

3

Existing Conditions

General

Land Use

Open Space

Circulation

Architecture

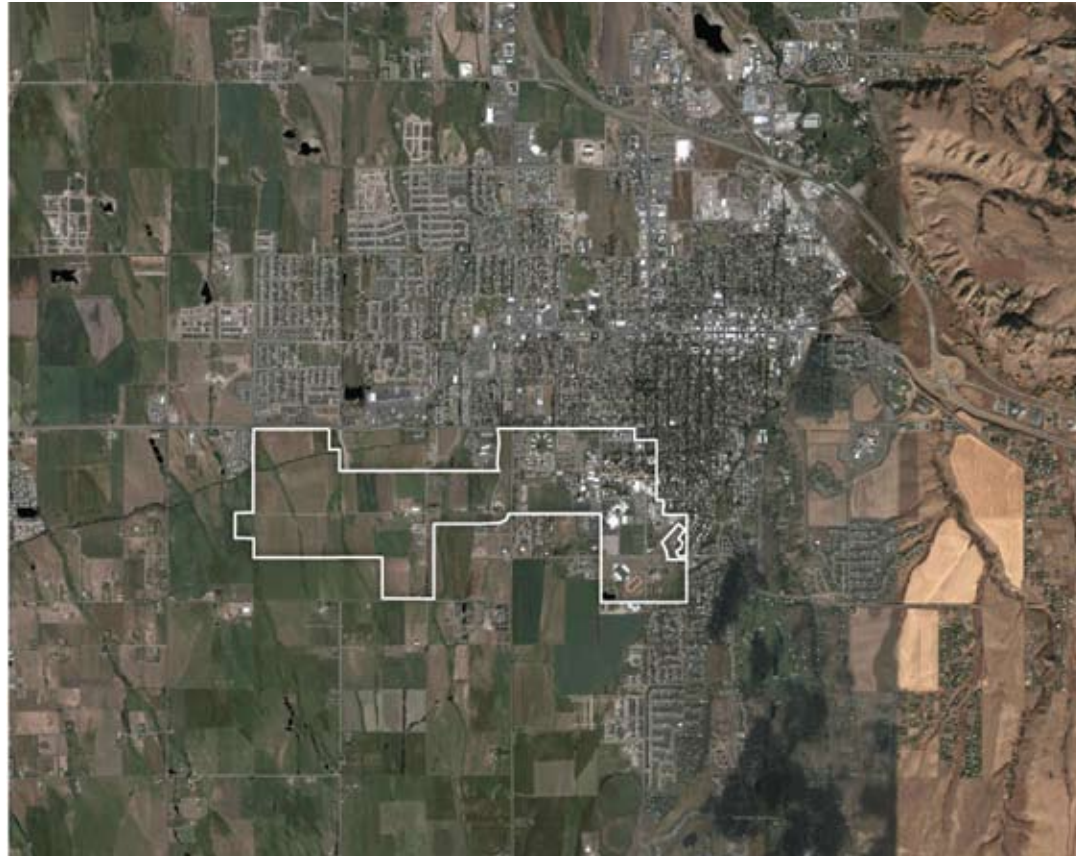
Landscaping

Academics

Housing

Sustainability

Aerial photograph showing the outline of the campus in the greater context of the Gallatin Valley and the Bozeman area. Downtown Bozeman is located northeast of the campus.



General

Relationship to the Community

Surrounded by the picturesque Rocky Mountains in the Gallatin Valley, Montana State University is located on a hill approximately 1.5 miles southwest of Bozeman's historic downtown. Since its inception as a Land Grant institution, MSU has played an important role in the community's growth and success and is embedded in the community. Evolving from its agriculture and mechanical arts (engineering) teaching roots, MSU has grown into a diverse institution that provides intellectual, economic, cultural and recreational opportunities. It is also a major employer within the community, providing employment for over 2,600 individuals.

Originally located on the outskirts of town, the university now shares its boundary with the city on all but the furthest west edge of the campus. The campus is

comprised of 950 acres and stretches from South 3rd Avenue west to Ferguson Avenue. Prominently located on a hill, the campus is highly visible due to residence hall structures (still among the tallest buildings in Bozeman) and several of the area's most recognizable landmarks, including the domed Brick Breeden Fieldhouse and the cupola-capped Montana Hall.

The university maintains a cooperative relationship with the City of Bozeman in seeking design solutions and in serving members of the larger community. The Long Range Campus Development Plan (Plan) improves on the community relationship and increases the community interaction with planned enterprise zones, strategically placed commercial and academic facilities, and enhanced connectivity to emerging residential neighborhoods adjacent to campus.

Campus panorama with Bridger Mountains in the background (2007).



Climate

Nestled in the Gallatin Valley, the university is surrounded by mountain ranges from the greater northwest Rockies. The weather varies as each of the four season's cycle through the valley. At 5,000 feet above sea level, the valley may experience snow seven months of the year; however, the semi-arid climate and abundant sunshine create beautiful outdoor environments and year-round recreation opportunities. During the summer season, daylight lasts into the evening, extending outdoor activities into the twilight.

Views

The campus offers many panoramic views. Numerous vantage points on campus provide spectacular views of the Bridger, Tobacco Root and Gallatin mountain ranges. Recognizing the recruiting value of the surrounding

natural resources, the Plan incorporates strategies for protecting on-campus opportunities for viewing these extraordinary viewsheds.

Public Service

Fulfilling its land grant institution mission of public education and outreach, the university serves Montana residents through its Cooperative Extension Service, KGLT radio station, KUSM public television broadcasting station, Montana Agricultural Experiment Stations, and the Museum of the Rockies.

Campus Image and Identity

The identity of the campus is closely tied to the natural landscape. The surrounding mountains and rivers distinguish MSU from other universities and are significant draws for students, faculty and staff from around the world.



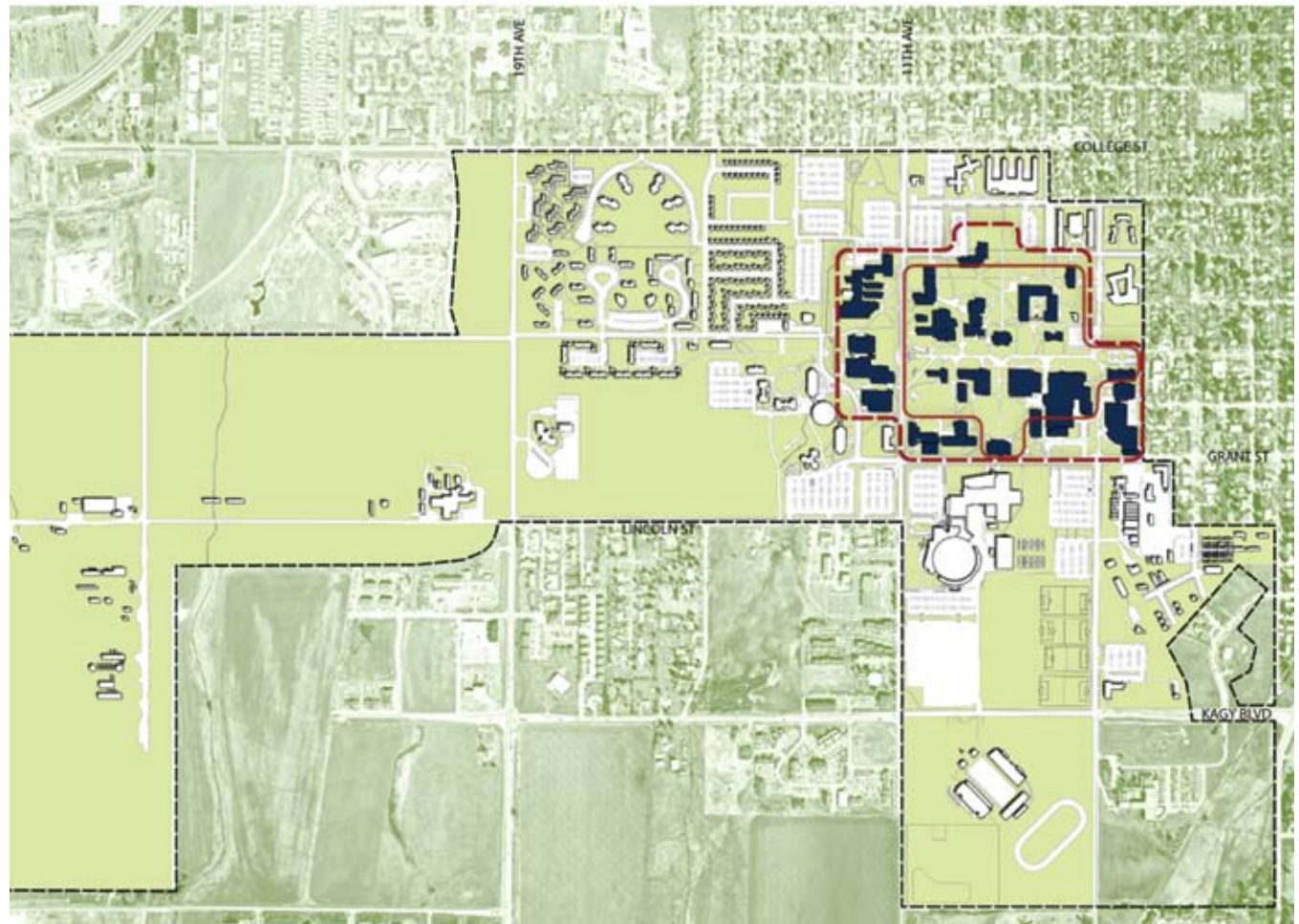
Land Use

Campus Core

The campus core embodies the cultural and natural resources associated with historic activity and thereby is a significant cultural landscape. Student services and educational facilities regularly used by a majority of the campus are within the campus core, creating a central nucleus of the university. The historic core consists of the area from College Avenue to Grant Street, and from South 6th Avenue to South 11th Avenue. The buildings within the core are primarily academic in nature, but

include several residential and support facilities. The core is interconnected by a series of open spaces and pedestrian corridors, the most prominent of which is Centennial Mall – a linear paved, pedestrian-oriented corridor that stretches from South 6th Avenue to South 11th Avenue – and the north lawn space leading up to Montana Hall from Harrison Street to the Romney Oval and Gymnasium. Montana Hall is the focal point of the campus core.

Map showing the outline of the historic campus core in a solid red line and the current campus core in a dashed red line.



Districts and Neighborhoods

The pattern of land use within the built campus has evolved loosely, resulting in clusters of related functions or distinct “districts.” Specific sub-areas within districts that exhibit particular and distinguishing activities are recognized as “neighborhoods.” For example: the Marga Hosaeus Fitness Center (Fitness Center) and its activities represent a Fitness and Recreation Neighborhood within the greater grouping of athletic facilities in the Athletics District.

Each grouping of similar facilities establishing a sense of place for the District, interconnects the Neighborhoods, and promotes an overall order and balance to the campus layout. Neighborhoods can accentuate their purpose and identity through unique landscapes, architecture and programs while maintaining connectivity to the campus.

Current districts include Athletics, Housing, Academics, and Agriculture. Chapter 4 outlines how the framework plan will further define and expand neighborhoods and districts.

The new Black Box Theatre, completed in 2008, is part of the Arts and Architecture Neighborhood.



- Neighborhoods in the Athletics District include Marga Hosaeus Fitness Center, the intramural fields, Bobcat Stadium, Brick Breeden Fieldhouse, Dyche Field, and a collective concentration of general athletic facilities.
- Neighborhoods within the Academics district are formed by colleges, centers, and groups of buildings. For example: the Arts and Architecture Neighborhood includes the Black Box Theatre, Howard Recital Hall, College of Arts and Architecture, and the outdoor performance area for Shakespeare in the Parks.
- Housing forms neighborhoods through the clustering of traditional housing units with dining halls and student recreational facilities within the campus core, and non-traditional housing (e.g. faculty, graduate, families with children, recreational facilities) located more towards the edges of campus.
- Neighborhoods within the large Agriculture District include the agricultural pastures and fields and Horticultural Farm, Miller Pavilion and support facilities, Bozeman Agricultural Research and Training (BART) Farm, and Marsh Laboratories.

Leased Land

Montana State University has partnered with state and federal entities to provide facilities on campus that enhance and support MSU and the community. These include 10 acres of MSU land leased to Montana Fish, Wildlife and Parks (FWP) for state’s District Three office at South 19th Avenue and Lincoln Road; the South 7th Avenue site of the USDA Forest Service Rocky Mountain Research Station; McCall Hall; and portions of the Marsh Laboratory complex. Newly leased land off South 11th Avenue for the proposed USDA Agricultural Research Service (ARS) building will complement Academic and Agriculture Districts.

Open Space

Gateways, Edges, and Boundaries

Gateways are part of campus edges and boundaries that delineate campus property and separate it from adjacent property. The gateways and entrances into campus have evolved and changed as the university has developed. An original and now historic gateway to campus is at South 8th Avenue and Harrison Street. Today the primary gateways into campus are South 19th Avenue and College Street, South 11th Avenue and College Street, South 11th Avenue and Kagy Boulevard, and South 7th Avenue and Kagy Boulevard. Secondary entrances are located at Grant Street and South 6th Avenue, and South 19th Avenue at both the Lincoln Street and Garfield Street intersections.

Edges exhibit a variety of character and conditions. Some are very clear, while others blend into the community and are non-distinct. Edges are formed by roads, buildings, pathways, landscapes, fences and topographic changes.

The edges and boundaries around the campus east of South 19th Avenue are more clearly defined and consist of College Street, Kagy Boulevard and South 6th Avenue. Of note, South 6th Avenue between Cleveland Street and Grant Street edges exhibit high-rise campus buildings and different landscaping treatment than the small-scale residential Greek houses and adjacent community plantings on the east side of the street. Kagy Boulevard acts more like an open space buffer between larger, manicured practice fields to the north and less formalized open space to the south.

The campus west of South 19th Avenue exhibits less formal or defined edges and gateways. Although clearly bordered by Garfield Street or Huffine Lane, MSU's and Montana Agricultural Experiment Station's (MAES) agricultural fields blend in with surrounding, privately owned land, with only a fence establishing the dividing edge or boundary.

The gateway sign at the corner of Kagy Boulevard and South 11th Avenue.



Core-dated to 1875, this Cottonwood tree along South 11th Avenue is the oldest tree on campus.

Open Space

Open space on Land Grant institutions represents heritage land. Often these cultivated or natural open spaces continue to provide a critical link between the accomplishments of the past and vision of the future.

Formal and informal open spaces exist on the MSU campus. Formal open space typically represents significant or iconic areas. These are often named spaces such as parks and historically significant gathering spaces. Notable formal open space includes Romney Oval, Centennial Mall,

Hedges Recreation Area and Montana Hall's north lawn. In addition, formal parks on campus include Danforth Park, Wally Byam Park, Buckingham Park, Veteran's Park, and Frank M. Harrington Park (includes Duck Pond).

Informal open spaces function as areas for impromptu gatherings, campus events, and passive and active recreation. The area around Danforth Chapel, the intramural fields north of Kagy Boulevard, the grass areas between the Quads, and the Mandeville Creek corridor are considered important informal open space.



Victoria Drummond

Circulation

See referenced maps on following pages.

Vehicular

Historical vehicular corridors connecting downtown Bozeman's residential and commercial areas to the university still exist, although increasingly traffic is directed more toward expanded arterial and collector roads and away from neighborhood roads. Over time, roads that bisected portions of the campus were abandoned, providing more continuity to the campus and increasing pedestrian safety within the historic campus core. Continued development of the area will increase MSU's accessibility and connection to the surrounding area.

The *Greater Bozeman Area Transportation Plan: 2001 Update* classifies South 19th Avenue as a principal arterial road and South 11th Avenue as a collector road, but both are primary north-south corridors for university access. South 7th Avenue and South 6th Avenue are secondary vehicular access corridors with limited access to the campus. The primary east-west corridors are College Avenue and Kagy Boulevard. The portion of College Avenue adjacent to the university is classified as a minor arterial, and Kagy Boulevard is classified as a principal arterial. Secondary east-west corridors include Garfield, Lincoln, and Grant Streets. Furthermore, Harrison Street provides access into the Johnstone Center complex, and Cleveland Street provides access to parking and utilitarian areas of Atkinson Quads, Hapner Hall and Herrick Hall.

Vehicular access does not typically penetrate the Academic District, except for service and emergency access. The majority of visitor traffic arrives via South 19th Avenue and South 11th Avenue. An existing visitor parking lot is located at the corner of South 7th Avenue and Grant Street for convenient access to the Student Union complex and library.

Pedestrian

Pedestrian corridors are sidewalks, paved plazas and footpaths, although service roads and grass or turf are also used by pedestrians. Most pedestrian corridors or routes have been created as a result of historic traffic patterns and

designed connections to building entrances. Pedestrian plazas and seating areas are located in both formal and informal settings across campus. In addition, most buildings feature seating areas or pedestrian amenities near entrances or courtyards.

The primary north-south pedestrian corridor extends down the center of the historic campus core and begins at the Johnstone Center and ends at Romney Gymnasium. Pedestrians are able to walk south from College Street to Grant Street (more than six blocks) without crossing a public vehicle route. Centennial Mall, the primary east-west pedestrian corridor, is within the center of the campus core. Centennial Mall is a main pedestrian corridor. This corridor begins at the steps on South 11th Avenue and terminates at the drop-off just west of the intersection of Garfield Street and South 6th Avenue. Unintended paths occur near building and sidewalk corners, where foot and bike traffic across grass causes significant soil compaction that inhibits continued vegetation growth.

MSU has coordinated with the City of Bozeman to align campus bike and pedestrian trails with the city designated trail system.

Parking

Although parking availability within the campus core is limited, MSU has abundant parking along its perimeter, particularly to the south of campus. Faculty, staff, students, and visitors are able to park conveniently and within a five-minute walk of their destinations on campus. Demands for convenient campus-core parking becomes increasingly difficult to accommodate as the campus expands and as interior surface lots are converted to building sites.

Vehicle parking on campus is classified for use by different types of permits. The 12 categories of parking on campus include remote, proximate, visitor, service, bicycle, and motorcycle. Parking permits are required for all parking facilities on campus. City streets adjacent to campus are categorized as either resident only, time of day or duration

restricted. Remote parking is provided on the north end of campus near the intersection of College Street and South 11th Avenue and on the south end of campus near Brick Breeden Fieldhouse, just off of Kagy Boulevard, and adjacent to Bobcat Stadium. These parking areas are also used for overflow during athletic and performance events. Motorcycles and scooters have designated parking areas within parking lots.

Bicycle

Use of alternative transportation on campus, such as bicycles, is encouraged. Students, faculty and staff use bicycles to access campus on a year-round basis. Bicycle registration is required on campus. Strategically placed bicycle racks accommodate bicycle parking near building entrances and along Centennial Mall. Local bike advisory and advocate groups have worked to link regional and local bike routes with campus gateways to provide safe and efficient corridors for campus access.

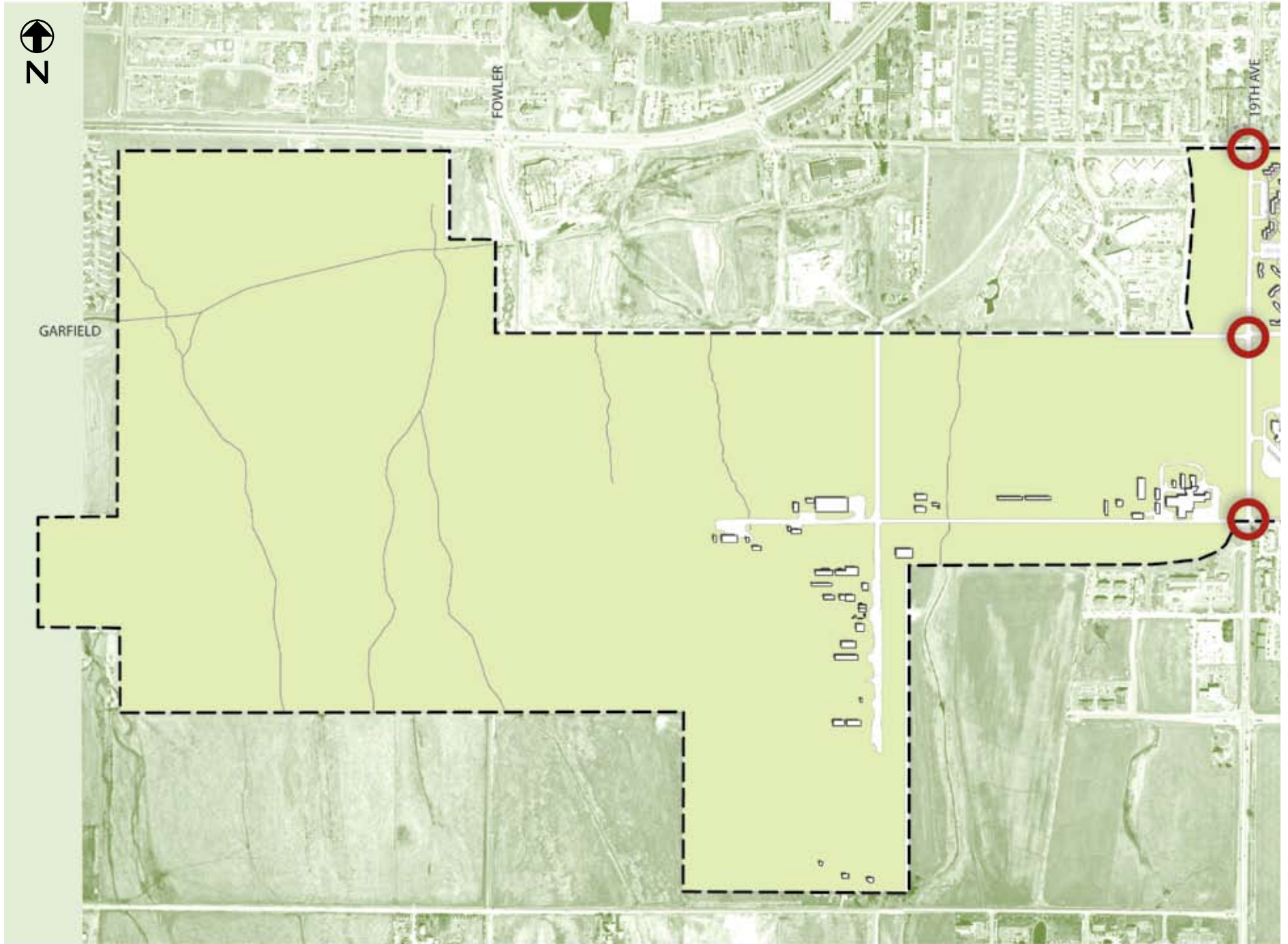
Transit

In 1986, a study performed by the university's College of Engineering and Western Transportation Institute (WTI) conclusively found that the community and the university would use a transit system that served a greater geographical area than the campus and its immediate vicinity. A campus-oriented bus service (Bobcat Transit) began in 1987 using a two-bus system that focused on University service, but was also available for use by the general public. Until recently, the bus system operated on campus and was funded by Associated Students of Montana State University (ASMSU). Adoption of the *Greater Bozeman Area Transportation Development Plan: 2001 Update* by the City of Bozeman and Gallatin County led to expanded sponsorship of the current Streamline and Skyline transit system that has routes connecting the campus to the key areas of Bozeman, Belgrade, Four Corners and Big Sky. The transit system is underwritten by a consortium of local entities, including ASMSU, which makes it possible to operate on a non-fare basis.

Bicycle parking near Roskie Hall.

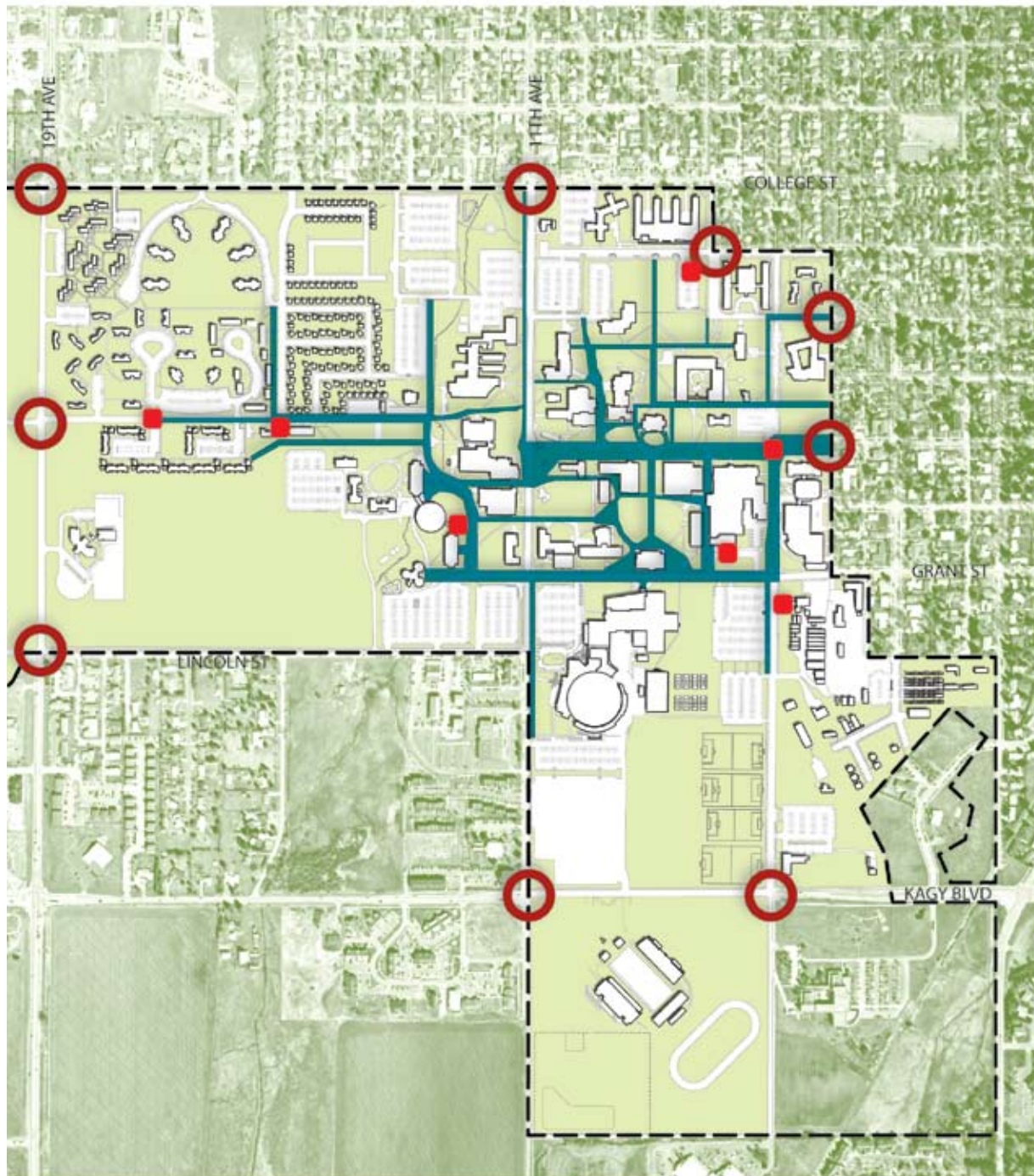
Skyline, one of the several local transit operators, provides service to the campus by linking to area amenities, such as ski areas. Inter-city transit is also currently available through Streamline transit service.

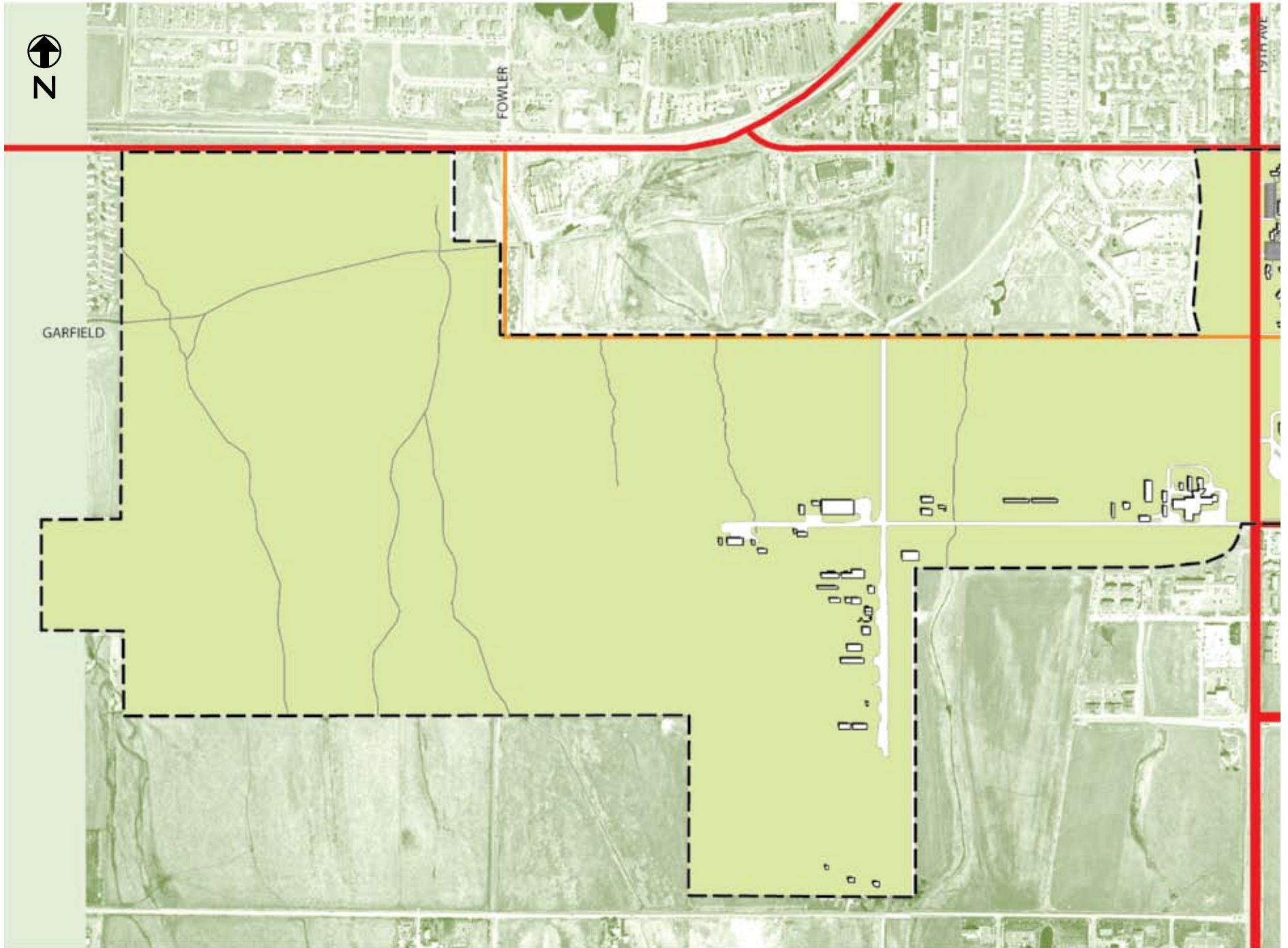




Existing Pedestrian and Bicycle Circulation

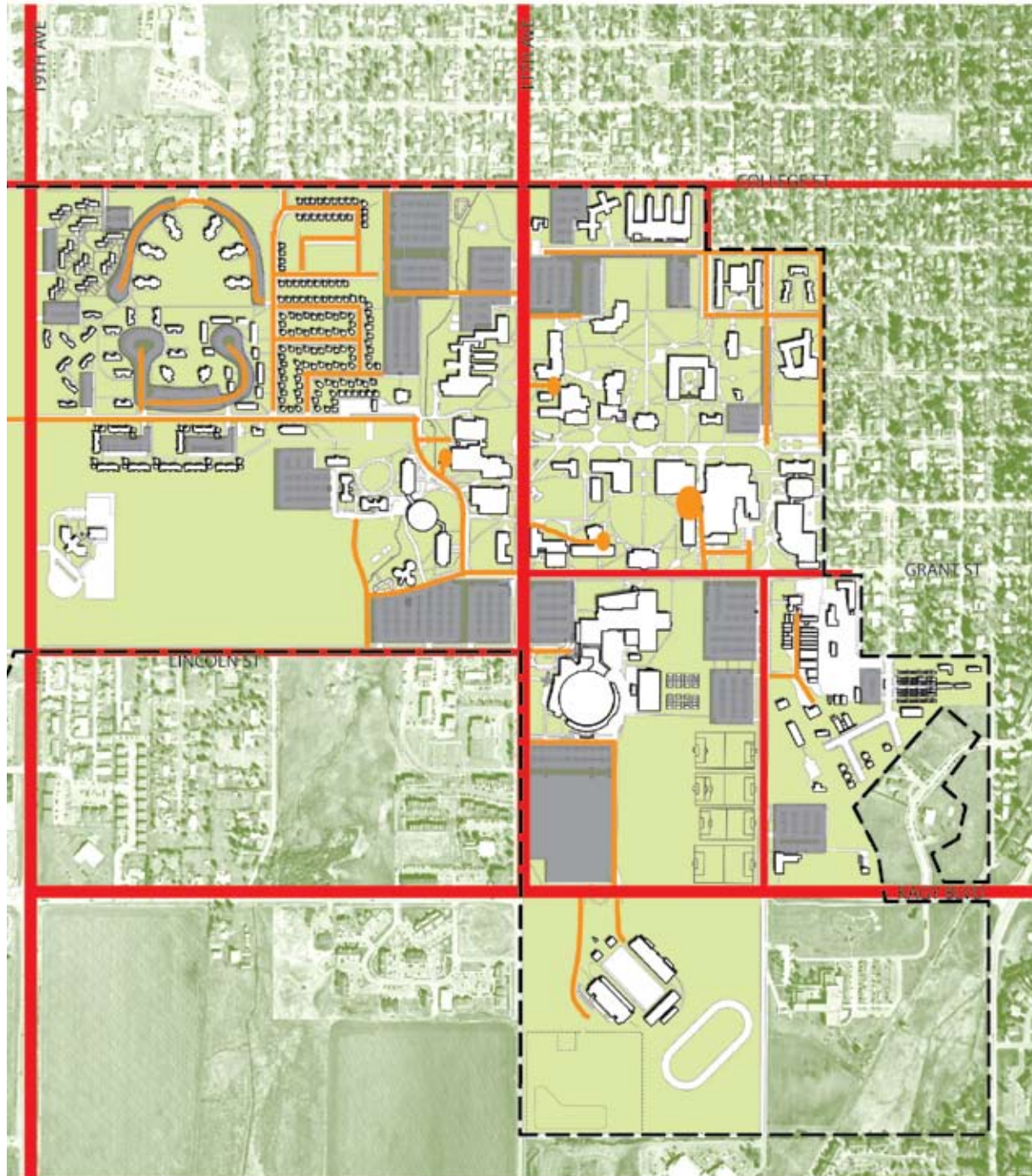
- Major Pedestrian Paths
- Campus Entries - Primary and Secondary
- Bus Transfers and Stops





Existing Vehicular Circulation

- Primary Vehicular Circulation
- Secondary Vehicular Circulation
- Surface Parking Lots



Architecture

The university consists of a collection of buildings with origins spanning portions of three centuries. Architectural expression and character, as well as physical building needs, have changed since the founding of the university over a century ago. The buildings reflect the architectural style, academic trends, social and cultural norms, and building construction of each respective era. Eclectic in design by necessity, the campus buildings embody the ideas, values and vision of those who shaped the university. The use of locally obtained natural material and brick in the early structures helped to establish the university's image of academic achievement, strength

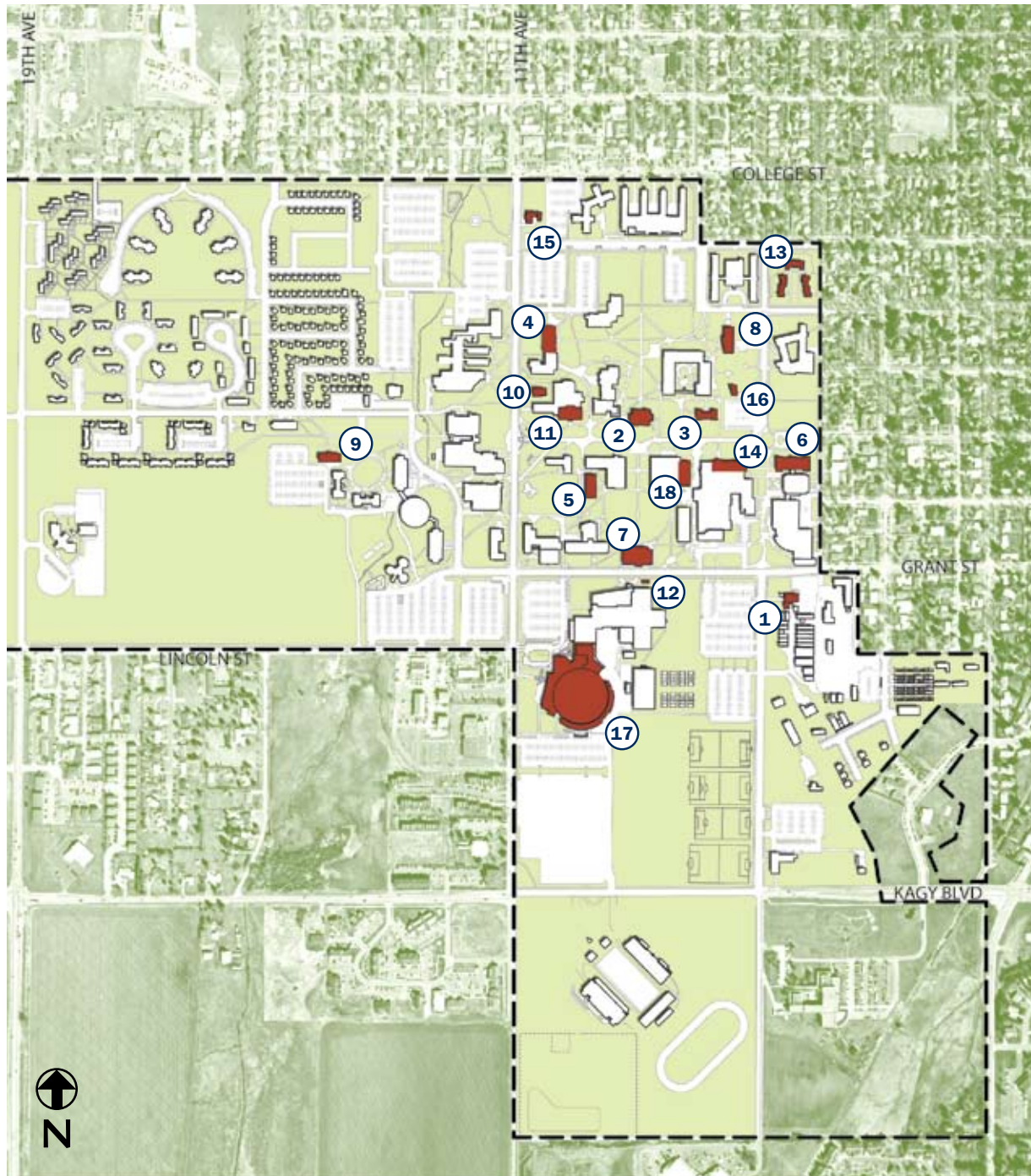
and perseverance. The massing, scale and character of the campus buildings provided critical spaces between them, which contributes to a sense of community within campus neighborhoods.

A functional, attractive campus contributes to the ongoing success in higher education's competitive environment. Teaching and research has evolved in the 21st century, requiring larger, more flexible interiors than in the past. To continue to thrive, facilities must periodically be adapted, renovated and remodeled to serve continually evolving needs.

Newly remodeled in 2008, the Marga Hosaeus Fitness Center provides students, faculty and staff with state-of-the-art recreation opportunities.



Candace Mastel



Historic and Heritage Sites

The campus character developed over time with the use of brick and other indigenous building materials. Although the campus is not on the National Register for Historic Places or Buildings, many of the older buildings on campus have been inventoried for Heritage Property designation, according to the Montana Antiquities Act for state-owned buildings. Although only the Heating Plant (1) has been approved as a Heritage Property by the State Historic Preservation Office (SHPO), Montana Hall (2), Hamilton Hall (3), Linfield Hall (4), Traphagen Hall (5), Roberts Hall (6), Romney Gym (7), Herrick Hall (8), S.O.B. Barn (9), Taylor Hall (10), Lewis Hall (11), Gatton Field Gate (12), Atkins Quadrangle "Quads" (13), original Student Union Building (14), Wool Lab (15), Danforth Chapel (16), Brick Breeden Fieldhouse (17), and original Renne Library (18) are significant historic structures and are under consideration. The Plan recognizes the history and importance these historic structures have to campus, and encourages their continued preservation and future use.

HISTORICALLY SIGNIFICANT BUILDINGS AND STRUCTURES



Landscaping

The George Carsley/Cass Gilbert Plan of 1917 was considered a “Beaux Arts” influenced plan based on axial and physical relationships between buildings and spaces. If fully implemented, its intent was to develop the campus landscape with large expanses of linear green space and open areas with creative vehicular and pedestrian spaces. Key components of the original plan still visible are in the formal spaces of Centennial Mall, Romney Oval, and the north lawn of Montana Hall.

Without a formal inventory or development plan, the landscape on campus has been installed as needed. Some formal landscape projects have been undertaken, such as Centennial Mall, which incorporates complementary pavement treatments that highlight spaces such as the Student Memorial. Planned landscaping has transformed otherwise ordinary spaces on campus through the use of tree-lined boulevards that change urban streets into satisfying pedestrian corridors, creating informal open spaces that unify buildings with the environment.

Water from an underground warm spring supports the popular Duck Pond, which evolved from a former frog pond of the 1916 era. The Duck Pond, within Frank M. Harrington Park, continues to be a memorable place and natural respite on campus.



Victoria Drummond

Academics

Academics (teaching and research)

The university consists of 10 colleges and many centers for learning that are committed to providing a high degree of excellence. Academics (teaching and research) has evolved from the original agricultural and engineering programmatic focus. MSU enters the 21st century with successful academic programs that prepare students for future professional employment and lifelong growth in many sectors, including agriculture, arts, architecture, engineering, nursing, and the sciences.

MSU is a research-intensive institution and is ranked in the top 100 U.S. institutions by the Carnegie Foundation (2007). Research is a vital part of university life and is integral to the success of academic programs, as well as the overall university. As these research-based programs have evolved, specialized facilities and programming such as labs, workrooms and storage areas have been created.

Agriculture

As a Land Grant institution, one of MSU's founding premises is that agricultural teaching and research remain an integral part of its success. The 950 acres on campus

currently in use by MSU's College of Agriculture teaching and outreach programs and MAES agricultural research contribute to the effectiveness of the agricultural industry and the university's achievements. Changing land use surrounding the campus will require ongoing and long-term evaluation of future field-oriented agricultural research and teaching programs.

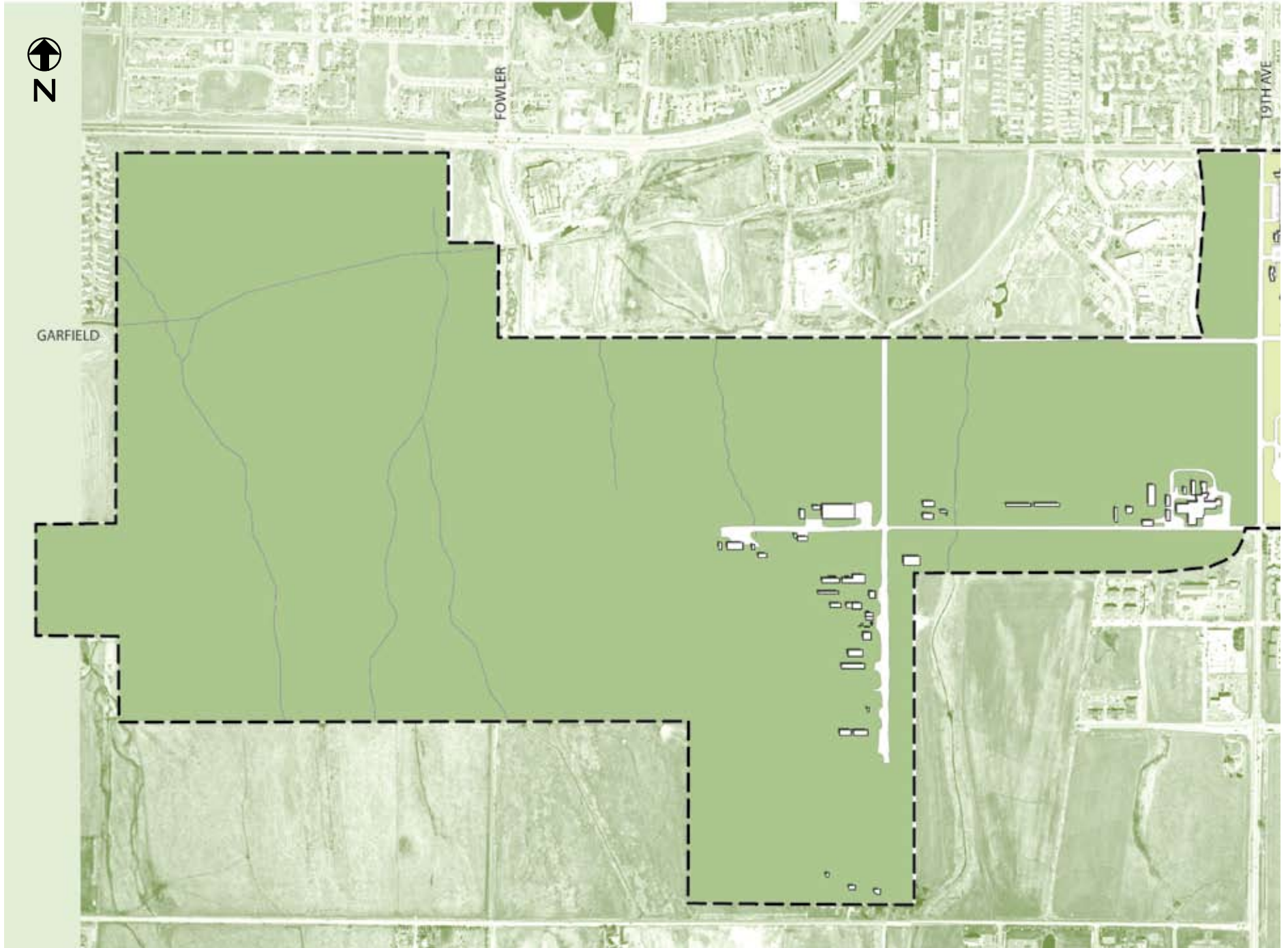
Faculty and Staff

Recently Bozeman has experienced an apparent resurgence of reinvestment in downtown properties, renovation of homes near campus, and development of surrounding farmland. Young families, retirees and professionals have sparked a wave of growth within the local community which has caused property values to increase substantially over the last four years. The average cost of a home in most of the established and new neighborhoods adjacent to campus has generally exceeded the affordability level of the average MSU employee. With the current cost of living and property increasing yearly, faculty and staff have expressed an interest in living on or near university property, close to work in order to take advantage of the many lifestyle opportunities available on campus. There are currently no faculty or staff residences on campus.

The university agricultural lands and the surrounding mountains offer unique and diverse academic "classrooms".



Stephen Hunts



Agricultural Lands

Agricultural Research and Teaching Facilities



Housing

See referenced maps on following pages.

Housing consists of residence halls and apartment-style graduate and family housing. Residence halls address the lifestyle and needs associated with recent high school graduates and provide more traditional on-campus accommodations and amenities. Residences for traditional students are located at North and South Hedges, Hedges Suites, Roskie Hall, Langford Hall, Johnstone Center, Hapner Hall, Hannon Hall and the Atkinson Quads. The residence halls near College Street have the advantage of being located near a commercial area that provides dining, office, gasoline, and service-related establishments. Additionally, four sororities and eight fraternities are authorized at the university and these residences are located adjacent to campus. These are privately owned, and maintained by the individual sorority or fraternity.

Graduate and family housing is collectively referred to as non-traditional student housing, and includes more

independent-type accommodations. Graduate and family housing includes Paisley Court, Peter Koch and Nelson Story towers, Branegan Court, McIntosh Court, Grant Chamberlain, and the 1950s houses. In total, graduate and family housing consists of 704 units that feature one, two, or three bedrooms arranged in a variety of floor plans within eight architecturally diverse neighborhoods.

With the exception of McIntosh Court, Paisley Apartments and Hedges Suites, MSU's housing was constructed between 1950 and 1979 and was configured to address market trends of those time periods. Currently, the average age of students at MSU is 22, but the non-traditional student cohort continues to increase. In general, incoming students have increasingly different expectations of campus housing than those of earlier decades. Housing on campus has been slowly adapting to the current market trends and will continue to do so in the future.

Hedges North, Roskie Hall and the Hedges Suites represent examples of current housing for students on campus. The Hedges Suites (left photo) are representative of what students demand in current on-campus housing arrangements.



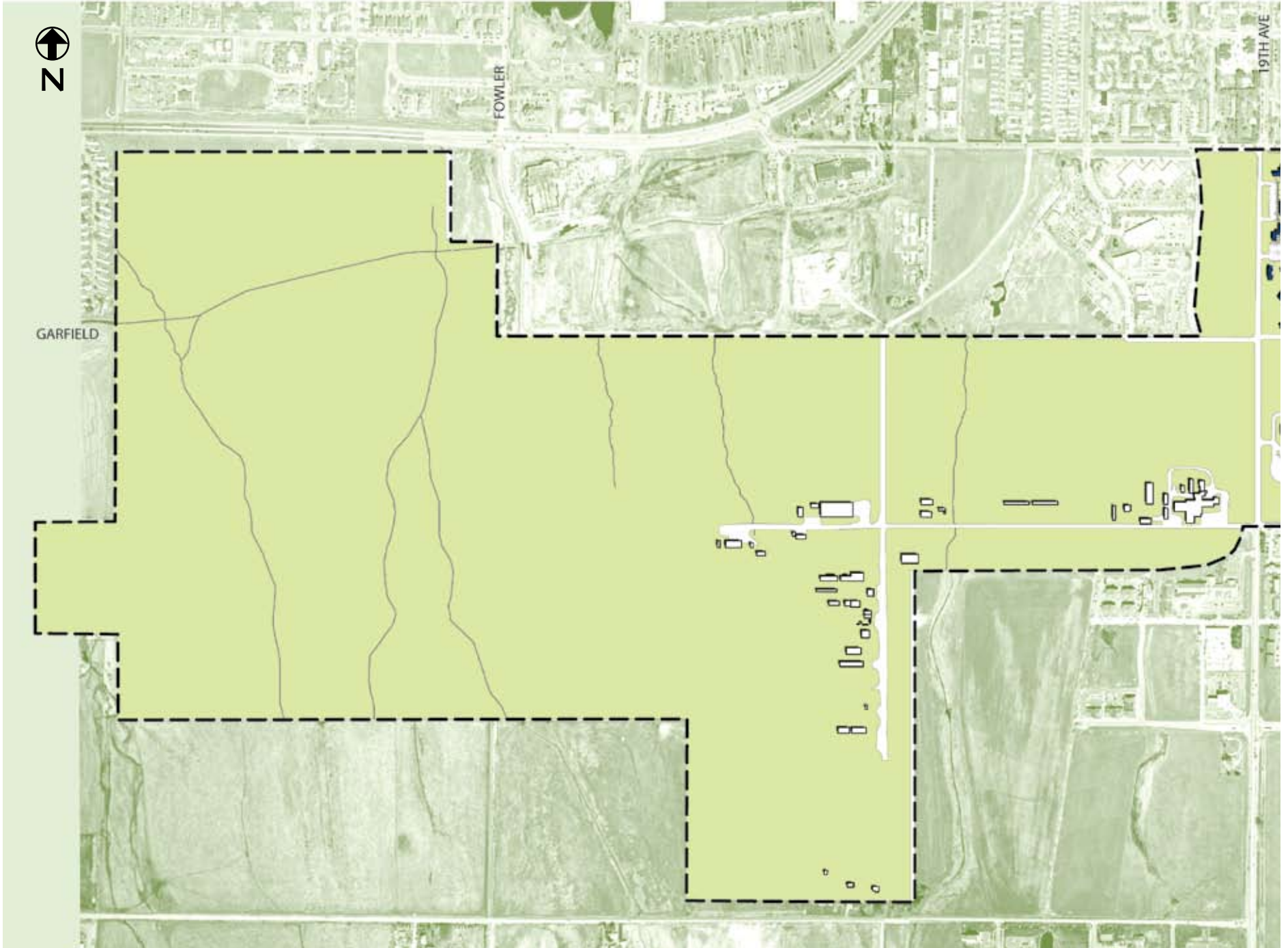
MSU campus housing provides certain intrinsic advantages over private sector housing in the vicinity, and these are attractive to MSU students considering campus housing. These advantages include:

- Common gathering venues for socializing, studying, recreation, and dining.
- A strong sense of social connectivity and community with other MSU housing students, in close proximity to campus academic, research and events venues on campus.
- Convenient, centralized billing for all campus services including housing, fees, tuition, financial aid and food services.
- Educational and social opportunities focusing on such topics such as diversity, wellness and academics.
- Dedicated professional police protection for a much smaller geographic area than the community at large. The MSU police force is also specifically focused on serving the campus population through community policing activities.
- A higher level of safety and cultural connectivity for international students.
- A higher level of university-associated IT connectivity than is available in the community at large.
- Family amenities, such as children's playgrounds and day-care facilities.

Family Graduate housing, built in the 1940's, will be replaced with modern housing such as that on Grant Chamberlain Drive, which is apartment style housing.

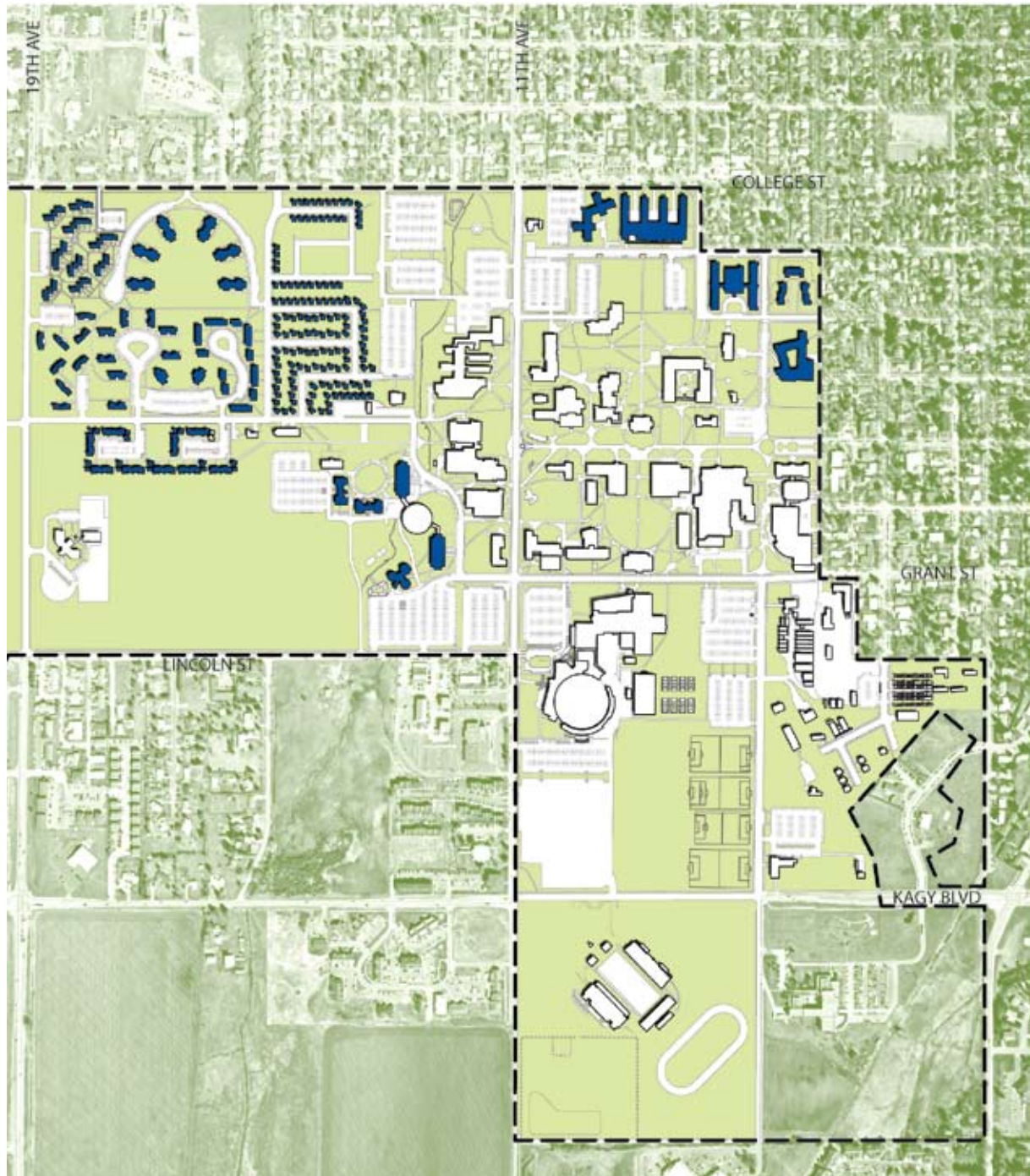


Victoria Drummond



Existing Housing

Existing Housing



Sustainability

Sustainability efforts have included analysis of water resources on campus. This includes the evaluation and restoration of sections of Mandeville Creek, which flows through campus.

The university recognizes that along with effective long-range planning, a greater transformation is necessary to advance its commitment to environmentally, socially and economically sustainable decisions and choices.

Existing sustainable practices include:

- Construction of buildings that are intended to last a long time.
- Adaptive re-use of existing structures through renovations and alterations.
- Expansion of the utility tunnel system, which takes advantage of central utility distribution and the central heating plant.
- Self generate 6-7% of campus electrical needs with a co-generation steam turbine.



Stephen Huntis

- Water conservation through its centrally controlled irrigation system with microclimate sensing.
- Use of indigenous vegetation and water-conservative landscaping.
- Replacement of equipment and lighting with energy-efficient technologies and automated energy-control systems.
- A broad range of recycling efforts.
- Installation of operable windows and natural light and ventilation in appropriate spaces other than laboratories.
- Demonstration of sustainable agriculture techniques that support local food production and community outreach.
- Support and promotion of community-based transit use and other alternative modes of transportation for students, faculty and staff.
- Become an active member institution of the US Green Building Council (USGBC).
- Become an active member institution of the Association for the Advancement of Sustainability in Higher Education.