

University of Minnesota Duluth

Campus Master Plan Update 2013

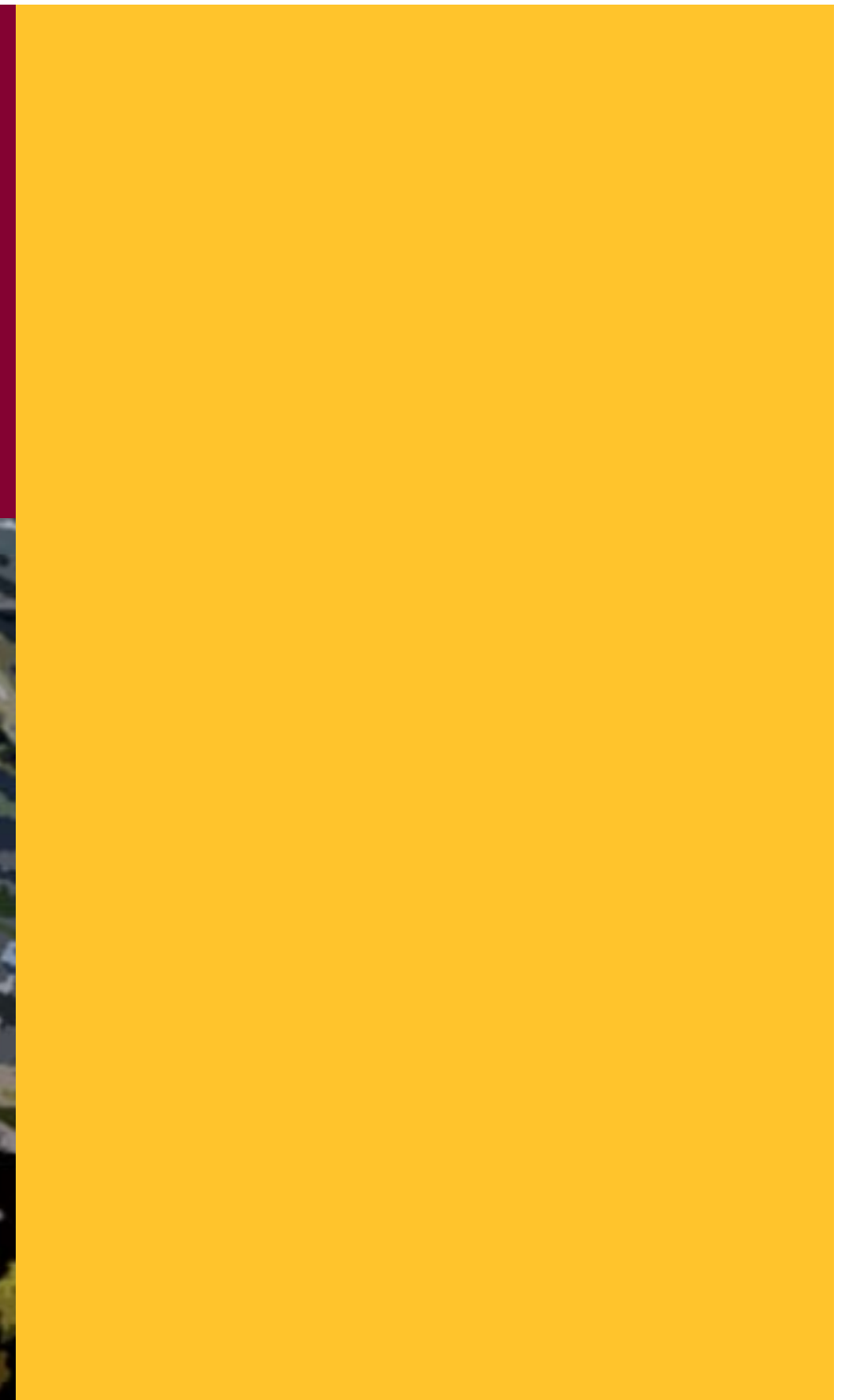




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- Physical Facilities Committee

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Sub Consultant Reports

- LKPB
- Pierce Pini & Associates, Inc.
- Midwest Traffic Consulting, LLC

Board of Regents Campus Master Planning Principles

- Campus Master Planning Principles

Lead Master Plan Consulting Firm:



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ACKNOWLEDGEMENTS

This update to the UMD Campus Master Plan was undertaken with ongoing involvement and participation by the UMD Physical Facilities Committee (PFC) as well as campus leadership. The PFC was charged with the task of evaluating, researching, analyzing, planning, and recommending implementation of an updated Campus Master Plan to address a short and long term planning time frame. Committee members were chosen to represent specific areas of the University and to gather input from their respective constituents. The PFC held scheduled planning meetings, workshops and two on-campus forums as vehicles to both garner and communicate information relevant to the update of the broader University.

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Lead Master Plan Consulting Firm:



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INTRODUCTION
EXECUTIVE SUMMARY
PLANNING FRAMEWORK

University of Minnesota Duluth
Campus Master Plan
Update



EXECUTIVE SUMMARY

Introduction

In 2012, the University of Minnesota Duluth engaged Hay Dobbs Architects to undertake this Master Plan Update. This Master Plan Update is an update to the 2005 Campus Master plan and is predicated on much of the conceptual and strategic direction set by the 2005 Plan. The Update was undertaken with ongoing involvement and participation by the UMD Physical Facilities Committee (PFC) as well as campus leadership. The Update will support the University's Strategic Plan and Academic Mission by guiding future land use and development decisions. The final documentation of the Update was published and presented in early 2013.

The UMD 2013 Campus Master Plan Update defines a conceptual and physical framework, guided by master plan principles and goals, for making physical changes to the campus over time. The plan describes the long term vision for the campus as well as short term implementation goals. This includes guidance on land use, buildings and infrastructure, open space, natural features, and circulation networks for movement to, from and around the campus.



Guiding Principles

The intent of the Guiding Principles is to provide an over arching framework of ideas that ground future decision making. The Principles are commonly agreed upon ideas about how the campus should evolve and how implementation should be prioritized. The Master Plan Guiding Principles are as follows:

- Establish a clear campus edge on West College Street and Woodland Avenue
- Establish primary campus entries
- Maintain and strengthen the “Academic Core” of the campus
- Connect the campus to the regional environment
- Visibly manifest sustainability



Master Plan Goals

The Master Plan Goals are supported by the Guiding Principles and provide a more focused set of expectations for implementation. The Master Plan Goals include:

- Create a “Front Door” for the UMD Campus
- Develop a “Focal Point” for the UMD Campus
- Make the UMD Campus more “Visible”
- Enhance the “Visual Quality” of UMD Campus
- Create a “Pedestrian and Bicycle Friendly” UMD Campus
- Connect and “Integrate” UMD Campus into the City of Duluth



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Major Changes from 2005 Plan

1. Campus Entries

The 2005 Plan suggested a new primary campus entry off of Woodland Avenue. The Master Plan Update process revealed many impediments to implementation of a Woodland entry including displacing several critical ball fields, severing future growth from the primary campus, pedestrian safety, outdoor facility security and high costs. The Master Plan Update allows for orderly campus growth and preservation of on-campus ball fields by locating a new primary campus entry off of West College Street. This new entry will be the primary Visitor Entry and will connect with a re-aligned University Drive. The Update plans for many new buildings on campus to be located along this entry drive allowing the University to showcase these new facilities as the “front door” to the campus.

A new ped/bike entry on Woodland Avenue will create a Grand Pedestrian and Bicycle Entry from Woodland Avenue to University Drive.



2. Solon Lawn

The 2005 Plan suggested a large informal open space east of Solon Campus Center identified as “The Clearing”. The Update evolves this idea into a more structured public lawn known as “Solon Lawn”. Solon Lawn will be a large elevated lawn and plaza established at the east ground floor entry level of Solon Campus Center. This elevated lawn is envisioned to have several levels of structured parking below to allow for underground, climate controlled parking in the core of the campus near athletic, performing arts and visitor activities. A large drop-off area is envisioned surrounding the lawn and connecting University Drive to the Solon Student Center Visitor Entry. The east end of Solon Lawn is planned to have large stepped - amphitheater like - terraces allowing students and visitors to socialize, study and enjoy views of Lake Superior and on-campus recreational and athletic fields.



3. Perimeter Structured Parking

UMD currently relies entirely upon surface parking lots to accommodate campus parking needs. Many of these large surface lots are located along key arrival points to campus. This creates the first impression of the campus as that of parking lots.

Construction of new multilevel parking structures is recommended at the north and south campus perimeter to meet campus parking demands in the coming years. Parking should also be designed to be located under, or in the lower levels of, new facilities whenever possible. The northern parking deck top level can also be surfaced for athletic and recreation activities (soccer, tennis courts, etc.) and may even be roofed over for year round use. Because of the topography, this level should be designed to be at the same grade level as the existing ball diamond, thus creating contiguous space for related activities.



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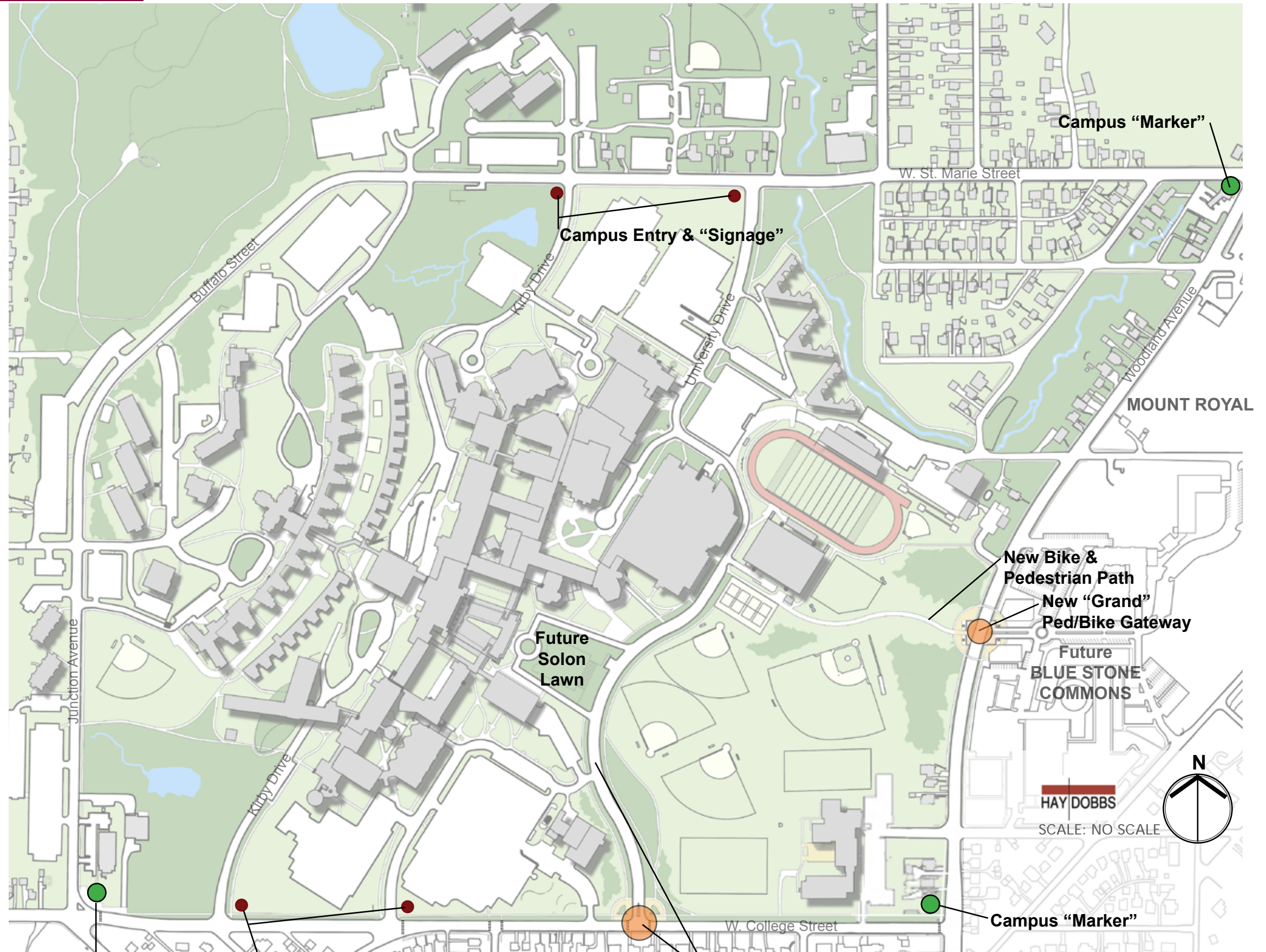
Short Term Plan

The immediate focus of the Master Plan Update will be to design and construct the new “Visitor Gateway” entry on the south side of the campus off of West College Street. This new entry will become the primary vehicular access point to the campus for visitors. University Drive will be reconfigured to connect to this new entry and allow for campus building expansion eastward around the campus core.

A second new entry, the “Grand Ped/Bike Gateway” will be designed and constructed off of Woodland Avenue. This Ped/Bike Gateway will provide a much stronger and safer access point to campus from the Blue Stone Commons residential and commercial development as well as other areas east of Woodland Avenue.

Already underway, additional wayfinding, signage and markers will supplement this effort.

Additional near-term activities involve working with the City of Duluth on a possible reconfiguration/relocation of the West College Street/Woodland Intersection to Clover Street; implementation of several “in-process” design/construction projects; and planning for future capital projects.

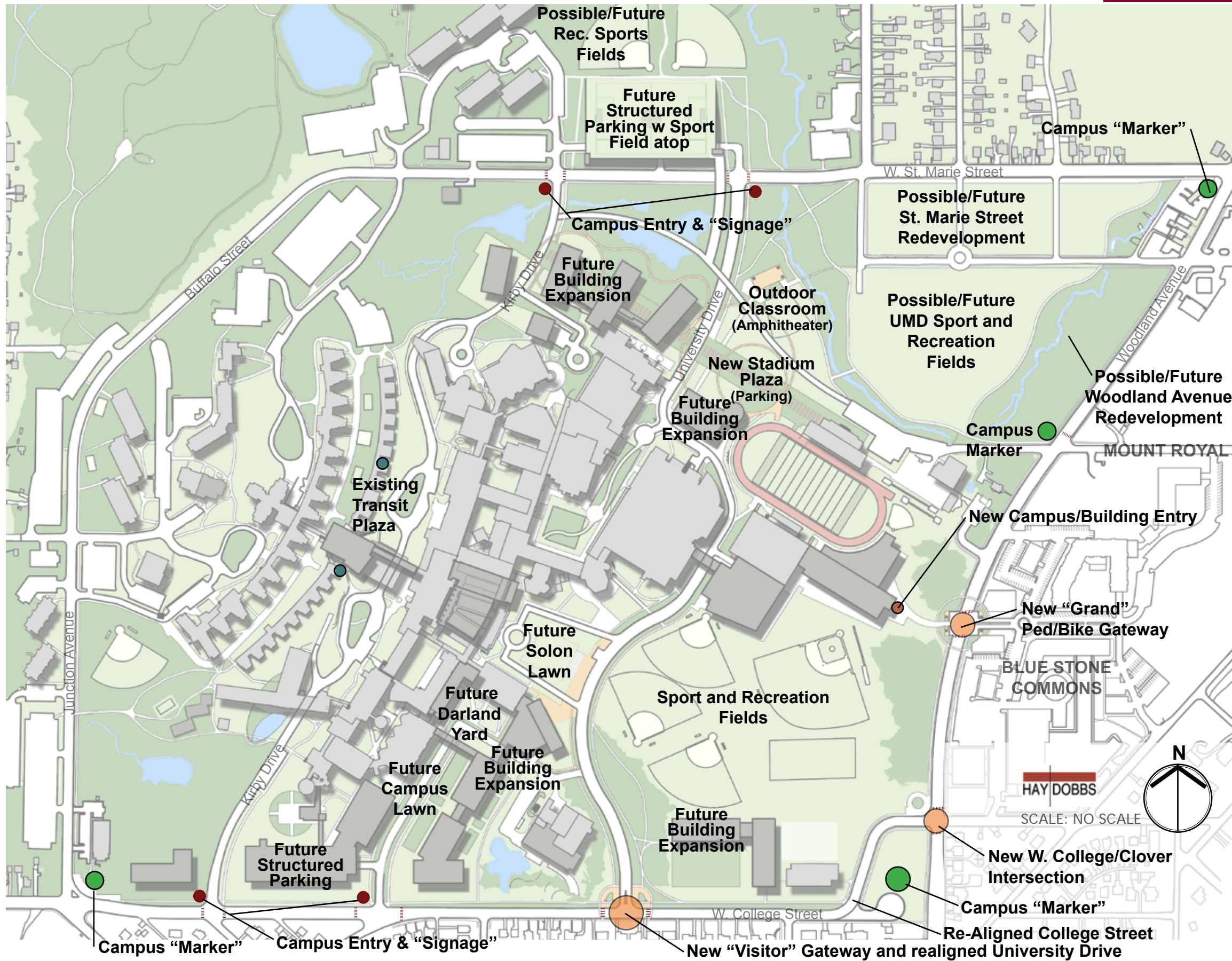


Campus “Marker” Campus Entry & “Signage”

New “Visitor” Gateway and realigned University Drive

Proposed UMD Master Plan - Short Term Plan





Proposed UMD Master Plan - Long Term Plan

Long Term Plan

The long term plan for UMD grows the campus in a compact and walkable manner. Nature is invited in more fully on the north end of campus while the southeastern portions of campus become more regularized and urban. Parking is primarily located in perimeter structured parking facilities creating a more pedestrian friendly and visually appealing campus core. Academic, Student Service, Administrative, Recreational and Athletic facilities expand near similar related facilities following the campus land use plan. Buildings and open spaces work synergistically in support one another. Buildings are positioned to allow for views, vistas and solar access. Natural and sustainable features are tangibly present on campus and new campus facilities are showcased within their respective precincts and along major vehicular and pedestrian thoroughfares. Off campus UMD facilities become ambassadors to each host community, reinforcing the UMD brand and demonstrating the value UMD brings to the region.

The future of UMD is bright. This plan provides the flexible framework to accommodate change while guiding the incremental physical manifestation of the University Strategic Plan.



End of Section

INTRODUCTION
OVERVIEW
PLANNING FRAMEWORK

University of Minnesota Duluth
**Campus Master Plan
Update**

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OVERVIEW

A campus master plan is a physical manifestation of a university's strategic plan. At its best, it is a road map for the future of a campus, and becomes a crucial tool in confirming that short-term projects are working in conjunction with long-term plans and goals. Without it, each decision made about a campus' facilities -- from new buildings to renovations to infrastructure improvements -- is made in isolation, without a bigger vision in mind. A good campus plan builds in flexibility, so that it can accommodate shifting academic priorities and economic conditions.

The UMD 2013 Campus Master Plan Update defines a conceptual and physical framework, guided by master plan principles and goals, for making physical changes to campus over time. The plan describes the long term vision for the campus as well as short term implementation goals. The plan includes guidance on land use, buildings and infrastructure, open space, natural features, and circulation networks for movement to, from and around the campus.





UMD Strategic Plan

An Inclusive and Collaborative Planning Process

The UMD Strategic Plan is the product of an inclusive, collaborative process involving the entire campus as well as Duluth community leaders. Because UMD's planning is "rolling," the document will be reviewed, assessed, and refined annually.

The plan includes these elements:

- UMD's Core Values articulate the essential principles that guide our decision-making.
- UMD's Mission Statement defines our purpose for being. It succinctly states why the institution exists.
- UMD's Vision Statement describes our ideal future and the institution's aspirations. It guides institutional decision-making and priority setting. The year 2020 serves as our target for achieving this new vision.
- UMD's Campus Goals define the six major initiatives leading to the realization of our new vision. They focus on the primary programs and activities for moving us forward within the next three to five years.
- UMD's Campus Action Plan delineates specific measurable steps for achieving the six goals. Some are short-term, to be completed within a year or two, while others are long-term, intended to be accomplished over a period of several years.

Continued,

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UMD Strategic Plan, Continued

Introducing a New Vision

Serving the people of Minnesota and beyond, the University of Minnesota Duluth takes full advantage of its Northeast Minnesota location on the dramatic shores of Lake Superior to offer a quality living and learning experience. An integral part of the University of Minnesota System, UMD takes pride in its collaborative programs and initiatives with other System campuses. We nurture student success in an academic culture of high expectations through a learning-centered environment characterized by innovative comprehensive undergraduate and graduate programs, student life initiatives, discipline-specific and interdisciplinary research opportunities, creative endeavors, and thriving international exchanges.

Our new vision focuses on students learning and growing through experience, critical inquiry, and interaction with other learners. An enhanced research presence leading to regional accomplishments will ultimately result in UMD's recognition as a world-class center of scholarly outreach. At the same time, we build upon our reputation for excellence in recreational programs, student life, and intercollegiate athletics, thereby providing a holistic experience for students.

We encourage the ability to speak honestly about issues and ourselves by fostering a campus culture that welcomes students, faculty, staff, and guests to an inclusive learning climate committed to diversity, equity, and social justice. We serve the educational needs of indigenous peoples, their economic growth, their culture, and the sovereignty of the American Indian nations of the region, the state, and North America.

UMD eagerly embraces a global future while maintaining a strong presence in the cultural, economic, and intellectual life of the

Duluth community, the Northland, the state, and the nation. By strengthening and firmly establishing the centrality of international activities on and away from campus, we leverage our place within the global strategies of the University of Minnesota System. We endeavor to become and remain a model of community engagement and service which improves the quality of life for all and deepens the understanding, meaning, and purpose of the UMD educational experience.

Core Values

To promote student success and to enrich the educational experience, students, staff and faculty at UMD strive to learn, work, and live in accord with the following core values:

- **Learning.** We educate students through an integrative learning-centered environment that fosters a lifelong pursuit of wisdom.
- **Discovery.** We discover, create, and share knowledge.
- **Engagement.** We actively collaborate with each other and the larger community to identify and achieve common goals.
- **Inclusiveness.** We respect and embrace the diversity of individuals, perspectives, and ideas and promote social justice.
- **Sustainability.** We balance current environmental, economic, and social needs with those of future generations.
- **Integrity.** We adhere to the highest ethical standards and take responsibility for our ideas and actions.
- **Excellence.** We achieve excellence through creativity, continuous improvement, and innovation.

Mission Statement

The University of Minnesota Duluth integrates liberal education, research, creative activity, and public engagement and prepares students to thrive as lifelong learners and globally engaged citizens.

Vision Statement

The University of Minnesota Duluth will build upon its unique land-grant and sea-grant traditions to become a premier comprehensive university recognized as world class for its learning-centered student experiences, research, creative activities, and public engagement.

- We will educate students to be engaged, lifelong learners through our rich learning-centered and innovative curricular and student life experiences.
- We will prepare graduates who are sought after by employers because of their cultural, global, and professional competence.
- We will address issues central to the global society's scientific, cultural, economic, and artistic vitality through research and creative inquiry.
- We will become a world leader in learning and research opportunities by leveraging the region's unique natural, human, and cultural resources.
- We will serve the educational needs of indigenous peoples, as well as the economic growth, cultural preservation, and sovereignty of the American Indian nations of the region, the state and North America.
- We will create a campus that exemplifies resource sustainability, technology and information integration, global perspectives and connections, social justice, and collaboration.
- We will be central to the cultural, economic, and intellectual life of Duluth and surrounding communities.

Campus Goals

Goal 1: Promote integrated curricular, co-curricular, and living-learning undergraduate experiences that achieve UMD's student learning goals and prepare students for lifelong learning, globally engaged citizenship, and success in their academic, personal, and professional lives.

Goal 2: Create a positive and inclusive campus climate for all by advancing equity, diversity, and social justice.

Goal 3: Establish UMD as a center of excellence for graduate studies in the Upper Midwest.

Goal 4: Advance UMD's stature as a major campus for research and creative activities, leveraging our region's unique natural, human, and cultural resources.

Goal 5: Strengthen ties with Duluth and surrounding communities in an intentional, visible, and mutually beneficial partnership.

Goal 6: Utilize UMD's infrastructure; technologies; and information, human and financial resources to support the campus in a sustainable manner.

The UMD Strategic Planning Steering Committee unanimously recommended the endorsement of this version of the strategic plan on April 11, 2011.



Master Plan Assumptions

This Master Plan update is predicated on a variety of assumptions that informed the underlying planning process, approach and methodology. These assumptions include:

- This plan describes *strategies* for change and growth; Final solutions will require additional planning, design and engineering to resolve specific programmatic and functional requirements.
- The 2005 Master Plan content and background inform this master plan. Changes to the 2005 plan are noted herein.
- Enrollment will continue to increase at a modest rate, approximately, 1%-2% per year.
- The campus is essentially "land-locked" on all sides with the exception of several strategic expansion areas.
- Existing natural areas should be preserved.
- Recommendations should be fiscally responsible and achievable.
- Parking stall quantity should remain static.
- Transit service to and from the campus will continue.
- On campus sports and recreation fields must be preserved.
- On campus housing capacity is adequate; Any future demand will be absorbed by the private sector.

End of Section

University of Minnesota Duluth
**Campus Master Plan
Update**



GUIDING PRINCIPLES



Establish a clear campus edge on West College Street and Woodland Avenue

West College Street and Woodland Avenue form the southern and eastern edges of the campus, respectively. Today, in many locations, there is a blurring of the campus and the surrounding neighborhoods. The University should seek to better define these edges to better distinguish the campus as a distinct district within the community. This may be achieved by many means including future building siting, landscaping, hardscaping, streetscaping including the use of lighting, signage, markers, monuments and gateways.



Establish primary campus entries

Currently, University Drive and Kirby Drive provide the primary vehicular access to the campus from West College Street and West St. Marie Street. These entries should be distinguished from other entries into the campus. Of utmost importance is relocating the southern University Drive entry - from West College Street, further to the east. This relocated entry drive should be designed to be the primary gateway into the campus. The other entries to campus should still provide functional access to campus but should take on a secondary character and scale.



Maintain and strengthen the “Academic Core” of the campus

The “Academic Core” of the campus is roughly centered around Kirby Student Center and Kirby Plaza. Currently, the Academic Core extends nearly 1/4 mile to the north and south of this center which allows pedestrians to travel from one end to the other in about 10 minutes, or 5 minutes from core to perimeter. Primary future academic, administrative and student service facilities and buildings should be located within this core to support campus walkability, sustainability and efficiency.



Connect the campus to the regional environment

Duluth, Minnesota is located in the unique Lake Superior north shore natural environment. The Master Plan recognizes the landscape, topography and geology of this environment as a key component in building a unique campus. The campus should engage and connect with this environment through paths, trails, views and vistas, stewardship, programs and coursework, and a commitment to celebrate, and connect to, the natural environment both on and around the campus.



Visibly manifest sustainability

The Master Plan recognizes sustainability as a key component in building a unified and enduring campus. It is important that sustainability is not only practiced in policy, but that it is also manifested more visibly on the campus. The landscape is a major vehicle for realizing the University's commitment to environmental stewardship and sustainability. Landscape design elements contribute to student life with spaces for learning, recreation, relaxation, and connections to nature. The Landscape can also provide more functional support of sustainable practices including stormwater rate and flow control, biofiltration; solar control, erosion control, heat recovery, latent biomass, biodiversity and wildlife habitat. Buildings and constructs should also outwardly convey the University's commitment to sustainability through daylight harvesting, solar orientation, material use, density of usable square footage and parking, use/generation of renewable energy and conservation of existing assets.

GOALS



Create a “Front Door” for the UMD Campus

There should be a clear sense of arrival to the UMD campus that begins when nearing the campus and ends when one has the sense they have arrived at the “Front Door” to campus. A future “Solon Lawn” and expanded Kirby Student Center/Solon Hall should be designed to create this welcoming experience for visitors that signals that they have arrived at, and are welcome on, the UMD campus.



Develop a “Focal Point” for the UMD Campus

Buildings and open space on campus should be composed to create a focal point to the campus both visually and spatially. Selected buildings should be designed to punctuate the visual and spatial experience while other buildings should be designed as background buildings consistent with other buildings on campus. The design of open space should support this effort as well by creating primary public open spaces in key locations.



Make the UMD Campus more “Visible”

Today, in many locations, there is a blurring of the campus and the surrounding neighborhoods. The University should seek to better distinguish the campus as a distinct district within the community. This may be achieved by several means including future building siting, landscaping, hardscaping, streetscaping including the use of lighting, signage, markers, monuments and gateways. Additionally, UMD should better utilize off-campus locations as “ambassadors” within the region that signal a connection to the primary campus while conveying the value UMD brings to city, region and state.



Enhance the “Visual Quality” of UMD Campus

The Master Plan should make the campus easier to navigate and more visually cohesive.

The current UMD campus building style varies throughout the campus. Structures are scattered throughout the campus forming a fragmented and visually incoherent appearance. Buildings are not uniform in size or style. In addition, wayfinding for pedestrians and vehicles is difficult. Signage exists but is difficult to find and directions are not easily identifiable. The University should improve the visual cohesiveness and linkages on campus by defining a consistent architectural vocabulary for buildings, establishing strong building edges, open space and distinctive pedestrian pathways, and using landscaping and streetscaping to differentiate parts of the campus. Unified buildings and open space as well as lighting, paving, exterior furnishings and other features should improve wayfinding.



Create a “Pedestrian and Bicycle Friendly” UMD Campus

The plan should seek to resolve conflicting needs between vehicles, pedestrians and bicyclists on campus. Some students live on campus but many more students, and all faculty and staff, commute from the neighborhood and the entire Duluth region. The Master Plan should support multi-modal transportation options and clear and accessible connections to and through the campus in support of safety and function. Those living on campus or coming to the campus should have transit and transportation options. UMD should create a culture that promotes walking and bicycling on campus. Parking should be limited primarily to the perimeter of the campus and bicycle facilities should be strategically located. The core of the campus should support pedestrian and bicycle access for easy, legible and safe movement across campus.



Connect and “Integrate” the UMD Campus into the City of Duluth

The University should continue to positively make its presence felt within the city and region. On-campus and off-campus programs, research, functions, events and conferences as well as off-campus facilities should build awareness and signal a connection to the University while conveying the synergistic and inherent value UMD brings to the city, region and state.

CITY OF DULUTH SMALL AREA PLAN



Background

With three colleges and over 20,000 students, Duluth is a college town. And as with other college towns, the growth of the student population and the changing characteristics of colleges have influenced the city's neighborhoods and economy. In light of these changes, the Higher Education Small Area Plan looks at ways to make Duluth an even more successful college town by balancing the needs of the colleges, students, businesses, and residents. It examines land use, transportation, demographics, and environmental considerations in the study area, which covers approximately six square miles of the city and includes the areas with highest concentrations of students living near the colleges.

In March 2012, the City of Duluth published the City of Duluth Higher Education District Small Area Plan. The study area includes the University of Minnesota Duluth as well as the College of St. Scholastica. A small area plan is a plan that is developed for a clearly defined area and gives more detailed recommendations than would be provided in the City of Duluth Comprehensive Plan.

The plan aims to:

- 1) Identify areas and strategies for residential and commercial development that meets market demand and includes places for students to dine and shop.
- 2) Identify strategies to alleviate pressure on established neighborhoods and to maintain their residential character.

The Five Goals of the Plan include:

- 1) Strengthen single-family neighborhoods through appropriate zoning tools and neighborhood stabilization efforts.
- 2) Minimize impacts on single-family neighborhoods from noise, light pollution, and visual impacts of student housing.
- 3) Promote mixed-use development and student housing along transit corridors and within walking distance of campus.
- 4) Increase use of alternate modes of transportation.
- 5) With leadership from The University of Minnesota Duluth and The College of St. Scholastica, integrate the colleges and students into the community.

Each goal has specific recommendations. Many require ongoing partnerships between the colleges, City, non-profit organizations, businesses, and neighbors. The recommendations continue the City's policy of strengthening neighborhoods through land use changes, neighborhood stabilization, and code enforcement. The plan supports the transition of the Woodland Avenue corridor to a mixed-use, pedestrian friendly area providing student housing, stores, restaurants, and neighborhood services. It also identifies social and physical ways to integrate the colleges and the community. An important part of this planning process was identifying win-win recommendations, such as bike trails and increased neighborhood retail. Importantly, the plan also finds that Duluth has already achieved success with such tools as the Duluth Transit Authority's UPASS program and the Social Host Ordinance. In recognition of efforts already underway, this plan's recommendations identify ways to build on these successes and increase collaboration across the city.

March 2012

Higher Education Small Area Plan Study Area





End of Section

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PLAN ELEMENTS AND
GUIDANCE
IMPLEMENTATION

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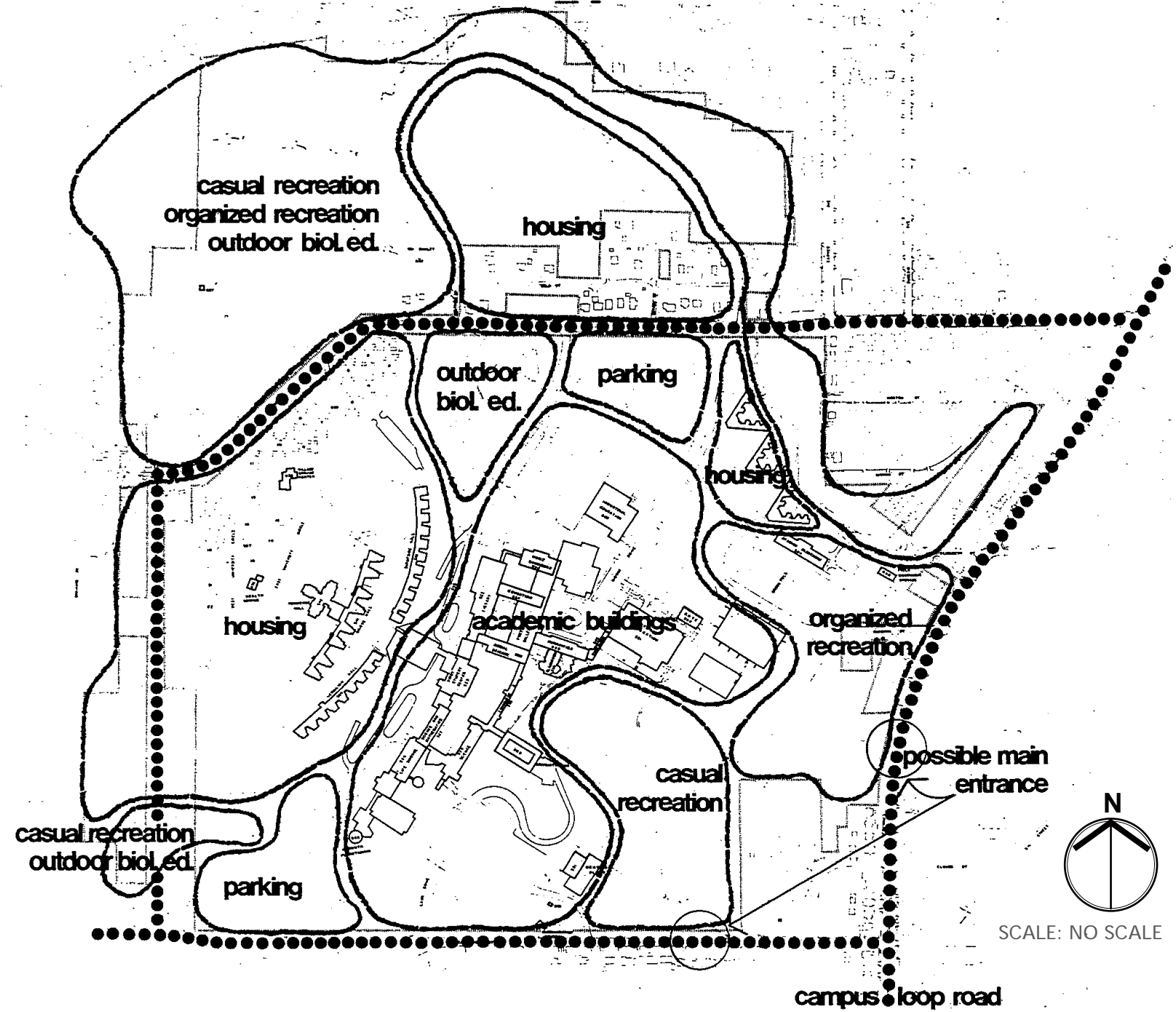
Plan Elements and Guidance

Land Use

Continuing traditions

The primary land uses on campus are academic, housing, recreation/athletics, natural open space and parking

General Description: The recommended land use plan generally follows the historic development pattern of the campus. This pattern concentrates academic facilities at the core of the campus while providing housing to the west, parking at the perimeter, and recreation, athletic and natural areas to the north and east.





Academic



Housing



Recreation and Athletics

Plan Elements and Guidance

Land Use



a. Academic: Academic facilities should be concentrated within the “Academic Village” at the core of the campus. Administrative and student support services should also be located within this core area.

b. Housing: Housing should continue to be located primarily on the west side of the campus.

c. Recreation/Athletics: Recreation and Athletic facilities should, in general, remain proximate to one another for efficiency and ease of maintenance. These facilities should continue to be located on the east and north side of the campus.

d. Natural Open Space: Natural Open Space should continue to be located on the north side of the campus and extend into the campus on the north side where possible and practical.

e. Parking: Parking should primarily be concentrated on the north and south sides of the campus. Over time, parking should be accommodated with structured parking where possible. When surface parking is required it should be limited in size and screened from view as much as possible.

Plan Elements and Guidance

Public Spaces and Buildings

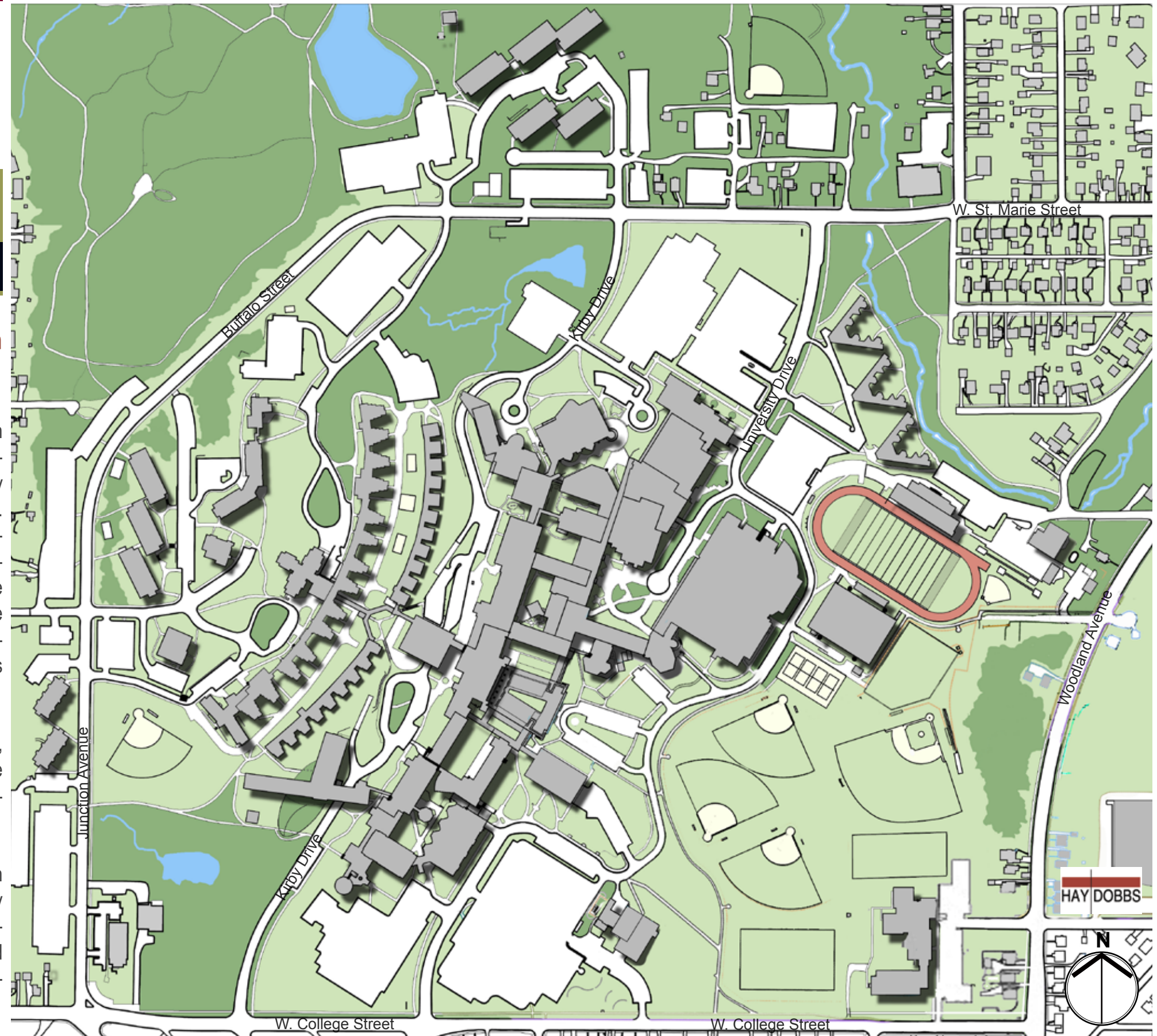
General Considerations

There should be a synergy between buildings and open space on campus

Buildings and open space should be designed to work together on the campus. As the UMD campus develops toward its target enrollment, a number of new buildings will be added and the density or intensity of development throughout the campus will increase. To prepare for this growth, open space can be designed and implemented early on in the process in anticipation of future building design and construction. These open spaces then form the development framework for future buildings while preserving the required area for the building. This approach has the added benefit of creating more usable open space on the campus regardless of the timing of future building construction.

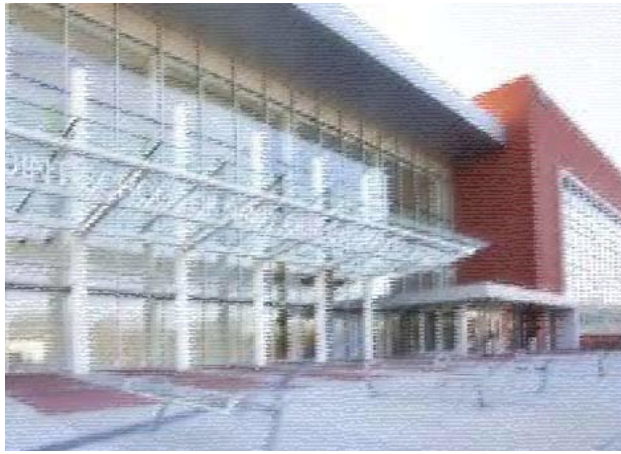
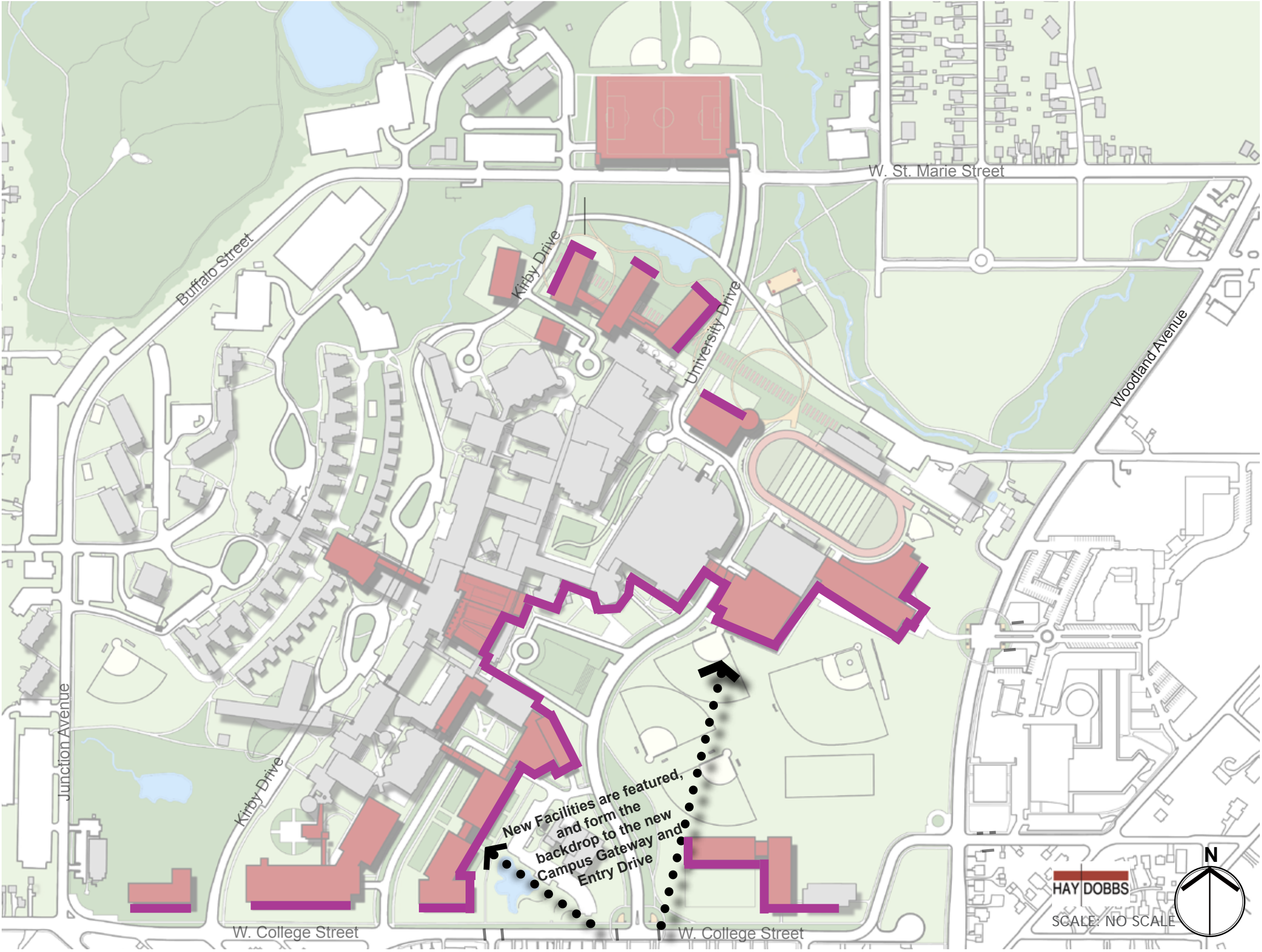
Conversely, if building design and construction is more immediate, then the building should seek to “create” meaningful and cohesive open space, of the proper character, by the careful siting and design of the building.

The primary formal public open space should be the future “Solon Lawn” on the east side of the campus. This area should be slowly revealed to the visitor as they enter the campus from West College Street on the new University Drive. Future buildings should frame this arrival sequence and provide the backdrop to the primary public open spaces.



Existing Conditions

Future Buildings Framework



New Facilities become the “face” of the University

Plan Elements and Guidance

Public Spaces and Buildings

Open Space

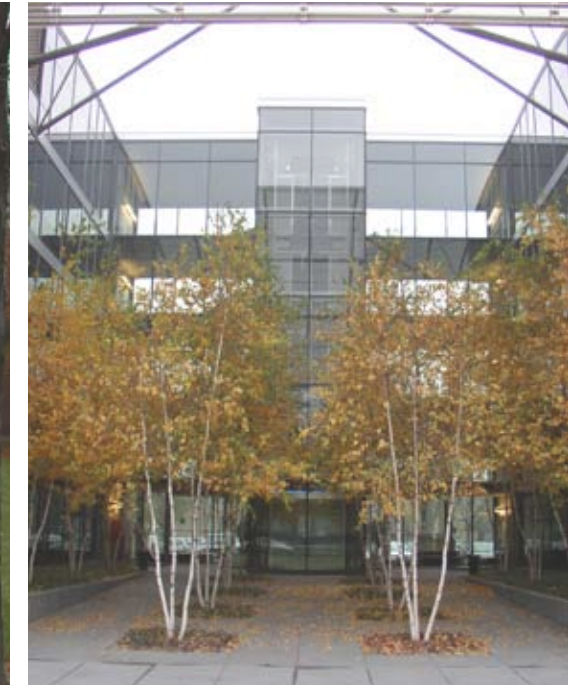
Create a variety of open space types on campus

The goal for the campus open space is to create a rich, supportive environment of open spaces and amenities that will support the academic and residence life components of the campus. Existing open spaces will be improved and new spaces added over time to improve the image of the campus, provide programmable and informal usable space, and contribute to a sustainable campus by conserving water and reintroducing native and other sustainable vegetation.

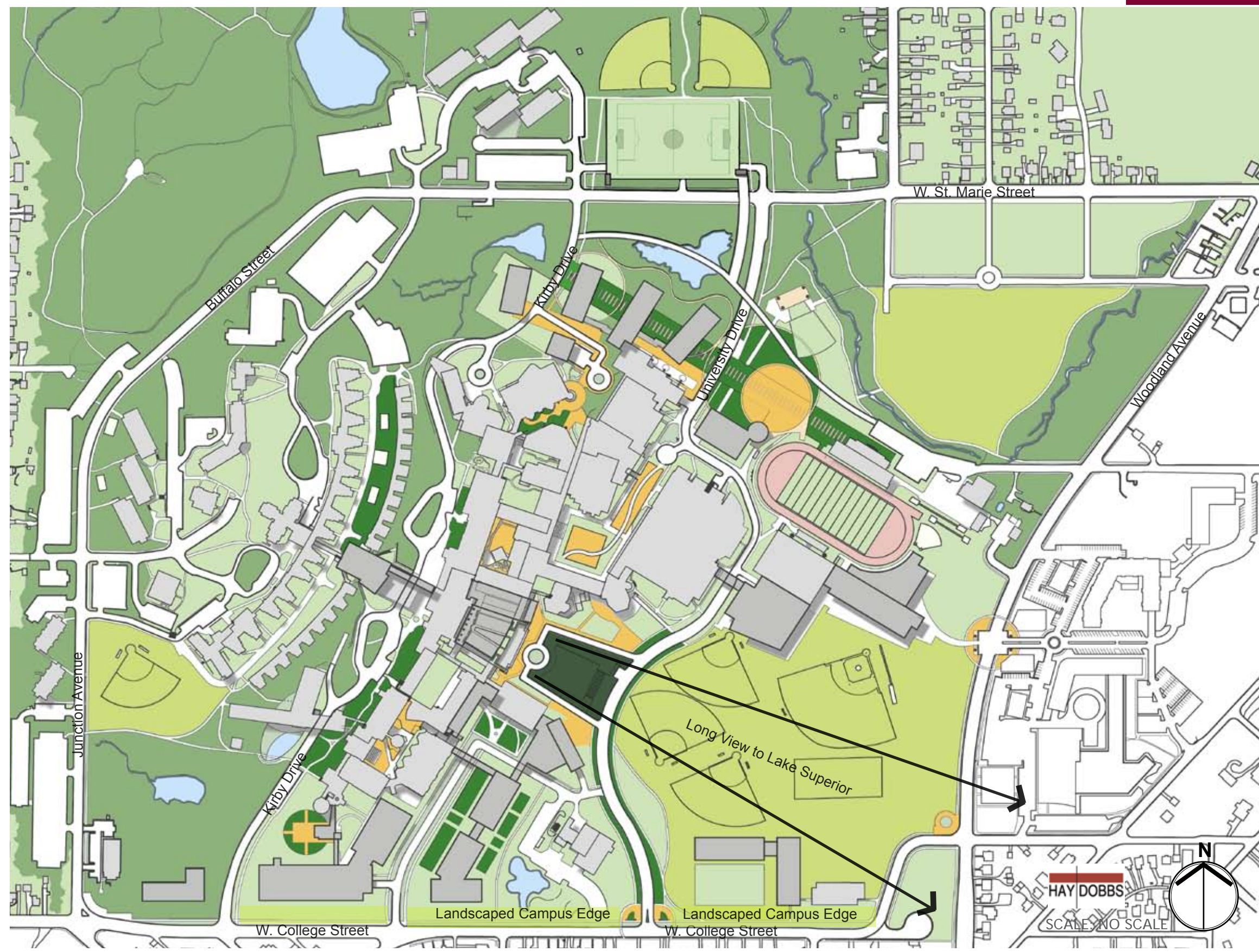
The campus today lacks a clear pattern of open space that was more present in the original campus plan concepts. The strategies in this master plan seek to reestablish some of the original patterns while supplementing them with spaces of varying scales and purposes. Careful implementation of these open, outdoor spaces will have an important impact on the character of the campus for decades to come.

Five types of open spaces are planned on campus:

- Primary Public Lawns
- Secondary Campus Yards
- Courtyards and Plazas
- Recreation and Athletic Fields
- Informal Natural Landscapes



Open Space Framework



■ Informal Natural Landscape
 ■ Primary Public Lawn
 ■ Public Yard
 ■ Rec/Athletics
 ■ Court/Plaza

Plan Elements and Guidance

Public Spaces and Buildings

Natural Features and Systems

The northern forest environment should be invited into the campus

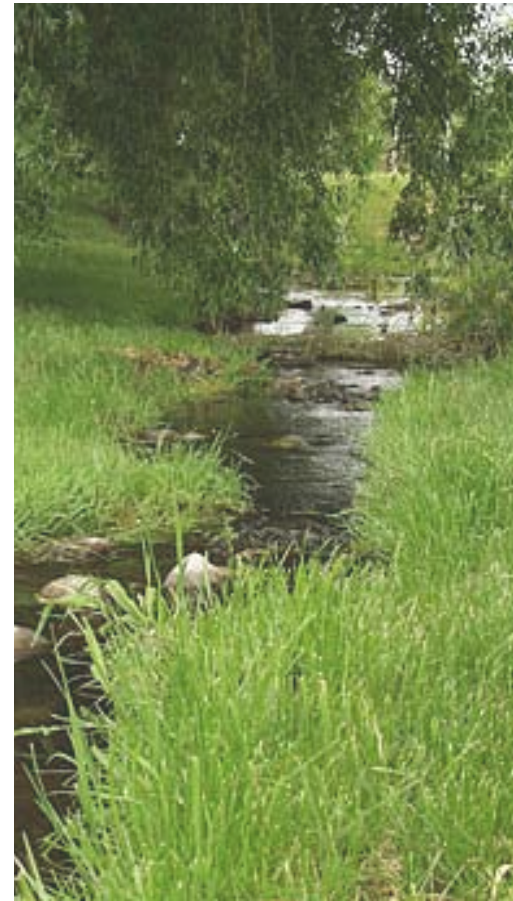
The Northern Minnesota landscape and nearby Lake Superior are powerful forces in creating a university with an authentic connection to place. Views to Lake Superior should be celebrated and enhanced wherever possible as a reminder of the campus proximity to this great lake.

Efforts should be made to more fully embrace the natural features already found on the northern portion of the campus and to integrate this landscape fully within the campus.

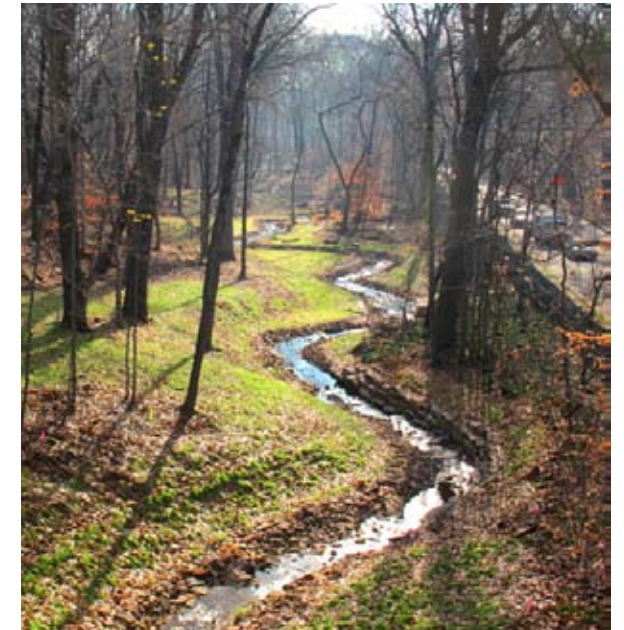
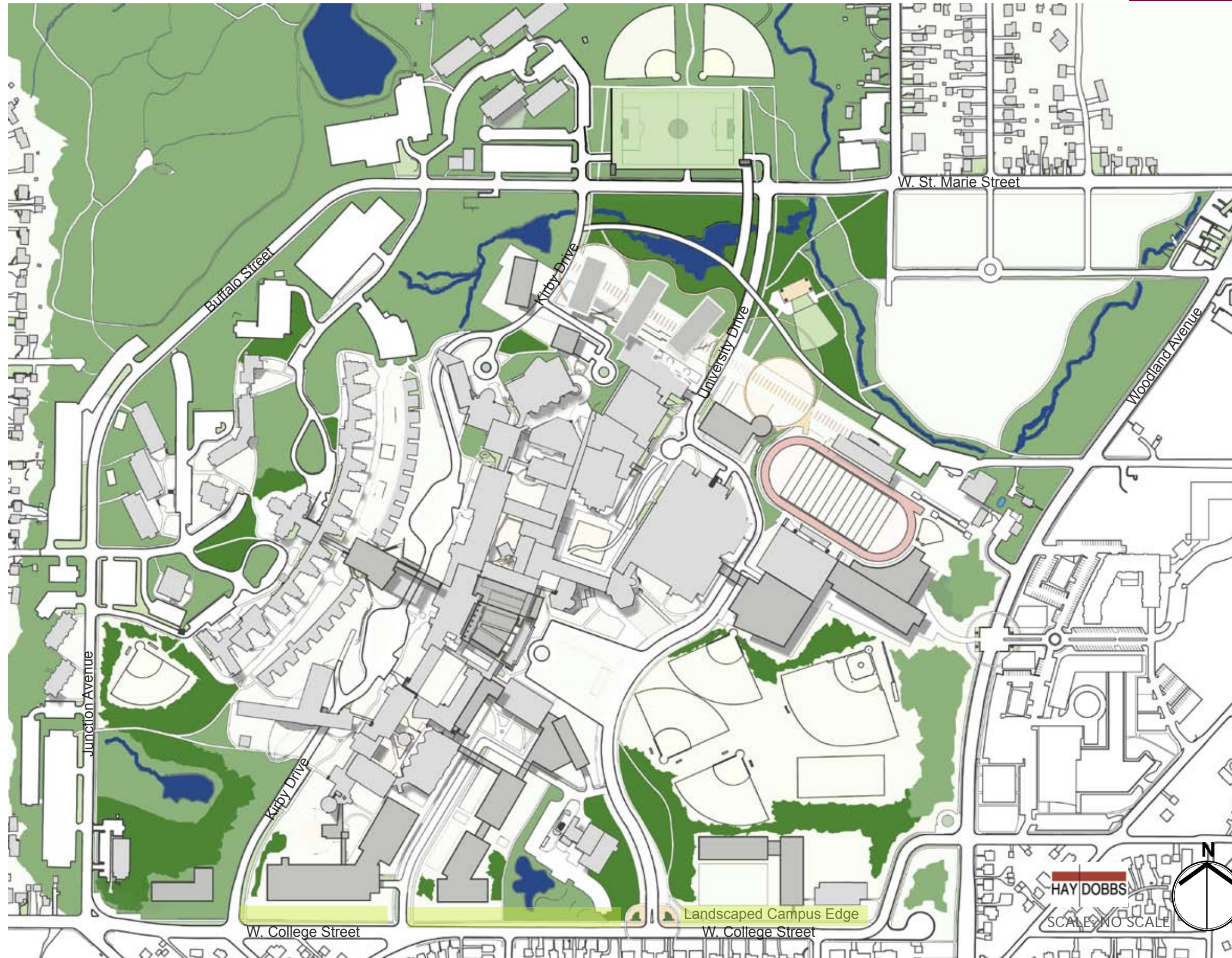
A Principle Goal of this master plan is to “Visibly Manifest Sustainability”. This can be achieved, in part, by a commitment to make restorative investments in:

- Hydrological systems: campus ponds and streams should be highlighted and used as natural amenities and rainwater biofilters, while still protecting them from degradation; and ecosystems;
- Geological systems: rock outcroppings, rip-rap, features;
- Ecosystems: local flora and fauna in and around campus;
- Open Space: lawns, yards, gardens and recreation fields;
- Trails and Paths: bike and pedestrian - on and beyond campus.

Natural features and systems should be used as a living laboratory, as is currently being done in Bagley Nature Center, to advance the University Mission and Strategic Plan.



Natural Features and Systems



Plan Elements and Guidance

Movement and Circulation

Gateways, Wayfinding and Orientation

Systems should work together to promote ease of access and clear routes to, and within, the campus

Wayfinding systems should be developed to create a series of layers that convey clearly to users that they are:

- 1) Approaching the campus,
- 2) Near the campus,
- 3) Arriving to campus,
- 4) On the campus,
- 5) At their first destination (often drop-off or parking),
- 6) At their final destination (building, room, event, etc.).

Tools such as banners, signage, lighting and appropriately scaled constructs should indicate proximity to the campus and should guide visitors to the major campus entries with simplicity and ease.

Major campus gateways should welcome visitors and embody the spirit of UMD in form, material and message. They must be significant enough to intuitively convey a sense of arrival to users. Phase one of this effort will include the development of a new major campus entry on the south side of campus off of College Drive. This gateway will allow entry to the campus to the east of the Lund Physical Plant and will reconnect with the existing University Drive near the Weber Music Hall. University Drive will be downgraded

to a service drive allowing for future building expansion and new open space to the southeast of the Medical School and Darland Hall. This will also provide the opportunity to create an arrival sequence that can express the natural beauty of the campus and showcase new facilities while minimizing the visibility of surface parking as the primary first impression upon arrival. The relocation of the entry drive will allow for the orderly and methodical expansion of academic buildings while preserving the recreation and athletic fields on the east side of the campus. Wayfinding on campus should be clear and easily understood. Pedestrian and vehicular circulation, landmarks, signage, and architecture should create a hierarchy of space that will add to imageability and wayfinding helping to facilitate travel to, from, and within buildings and parking areas.

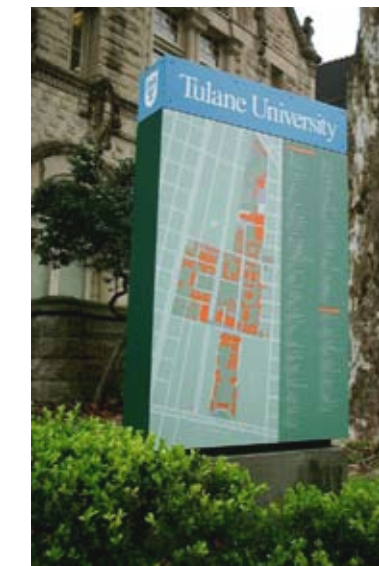
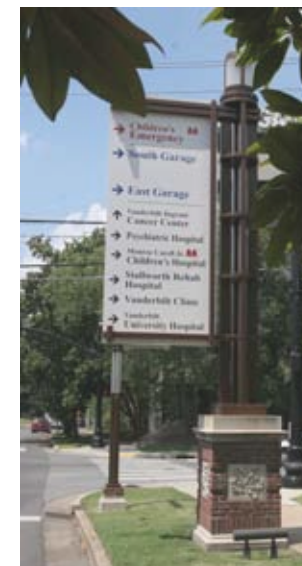


Gateways



Primary Entries

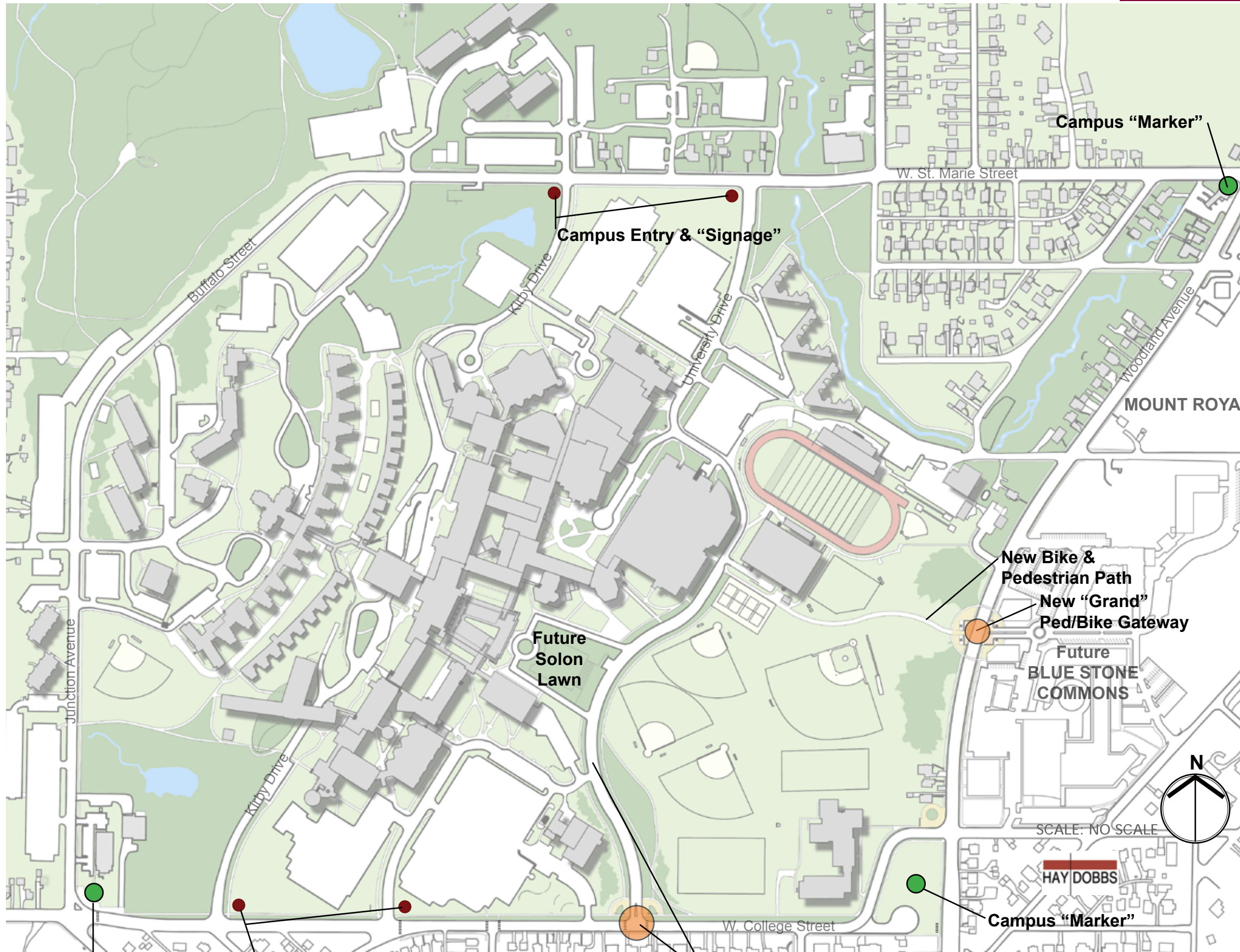
Edges



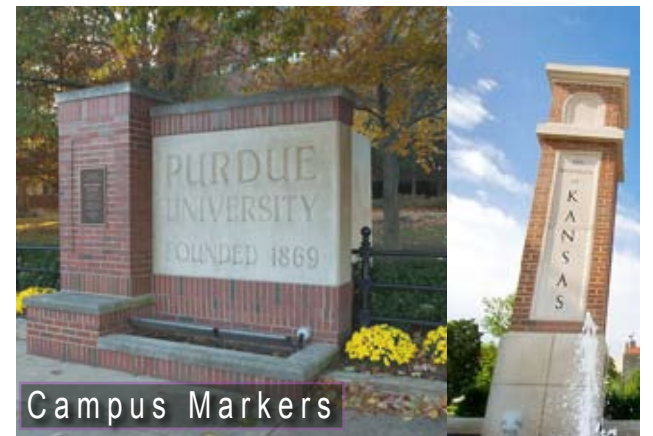
Secondary Entries, Wayfinding and Signage



Gateways and Wayfinding



- Campus Marker
- Campus Entry & Signage
- Campus Gateway



Plan Elements and Guidance

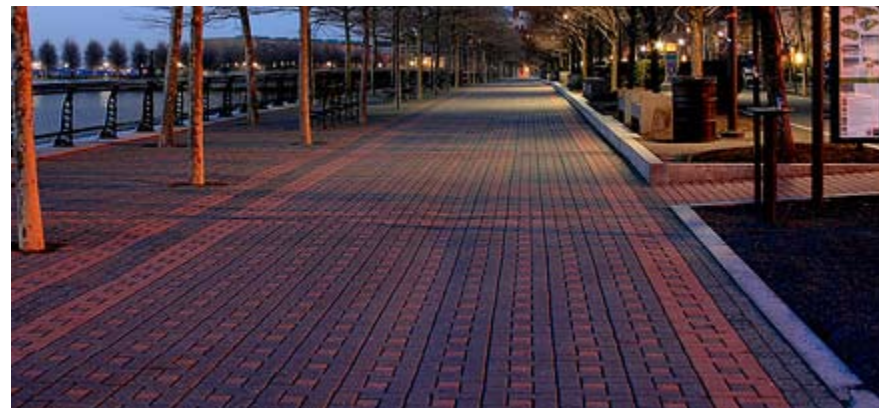
Movement and Circulation

Pedestrians

Pedestrian movement should be of primary importance on campus

Safe, reliable and convenient pedestrian access on campus is essential. However, pedestrian access should go beyond mere utility. A thriving academic community depends as much on the casual encounters that arise from well designed patterns of access, as it does on the more structured encounters of the classroom and laboratory. The ongoing trend toward interdisciplinary scholarship requires a campus sufficiently compact to allow for both formal and informal collaboration. Walking, the primary means of movement in and around the campus, should be encouraged both by upgrading major interior and exterior pedestrian routes to make them pleasant, legible, and secure day and night, and by minimizing conflicts with vehicles.

Capital investment should both optimize access to campus programs and resources and maintain the primacy of the pedestrian by: establishing a program of strategic investments to upgrade major pedestrian routes into and within the core campus - both externally and internally; consolidating campus parking in structures outside or at the edge of the core campus; collaborating with the city of Duluth on integrated landscape and access improvement programs at the campus perimeter and; restricting service and delivery vehicles to designated times and routes.

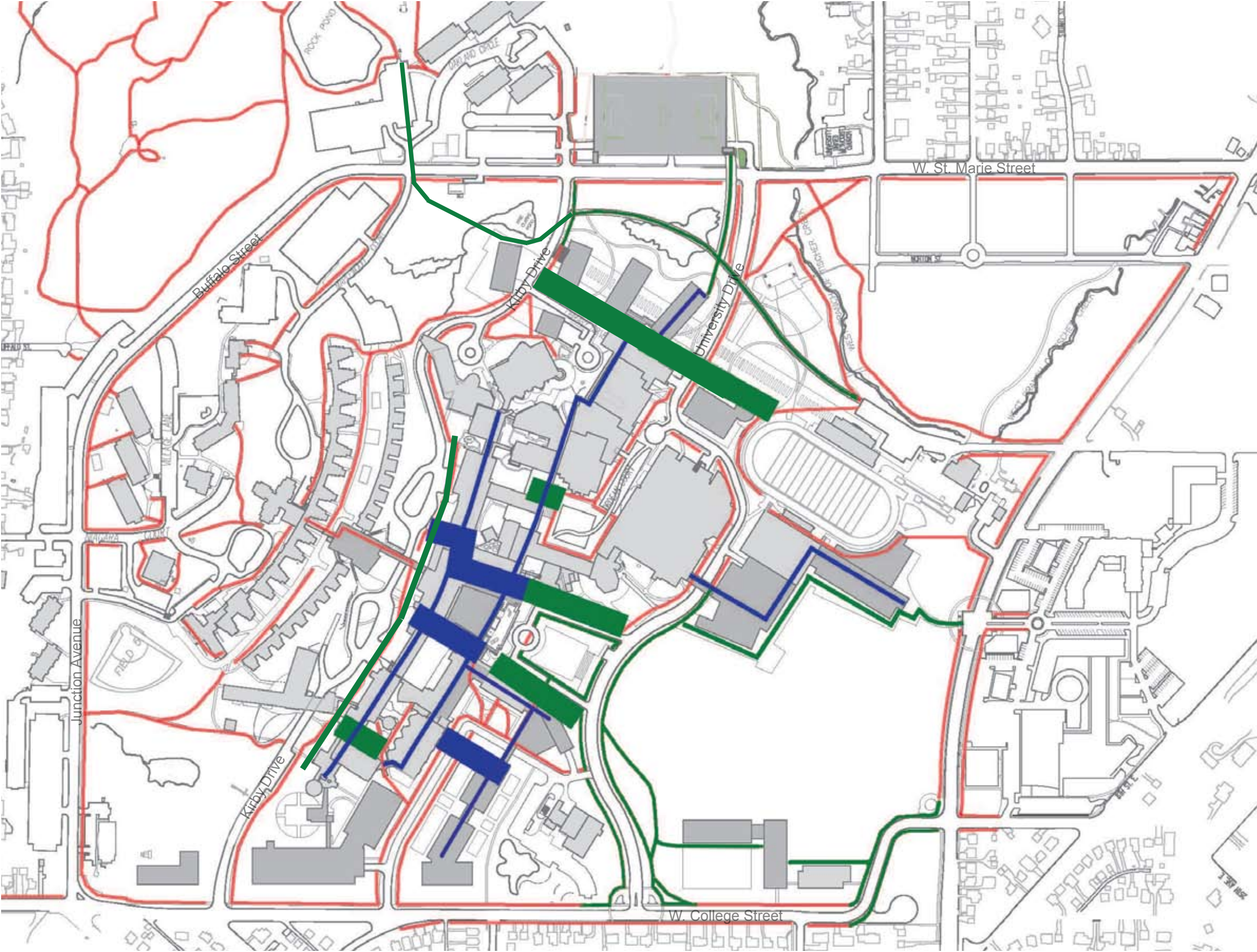


Formal



Informal

Pedestrian Framework



- █ Primary Interior Routes
- █ Future New/Improved Interior Routes
- █ Exterior Routes
- █ Future New/Improved Exterior Routes



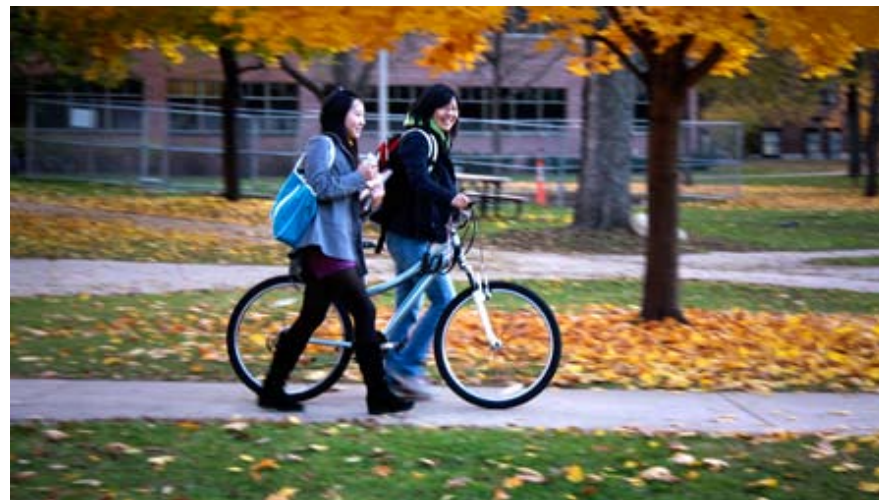
Plan Elements and Guidance

Movement and Circulation

Bicycles

Enhance routes, services and storage for bicycles on campus

Not only are more students, faculty, and staff opting for public transit rather than automobile to travel to and from the campus, but bicycle use has also increased. The Plan responds to this demand by recommending enhanced bike facilities on campus with connections to off-campus locations and City of Duluth bicycle trails. The UMD Campus should support an increase in the number of bike commuters. New bicycle facilities should be added including secure bike parking, covered storage and selected service/sales areas. It is also recommended that a stronger bike network be developed on campus along with these enhanced bicycle facilities. The Plan seeks to create stronger east-west bike routes along around and through the campus. These new connections should occur as either dedicated bike paths, on-street lanes or by sharing the roadway with traffic using a sharrow symbol to mark space for bike riders (as the City of Duluth has already done in several locations). This use will need to be monitored to determine if additional sidewalk width is needed in the future, or if paths/trails separated from pedestrians is needed based on high use of these routes by both pedestrians and bikes. Pedestrian safety should be a paramount concern in all cases. These new connections are major improvements and will strengthen UMD's commitment to supporting all means of transportation.



Integrated Bike Paths

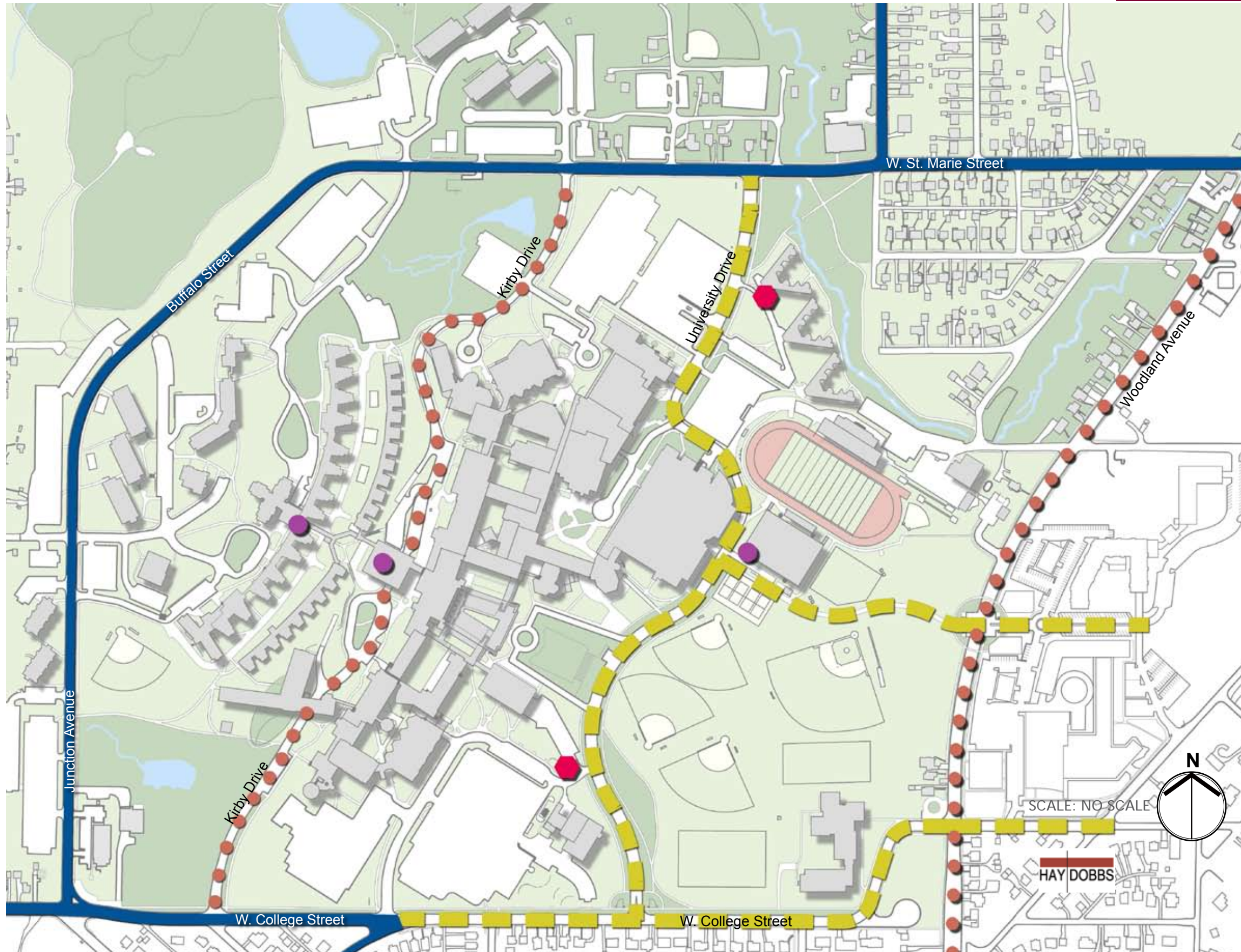


Integrate with Transit



Provide Amenities

Bicycle Framework



■ Bike Route
 - - - Proposed Routes
 ●●●● Undesignated Routes
 ◆ ZAP Station
 ● Proposed Major Bike Facility

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Plan Elements and Guidance

Movement and Circulation

Transit

Transit should be integrated into the campus movement systems, signage and amenities

Thanks to a cooperative effort between UMD and the Duluth Transit Authority (DTA), UMD students, faculty and staff can ride DTA buses anytime, anywhere throughout the Twin Ports, free of charge with their UMD Photo I.D.

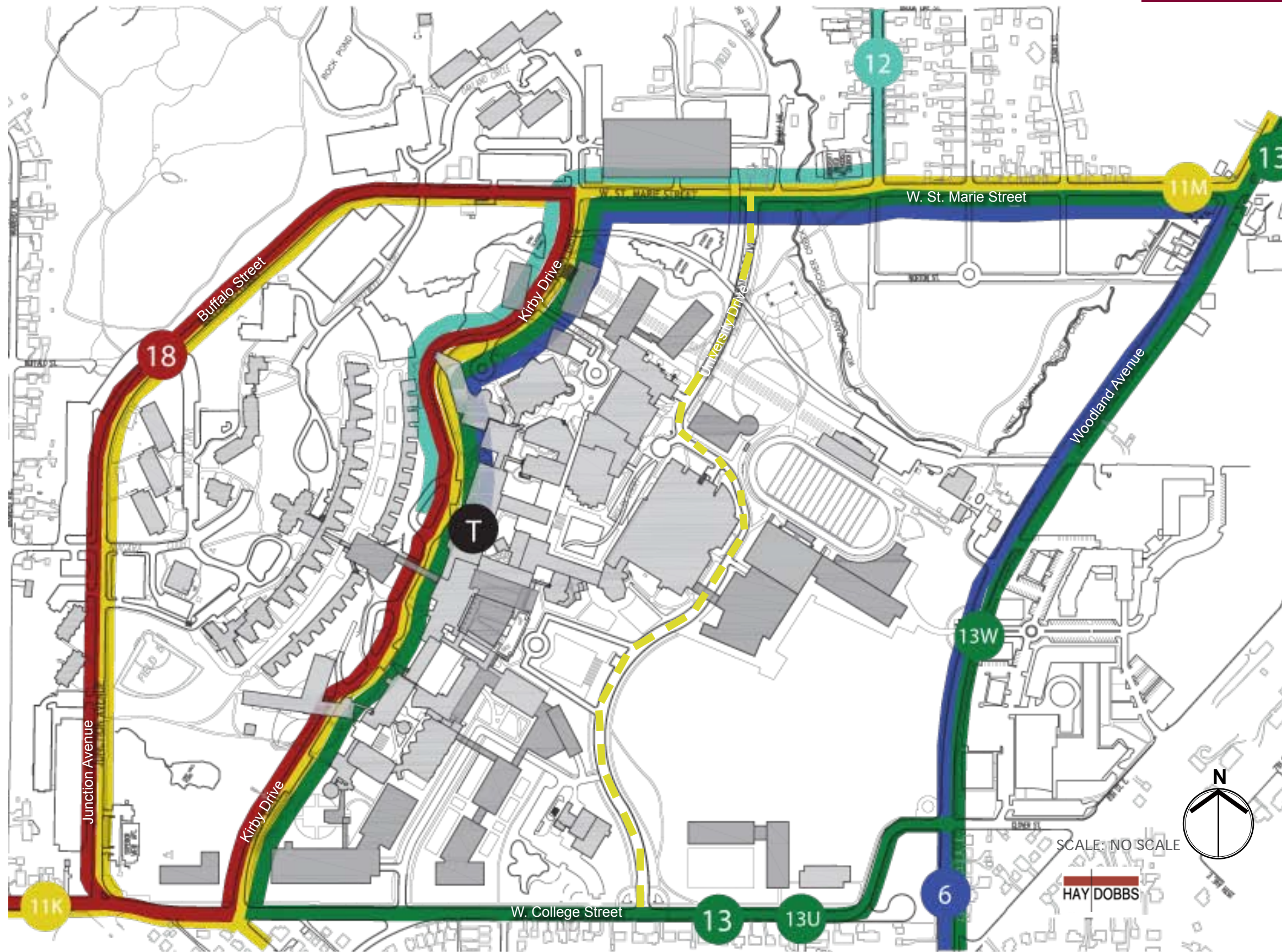
Users have realized that riding the DTA is a smart choice as they encounter no fees and no parking hassles.

The DTA has plans in place to increase safety and efficiency of bus service. By including adding additional buses during peak periods and improving routes, the DTA system will help to decrease vehicle congestion on and around campus. All buses should eventually be equipped with bike racks to better serve multi-modal passengers. Buses will eventually have global positioning devices, allowing passengers to monitor actual arrival times with smart phones and in-station real-time schedules.

The Kirby Transit Plaza on the UMD campus is anticipated to remain as the primary transit stop on campus. Future secondary stops should be considered on the east side of the campus as the campus grows physically to the east.



Transit Framework



 Existing Routes

 Potential Additional Routes/Circulator

 Existing Transit Plaza

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Plan Elements and Guidance

Movement and Circulation

Vehicles

Vehicular access should be clear for visitors and discreet for regular users

The arrival sequence to campus makes a major impression on visitors to the campus. UMD events and destinations draw visitors from all over the region to the campus, as well as off campus venues. As such, a clear, layered, logical wayfinding system should be developed to greet those destined for the UMD campus. “Trail-blazer” signage and banners should be put in place within one-mile of the campus. More distinct signage and architectonic elements should be put in place near the campus and adjacent to the campus to confirm visitor’s proximity to the campus. Campus Markers and Gateway elements, supported by cohesive signage, should beckon visitors into the campus where they should be greeted by a cohesive on-campus wayfinding system that guides them to parking or drop-off locations and on to their final destination.

Signature Streets, as an extension of campus gateways, should be treated with a higher degree of design quality, attention and detail followed by Primary Routes. Service and utilitarian routes should be more discreet, intended primarily for regular users and service vehicles.

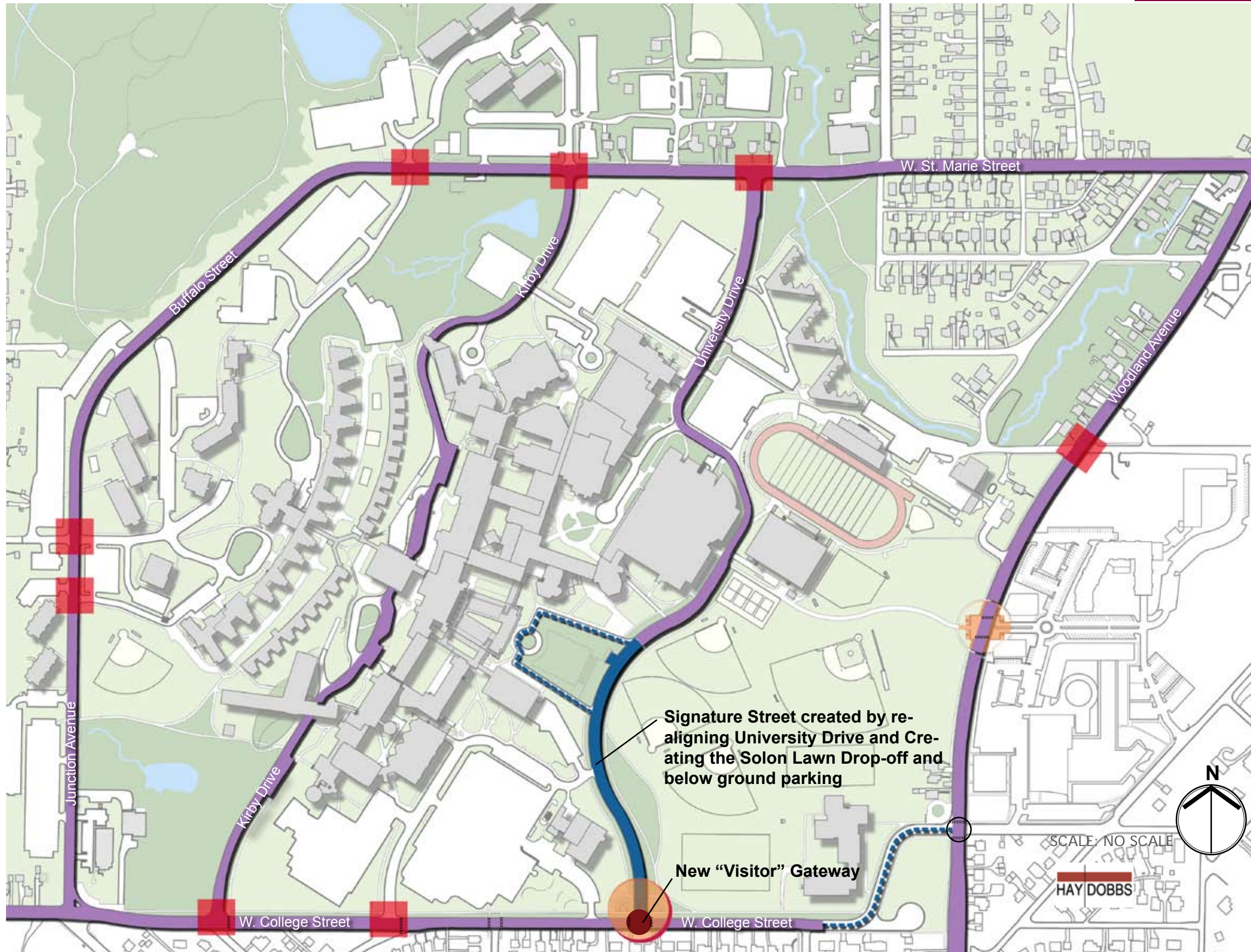
A balance must be maintained between public vehicular access and the need to limit vehicular access to selected areas of the campus.



Markers

Gateways

Vehicle Framework



- Signature Street
- Primary Routes
- Future Streets
- Gateway
- Entry

Plan Elements and Guidance

Parking

A long term strategy

De-emphasize parking as the primary first impression of the campus

Existing conditions of transportation on the UMD campus were assessed and include traffic circulation and access, parking, transit, and pedestrian facilities. Regional transportation issues were also considered. UMD currently relies entirely upon surface parking lots to accommodate campus parking needs. Many of these large surface lots are located along key arrival points to campus. This creates the first impression of the campus as that of parking lots.

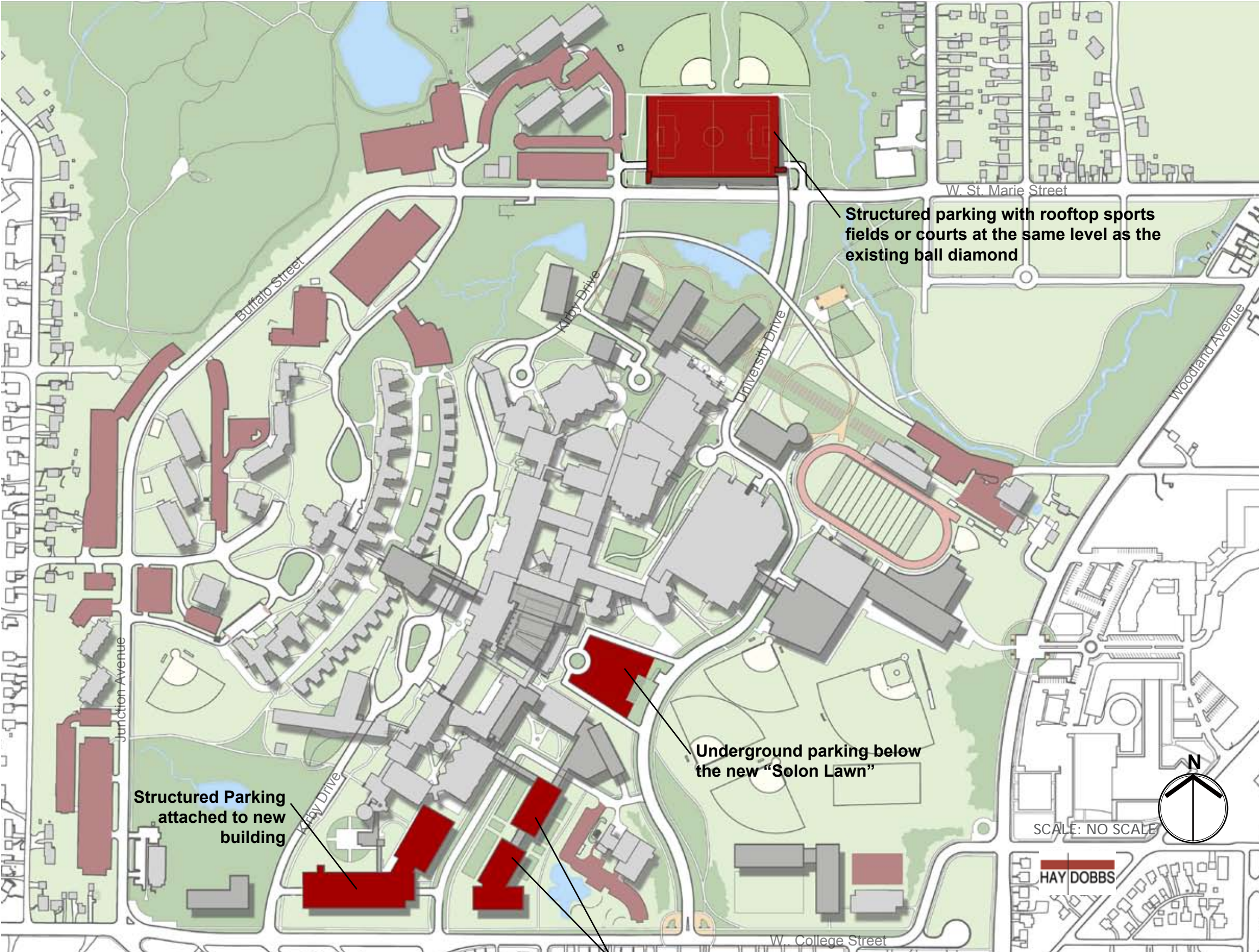
Parking demands will increase with future growth in student enrollment and development of new and expanded campus facilities. Construction of new multilevel parking structures is recommended at the north and south campus perimeter to meet campus parking demands in the coming years. Parking should also be designed to be located under, or in the lower levels of, new facilities whenever possible. Additionally, below grade parking should be designed into the future “Solon Lawn” to provide centralized structured parking for visitors to athletic, performing arts and other campus events. The northern parking deck top level can also be surfaced for athletic and recreation activities (soccer, tennis courts, etc.) and may even be roofed over for year round use. Because of the topography, this level should be designed to be at the same grade level as the existing ball diamond, thus creating contiguous space for related activities.



Structured parking can be decked, wrapped or located underground. Surface parking lots that remain should be screened with landscape and fencing treatments.

Lots should also be broken down in scale whenever possible by the introduction of islands, rainwater gardens, and other treatments.

Parking Framework



Structured Parking
 Surface Parking

Underground parking below the new buildings

Plan Elements and Guidance

Additional Considerations

Internal Circulation

Legibility, Light and Views

Presently, the campus is very internalized. As a pedestrian, one can circulate throughout nearly all of the on-campus buildings without ever leaving the comfort of the interior environment. Although this practical response works quite well, it also can be quite disorienting. Many of the buildings are focused inward and there are limited opportunities to take advantage of natural daylighting, natural ventilation and views to the outdoors. Additionally, nearly all of the vertical circulation - stairs and elevators - are located internally with few or no windows, again limiting exposure to natural light and orienting views of surrounding buildings and landscape.

Daylighting is the controlled admission of natural light—direct sunlight and diffuse skylight—into a building to reduce electric lighting and save energy. By providing a direct link to the dynamic and every changing patterns of outdoor illumination, daylighting helps create a visually stimulating and productive environment for building occupants, while reducing as much as one-third of total building energy costs.

Whenever possible in both new and existing buildings and linkways, daylighting and views should be a design priority to enhance sustainability, reduce operating costs, support wayfinding and orientation, visually connect to the outdoors, and better connect public open space and natural features with internal spaces.





Research Lab Building - One of three remaining buildings on the former UMD lower campus on Fifth Street, this facility houses the Large Lakes Observatory (LLO), among others, and has strong ties to the NRRI and the Limnology Lab.



Natural Resources Research Institute (NRRI) - Located near the Duluth Airport, this high bay research facility also operates a research laboratory in Coleraine, Ely and Zim, MN.

Glensheen - Donated to UMD in 1968, the Glensheen Historic Estate is a historic mansion and 7.6 acre estate on Lake Superior constructed as the family home of Chester Adgate Congdon. Listed on the National Register of Historic Places, this facility today functions as a tourist destination, reception facility and event center.



Limnology Lab Building - Originally a Fish Hatchery and on the National Register of Historic Places, this highly visible facility sits directly on the shore of Lake Superior adjacent to London Road. Research is closely tied to the LLO as well as the NRRI.



Research and Field Studies Farm - 114 acre site located along Amity Creek approximately 4 miles from campus on Jean Duluth Road. This resource hosts educational and research-centered activities and also provides space to support other UMD Campus activities.



Plan Elements and Guidance

Additional Considerations

Off-Campus Facilities

Ambassadors and Brand Stewards

UMD maintains and utilizes numerous off-campus facilities ranging from research facilities to historic properties located throughout northern Minnesota. These facilities have the ability to expand the UMD brand by functioning visually and programmatically in their respective locations. As such, these facilities can act as “ambassadors” for the University, positively connecting each remote facility back to the main UMD campus and demonstrating the value UMD brings to the region.

Specifically, these facilities include:

- Natural Resources Research Institute, Duluth
- Research Lab Building, Duluth
- Limnology Lab, Duluth
- Research and Field Studies Farm, Duluth
- Glensheen, Duluth

The first four facilities focus largely on research and learning related to Natural Resources and Environmental Issues. Collectively, these facilities can convey a powerful message of UMD’s commitment to sustainability, conservation and economic development of Minnesota’s natural resources in an environmentally sound manner.

The UMD brand should be manifested in these facilities by unified exterior, on-site and web based graphics/signage; consistent messaging, and synergistic programming. On campus efforts should also be made to raise awareness of these proximate facilities.





End of Section

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University of Minnesota Duluth
Campus Master Plan
Update



Implementation

Short Term Plan

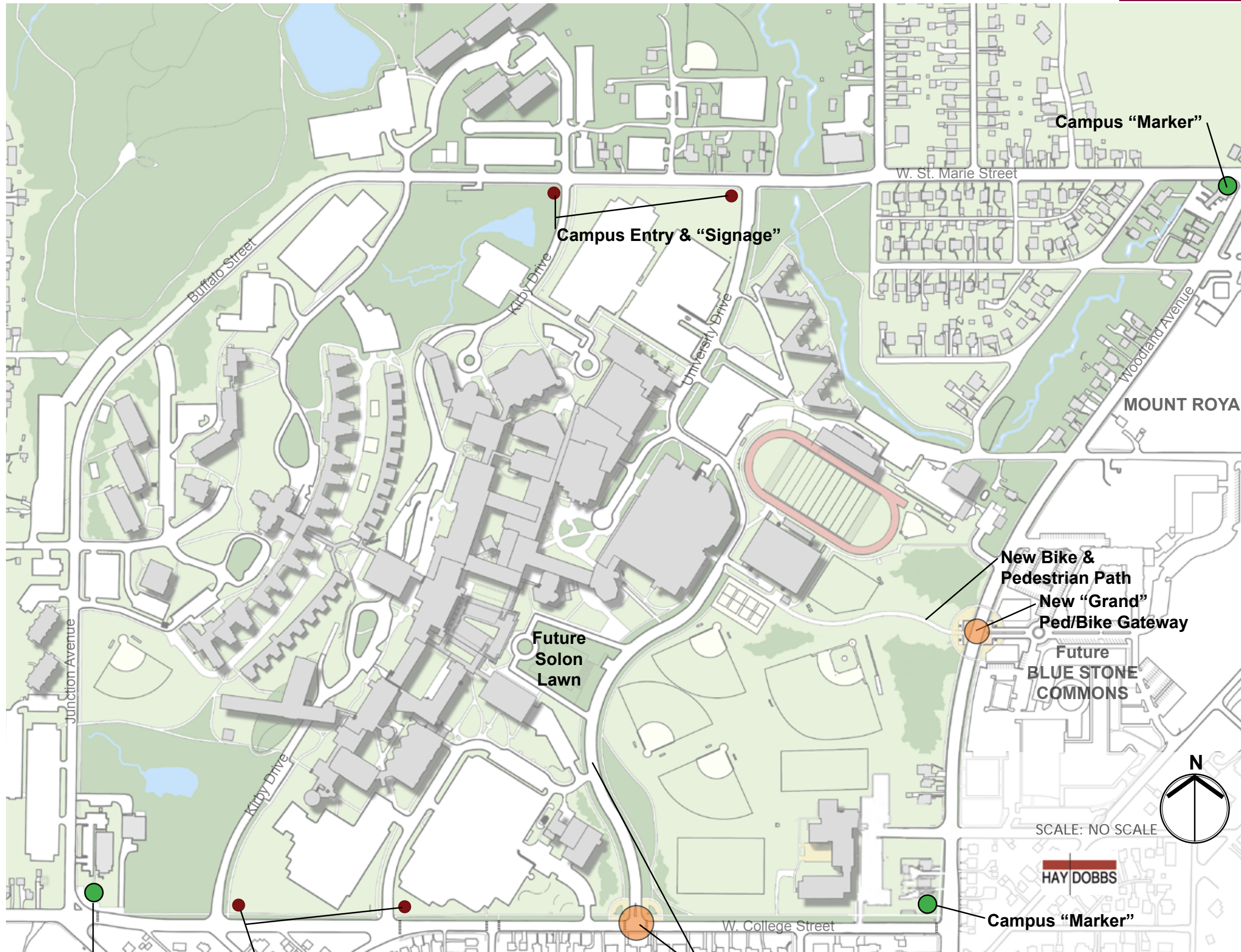
Creating a Better Sense of Arrival

The immediate focus of the Master Plan Update will be to design and construct the new “Visitor Gateway” entry on the south side of the campus off of West College Street. This new entry will become the primary vehicular access point to the campus for visitors. University Drive will be reconfigured to connect to this new entry and to allow for campus building expansion eastward around the campus core.

A second new entry, the “Grand Ped/Bike Gateway” will be designed and constructed off of Woodland Avenue. This Ped/Bike Gateway will provide a much stronger and safer access point to campus from the Blue Stone Commons residential and commercial development as well as other areas east of Woodland Avenue.

Already underway, additional wayfinding, signage and markers will supplement this effort.

Additional near-term activities involve working with the City of Duluth on a possible reconfiguration/relocation of the West College Street/Woodland Intersection to Clover Street; implementation of several “in-process” design/construction projects; and planning for future capital projects.



Campus "Marker" Campus Entry & "Signage"

New "Visitor" Gateway and realigned University Drive

Proposed UMD Master Plan - Short Term Plan



Campus Gateway



Campus Marker



Bike/Ped Path



Ballfield Fencing

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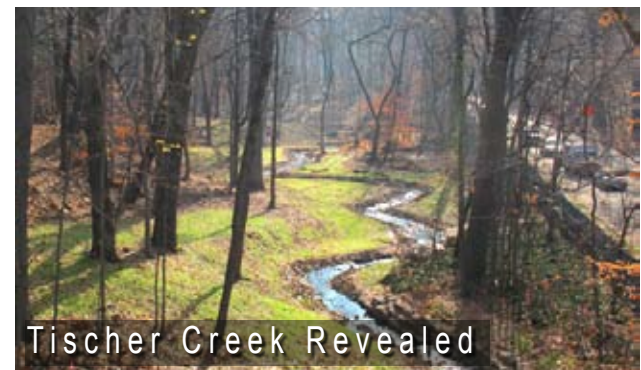
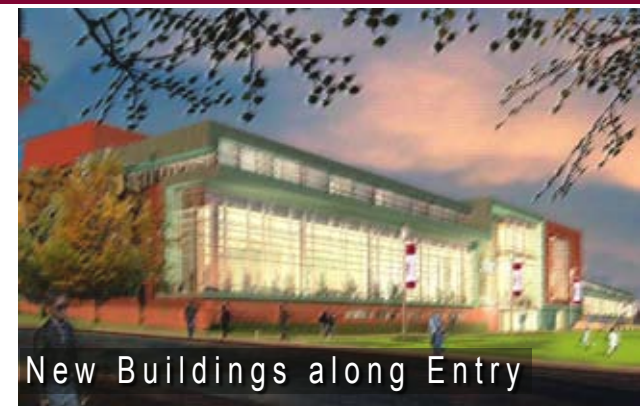
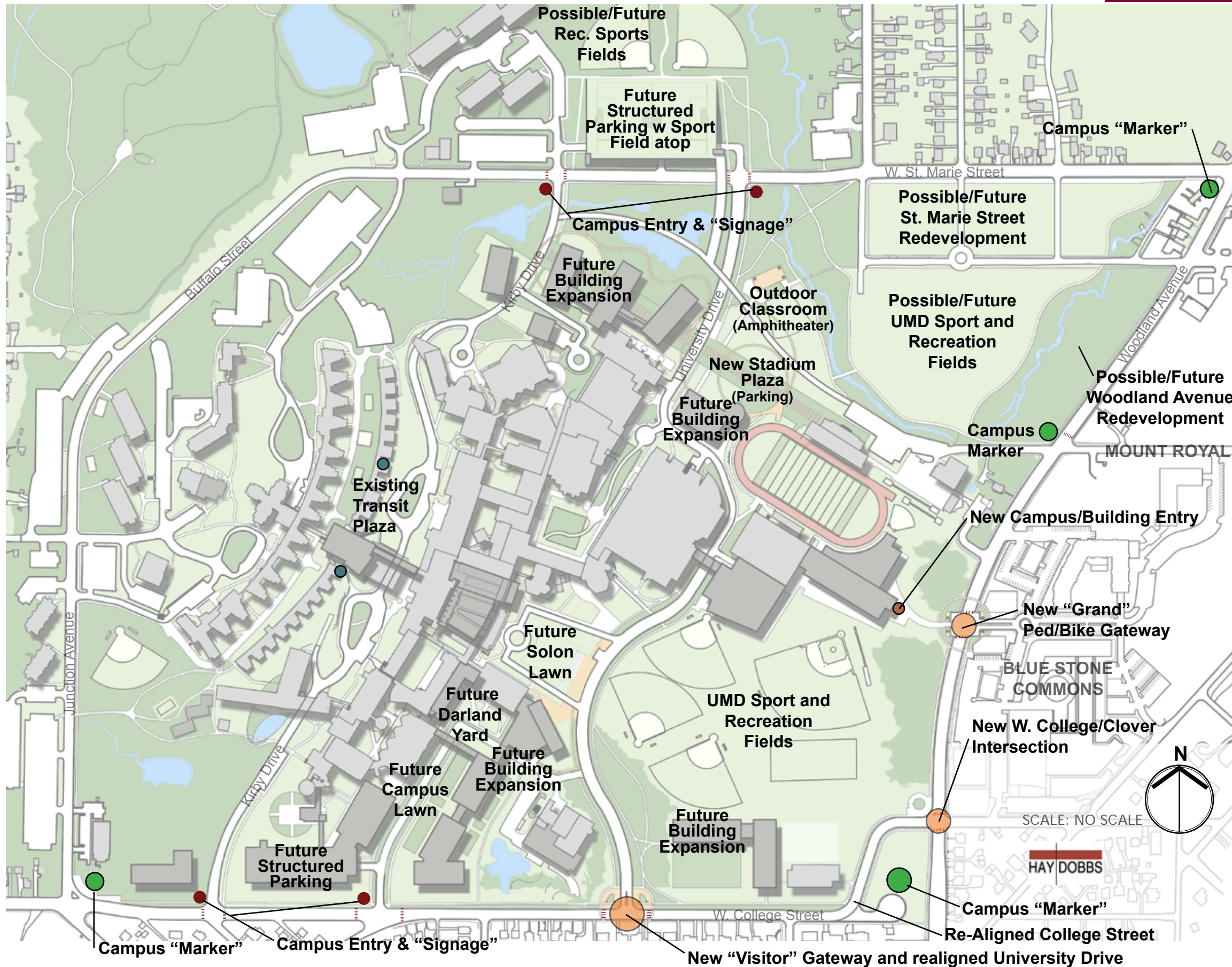
Implementation

Long Term Plan

Being thoughtful about growth and change

The long term plan for UMD grows the campus in a compact and walkable manner. Nature is invited in more fully on the north end of campus while the southeastern portions of campus become more regularized and urban. Parking is primarily located in perimeter structured parking facilities creating a more pedestrian friendly and visually appealing campus core. Academic, Student Service, Administrative, Recreational and Athletic facilities expand near similar related facilities following the campus land use plan. Buildings and open spaces work synergistically in support of one another. Buildings are positioned to allow for views, vistas and solar access. Natural and sustainable features are tangibly present on campus and new campus facilities are showcased within their respective precincts and along major vehicular and pedestrian thoroughfares. Off campus UMD facilities become ambassadors to each host community, reinforcing the UMD brand and demonstrating the value UMD brings to the region.

The future of UMD is bright. This plan provides the flexible framework to accommodate change while guiding the incremental physical manifestation of the University's strategic plan.



Proposed UMD Master Plan - Long Term Plan

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