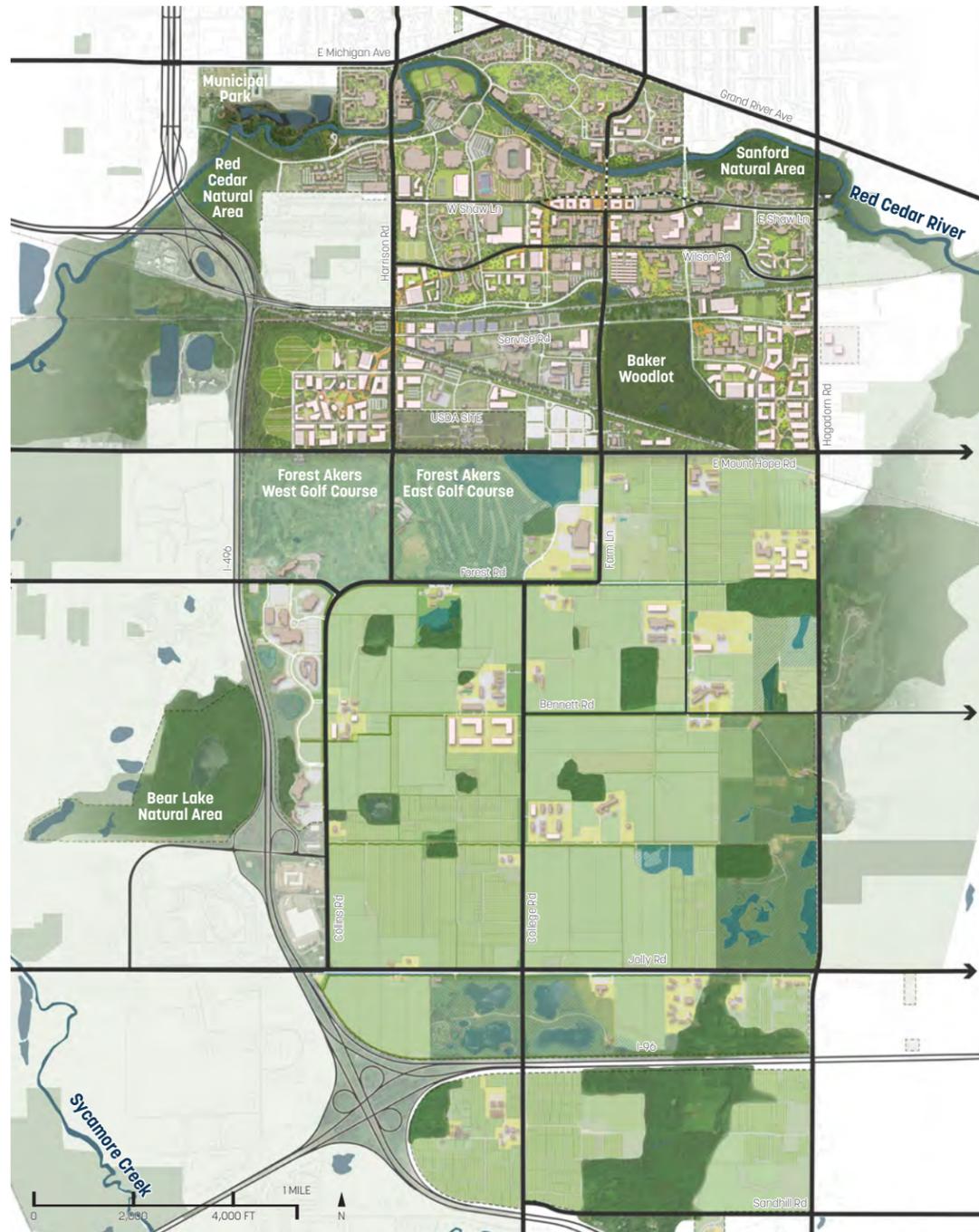


# 4 Campus Frameworks



## FRAMEWORK VISION

Vision 2050 provides a flexible framework that meets the campus' near-term needs and provides capacity for long-term development across the East Lansing campus. Within the historic North Campus, it focuses on modest infill development and selective redevelopment at a scale that reinforces the park-like, pedestrian-oriented setting. South of the Red Cedar River, infill development along the Farm Lane and Shaw Lane corridors supports a more pedestrian-oriented precinct than what is present today. A spine of open space and public realm connects the precinct southwest, towards the intersection of Trowbridge Road and Harrison Road. Immediately adjacent, the plan identifies a vibrant district of research and partnership space on the former site of Spartan Village.

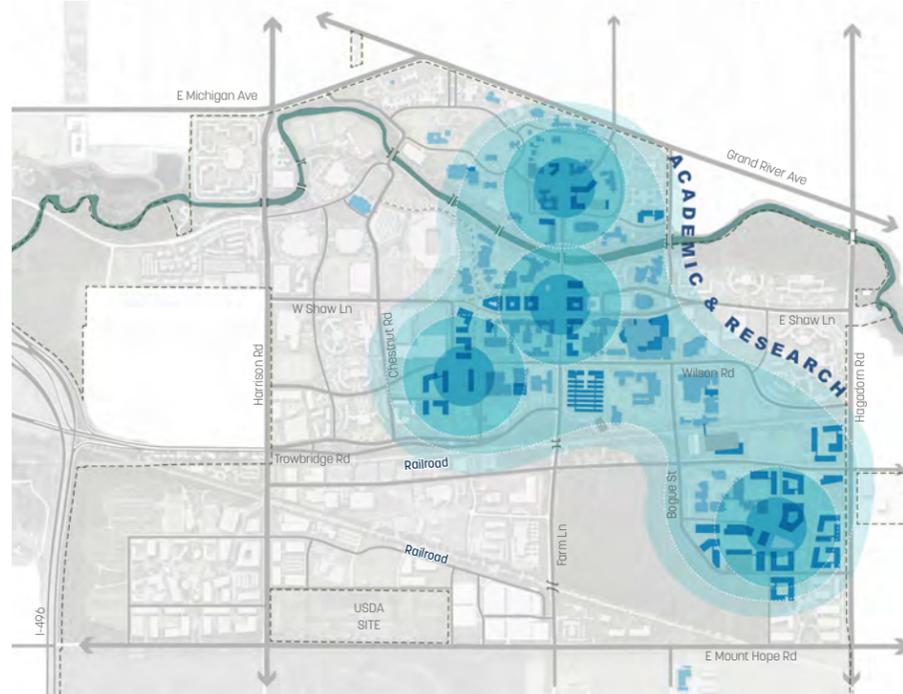
Stretching southeast from the Central Campus, a second spine of open space supports pedestrian mobility between the academic core and an expanded biomedical academic and research district. This reimagined district could support both MSU- and affiliate-sponsored research and housing and amenities to provide a more vibrant, mixed-use district.

Notably, the plan protects and expands many agricultural and natural resources supporting learning and discovery on the East Lansing campus. South of Mount Hope Road, the plan minimizes the amount of new development, ensuring that future generations have access to the farmlands that continue to play a pivotal role in MSU's academic and research mission.

The plan expands Baker Woodlot and preserves woodlands and wetlands elsewhere on campus, most notably along the Red Cedar River and throughout the Agricultural Campus.



# LAND USE FRAMEWORKS



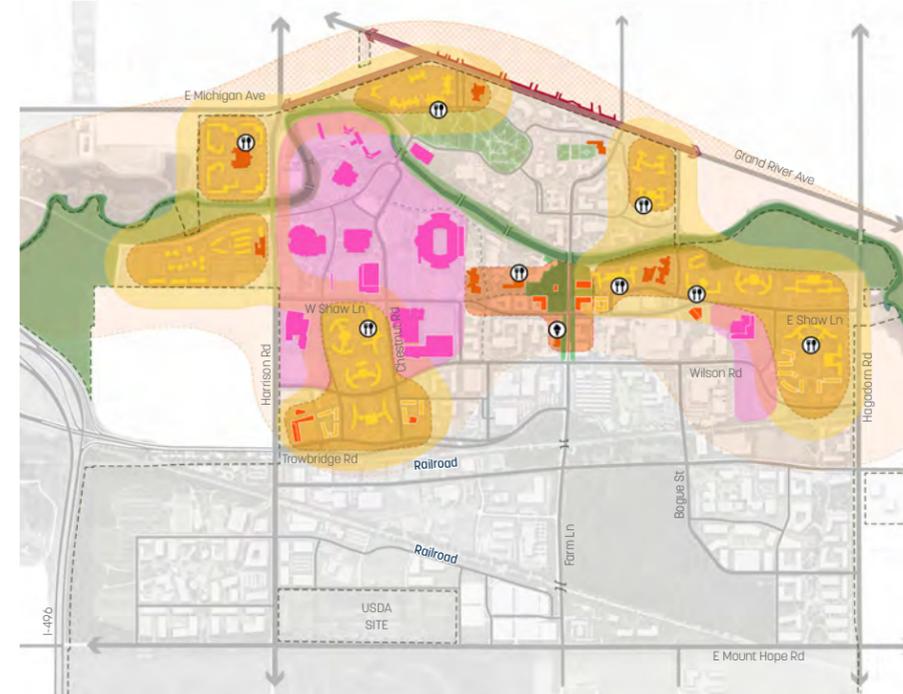
## Academic Crescent

The plan intentionally concentrates academic and research facilities along a crescent that connects the former Spartan Village, the intersection of Farm and Shaw, and Southeast Campus. This focused development pattern maximizes programmatic synergies, utilizes the university's land to its highest and best potential, provides efficient accessibility to these resources, and minimizes costly extensions to supporting infrastructure. Proximity for class change and research collaboration is critical.



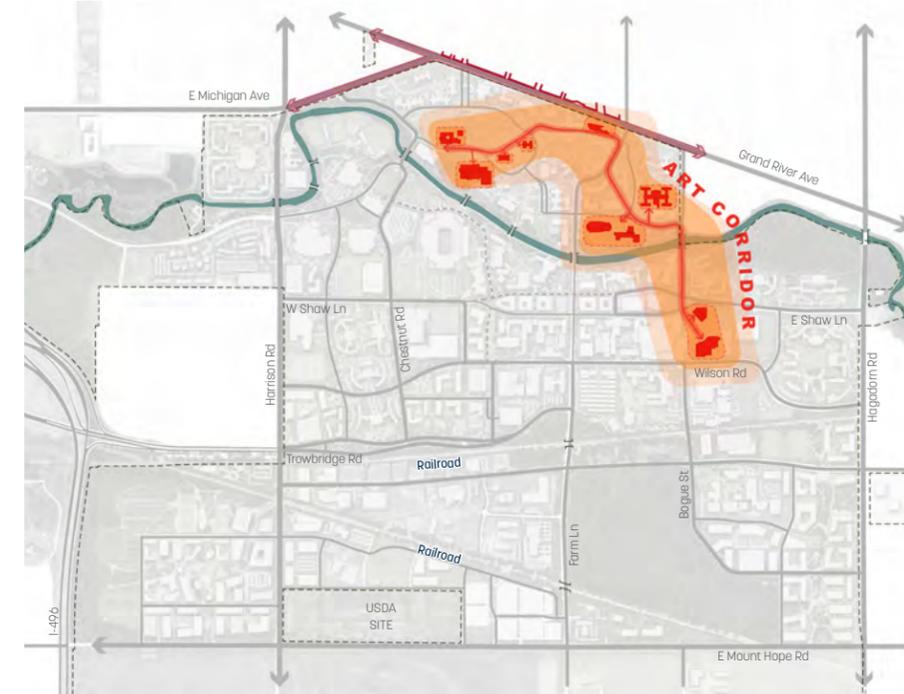
## Research Gateways

In addition to university-sponsored research and academic growth, the plan anticipates sites for partnerships that advance its teaching, research, and outreach mission. These support new gateways to campus at its southeast, along Hagadorn Road, and its southwest, along Harrison Road.



## Campus Life Nodes

The plan provides a flexible approach to the potential expansion or renewal of existing student housing and student life amenities. It concentrates improvements within or adjacent to MSU's existing residential neighborhoods, ensuring efficient access to academic resources and amenities that support the development of the whole student. Given the success of the residential neighborhoods, this same intention to support the whole student should be considered within academic districts to promote student health and wellbeing throughout the day.



## Arts and Culture Corridor

Creative inquiry and the arts are fundamental to advancing knowledge and developing a vibrant campus community. The plan identifies a corridor that connects the Wharton Center for the Performing Arts north to Kresge Art Center, the Auditorium, and Broad Art Museum. This spine not only unifies the university's multiple facilities for visual and performing arts but also tie it to the vibrant retail and dining district along Grand River Avenue, thereby stitching the university's artistic mission with East Lansing's cultural context.

# PROGRAMMATIC FRAMEWORK

Vision 2050 provides for up to 27 million GSF of additional programmatic capacity within the East Lansing campus. Of this capacity, approximately 37% supports academic growth, 33% mixed-use, and 12% student housing. The plan supports existing programmatic distribution across campus, with academic and research functions extending along the Farm Lane corridor, southwest towards the intersection of Chestnut Road and Trowbridge Road, and southeast towards the Biomedical Discovery Neighborhood. Interspersed within these corridors are campus life amenities intended to provide a vibrant academic environment, and support for health and wellbeing.

To the east and west of the academic core, the plan recommends modest infill and redevelopment of existing housing stock as well as campus life hubs to amplify MSU's successful neighborhoods model. Maintaining a density of students living adjacent to the academic core and adding density within the academic core is intended to reduce the perceived distances between these precincts and encourage students to remain in the academic neighborhoods throughout the day to foster meaningful connections.

Finally, the plan recommends potential partnership opportunity sites within the Southeast Campus and along Harrison Road and the former Spartan Village parcel. These mixed-use districts can flexibly meet various programmatic functions, including affiliated research, housing, retail, and dining.

- Proposed Academic/ Research
- Proposed Partnership
- Proposed Athletics
- Proposed Housing
- Proposed Campus Life
- Proposed Admin/ Support
- Existing Academic
- Existing Research
- Existing Clinical
- Existing Athletics
- Existing Housing
- Existing Campus Life
- Existing Admin/ Support
- M Capital Area Multimodal Gateway
- P Existing Structured Parking
- P Potential Structured Parking





## PUBLIC REALM FRAMEWORK

Many parts of MSU's campus benefit from an elegant open space network, from the legacy landscapes around East Circle and West Circle Drives, the network of open spaces and pathways that trace the Red Cedar River, and the more intimate gardens across the campus. Vision 2050 amplifies the existing diversity of open space to create a cohesive network of paths, gardens, plazas, and quads that promote non-motorized mobility across campus. Within each precinct, iconic and memorable open spaces provide visual connectivity between buildings and provide opportunities to showcase the university's groundbreaking learning and discovery within the public realm. A clear hierarchy of bike and pedestrian paths, separated from the vehicular network, intuitively knits the campus's precincts together. Along the primary pedestrian corridors, more intimate parks and plazas adjacent to key buildings support outdoor gatherings and provide the campus community with places to find solace and connect with the natural environment.

While the primary pedestrian network largely works separately from the campus's vehicular network, the campus's streets and roads are equally important components of the campus identity. As a counterweight to the picturesque and park-like North Campus, the plan positions new facilities within those precincts south of the Red Cedar River to strategically reinforce street edges, creating precincts that feel slightly more urban and vibrant. The plan promotes impromptu connections and cross-programmatic connectivity through consistent streetscapes, modest increases in density, and the relocation of parking away from the heart of each precinct.

- Existing MSU Buildings
- Potential Development Site

## Interconnected Natural Areas

Vision 2050 establishes a framework that connects the East Lansing campus's diversity of natural areas together into a more cohesive system of ecological resources. Strategic investments in the streetscape and public realm improve connections between major resources such as the Red Cedar River corridor and Baker Woodlot. Precinct-level stormwater management facilities ameliorate the impacts of major rain events on downstream areas of campus and the Red Cedar and Grand River watersheds. Corridors of native prairie grasses stitch together the Southern Agricultural Campus, introducing additional biodiversity within areas that could otherwise be a monoculture of crop species.

-  Ecological Area
-  Historic Lawn
-  Sport Fields
-  Golf Course
-  Streetscape with Multi-Layer
-  Planting as ecological connectors

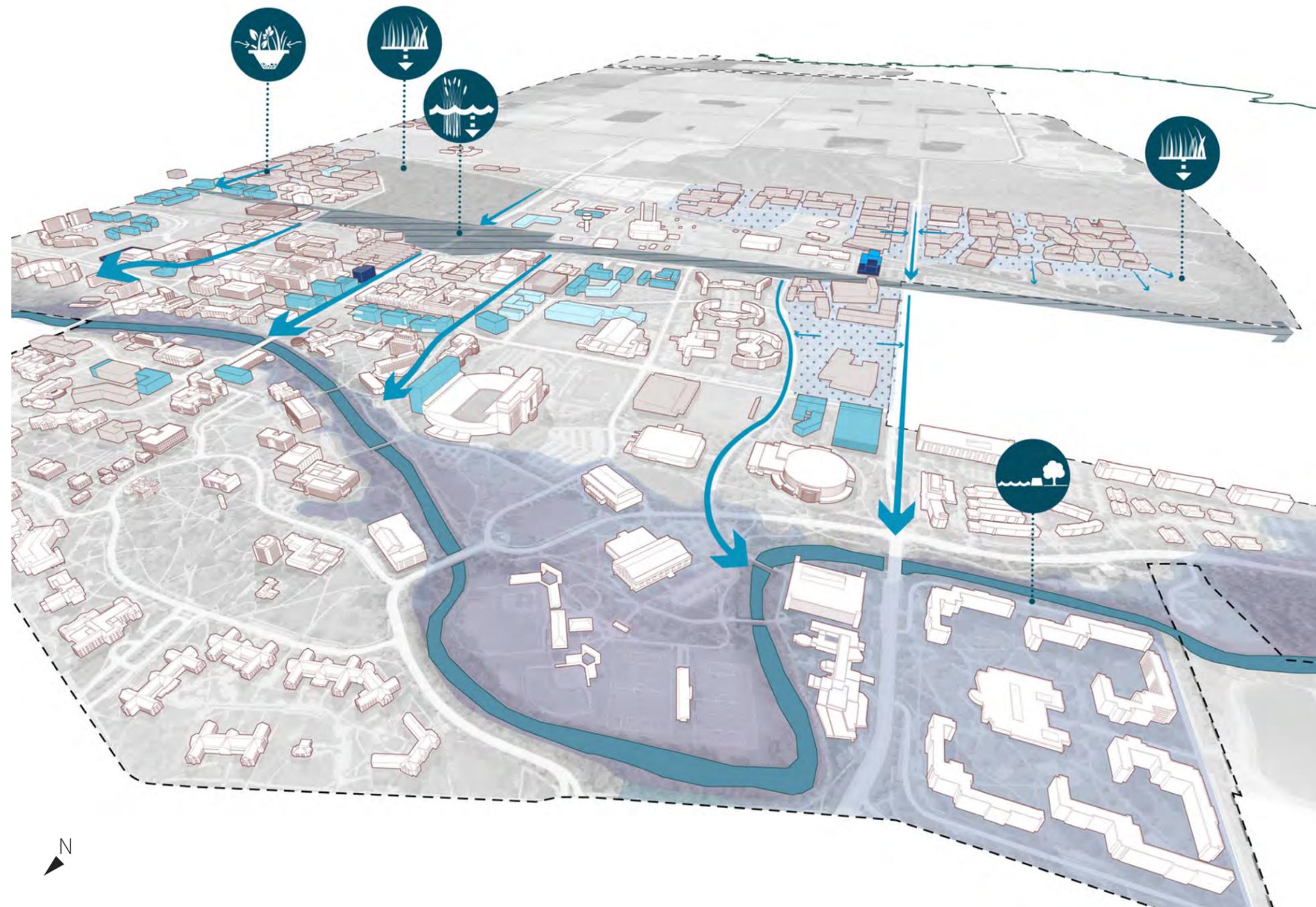


## Holistic Water Management

Vision 2050 provides campus- and precinct-level recommendations for stormwater management strategies. The volume requirements and resultant footprint are governed by either the water quality volume or the retention volume. To determine which estimated footprint to use for this level of planning, the project team evaluated the key drivers. An increase in impervious coverage contributes to retention and water quality requirements. Underlying soil conditions determine the infiltrative capacity of the soil and affect the required footprint to achieve the retention volume. The site size relative to the location in the outfall basin contributes to the detention requirements.

Using these filters, the team developed a stormwater classification ranking to estimate the complexity of the future stormwater management design. Individual building projects are evaluated by the university engineer and a technical working group to assess its ability to meet current stormwater management regulations onsite. If a project cannot meet its requirements onsite, due to existing development constraints or other unique project attributes, then the university has the option of utilizing a subwatershed facility in another location on campus per Environment Great Lakes and Energy agreements.

-  Onsite Treatment
-  Onsite Treatment + Retention 8% of Hardscape
-  Onsite Treatment + Retention 10% of Hardscape
-  Onsite Treatment + Use Retention Credit
-  Retention in Restored Landscape
-  Site Storm Water Natural Drainage
-  Floodplain 10 yr to 100 yr



# Landscape Strategies

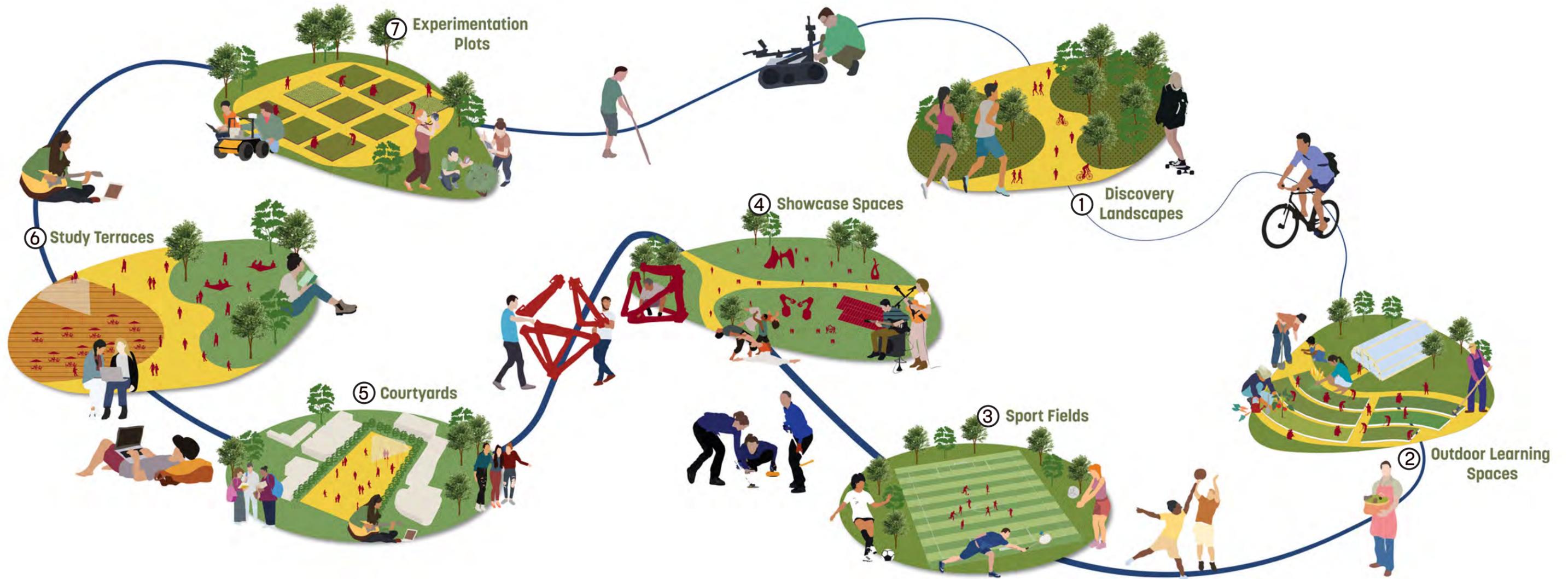
The plan recommends implementing three thematic landscape strategies across MSU's campus to advance the public realm framework.

## Expand the Academic Experience

The landscape should act as an extension of the learning and discovery happening within the campus's buildings. Study terraces and outdoor classrooms next to major academic buildings encourage outdoor learning during the fall, spring, and summer seasons. Experimental plots and showcase spaces make visible groundbreaking student and faculty research and, by doing so, foster cross-disciplinary relationships. Outdoor recreation facilities and landscapes for wandering and discovery encourage the campus population to build healthy physical and mental wellbeing habits, which is critical to academic success and the wellbeing of the whole person.



Example locations of Open Spaces extending the learning experience.



# Landscape Strategies

## All-season Open Spaces

Vision 2050 elevates the four distinct seasons from which MSU's campus benefits. Vegetation and maintenance practices should highlight visual interest throughout the year, including during the winter season, and connect the campus back to the woodlands, prairies, and wetlands native to central Michigan. Careful programming of major outdoor spaces allows the campus community to unite around cultural celebrations and seasonal spectacles. Indoor and outdoor threshold spaces connect the campus's natural environment to indoor programmatic spaces.



Example locations of All-season Open Spaces.



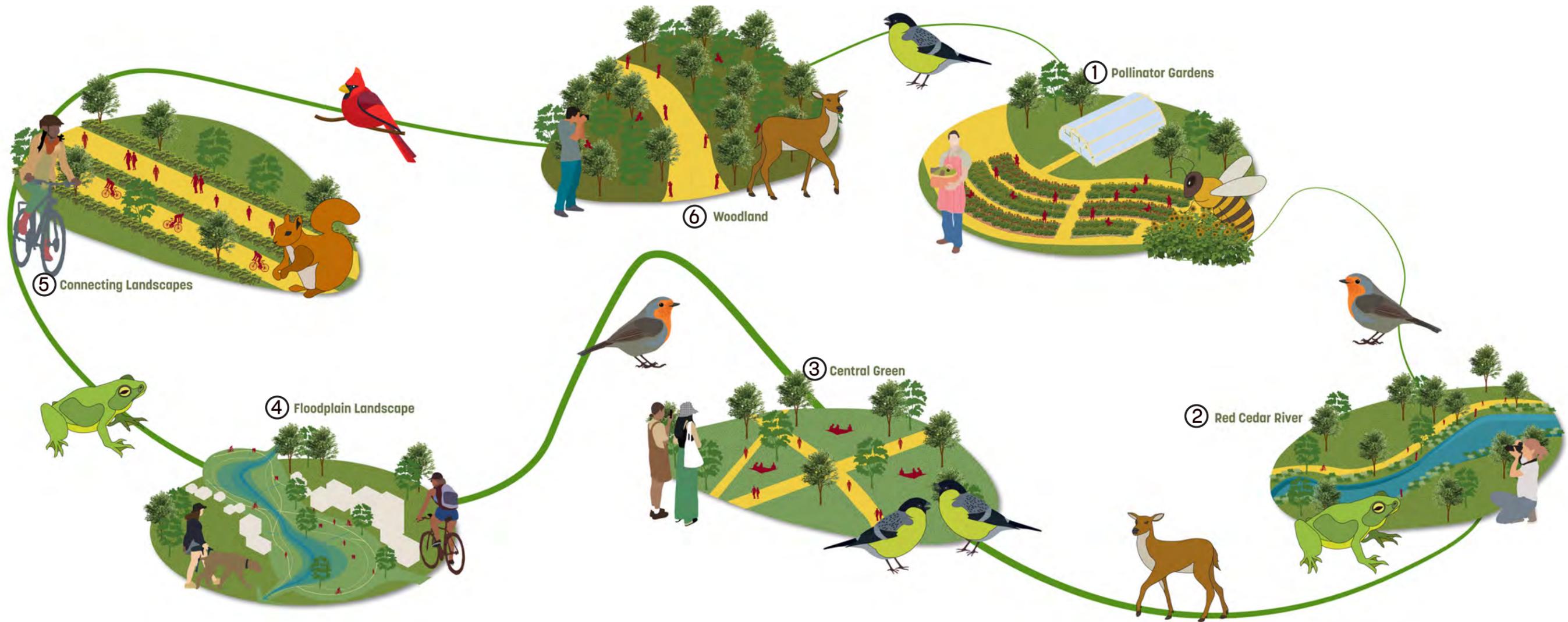
# Landscape Strategies

## Celebrate the Diversity of Places

The scale of Michigan State University's campus means it already enjoys many different types of outdoor spaces, including formal quads, ornamental gardens, and riparian corridors. Vision 2050 expands on the existing catalog of open spaces and heightens awareness of their differences. Along the Red Cedar River and elsewhere on campus, it recommends the introduction of landscapes that can accommodate flooding and ameliorate downstream impacts. The plan recommends expanding the campus's existing woodlands and introducing pollinator gardens to appeal to the senses, support ecological biodiversity, and provide counterpoints to more formal campus landscapes.



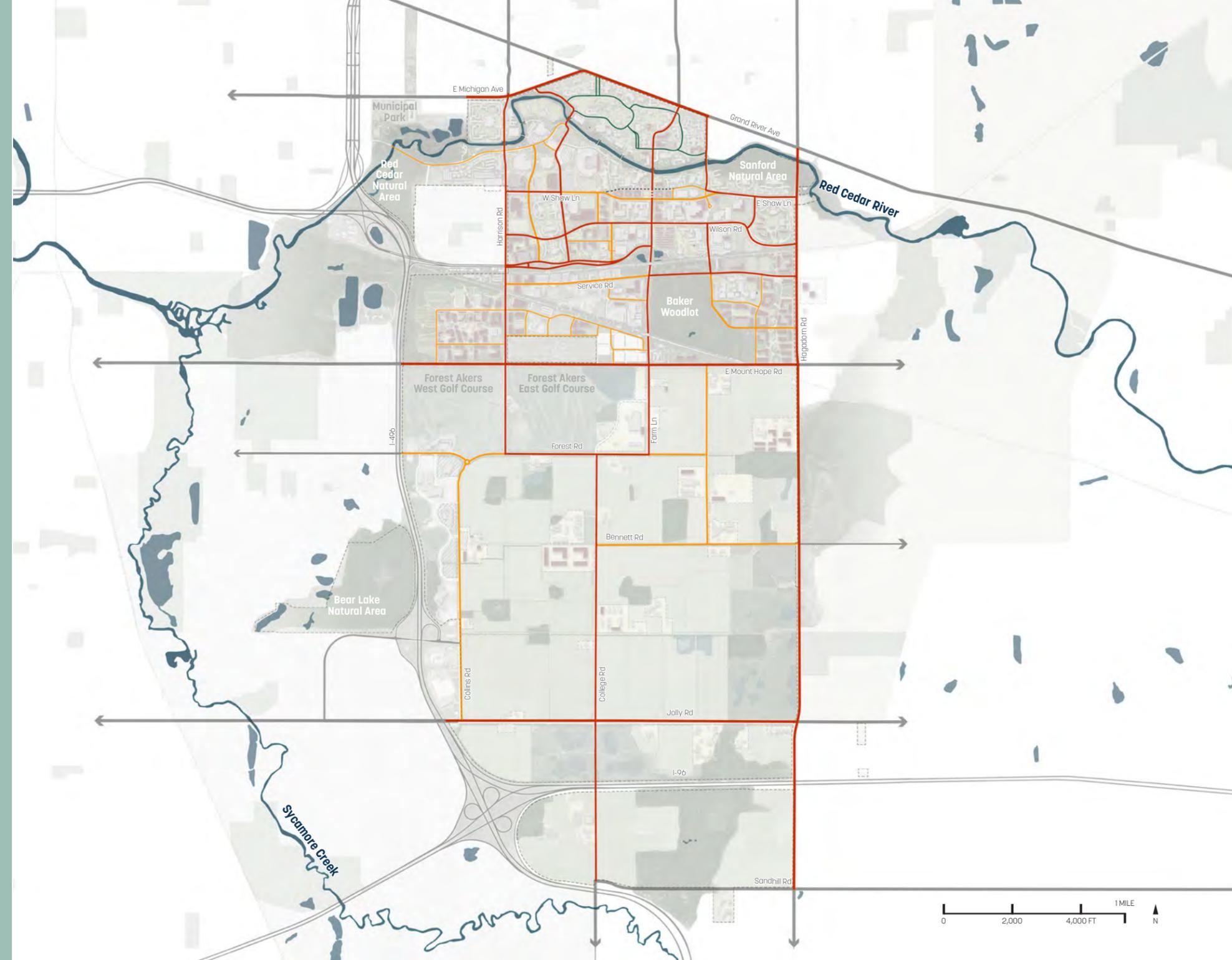
Example locations of diverse landscapes.



## MOBILITY SYSTEMS

Vision 2050 recommends a campus-wide mobility network that elevates and prioritizes pedestrian movement while supporting vehicular mobility. Much of today's campus was planned and built immediately following World War II, with development patterns and mobility networks catering to automobile-centered mobility. As the University continues to grow and add density, the plan recommends the replacement of surface lots on high-value parcels, such as at the intersection of Farm Lane and Shaw Lane, with nearby structured parking. Additionally, it recommends prioritizing a pedestrian and bicycle network that more intuitively connects discreet precincts. Finally, it recommends future coordination between the university and CATA to better integrate transit across campus and to its surroundings with the goal of reducing the number of private automobile trips.

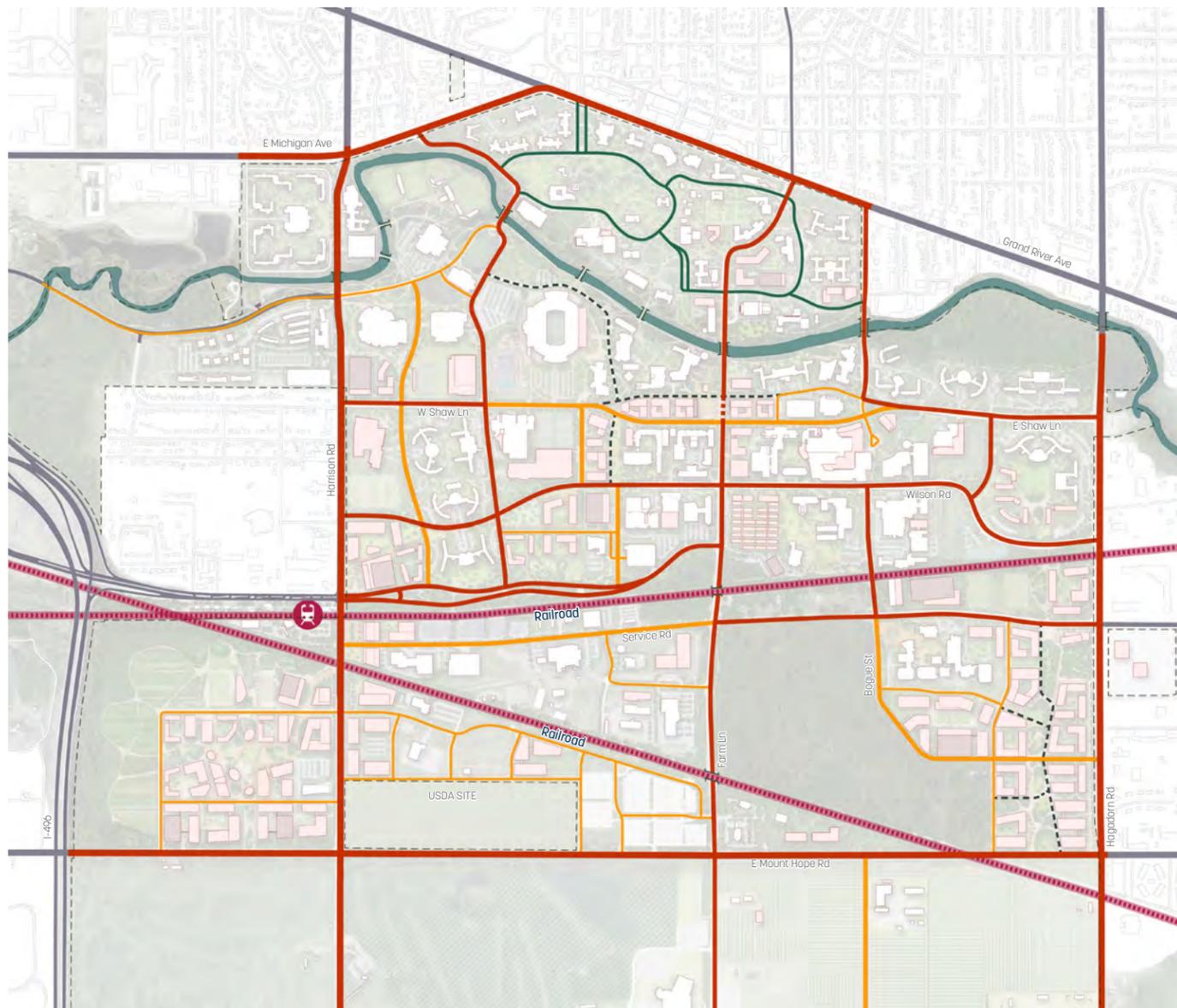
- Historic Core
- Campus Connector
- Precinct Interior
- - - Limited Vehicular Access
- Context Roads



## Street Typology

The plan identifies a clear hierarchy of street typologies to address different service levels across the campus. Campus connectors support vehicular circulation between the campus and its periphery as well as between each of the campus's major precincts with the goal of efficiently bringing vehicles to major parking reservoirs. Within each precinct, interior routes support building-level service and accessibility but are not intended for through-traffic. Finally, within the historic campus core and portions of Central Campus, a number of roads are designated for limited vehicular access or as historic in nature; these routes should prioritize non-motorized mobility.

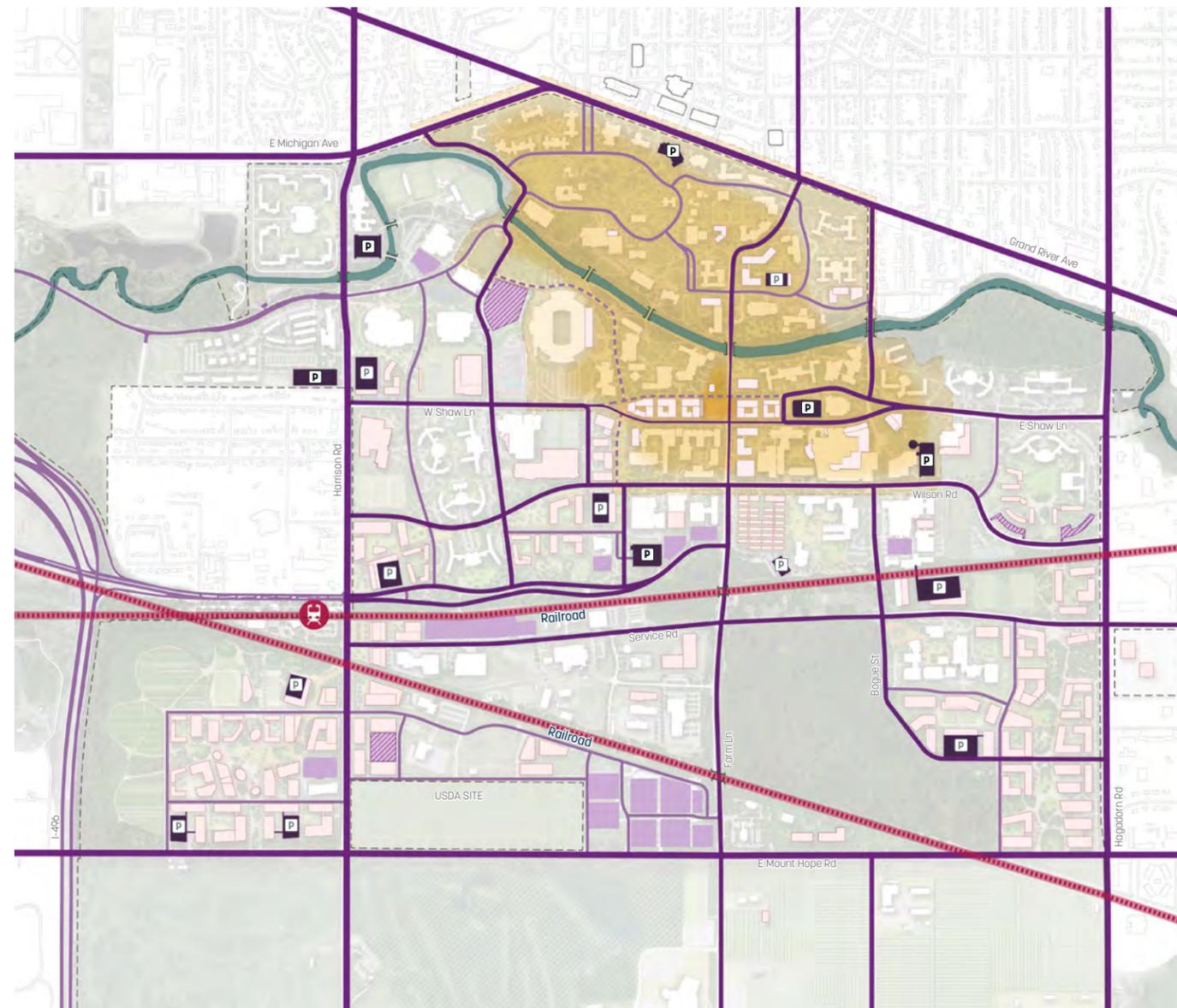
- Historic Core
- Campus Connector
- Precinct Interior
- Limited Vehicular Access
- Context Roads
- Railroad



## Parking Strategy

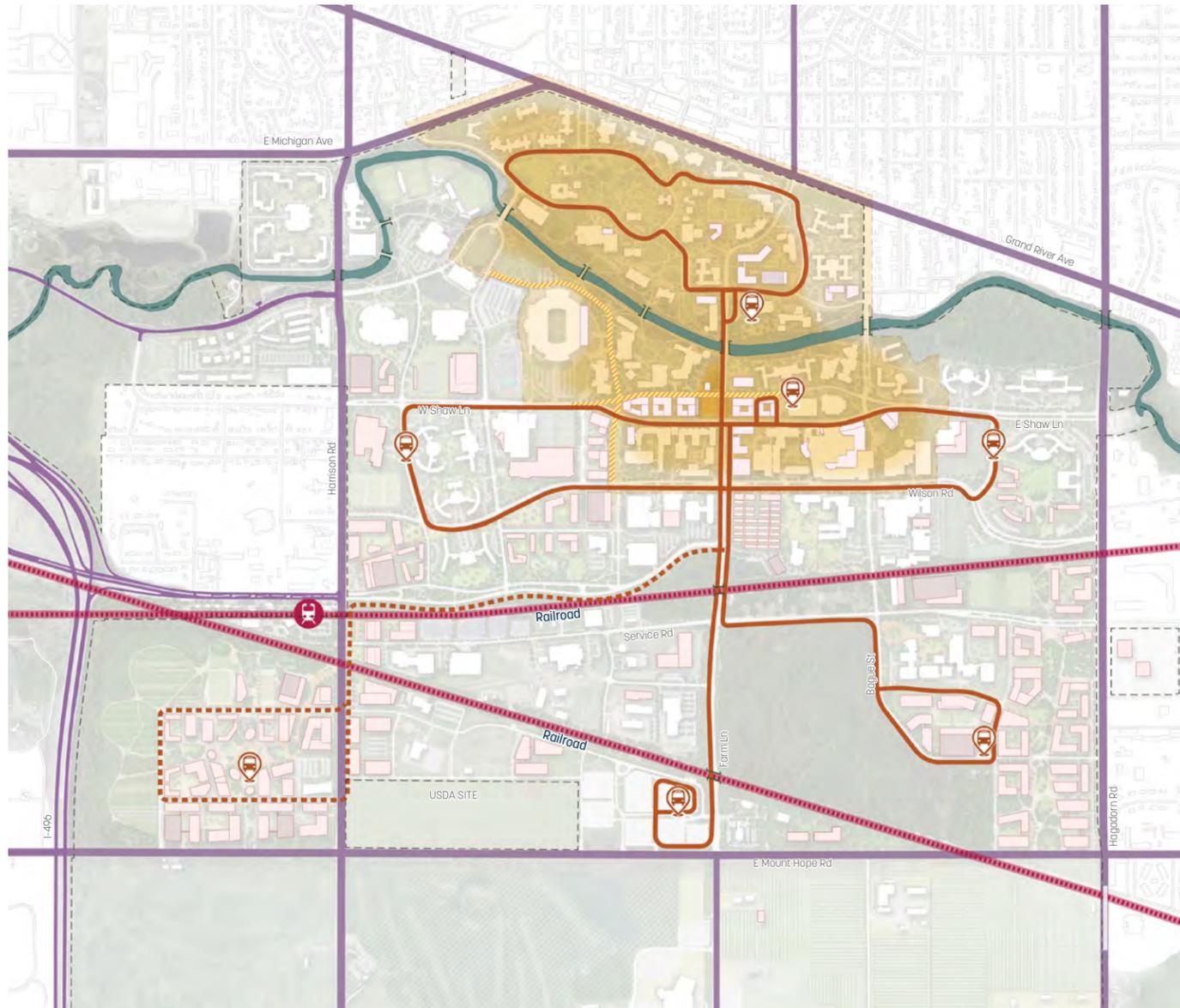
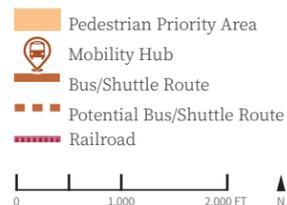
The plan recommends several strategic changes in the campus parking strategy. Centrally-located, strategic areas presently used for surface parking should be reclaimed to support uses that advance the university's academic mission and support community life. Parking structures may be used to serve areas within denser areas of campus; larger surface parking areas may occur along the campus periphery or in areas less densely programmed. A more frequent, reliable shuttle service serving peripheral parking areas and connecting to major transit nodes on the campus interior would help to alleviate the demand for parking within the campus core. Smaller surface parking areas would remain within the campus core to meet accessibility and building servicing demands.

- Pedestrian Priority Area
- Main Mobility Corridor
- Shared Main Mobility Corridor
- Secondary Mobility Network
- Shared Secondary Street
- Existing Surface Parking
- Existing Structured Parking
- Potential Structured Parking
- Potential Surface Parking
- Railroad



## Public Transit Network

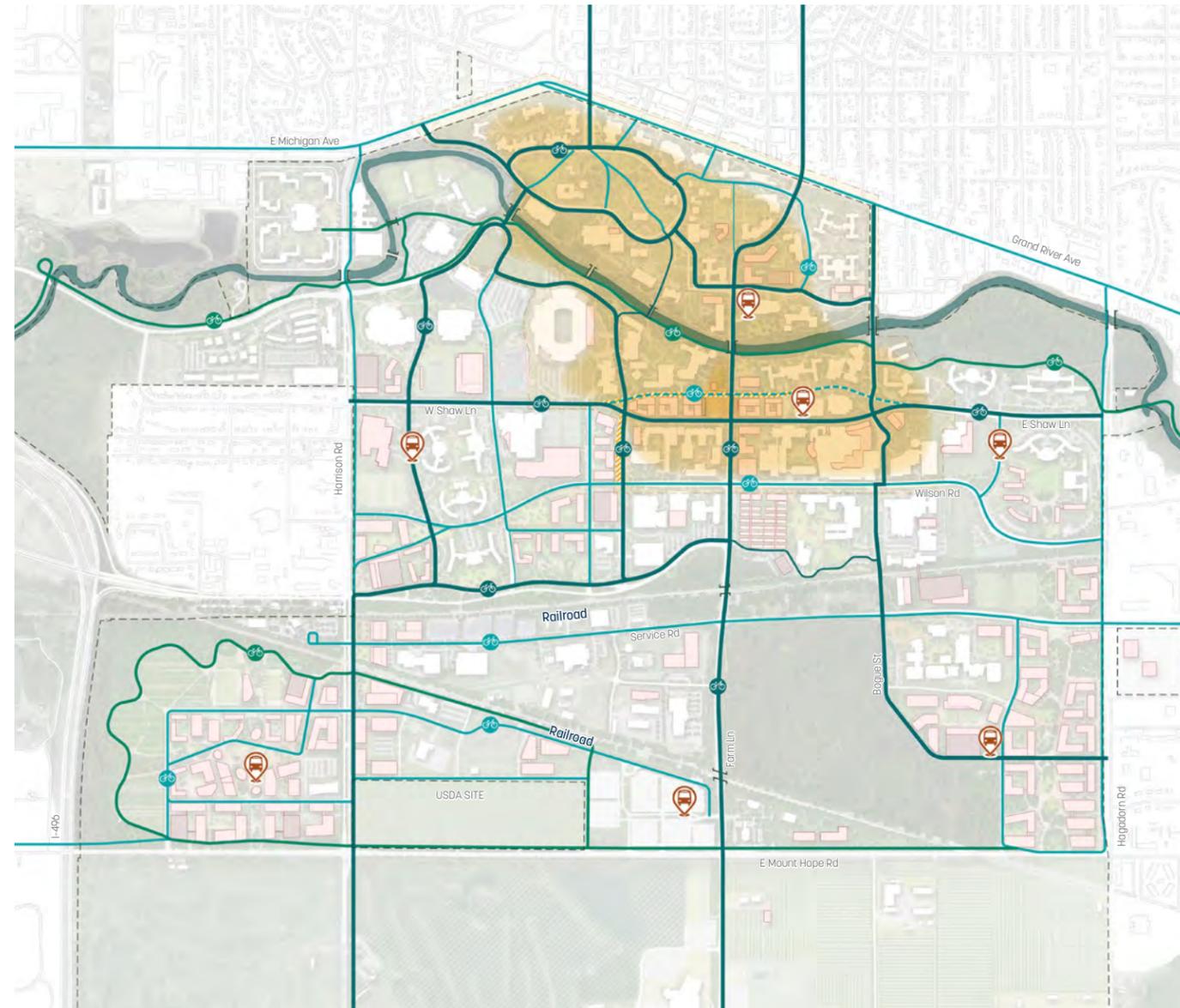
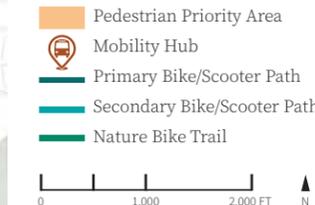
The existing network operated by CATA with 15 routes on and near campus is fairly well utilized but should be improved as the MSU campus continues to grow. Routes should be simple and direct, and many routes could benefit from more frequent service. A revised agreement between CATA and MSU allowing the campus community to ride any CATA route fare-free would increase ridership, speed up service and make transit easier to use. Improvements to bus stops and the addition of dedicated bus lanes where appropriate would improve passenger comfort and system reliability. Overall, changes should focus on making transit easier to understand and use, which in turn will reduce the demand for parking by: making transit routes simpler and more direct; providing more frequent transit service; revising the agreement with CATA to allow campus community to ride any route fare-free; and enhancing bus stops with shelters and real-time arrival information.



## Bicycle and Micro-mobility Network

Bicycles (and to a lesser degree scooters) are already a popular way to get around campus. Bike racks and other facilities, including the bike lanes along the Red Cedar River, are well utilized. The size of the MSU campus is ideal for bikes and scooters, and improvements can be an important strategy for reducing parking demand. While the MSU Bikes Center currently provides rentals, a more robust shared bicycle network on and near campus is needed, which could be managed by a third-party operator.

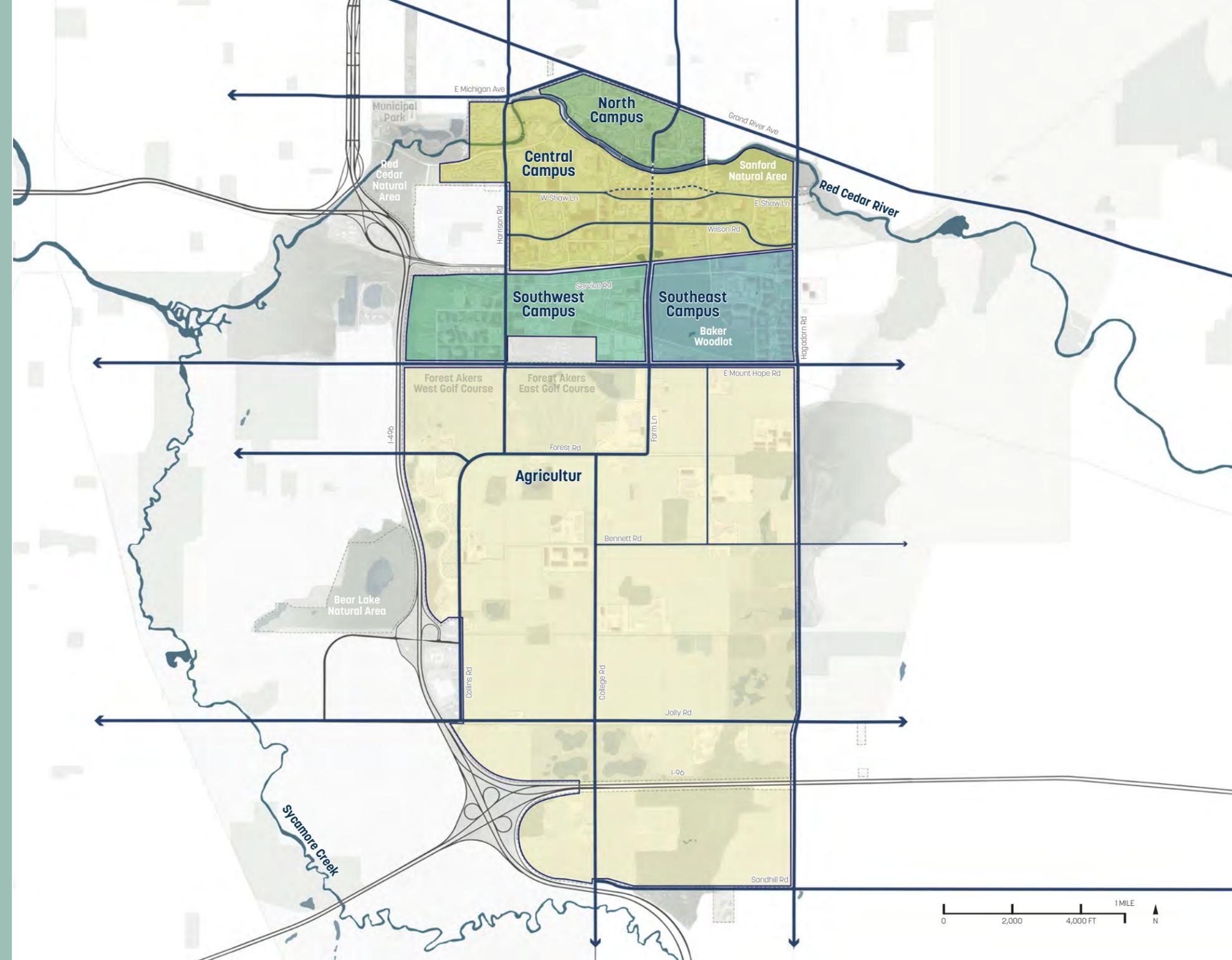
Investment in additional bike lanes and secure bike parking would attract new users by implementing new shared bike network on and near campus, and adding more bike lanes and secure bicycle parking.



## DEVELOPMENT CAPACITY

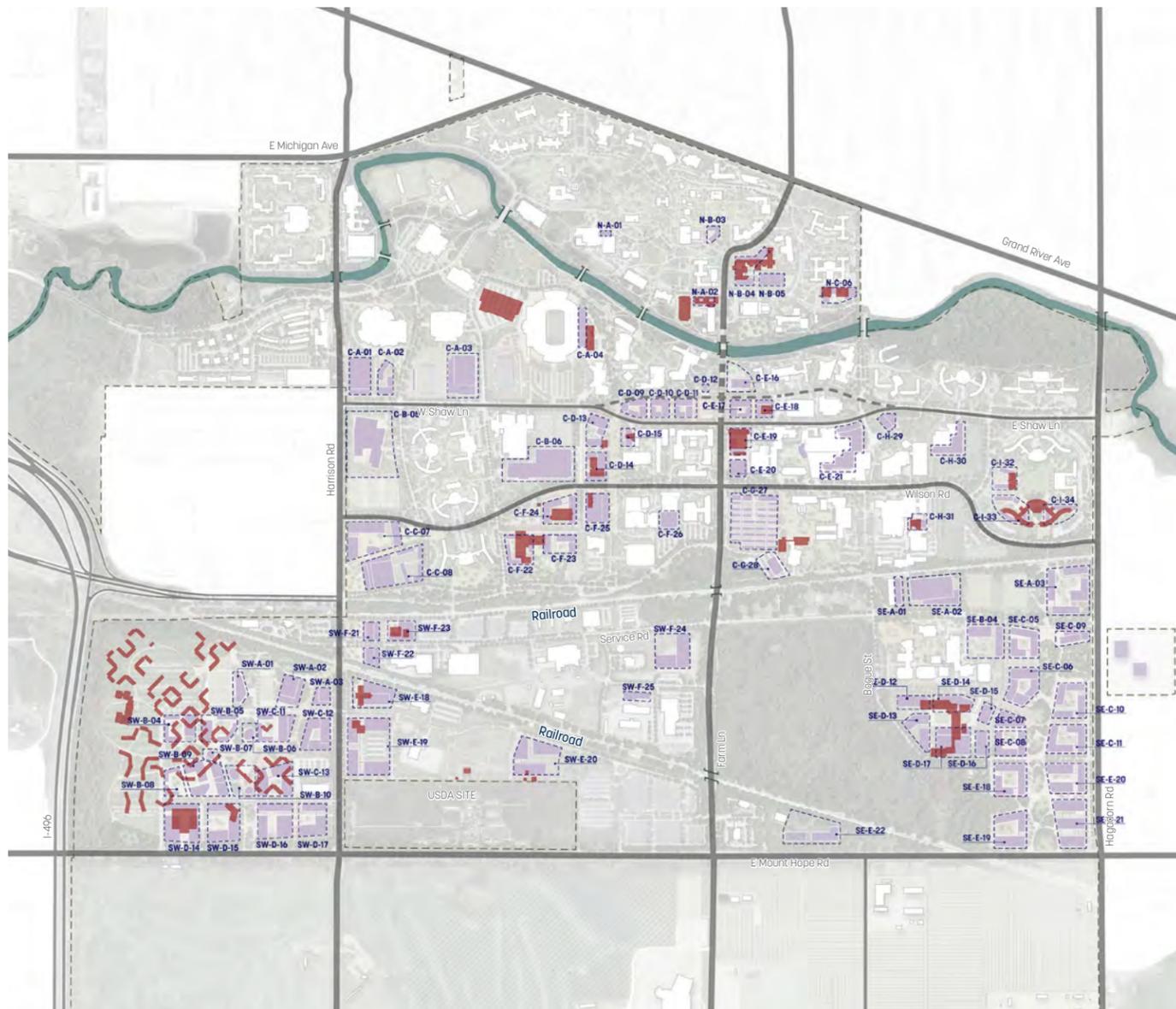
With up to 28 million GSF of capacity for additional development, the plan provides a flexible framework for development potential on the East Lansing campus. While many parts of the plan are adaptable in terms of timing and programmatic specificity, it also accommodates capital projects currently in planning or anticipated within the next twenty years.

In examining the historic growth rate of the campus, MSU has seen a 50-year average GSF per year of approximately 182,000 gross square feet. While this number has varied slightly decade by decade, there is remarkable consistency in campus growth rates over time. Based on the 50-year average growth rate, MSU might expect to develop 3.5 to 4 million gross square feet over the next twenty years. With over 28 million in net new GSF for additional development, this suggests that the plan can accommodate more than sufficient growth for the next several decades.



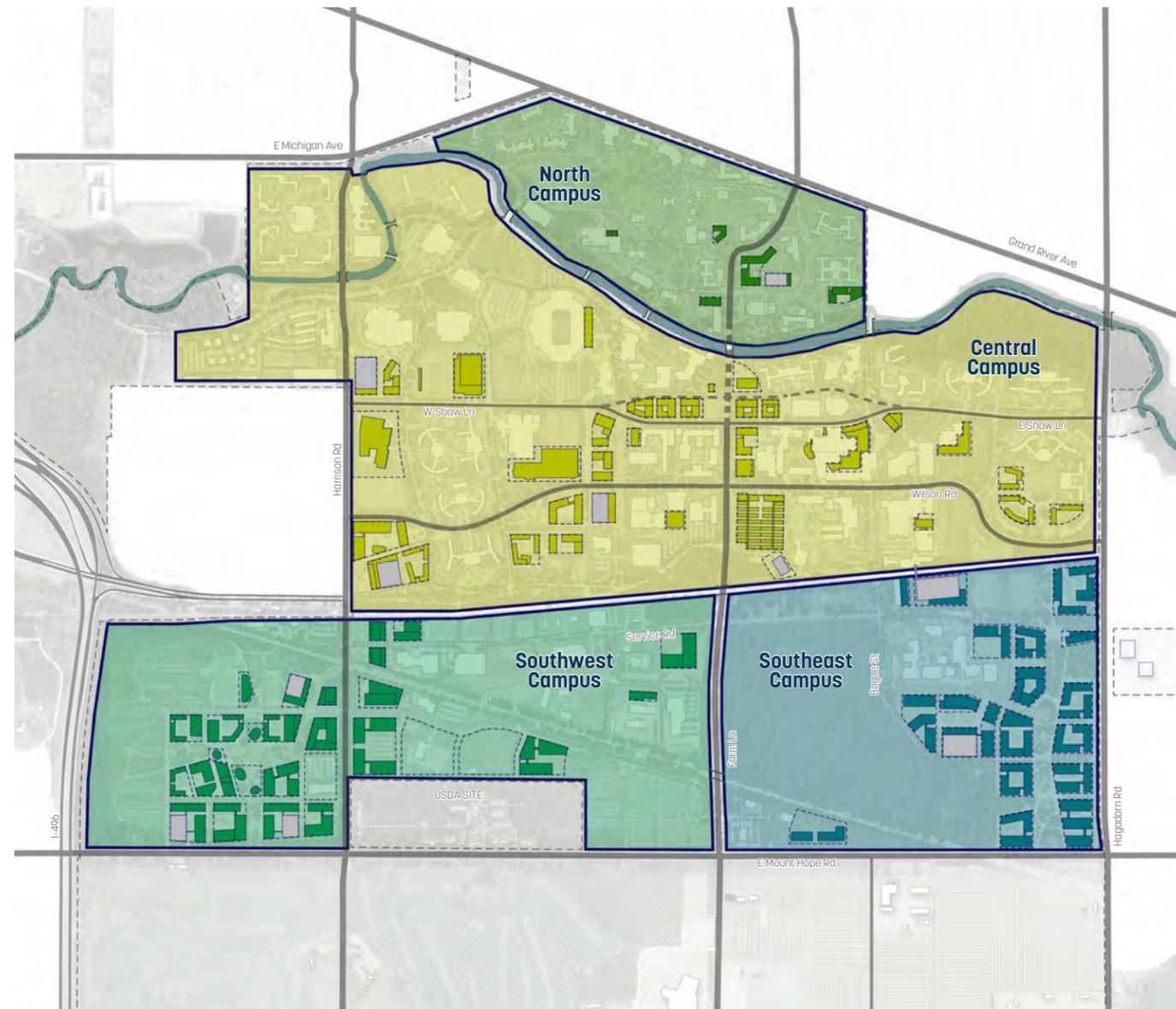
## Potential Demolition

The plan identifies facilities that may not appropriately serve MSU into the future. These facilities are suggested for potential demolition. This determination is based on a number of factors, including the cost to renovate as well as a higher and better use for the land these facilities currently occupy. Final determination should be made on a case-by-case basis relative to programmatic needs, and renovation vs. replacement costs.



## Development Capacity

The plan can accommodate approximately 28 MGSF not including the USDA site which we do not currently own. Incremental and measured in nature, the plan recommends approximately 28 million GSF of net new capacity (accounting for both new and demolished facilities) within the East Lansing campus. Of this capacity, just over 51% is targeted within Southwest Campus, which includes landholdings south of Trowbridge Road, West of Farm Lane, and North of Mount Hope Road. This includes the redevelopment of Spartan Village but not the USDA site. An additional 24% of this development capacity is within Southeast Campus, to the east of Farm Lane. Central Campus, between Trowbridge Road and the Red Cedar River, accommodates a further 24% of development capacity. North Campus accommodates only 1% of net new space on campus; within this portion of campus, the plan focuses on replacing existing facilities that have reached the end of their useful lifespan and minimal interventions to expand capacity.



## Development Capacity Table

### North Campus

DEV.SITE NAME	DEV.SITE AREA (SF)	BLDG FOOTPRINT (GSF)	AVERAGE FLOORS [1]	HAS BASEMENT	GROSS CAPACITY (GSF) [2]	DEMOLITION (GSF) [3]	GROSS CAPACITY NET NEW (GSF) [2]	PRIMARY PROGRAM	POTENTIAL CAPACITY (ASF) [4]	ASSIGNABLE DEMOLITION (ASF) [5]	NEW CAPACITY (ASF)	PROJECT DESCRIPTION
N-A-01	7,200	7,200	4.0	1	36,000	-	36,000	Academic	23,400	-	23,400	New Library Access
N-A-02	23,660	19,500	4.0	1	97,500	(56,265)	41,235	Academic	63,375	(20,500)	42,875	Bessey Hall Partial Replacement
N-B-03	24,210	17,900	3.0	1	71,600	-	71,600	Academic	46,540	-	46,540	
N-B-04	87,990	62,700	4.0	1	313,500	(253,356)	60,144	Academic	203,775	(128,400)	75,375	Giltner Hall Replacement
N-B-05	39,900	6,300	4.0	1	31,500	-	31,500	Academic + Parking	20,475	-	20,475	Replacement Parking for Ramp#2
N-C-06	60,900	43,700	4.0	1	218,500	(91,519)	126,981	Academic	142,025	(46,600)	95,425	Geography and Baker
N-X-07 (Demolition)	N/A	-	-	-	-	-	-	N/A	-	-	-	Ramp#2 Demolition
<b>NORTH HISTORIC</b>	<b>243,860</b>				<b>768,600</b>	<b>(401,140)</b>	<b>367,460</b>		<b>499,590</b>	<b>(195,500)</b>	<b>304,090</b>	

### Central Campus

C-A-01	100,800	14,400	4.0	1	72,000	-	72,000	Mixed-Use + Parking	46,800	-	46,800	Shaw West Gateway
C-A-02	59,900	40,800	3.0	1	163,200	-	163,200	Mixed-Use	106,080	-	106,080	Shaw West Gateway
C-A-03	172,500	136,500	1.6	-	218,400	-	218,400	Athletics	141,960	-	141,960	Proposed Multipurpose Arena
C-A-04	108,000	40,500	8.0	-	324,000	(70,035)	253,965	Campus Life + Athletics	210,600	(47,900)	162,700	Stadium Tower on Central Services Demolition
C-B-05	396,000	145,000	2.0	-	290,000	-	290,000	Athletics	188,500	-	188,500	Planned Student Rec & Wellness
C-B-06	278,000	203,300	1.5	1	508,250	-	508,250	Athletics	330,363	-	330,363	
C-C-07	207,700	19,500	4.0	1	97,500	-	97,500	Mixed-Use + Academic	63,375	-	63,375	Trowbridge West Gateway
C-C-08	242,100	110,800	6.0	1	775,600	-	775,600	Student Housing + Hotel + Parking	-	-	-	Trowbridge West Gateway
C-D-09	49,700	43,800	4.0	1	219,000	-	219,000	Academic	142,350	-	142,350	
C-D-10	43,800	40,000	4.0	1	200,000	-	200,000	Academic	130,000	-	130,000	
C-D-11	43,800	40,000	4.0	1	200,000	-	200,000	Academic	130,000	-	130,000	
C-D-12	6,300	3,900	1.0	-	3,900	-	3,900	Campus Life	2,535	-	2,535	Community Building
C-D-13	69,700	52,500	5.0	1	315,000	(9,214)	305,786	Academic	204,750	(4,700)	200,050	Academic Building on Parking lot 56 & Water Pump Station (in design)
C-D-14	72,400	51,900	5.0	1	311,400	(47,013)	264,387	Academic	202,410	(32,318)	170,092	Future Academic
C-D-15	30,200	18,300	4.0	1	91,500	(8,250)	83,250	Academic	59,475	(4,100)	55,375	Classroom Removal for Addition
C-E-16	79,100	34,000	1.0	-	34,000	-	34,000	Campus Life	22,100	-	22,100	Multi-cultural Center (under construction)
C-E-17	46,500	40,800	4.0	1	204,000	-	204,000	Academic	132,600	-	132,600	
C-E-18	36,600	30,000	5.0	1	180,000	(17,465)	162,535	Student Housing	-	(11,250)	(11,250)	Mixed Use on Planetarium Site
C-E-19	66,400	44,100	4.0	1	220,500	(81,629)	138,871	Academic	143,325	-	143,325	Farrall Hall Redevelopment
C-E-20	46,000	36,600	5.0	1	219,600	-	219,600	Academic	142,740	-	142,740	Plant and Environmental Science Building (in design)
C-E-21	141,900	120,000	1.0	1	240,000	-	240,000	Academic	156,000	-	156,000	Facility for Rare Isotope Beams Expansion
C-F-22	161,100	62,900	5.0	1	377,400	(97,220)	280,180	Student Housing	-	(72,780)	(72,780)	IPF Replacement
C-F-23	99,900	47,600	4.0	1	238,000	-	238,000	Academic	154,700	-	154,700	
C-F-24	139,900	61,900	4.0	1	309,500	(32,445)	277,055	Academic	201,175	(9,050)	192,125	Landscape Services Replacement
C-F-25	85,400	25,900	4.0	1	129,500	(19,896)	109,604	Academic + Parking	84,175	-	84,175	Oyer Demolition
C-F-26	43,900	32,200	2.0	1	96,600	-	96,600	Academic	62,790	-	62,790	School of Packaging Addition Phase II
C-G-27	175,600	34,400	1.0	-	34,400	(31,200)	3,200	Academic	22,360	(25,900)	(3,540)	Greenhouse Renovation
C-G-28	68,900	-	2.0	1	-	-	-	Parking	-	-	-	Parking Deck
C-H-29	29,400	29,400	4.0	1	147,000	-	147,000	Campus Life	95,550	-	95,550	
C-H-30	76,900	53,700	2.0	1	161,100	-	161,100	Athletics	104,715	-	104,715	IM East Expansion
C-H-31	35,500	18,100	3.0	1	72,400	(9,050)	63,350	Academic	47,060	(6,000)	41,060	Vet Med Expansion and Partial Demolition
C-I-32	70,400	25,700	4.0	1	128,500	(23,096)	105,404	Student Housing	-	(13,500)	(13,500)	Conrad Hall Removal
C-I-33	113,400	40,800	6.0	1	285,600	(388,116)	(102,516)	Student Housing	-	(228,000)	(228,000)	Fee Hall Replacement
C-I-34	86,500	24,300	6.0	1	170,100	-	170,100	Student Housing	-	-	-	
C-X-35 (Demolition)	N/A	-	-	-	-	(36,600)	(36,600)	N/A	-	(21,960)	(21,960)	Center for Integrated Plant Sciences Removal
C-X-36 (Demolition)	N/A	-	-	-	-	(235,573)	(235,573)	N/A	-	(151,200)	(151,200)	IM West Demolition
<b>CENTRAL</b>	<b>3,484,200</b>				<b>7,037,950</b>	<b>(1,106,802)</b>	<b>5,931,148</b>		<b>3,328,488</b>	<b>(628,658)</b>	<b>2,699,829</b>	

[1] Potential buildings shown in massing model have height articulations, that vary in response to urban design conditions. Mechanical Space height and Area not accounted for.

[2] Structured parking not accounted for in Table. Approximate long-term parking is 4,6M SF.

[3] Demolished GSF calculated from MSU's Facilities Information Tool (yellow cells), and contrasted with AutoCAD base file building footprints and number of floors.

[4] Student Housing not accounted for in Assignable SF. An average of 0.65 as a general planning assumption was used to calculate ASF for all program uses.

[5] Demolition ASF come from the Space Utilization Table provided by MSU.

[6] USDA Site and Geagley Lab areas not included in calculations.

## Southeast Campus

DEV.SITE NAME	DEV.SITE AREA (SF)	BLDG FOOTPRINT (GSF)	AVERAGE FLOORS [1]	HAS BASEMENT	GROSS CAPACITY (GSF) [2]	DEMOLITION (GSF) [3]	GROSS CAPACITY NET NEW (GSF) [2]	PRIMARY PROGRAM	POTENTIAL CAPACITY (ASF) [4]	ASSIGNABLE DEMOLITION (ASF) [5]	NEW CAPACITY (ASF)	PROJECT DESCRIPTION
SE-A-01	30,700	23,400	1.0	-	23,400	-	23,400	Support	15,210	-	15,210	Chilled Water Plant Expansion
SE-A-02	168,100	47,400	1.0	-	47,400	-	47,400	Campus Life + Parking	30,810	-	30,810	PV Field Replacement
SE-A-03	234,200	118,600	4.0	1	593,000	-	593,000	Academic	385,450	-	385,450	PV Field Replacement
SE-B-04	133,700	61,600	4.0	1	308,000	-	308,000	Academic	200,200	-	200,200	PV Field Replacement
SE-C-05	95,800	70,400	4.0	1	352,000	-	352,000	Academic	228,800	-	228,800	PV Field Replacement
SE-C-06	119,100	85,000	3.0	1	340,000	-	340,000	Academic	221,000	-	221,000	Health Sciences Education Building
SE-C-07	53,300	44,600	2.0	-	89,200	-	89,200	Campus Life	57,980	-	57,980	
SE-C-08	104,800	62,900	4.0	1	314,500	-	314,500	Academic	204,425	-	204,425	
SE-C-09	49,700	35,200	5.0	1	211,200	-	211,200	Academic	137,280	-	137,280	
SE-C-10	127,000	81,100	4.0	1	405,500	-	405,500	Academic	263,575	-	263,575	
SE-C-11	122,000	80,900	4.0	1	404,500	-	404,500	Academic	262,925	-	262,925	
SE-D-12	54,000	43,700	4.0	1	218,500	(128,050)	90,450	Academic	142,025	(80,700)	61,325	Engineering Research Complex Replacement
SE-D-13	83,500	60,400	4.0	1	302,000	-	302,000	Academic	196,300	-	196,300	
SE-D-14	76,100	59,000	4.0	1	295,000	-	295,000	Academic	191,750	-	191,750	
SE-D-15	26,200	26,300	6.0	1	184,100	-	184,100	Academic	119,665	-	119,665	
SE-D-16	39,400	35,700	4.0	1	178,500	-	178,500	Academic	116,025	-	116,025	
SE-D-17	118,100	28,100	5.0	1	168,600	-	168,600	Academic + Parking	109,590	-	109,590	
SE-E-18	118,700	82,400	4.0	1	412,000	-	412,000	Academic	267,800	-	267,800	
SE-E-19	127,800	85,200	4.0	1	426,000	-	426,000	Mixed-Use	276,900	-	276,900	
SE-E-20	129,500	92,400	4.0	1	462,000	-	462,000	Mixed-Use	300,300	-	300,300	
SE-E-21	166,800	121,200	4.0	1	606,000	-	606,000	Mixed-Use	393,900	-	393,900	
SE-E-22	181,600	60,000	2.0	1	180,000	-	180,000	Mixed-Use	117,000	-	117,000	
<b>SOUTH EAST</b>	<b>2,360,100</b>				<b>6,521,400</b>	<b>(128,050)</b>	<b>6,393,350</b>		<b>4,238,910</b>	<b>(80,700)</b>	<b>4,158,210</b>	

## Southwest Campus

SW-A-01	53,300	28,900	1.0	-	28,900	-	28,900	Campus Life	18,785	-	18,785	
SW-A-02	77,600	34,400	3.0	1	137,600	-	137,600	Mixed-Use + Parking	89,440	-	89,440	
SW-A-03	36,300	20,600	5.0	-	103,000	-	103,000	Campus Life	66,950	-	66,950	
SW-B-04	105,000	58,700	5.0	1	352,200	-	352,200	Mixed-Use + Student Housing	-	-	-	
SW-B-05	112,100	60,700	5.0	1	364,200	-	364,200	Mixed-Use + Student Housing	-	-	-	
SW-B-06	30,700	13,000	1.5	-	19,500	-	19,500	Campus Life	12,675	-	12,675	
SW-B-07	24,200	7,400	1.0	-	7,400	-	7,400	Campus Life	4,810	-	4,810	
SW-B-08	67,400	30,700	6.0	1	214,900	-	214,900	Student Housing	-	-	-	
SW-B-09	163,500	111,500	4.0	1	557,500	-	557,500	Mixed-Use Campus Life	362,375	-	362,375	
SW-B-10	100,900	20,300	1.5	-	30,450	-	30,450	Campus Life	19,793	-	19,793	
SW-C-11	115,200	61,700	5.0	1	370,200	-	370,200	Mixed-Use + Student Housing	-	-	-	
SW-C-12	106,600	94,000	4.0	1	470,000	-	470,000	Mixed-Use	305,500	-	305,500	
SW-C-13	133,500	92,700	4.0	1	463,500	-	463,500	Mixed-Use	301,275	-	301,275	
SW-D-14	173,900	70,100	4.0	1	350,500	(112,789)	237,711	Mixed-Use + Parking	227,825	(58,600)	169,225	MSU Tennis Center Replacement
SW-D-15	158,700	92,800	4.0	1	464,000	(16,076)	447,924	Mixed-Use	301,600	(10,900)	290,700	
SW-D-16	152,100	65,400	4.0	1	327,000	-	327,000	Mixed-Use + Parking	212,550	-	212,550	
SW-D-17	113,900	77,000	4.0	1	385,000	-	385,000	Mixed-Use	250,250	-	250,250	
SW-E-18	133,000	86,500	3.0	1	346,000	(58,519)	287,481	Mixed-Use	224,900	(41,000)	183,900	Manly Miles Replacement
SW-E-19	301,500	159,500	4.0	1	797,500	(93,777)	703,723	Mixed-Use	518,375	(37,400)	480,975	1407 Harrison Replacement (Geagley Lab NIC)
SW-E-20	188,200	122,500	2.0	1	367,500	-	367,500	Support	238,875	-	238,875	
SW-F-21	37,800	37,800	3.5	1	170,100	-	170,100	Mixed-Use	110,565	-	110,565	
SW-F-22	35,200	35,200	3.5	1	158,400	-	158,400	Mixed-Use	102,960	-	102,960	
SW-F-23	60,000	47,800	3.5	1	215,100	(17,600)	197,500	Mixed-Use	139,815	(11,500)	128,315	RHS Services and University Services
SW-F-24	152,900	94,500	2.0	1	283,500	-	283,500	Support	184,275	-	184,275	
SW-F-25	30,300	27,400	1.0	1	54,800	-	54,800	Support	35,620	-	35,620	
SW-X-26	N/A	-	-	-	-	(792,998)	(792,998)	N/A	-	(523,400)	(523,400)	Spartan Village Housing Replacement All Housing & Laundry. Utilization projected to end after 2024
SW-X-27	N/A	-	-	-	-	(45,698)	(45,698)	N/A	-	(30,000)	(30,000)	Spartan Community Center Demolition
<b>CENTRAL</b>	<b>5,932,000</b>				<b>16,177,350</b>	<b>(1,265,507)</b>	<b>14,911,843</b>		<b>9,669,303</b>	<b>(793,500)</b>	<b>8,875,803</b>	

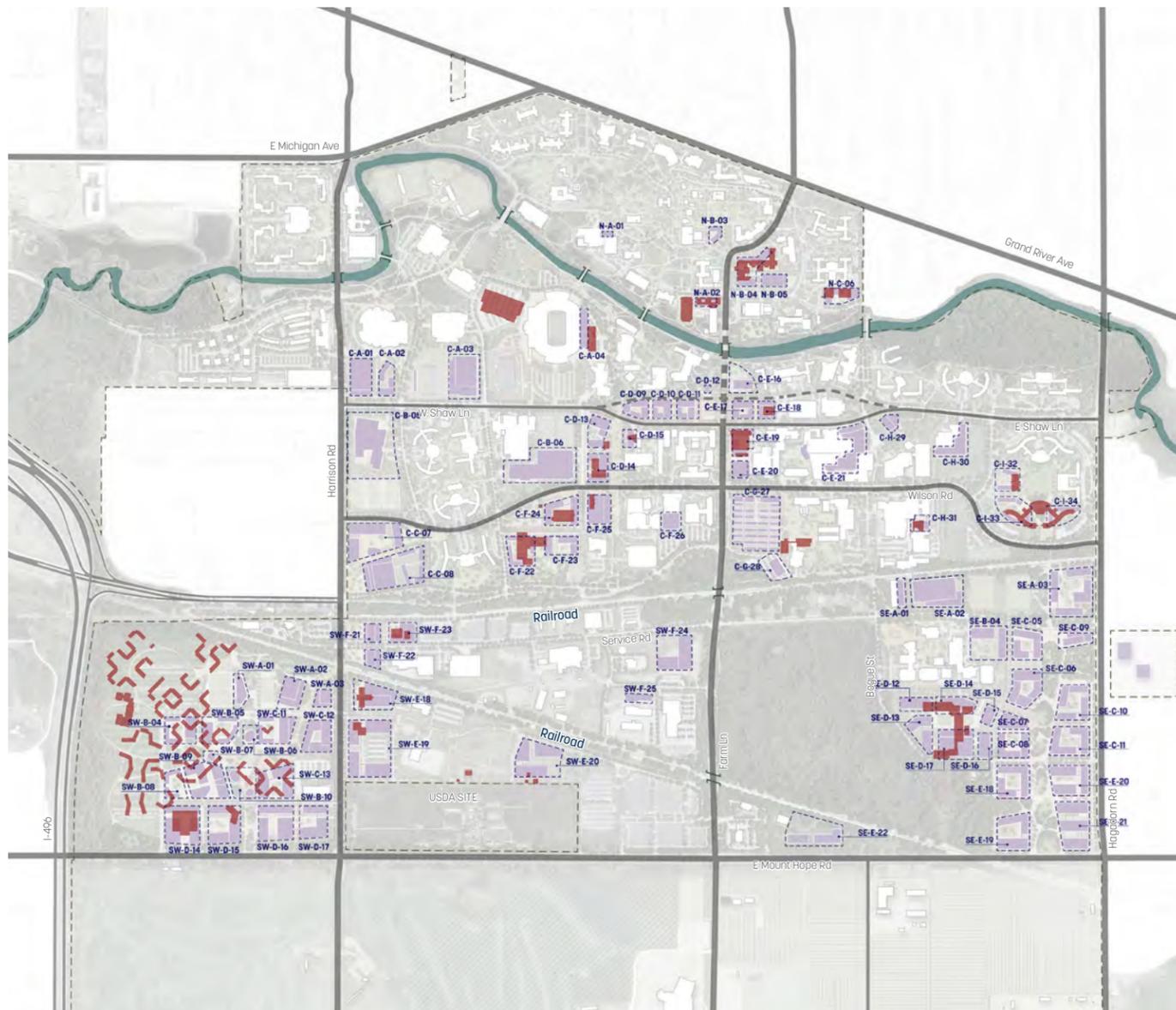
## Development Capacity Table (continued)

### Total Development Capacity

<b>TOTAL DEV.SITE AREA (SF)</b>	<b>12,020,160</b>
<b>TOTAL CAPACITY (GSF)</b>	<b>30,505,300</b>
<b>TOTAL DEMOLITION (GSF)</b>	<b>(2,901,499)</b>
<b>TOTAL NET NEW CAPACITY (GSF)</b>	<b>27,603,801</b>
<b>TOTAL CAPACITY (ASF)</b>	<b>17,736,290</b>
<b>TOTAL DEMOLITION (ASF)</b>	<b>(1,698,358)</b>
<b>TOTAL NEW CAPACITY (ASF)</b>	<b>16,037,932</b>

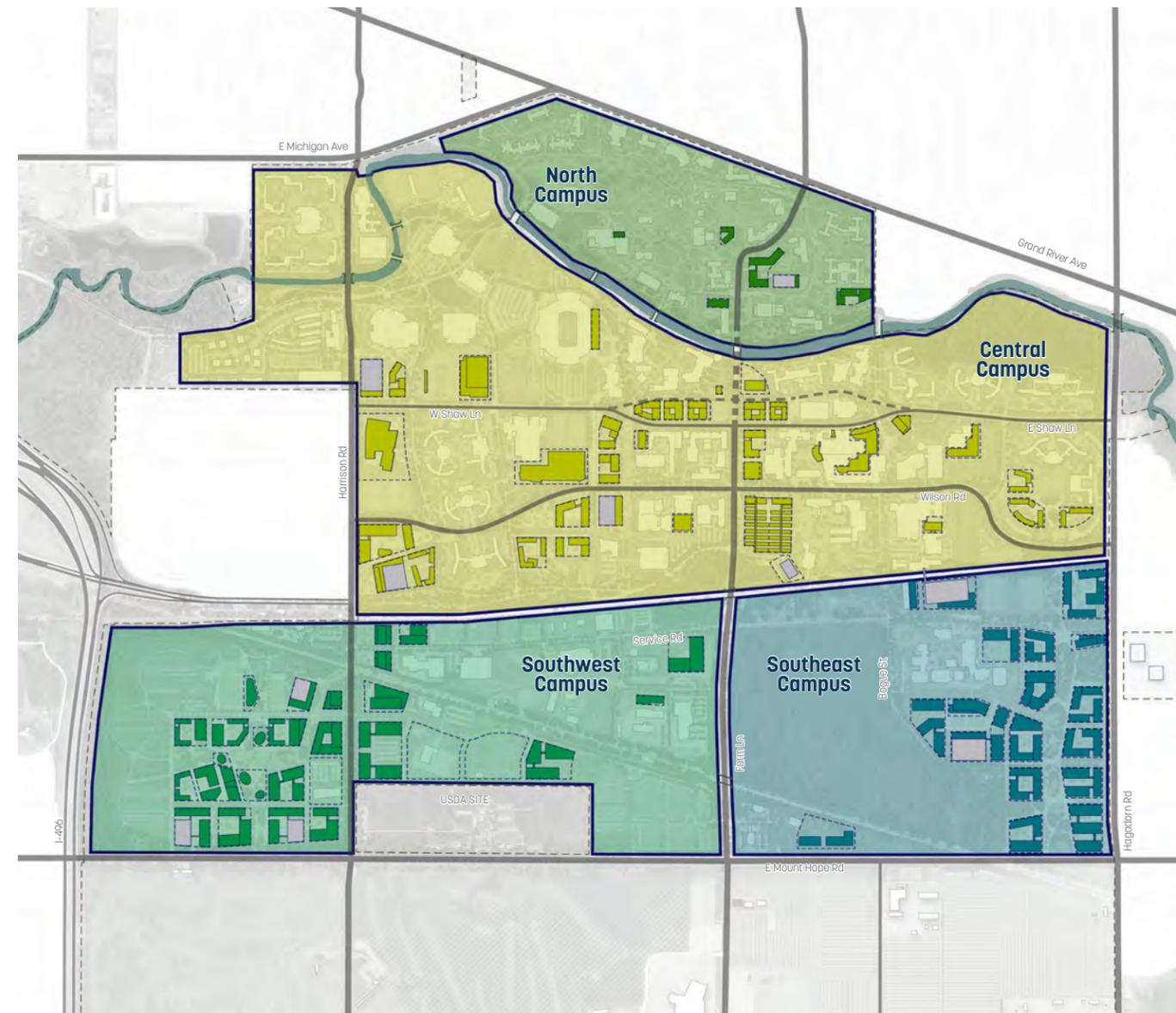
## Potential Demolition

The plan identifies facilities that may not appropriately serve MSU into the future. These facilities are suggested for potential demolition. This determination is based on a number of factors, including the cost to renovate as well as a higher and better use for the land these facilities currently occupy. Final determination should be made on a case-by-case basis relative to programmatic needs, and renovation vs. replacement costs.



## Development Capacity

The plan can accommodate approximately 28 MGSF not including the USDA site which we do not currently own. Incremental and measured in nature, the plan recommends approximately 28 million GSF of net new capacity (accounting for both new and demolished facilities) within the East Lansing campus. Of this capacity, just over 51% is targeted within Southwest Campus, which includes landholdings south of Trowbridge Road, West of Farm Lane, and North of Mount Hope Road. This includes the redevelopment of Spartan Village but not the USDA site. An additional 24% of this development capacity is within Southeast Campus, to the east of Farm Lane. Central Campus, between Trowbridge Road and the Red Cedar River, accommodates a further 24% of development capacity. North Campus accommodates only 1% of net new space on campus; within this portion of campus, the plan focuses on replacing existing facilities that have reached the end of their useful lifespan and minimal interventions to expand capacity.



## Zoning Districts

The design guidelines divide the campus into ten distinct zone typologies. While some of these reflect the campus' geographic evolution from north to south, others reflect the unique functions within each district and the contingent programmatic and design needs.

- North Academic District
- Central Academic District
- South Academic District
- Residential District
- Athletic and Recreation District
- Agriculture District
- Mixed Use District
- Natural Areas District
- Service District



## Protected Green Spaces

The existing East Lansing campus benefits from a network of both formal and informal green spaces. Some of these, like People's Park and the Historic North Circle, support a vibrant social life on campus. Others, such as Baker Woodlot and Red Cedar Natural Area, ensure that mature woodlands will remain on campus to support learning and discovery for future generation. And yet others are needed for the university's formal athletics and recreation programs.

The design guidelines affirm the preservation of the campus's most important outdoor green spaces and create a formal framework for their tactical expansion, ensuring that future generation of Spartans have access to the range of open spaces that support the campus's diversity of outdoor programming.

- Environmental or Historic
- Program and/or Research
- Golf Courses
- Existing Buildings
- Potential Development Sites

