6.1 INTRODUCTION

The identification of campus site issues and opportunities involved in analysis of the campus context, property ownership building use, campus precincts, vehicular circulation, parking, pedestrian circulation, open space, vegetation, visual image and spatial patterns, site lighting, and signage. These subject areas were inventoried and analyzed to identify opportunities and constraints. A composite analysis was then developed. The information for this analysis was obtained through on-campus observation, campus interviews, and planning documents provided by the University. Campus site issues and opportunities by subject category are presented in sections 6.3 – 6.10.

6.2 ASSESSMENT SUMMARY

Major findings from the site assessment are as follows:

- The university has significant opportunities to infill the campus with new development. The infill of new buildings should help define positive outdoor spaces and establish desirable indoor/outdoor space relationships.
- The existing street character does not create a positive image for the university.
- Significant pedestrian/vehicular conflicts need to be addressed.
- The campus lacks a clear sense of arrival at key points of entry.
- Wayfinding within the campus needs to be addressed.
- The campus open spaces (malls and quadrangles) need to be enhanced through renovation.
- Campus edges need to be defined on the north side of the campus.
- There is sufficient parking available on campus. Distance to parking is the primary issue.
- Potential relocation of academic uses in the campus precinct involving the Wiecking Center to the academic core.
- The campus lacks an overall landscape framework.
- There is an opportunity to optimize views from the bluff to the city and river for the university.

These findings are graphically depicted on the Composite Analysis figure on the following page.
6.3 PROPERTY OWNERSHIP AND LAND USE

The existing university property ownership was reviewed to gain an understanding of land that was available for development and potential properties that should be considered for acquisition.

The existing land areas of the campus total approximately 303 acres. Approximately 108 acres of this land are characterized by steeply wooded ravines located to the north of Stadium Road. The ravine areas are not suitable for development. The campus is bounded by Monks Avenue, Stadium Road, and Warren Street on the east; Main Street, Ellis Avenue, and Maywood Avenue to the north; MSU Foundation lands and private property to the south; and wooded bluffs and ravines to the west.

Assessment Summary – Property Ownership

- The university should work closely with the MSU Foundation to assess potential land acquisition and disposition. The Foundation controls significant land holdings on the south and east sides of the campus that directly affect the campus.
- Pedestrian linkages should be considered to private housing and commercial areas on the east side of Warren Street. These areas have significant visual relationships and linkages to the campus that have not been addressed in a positive manner.
6.4 CAMPUS PRECINCTS

Campus precincts are defined as land use areas that have similar overall functions. The campus has been organized into six major precinct categories: Academic, Support, Residential, Athletic/Recreation, Athletic/Academic, and Service. Precincts were analyzed to determine compatible and incompatible functional relationships.

A general building use inventory was undertaken to identify where major campus uses are located and the functional relationships that exist between building uses. Five building categories were used to describe the major function of existing buildings. These are Academic, Support, Residential, Athletic, and Service. In addition to these five categories, several buildings have multiple building uses that are both academic and support and academic and athletic.

Assessment Summary – Campus Precincts

- The area defined by Val Imm Drive, Ellis Avenue, and Malin Street (Wiecking Center) contains a mix of land use precincts. Ideally, this area should be considered for service expansion with the relocation of academic uses to the campus core.
- Consideration should be given to developing “mixed-use” precincts that combine student housing, academic, and support functions. Opportunities exist to develop this “living/learning” concept in the area to the south of the utility plant on West Road, and to the east of the Trafton Science Center.
- Opportunities to expand student housing in residential precincts occur on the south side of Stadium Road to west of the stadium, south of McElroy Center, and south of the Utility Plant.
- With the exception of the precinct containing the Wiecking Center, the campus precincts are well defined; have compatible, functional relationships; and have opportunities for additional growth within the precincts.
6.5 VEHICULAR CIRCULATION

Analysis of vehicular circulation involved public streets, campus roads, service roads, emergency access, loading areas, and campus entry points. Further analysis of vehicular circulation and pedestrian movement patterns resulted in the identification of pedestrian/vehicular conflict areas.

Assessment Summary – Vehicular Circulation

- The campus lacks a clear sense of arrival from the vehicular circulation system. Primary arrival zones should be established at the intersection of Stadium Road and Ellis Avenue; the intersection of Stadium Road and Warren Street, and the intersection of Val Imm Drive and Ellis Avenue North.
- The existing street network of Stadium Road, Warren Street, Maywood Avenue, Ellis Avenue, West Road, and South Road defines the campus core, but does not enhance the visual quality of the campus. Enhancement of these streets should be considered as an alternative to streets closure.
- Potential development of a campus road between Val Imm Drive and West Road should be considered. This would require the removal of “D” wing of the McElroy Center.
- The potential closure of all or sections of Maywood Avenue should be explored in the Master Plan concepts as a means to reduce pedestrian/vehicular conflicts.
- South Road, currently used to access parking and service to Trafton Science Center, should be maintained for service and emergency access. The corridor should be considered for development into an open space pedestrian area that connects the Taylor Center to the quadrangle on the west side of Trafton.
- The university should coordinate the Master Plan with street improvements that the City is considering for Stadium Road. This involves traffic signals, a boulevard, pedestrian crossings, and landscape improvements.
- All improvements to streets serving the campus (Ellis Avenue, South and West Roads, Val Imm, Maywood, Warren, and Stadium) require review and coordination with the city planning and engineering departments.
6.6 PARKING

The existing campus parking was analyzed to identify the distribution of parking on campus and current parking patterns. This information was then used to identify opportunities and constraints for future parking concepts.

The campus has a total of approximately 5,100 +/- surface parking spaces that are distributed in parking lots and on-street parking areas. The majority of this parking is located in the southeast corner of the campus. The remainder of the parking is distributed primarily in smaller lots and in

Analysis of the current demand for parking in relationship to available spaces indicates that there is sufficient space available to accommodate current needs (Parking System Analysis, Rich and Associates, May 2000). However, two major problems were identified in relation to how the existing parking functionally satisfies current and projected needs. The first problem relates to the distance between parking in the southeast corner of the campus and the academic core area, which generates the highest number of users. The location of the primary parking areas on the east side of the campus requires pedestrians to cross Stadium Road. This results in significant pedestrian/vehicular conflicts. A second issue is the lack of sufficient parking for the McElroy Dorm complex.
Assessment Summary – Parking

- The Master Plan should consider expanding parking in the southeast corner of the campus and enhancing the shuttle system with more frequent service.
- Consideration should be given to relocate on-street parking on Maywood, Ellis Avenue, West Road, and South Road to enhance the visual quality of the streetscape.
- Parking expansion for the McElroy Dorms should be considered on the west side of B Wing.
- Parking lots 7, 11, 11A, and 13 should be considered as potential development zones for future buildings.
- Parking structures, while not economically viable at the present time, should be considered in the future. There are two primary locations: 1) in the area containing lot 4 and 4A; and 2) on the north side of the Performing Arts Center.
6.7 PEDESTRIAN CIRCULATION

Analysis of pedestrian circulation identified major and minor routes, generators, and destinations for pedestrians and pedestrian/vehicular conflict areas. These factors were analyzed to determine opportunities and constraints concerning pedestrian circulation.

Assessment Summary – Pedestrian Circulation

- The campus has an extensive indoor pedestrian system that connects all of the buildings in the core area with the exception of the library. An underground or second story connection should be considered for the library and future buildings.
- The Taylor Center indoor walkway and the future Phase II and III projects will continue to build upon this system.
- The indoor system that connects buildings lacks a clear sense of orientation and does not integrate well with views to exterior site spaces.
- Significant pedestrian/vehicular conflicts occur at the intersections of Stadium Road and Warren Street, Maywood Avenue and Ellis Avenue North, Maywood Avenue where students cross to the McElroy Center, Ellis Avenue and Stadium Road, and Ellis Avenue and South Road.
- Traffic calming techniques including street narrowing, street “tables”, pedestrian crossing pavements, and traffic signals where appropriate should be considered.
- Pedestrian/Vehicular conflicts in the area between Nelson Hall and Wissink Center should be mitigated.
6.8 DEVELOPMENT ZONES

Zones for future development have been identified to illustrate opportunities for the infill of new campus buildings.

Assessment Summary – Development Zones

Within the academic core area of the campus there are significant opportunities for the positive infill of new development. These involve:

- The area on the east side of the Trafton Science Center. Infill in this area could spatially define the arboretum and be used for academic and/or residential space.
- The area on the west side of Memorial Library. This zone could be developed for library or academic expansion.
- The parking area and land on the south and west sides of the Student Union. Potential union expansion or academic use.
- The area on the west side of West Road south of the Utility Plant. This area is suited for student housing and academic use.
- Parking Lot 4 and 4A area. Suitable for a parking structure that could also combine with university support functions.
- The area between Otto Arena and Morris Hall. Potential academic or university support uses.
- The area on the south side of Stadium Road to the west of the Stadium. Potential use for student housing.
- The area on the south side of McElroy Dorms. Potential use for student housing.
- The zone located between Maywood Avenue and Birchwood Street to the west of the Performing Arts Center. Potential use for academic and/or student housing.
- The area at the southeast corner of Wiecking Center. Potential use for university service and support uses.
- Trafton Science Building area. Potential redevelopment of this site based on decision to renovate or replace.
- Potential redevelopment of Gage Towers and Center Complex.

The Gage Towers Complex provides the opportunity for adaptive reuse if student housing build new or redevelopment of the site for a new use.

The edges of the Arboretum offer the opportunity for the in-fill of new development. This could help make this area the focus.
6.9 VISUAL IMAGE AND SPATIAL PATTERNS

The analysis of visual image and spatial patterns involved an identification of architectural context, campus edges, positive and negative views, visual axes, ceremonial space, and landmark features. Together these elements form an image and spatial structure that define the campus.

Assessment Summary – Visual Image and Spatial Patterns

- Opportunities to enhance campus edges primarily involve the enhancement of the streetscape. Major deciduous tree plantings and landscaped boulevards would enhance street corridors. The removal of on street parking where possible would also improve the visual quality of the arrival corridors and campus edges.
- The addition of entry gateways for the campus at key locations using signage, landscaping, and walls would also strengthen campus edges. These could be located at the intersection of Stadium Road and Ellis Avenue; Ellis Avenue and Val Imm Drive; and Stadium Road and Warren Street.
- Visual axes for the campus have been established through the location of buildings and sight lines. A major north/south axis extends from Ellis Avenue north to the Wigley Administration Building. This visual axis is obscured by trees and lacks clear definition. A second east/west axis extends from Armstrong Hall to the west. The space is defined by Memorial Library and the Student Union.
- The campus lacks significant architectural landmarks. Gage Towers and Blakeslee Stadium are the dominant structures on the campus, but they lack architectural prominence.
- A number of campus views were inventoried as part of the visual image analysis. Most significant are the potential views from the top of the bluff on the west side of the campus to the city and river.
- Significant campus buildings are located with the back of the building facing the campus streets. This creates a poor visual image from the street.
SECTION VI

ANALYSIS OF EXISTING SITE CONDITIONS

Lack of visual interest in outdoor spaces. Need to enhance indoor-outdoor visual relationships.

Existing entries for primary building entries lack definition and visual interest.

Existing visual axis to Wigley Administration building. Opportunity to strengthen axis with boulevard, lighting, campus streets.

Lack of street definition on Maywood Avenue. Example of rear building facades that face the Poor visual edge.

Lack of streetscape and campus edge. Definition on Warren Street.

Partially defined streetscape on Ellis Avenue North.
6.10 OPEN SPACE

The open space system of the campus is classified into seven general types: Undefined open space, formal quadrangle space, formal mall space, courtyards, the arboretum, natural open space, and athletic areas.

Assessment Summary – Open Space

- The campus open space system provides a strong organizing pattern for existing and proposed development. The quadrangle concept also provides the opportunity to develop clear identities for different precincts of the campus.
- The east/west and north/south mall spaces should be renovated and linked together in a positive manner.
- Portions of South Road should be developed as pedestrian open space to provide a linkage from the Taylor Center to the campus core area.
- The university and the city should jointly explore opportunities to develop a trail system on the west side of the campus.
- The placement of future buildings should define positive outdoor spaces such as quadrangles and courtyards.
- The rugby field located on the south side of the Utility Building should be considered for relocation.
Emphasis should be placed on developing indoor-outdoor relationships.

Evergreens create positive winter experience.
6.11 LANDSCAPE

The existing landscape of the campus has been identified to gain an understanding of the overall landscape framework, plant species, and general condition of plantings. This information was used to determine opportunities and constraints for future changes to the landscape.

Assessment Summary - Landscape

- The overall campus landscape consists of large lawn areas surrounding buildings and parking areas, deciduous shade and flowering trees, evergreen trees, evergreen and deciduous shrubs, and seasonal plantings. There are a few mature tree plantings on the campus and as a result, there is a limited landscape framework for the campus.
- In addition to the lack of a mature landscape framework, there is also no clear planting design theme that organizes the campus. Some areas of the campus are planted in an informal manner with groves of trees, and other areas have a more formal character with linear rows of trees. Landscape plantings for parking areas and streets are limited.
- The major plant species used are: ash, locust, and varieties of maple. Tree plantings vary widely in regard to size and condition. It is likely that a wide range of urban soil conditions exist on the campus that impact the growth and quality of plantings. This is evidenced by variation in tree sizes in formal arrangements such as in the mall area. The wide range of growing conditions combined with winter climate conditions make it difficult to establish mature plantings that rely on strict formal geometries.
- Analysis of the overall landscape indicates a number of opportunities for enhancement. The primary goal of the landscape should involve the development of a mature spatial framework that complements the built environment. The landscape should be interesting in all seasons. This is particularly important for the winter months, which coincide with the largest portion of the academic year. The concept of informal grove plantings with trees of different sizes has excellent potential for the campus. This type of planting would not be severely impacted if some trees do not survive, as would be the case with more formal plantings. There are also opportunities to reinforce the edges of the campus and landscaping. Street tree plantings and a grass boulevard could be developed and corridor plantings should be established for Stadium Road. Parking areas can be buffered with landscape plantings and islands can be developed to provide areas for shade trees. Major pedestrian spines can be planted in linear configurations with shade and flowering trees for emphasis. Quadrangle spaces could each have a different character and purpose. The plantings should reflect the individuality of these spaces.
- The use of extensive foundation plantings is not recommended for campus buildings due to maintenance requirements and ineffective scale relationships that these types of plantings create. The development of a landscape canopy of deciduous trees and evergreen trees for winter interest should be given a high priority. Seasonal interest plantings with annuals should be limited to areas with high visibility.