

MONTANA STATE UNIVERSITY



– MSU TOMORROW – A CAMPUS PLAN FOR THE FUTURE

Long Range Campus Development Plan

2006

The Benefits of a Campus Plan

Original Campus Master Plan

Cass Gilbert



1917

The New York architect designed the campus in the Italian Renaissance style.

Future Planning can Inform and Shape Decision Making

Lack of Vision sets the stage for:

- Loss of opportunity and natural resources
- Buildings built in the wrong location
- Unnecessary invasion of open space
- Unexpected barriers to future expansion
- Inappropriate architecture on campus



The Essential Elements of a Plan are:



A *“shared vision”* to inform & shape decisions
Policy

A Conceptual Framework for future growth

A holistic planning process that meets the needs
of the institution while considering the community
at large

Guidelines



What MSU Gains with a Campus Plan:



Opportunity

Direction and Order

Campus Sense of Place

Sense of Community

A long term vision protecting the mission & values of Montana State University

The Campus Plan Process

Observation & Information Gathering

Analysis

Guiding Principles & Concepts

Buildout Scenarios

Draft

Campus Plan for the Future

2006 Campus Design Guidelines



Guiding Principles

Examples:

Build on the best qualities of the overall campus and region by respecting tradition and encouraging invention.

Strive to embody the Principles of the Campus Plan in each individual project.

Respect the University's unique setting and climate.

Goals

Example:



The Campus Plan should create an aesthetic quality appropriate to the campus as a whole and to specific areas, conserving and improving existing buildings, open space, and views on campus, while looking for opportunities to create additional open space.

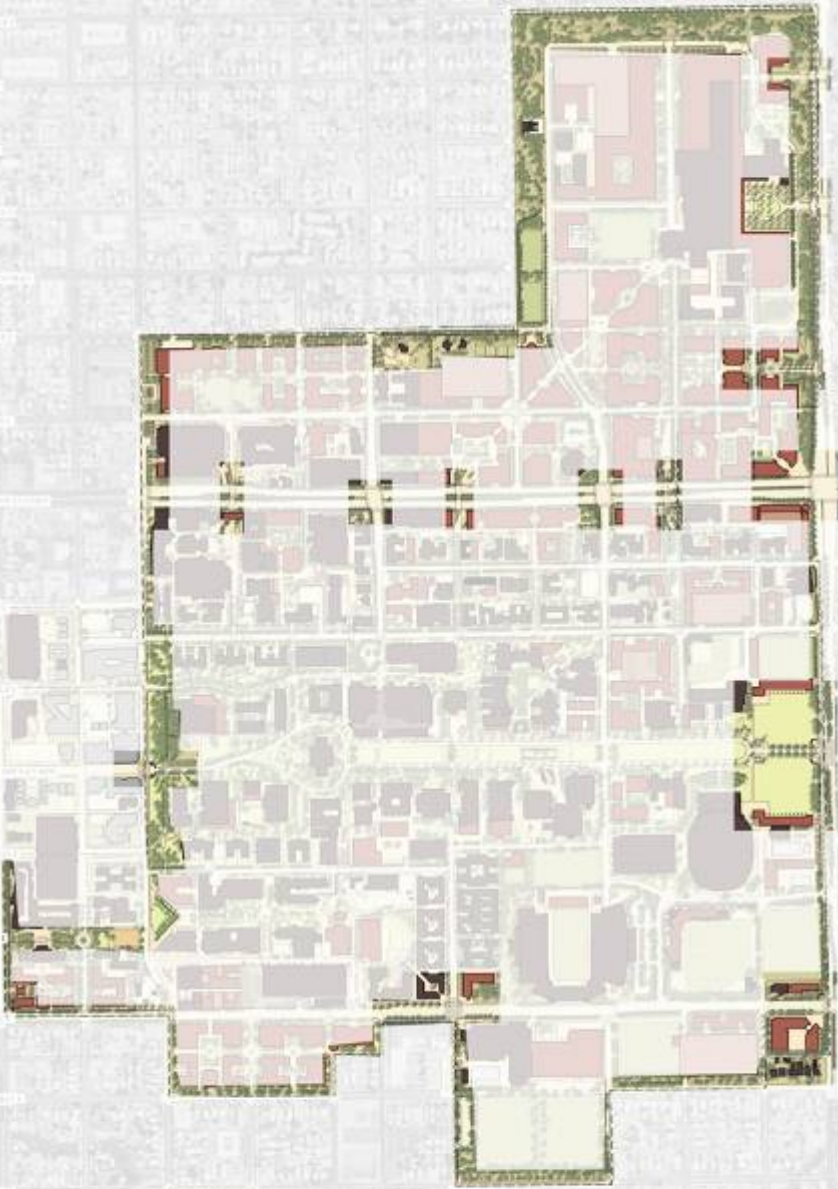
Objectives

Example:

Designate important open spaces and views on campus and create policies to ensure their preservation and maintenance

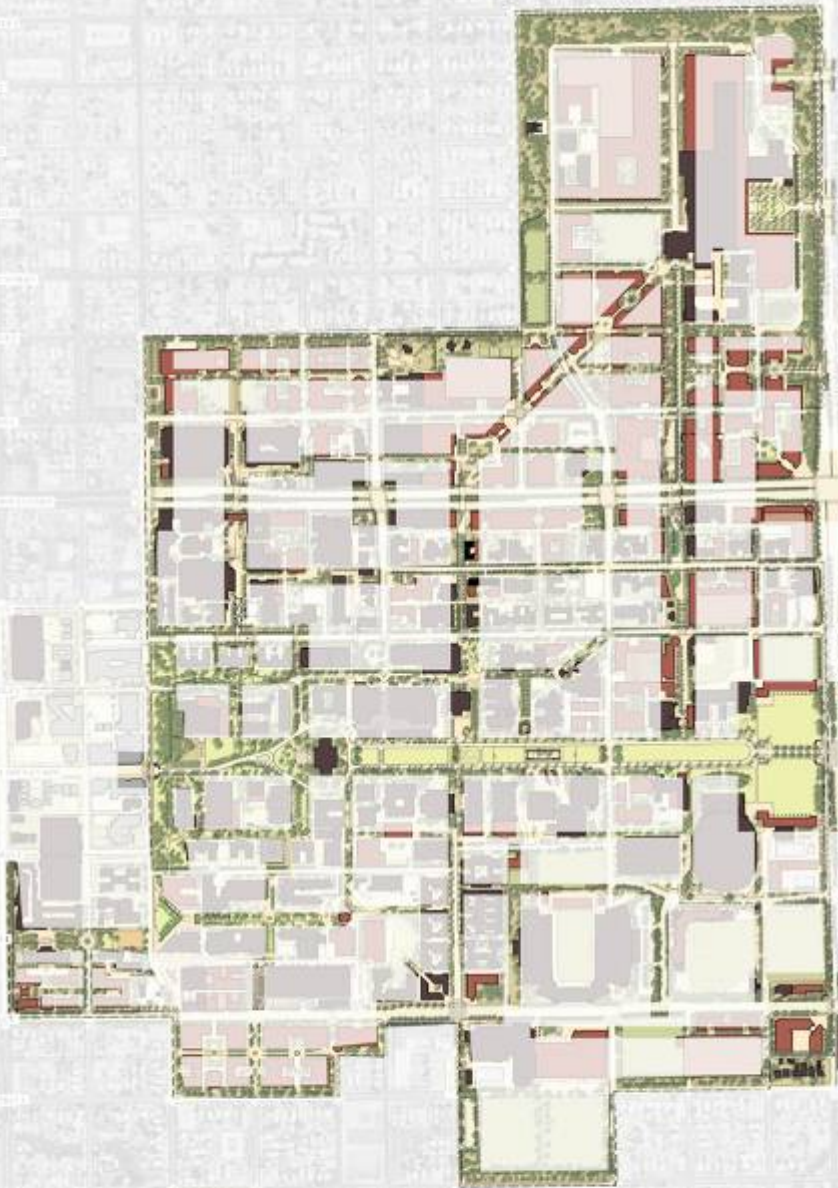
Campus Plan Goals

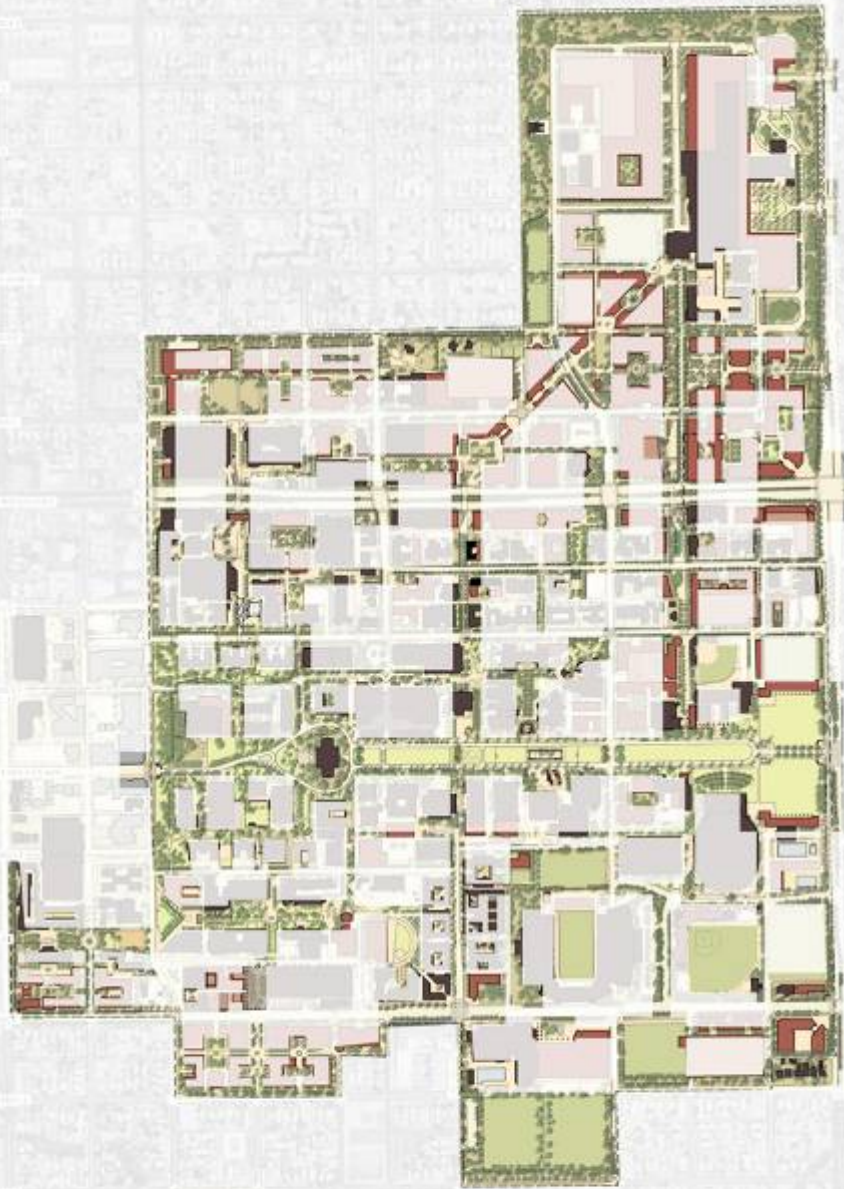
- Edges
- Gateways



Campus Plan Goals

- Edges
- Gateways
- Student Space
- Connections





Campus Plan Goals

- Edges
- Gateways
- Student Space
- Connections
- Open Space



Campus Plan Guidelines

Example:

Montana's mountains and valleys represent one of MSU's most important and "imageable" features. View corridors to the Bridgers, Hyalites, Tobacco Roots, Spanish Peaks and Sourdough Ridge should be mapped and protected from future development invasion.

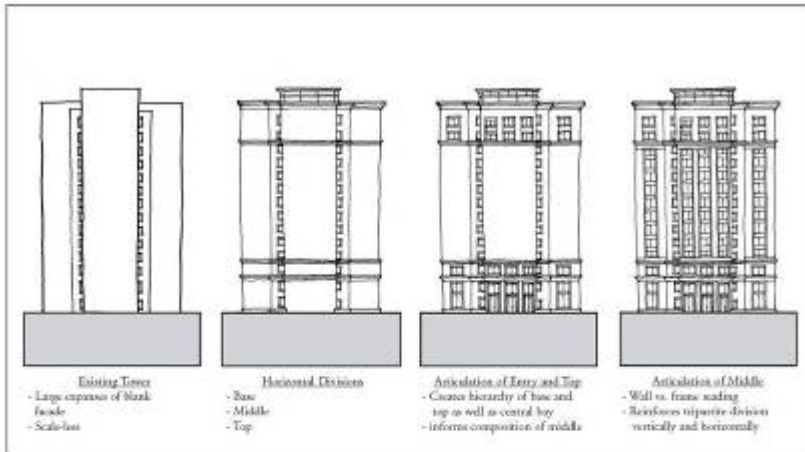
Design Guidelines

Building Elements



Porticos, gables, cornices, columns, and dormers are not style-dependent architectural elements. Rather, they act as a kit of parts that can be used to help define the character of buildings and grounds by regulating scale, massing, and facade rhythm.

CAMPUSWIDE DESIGN GUIDELINES CAMPUS BUILDING TYPES



Oregon Health Science University



Oregon Health Science University (above and below)



Campus Master Plan 2001 - University of North Carolina at Chapel Hill

CAMPUSWIDE DESIGN GUIDELINES CAMPUS BUILDING TYPES

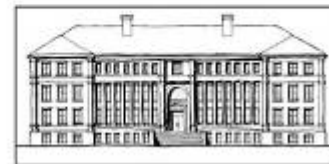
FACADE VARIATIONS



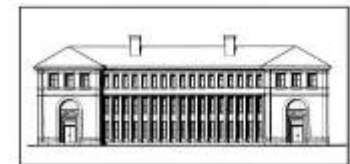
Gardner Hall - Wall vs. Frame



Wall vs. Frame Variation



Articulated Frame



Articulated Frame Variation



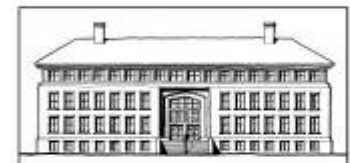
Wall with Grouped Windows



Grouped Window Variation



Wall with Punched Openings

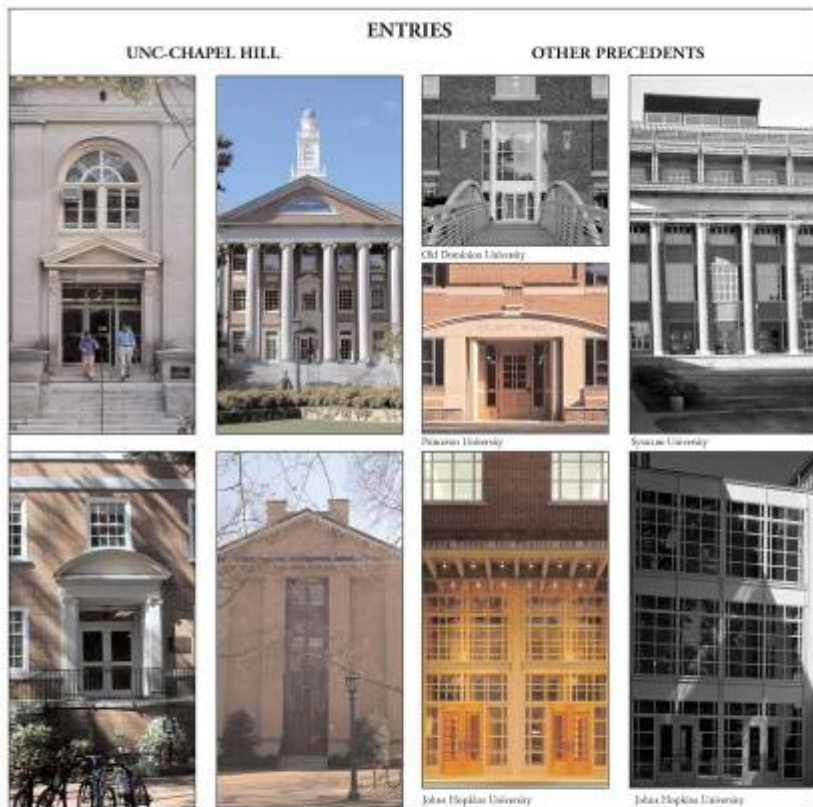


Punched Opening Variation

The above facades are all derivations of Gardner Hall (uppermost left diagram). Many elevations may be produced by simply transforming existing types. Individual elements or styles are less important than

basic proportions, scales and rhythms. This exercise is very useful for new buildings where a strong context exists.

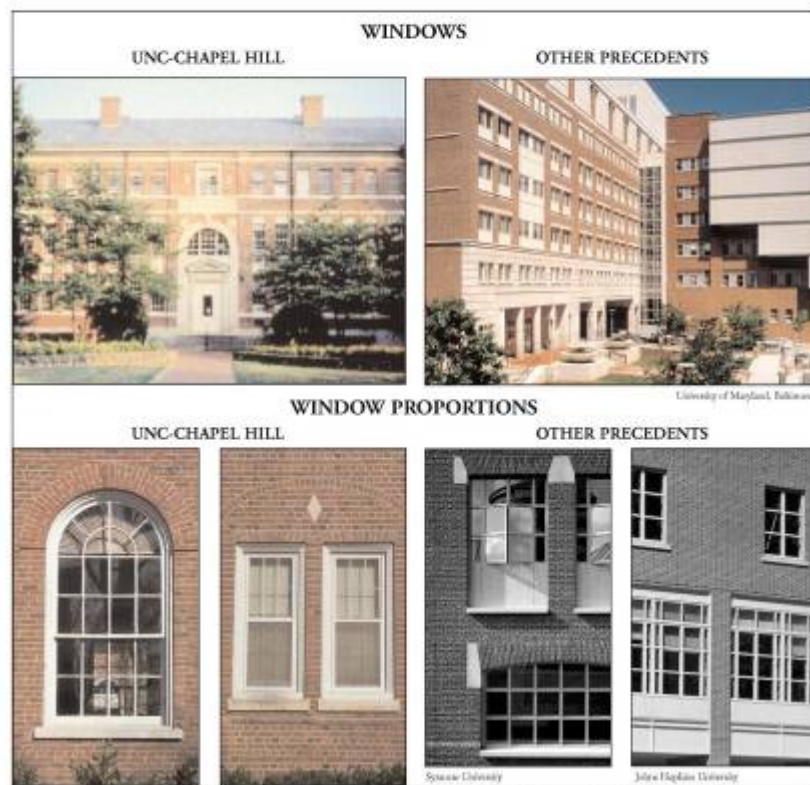
CAMPUSWIDE DESIGN GUIDELINES CAMPUS FACADE ELEMENTS



- Entries should be created by a hierarchy of openings.
- Terraces, porches and other transitional devices should be considered.
- Main entrances should be proportional to entire facade.
- Consideration should be given to shade and overhead cover.
- Arrival area in front of entry should be identified by landscaping and paving.

- Buildings may have multiple primary entries, with all sides of every building being equally considered.
- Doors should be wood or metal with glazing.
- Primary entries must accommodate access for the handicapped.
- These principles should be applied to renovations as well.

CAMPUSWIDE DESIGN GUIDELINES CAMPUS FACADE ELEMENTS



Horizontal openings should not be treated as strip windows. Ideally, window openings should be vertical.

- Acceptable materials for window frames are:
 - wood (painted or clad) or metal.
- Windows should be operable (where technically feasible).
- Frame color will vary throughout campus but will be compatible with exterior of building. (Sample panels will need to be developed for final approval, ideally during design development.)
- Standard module should be vertical, organized with the facade tripartite system of base, middle and top.

- Special windows (square, arch, round, etc.) should appear in base or attic.
- Tops of windows could be a lintel or an arch. (In either case, the head and sill should be articulated, with head either a jack arch or limestone/precast.)
- Clear glass is preferred. (Any colored glass should use subtle/soft colors. No reflective glass should be used.)
- Patient care facilities and historical renovations may require special exceptions. Tinted glass may be used where required for patient privacy.

CAMPUSWIDE GUIDELINES STREET TYPES



Franklin Street

The portion of Franklin Street that runs through downtown Chapel Hill is an example of a street that satisfies many functions and typifies the intermediate level street. The 60-foot pavement on Franklin Street accommodates four traffic lanes and two parking lanes. Its width could easily deter pedestrians and create a barrier. However, the four lanes of moving vehicles (around 20,000 on a typical day, which is close to its traffic-carrying limit in peak periods) are mitigated by crowds of people on the adjacent sidewalks and parked vehicles on both sides that buffer pedestrians from traffic. The continuous building face, tree-lined street and parallel parking invite both the pedestrian and the motorist to slow down.

Motorists could speed along Franklin Street, but they rarely do. The street is posted at 25 miles per hour, but probably few motorists are aware of this. This can be attributed to the lively landscape, multiple traffic lights and pedestrians, which all deter speeding.

Franklin Street also accommodates larger vehicles, hosting both buses and trucks. It is one of the few successful urban streets in the Triangle and an example of how a busy street, if carefully designed, can satisfy all its users.



Typical Section

CAMPUSWIDE GUIDELINES STREET TYPES



Cameron Avenue

Cameron Avenue represents the ideal street. It gracefully satisfies the needs of all users, motorists and pedestrians alike. Its sign and streetscape subtly alert motorists to pedestrians. Motorists know that it is not the route to take in a hurry. Using this street adds to the pleasure of the day.

Cameron Avenue is two-way but only about 20 feet wide, with low granite curbing and trees with boughs that form a canopy over the street. Set behind the trees that line the street, there are sidewalks on each side. The buildings are set close to the street and add to the streetscape. The speed limit is 25 miles per hour, reinforced by several mid-block stop signs. At certain times of the day, large volumes of students pour across the street with little fear for their safety.

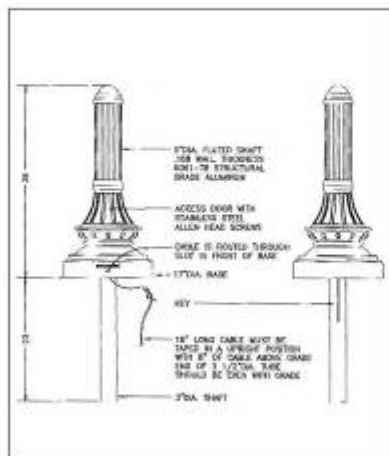
Cameron Avenue primarily serves short local trips. While no traffic count is available, the volume is probably less than 100 vehicles a day. This represents the environmentally sound capacity of the street, given its importance in fulfilling its non-vehicular needs.

Typical Section



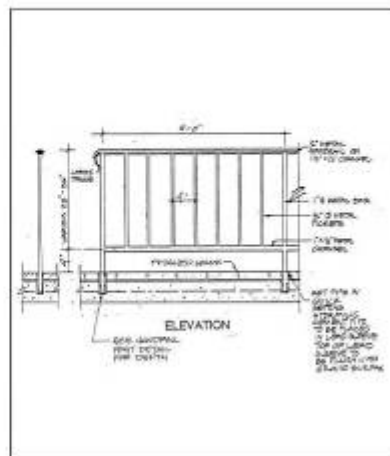
CAMPUSWIDE GUIDELINES

STREET FURNITURE

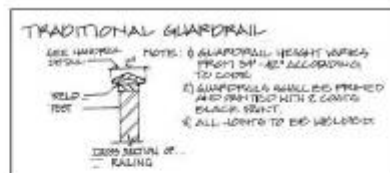


Bollards

- **Manufacturers:** Sternberg Vintage Lighting
7401 Oak Park Ave.
Niles, IL 60714
Phone: 847.588.3400
Fax: 847.588.3440
- Model:** 6201
- Size:** 3/4" = 1"
- Finish/Color:** Verde Green
- Special Features:** Welded for single unit construction
Removable
- or similar -



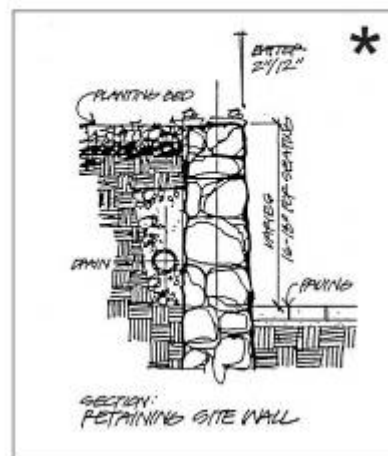
Guardrails



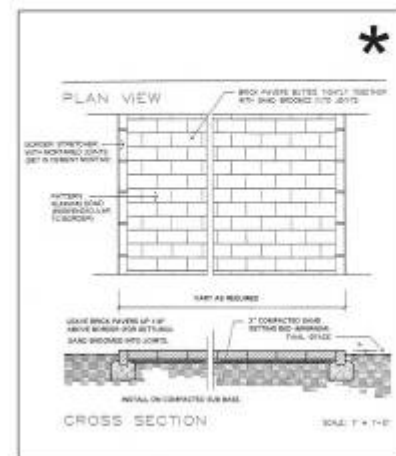
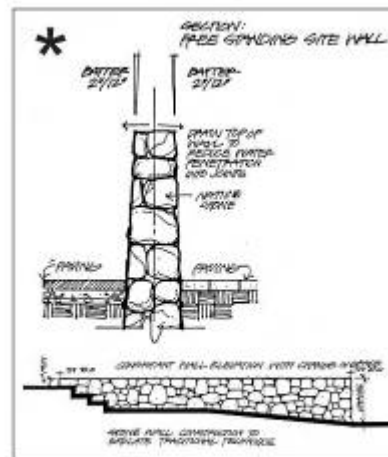
- The ornamental lamb's tongue end piece should match the end piece used on handrails to complement one another.
- Bronze railings are preferred.
- Painted steel is acceptable.

CAMPUSWIDE GUIDELINES

STREET FURNITURE



**Retaining Walls
Seat Walls**



Walkways

New walkways should be carefully planned to connect major destinations and offer pedestrians safe, accessible and relatively direct travel. These new walkways should be indicated on the schematic design site plan. Steps and features hazardous to the visually impaired should be avoided. Special consideration should be given to locations where pedestrian pathways cross vehicular routes. On campus-controlled roads, brick paving material should continue across the vehicular route where pedestrian traffic is meant to dominate. Existing brick paving materials and patterns should be matched. Brick walls should be dry-laid (see Standard detail). Brick walls that provide service or emergency vehicle access should be built on a concrete base. Consistent widths should be maintained across the campus.

Standard widths:

Major pedestrian corridors:	16 ft. wide
Major pedestrian walks:	8 ft. wide
Minor walks:	6 ft. wide

*Courtesy of, "Design Guidelines," *A Guide to Physical Development*, UNC-Chapel Hill, 1988, Johnson, Johnson and Roy

Some Trends in Education

The decade since 1993 has seen college enrollments grow by 15% with minority students now making up nearly 30% of the total undergraduate population.

The percentage of male students has declined and is projected to continue to do so.

Less tax revenue is available for capital projects at public universities.

Partnerships across universities, government agencies, and private industry will increase with shared space.

How will this affect physical planning at Universities?

Some Trends in Education

Adolescents, including college students, have different bio-cycles than children & adults –

They experience a 2nd alert cycle in the late evening & don't experience waking alertness until mid-morning

Future changes for campus libraries –

Traditional library will remain while the definition is changing:
annex concept – “campus living room” – “work center”

University-linked retirement communities is a growing trend in the US –

By 2050 the proportion of older people will have double while the proportion of children will have declined.

Baby boomers retiring will be 20 % of the total population by 2030.

Percentage of adults age 55+ participating in educational activities has increased from 6 % to 38 % (2001)

(United Nations Population Division)

How will this affect physical planning at Universities?

MSU Trends in Education

Grow to 13,000 students from 12,200 in next 5 years –
half of growth is graduate students, half through retention

Increase Native American and International students

There will be a premium for space for graduate students and upper division undergraduates – research space, living space, etc.

Faculty and staff will grow proportionately with enrollment and research.

There will be increased pressure for offices, growth in research space and increased parking demand.

Integration of learning and discovery – students will interact with senior faculty.

Academic offerings will be increasingly interdisciplinary

How will this affect physical planning at Universities?

Stakeholder Meetings January 2006



Meetings are
scheduled throughout
the day

Wednesday Jan. 25th

and

Thursday January
26th.

Today – Needs, Wants, Vision Ideas, Complaints

Comments and suggestions will be anonymous.

Be sure to sign the Sign-In sheet for future communications.

What to do about getting to Campus?

PEANUTS By Charles M. Schulz

