

UNM SOUTH CAMPUS PLACEMAKING PLAN

5.05.10



synthesize + connect + create

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Executive Summary

The UNM South Campus Placemaking Plan (Placemaking Plan) is a new kind of document for the University of New Mexico. Placemaking is about creating great places that capitalize on a community's assets, inspirations and potential. In its direction, the Placemaking Plan is more detailed than a master plan but less prescriptive than design standards. The UNM South Campus Placemaking Plan does the following:

- Establishes the overall framework for land uses, circulation, and open space;
- Proposes guidelines for development of the public realm;
- Gives direction to site-specific projects on best practices for design and development, and how and where to tie into the larger campus plan; and
- Reflects the University's overall mission and values.

Section I: Placemaking

While the UNM South Campus is a center of intellectual and athletic accomplishment, it does not have a consistent campus aesthetic or identity that reflects these achievements. UNM's South Campus doesn't appear or operate as a campus. The district is divided into disconnected parts – Science and Technology Park, athletic venues, vast expanses of parking and undeveloped land. The South Campus lacks public spaces and amenities that connect people, and lacks the diversity and density to consistently populate the area beyond athletic events.

Opportunities for Placemaking – for capitalizing on the assets of the South Campus, are substantial. There are acres of undeveloped land, \$250 million worth of first class athletic facilities, 5000 employees working on site, and 360,000 finished square feet of laboratory, office, R&D and mixed use space. There is convenient highway and arterial road access into the site to accommodate the thousands of visitors that come at one time for sporting and entertainment events, and acres of surface parking to be used, shared, and developed into other uses.

The recommendations made in the Placemaking Plan are designed to do the following:

- Improve connectivity;
- Diversify land uses;
- Renew focus on the design of spaces around and between buildings;
- Establish campus landmarks;
- Establish campus identity and create visual interest;

- Enrich the college experience; and
- Provide a framework to guide decision-making.

Section II: Sustainability

UNM is committed to making a new campus model that is sustainable. Several recent documents, including the American College & University President's Climate Commitment, UNM Master Plan Update 2009, and the UNM Climate Action Plan September 2009, outline the University's internal sustainability commitments and strategies for evolving toward a more sustainable institution. The recommendations and standards outlined in other sections of the Placemaking Plan are aligned with the University's sustainability goals, and provide clear direction on sustainable development practices and standards that will benefit the University, the community and the environment.

Section III: Planning and Design Context

UNM's South Campus is located among neighbors who have a vested interest in the type and quality of development that occurs in the area. The Placemaking Plan establishes standards for development and design that are aligned with existing planning policy for the area, and create a shared understanding of the University's commitment to creating an exciting, attractive, and memorable campus environment that will benefit students, staff and the surrounding community.

Relevant UNM policies and activities that are addressed in the Placemaking Plan include:

- UNM Master Plan 2009 Update
- UNM South Campus Master Plan, August 2007
- Renovation of The Pit, 2009-2010
- Introduction of student housing on the South Campus, 2010
- Science and Technology Park @ UNM

Relevant City of Albuquerque policies and activities that are addressed in the Placemaking Plan include:

- Albuquerque/Bernalillo County Comprehensive Plan
- South Yale Sector Development Plan
- Clayton Heights Metropolitan Redevelopment Area Plan
- Other City of Albuquerque regulations/policies related to transportation, public works, open space and development within the public and private realms.

Section IV: Environmental Design

Environmental Design is the art and science of identifying and defining a broad range of design elements that communicate a brand and create a positive experience for the users of the space. This section of the Placemaking Plan addresses the following environmental design components:

- New configurations for land use, circulation and open space systems to create the framework for more detailed design elements;
- Methods for retrofitting surface parking lots into more attractive, sustainable, safe and pedestrian- friendly amenities;
- Wayfinding and signage recommendations that build on the UNM Wayfinding & Signage Standards and Guidelines that were recently approved by the University Regents;
- Suggestions for developing focal elements and landmarks on the South Campus to serve wayfinding purposes and to create memorable, interesting places that will become home to school traditions; and
- Suggestions for ways to create temporary event spaces that might draw on the energy created when thousands of people visit the site – creating new activities, experiences and memories on the South Campus.

Section V: Standards

The rules and recommendations included in this section of the Placemaking Plan are at the heart of the document. The standards communicate the University's commitment to creating a new kind of campus environment, and express the University's expectations for design and development on the South Campus. The standards have been written for use as a design and development guide for the University and its partners, and as a reference for use by UNM's Design Review Board when evaluating design proposals. Primary components of the Standards section include:

- **Kit of Parts for Campus Street Design:** South Campus streets need to accommodate people, transit, and bikes as well as cars. The "Kit of Parts" refers more to an approach than a product; it proposes a menu of design standards that should be used on campus projects. They are meant to guide the decisions that impact the character of the campus. The kit of parts addresses the individual physical elements that make a place distinct: roads, sidewalks, lighting, furnishings, landscape, and graphics. For each category, there are a number of design standards; ideally, every project would incorporate all of the suggested standards. But as the "kit of parts" implies, a project can pick and choose from each category, depending upon the particular site-specific conditions. The UNM Design Review Board will also use these standards in evaluating individual projects.
- **Streetscapes:** Besides including conceptual designs for University Boulevard and Avenida Cesar Chavez, the Placemaking Plan proposes to create "green streets" for all new internal roads on the South Campus and provides information on how this can be accomplished.
- **Paths and Trails:** The Placemaking Plan presents a hierarchy of convenient, interconnected paths and trails that will help reduce vehicle miles traveled and improve inter-campus connectivity.
- **Furnishings:** The Placemaking Plan includes a selection of modern and durable standards for benches, litter receptacles, tables, bollards, and bike racks.
- **Walls and Fence:** The Placemaking Plan includes suggestions wall and fence characteristics that will help create comfortable spaces, reinforce wayfinding efforts, and create visual interest on the campus. The Placemaking Plan also clearly indicates that chain link fencing is not an acceptable choice for the South Campus.
- **Paving:** The Placemaking Plan includes suggestion for contrasting paving to increase the amount of permeable surface in the landscape, create visual interest, and reinforce wayfinding efforts.
- **Site Lighting:** The Standards section includes recommendations for lighting design that may encourage creative differentiation between uses on the South Campus, while concurrently establishing lighting design consistency and quality in the public realm.
- **Landscaping:** Plant lists that support new landscape concepts are introduced for the South Campus. These concepts reinforce landscape design principles found on the main campus. Primary concepts include:
 - **Trees:** using a high volume and diversity of trees
 - **School Colors:** using plant materials that promote the school colors;
 - **Native Landscaping:** including a significant amount of native vegetation in each installation to create a regionally specific aesthetic, and reduce water/fertilizer/pesticide use;
 - **Xeriscape:** applying xeriscape principles to reduce potable water user for irrigation, create healthy soils, and reduce the need for chemical fertilizers and herbicides;
 - **Wayfinding:** using plant materials to help orient visitors; and
 - **Water Harvesting and Green Infrastructure:** creating green streets, parking lots and landscaping that utilizes storm water to reduce potable water use for irrigation, and improves water quality prior to release into the storm drain system.

Section I



Placemaking

Placemaking is about creating great places that capitalize on a community's assets, inspirations and potential. In its direction, it is more detailed than a master plan but less prescriptive than design standards. The UNM South Campus Placemaking Plan does the following:

- Establishes the overall framework for land uses, circulation, and open space;
- Proposes guidelines for development of the public realm;
- Gives direction to site-specific projects on how and where to tie into the larger campus plan;
- Reflects the University's overall mission and values.



The UNM South Campus Placemaking Plan is comprised of urban planning and design recommendations that will help transform the district into a more diverse, dynamic and pedestrian-friendly environment.

- Improve connectivity
- Diversify land uses
- Renew focus on the design of spaces around and between buildings
- Establish campus landmarks and opportunities for traditions
- Establish the campus identity and create visual interest
- Enrich the college experience
- Provide a framework to guide decision-making

Opportunities for Placemaking

- \$250 million dollars worth of first class athletic facilities
- 360,000 SF of developed R&D, laboratory, office and mixed-use space
- 5000 employees at the Science and Technology Park @ UNM
- Many visitors per year to UNM and Isotopes athletics events
- Access: to a highway interchange and arterial roads
- Topography: affording views of the City and natural landmarks
- Parking: large quantities of surface parking to be used, shared and developed into other uses

Challenges for Placemaking

- The South Campus is the center of intellectual and athletic accomplishment, but does not have a consistent campus aesthetic or identity that reflects these achievements.
- As a district, UNM's South Campus is divided into disconnected parts - Science and Technology Park, athletics venues, vast expanses of parking and undeveloped land.
- Buildings and infrastructure have been developed purely for their immediate function, with little consideration for the impact on appearance and function on the campus.
- The South Campus lacks public spaces and amenities that connect people.
- The area as a whole works well for large scale athletic events but is under utilized during UNM events.



Study Area: South Campus

Existing Conditions

UNM's South Campus is comprised of 289 acres located east of Interstate 25, at the intersection of Avenida Cesar Chavez and University Boulevard. The South Campus is home to:

- Science & Technology Park @ UNM (NW of the intersection)
- The Pit – UNM's renown basketball and event venue (SW of the intersection)
- University Stadium (SE of the intersection).

The area is visually dominated by roads, parking lots and large athletic facilities and office buildings. The area currently lacks a diversity of uses and scales, spatial hierarchy, density and connectivity that are desirable for a college campus.

Section II



Sustainability

A sustainable South Campus is efficient with resources and effective at serving the needs of the people in the district. The UNM South Campus Placemaking Plan illustrates the University's commitment to creating a connected, multi-modal campus environment that is attractive and functional for the 5,000+ employees, students and staff who will populate the district on a daily basis, as well as for the other 5,000-25,000 people who will visit the district during athletic and entertainment events.

UNM is committed to making the campus more sustainable. New development on the South Campus will need to comply with internal sustainability commitments and strategies as outlined in the following documents.

American College & University President's Climate Commitment

In June 2007, President David J. Schmidly committed the University of New Mexico to carbon neutrality by 2030. This decision impacts virtually every planning and design decision made by the University and their consultants, as well as most decisions related to University operations.

UNM Master Plan Update 2009

The Master Plan Update identifies goals, objectives and strategies related to achieving sustainability and carbon neutrality. The elements of the sustainability approach that most impact the UNM South Campus Placemaking Plan include:

- Diversify transportation options in order to minimize fossil fuel consumption
- Provide alternative forms of transportation and incentives to use them
- Increase access to transit
- Create a pedestrian and bike-friendly campus
- Make Buena Vista Drive a recognized pedestrian and bicycle route between South and Central Campuses
- Create standards for site and landscape development that will reduce the use of potable water for irrigation
- Encourage sustainable lighting on campus including the use of solar lighting and high-performance lighting like LED.

UNM Climate Action Plan September 2009

UNM's Office of Sustainability and the UNM Sustainability Council created a Climate Action Plan for UNM's Albuquerque Campus. The Climate Action Plan includes recommended measures that in combination would reduce emissions by a minimum of 70% from 2006 levels by 2030. The measures that most impact the UNM South Campus Placemaking Plan are related to energy and transportation.

- Energy-related recommendations outlined in the Climate Action Plan include creating a Solar-Powered UNM, creating a smart grid on campus, and reducing thermal energy use emissions by 20% by exceeding Architecture 2030 standards. The extensive use of solar panels in the South Campus could be part of a developing "tech aesthetic" that would work well with the large scale athletics venues and visually reinforce the mission of the Science and Tech Park.
- Because commuting and travel account for 34% of UNM's carbon emissions, the Climate Action Plan has committed to moving the commuter out of cars and into mass transit, onto bicycles, or onto feet. Tactics being considered for achieving transportation-related reductions include shifting commuters to a 4-day work week; reallocating commuters to 40%, 30% and 30% for vehicular, mass transit, and pedestrian categories respectively, using programs/incentives like free train passes, improved biking and pedestrian facilities; providing a guaranteed ride home service; carpool coordination and incentives; and marketing.



Native Plants

The use of native plants reduces water use, and helps give the campus a regional identity.



Water Harvesting

Collecting stormwater runoff in parking lots, reduces the use of potable water for irrigation and can increase stormwater quality.



Bicycles

Moving commuters from cars to bicycles reduces carbon emissions and promotes a healthy lifestyle.



Transit

Convenient transit will increase transit use, reduce carbon emissions and reduce the campus land allocation for cars.



Lighting

High performance, well designed lighting can save energy, and reduce light pollution.



Solar Panels

Solar panels located on rooftops can generate power and reduce carbon emissions.

SECTION III



Planning and Design Context

UNM's South Campus is located among neighbors who have a vested interest in the type and quality of development that occurs in the area. The Placemaking Plan establishes standards for development and design that are aligned with existing planning policy for the area, and create a shared understanding of the University's commitment to creating an exciting, attractive and memorable campus environment that will benefit students, staff and the surrounding community.

UNM Master Plan 2009 Update

The UNM Master Plan 2009 Update (2009 Update) seeks to create a “Live, Learn, Work, Play” environment at UNM. The goals, as summarized in the 2009 Update, are listed below.

- Synthesize sustainability into all major development decisions. UNM's commitment to reduce carbon emissions by 70% by 2030 impacts all development and transportation issues
- Connect the three campuses. A major goal of the 2009 Update is to make North, Central, and South Campuses look and function like one, unified campus.
- Create a campus that continues to reflect UNM's unique cultural and architectural heritage. This means preserving UNM's architecture and landscape while allowing new buildings to articulate a contemporary expression of New Mexico Culture. The UNM Campus should manifest New Mexico's “brand” of art, culture, and technology.

UNM South Campus Master Plan, August 2007

- Prepared by Molzen-Corbin & Associates for UNM's Department of Athletics, the UNM South Campus Master Plan promotes a sports complex that is centered on University Stadium and The Pit. The focus is primarily on athletics-related facilities and sports program offerings.

The Pit

- The \$61 million dollar renovation of The Pit is currently underway. Construction is expected to be complete in 2010. The improvements include interior upgrades appropriate to a modern NCAA Division 1 Basketball Program, and site renovations in response to new entrances, loading areas and parking fields.

UNM Student Housing

- In an effort to create the Live, Learn, Work, Play campus environment envisioned in the 2009 Update, the University is building a new of student housing complex west of the Pit, along Avenida Cesar Chavez.
- The addition of almost 1,000 students living on the South Campus will change the dynamic of the South Campus.

Science and Technology Park @ UNM

- Comprised of 80 acres and 360,000 square feet, the Science and Technology Park @ UNM (STP) is home to technology based companies and research facilities that employ approximately 2,000 people.
- A new charter school at STP and the new student success center at the southeast corner of the park (Avenida Cesar Chavez and University) adds a significant number of students to the STP.

UNM Master Plan 2009 Illustration



The STP and the athletics facilities are physically separated by Avenida Cesar Chavez and surface parking. Representatives of the STP would like to see more physical and functional connectivity, as well as aesthetic continuity across the South Campus.

City of Albuquerque Policies

Although the University is not subject to city zoning regulations, the South Campus Placemaking Plan recognizes City of Albuquerque (COA) planning policies applicable to the public streets and surrounding neighborhoods. Portions of City policy relevant to South Campus are summarized below.

Albuquerque/Bernalillo County Comprehensive Plan

- The Albuquerque/Bernalillo County Comprehensive Plan (Comprehensive Plan) designates “Activity Centers” throughout the city-areas where increased density is encouraged. UNM as a whole is designated as a Major Activity Center (Figure 30, p. II-41) and the UNM Sports Complex on the South Campus is designated as a “Special Activity Center.” Activity Centers are designed to “...help shape the built environment in a sustainable development pattern, create mixed use concentrations of interrelated activities that promote transit and pedestrian access both to and within the Activity Center” (p. 11-35).
- The Comprehensive Plan also designates certain roadways as transit corridors. University Boulevard is designated as an “Enhanced Transit” corridor. For Enhanced Transit corridors, “...the goal is to provide transit service competitive with the car, and develop adjacent land uses and intensities that promote the use of transit.” (p. I-73).

South Yale Sector Development Plan

This Plan acknowledges the impact that UNM has on the area and proposes a number of transportation-related changes that impact the South Campus. Among these changes are the following:

- improved pedestrian crossings on Avenida Cesar Chavez;
- enhanced medians along Avenida Cesar Chavez;
- signalized intersection at Buena Vista Drive and Avenida Cesar Chavez; and
- designated bike route on Buena Vista Drive/

Clayton Heights Metropolitan Redevelopment Area Plan (CHMRA)

- The CHMRA Plan estimates that the area could support approximately 28,000 square feet of additional retail development.
- It also proposes to reconfigure Avenida Cesar Chavez at Buena Vista to reduce travel lanes down to two in each direction and establish prominent gateway markers along Avenida Cesar Chavez to help identify the sequence of entry onto the UNM South Campus District.



Science and Technology Park

Section IV

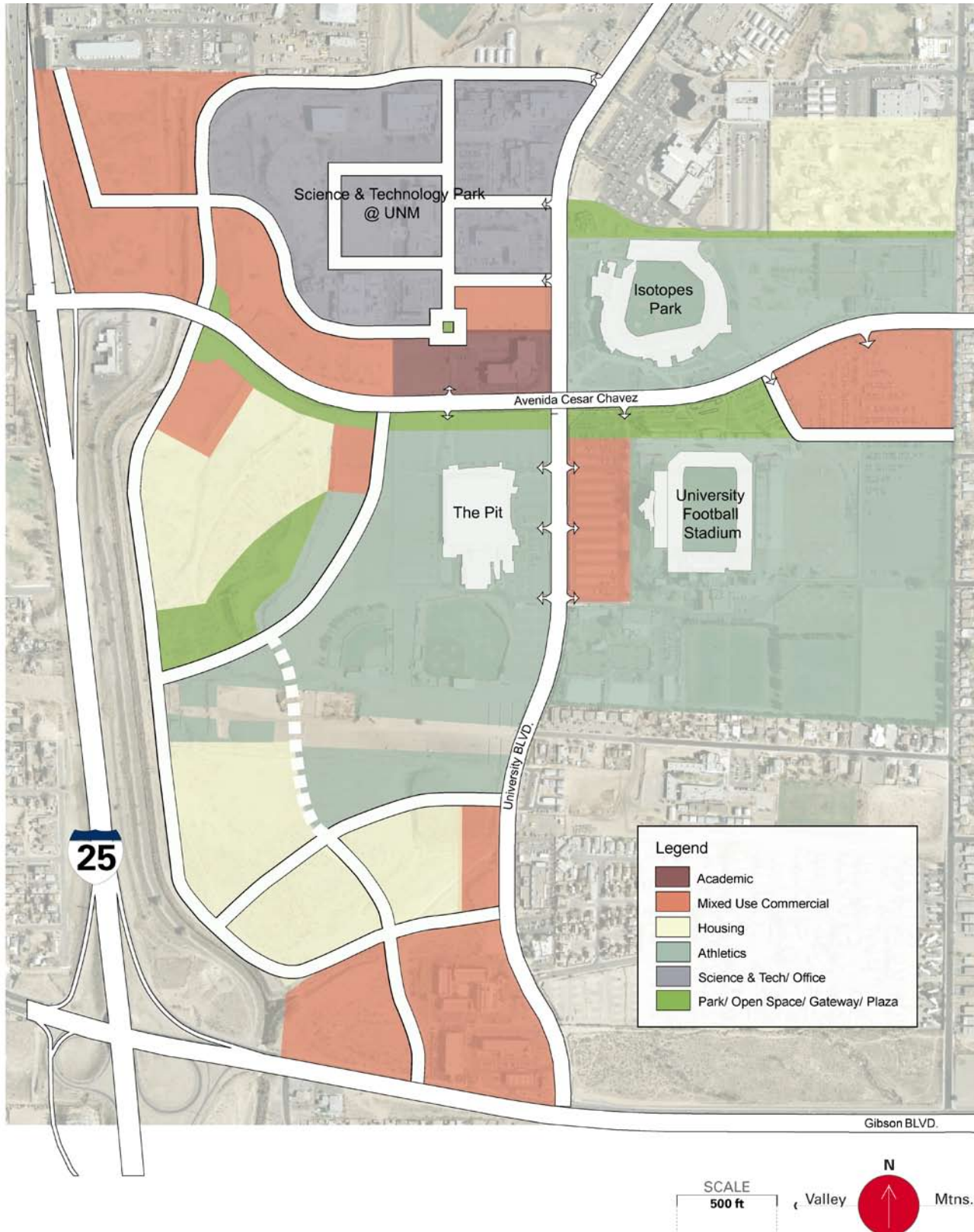


Environmental Design

Environmental Design is the art and science of identifying and defining a broad range of design elements that communicate a brand and create a positive experience for the users of the space. This section proposes combinations of land uses, and circulation and open space systems; elements that create the framework for more detailed design elements. This section also identifies the large scale elements within public spaces that create memorable places and help people navigate around the campus.

Land Use

The land use pattern illustrated in the diagram below is based on the overall master plan program needs, opportunities for public private partnerships and a desire to create a cohesive campus environment.



Connectivity: Circulation and Parking

Functional vehicular circulation is particularly critical in the South Campus. Thousands of people arrive by car for athletic and entertainment events at University Stadium, The Pit and Isotopes Park. The goals include creating a pedestrian-friendly campus and creating connections between roads and parking, parking

and pedestrians corridors, and pedestrian corridors and events/facilities. The connections need to be intuitive, well-marked and designed with minimal conflicts in order to make convenient and functional vehicular circulation.



Open Space & Pedestrian Network

The open space recommendations illustrate a hierarchy of open space opportunities across the campus for the benefit and enjoyment of students, staff, employees and visitors. Open space elements like gateway parks, and wide landscaped corridors become key elements in establishing a campus identity and aesthetic.

Pedestrian connectivity is provided through a hierarchical system of sidewalks, corridors, paths and trails. New pedestrian-friendly road crossings and intersections are an important part of creating connectivity across campus – knitting together areas of campus north and south of Avenida Cesar Chavez. Convenient proximity to transit and parking areas, as well as attractive landscapes and well-defined pedestrian corridors will promote foot traffic by residents, employees and visitors.



Open Space/Parks/Plaza Images



Corridors

Corridors can provide comfortable areas for meeting, walking and working.



Landscaped Trails

Trails are attractive, natural areas that connect destinations and facilitate walking and biking.



Patios

Patios next to buildings create more intimate spaces for socializing and learning.



Parks

Parks provide comfortable, convenient areas for active and passive recreation.



Parking & Pedestrian Connections

South Campus is filled with asphalt parking lots that could be retrofitted to become more pedestrian-friendly. The rendering below is an illustrative retrofit to The Pit parking

lot, and shows how easily these parking areas could be modified to become safe, accessible corridors and encourage people to get out of the car and walk.

Proposed Pit Parking Layout

Street trees

Define street edge

40' Wide

Pedestrian Corridor

Crosswalk

Pedestrian

Connection

9' Wide sidewalk

Decrease size of parking stalls from 20' to 18' to create wider sidewalks

9' Wide water harvesting

Decrease size of parking stalls from 20' to 18' to create wider sidewalks

18' Long parking space

18' is COA standard



Existing Pit Parking Layout

Walkway

Narrow connection

Land

Inefficient use of land

Parking

Inefficient parking layout- no pedestrian connections

Lack of Connection

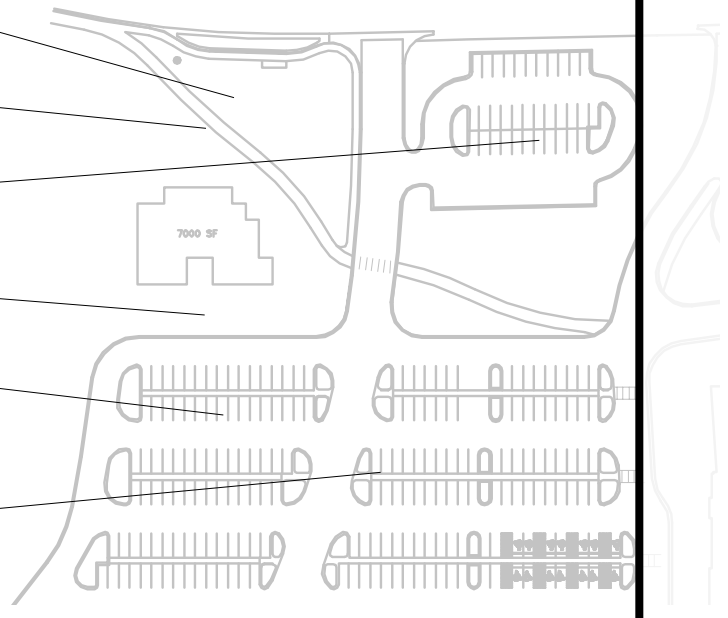
No connection to housing

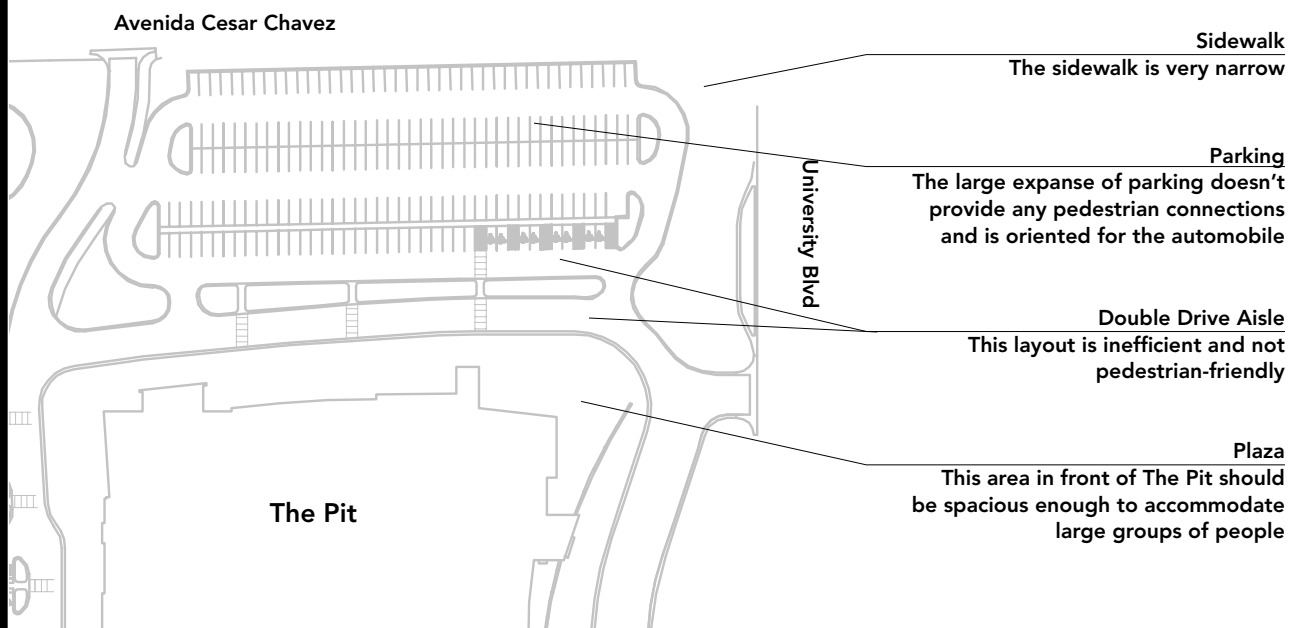
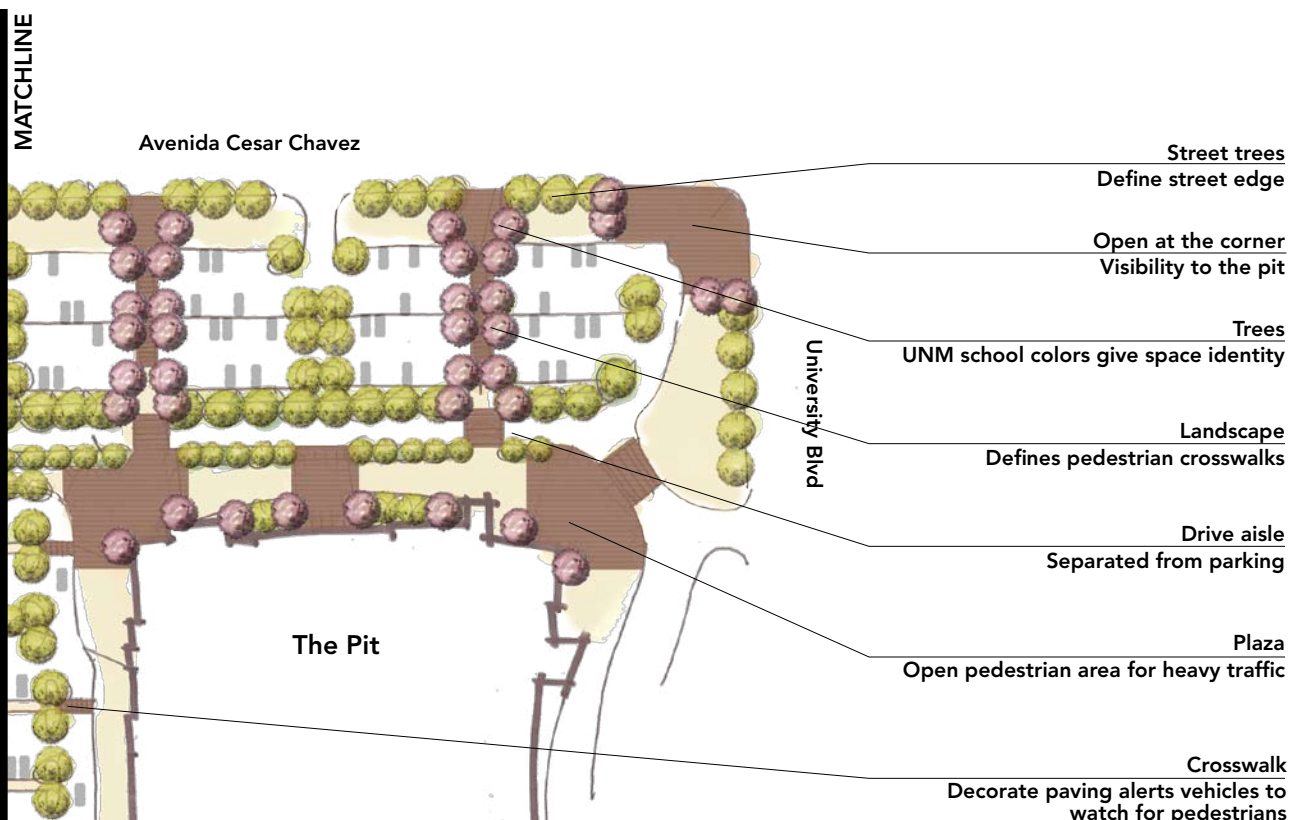
Parking Space Size

20' long spaces are not necessary
The space between the 20' parking stalls is not usable for water harvesting or pedestrians

No Crosswalk

Without a crosswalk, pedestrians have a difficult time crossing along a street





Wayfinding & Signage

The concept of Placemaking or “experience architecture” is attributed to the practices in the 1960s when visionaries like John Jerde and William Whyte presented revolutionary ideas for designing cities that focused on people, rather than automobiles. The notion considered the importance of creating and maintaining vibrant communities and inviting public spaces. In 1975, Project for Public Spaces further defined placemaking as “places that have meaning to people, enduring patterns of community use, and memorable physical qualities”.

Environmental graphics and wayfinding as a separate academic discipline from architecture came into being in the 1980s. The specialization of environmental graphics and wayfinding allowed the practice to become more refined and sophisticated. Wayfinding is attributed to Kevin Lynch, 1960, as being pivotal in professional thinking about how we understand environments.

Environmental graphics is most evident from the development of Disneyland. Disneyland is an example of architecture and graphics merging seamlessly creating a fully immersed environment as an entertainment destination. However, environmental graphics and wayfinding as a part of urban planning and placemaking came into being with the creation of the 1968 Mexico Olympics, designed by Lance Wyman. The iconography designed for the Olympic games was extended as part of a city-wide wayfinding program for the Mexico Metro. This graphic system for the Metro is still maintained today in Mexico City, and represents one of the most complex and iconic urban wayfinding programs in the world.

As it relates to the UNM South Campus Placemaking Plan, wayfinding is defined as the orderly structuring of information and graphics required to enable people to comfortably and successfully navigate the built environment. Functionally, wayfinding means reaching a destination within an acceptable amount of time and energy, and is measured

in terms of efficiency in student and business productivity. Wayfinding also establishes an experiential relationship with architectural, urban and natural landscapes, and is essential as part of a modern campus environment, impacting all users of the University and the surrounding community. Wayfinding affects users emotions and attitudes about the University, and is more than a navigational tool. Wayfinding is a way to market a specific area’s resources, alter negative perceptions and evoke a sense of history, character and pride, while improving the streetscape. Finally, wayfinding encourages accessibility and public safety, focusing on all modes of transportation by foot, bicycle and automobile, reducing accidents and liability. As stated in the 2009 UNM Master Plan Update, wayfinding is essential for the success of the University.

The UNM South Campus Placemaking Plan incorporates wayfinding principles outlined in the recently approved UNM Wayfinding and Signage Standards by recommending implementation of a comprehensive network of wayfinding, information and graphic elements to provide visual cues that guide users and creating a unique sense of place. The graphic devices and components for the UNM South Campus include: a messaging and information strategy for destinations and amenities, pedestrian and vehicular directional signs, orientation maps, site identification, information kiosks, banners, art elements, super graphics, regulatory and information signage, lighting, electronic graphic displays, electronic orientation aids (Bluetooth and infrared transmitters at street corners), gps navigation mapping and graphics, educational and informational components to provide a sense of history and place and UNM marketing and branding elements.

It is our goal to create UNM South Campus as a vital and integral component for the University community and local residents and visitors encouraging commerce, education, retail and athletic activities.



Icon

An icon can create a campus identity and also become a wayfinding tool.



Gateway

A gateway can provide a sense of arrival into a campus.



Signs

Place informal and directional signs along sidewalks to support positive wayfinding



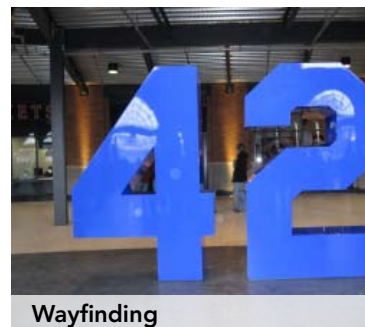
Focal Elements

A focal element can establish landmarks for improved wayfinding.



Focal Elements

Focal elements and sculpture can create a memorable campus.



Wayfinding

Large graphics can promote identity.

Focal Elements/Landmarks

Large scale graphics, signage, art pieces, highly designed public spaces, specimen landscaping, iconic architecture – all of these focal elements can develop into landmarks on a campus. Placemaking is about creating memorable, interesting places. On a campus, it can serve wayfinding purposes and also be about creating spaces and places that will become home to school events and traditions.

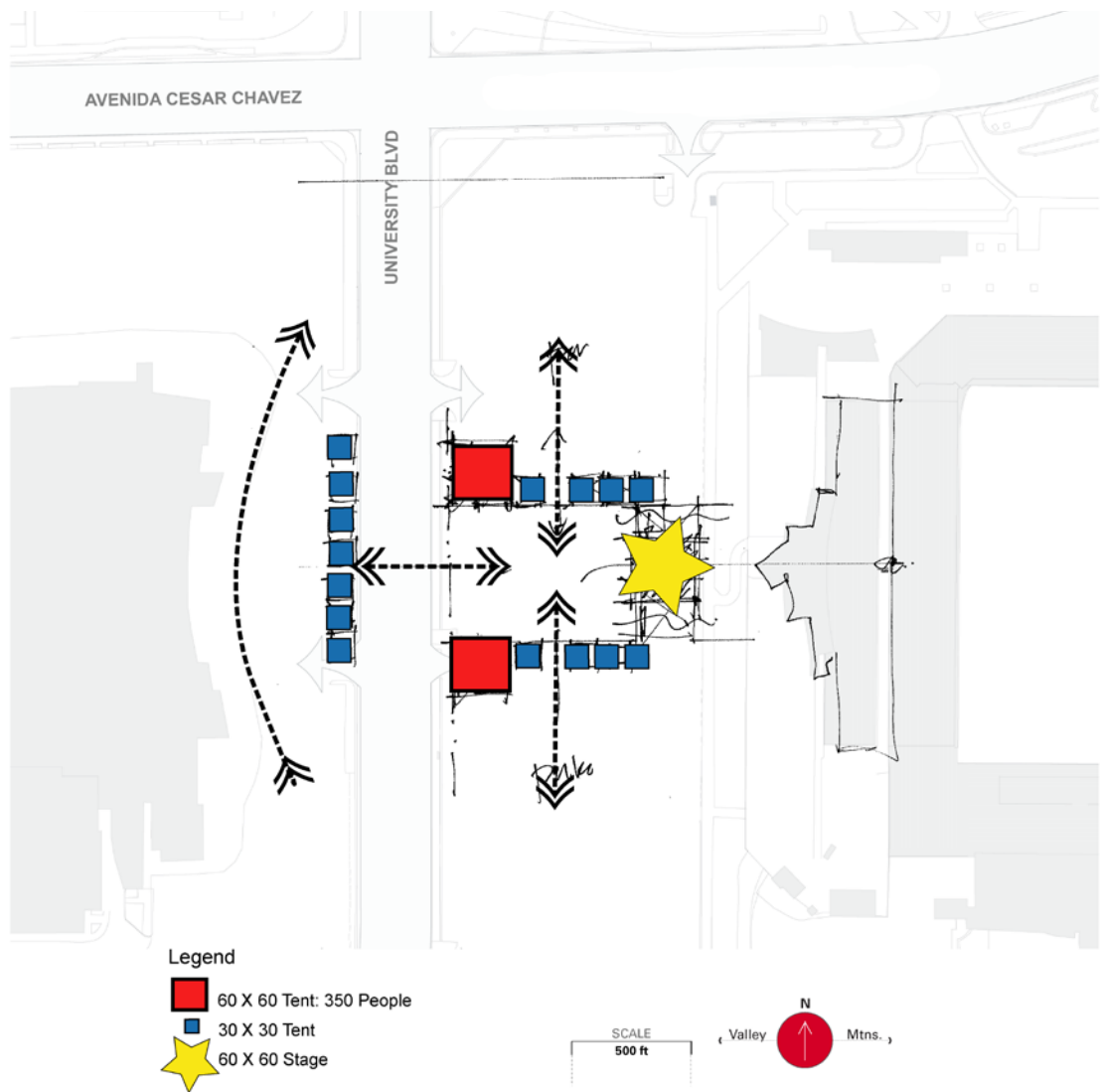
The South Campus is already home to venues for activities that instill school pride – University Stadium and The Pit. Design elements across the remainder of the campus need to be equally inspirational. The diagram below illustrates opportunities for locating and creating landmarks.



Event Space Plan

This graphic represents one option for creating an event zone between The Pit and University Stadium. The various icons represent two sizes of temporary tents, and the star represent a stage. This area has the of potential to become

a large event space during various sporting activities or even without a sporting event. By placing temporary tents and closing University Boulevard the space is activated and alive and becomes a pedestrian hot spot.





Standards

The heart of the Placemaking Plan is the design standard. These rules and recommendations communicate the University's commitment to creating a new kind of campus environment, and the University's expectations for design and development of the public realm on the South Campus. The standards establish visual interest, order and consistency for wayfinding and signage, streets, walks, trails, furnishings, lighting, and landscaping. The kit-of-parts approach within the standards provides the University flexibility to develop the best placemaking approach for each site as long as larger, district-wide systems (i.e. land use, circulation, open space and pedestrianism) are also put into place.

Kit of Parts for Campus Street Design & Pedestrian-Friendly Environment

Why it is needed?

South Campus streets need to accommodate people, transit, and bikes as well as cars. We recommend a kit-of-parts approach, whereby pedestrian-friendly and sustainable design elements can be selectively integrated into new and existing streets to create a safer, more attractive campus.

What is it?

Kit of Parts refers more to an approach than a product; it proposes a menu of design standards that should be used on campus projects. They are meant to guide the decisions that impact the character of the campus. The kit of parts addresses the individual physical elements that make a

Roads

- Create corner bulb-outs
- Install median refuges
- Narrow the street at intersections
- Provide pedestrian crossings (at vehicular traffic stops)
- Provide audible and visible traffic signals
- Reduce turning radius on corners
- Install speed bumps/humps
- Provide bike Lanes
- Provide bus Shelters



Bike lanes prioritize part of the ROW for bicycles, encourage multi-modal transportation and help reduce vehicle miles traveled.



Landscape medians create safe pedestrian zones in the street and create a more pedestrian-friendly scale.

Sidewalks

- Provide wider sidewalks along busy streets
- Reduce the number of drive pads
- Relocate utilities out of the path of travel
- Provide raised crossings
- Encourage continuous sidewalks



Wide sidewalks are safe and comfortable for pedestrians and reduce pedestrian vehicle conflicts.



Raised crosswalks provide optimal accessibility and suggest that the pedestrian has the priority in the street ROW.

Lighting

- Introduce various scales of lighting
- Coordinate lighting spacing with tree spacing and landscape design
- Highlight focal elements with lighting
- Create pedestrian friendly spaces and corridors with appropriate lighting



Pedestrian level lighting creates a safe, pedestrian-friendly space.



Pedestrian lighting can include fixtures such as bollards, pole lights and accent lighting.

place distinct: roads, sidewalks, lighting, landscape, and graphics. For each category, there are a number of design standards; ideally, every project would incorporate all of the suggested standards. But as the “kit of parts” implies, a

project can pick and choose from each category, depending upon the particular site-specific conditions. The UNM Design Review Board will also use these standards in evaluating individual projects.

Landscape

- Landscape center medians to create an attractive environment, shade paved areas, slow traffic and reduce the perceived scale of the street
- Depress landscape areas to capture and treat stormwater and reduce potable water use for irrigation
- Incorporate green street practices in design
- Plant a diversity of trees
- Promote UNM school colors
- Create focal elements to create a memorable campus and assist wayfinding
- Create landscape buffers between the road and sidewalk to create safe and attractive walking areas



Green streets may include water harvesting elements to filter stormwater and reduce potable water use for landscape irrigation.



Street trees improve the pedestrian environment by providing shade, a buffer between the street and sidewalk, and a shift in scale from adjacent large streets and buildings.

Environmental Graphics

- Add banners within the center median to promote the University
- Place informal and directional signs along sidewalks to support positive wayfinding
- Introduce focal elements and sculpture to create a memorable campus and establish landmarks for improved wayfinding
- Utilize existing buildings, light poles and other campus structures for environmental graphics to create visual interest and minimize visual clutter



Adding lobo paw prints along crosswalks would create an identifiable and unique feature within the campus.



Major intersections could become more pedestrian and visitor friendly by adding color and logos to create interest and identity.

- Encourage mixed uses, infill development and higher densities
- Encourage the development of a mixture of uses at intersections
- Require the placement of buildings closer to the street



Mixed-use development activates the pedestrian corridor and can create a strong and dynamic street edge.



Placing buildings closer to the street and creating attractive, safe pedestrian areas, encourages a walkable community.

Streetscapes

South Campus streets need to accommodate people, transit and bikes, as well as cars. The a kit-of-parts approach introduces pedestrian-friendly, traffic calming, multi-modal, and sustainable design elements that can be selectively integrated into new and existing streets to create a safer, more connected, more attractive street system.

Internal Streets

Internal Streets are the streets within the campus that define blocks and provide vehicular, pedestrian and bike connectivity between blocks. The primary placemaking component of these streets is that “green street” design components will be integrated into their design. Green Streets are just one piece of a larger watershed approach to improving our region’s water quality. It is also part of a regional approach to reducing potable water use for landscape irrigation and to reducing the heat island effect on campus. The design of each green street will need to reflect the program within the right-of-way as well as the needs of the adjacent land uses – so the designs of the internal streets within the South Campus will not all be identical. However, green street design components that may be integrated into the right-of-way include:

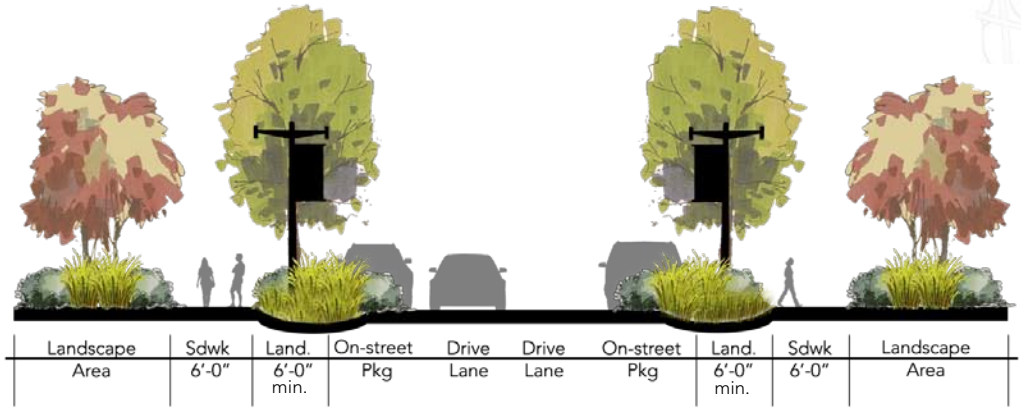
- Street trees for beautification and shade
- Permeable paving to reduce surface rainwater runoff and increase infiltration
- Curb design modifications to allow rainwater to be diverted to landscape areas and still allow for street sweeping and other traditional maintenance activities
- Filter strips and swales, typically in medians or wide buffer areas between streets and sidewalks, to divert water, provide a location for infiltration, and supplement potable water for landscape irrigation
- Infiltration trenches (in filter strips and swales) to collect runoff and slow the discharge rate
- Bioswale water infiltration areas for beautification and to mitigate contaminants before infiltration or return of rainwater to the storm water system
- Street tree wells in tight urban situations to irrigate trees with rainwater and reduce potable water use for irrigation, capture sidewalk rainwater, and convey rainwater to the storm system.



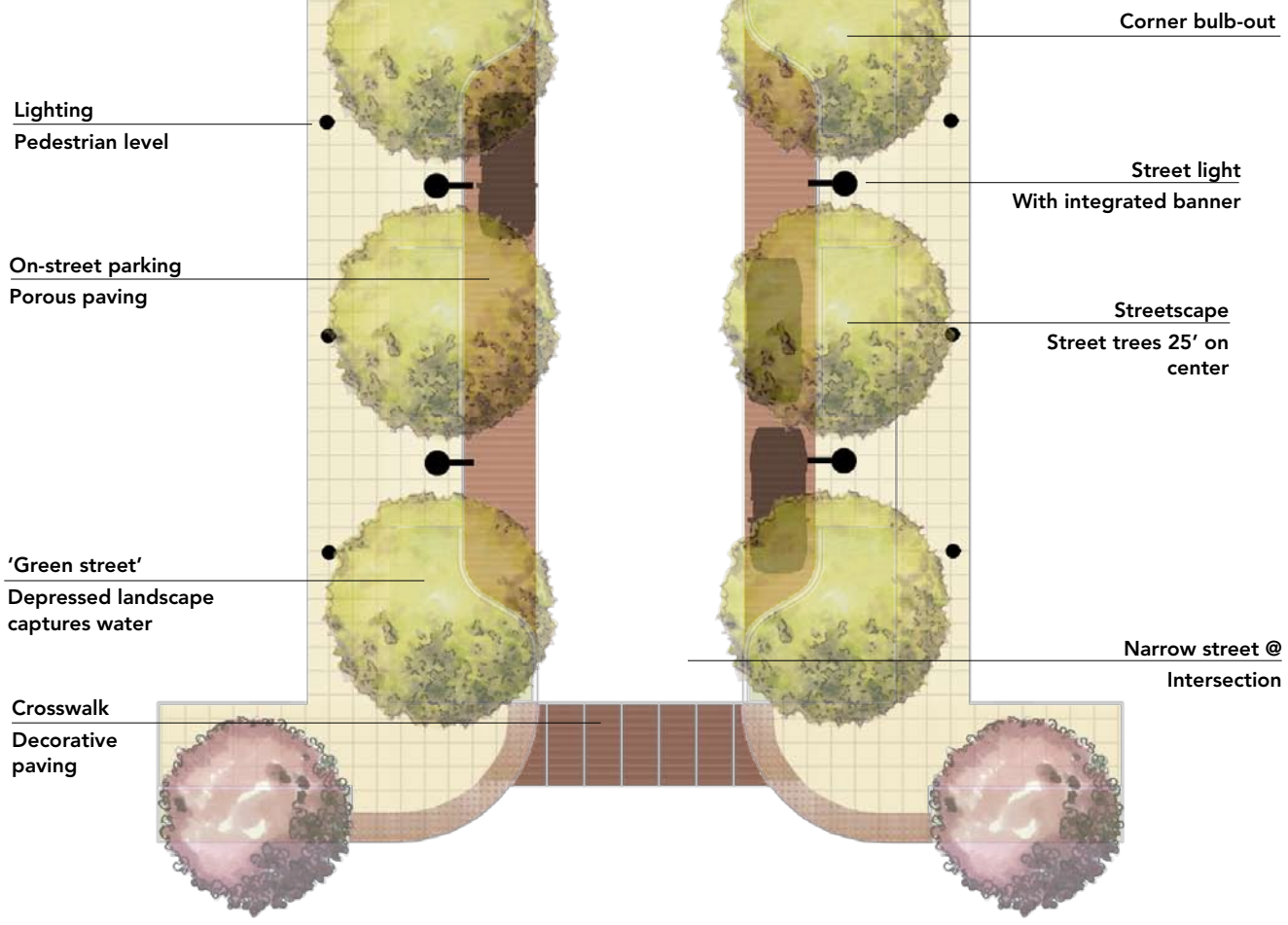
Location Map

Internal Street Section

Section



Plan View



Amenities

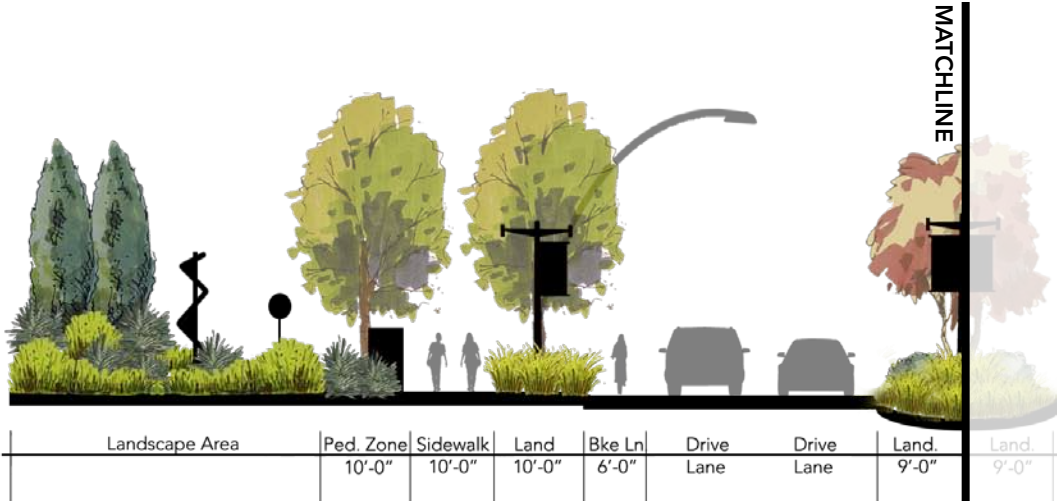
Landscape Area	Ped. Level Lighting, Benches	Street Lights, Banners, Street Signs	Porous Paving		Porous Paving	Street Lights, Banners, Street Signs	Ped. Level Lighting, Benches	Landscape Area
----------------	------------------------------	--------------------------------------	---------------	--	---------------	--------------------------------------	------------------------------	----------------

Avenida Cesar Chavez (4 Lanes)

Avenida Cesar Chavez is the primary route into the South Campus for many visitors and employees. Direct access to Avenida Cesar Chavez from I-25 makes this the intuitive entry to the South Campus for many people. The two options illustrated here include a four-lane option and a

six-lane option. Currently the road is six lanes wide and includes turn lanes and medians at points along the corridor. With the addition of a more connected and comprehensive internal street system, there may be opportunities to reduce the capacity of Avenida Cesar Chavez. A 4-land option has

Section



Plan View

'Green street'
Depressed landscape captures water

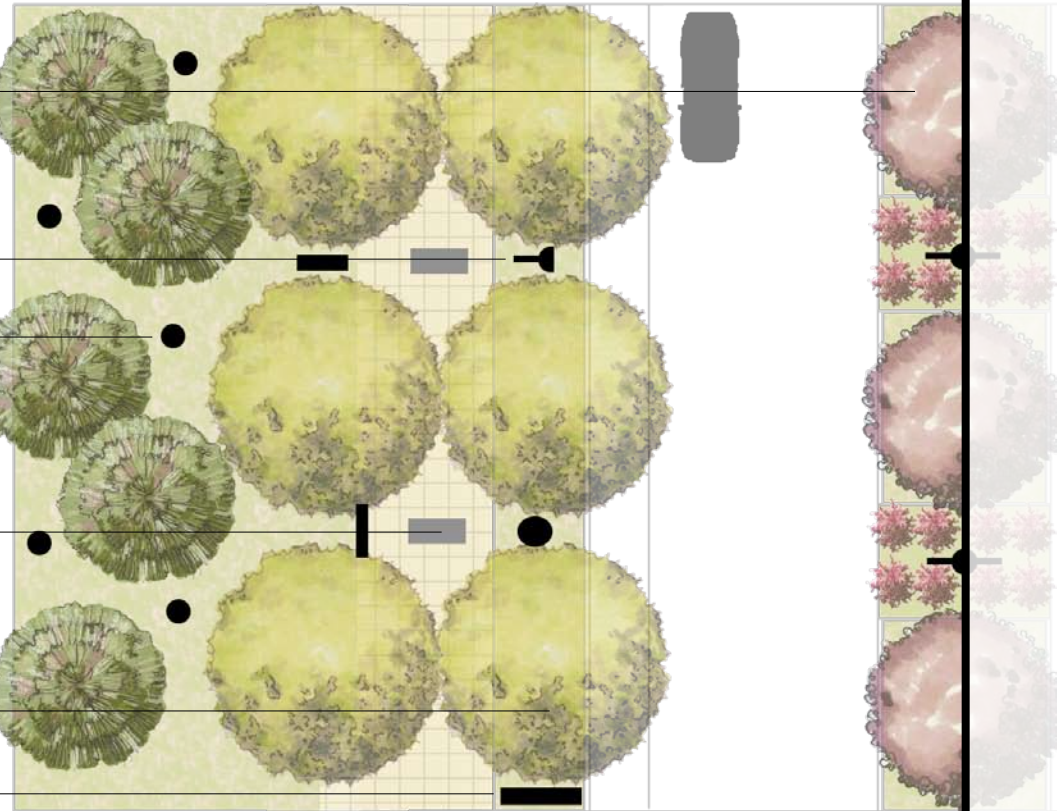
Banner location

Sculpture

Imbedded
Graphic in sidewalk

Streetscape
Street trees 25' on center

Vehicular directional
sign

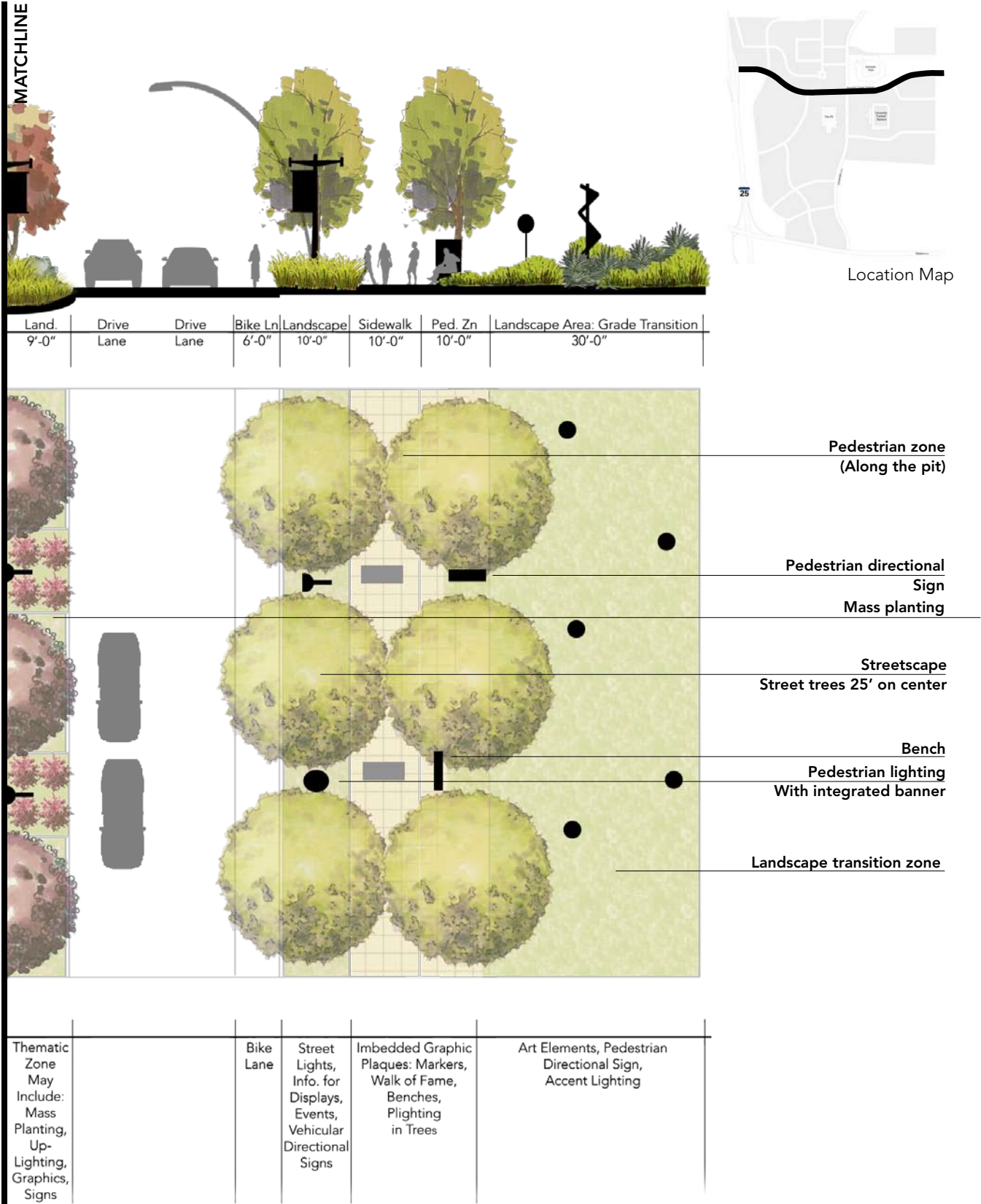


Amenities

Art Elements, Pedestrian Directional Sign, Accent Lighting	Imbedded Graphic Plaques: Markers, Walk of Fame, Benches, Up-lighting in Trees	Street Lights, Info. for Displays, Events, Vehicular Directional Signs	Bike Lane	Thematic Zone May Include: Mass Planting, Up-Lighting, Graphics, Signs
--	--	--	-----------	--

been included in case there is a desire or an opportunity to create a more pedestrian-friendly environment within parts or all of the corridor. In both options, a large landscape setback is included beyond the right-of-way. This area

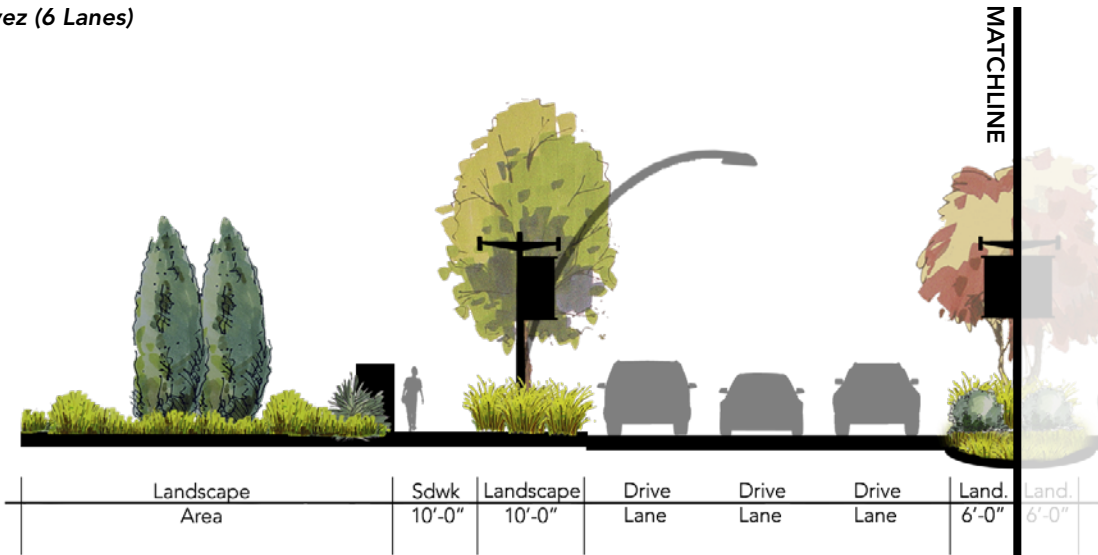
should be designed to create a memorable and attractive entry into the South Campus, and is an opportunity to establish the University brand and a unique South Campus aesthetic.



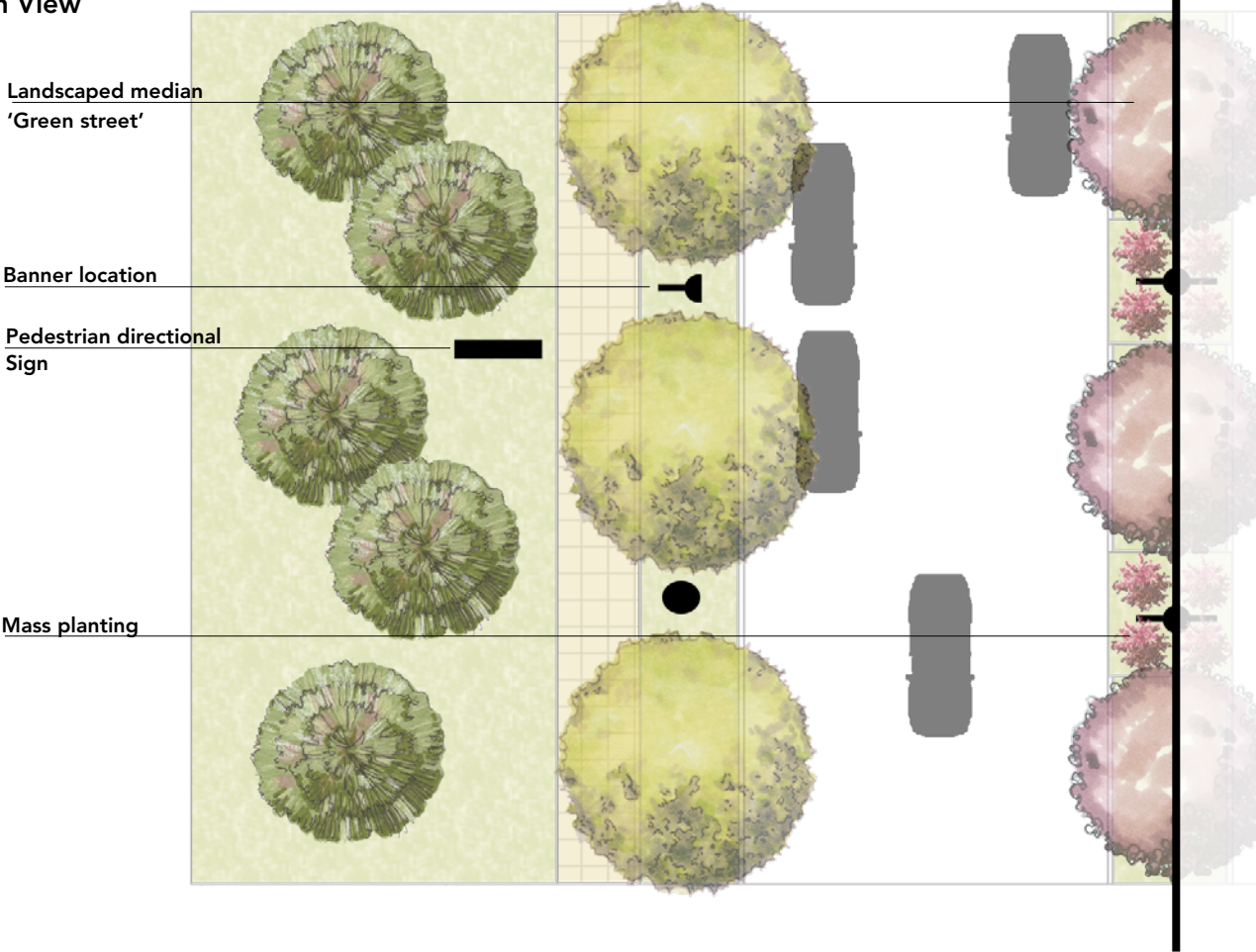
Location Map

Avenida Cesar Chavez (6 Lanes)

Section



Plan View



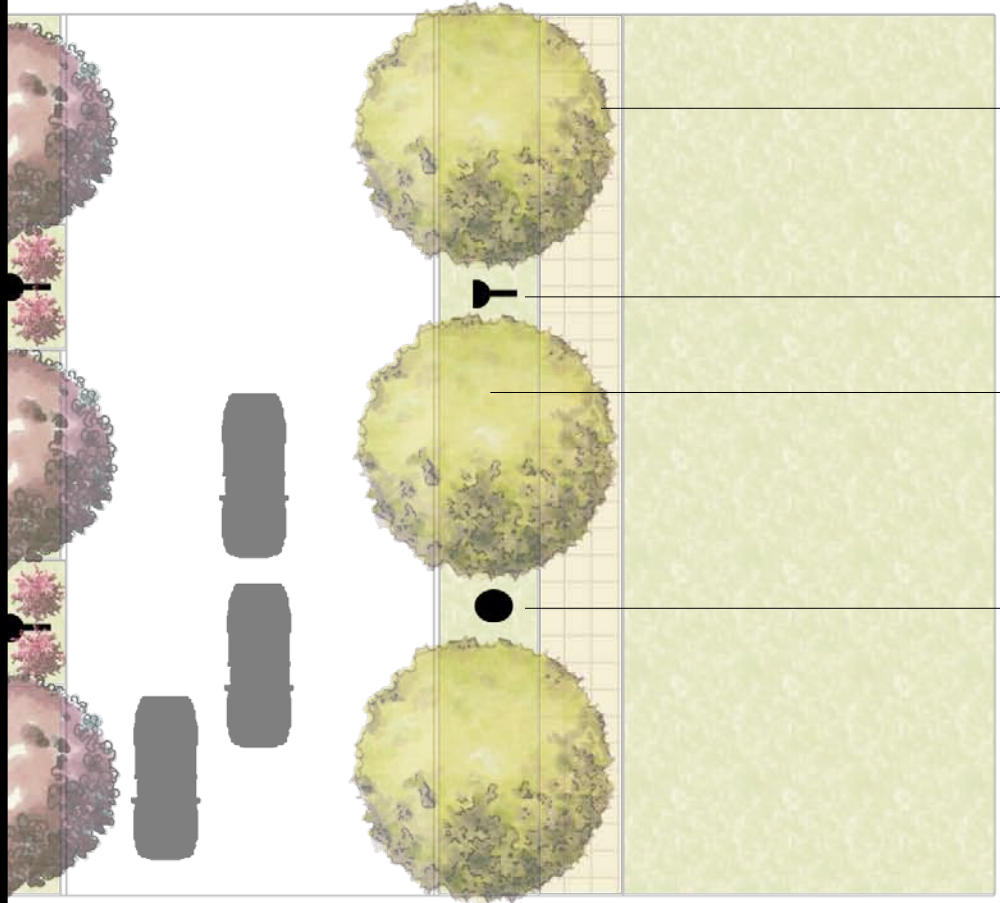
Amenities

Pedestrian Directional Sign, Accent Lighting	Benches	Street Lights, Info. for Displays, Events, Vehicular Directional Signs	Thematic Zone: Light Pole with Integrated Banner System, Up-light, Mass Planting
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MATCHLINE



Land. 6'-0"	Drive Lane	Drive Lane	Drive Lane	Landscape 10'-0"	Sdwk 10'-0"	Landscape Area
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Wide sidewalk

Banner

Streetscape
Street trees
25' on center

Pedestrian lighting

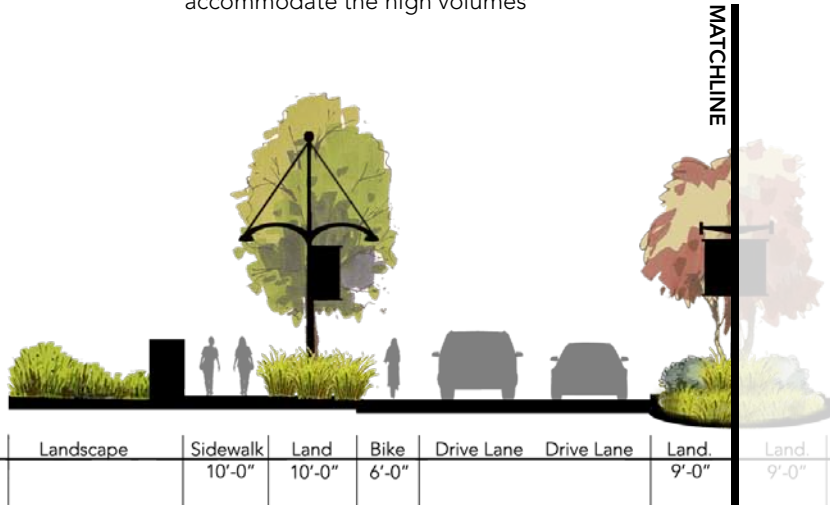
		Street Lights, Info. for Displays, Events, Vehicular Directional Signs	Benches	Pedestrian Directional Sign, Accent Lighting
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University Blvd.

University Boulevard was recently improved north of Avenida Cesar Chavez all the way to Coal Avenue. This corridor serves UNM, CNM and Isotopes Park. South of Avenida Cesar Chavez, UNM controls both sides of University Boulevard between The Pit and University Stadium. The design for University Boulevard

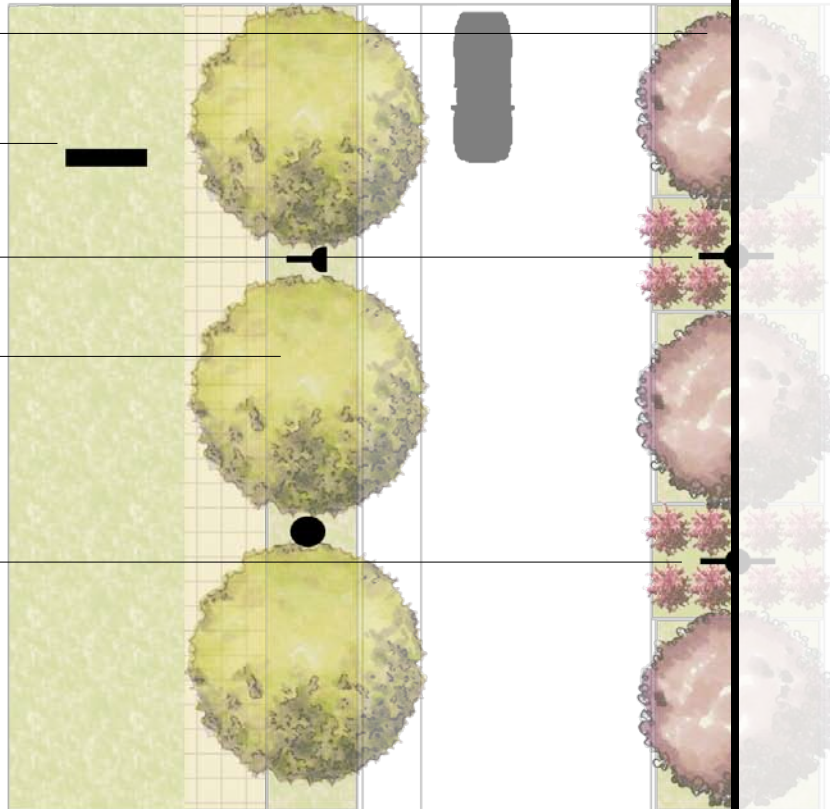
addresses this portion of the corridor and includes a wide median to accommodate University promotion and branding opportunities. The streetscape includes vehicular and pedestrian lighting, banners, and landscaping, as well as gracious sidewalks on both sides of the street to accommodate the high volumes

Section



Plan View

- 'Green street'
Depressed landscape captures water
- Pedestrian
Directional sign
- Banner location
- Streetscape
Street trees 25' on center
- Mass planting

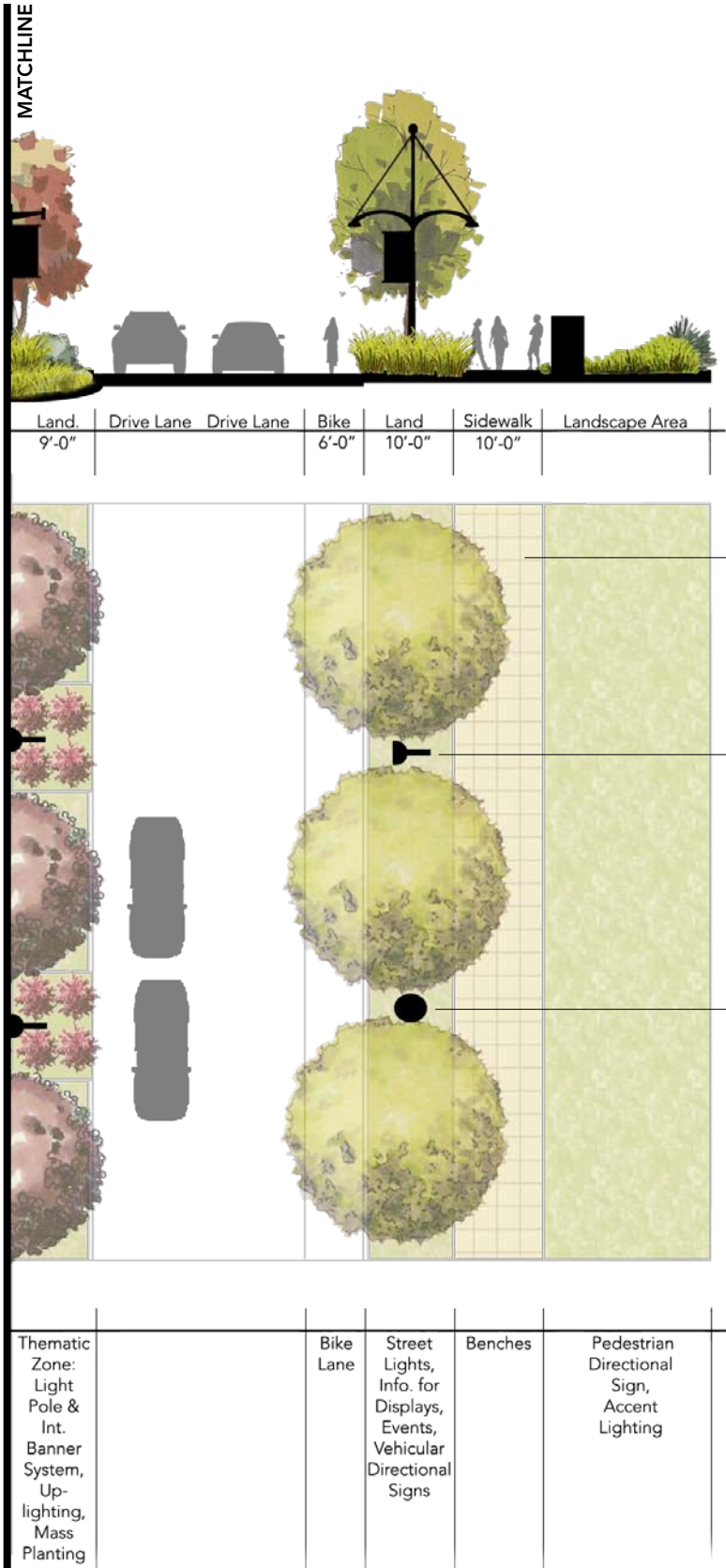


Amenities

Pedestrian Directional Sign, Accent Lighting	Benches	Street Lights, Info. for Displays, Events, Vehicular Directional Signs	Bike Lane	Thematic Zone: Light Pole & Int. Banner System, Up- lighting, Mass Planting
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of visitors to the athletic events. Further discussion is warranted to explore opportunities for closing portions of this corridor to vehicular traffic on game days, and to creating an optimal and flexible design that accommodates a variety of outdoor programming and branding

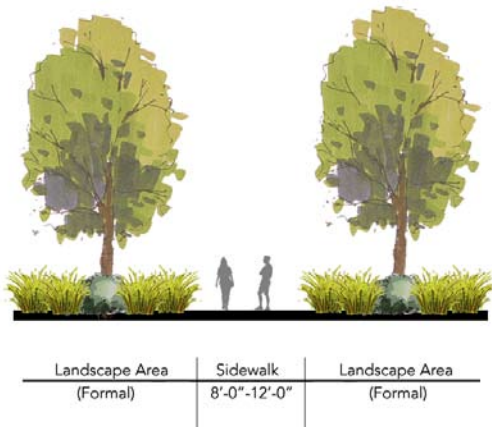
opportunities in this part of campus. South of this area, all the way to Gibson Boulevard, UNM controls only the west side of University Boulevard. The design intent is to continue the 10' wide landscape band and a narrower sidewalk along this portion of the street.



Paths & Trails

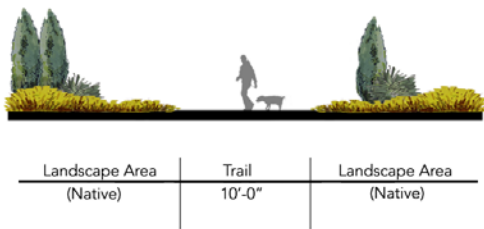
An internal system of pedestrian-oriented corridors is an important part of facilitating safe, convenient movement on campus. These paths and trails need to be logically located to optimize and maximize use, and to minimize conflicts with vehicles.

**Section
Pedestrian Walkway**



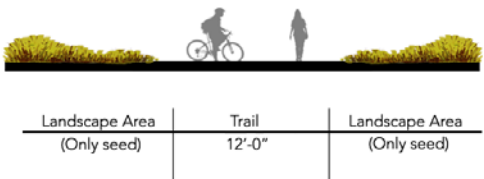
- Notes**
- Wide sidewalks
 - Street trees
 - Crosswalks
 - Formal landscape
 - Concrete sidewalk

**Section
Multi-Use Trail**



- Notes**
- Wide trail to accommodate different users
 - Low maintenance landscape
 - Asphalt trail

**Section
Secondary Trail**



- Notes**
- Wide trail to accommodate bike commuters
 - Almost all native landscape (easily maintained)
 - 1' clear zone on each side of the trail to keep trail free of debris

Location Diagram



Examples



Location Diagram



Examples



Location Diagram



Examples



Furnishings

Selection of site furnishings around the South Campus needs to be coordinated and deliberate in order to reinforce a sense of campus identity. Existing site elements are not coordinated, seem to have been chosen exclusively for durability, and do not promote any particular design direction for the campus.

Phased implementation of furnishings like those noted below will help establish a more modern, high quality, pedestrian-friendly, refined look to the campus. These choices have also been made with sustainability in mind – with high amounts of recycled content and materials with relatively low embodied energy.

Recommendations

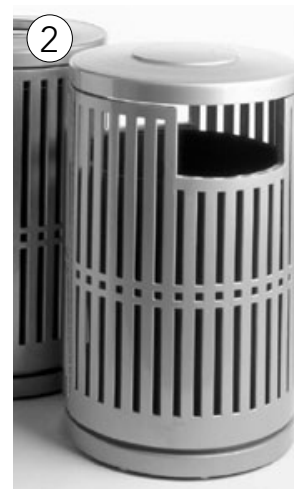
Benches

1. Manufacturer: loltrade
2. Manufacturer: Forms + Surfaces
3. Manufacturer: Landscape Forms
4. Manufacturer: Forms & Surfaces



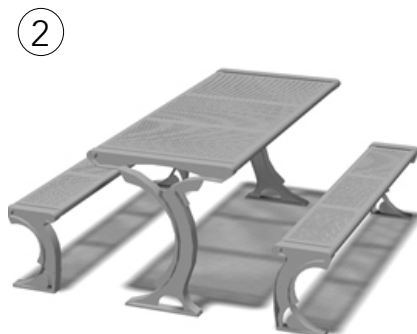
Litter

1. Manufacturer: Forms + Surfaces
2. Manufacturer: Landscape Forms
3. Manufacturer: Wausau Tile



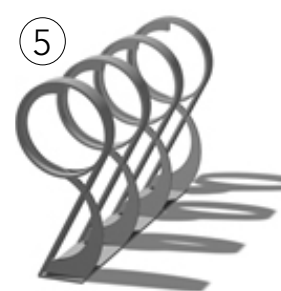
Tables

1. Manufacturer: Forms + Surfaces
2. Manufacturer: Urban Park
3. Manufacturer: Forms + Surfaces
4. Manufacturer: loltrade



Bollards/Bike Racks

1. Manufacturer: Urbanco
2. Manufacturer: Forms + Surfaces
3. Manufacturer: Landscape Forms
4. Manufacturer: Madrax
5. Manufacturer: Urban Park



Walls and Fences

Selection of fences and walls around the South Campus needs to be coordinated in order to reinforce a sense of campus identity. Existing walls and fences are not consistent and seem to have been chosen exclusively for

the specific project, and do not promote any particular design direction for the campus. The fences and walls like those noted below will help establish a more modern, high quality, pedestrian-friendly, refined look to the campus.

Walls- Recommendations

- Color and layering breaks up long lengths of walls.
- Articulate an entry by introducing different materials that work with the overall campus identity.
- Contrasting materials and colors provide visual interest.
- Stucco can come in many colors and can help break up long sections of a wall.
- CMU walls provide an interesting texture when combined with other materials.
- Framed views into spaces emphasize the public and private realms



This wall shows a layering of CMU and stucco finishes to provide contrast and identity.



A change in material helps articulate an entrance.



Stucco finishes can add dimension and interest to a wall.



Framed views into spaces emphasize the public and private realms

Fencing-Recommendations

- Chain link fence is not acceptable on campus.
- Ornamental fencing is visually appealing and is a safe alternate to a solid wall.
- Welded steel mesh is very durable, and harder to climb than chain link fence.



Metal fencing provides a modern look but still provides transparency for safety.



Welded steel mesh comes in a variety of colors and is a good way to introduce school colors.

Paving

When contrasting paving is introduced within crosswalks, entries and focal points it defines a space and becomes a wayfinding tool for pedestrians. Materials such as colored concrete, pavers or even brick can bring in colors that relate to the school and create interesting spaces for pedestrians.

Paving-Recommendations

- Colored concrete comes in a variety of colors and is a good contrast with asphalt and gray concrete.
- Concrete and stone pavers are a good material to use as an accent.
- Permeable pavers are good to use in a green street application, or within an on-street parking area.
- Crusher fines when compacted can become a good material for trails or minor pedestrian walkways.
- Brick is another specialized material that could be placed at any focal point. It also comes in red colors that could relate to the school color.
- Branded colored paving is a bold way to introduce environmental graphics in paving.



The red pavers create a contrast from typical gray concrete, and would be good to use at entries as a focal point.



Colored bricks patterned at an intersection defines crosswalks and pedestrian connections.



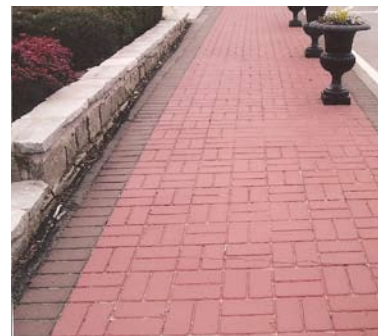
Porous paving is a good option in parking lots to help reduce the stormwater runoff.



Exposed aggregate is an inexpensive way to provide contrast and interest.



Branding and colored asphalt has an immediate impact on the campus environment.



Colored pavers add interest and a visual cue along a pedestrian corridor.

Site Lighting

Initially, light poles will be the tallest site element along the streets, and their form and placement will frame the entrances into the campus, and create an immediate impact on the perception of the campus. Lighting design should also help to reinforce the differences between areas within the campus – reinforcing the excitement and entertainment aspect of the public spaces associated

with the athletic venues, meeting performance criteria for athletic playing surfaces, and creating cohesive, attractive, safe and inviting spaces and corridors.

The principles for site lighting design on the South Campus are as follows:

Aesthetics

- Deliberate differentiation (e.g. Athletics vs. Science and Tech Park)
- Cohesive
- Consistent connections
- Hierarchy to address scale and layering



Specialty lighting can define the area and give identity to a place.

Sustainability

- LED lamps where possible for reduced energy use
- LED lights have a long life



LED lighting still provides the same aesthetic, and is much more energy efficient.

Scale

- Light poles should address scale transitions
- Respond to context (e.g. landscape areas between large roads and sidewalks)
- Tree canopy heights



Scale along pedestrian corridors provides comfortable, usable spaces.

Color lamps

- Good color rendition (metal halide or LED with color filter)



The correct color within a space creates a safe environment at night.

Uniformity

- For energy conservation (high uniformity may enable lower foot candle levels) and safety



A uniform lighting approach creates visual interest and assists with wayfinding.

Wayfinding

- Building light levels toward entries
- Consistency in corridors and areas
- Creating a landmark



Large, well lit graphics become a wayfinding tool.

Reduced Glare

- For visibility and safety



By reducing the amount of glare, a space is much more pleasant for the user.

Dark Skies

- Full cut-off fixtures
- Avoid light trespass
- Illuminate signs from above rather than below
- Architectural lighting should only illuminate the intended target



Full cut-off fixture only illuminate the area directly below.

Site Lighting Recommendations

Streetscape Lighting

- Defines street edge.
- Creates a scale transition.
- Can help exhibit environmental graphics.
- Sets a design tone and project image.



Avenida Cesar Chavez
This light pole is made by Valmont and the fixture is LED.



University Boulevard
These light fixtures will be the same fixture as the pole lights along Central Avenue.



Internal Streets
These light fixtures will be similar to the new pole lights along Central Avenue.

Pedestrian Level Lighting

- Defines street edge.
- Good scale for pedestrians.
- Can help exhibit environmental graphics.
- Creates a safe area for pedestrians at night.



Bollards provide both safety and aesthetics along walkways and at building entrances.



Accent lighting creates a visually appealing landscape.



Ground-mounted lighting helps guide pedestrians along walkways, stairs, entrances and within focal elements.

General Lighting Concepts

- Create continuity within a district
- Same finish along ROW
- Internal streets don't have to be the same everywhere, the fixtures should follow the same principles
- Creates a safe area for pedestrians at night.

Location Map- Lighting



Landscaping

Landscaping in the South Campus will be used to create an attractive, comfortable, sustainable and memorable environment.

Existing Landscape

The Science and Technology Park @ UNM is the only part of the South Campus with an extensive amount of developed landscaping. Because much of the remainder of the campus is comprised of surface parking lots without landscaping, undeveloped land and large scale athletic facilities, the amount of developed landscape area in the South Campus is minimal, and the impact on the campus aesthetic is negative.

Trees

- Plant a large volume and diversity of trees
- Provides shade and can reduce energy use for cooling
- Defines streets and open spaces
- Provides urban habitat



Shade trees are critical in the desert southwest, to create comfortable places for people.



School Colors:

- Promote UNM school colors
- Silver foliage and red plants
- Use these plants in highly visible, specialty landscape areas
- Reinforce the university brand



Plants that promote UNM school colors should be planted in masses along medians, focal points or streetscapes.

Native Landscaping

- Include a significant amount of native plants in every landscape installation
- Create a regionally specific landscape aesthetic
- Reduce needs for water and chemical fertilizers
- Create urban habitat



Native plants reinforce geographic location and campus identity.

Landscape Concepts

Plant Material Lists

The plant material lists are designed to be a guide for the design of new landscapes.

- to facilitate plant and landscape diversity
- to encourage the creation of bold designs using plant materials
- to expand the intent and location of the campus arboretum
- to establish a regional aesthetic for the campus using native plants ((n)- this symbol is used to represent native plants on the plant list)
- to encourage use of low water use materials
- to reinforce the use of proven species for the campus environment

Xeriscape

- Apply xeriscape principals to the landscape design
- Reduce potable water use for irrigation
- Create healthy soils
- Reduce the need for chemical fertilizers and herbicides



Xeriscape principles include the use of native and drought tolerant plants.

Wayfinding

- Use landscape materials to help orient visitors and reinforce wayfinding
- Parking Areas
- Entrances
- Street Intersections
- Crosswalks



Reinforce presence and comfort along paths with strong landscape design.

Water Harvesting + Green Infrastructure

- Direct storm water into landscape areas around buildings and in streets
- Reduce the use of potable water for irrigation
- Improve water quality prior to release into the storm sewer
- Create rain gardens
- Create a living, evolving campus landscape



Harvesting stormwater to create usable attractive landscape with less potable water.

Tree List

The Placemaking Plan includes an extensive list of trees because of the importance of trees in creating an attractive, memorable and comfortable campus.

Deciduous Trees		Flower	Foliage	Street Tree
Acer negundo "Sensation" (n).....	Sensation Maple	n/a	orange	
Acer palmatum "Bloodgood"	Japanese Maple	n/a	red	
Albizia julibrissin Rosea	Mimosa	pink	n/a	
Carya illinoensis.....	Pecan	white	n/a	
Catalpa speciosa.....	Northern Catalpa	white	yellow	x
Celtis occidentalis	Common Hackberry	n/a	yellow	x
Celtis reticulata (n)	Netleaf hackberry	n/a	yellow	
Cercis occidentalis	Eastern Redbud	pink	yellow	
Cercis reniformis (n)	Western Redbud	pink	yellow	
Chilopsis linearis (n)	Desert Willow	pink	n/a	x
Crateagus crus-galli inermis	Thornless Cockspur Hawthorn	white	orange	x
Crateagus laevigata "Crimson Cloud" .	Crimson Cloud Hawthorn	red	yellow	x
Crataegus phaenopyrum.....	Washington hawthorn	white	n/a	x
Forestiera neomexicana (n)	New Mexico Olive	n/a	yellow	
Fraxinus americana "Autumn Purple" ...	Autumn Purple Ash	n/a	purple	x
Fraxinus oxycarpa.....	Raywood Ash	n/a	purple	x
Fraxinus velutina "Arizona"	Arizona Ash	n/a	yellow	x
Fraxinus velutina "Modesto"	Modesto Ash	n/a	yellow	x
Gleditsia triacanthos inermis.....	Thornless Honeylocust	n/a	yellow	x
Juglans major	Arizona Walnut	white	n/a	
Koeleruteria paniculata.....	Golden Rain Tree	yellow	yellow	x
Malus "Radiant"	Radiant Flowering Crabapple	red	bronze	
Pistacia chinensis.....	Chinese Pistache	n/a	orange	x
Platanus wrightii (n)	Arizona Sycamore	n/a	yellow	x
Populus fremontii wislizenii "Rio Grande" (n)	Rio Grande Cottonwood	n/a	yellow	
Prosopis glandulosa (n).....	Texas Honey Mesquite	yellow	n/a	
Prunus cerastifera.....	Purple Leaf Plum	white	red	x
Pyrus calleryana "Autumn Blaze"	Autumn Blaze Ornamental Pear	white	red	x
Quercus buckleyi (n).....	Texas Red Oak	n/a	red	x
Quercus gambelii (n).....	Gambel Oak	n/a	n/a	
Quercus macrocarpa.....	Bur Oak	n/a	n/a	x
Quercus muehlenbergii (n).....	Chinquapin Oak	n/a	yellow	x
Quercus turbinella.....	Scrub Live Oak	n/a	n/a	
Quercus shumardii	Shumard Oak	n/a	red	x
Rhus lanceolata (n)	Prairie Flameleaf Sumac	red	orange	
Robinia x ambigua (n)	Idaho Locust	pink	yellow	x
Robinia neomexicana	NM Locust	pink	yellow	
Robinia pseudoacacia "Purple Robe" ...	Purple Robe Locust	purple	yellow	
Sapindus drummondii	Western Soapberry	white	yellow	x
Sophora japonica "Regent"	Japanese Pagoda Tree	yellow	yellow	x
Syringa reticulata.....	Japanese Tree Lilaz	white	n/a	x
Ulmus parvifolia "Allee"	Allee Elm	n/a	yellow	x
Ulmus x "Frontier"	Frontier Elm	n/a	red	x
Ulmus parvifolia.....	Lacebark Elm	n/a	yellow	x
Vitex agnus-castus	Chaste Tree	purple	n/a	
X Chitalpa tashkentensis	Chitalpa	pink	n/a	x

Plant Images



Evergreen Trees

Calocedrus decurrens.....	Incense Cedar
Cedrus depdara	Deodar Cedar
Cupressocyparis leylandii	Leyland Cypress
Juniperus deppeana (n).....	Alligator Juniper
Juniperus monosperma (n).....	One-seed Juniper
Juniperus scopulorum	Rocky Mountain Juniper
Picea pungens.....	Colorado Blue Spruce
Pinus aristata (n)	Bristlecone Pine
Pinus eldarica	Afghan Pine
Pinus flexilis.....	Limber Pine
Pinus nigra	Austrian Pine
Pinus pinea	Stone Pine
Pinus ponderosa.....	Ponderosa Pine
Pinus strobiformis.....	Southwestern White Pine
Quercus emoryii (n).....	Emory Oak
Quercus fusiformis (n)	Escarpment Live Oak
Quercus grisea	Gray Oak
Quercus virginiana	Southern Live Oak
Sambucus mexicana (n)	Mexican Elder

Evergreen/Evergray/Shrubs/Perennials/Accents

Artemisia sp.....	Sage varieties
Baccharis sp. (n).....	Broom (hardy varieties: Centennial, Starn)
Berberis mahonia fremontii (n).....	Blue Algerita
Cercocarpus ledifolius (n)	Curlleaf Mountain Mahogany
Cotoneaster buxifolia Glaucohylla	Grayleaf cotoneaster
Cotoneaster congestus	Pyrenees cotoneaster
Cotoneaster dammeri.....	Bearberry Cotoneaster
Cotoneaster lacteus.....	Parney Cotoneaster
Cytisus sp.	Broom varieties
Eleagnus pungens.....	Silverberry
Ephedra sp. (n)	Jointfir
Ericameria laricifolia	Turpentine Bush
Juniperus sp.	Juniper varieties
Larrea tridentate (n).....	Creosotebush
Lavandula sp.....	Lavender varieties
Leucophyllum sp. (n)	Leucophyllum (hardy varieties)
Mahonia sp.	Mahonia varieties
Photinia fraseri	Red Tip Photinia
Purschia Mexicana (n)	Cliffrose
Pyracantha coccínea	Firethorn
Rhaphiolepis indica.....	India Hawthorn
Rhus virens (n).....	Evergreen Sumac
Rosmarinus sp.	Rosemary (Hardy varieties)
Salvia chamaedryoides (n)	Mexican Blue Sage
Santolina chamaecyparissus.....	Lavender Cotton
Sedum sp.	Sedum varieties
Shepherdia rotundifolia (n).....	Roundleaf Buffaloberry
Spartium junceum	Spanish Broom
Teucrium sp.....	Germander varieties
Thymus sp.....	Thyme varieties
Vauquelinia californica (n)	Arizona Rosewood
Veronica sp.	Veronica
Vinca sp.....	Periwinkle

Plant Images



Plants with Red Stems, Berries, Flowers or Foliage

Aquilegia Formosa.....	Red Spur Columbine
Berberis fendleri.....	Fendler's Barberry
Berberis thunbergii sp.	Japanese Barberry
Centranthus ruber.....	Jupiter's Beard
Cornus..... sp.	Dogwood varieties
Crataegus phaenopyrum.....	Washington hawthorn
Hemerocallis varieties.....	Day Lilies
Hesperaloe parviflora	Red Yucca
Imperata cylindrical "Rubra"	Japanese Blood Grass
Nandina domestica.....	Dwarf Bamboo
Papaver varieties	Poppy varieties
Parthenocissus tricuspidata.....	Boston Ivy
Pennisetum setaceum "rubrum"	Rubrum Pennisetum
Penstemon sp.....	Penstemon varieties (Firecracker, Nearly Red)
Potentilla "Red Ace"	Red Ace Potentilla
Salvia sp.	Sage varieties (Furman's Red, Black Cherry, Maraschino)
Sedum x "Autumn Joy"	Autumn Joy Sedum
Senecio sp.	Dusty Miller
Tulipa varieties.....	Tulips Varieties
Verbena "Peruvian Red"	Peruvian Red Verbena

Plants with Whites, Silvers and Grays

Achillea sp.....	Yarrow varieties
Artemisia sp.....	Sage (Powis Castle ,)
Caryopteris clandonensis	Blue Mist Shrub
Centaurea cineraria.....	Dusty Miller
Cerastium tomentosum.....	Snow-in-summer
Convolvulus cneorum	Bush Morning Glory
Euphorbia sp.	Euphorbia varieties
Hedera helix "Glacier"	Glacier English Ivy
Lavendula sp.....	Lavender Varieties
Leucophyllum sp.	Leucophyllum varieties
Perovskia atriplicifolia	Russian Sage
Salvia chamaedryoides	Mexican Blue Sage
Salvia leucantha.....	Mexican Bush Sage
Salvia x "Powis Castle"	Powis Castle Sage
Santolina chamaecyparissus.....	Lavender Cotton
Shepherdia argentea	Silver Buffaloberry
Stachys byzantine.....	Lamb's Ears
Teucrium sp.....	Germander
Thyme sp.	Thyme varieties

Plant Images

