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GLOSSERY OF TERMS

NATURAL LANDSCAPES- Native, or “natural”, landscapes consist of undisturbed indigenous plant materials surrounding the campus and also disturbed areas that have been reclaimed by planting trees, shrubs, perennials, and grasses that are native to the region.

DRAINAGE AREAS- Drainage areas are natural arroyos cutting through the campus, as well as drainage detention areas.

CAMPUS EDGES- The campus edges consist of the landscape treatment along Austin Bluffs Parkway and Nevada Avenue. Also referred to as the formal and transitional streetscape, these areas are highly visible and help create and reinforce an impression of the campus to the surrounding community.

CAMPUS ENTRANCE FEATURES- These are landscaped entry features that signify the formal entrances into the campus. Entrances should create a sense of place and set a high standard for the campus aesthetic.

PARKING LOT LANDSCAPING- These areas contain landscaping within parking lot islands, medians, and planting areas immediately surrounding parking lots.

FORMAL LANDSCAPING- Formal landscapes consist of landscaping around buildings, intensive and passive outdoor use areas, and high impact and visibility areas. These areas are located in the campus core where most campus activity takes place. Formal landscapes can consist of irrigated lawns and non-indigenous planting beds around buildings or non-irrigated indigenous plantings.

LANDSCAPE

This section covers guidelines for landscaping of entrances, streets, parking lots, buildings, pedestrian paths and natural spaces.

LANDSCAPE CONCEPT

On a mature campus, the spaces between buildings become even more important to the campus aesthetic than the buildings themselves. Thus, the attitude toward landscape design at the University must be one which fosters a high degree of visual excellence. The campus must also be a good steward of the land and set an example for the community in terms of appropriate water use, sensitivity to native landscapes and land forms, and creating a sense of place. Adhering to the City of Colorado Springs landscape requirements detailed in the "Landscape Code & Policy Manual" (City of Colorado Springs Planning Department, 1998) is an important aspect of being a good community partner and respecting the landscape standards established for the City. The website for the City's Landscape Design Manual is <http://www.springsgov.com/Page.asp?NavID=4068>. In conjunction with following City landscape requirements, utilizing the seven principles of xeriscaping should be mandatory for all landscape areas on campus.

The concept begins with the notion that an urban campus landscape can be blended and woven into the natural, semi-arid open space of the high plains and respects and accepts the natural landforms of Austin Bluffs as the prevailing landscape image. It also applies urban landscape treatments to create a collegiate identity for the environment of buildings, streets and pedestrian pathways.

The collegiate image starts along Austin Bluffs Parkway, with formal entrance gateways, landscaped entry boulevards and screening of campus parking lots. Moving toward the campus interior, landscaping highlights drop-off points, building entrances and access points on the central pedestrian spine.

Along the densely developed portions of the spine, site furnishings, lighting and landscaping combine to create an inviting, pedestrian environment that links the major buildings of the campus. As the spine extends through natural open spaces to connect to other portions of the campus, its landscaping blends with the natural grasses, scrub oaks, mountain mahogany, rocky mountain junipers, and pine trees.

At the juncture of the developed campus and natural open spaces, the landscapes should gently blend together these two diverse environments, with non-urban paintings, less ordered and less formal, used to provide a transition to nearly natural landscaped areas. Within the built campus, fingers of natural landscape should extend between buildings and formal landscaping. These native areas should intersect portions of the pedestrian spine to link the campus to the natural environment and provide access to open space trails and opportunities for academic study of the indigenous surroundings. Pedestrian scale bridges should be used on the spine to traverse these natural features, rather than using culverts.

IMPLEMENTATION

The University realizes the need for high quality, coordinated landscaping and is committed to pursue funds to develop a detailed, formal landscape master plan. Until a detailed landscape plan is developed, requests for landscaping projects should be approved in a manner authorized by the Facilities Planning and Construction Office and the Design Review Board. The University also recognizes the need to continue its landscape maintenance program and will continue to request appropriate funding.

NATURAL LANDSCAPES

Native, or “natural”, landscapes consist of undisturbed indigenous plant materials surrounding the campus and also disturbed areas that have been reclaimed by planting trees, shrubs, perennials, and grasses that are native to the region. This topic discusses the preservation and integration of natural features into campus landscaping planning. Refer to the City of Colorado Springs Landscape Code and Policy Manual for specific requirements.

Policy. The University recognizes the value of preserving the natural landscape and encourages incorporation of the natural features into campus landscape planning.

G6.1.1 Guideline: Campus Rock Outcroppings

- Comply with the Campus Master Plan and preserve the rock outcroppings and associated scrub oak groves near the Classroom-Office Building. Although not endangered, scrub oak should be protected due to its limited geographic range. In new landscaping, use compatible adaptive species such as Mountain Juniper, Russian Olive and Hackberry in this area.

G6.1.2 Guideline: Austin Bluffs Ridge Line

- Do not construct facilities along the ridge line. The long range goal is to ensure that structures on the top of Austin Bluffs are not visible from lower campus or the surrounding community.

G6.1.3 Guideline: Natural Drainage Courses

- Protect natural drainage courses with stabilizing native grasses and indigenous rip-rap from the historic drainage wash. Avoiding building within 50 feet of these courses, if possible.

G6.1.4 Guideline: Meandering Edges and Landscape Fingers

- Do not create long unbroken linear edges where the formal campus landscape merges with the natural landscape.
- Preserve stands of Ponderosa Pine in combination with Mountain Mahogany, native grass and cacti to provide a regional image.
- Provide access to and incorporate native plant areas into the academic study programs.
- Encourage further use of natural open spaces that extend between buildings and into the campus core.

G6.1.5 Guideline: Construction Sites

- Flag and preserve existing trees with calipers of 2 inches or more, that are located more than 20 feet from a proposed facility.
- Do not strip vegetation from steep hillsides. Due to the very unstable nature of the soils, it is difficult to re-vegetate. Additional seeding with adaptable bluegrama, western wheat and other native grasses is required.

DRAINAGE AREAS

Drainage areas are natural arroyos cutting through the campus. The natural vegetation within these areas provides soil stabilization and, in some areas, acts as a filter to runoff water. These areas should be treated with extreme sensitivity because of the surface runoff that collects and is carried into downstream creeks. Refer to the City of Colorado Springs Landscape Code and Policy Manual for specific requirements.

Policy. The University recognizes the value of preserving the natural drainageways and not allowing land to be disturbed within and adjacent to significant natural arroyos.

G6.2.1 Guideline: Drainage Areas

- Existing land and vegetation within 50' of a significant natural arroyo shall be left undisturbed.
- If corrective measures must be taken to reduce erosion within a drainage channel the use of native grasses indigenous to the immediate area, in combination with erosion control blanket, shall be required.
- Rip-rap shall consist of stone matching, or similar to, existing stone found on campus property.
- The use of culverts shall be avoided. Pedestrian bridges should be used, wherever possible.

CAMPUS EDGES

The edges of the campus, as viewed from the surrounding street network, are often the only impression the passerby gains of the University. To those who enter and use the campus, the edges are the first impression. If the impression is unfavorable, the mind-set can be so strong it can never be fully overcome. Such is the level of importance of the campus edges. Refer to the City of Colorado Springs Landscape Code and Policy Manual for specific requirements.

Policy. The University shall assure the landscape treatment of the campus, as viewed from outside of its boundaries (edges), is designed and maintained so it will present the University well to its community and enrich its visual quality.

G6.3.1 Guideline: Campus Edges

- Earth forms and planting materials should be used to minimize views of parking lots. Parking lots should be located far enough from the campus edges to permit adequate landscape installation.
- Landscaping should be designed to assure favorable views into the campus, to emphasize vehicular and pedestrian entrances to the campus; and to provide an attractive setting for major campus identification and entrance signage.
- The landscape along Austin Bluffs Parkway shall tie into the proposed streetscaping proposed east and west of the campus by utilizing some common plant materials and design elements. Where appropriate, the campus shall naturalize the streetscape in order to promote a xeriscape image to the community and to bring the natural landscape through the campus.
- All disturbed slopes steeper than 4:1 (25% slope) shall be seeded with native grasses, planted with xeric shrubs, and/or terraced with stone retaining walls.

CAMPUS ENTRANCE FEATURES

These are landscaped entry features that signify the formal entrances into the campus.

Policy. Campus entrances shall provide a consistent signature statement of arrival through the use of unified sign monumentation and landscaping. Campus entrance landscapes are to be planned as densely planted high visibility areas. Refer to the City of Colorado Springs Landscape Code and Policy Manual for specific requirements.

G6.4.1 Guideline: Formal Gateways

- Develop landscaped entry features with integral signage to enhance boulevard style entrance streets and sidewalks.
- Use similar plant materials and planting bed design at each entrance to provide a unified entry experience across campus.
- Incorporate low berms (6:1 maximum slope) and landscape boulders into planting beds to create a rolling terrain and to reduce the visual impact of the parking lots. The intent is to create a rhythm and to draw attention to internal views of landmark buildings and open spaces.
- Comply with requirements for traffic vision clear zones at intersections. Refer to the City Zoning Code publication, Article 3, for criteria on the height and location of objects related to the design speed of the intersecting street. In general, a clear visibility zone of triangular shape must be maintained 55 feet back from the curbs.

G6.4.2 Guideline: Landscape Materials

- Display three levels of scale: ornamental trees, shrubs, and ground covers. The ground cover and shrubs should establish a visual base for the sign, while trees provide the colorful, textured backdrop.
- Use structural features, such as low walls and raised plant beds with colorful plantings for visual interest. These elements should be in proper scale with the entrance size and the overall prominence of the setting.
- Do not include landscape materials over 30 inches tall within the viewing setback triangle. Shrubs in this viewing zone should be maintained to a height less than 30 inches.

PARKING LOT LANDSCAPING

This topic addresses the landscaping of parking lot islands, medians, and planting areas immediately surrounding parking lots. Refer to the City of Colorado Springs Landscape Code and Policy Manual for specific requirements.

Policy: The negative visual impacts of parking areas shall be minimized through careful planning, design and landscaping. The University shall adopt landscape guidelines for parking lots.

G6.5.1 Guideline: City Tree and Screening Requirements

- Provide at least 1 shade tree for every 15 parking spaces or fraction thereof. Use trees to break up expanses of paving and to create a canopy effect.
- Provide screening of campus parking lots from adjacent, non-university properties. At least two-thirds of the affected frontage should be screened with berms, plantings, walls, or a combination of these elements. Minimum height for the screen is 3 feet. Avoid a monotonous appearance in long screen walls through techniques such as using articulated segments, columns and plantings.
- A minimum of one parking lot island shall be provided for every 15 parking stalls. Parking lot islands shall be a minimum of 9' x 18'. Each parking lot tree shall have a minimum of 160 square feet of landscape area surrounding it.

G6.5.2 Guideline: Other

- Design parking lots adjacent to Austin Bluffs Parkway and Eagle Rock Road to present a high quality appearance to the community, passing vehicular traffic, and vehicles entering the campus.
- Include at least a 3 foot landscape buffer around the perimeter of parking lots through the use of trees and informal shrub masses. Use landscaped islands and medians to visually breakup the parking surface and provide shade.
- Include large boulders, berms and plantings of native materials near natural open space areas to complement the natural setting and reduce maintenance.

FORMAL LANDSCAPING

Formal landscapes consist of landscaping around buildings, intensive and passive outdoor use areas, and high impact and visibility areas. Formal landscapes can consist of irrigated lawns and non-indigenous planting beds around buildings or non-irrigated indigenous plantings. Refer to the City of Colorado Springs Landscape Code and Policy Manual for specific requirements.

Policy. Individual buildings shall be blended into the campus landscape. Their landscaping shall be professionally executed and respond to adjacent contexts of formal campus appearance and natural hillside setting.

G6.6.1 Guideline: Views into the Campus

- Develop landscaping to complement and soften building forms and massing, as seen from outside the campus. Most buildings are likely to be in an urban environment on the campus, but where they are near the natural environment, it is essential that the transition between the urban and natural settings be carefully blended.
- Devote special attention to blending buildings at the campus edges into the natural environment.
- Use trees to create a sense of human scale relative to buildings and to visually break up long walls. Along the urban edges of the campus, use regular spacing for trees. Along campus edges that border natural areas, use more natural, random placement of trees and tree clusters.

G6.6.2 Guideline: Views within the Campus

- Provide more formal landscaping where building facades primarily present themselves to the campus interior. Use masses of trees and shrubs to soften expanses of the built environment and provide shade to encourage outdoor passive use.

G6.6.3 Guideline: Building Entrances and Pedestrian Connections

- Use landscape elements at entrances and pathway connections that reinforce walkway edges and direct pedestrian movement. Use a variety of plant colors and textures to complement the built forms.
- Native and non-native treatments can both be attractive and each should be used where most functionally and visually appropriate.

G6.6.4 Guideline: Irrigated Lawn Areas

- Campus greens and student gathering areas should be irrigated turf to present inviting spaces to sit, read and play.
- Provide shrub beds to define edges between irrigated turf areas and native areas. Provide trees within turf areas to provide shade.
- Consider planting ground covers near adjacent natural areas for visual transition, variety and reduced watering requirements.
- Limit irrigated turf areas to slopes no greater than 6:1 (16%). Slopes greater than 6:1 shall be terraced with retaining walls or planted with shrubs or groundcovers.

PLANT PALETTES

Plant palettes provide lists of recommended plant materials and may include characterizations such as: drought tolerance, color, form size and suggested landscape applications. Plant palettes have been created to correspond with diverse landscape spaces within and around the campus environment.

Policy. The University strongly endorses the use of landscape plantings to enhance outdoor spaces and views. Landscape designs shall reinforce this commitment to visual excellence. The choice of landscape materials shall be guided by the use of plant palettes that are part of the approved Campus Master Plan.

G6.7.1 Planting Design Guideline:

- Use plants to frame nearby as well as distant views.
- Use plants to create a sequence of spaces to promote visual interest and create a sense of passage from place to place on the campus.
- Use canopy trees to create a “roof” over selected spaces to influence user comfort and create a dynamic sense of scale.

G6.7.2 Plant Material Guideline:

- Utilize plant palettes in this section and guidance from the Grounds and Custodial Office. Contact local professional nurseries that feature plant materials that are known to perform well in the area.
- Utilize the Natural Campus Plant Palette for the natural, semi-arid open spaces and near natural landforms. Use the Urban Campus Plant Palette to create a collegiate identity near buildings, streets and pedestrian spaces.
- Design to reflect the patterns and identity of the four seasons: *Spring* – flowering plants for color and accent; *Summer* – trees for canopy and shade; *Fall* – leaf color; *Winter* – branch forms and texture. Achieve a strong campus identity through repetition of elements.
- Specimen plant materials are encouraged on a limited basis throughout the campus in order to provide more diverse plant materials, experiment with non-indigenous plants, use exotic plants for educational programs, and demonstrate new planting possibilities to the community.

BUFFERS AND SCREENS

These areas are developed to provide separation and visual screening of facilities. They usually include landscape features such as earthen berms, shrubs and tree masses.

Policy. The use of landscaped buffers and screen is encouraged to mitigate unwanted noise and visual distractions and to strengthen the collegiate appearance of the campus.

G6.8.1 Guideline:

- Use evergreen or deciduous shrub masses to establish formal and informal screening hedges in landscaped areas to soften or block undesirable views.
- Create large landscape berms with slopes no greater than 4:1 (25% slope) and plant with masses of trees and shrubs.
- Cluster trees with shrubs when developing informal screens. The use of formal manicured hedges should be limited because of the maintenance required.
- Consider the use of sound buffers along Austin Bluffs Parkway. Provide a combination of noise abatement walls and landscaping. Planting alone are not sufficient to effectively reduce traffic noise near the parkway.

PEDESTRIAN PATH LANDSCAPING

This topic covers the landscape design intent for pedestrian pathways. A hierarchy of pedestrian paths and walkways should be created by the University to establish guidelines and requirements that detail path widths, materials, locations, slopes. The use of pervious materials should be considered in this study for both walkways and parking lots. Pathways should also be created to follow the natural topography, wherever possible.

Policy. Pedestrian pathways shall be supported with coordinated site furnishings, lighting and landscape features. Landscaping along pathways shall unify the campus and help direct pedestrian movement.

G6.9.1 Guideline: Pedestrian Spine in Built-up Campus

- Use landscaping to develop the pedestrian spine's image as the central pedestrian element. Provide some plants that will ensure year-round color.
- Use clusters or groups of trees to define plazas, sitting places and other social destinations along the spine.
- The spine is a sequence of spaces, and trees should reinforce not only its linear qualities, but also the sequence and rhythm of the spine.
- Limit the use of flowering perennials and annuals to areas near building entrances. Do not overuse accent plantings within the campus core. Too many accent features diminish their effect and disrupt the natural foothill landscape composition.

G6.9.2 Guideline: Pedestrian Spine in Natural Areas

- Use landscaping in open spaces to hide or blend the spine into the natural setting. Use trees in more random spacing and groupings to provide shade at points along the spine, particularly at viewing plazas. To avoid shaded, icy patches, exercise care in placing evergreen trees near the spine.

G6.9.3 Guideline: Secondary Pedestrian Paths

- Provide landscaping on secondary pathways that is noticeably less extensive than along the pedestrian spine or at building entrances.
- Use tree types on the secondary pathways that are different from those on the spine, so that each has its own discernible character.

RETAINING WALLS

Retaining walls are typically used to provide stability to steep slopes in natural areas and to create landscape planting areas in the formal portions of the campus.

Policy. Retaining walls shall be professionally constructed of materials that reinforce the collegiate setting.

G6.10.1 Guideline:

- Take advantage of the hillside setting which lends itself to creative use of retaining walls. Terraced retaining walls can serve as seating amenities, planters and bases for building identification signs.
- Construct retaining walls of aesthetically pleasing materials that complement the surrounding buildings and landscape. Rock faced walls and textured concrete walls are strongly encouraged.
- The use of stone retaining walls is strongly encouraged. Do not use railroad ties or landscape timbers for retaining walls.
- Limit the use of differing retaining wall materials across campus. The University shall dictate acceptable retaining wall building materials based on a few existing walls materials on campus. Providing unified building materials will help create a visually cohesive and well-designed campus aesthetic.

WATER CONSERVATION

Water is a valuable resource in the semi-arid Pikes Peak region. This topic covers landscape design factors that can help reduce water consumption.

Policy. The University actively promotes programs and operational practices to conserve water. The designs for campus landscaping shall balance aesthetic goals with the practical need to reduce water consumption.

G6.11.1 Guideline:

- Design landscape projects to comply with landscape zone and associated water requirements that are given in the Campus master plan.
- Use xeriscape concepts in all landscape areas throughout the campus. Refer to the City of Colorado Springs Water Department Landscape Design Guideline for xeriscape suggestions.
- Incorporate water conservation measures in turf areas. Consider impulse heads, central timers and drip irrigation. Include native turf grasses where appropriate to reduce the amount of bluegrass.
- Incorporate rocks, large boulders and xeriscape plant species in parking lot medians and islands to eliminate the need for watering. In planting beds, incorporate mulch to retain moisture and reduce weeds.

PLANTING AND MAINTENANCE FACTORS

General factors to help achieve successful landscapes are presented in this topic.

Policy. The designs for campus landscaping shall include consideration of practical goals and experience factors.

G6.12.1 Guideline: Plant Characteristics

- Consider that trees have greater visual and micro-climate impacts on the campus than shrubs and ground covers. Trees should be carefully selected and planted as long term investments in the environment. Trees will provide a longer life span and require less maintenance than ornamental shrubs and ground covers.
- Plant annuals and perennials for use in raised bed planters or large free standing pots that are coordinated with the urban features along the pedestrian spine, plazas and building courtyards.

G6.12.2 Guideline: Maintenance Issues

- Plant shrubs at least 3 feet from building foundations to allow for maintenance and to reduce negative impacts from watering. The shrub selected should not be invasive or have high watering demands.
- Use concrete or rolled-top steel edging to define and separate planting areas. Place trees in ground cover beds to simplify mowing and reduce hand trimming.
- Cover planting areas with organic mulch, such as shredded wood. Use a 3 to 4 inch layer for trees, 3 inches for shrubs and 2 inches for perennials.
- Use a landscape ground fabric under rock cover areas, instead of impervious plastic sheets, to allow water and air to pass into the soil, but block unwanted weeds.
- Do not trim individual plants in informal and natural areas. Allow shrubs and ground covers to grow together to form masses.
- Wood mulch and rock cover materials shall be limited to those accepted by the University. These materials shall be consistent with acceptable wood mulch and rock materials used throughout the campus in order to create a unified landscape appearance.