# Oregon Institute of Technology

Landscape Master Plan

Prepared for
Oregon Institute of Technology
Klamath Falls, Oregon

Prepared by
Mayer/Reed

Landscape Architects

DECEMBER 2007



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### Prepared for

### Oregon Institute of Technology

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DECEMBER 2007

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#### **EXECUTIVE SUMMARY**

Oregon Institute of Technology (OIT) is experiencing expansion of its programs in engineering, computer science, health professions and renewable energy. In September of 2007, the first wing of the Oregon Center for Health Professions was opened on the Klamath Falls campus in order to address the education demands. Currently, the campus is poised to build new student housing to provide new opportunities for on-campus student residency.

Built in 1964, OIT has not had many major changes to the campus core since it opened. The landscape and site have served the campus well for almost 50 years, but are in need of improvements. The university has identified the need to make improvements to outdoor spaces to attract new students, provide amenities for the existing students, improve maintenance and feature aspects of sustainability.

OIT has an interesting geographic setting and can take more advantage of the scenic natural resources that surround it. The hillsides to the north and east are a beautiful native backdrop for the campus. Views west to Klamath Lake and the Cascade Mountains, sunsets, and migrating flocks of birds make for a memorable experience at the OIT campus.

OIT is very interested in employing new approaches to sustainable and green design. The campus makes use of geothermal power for heating its buildings and will adapt arrays of photocells to the campus over time. The campus has potential to become a laboratory of green design technologies through its conservation, use of renewable energy, recycling practices and sustainable principles demonstrated throughout the buildings and site.

One important aspect of the campus tour for visitors and prospective students is informally called, The Million \$ Walk. It is a physical route that links main buildings and programs on campus. Special consideration can be given to the outdoor spaces along the walk so that the campus is more favorably showcased; and visitors get a better impression of the visual character of the campus along with the activities of students.

Preservation of the campus character should be given priority so that the original site plan and landscape framework stay intact. In keeping with the original intent and concept of the campus, linear tree plantings of a single species should be extended along the walkways. Rose plantings should be limited to just a few key areas to provide an improved visual appearance during the school year with more winter structure. Original juniper ground covers on slopes are in need of replacement.

#### PURPOSE OF THE PROJECT

One purpose of the OIT Landscape Master Plan is to analyze the condition of the existing campus site design and landscape. Out of the analysis, direction for identifying campus site and landscape improvements are addressed. The master plan includes guidelines and recommendations for strategies and design for identified improvements in two main focus areas, the Fountain Quad and the green open space between Semon and Cornett Halls.

#### **GOALS AND OBJECTIVES**

Through the process of preparing this report, goals and objectives were developed from a number of discussions with faculty, students, campus administrators and facilities personnel.

- 1. Improve outdoor spaces for student activities and campus life.
- Create a hierarchy of outdoor use spaces for gatherings and individual use. Upgrade these areas with special paving, landscape plantings, and furnishings.
- Increase outdoor seating areas.
- Improve visual and physical connections and accessibility between spaces on campus.
- Improve the existing fountain and surrounding area.
- Create identifiable names and special character for the main open

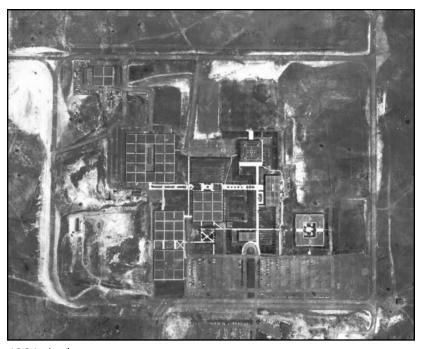


spaces on the campus. For the purpose of this report the spaces are called the Fountain Quadrangle, Cornett Green, the Aspen Quad, and the Overlook.

- 2. Improve the overall visual appearance of the OIT campus.
- Improve first impressions of the landscape and quality of outdoor spaces at the campus entry and along the Million \$ Walk.
- Connect the campus to the larger landscape setting.
- Screen parking and service areas.
- Develop standards and guidelines for planting and a recommended plant list.
- Extend seasonal interest in the landscape, especially focusing on April when a number of prospective students visit, June commencement, and early fall at the beginning of the academic year.
- Develop standards and guidelines for site furnishings and lighting.
- 3. Improve the sustainability and green design of the campus.
- Make visual and physical connections to adjacent native landscape.
- Increase plant diversity while preserving original planting design intent.
- Use native and/or drought-tolerant plants to conserve water where appropriate.
- Install water-efficient irrigation systems wherever possible.
- Make plant recommendations for juniper removal embankments.
- Examine the campus for stormwater treatment opportunities; and incorporate stormwater treatment strategies into new campus development.
- Encourage walking and bicycling as alternative transportation modes.

### **CAMPUS CONTEXT**

The Oregon Institute of Technology is located in Klamath Falls, Oregon in the Klamath Basin on the east side of the Cascade Mountains. Klamath Lake is west of the campus. The region has an average of 300



1964 air photo



2007 air photo

days of sunshine a year, 13.95 inches of rain fall and an average snow fall of 32.36 inches per year.

The OIT campus is north of Klamath Falls. The campus is adjacent to some commercial development, a hospital, and open space.

#### **EXISTING CONDITIONS**

The campus was designed by Skidmore, Owings and Merrill. One building was added in 1990 and a new health professions building was completed in summer of 2007.

The campus is located on a terraced hillside with distinct grade changes between buildings, parking and athletics. The campus use zones identified generally correspond with the changes in grade. See Site Analysis Diagram and Existing Use Zones Framework.

The perimeter of the campus is surrounded by an access road. Most visitors, students and faculty currently drive to campus. Parking and athletic fields are on the edges of the campus core. Transitions from perimeter parking lots to the pedestrian core of the campus are abrupt and need to be more welcoming. Generally buildings face the center of campus with service and parking at the perimeter.

The buildings and open spaces are organized on a strong, simple, geometric grid. Buildings are organized to create a series of quadrangles, greens, and open spaces.

A hierarchy of vehicle, pedestrian and main entrances is identified on the Site Analysis and Circulation Framework diagrams. There are two main pedestrian axes; an east-west axis between the College Union and Purvine Hall; and a north-south axis from the main campus entry, to the gymnasium, intersecting the east-west axis at the College Union.

#### CAMPUS DESIGN CHARACTER

The original campus, set onto a series of three carefully engineered and graded terraces from a sloped hillside, yields a clear and coherent relationship of mid-century Modern buildings. The buildings are laid out around well-proportioned, flat quadrangles of lawn and are linked with axial walkways. The buildings are presented on simple, graded flat platforms or "plinths." Many buildings have covered colonnades around the entire perimeter wall that create a transition from interior to exterior. Building doorways are located in the center of the façade along the exterior wall beneath the large canopy, rather than with a porch or special identifying feature.

The clear geometric organization of the site is characteristic of approach of mid-century Modern architecture and site planning. Unlike older campuses with layers of eclectic styles of architecture and spaces that evolved over a longer period of time, the OIT campus is still intact and is very simple and coherent. Even the roofs of the buildings were carefully considered when designed, having simple geometric patterns. Parking lots planned at the perimeter of the campus allow for a pedestrian orientation of the campus core; and service accessways are incorporated into the exterior or "backside" spaces of the buildings. As the campus grows outward, the screening of the backsides becomes more important.

Original plantings consisted of three varieties of large shade trees established along the axial walkways that reinforced the simple plan geometry and provided a sense of continuity through the campus. Slopes between the main campus terraces and around the building plinths were massively planted with juniper shrubs. Pine trees were planted in more informal groupings and in the south parking lot.

Over time, rose plantings have been added to the campus. While the summer flowering roses are a gift from a nationally recognized rose grower in Medford, they do not provide an adequate appearance during many times of the year when students are on campus.

Paving and site wall materials of the original campus are simple poured concrete. Original site furnishings are not apparent, except for some

### **Site Analysis**

round globe lights. Many styles of benches, tables, bollards and lighting have been added over time. Rocks have been placed where students tend to cut corners or where vehicular access is restricted.

Future growth of the campus may necessitate a departure from buildings that are designed for flat sites or plinths since the topography will present challenges. Universal access for pedestrians will need to be incorporated to meet the Americans with Disabilities Act.

#### SITE ANALYSIS

It is the intent of this report and its guidelines to respect the original 1960s design of the campus as a distinct period of mid-century architectural history. In particular, every effort should be made to protect and/or replace the original trees. The direct and linear geometry of the axial walkways should be enhanced, maintained and extended when necessary for campus growth.

The original Modernist approach to architecture provided buildings of a matched design but are difficult for visitors to distinguish from one another. In places, the recessed doorways are not obvious. New buildings such as Purvine Hall and additions to the Campus Union have more variety of materials and design while being largely compatible with the original architecture and intent of the site plan.

The terracing of the original hillside for flat building pads necessitated very steep cuts and fills in the grade. Some of the terraces remain difficult to negotiate as a pedestrian. Some routes for people with disabilities are unfriendly and circuitous.

The slopes are challenging to plant and maintain from a landscape perspective. Now that the juniper plantings have reached their useful life and are in decline, the campus is faced with massive replacement of the ground covers on many of the steep slopes. More junipers are not desired by many vocal people on campus.

The monoculture of tree plantings is another issue of concern as infes-

tations of pine beetles or other diseases take hold on the campus. The site is in danger of losing some of its tree framework. Due to monoculture plantings, there is now a strong desire for more diversity of plants on campus for more seasonal character and botanical interest, which can be achieved while holding the larger geometric lines and character.

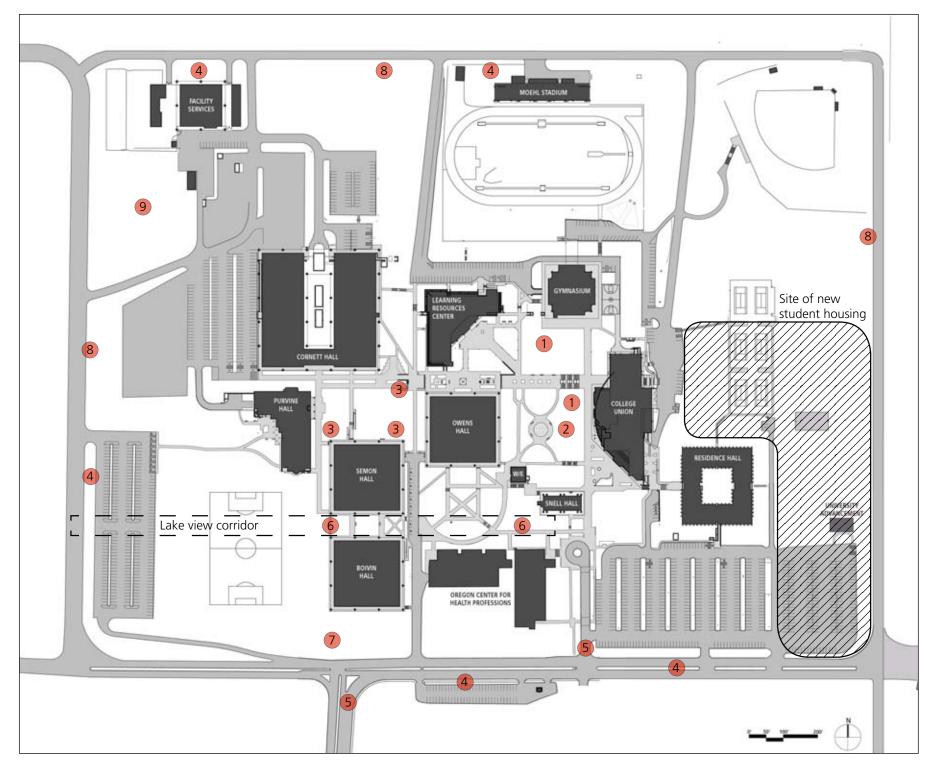
Some building entries and stairways have heavy flanking concrete walls that tend to obscure entries or give them an unwelcoming, cold "tunnel" effect. Examples include the south entry of the Learning Resources Center and the lower level of the Gymnasium. Some of the walkways are now cracked, in poor condition and in need of replacement. Simple steel railings with a painted surface are difficult to maintain and unsightly.

The site materials generally lack visual warmth. This condition is especially noticeable throughout the late fall, winter and early spring season when temperatures and winds are chilly and most plants are out of leaf. The landscape appears bare during much of the school year. The accumulation of various site furnishings, signage and random rock placement over time has begun to create a fragmented and haphazard appearance to the campus. New low retaining walls can be constructed with veneer of either brick or a horizontally coursed regional stone.

Students do not spend much time outside other than moving between buildings, in part because weather is not favorable at many times of the year, but also because there are not many inviting places to sit. Some of the outdoor spaces are used for events such as the annual Activities Fair in September. But generally there are few places to gather other than at the Campus Union. Some various furniture groupings are placed in linear arrangements under the building colonnades.

There are few retaining walls at a seat height where students can perch and observe activities. Stairs are not wide enough to allow for students to use them for seating without impairing through movements. Circulation nodes and intersections of walkways do not offer seating and are not articulated with changes of pavement that create texture and interest. Microclimates, therefore, need to be carefully considered so that warm, sunny places out of the wind are available in winter and shoulder seasons, and cool, shady, breezy places are available on hot days.

Just as the buildings on campus have a unified style, more unified furnishings throughout the campus will add to the aesthetics and contribute to the intactness of character and identity. Lighting has been identified in the Master Plan Update Study dated April 15, 2006 by Soderstrom Architects as an important element for campus safety. Signage was also addressed in the plan.



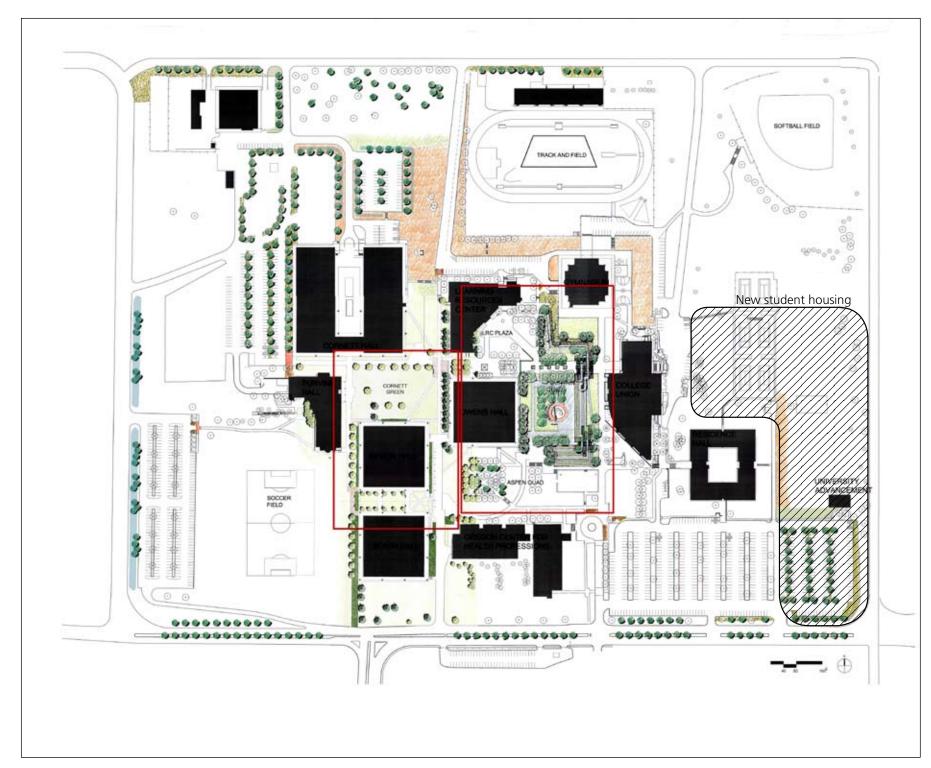
SITE OPPORTUNITIES PLAN

### SITE OPPORTUNITIES

The following describes both general and specific opportunities that can be phased over time on the campus. These opportunities are further discussed under individual topics of this report.

### SUMMARY OF IMPROVEMENTS

- 1 Improve physical access between the Fountain Quad and the College Union. See Fountain Quad plan.
- Redesign Fountain Quad to include an amphitheater for gathering and events. Improve fountain.
- 3 Add ramp access to west corners of Semon Hall. Add a seating area along the Million \$ Walk. See Cornett Green plan.
- 4 Improve and maintain campus edges and screen parking.
- Improve and clarify vehicle entry for first time users.
- 6 Create an overlook and gathering space between Semon and Boivin Halls and create a lake view corridor extending from the Snell Hall Administration Building west toward Klamath Lake.
- Textend walkways from the corner of Boivin Hall to the south and west and a pedestrian friendly intersection at Campus Drive/Dan Obrien Way.
- 8 Develop perimeter walking and jogging trail around campus.
- 9 Establish a special native plants display area.



LANDSCAPE MASTER PLAN

#### LANDSCAPE MASTER PLAN

The overall Landscape Master Plan for Oregon Institute of Technology addresses many more aspects of the site and the campus than planting design. Improvements include redesign of the Fountain Quad and improvements to the Cornett Green. Additional aspen trees are recommended to be planted at the Aspen Quad to reinforce its character, to establish new trees as the older ones decline and to distinguish it with a shady canopy from the other two quads.

This illustrative plan of the campus highlights several of the focus areas studied in this report as well as additional tree planting locations and landscape buffer plantings at campus entries and parking lots. Phased over time, improvements to all of these areas will help achieve the desired visual enhancements and create better connectivity in the campus core. See plan enlargements for the Fountain Quadrangle, Cornett Green, the Lake Overlook and the Lake View Corridor.

#### FOUNTAIN QUADRANGLE

Many people have envisioned the potential for the Fountain Quadrangle to become a more active space that links the Campus Union, Snell Hall and the Learning Resources Center. The east and south hillsides are particularly suitable for an amphitheater and formalized activity venue at the heart of campus.

Special paving around the fountain could ensure a durable surface for concerts and events. New drainage, especially at the north, east and south corners of the quad would ensure that the space could be used in all seasons. While the existing fountain is an amenity for the campus, it could be developed into a more interesting feature. More dramatic water effects could be achieved with new vertical jets with variable programming capabilities to set a mood in accordance with time of day, campus activities, wind and weather. Steam heated by the geothermal could lend a unique "ethereal" effect and a visual reminder of the renewable heat source of the OIT campus. Regional stone could



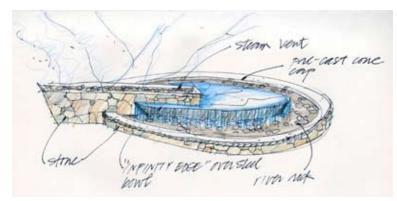
FOUNTAIN QUADRANGLE AND ASPEN QUAD PLAN

be incorporated into the water feature and the area around the perimeter to further distinguish the area.

The quad has a substantial grade change from the Campus Union, Gymnasium and Snell Hall. The lower grade of the quad relative to the spaces surrounding it can have more fluid transitions between terraces and can be viewed from above if physical and visual barriers are removed. Existing trees should be retained, but limbed up to improve sightlines.

Barrier-free access in the campus core can be achieved diagonally across the hillside above the Fountain Quad. A new sloped walkway could extend from the southeast corner of the Campus Union down to the Learning Resources Center. The new walk should be held below a 5% gradient to be accessible without the need for handrails.

Two smaller ramps constructed at the lower level of the Fountain Quad could achieve barrier-free access from the quad to the rest of campus. The ramps could be located at the northeast and southeast corners of Owens Hall on the pair of east-west walkways. Steps, already in poor condition, could be eliminated near the northeast corner of Owens. At the southeast corner of the building, the pathway could be widened to accommodate increased volumes of pedestrian traffic.



**ASPEN QUAD** 

The Aspen Quad would have additional tree plantings to complete the existing geometric pattern. As trees decline, they should be removed and replaced with new aspen. New benches could be added next to several pathways for enjoyment of this pleasant space.



CORNETT GREEN AND LAKE OVERLOOK PLAN

### **CORNETT GREEN**

As an open space on campus, Cornett Green is the most open, sunny, flexible lawn and secondary gathering space. Cornett Green ties the original academic core together. Cornett, Purvine and Semon Halls all have main entrances into the space.

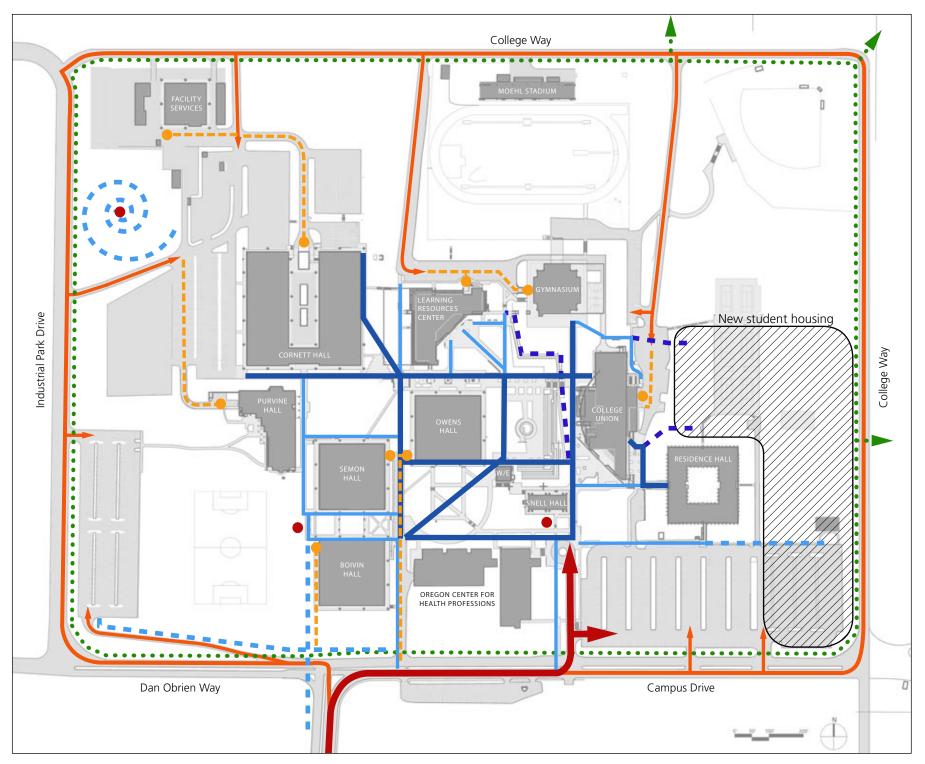
The entry walk and a retrofitted handicap ramp to Semon Hall bisect the space. As an early accessibility retrofit, some other awkward ramps were added between Owens and Semon Halls. To allow the spaces to flow better and improve accessibility, a pair of new sloped walkways with gradients less than 5% along the north side of Semon Hall can blend into the building plinth, and replace the shorter awkward ramps.

At the northeast corner of Cornett Green, there is an important stopping place along the Million \$ Walk at the intersection of the north-south and east-west pedestrian corridors. Special paving, seat walls, lighting and benches would give more emphasis and character to this space. A new walk extending diagonally across the green would connect another barrier-free route to Semon Hall. A north-south walk would connect to the east side of Cornett Hall. Removal of a flowering plum tree and adding several more sweetgum trees to match the existing would complete the tree planting along the north side of Cornett Green.

#### THE LAKE VIEW CORRIDOR AND LAKE OVERLOOK

A new overlook on campus could feature the wonderful views of Klamath Lake and the Cascade Mountains to the west. The space could be part of the Million \$ Walk and be enjoyed by visitors, faculty and students alike. The space would also give a great overview of the athletic field below. This space could consist of special paving, benches, lighting, new landscape plantings, shade trees and low seat walls.

The Lake View Corridor already exists framed between the Semon and Boivin Halls, extending west from Snell Hall. New upright canopy trees could be planted along the building edges of Semon and Boivin Halls. These trees could replace ones that need to removed from the center of the space in order to open up a lake view from outside Snell Hall and the main visitor drop-off. Campus plans should note this view corridor so buildings are not constructed in it.



CIRCULATION FRAMEWORK PLAN

#### CIRCULATION FRAMEWORK

The Circulation Framework diagram illustrates the existing hierarchy of roadways and walkway as well as some proposed circulation improvements for pedestrians. Several new locations for improved universal access are proposed on the existing campus.

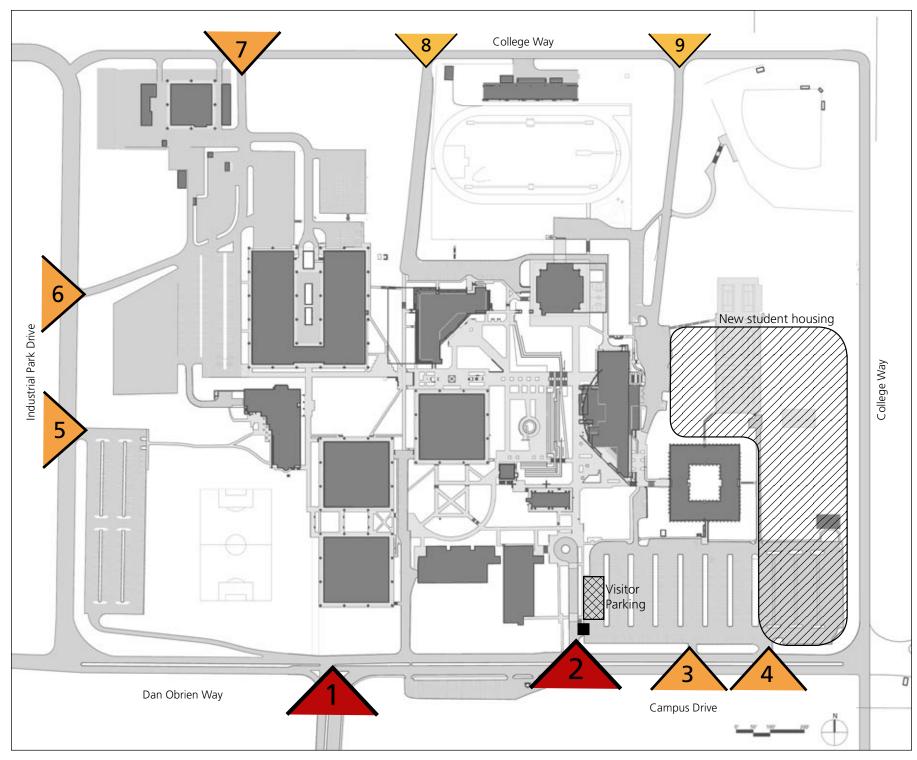
One of the most interesting ideas is to connect a new barrier-free walkway between the Campus Union outdoor space and the plaza outside the Learning Resources Center. This walkway would traverse the upper slope from the southeast corner of the Campus Union and intersect with the first landing of the west pair of stairs. The path would continue north, traversing the lower slope around the north side of the Fountain Quad until it reaches existing grade at the north-south walk between the Learning Resources Center and the Gymnasium. It is anticipated that this new walk will be used for bike access as well. New seating can occur at landings and along low retaining walls.

Additional proposed improvements include new walkways near the southwest corner of Boivin Hall to the west parking lot, traversing the south side of the athletic field slope. In addition, a new walkway could be extended south to the campus perimeter and a cross walk located at Campus Drive/Dan Obrien Way to facilitate pedestrians walking to the commercial district, rather than driving cars.

A perimeter walking and jogging path could be developed around the perimeter of the campus. The mileage would be posted at 1/4 mile segments so that trail users know the amount of exercise they are getting. It is anticipated that the trail will be popular with hospital visitors and employees as well as OIT students and faculty.

### LEGEND





VEHICULAR ENTRIES PLAN

### **VEHICULAR ENTRIES**

The following recommendations relative to vehicular entries are summarized below.

Campus Entry 1. The campus loop road offers a number of places to access parking. However, to reduce confusion for the first time visitor, the primary approach to the campus and vehicular entry leading to parking needs to be obvious, clear and welcoming. The first landscape impressions need to be simple and bold, not detailed or fussy. Campus Drive and Dan Obrien Way should have street trees along the length to shade paving and give a sense of enclosure for the campus on the south edge.

Campus Entry 2. The information booth and campus map need to be relocated at the first left turn off Campus Drive. Designated visitor parking should be clearly marked. Parking should be screened with landscape plantings.

Campus Entries 3-6. Secondary campus entries lead to parking for students and faculty. These entries should be signed and landscaped so that they reinforce the sense of welcome to campus. Parking should be screened with trees and shrubs.

Campus Entry 7. This entry leads to the facilities offices and maintenance yards. Directional signage should allow business visitors and vendors to find the offices. Parking should be screened with trees and shrubs.

Campus Entries 8 and 9. These entries lead to the football and base-ball stadiums as well as smaller parking lots and service areas of the campus. Again, directional signage should allow visitors or vendors to find their way if they are directed to these areas. Parking should be screened with trees and shrubs.

### LEGEND

Primary Vehicle Entrance for Visitors



Secondary Vehicle Entrance



Tertiary Vehicle Entrance



Campus Information Kiosk and Map



Entry 1. At the main campus entrance at Dan Obrien Way and Campus Drive, construct an inviting pedestrian walkway crosswalk and flashing traffic signal.



Entry 2. New landscape south of Snell Hall is underway. Screen all perimeter parking lots with trees and shrubs.

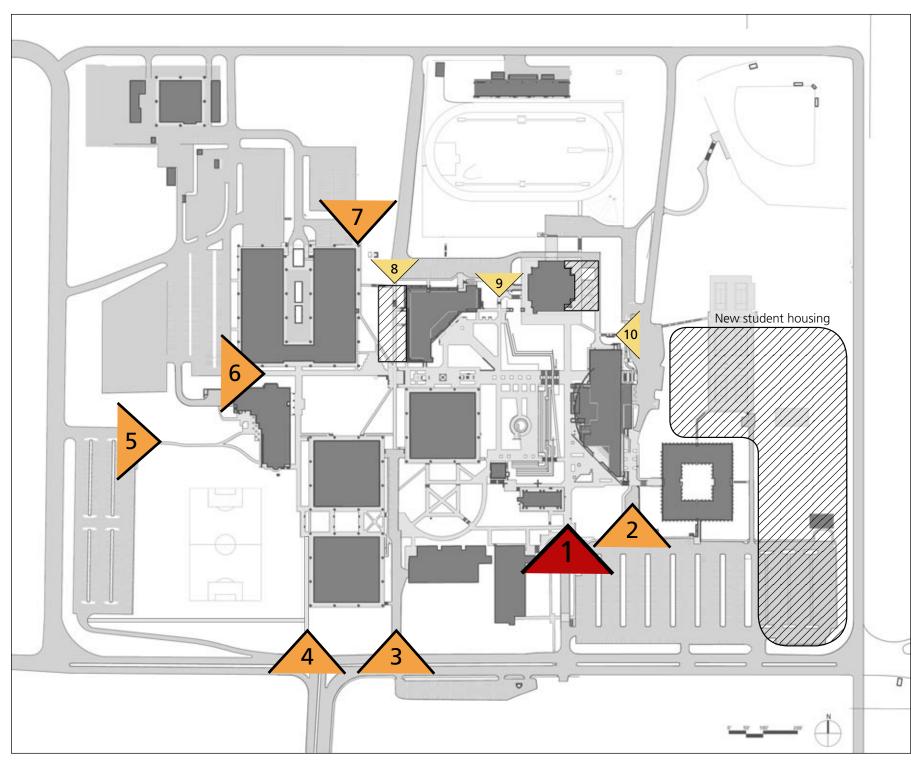


Entry 1. Extend stronger foundation plantings at the monument sign. Transplant cedar trees that will eventually crowd and shade the sign.



Entry 2. Design a new information booth and locate it on the north side of Campus Drive next to visitor parking.

Mayer/Reed December 2007 11



PEDESTRIAN ENTRIES PLAN

#### PEDESTRIAN ENTRIES

The following recommendations relative to pedestrian entries are summarized below.

Pedestrian Entry 1. Create the most welcoming portal into the campus core through the use of plantings that have a strong appearance year around. Some colorful spring and summer seasonal plantings can be featured against larger plantings that provide a structure to this important gateway. Ornamental grasses can be used for interesting fall and winter effects.

Pedestrian Entries 2-7. These entries are used on a daily basis by a number of faculty and students coming from the largest parking areas. They should have an informal yet structured planting to designate a secondary gateway into campus. The plantings should have a strong appearance year around. Shade trees should be added to enhance the sense of arrival and welcome, and to create a transition from the parking lots. Ornamental grasses and other informal drought-tolerant shrubs and ground covers can be used.

Pedestrian Entries 8-10. These entries are more internal as portals into campus and connect from smaller parking lots. They should also have shade trees and a well maintained, all season appearance similar to the secondary entries, but simpler in visual character and smaller scale in design.

### LEGEND



Primary Pedestrian Entrance



Secondary Pedestrian Entrance



Internal Pedestrian Entrance



Entry 1. At the main campus entrance near Snell Hall, add campus standard entry signage. Include additional signage at the main visitor entrance. Add a campus map, directions to admissions and visitor information. Remove boulders and develop gateway planting with inviting all season appearance.



Entry 7. At the northeast Cornett Hall entry, add campus standard entry signage and replace furnishings with campus standards. Add campus new entry planting with trees and shrubs. Remove the gravel area east of the entry and seed with native grass seed mix.



Entry 5. At the entry east of Purvine Hall, add plantings and shade trees along the walkway. Use campus standard entry signage. Remove random boulders.



Entry 8. At the northwest corner of the Learning Resource Center entry, remove these two parking spaces and extend a pedestrian walkway into the lot. Add campus standard entry signage and replace furnishings with campus standards. Add new entry plantings.



Entry 6. At the Cornett/Purvine entry, this major east/west pedestrian corridor deserves special attention both as an entry and as a terminus from inside the campus. Add campus standard entry signage, replace lighting and furnishings with campus standards. Add campus new entry planting and remove boulders.



### **BUILDING ENTRIES**

Use foundation and entry plantings, lighting, and furnishings to help identify building entries. Open up entrances to buildings by removing concrete walls that flank the entry and create a tunnel effect at the Learning Resources Center and the Gymnasium. Use campus standard building signage furnishings at building entries. Establish campus standard "smoking station" a minimum of 50 feet away from building entry. Install campus standard bike rack at main building entrances. Provide a campus standard "information board" in foyer for student communications.

### LEGEND



Main Entry



Secondary Entry

**BUILDING ENTRIES PLAN** 



Replace temporary building signage with permanent campus standard signage.



Use campus standard furnishings at entrances. Establish a smoking station at least 50 feet away from building entrance, or in accordance with the campus smoking policy.



Provide a campus standard information board in foyer of building entrances to avoid the need for announcements taped to the glass.



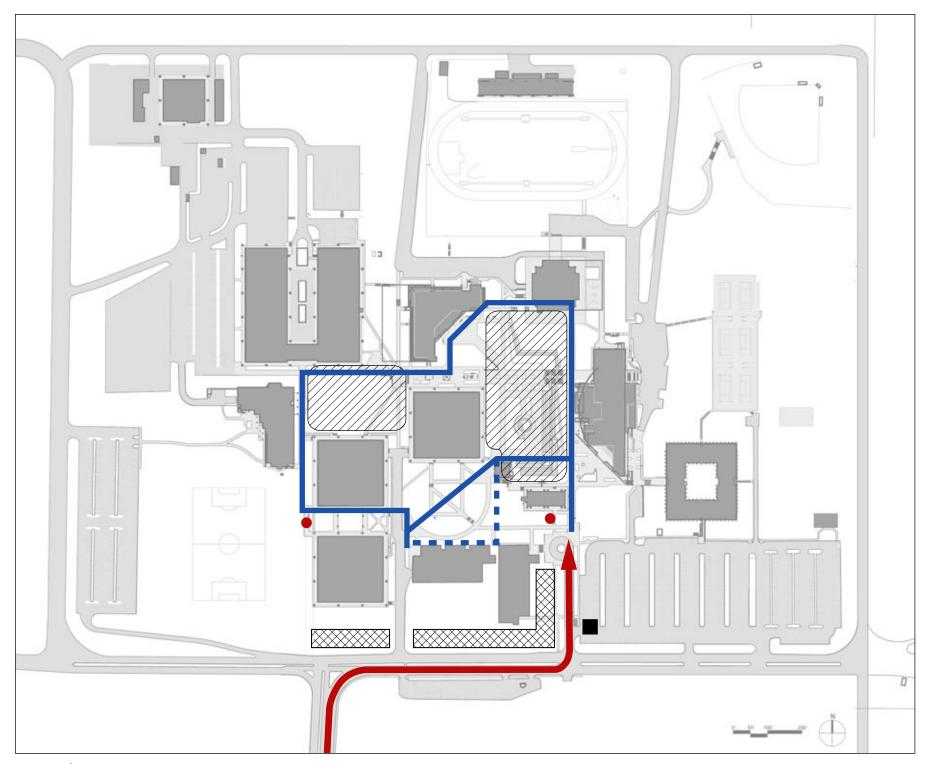
At the Learning Resources Center, open up the south entrance to be more inviting by removing concrete walls that flank the walkway. Remove lawn and raise the grade against the foundation walls. Plant with new low shrubs and ground covers.



At the west Gymnasium entrance, provide campus standard signage and furnishings. Add new entry planting and remove boulders. Screen adjacent service area.



At Semon Hall, provide a convenient universally accessible entrance route. See Cornett Green plan.



MILLION \$ WALK PLAN

#### THE MILLION \$ WALK

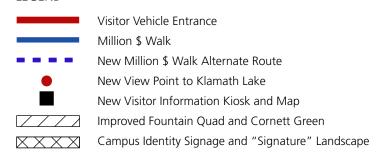
The Million \$ Walk starts with the initial vehicular approach to campus. As visitors proceed to campus, they come to the intersection at Campus Drive. Campus signage is in a visible location and visitors are directed to turn right. A more distinctive, memorable, "signature" landscape should be developed south of Boivin Hall and extended past the new health professions building to Snell Hall.

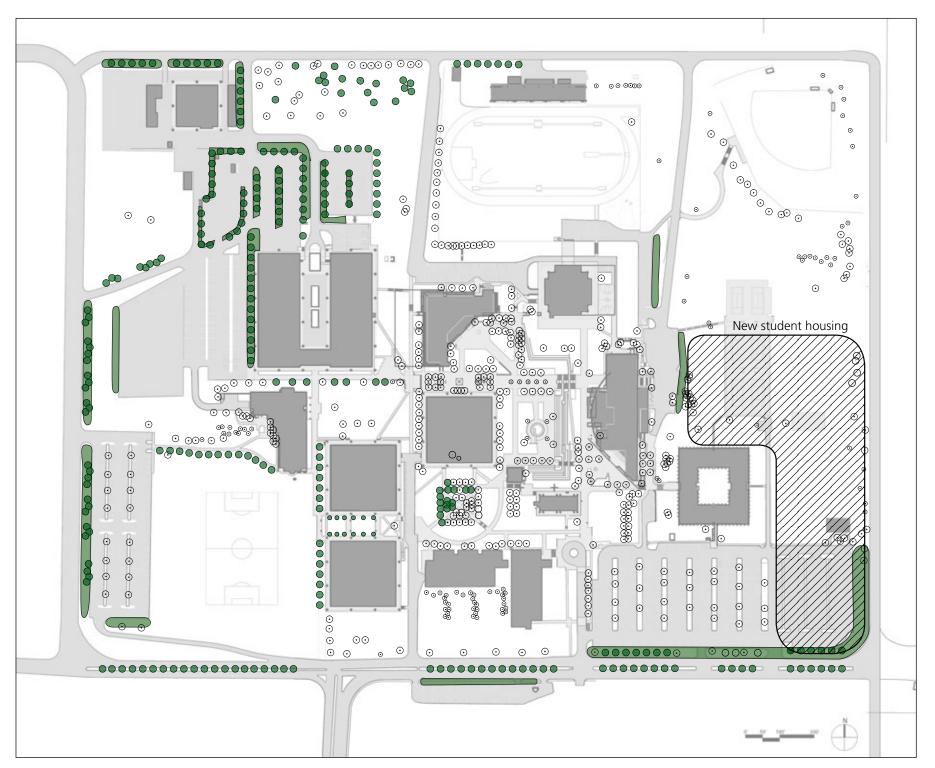
Currently, visitors are directed to a small information kiosk on the right side of the road in a parking lot. The kiosk is not very visible and visitors do not expect to find it on the right side of the road when they already see the OIT campus on the left. Therefore, the kiosk and campus map should be relocated on the southwest corner of the parking lot near the approach to Snell Hall. Visitor spaces should be reserved in the first row of the lot.

A new landscape and vehicular turnaround is currently under construction south of Snell Hall. A viewpoint and view corridor west Klamath Lake should be established from the entry space outside Snell Hall. The Lake View Corridor, enframed by Boivin and Semon Halls, should be cleared of trees that block the view of the lake from Snell Hall. The Lake Overlook and gathering area should be developed above the soccer field between Boivin and Semon Halls.

Along the walk, the new improvements to the Fountain Quad will be seen from above outside the Campus Union and again on the return to Snell Hall. The fountain will be more engaging with new lighting and water effects; and a new amphitheater built into the hillside will host special events and outdoor activities. See Fountain Quad Plan and Cornett Green Plan improvements in this report.

### LEGEND





PARKING LOTS AND SERVICE AREAS SCREENING PLAN

#### PARKING LOTS AND SERVICE AREAS

- In general, the appearance of the OIT campus could be improved with more screening of its parking lots and service areas. Parking lot trees should be matched varieties of large canopy shade trees. Shrub screening should be tall enough to visually break up the expanses of hardscape from the perimeters and between parking rows. On the west parking lot, coordinate tree plantings with future solar panel project. See Sustainability Framework.
- Plant trees in parking lot islands to reduce heat effect, improve user comfort, and improve visual character of the parking.
- Screen parking from perimeter road to improve public views of campus.
- Provide safe and clear circulation for pedestrians.
- Provide clearly marked entries to campus core.

### LEGEND

• Existing Trees

New Tree Plantings

New Screen Planting



OPEN SPACE FRAMEWORK PLAN

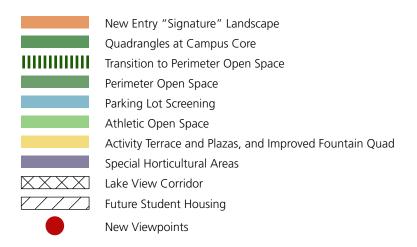
### OPEN SPACE FRAMEWORK

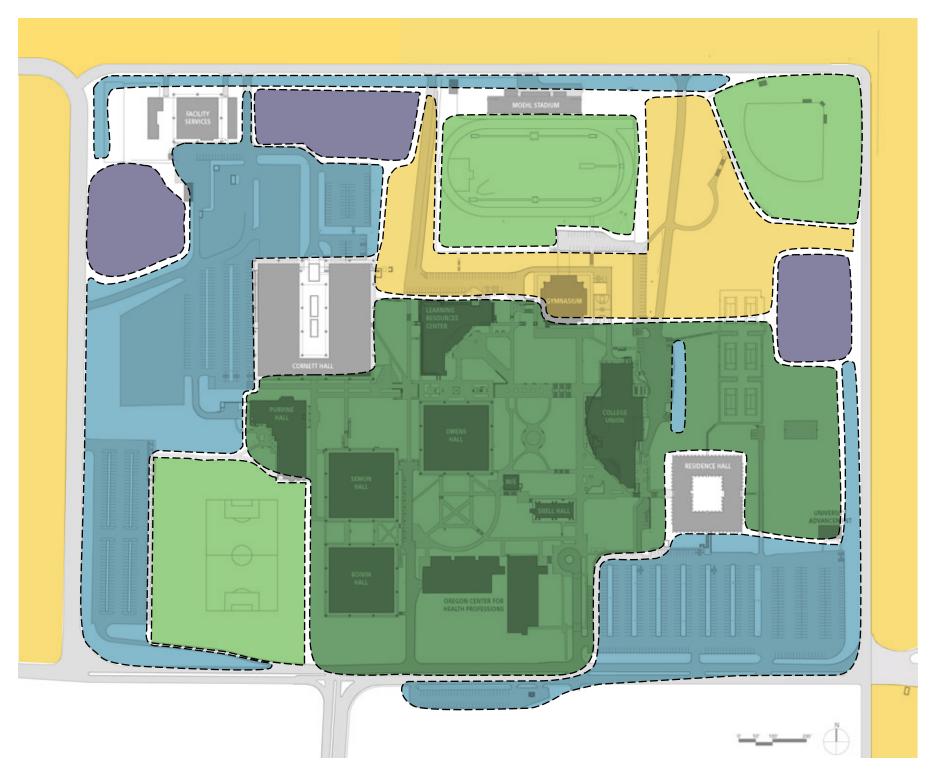
The Open Space Framework diagram designates different types of outdoor spaces other than surface parking lots. The entry "Signature" landscape and Lake View Corridor were discussed with the Million \$ Walk diagram. It is important to remember that when new building sites may be considered where the soccer field is located, the view corridor will need to remain open to the lake.

Improvements to the Fountain Quad could incorporate an amphitheater and some hardscape paving to host events and activities, taking advantage of the grade change between the Campus Union and the quad. It could also provide an improved visual and physical connection to the space outside the Learning Resource Center.

Two new special horticultural areas are proposed as part of the Open Space Framework that can be used in conjunction with the existing Arboretum. One underutilized space on the north College Way perimeter road could be an extension of the ornamental tree and plant arboretum as a working nursery yard. The other opportunity would utilize the existing topographic knoll near the northwest corner of campus. It could host a native plant collection as well as a special viewpoint to Klamath Lake.

### **LEGEND**





**GENERAL VEGETATION ZONES PLAN** 

#### **VEGETATION ZONES**

The General Vegetation Zones plan indicates various parts of the campus for different landscape treatments based on the Open Space Framework, aesthetic requirements, academic programs and functional/maintenance concerns. While the main entry and core of the campus remain the most geometric, massed with similar plantings, structured and maintained, there are ample opportunities to establish native plants and lower maintenance requirements as green landscape corridors from the perimeter of the site into the campus.

### LEGEND



Core Landscape

- Highest maintenance level
- Structured planting design
- Irrigation



Athletic Fields

- Medium maintenace level
- Irrigated
- Regular mowing and turf care



Native/Unstructured Landscape

- Lowest maintenance level
- Informal planting arrangement and massing
- Non-irrigated
- Supports wildlife habitat



Adjacent Landscape

• Undeveloped, low maintenance/native landscape



Perimeter Landscape and Parking Screening

- Medium maintenance level
- Shrubs and trees for parking screening
- Trees at interior parking landscape



Special Horticultural Areas

- Native plant display and overlook at hill on west
- Arboretum and ornamental plants at open space on north and east.

### **Landscape Master Plan** - Vegetation

Preservation of existing trees should be given a priority so that the framework of the campus endures over time. A consulting arborist should be used to direct pruning and a develop program for tree care.

In keeping with the original intent and concept of the campus, linear tree plantings of a single species should be extended along the walkways. Also in keeping with the original campus concept, ground covers as replacements for junipers on the slopes or foundation plantings should be simple geometric masses, rather than fussy collections of many plant types. However, there can be variety of ground covers so that the overall diversity of the plant collection on campus is increased. The aspect and degree of the slope, shadows cast by buildings, drainage, length of time to establish, presence of existing trees and maintenance should be taken into consideration when making new plant choices for juniper replacement. See Recommended Plant List.

The ornamental rose plantings should be limited to a few areas, otherwise, roses should be replaced with low shrubs that provide an improved visual appearance during the school year and particularly more winter structure. There are new low maintenance varieties of roses and native roses that can be used for ground covers in certain areas of campus. See Recommended Plant List.

#### **PLANTING**

- Preserve and protect existing healthy mature trees. Prune dead wood and selectively thin to improve tree health and appearance.
- Limb up existing trees where appropriate to improve views.
- Screen utilities with vegetation (or opaque fencing if vegetation is not possible).
- Use native and adaptive plants as much as possible to reduce irrigation demands.
- Choose plants to attract birds and enhance wildlife habitat.
- Choose hardy, disease free, reliable species of plants to reduce maintenance and tree replacement.
- Plant steep slopes with low shrubs and ground covers. Use terracing if necessary to reduce soil erosion.
- Increase tree species diversity on campus.
- Establish campus standard signage for trees and plants of botanical interest and memorial trees.



At the Semon Hall/Owens Hall service drive, replace juniper slopes with low shrubs and ground covers. Install low poured-in-place concrete retaining wall to reduce the slope. Weed planting beds two times per season. Apply mulch in spring.



At the new pedestrian entry west of Boivin Hall, add a pedestrian walkway extending to Campus Drive. Remove gravel and replace with reinforced turf for service vehicle access.



At the existing Residence Hall, replace juniper slopes with terraced low shrubs and ground covers. Create a lower terrace as a seatwall. Weed planting beds two times per season. Apply mulch in spring. Remove boulders and replace with a shrub bed.



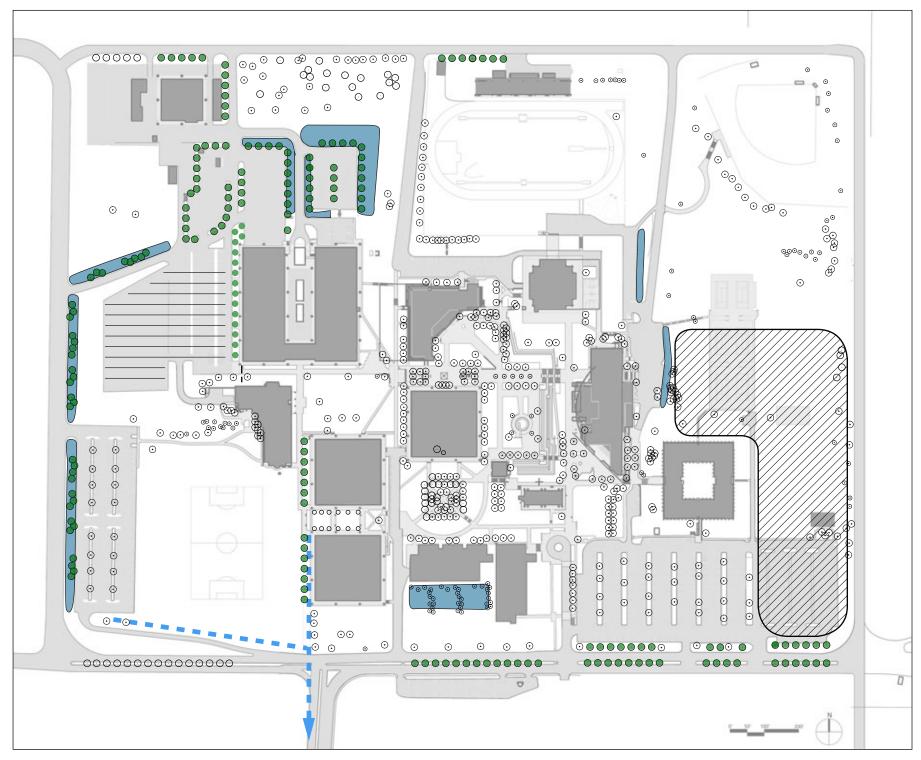
At the slopes north and east of the gymnasium, plant new low shrubs and ground covers to replace juniper plantings in decline.



This site west of the University Advancement Building will be used for future student housing. For large areas around the athletic fields, seed with native seed mix. Mow once a year in fall, after grasses have gone to seed. Apply broadleaf herbicide during establishment if needed.



At the northeast corner of Cornett Hall, seed slopes with native seed mix. Use erosion control mat where necessary. Mow once a year in fall, after grasses have gone to seed. Apply broadleaf herbicide during establishment.



SUSTAINABILITY FRAMEWORK PLAN

#### SUSTAINABILITY FRAMEWORK

Key sustainability and green design features of the campus are summarized as follow:

### Energy

- Use energy efficient outdoor lighting. Remove large sports field style lighting in the campus core and replace with smaller pedestrian-scaled pole lights that direct light down to the pathways.
- Develop photovoltaic energy sources for campus electricity needs. Extend arrays mounted to covered walkways in the west parking lot.

#### **Transportation**

- Encourage people to walk to and from the campus. Add a new walkway at the corner of Boivin Hall connecting to Campus Drive/ Dan Obrien Way and the nearby commercial district.
- Build a fitness loop for walking around the campus perimeter.
- Encourage use of bicycles for commuting to campus. Add more bike parking at building entries.

### **LEGEND**

• Existing trees

New trees planted on west side of buildings and trees to shade parking and streets

Stormwater treatment bioswales
Future photovoltaic panels
Future student housing
New walk and crosswalk



Deciduous trees on the west side of Purvine Hall shade the building from afternoon sun in hot season months.



Planting additional trees in parking lots will reduce heat island effect and improve visual character of parking lots.

### Planting and Water Conservation

- Use drought-tolerant and native or adapted plants for water conservation and to reduce irrigation demands. See Recommended Plant List.
- Plant exposed slopes and incorporate terracing where possible to reduce soil erosion.
- Plant new shade trees on the west side of buildings to avoid solar gain in the afternoons.
- Plant shade trees in the parking lots to reduce heat island effect and heat gain inside the vehicles. Coordinate tree layout with lighting design.
- Treat and infiltrate stormwater on site.
- Explore opportunities for treated wastewater to supplement irrigation.

### **Paving Materials**

• Use sand-set modular pervious paving systems for special gathering areas. Pavers will break the monotony of the poured concrete, infiltrate rainwater, and resist the temperature extremes that crack poured concrete. Sand set pavers are commonly used at ski resorts since they can be plowed and/or heated for snow melt.

### Site Furnishings

• Add attractive, convenient recycling stations at building entries so that paper, cans, glass and plastic wastes can become more of a habit and be more easily sorted for re-processing.



Aluminum bench Manufacturer: Landscape Forms

Model: Austin cantilever w/arms, surface mount



Moveable and Stackable Chair Manufacturer: Landscape Forms

Model: Verona perforated seats, optional armrests.

Color: silver powder coat



Steel Picnic Table Manufacturer: Landscape Forms Model: Carousel. 3-6 perforated seats, optional surface mount

Color: silver powder coat



Umbrella (pictured with Carousel table) Manufacturer: Landscape Forms Model: Equinox

Color: plain edge oyster fabric, silver powdercoat frame

#### SITE FURNISHINGS

With new design opportunities as buildings are developed or remodeled, low seat walls or small spaces for sitting should be incorporated. In addition, new fixed furniture such as benches and tables can be added at key locations. Moveable and stackable chairs can furnish a space outside the Campus Union to give people flexibility of arrangement.

Various styles of lighting and site furniture have been added to the campus over time. In some cases, indoor furniture is taken outdoors since there are few places provided for sitting. A more updated standard style and higher level of quality of furniture will improve the overall appearance of the campus, be easier to maintain with parts and provide a longer period of service than what is now being used. The following products are recommended as site furnishings that can become the standard throughout campus.



Wave Bike Rack Manufacturer: Barco Products Model: Wave Color: black



Pole Lighting Manufacturer: Bega

Model: 8309, full cut off, 12' height, 5" diameter pole, dark sky

Color: BEGA silver



Trash and Recycling Receptacle Manufacturer: Landscape Forms Model: Petoskey, surface mount. Color: black powder coat



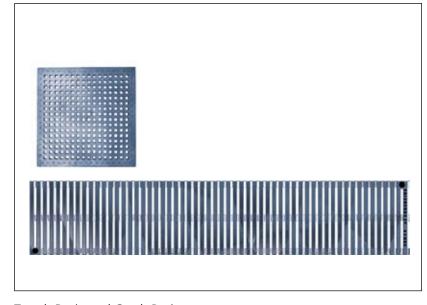
Wall and Step Luminair Manufacturer: Bega Model: 203 Color: stainless steel



Ash Receptacle
Manufacturer: Forms + Surfaces
Model: large butler ash receptacle, embedded mount or wall mount
Color: clear coat aluminum



Steel Bollard Manufacturer: Fair Weather Model: B-2 Color: black

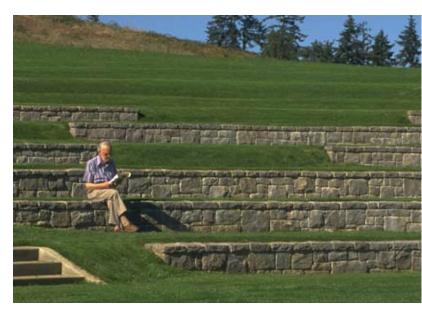


Trench Drain and Catch Basin Manufacturer: Urban Accessories Model: Jamison trench drain, STD ADA drain cover Color: cast iron



Example of Smoking Shelter Manufacturer: Forms + Surfaces

Model: custom, may be simplified and modified for location Color: stainless steel or silver powder coat and glass



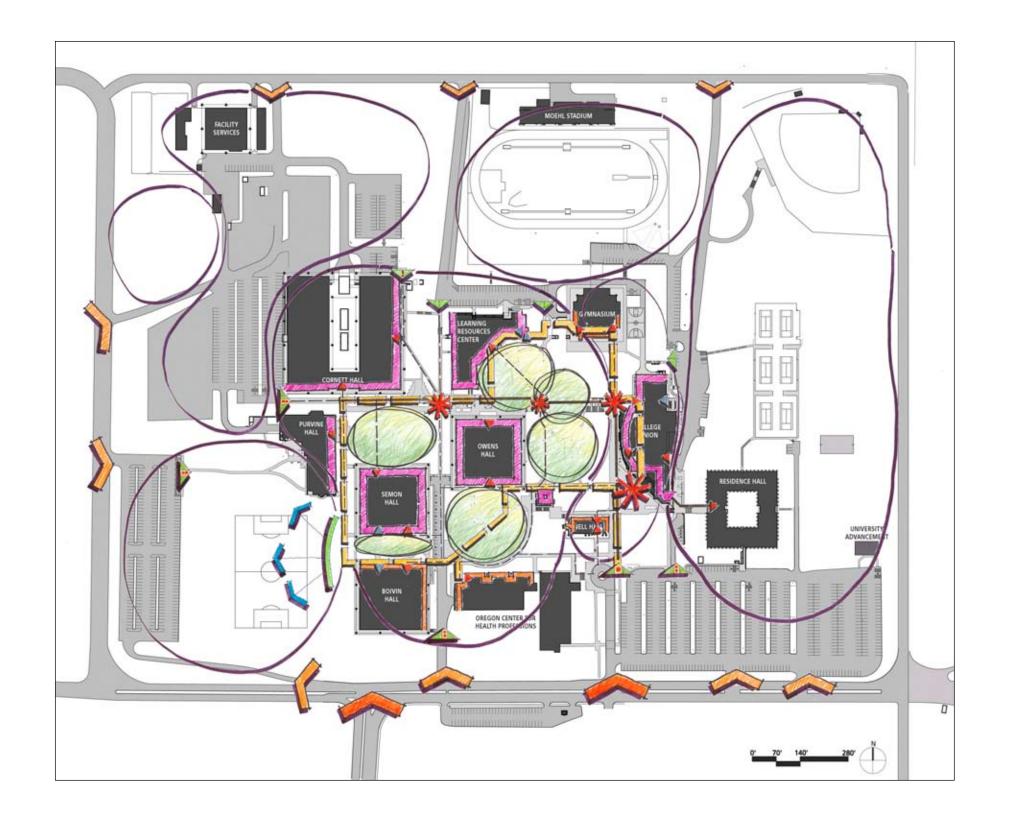
Low stone veneer retaining wall



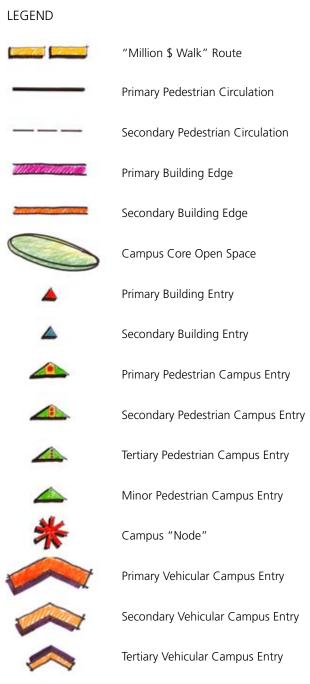
Sand Set Accent Paver for Pedestrian Areas Double Holland Pattern: Holland stack bond, not herringbone as shown Color: Warm autumn blend



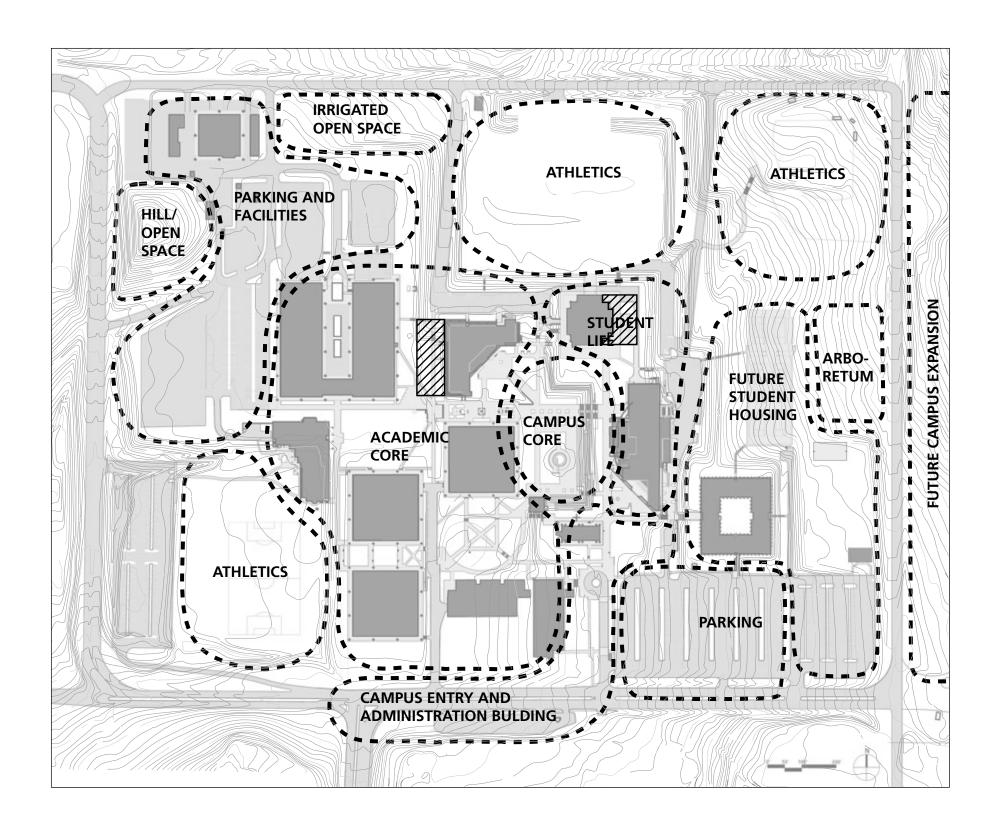
Low brick veneer retaining wall with precast concrete cap



### SITE ANALYSIS DIAGRAM



Off-site Views to Klamath Lake



### EXISTING USE ZONES FRAMEWORK

The campus is presently organized into zones where related activities and similar buildings are grouped. As growth occurs over time, the locations of new buildings and their relationship to the campus core will become more challenging due to topographic conditions. Parking lots will likely become future building sites, while parking is relocated to more distant perimeter locations, or is incorporated into lower level structures beneath future buildings.

### LEGEND



Future building expansion as identified in the 2006 Campus Master Plan by Soderstrom Architects.

### SHADE TREES



common hackberry



green ash



Kentucky coffee tree



northern red oak



HARDY SHRUBS



Blue Mist spiraea



flowering quince





Snowmound spiraea



mariesii Viburnum

ORNAMENTAL GRASSES, GROUND COVERS AND PERENNIAL



big bluestem



blue oat grass



Foerster's feather reed grass



spreading cotoneaster



Brilliant stonecrop

Deciduous Trees         Care circinatum         vine maple         fall color         yes         20°x25′         shady side of buildings           Acer platanoides         Norway maple         fall color         40°x50′         parking lot           Acer pubrum var.         red maple         fall color         60°x60′         parking lot, campus walk           Arrelanchier laevis         Shadblow servicberry         spring flowers, fall color         90°x40′         hillside grove           Betula nigra         niver birch         fall color         30°x40′         near bioswale, hillside grove           Betula papyifera         paper birch         fall color         30°x40′         near bioswale, hillside grove           Celtis occidentalis         common hackberry         spring flowers, fall color         15°x20′         parking lot, campus walk           Cornus florida         flowering dogwood         spring flowers, fall color         15°x20′         ornamental grove, single speciman           Cratagus laevigata         English Hawthorne         spring flowers, fall fruit         20°x20′         parking lot, campus walk           Fraxinus p. "Summit'         Summit green ash         fall color         40°x60′         parking lot, campus walk           Ginkgo biloba         Ginkgo biloba         Ginkgo biloba         Ginkgo biloba
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Ulmus 'Accolade' Accolade Elm fall color 50'x70' campus walk
Coniferous Trees
Calocedrus decurrens incense cedar summer fragrance yes 15'x70' single speciman, service screening
Picea pungens 'Glauca' Colorado Blue Spruce grey green foliage 35'x80' single speciman
Pinus monticola Western White Pine yes 35'x60' hillside grove
Pinus nigra Austrian Pine 40'x60' hillside grove, single speciman
Pinus ponderosa Ponderosa Pine yes 30'x100' hillside grove
Pinus strobus Eastern White Pine 40'x100' hillside grove, single speciman
Pseudotsuga menziesii yes 50'x100' hillside grove, single speciman

BOTANICAL NAME	COMMON NAME	SEASONAL INTEREST	NATIVE	width x ht.	SUGGESTED APPLICATION	
Deciduous Shrubs						
Amelanchier alnifolia	saskatoon	summer flowers, fall color, winter berries	yes	15'x18'	near bioswale	
Aronia arbutifolia	chokeberry	summer flowers, fall color, winter berries	yes	5'x10'	hillsides	
Artemisia tridentata	big sagebrush	summer flowers	yes	3'x5'	hillsides	
Berberis t. 'Kobold'	Kobold barberry	fall color		5'x6'	barrier plant	
Caryopteris clandonensis	Blue Mist spirea	summer/fall flowers		2'x2'	hillsides	
Chaenomeles speciosa	flowering quince	early spring flowers		10'x15'	accent plant	
Cornus sericea	red-twig dogwood	winter red stems	yes	9'x9'	near bioswale, lower hillsides	
Cornus s. 'Flaviramea'	yellow-twig dogwood	winter yellow stems		9'x9'	near bioswale, lower hillsides	
Cornus s. 'Kelseyi'	Kelseyi dogwood	winter red stems		3'x3'	near bioswale, campus walk	
Cotoneaster apiculatus*	cranberry cotoneaster	winter berries		3'x6'	steep hillsides, Juniper replacement	
Cotoneaster divaricatus	spreading cotoneaster	spring flowers, fall berries		7'x8'	parking lot screen	
Deutzia gracilis	slender deutzia	spring flowers		5'x6'	accent plant or hillsides	
Ericameria viscidiflora	Rabbitbrush	late spring flowers	yes	3'x3'	native hillsides	
Euonymus alata	burning bush	fall color		15'x15'	parking lot screen	
Forsythia intermedia var.	forsythia	early spring flowers		varies	hillsides or accent plant	
Hamamelis virginiana	Common Witchhazel	early spring flowers, fall color		10'x15'	accent plant	
Kerria j. 'Pleniflora'	kerria	spring flowers		5'x8'	accent plant	
Lonicera fragrantissima	winter honeysuckle	spring flowers, fragrant		5'x8'	parking lot screen	
Philadelphis lewisii	wild mock orange	spring flowers, fragrant	yes	12'x12'	parking lot screen or accent plant	
Philadelphus v. 'Minn. Snowflake'	mock orange	spring flowers, fragrant		6'x8'	parking lot screen	
Philsdelphus v. 'Dwarf Minnesota Sno	owflake' *	spring flowers, fragrant		2'x3'	Juniper replacement	
Physocarpus capitatus	ninebark	late spring flowers, fall color	yes	8'x8'	near bioswale, lower hillsides	
Physocarpus o. intermedius	dwarf ninebark	late spring flowers, fall color		3'x5'	near bioswale, lower hillsides	
Potentilla fruticosa var.*	potentilla	late spring flowers		varies	Juniper replacement	
Rhamnus purshiana	cascara sagrada	fall color	yes	15'x20'	parking lot screen	
Rhus aromatica	fragrant sumac	outstanding fall color		6'x6'	accent plant or hillsides	
Rhus glabra	smooth sumac	outstanding fall color		15'x15'	accent plant or hillsides	
Ribes aureum	golden currant	spring flowers		3'x6'	accent plant or hillsides	
Rosa 'Flower Carpet' var.*	Flower Carpet rose	summer flowers, fall color, winter berries		2'x5'	Juniper replacement	
Rosa rugosa var.	rugosa rose	spring flowers, fall color, winter berries		5'x8'	blends with natives	
Salix purpurea 'Gracilis'	purple-osier willow	winter purple stems		6'x'10'	near bioswale	
Spiraea douglasii	Douglas spiraea	spring flowers, fall color	yes	5'x8'	near bioswale	
Spiraea n. 'Snowmound'	Snowmound spiraea	spring flowers, fall color		4'x6'	accent plant or hillsides or parking lot screen	
Spiraea t. 'Swan Lake'	Swan Lake spiraea	spring flowers, fall color		5'x8'	accent plant or hillsides or parking lot screen	
Syringa vulgaris var.	common lilac	spring flowers, fragrant		12'x15'	accent plant	
Taxus m. 'Hicksii'	Hicksii Japanese yew	winter berries		5'x10'	accent plant	
Vibrunum opulus	European cranberry bush	spring flowers, fall color		10'x15'	parking lot screen	
Viburnum p. 'Mariesii'	Mariesii Doublefile Viburnum	spring flowers, fall color		8'x8'	parking lot screen	
Weigela florida. var.	weigela	spring flowers		varies	parking lot screen	
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BOTANICAL NAME	COMMON NAME	SEASONAL INTEREST	NATIVE	width x ht.	SUGGESTED APPLICATION
Evergreen Shrubs					
Mahonia aquifolia Pinus mugo mugo Potentilla atrosanguinea*	Oregon grape Mugho pine potentilla	winter fruit spring flowers	yes	3'x4' 3'x4' 18"x24"	parking lot screen parking lot screen Juniper replacement
Ground Covers					
Arctostaphylos uva-ursi* Cotoneaster d. 'Coral Beauty'* Deutzia g. 'Nikko'* Euonymous f. 'Colorada'** Iberis sempervirens Mahonia repens**	kinnikinnick Bearberry cotoneaster Nikko deutiza purple-leaf wintercreeper evergreen candytuft creeping mahonia	evergreen, spring flowers, fall berries semi-evergreen, spring flowers, fall berries spring flowers evergreen, winter color evergreen, early spring flowers evergreen, winter fruit	yes	6"x15' 6"x10' 12"x5' 12"x5' 12'x18" 24"x3'	Juniper replacement Juniper replacement Juniper replacement Juniper replacement Juniper replacement Juniper replacement
Ornamental Grasses					
Calamagrostis a. 'Karl Foerster'* Festuca o. glauca* Helictotrichon sempervirens* Panicum virgatum*	Foerster's feather reed grass blue fescue blue oat grass switch grass	fall/winter interest fall/winter interest fall/winter interest fall/winter interest		3-4' ht. 10" ht. 2-3' ht. 3-4' ht.	Juniper replacement Juniper replacement Juniper replacement Juniper replacement
Perennials					
Achillia sp. Aquilegia Linum perenne Penstemon	yarrow columbine blue flax beard tongue	summer/late fall flower spring flower spring flower spring flower	some var.		
Perovskia 'Blue Spire' Phlox sp. Rudbeckia h. 'Goldsturm' Santolina chamaecyparissus	Blue Spire Russian sage phlox Goldsturm black-eyed Susan lavender cotton	summer/fall flowers spring/summer flower summer/early fall flower late spring/early summer flower late summer/early fall flower		3'x3'	blends with natives
Sedum sp. various bulbs	stonecrop	flower in early to late spring season	some var.		plant in large drifts
Native Seed Mix - Protime Native Ea	stside Grass Mix				

Bromus carinatus California brome
Festuca idahoensis Idaho fescue
Koeleria macrantha prairie Junegrass
Poa canbyi Canby bluegrass
Pseudoroegneria spicata bluebunch wheatgrass

<sup>\*</sup> indicates low shrub or ground cover for Juniper replacement in full sun

<sup>\*\*</sup> indicates low shrub or ground cover for Juniper replacement in partial or full shade