2. Design Guidelines

INTRODUCTION

The following **site design guidelines** set the minimum standards that must be attained throughout the entire campus. They are divided into two sections: the first identifies the required site components associated with each type of construction project—a new building versus a road, for example—and the second defines the component parts—paving, planting, etc.—in greater detail. The intent is to ensure that every project undertaken on the campus fully addresses its site and the surrounding landscape, using materials and forms of a timeless nature, quality installation that reduces long-term maintenance, and responsible practices that promote sustainability.

The guidelines describe the desired method for the design of paving, lighting, site furniture, utilities, walls, and planting to ensure that the UAF campus has consistent quality and quantity, coordinated styles, and an integrated appearance. The design guidelines build upon the actions and conceptual guidelines established in the 2002 campus master plan. Used in tandem with the UAF Design Standards, the guidelines set the parameters for design while the standards provide detailed specifications for construction and installation. The guidelines should be applied consistently to campus site design, but are not intended to supersede relevant Fairbanks North Star Borough (FNSB) ordinances and codes. The Campus Landscape Subcommittee of the Master Planning Committee (CLS) is responsible for reviewing specific proposals for approval prior to implementation.

SITE COMPONENTS FOR CONSTRUCTION PROJECTS

Site improvements—whether independent or associated with a building—affect the immediate and overall campus landscape. Project types, each with its own set of requirements, can be grouped into several categories—buildings, circulation, utilities, outdoor gathering, and landscape restoration/enhancement. It is essential that site design be included and funded regardless of whether it is the primary focus of the project.

An informal grove of birch trees in the lawn near the Arctic Health building.

Construction of the Utilidor in the West Ridge, Summer 2003.

A computer simulation of birch tree planting at the Patty Building illustrates the added sense of depth and arrival.

Seasonal flowers are planted and maintained by the UAF grounds crew.

BUILDINGS

Site improvements shall be part of the planning and design of a new building or a renovation associated with one or a group of existing buildings. The landscape is key to creating an inviting and collegial environment outside as well as inside the building, to connecting the building to its larger campus setting, and to clarifying circulation and wayfinding.

1. Require site improvements as part of the design and construction of all new buildings.
2. Enhance existing buildings with new planting.
3. Use massed plantings of trees, shrubs, and groundcover to integrate the building with its site and the surrounding campus, and to make efficient use of irrigation water.
4. Coordinate the design of planting areas with roof drains to collect runoff.
5. Highlight primary building entrances with ornamental plants.
6. Include planting beds for seasonal flowers at buildings if indicated on the Seasonal Flower Planting Plan. *Note: The Seasonal Flower Planting Plan is to be developed. See Section 3, Implementation Strategy.*
7. Protect existing trees from damage during construction.
8. Plant trees at the recommended distance from buildings to meet fire safety goals.
9. Provide pathways that tie into existing pedestrian circulation.
10. Use materials that complement the building architecture and tie the project to the larger campus context.
11. Design routes for emergency access, garbage, and snow removal to enhance the pedestrian experience.
12. Provide space for snow removal and storage as described in Section 02000 of the UAF Design Standards.

13. Include permanent bicycle parking areas, with racks and/or lockers as space allows, in the site design for all new buildings.

14. Install signs to meet UAF standards. *Note: UAF is currently evaluating wayfinding and signage.*

CIRCULATION

By helping to define and differentiate circulation routes, the landscape can improve wayfinding and give identity and scale to the campus.

ROADS

Site improvements—such as sidewalks, lighting, street trees, and signs—should be an integral part of all campus roadway projects.

1. Require site improvements as part of the design and construction of all new roadways.

2. Locate new sidewalks along all roadways at a minimum of 12 feet from the edge of curb, where possible, and create a planting buffer between sidewalks and roadways.

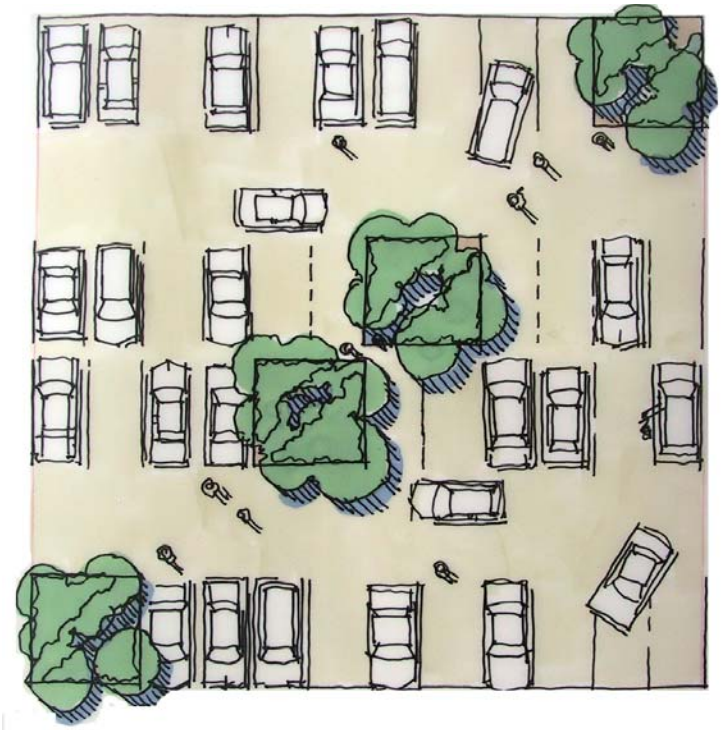
3. Connect sidewalks to the overall campus pedestrian network.

4. Install signs to meet UAF standards. *Note: UAF is currently evaluating wayfinding and signage.*

5. Locate site lights outside of the circulation routes as well as routes for snow removal and lawn mowing.

6. Plant street trees in the areas identified for reforestation by the Landscape Framework Diagram according to the UAF Campus Plant Palette.

7. Use ornamental species from the UAF Campus Landscape Palette to highlight intersections, roundabouts, and campus entrances.



Bicycles are used on campus throughout the year.

8. Use native plants as indicated on the UAF Campus Landscape Palette for restoration of the construction site, except at the campus entrances and intersections as approved by the CLS.

9. Include planting beds for seasonal flowers at campus entrances and intersections as approved by the CLS. Follow the Seasonal Flower Planting Plan when it is completed. *Note: The Seasonal Flower Planting Plan is to be developed. See Section 3, Implementation Strategy.*

PARKING

Even with the possible addition of structured parking in the future, surface lots will continue to be a feature of the campus. To better integrate them into the overall landscape:

1. Require site improvements as part of the design and construction of all parking lots.

2. Plant groups of trees as landscape islands in parking lots to break up the expanse of paving and cars.

3. Make planting areas a minimum of 300 square feet to contain multiple trees and understory plants.

4. Where feasible, align planting areas to assist in directing pedestrians to destinations, such as shuttle stops.

5. Use regional water quality standards to determine the ratio of planting area to paved parking surface.

6. Design and locate planting areas to collect, retain, and direct ice- and snowmelt and stormwater runoff.

7. Address the needs for circulation of private vehicles, campus shuttle, and snow removal as well as lighting and headbolts.

8. Install signs to meet UAF standards. *Note: UAF is currently evaluating wayfinding and signage.*

TRAILS

The UAF Trail System is part of the North Campus Plan, which is currently being developed by the North Campus Planning Subcommittee. It is expected to define trail locations, design, and maintenance standards. In general, no trails are to be located in environmentally sensitive areas. In coordination with the North Campus Plan:

1. Identify a campus-wide trail network linked to the North Campus Plan.
2. Link the east and west ends of campus by trails.
3. Encourage the trail use as designated by the North Campus Plan. Install temporary physical barriers and signage to educate users of ongoing environmental restoration. Install permanent physical barriers, if necessary, designed to complement the adjacent landscape.
4. Identify trail heads within Tanana Loop at parking areas as designated by the plan.

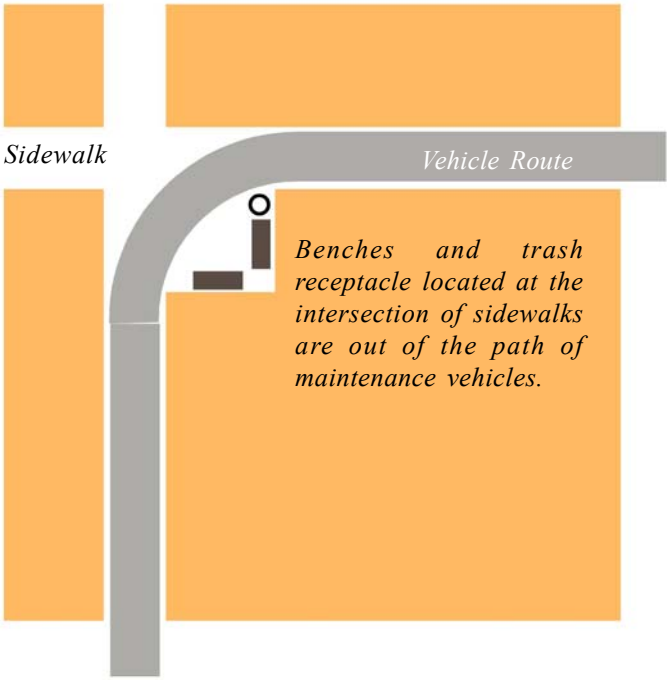
Pedestrian paths that cut through planting areas should be designed to properly meet the evolving needs of the campus.

SIDEWALKS AND PEDESTRIAN PATHS

Sidewalks and pedestrian paths should be designed to encourage walking on the campus —minimizing conflicts between pedestrians and automobiles, connecting clearly to the overall pathway and trail system, and providing seating and other pedestrian-scale amenities. Where possible, walkways should be located to capture the site's extraordinary views.

1. Lay out paths so vistas are directed to focal points of campus life or outward to Tanana Valley and the Alaska Range.
2. Install straight paths where pedestrian movement and modest gradients suggest direct routes. See UAF Design Standards Sections 02000 and 02500 for definition of maximum sidewalk grade.
3. Install curving paths at steeper slopes as necessary to enrich the experience of moving through campus with appropriate drainage and surface treatments
4. Provide a minimum clear zone of 8 feet in horizontal width on each side and 8 feet in vertical clearance for all sidewalks.

The stairs between Alumni Drive and Tanana Loop, made from metal grate, contribute to the function and beauty of the UAF campus.



Example of an intersection of pedestrian walks designed to accommodate the route of maintenance vehicle with a 25' turning radius.

Maintenance vehicles occasionally use pedestrian paths.

5. Provide an ample planted strip between all sidewalks and the adjacent roadway. (UAF Design Standards Section 02900, paragraph 1.5 sets 12 feet as the minimum width for islands and separation strips where there is grass or vegetation.)

6. Make pedestrian paths designated for use by authorized vehicles a minimum of 10 feet wide with space for the 25 foot turning radius of a typical maintenance vehicle. Pavement and subsurface should be designed to withstand the load of snow-removal and cleaning equipment. Design routes of maintenance vehicles should complement the pedestrian environment.

7. Design pedestrian paths designated as emergency vehicular routes to meet the UAF Design Standards and to complement the pedestrian environment of the campus.

8. Direct ice- and snowmelt and stormwater runoff away from pedestrian paths.

9. Provide aids such as push buttons at all signalized street crossings.

10. Meet UAF Design Standards for grading, drainage, lighting, snow removal, storage, structures, etc.

UTILITIES

Utilities will be required for all new or revitalized projects within the campus. The intent of the guidelines is to ensure that they are well placed to meet aesthetic, operational, and functional criteria.

UTILIDOR

1. Understand the specific opportunities and constraints associated with the utilidor within each development or restoration site such as, but not limited to, its depth below the surface, width, heat of soil, location of access hatches, etc.

OTHER UTILITIES

1. Design and coordinate the location of all above-ground utilities, enclosures, and service areas as part of the adjacent architectural massing and materials. Do not locate utilities

above ground in the sidewalk. In no case shall a utility box limit the sidewalk clear-zone to less than 5 feet.

2. Design hatches for below-ground utilities to match the adjacent sidewalk. Locate hatches away from snow removal path. Utility hatches located in the sidewalks may become a public art opportunity for the community, to uniquely mark the place. This shall be done in coordination with the regulating utility provider.

3. Locate public telephones and emergency phones according to demonstrated needs and campus police recommendations.

OUTDOOR GATHERING AREAS

The 2002 Campus Master Plan identified the need to protect open spaces, as well as enhance existing and create new outdoor gathering areas. As more specific plans evolve for areas of campus that are associated with outdoor gathering areas and open spaces, the terms need to be defined. For purposes of future planning, the following will apply:

Open Space – an unsheltered, outdoor area that is subject to negligible-to-minimal development and is intended for individuals, small groups, and occasional larger groups, all in activities that place little demand on the area. Such open spaces often contain a viewshed and no buildings. A minimally developed open space can be a park. Designed to maximize the natural setting of a particular area, a park provides a place where both organized activities as well as individual pursuits (recreation, rest and relaxation, etc.) can occur. A park can have a theme, and it is distinguished from a plaza by the absence of surrounding built architecture and heavy traffic flow (pedestrian and/or vehicular). However, it may need to include restroom facilities.

Outdoor Gathering Area – a moderately developed area that provides interest, encourages interaction, and facilitates movement between adjacent buildings. Outdoor gathering areas would include plazas, approaches to building entries, and shuttle stops, including shelters. Plazas, as distinct from parks, are intended for relatively heavy use by pedestrians and may include some vehicular traffic and parking (e.g.. West Ridge and Cornerstone Plazas).

Similar features that may be found in open spaces and gathering areas include an emphasis on

The campus community uses tables near Constitution Hall year round.

Students at the reconstructed Circle of Flags in Cornerstone Plaza.

The recreational fields are important to the open space character as well as the active life of the campus and community.

the natural environment, outdoor art, furnishings such as picnic tables, benches, etc., lighting and wayfinding signs.

Outdoor gathering places should be designed for all seasons. They should provide interest, encourage interaction, and facilitate movement between adjacent buildings. Outdoor gathering places, such as plazas, building entries, and shuttle stops, may use a distinct pavement type.

1. Provide a variety of seating arrangements to allow for conversation, people watching, or quiet contemplation.

2. Orient seating to take advantage of sun at all times of year.

3. Where appropriate, integrate art into outdoor gathering places.

4. Provide electrical outlets for special activities such as seasonal lighting, performances, and ice carving. Outlets should be located where they are not susceptible to damage and can be integrated into the adjacent landscape.

5. Provide emergency phones in coordination with campus police.

6. Provide space for snow removal and storage as described in Section 02000 of the UAF Design Standards.

7. Define spaces and direct views with the composition of landscape components, including tree massings, pavement, furnishings, etc.

8. Use native and nonnative plants as indicated on the UAF Campus Landscape Palette for special outdoor use areas including plazas, quads, courtyards and building entries.

9. Use native plants as indicated on the UAF Campus Landscape Palette for restoration of the development site where adjacent to undisturbed areas.

10. Use ornamental species from the UAF Campus Landscape Palette to enhance the character of the space.

11. Include planting beds for seasonal flowers at buildings if indicated on the Seasonal

Flower Planting Plan. *Note: The Seasonal Flower Planting Plan is to be developed. See Section 3, Implementation Strategy.*

RECREATION AREAS

1. Design the expansion and/or relocation of recreational fields as part of the campus landscape.

2. Direct ice- and snowmelt and stormwater runoff away from recreational fields.

3. Encourage appropriate use of the campus landscape with a program of educational signs, policing, and barriers that complement the adjacent elements. Inappropriate use includes bicycling off the designated trails, snow machines, off-leash dogs.

LANDSCAPE RESTORATION AND ENHANCEMENT

LANDSCAPE RESTORATION

1. Restore landscape areas immediately after damage has occurred to minimize soil erosion and habitat degradation, and to enhance the campus.

2. Incorporate interpretive signage near areas of pedestrian activity to raise the community's awareness of the value of native habitat and the steps toward restoration.

SEASONAL FLOWER PLANTING

1. Plant flowers at focal points identified on the Seasonal Flower Planting Plan. *Note: The Seasonal Flower Planting Plan is to be developed. See Section 3, Implementation Strategy.*

2. Avoid plantings in small, hard-to-maintain areas.

3. Prioritize planting efforts to minimize maintenance through the use of large beds, and proximity to a water source and/or within reach of the water truck.

Boulders installed at the base of the slope and groundcover will reduce erosion.

The stone retaining wall along North Chandalar is beautiful, but drainage should be redirected away from the sidewalk.

4. Consider the scale of the space; use a single species and color for grand spaces—at campus entrances, for example—and more variety of color and texture in more intimate spaces.

5. Cluster large plant containers in masses.

LANDSCAPE COMPONENTS

This section guides the use of particular materials and techniques for use in each project type as described previously. Construction specifications are required for each project to address the site conditions and design goals.

GRADING AND DRAINAGE

1. Sculpt landforms to blend with the surrounding landscape.

2. Create bioswales to collect surface runoff before it crosses pavement areas and to reduce puddling and damage to walkways. Bioswales may be grass-lined where adjacent to a lawn area, or planted with low shrubs and grasses. They should be graded to direct water away from paved areas.

3. Direct snow melt away from buildings and circulation routes.

4. Locate drainage basins throughout surface parking lots to collect storm water. These basins should contain native plant materials that thrive in wet conditions.

5. Follow the UAF Design Standards to minimize the need for retaining walls.

6. Slopes requiring retaining at a height greater than 3 feet should be terraced for planting areas a minimum 5 feet wide. Exceptions must be approved by the CLS.

7. Site retaining walls should be designed to provide seating where appropriate. In such cases walls should be 16 inch—18 inch tall, and as wide.

8. Use forms and materials for fences and/or site walls that complement the adjacent architecture and site design. Chain link fencing is not appropriate.

The 18-inch-tall concrete retaining walls at the Natural Sciences Facility step up the slope, and offer seating.

Flat face precast concrete block walls can be designed to contribute to the campus character.

An example of precast concrete block retaining wall in an ashlar pattern.

9. Construct site retaining walls using native stone, poured-in-place concrete, or precast concrete block.

10. Precast concrete block retaining walls should be rectangular with a flat face. A minimum of three sizes of blocks should be used following an ashlar pattern. The color of precast concrete blocks should match the adjacent soil color, adjacent pavement, or building.

PEDESTRIAN PAVEMENT

Pedestrian pavement is intended to be a background design element, allowing the activity of the surrounding use to predominate. Patterns should be simple and respond to their location. Use pavement materials in their primary forms, rather than as imitations of another material.

1. Use plain gray concrete with a medium broom finish as the standard campus paving for sidewalks and pedestrian areas, except where special paving is designated in gathering places. (Refer to the UAF Design Standards, Section 02500)

2. Use pavement materials in their elemental form, such as concrete (plain, colored, scored and/or with exposed aggregate), or precast concrete pavers.

3. For colored pavement, use earth tones found in the region. Any deviation from the

campus standard gray must provide the specific mix for future repair.

4. Design pedestrian pavement of designated accessible routes to meet the Americans with Disabilities Act (ADA) criteria for slopes, width, and finish.

PLANTING

Guidelines for trees and other planting across the campus are intended to ensure that plants are used appropriately for their function and location and can be maintained in the proper manner.

1. Use color, texture, and form of plants in the composition of landscape spaces.

2. Meet the UAF Design Standards (Section 02900) in the placement of plant materials in relation to buildings and utilities.

3. Make planting areas a minimum of 5 feet by 8 feet for flower, groundcover, and shrub beds. Minimum area for tree planting is 10 feet by 10 feet..

4. Plant trees, shrubs, and groundcover in masses within planting areas.

5. Provide 40 square feet of water- and air-permeable landscape area at the base of each tree, within the drip zone, using either a tree grate (in highly used pedestrian areas) or groundcover or shrubs and mulch (in low-use areas).

6. Maintain trees along sidewalks and in parking lots with a clear-zone (between the top of pavement and bottom limb) of 8 feet above the sidewalk and 13 feet 6 inches above the street.

7. Comply with all fire safety standards.

8. Use tree grates in pedestrian pavement at locations of high pedestrian traffic such as in plazas, quads, and courtyards.

9. Use tree grates, whether prefabricated or one-of-a-kind, with openings no greater than 1/4 inch meeting current ADA code.

The trees next to Wickersham provide clearance for pedestrians and vehicles.

10. Fill the space between the finish grade of the tree and the tree grate with gravel larger than 1/4 inch to limit the accumulation of debris under the grate while still allowing air penetration.

11. Use tree grates with a minimum 12-inch diameter opening for the tree and with removable sections that allow for the growth of the tree.

12. Create a simple ground plane of lawn in areas of active use.

13. Design lawn areas for efficient maintenance.

14. Do not install lawn on slopes greater than 3:1.

15. Use low-maintenance grasses on slopes steeper than 3:1 (e.g., the slope below Butrovitch) or in areas of low pedestrian use, as determined by the CLS.

16. Conduct soil testing in the site development stages to obtain recommendations to improve soil fertility and to determine if subsurface drainage and aeration systems are required to maintain the growth of trees. (Refer to the UAF Design Standards, Section 02900).

17. For security, locate tree massing to allow sight lines and not obscure lighting.

18. Use the Campus Landscape Plant Palette unless approved by the CLS.

19. Do not use nonnative plants that have been identified as noxious and invasive.

CAMPUS LANDSCAPE PLANT PALETTE

The following plant palette identifies appropriate plants for the UAF campus and greater Fairbanks community. It is organized by plant form:

- Bulb
- Fern
- Grass, Annual, Groundcover
- Herbaceous Perennial
- Shrub
- Tree

Recommended locations and plant characteristics are referenced for each plant.

Form	Native, Natualized Plant	Common Name	Scientific Name & Cultivars	Locations: White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Plant Characteristics: Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
Bulb																										
B		Lily, Asiatic Hybrid	*Lilium* sp.: many cultivars															■							3 - 5	multi
B	■	Lily, Chocolate	*Fritillaria camschatcensis*								■						■	■	■					■		1.5	maroon
B		Lily, Martagon hybrids	*Lilium* X Martagon															■							3	
B		Lily, Siberian Coral	*Lilium tenuifolium*															■							2	
B		Squill, Siberian	*Scilla sibirica*														■	■							0.5	blue
B		Tulip. Tarda	*Tulipa dasystemon (tarda)*														■	■							0.5	yellow-white
Fern																										
F	■	Fern, Braun's holly	*Polystichum braunii*															■	■						2	
F	■	Fern, Ostrich	*Matteuccia struthiopteris*								■							■	■				■		3	
F	■	Fern, Wood	*Dryopteris dilitata*															■	■						2	
Grass, Annual Grass, Ground Cover																										
G	■	Bluegrass, Glaucous	*Poa glauca:* Tundra								■		■		■										1	
G	■	Bluegrass, Kentucky	*Poa pratensis:* Nugget, Park, Merion, Fylking									■	■		■			■							3	
G	■	Bromegrass, Polar	*Bromus inermis x pumpellianus:* Polar												■										4	
G	■	Fescue, Red	*Festuca rubra:* Arctared, Pennlawn, Boreal									■	■		■			■							1.5	
G	■	Hairgrass, Bering	*Deschampsia beringensis:* Norcoast											■	■										4	
G	■	Hairgrass, Tufted	*Deschampsia caespitosa:* Nortran										■		■			■						■	4	
G	■	Polargrass	*Arctagrostis latifolia:* Kenai, Alyeska											■	■										4.5	

		Common Name	Scientific Name & Cultivars	Locations																Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
G	■	Reedgrass, Bluejoint	*Calamagrostis canadensis:* Sourdough											■				■						■	4-6	
AG	■	Sloughgrass	*Beckmannia syzigachne:* Egan										■	■											3	
G		Timothy	*Phleum pratensis:* Engmo								■		■		■										3	
G	■	Wheatgrass	*Elymus macrourus (Agropyron macrourum)*							■			■		■										3	
G	■	Wheatgrass	*Elymus alaskanus (Agropyron violaceum)*																							
G	■	Wheatgrass, Slender	*Elymus trachycaulus*							■			■		■											
G	■	Wheatgrass	*Agropyrum pauciflorum:* Wainwright strain																							
G	■	Wheatgrass, bearded	*Agropyron subsecundum*												■											
G	■	Wheatgrass, Bluebunch	*Agropyron spicatum*												■											
GC	■	Alyssum, American	*Alyssum americanum*													■	■								0.5	
GC	■	Bearberry, Black Alpine	*Arctostaphylos alpina*														■						■		0.5	
GC	■	Bearberry, Red-berried	*Arctostaphylos rubra*	■	■			■	■																0.5	
GC	■	Bunchberry	*Cornus canadensis*															■	■						0.5	white
GC	■	Cranberry, Bog	*Oxycoccus microcarpus*						■					■											0.5	
GC	■	Crowberry	*Empetrum nigrum*	■		■		■	■								■	■	■				■		0.5	
GC	■	Dryas, mountain avens	*Dryas octopetala*													■	■	■							0.5	white

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
GC	■	Kinnikinnick	*Arctostaphylos uva-ursi*	■	■								■			■		■	■				■		0.5	pink
GC		Juniper, Blue Rug	*Juniperus horizontalis:* Wiltonii															■	■						1	
GC		Lily of the valley	*Convallaria majalis*															■	■						1	white
GC	■	Lingonberry, lowbush cranberry	*Vaccinium vitis-idaea* subsp. *minus*	■	■	■			■									■	■				■		0.5	pink
GC	■	Nagoonberry	*Rubus arcticus:* Kenai Carpet										■					■	■						1	pink
GC	■	Pussytoes, Common	*Antennaria dioica*								■					■	■	■	■						1	white, pink
GC		Strawberry, Hybrid	*Fragaria sp.:* Toklat, Pioneer															■							1	white
GC	■	Strawberry, Wild	*Fragaria virginiana*										■		■								■		1	white
GC	■	Twinflower	*Linnaea borealis*																■						0.5	
GC		Violet, Altai	*Viola altaica*															■	■						1	purple
GC	■	Willow, Netleaf	*Salix reticulata*														■	■							0.5	
GC		Three-toothed cinquefoil	*Potentilla tridentata*															■	■						1	white

		Common Name	Scientific Name & Cultivars	Locations																Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
Herbaceous Perennial																										
HP	■	Anemone, Cutleaf	*Anemone multifida*												■											
HP	■	Anemone, Narcissus-flowered	*Anemone narcissiflora*								■				■											
HP		Arnica	*Arnica cordifolia*								■		■		■	■										1	yellow
HP		Arnica	*Arnica lessengii*								■		■		■	■										1	yellow
HP		Arnica, Alpine	*Arnica alpina* subsp. *attenuata*								■		■		■	■	■									1	yellow
HP		Arnica, Frigid	*Arnica frigida*								■		■		■	■	■	■								1	yellow
HP		Aster, Siberian	*Aster sibiricus*								■		■		■	■		■								1	lavender-yellow
HP	■	Bedstraw	*Galium boreale*								■		■		■	■		■					■			1.5	white
HP		Bellflower, Clustered	*Campanula glomerata*															■								1.5	purple
HP		Bellflower, Peach-leaved	*Campanula persicifolia*															■								1.5	
HP		Bleeding heart	*Dicentra spectabilis*															■	■							2.5	pink
HP	■	Bluebell	*Mertensia paniculata*								■		■		■			■	■							2	blue
HP		Bluebells	*Campanula rotundifolia*														■	■								1	blue
HP	■	Buckbean	*Menyanthes trifoliata*											■												1.5	white
HP	■	Bulrush	*Scirpus validus*											■												4	
HP	■	Camas, Death	*Zygadenus elegans*								■		■		■	■										1.5	white
HP	■	Cattail	*Typha latifolia*											■										■		4 - 5	
HP		Chives	*Allium schoenoprasum:* 'Sterile' and others															■								1 - 2	lavender
HP	■	Chives, Wild	*Allium schoenoprasum (native)*								■		■	■	■			■					■			1.5	lavender
HP	■	Cloudberry	*Rubus chamaemorus*											■									■			0.5	

				Locations															Plant Characteristics						
Form	Native, Natualized Plant	Common Name	Scientific Name & Cultivars	White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
HP	■	Coltsfoot	*Petasites frigidus*					■	■					■											1	
HP		Columbine, Colorado	*Aquilegia caerulea*															■	■						2	blue
HP		Columbine, Hybrid	*Aquilegia* sp.: Fairyland mix, Harlequin Mix, McKana Giant mix, Dynasty, Nora Barlow, Star McKana Giant															■	■						2.5	multi
HP		Columbine, Siberian	*Aquilegia sibirica*															■	■						2.5	purple
HP	■	Columbine, Sitka	*Aquilegia formosa*											■	■		■	■	■						2	red-yellow
HP		Columbine, White	*Aquilegia flabellata:* Nana Alba															■	■						2.5	white
HP	■	Cottongrass	*Eriophorum spp.*											■											1.5	
HP		Daisy, Ox-eye	*Chrysanthemum leucanthemum*										■		■			■							1.5	white-yellow
HP		Daylily	*Hemerocallis flava*															■							3	yellow
HP		Daylily	*Hemerocallis middindorfi*															■							3	orange
HP		Daylily	*Hemerocallis minor*															■							2.5	yellow
HP		Delphinium, Russian	*Delphinium elatum*															■							10+	purple
HP		Delphinium, Hybrid	*Delphinium* x *cultorum:* Pacific Coast Hybrids Magic Fountains series, Clear Springs series, etc.															■			■				6+	white, lavender, pink, blue
HP		Dianthus	*Dianthus plumarius:* Smokey														■	■							1.5	pink
HP		Dianthus	*Dianthus superbus:* Fantasy Mix															■							2	white. Pink, lavender

		Common Name	Scientific Name & Cultivars	Locations																Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
HP	■	Draba	*Draba densifolia*														■	■							0.5	yellow
HP	■	Fireweed	*Epilobium angustifolium*		■	■				■	■		■		■	■							■		4+	pink
HP	■	Fireweed, Dwarf	*Epilobium latifolium*										■	■				■							1.5	pink
HP	■	Fivefinger, Marsh	*Potentilla palustris*						■					■											2	maroon
HP	■	Flax, Blue	*Linum perenne*								■		■		■			■							1.5	
HP	■	Fleabane	*Erigeron glabellus* subsp. *pubescens*								■		■		■										2	white, pink, lavender
HP	■	Geranium, Wild	*Geranium erianthum*								■		■		■			■							2	lavender
HP		Globeflower, Chinese	*Trollius chinensis*															■	■						3	orange
HP		Globeflower, European	*Trollius europaeus*															■	■						1-3	yellow
HP		Globeflower, Swamp	*Trollius laxus*														■	■							1	cream
HP	■	Goldenrod	*Solidago multiradiata*								■		■		■	■									1	gold
HP	■	Grass of Parnassus	*Parnassia palustris*					■	■		■		■	■	■										1	white
HP	■	Great Burnet	*Sanguisorba officinalis*								■		■		■	■		■							3	burgundy
HP		Harebell	*Campanula lasiocarpa*													■	■	■							0.5	blue
HP	■	Iris, Alaska wild	*Iris setosa* subsp. *Interior*								■		■		■			■							1-4	lavender, white, rose, purple
HP	■	Jacob's ladder	*Polemonium acutiflorum*								■		■		■			■							2.5	blue
HP	■	Jacob's ladder, Beautiful	*Polemonium pulcherrimum*								■		■				■	■							1.5	blue
HP	■	Harlequin Flower	*Corydalis sempervirens*	■						■	■		■		■			■							2.5	pink-yellow
HP		Larkspur, Wild	*Delphinium glaucum*	■						■	■		■		■			■	■						4+	white

		Common Name	Scientific Name & Cultivars	Locations																Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
HP	■	Lupine, Arctic	*Lupinus arcticus*								■		■		■			■							3	
HP		Lupine, Nootka	*Lupinus nootkatensis*															■							3+	lavender
HP		Maltese Cross	*Lychnis chalcedonica*															■							4	scarlet
HP	■	Marigold, Marsh	*Caltha palustris*											■											1.5	yellow
HP	■	Mastodon Flower	*Senicio congestus*						■					■											4	
HP	■	Meadowrue	*Thalictrum sparsiflorum*								■				■				■						2	yellow
HP	■	Monkshood	*Aconitum delphinifolium*	■	■	■					■							■	■						3	
HP	■	Moss campion	*Silene acaulis*														■	■							0.5	pink
HP		Onion, Altai	*Allium altaicum*															■							3	white
HP		Onion, Senescent	*Allium senescens*															■							2	white
HP		Onion, Welsh	*Allium fistulosum*															■							3	white
HP	■	Orchid, Calypso	*Calypso bulbosa*	■															■						0.5	pink
HP	■	Oxytrope, Deflexed	*Oxytropis deflexa*							■	■		■				■								1	white suffused with purple or pink
HP	■	Oxytrope, Northern	*Oxytropis campestris*							■	■		■				■								1	white, yellowish
HP	■	Oxytrope, viscid	*Oxytropis viscida*							■	■		■				■								1	
HP	■	Oxytrope, Yellow	*Oxytropis maydelliana*							■	■		■				■								1	yellow
HP		Parsley, Wild	*Cnidium cnidifolium*							■	■				■										2	purple
HP	■	Pasqueflower, Wild crocus	*Pulsatilla patens*										■		■	■	■	■					■		1	lavender

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
HP		Peony, Herbaceous	many cultivars available such as Edulis Superba, Ann Cousins, Festiva Maxima, Karl Rosenfeld, Sarah Bernhardt															■							3	white, pink, red
HP		Pink, Carthusian	*Dianthus carthusianorum*															■							1.5	red
HP	■	Poppy, Alaska	*Papaver alaskanum*								■		■				■	■							1	
HP		Poppy, Portage	*Papaver alboroseum*														■	■							0.5	pink
HP	■	Potato, Wild	*Hedysarum alpinum* subsp. *americanum*								■		■		■	■		■				■			3	pink
HP	■	Primrose, Wild	*Primula incana*								■				■		■								0.5	pink
HP		Raspberry, Red	*Rubus idaeus* subsp. *strigosus*							■					■								■		5+	
HP		Rhubarb	*Rheum rhabarbarum:* Canada Red, Strawberry, Victoria and others															■							4	cream
HP	■	Rhubarb, Wild	*Polygonum alaskanum*								■		■		■				■				■		4+	cream
HP	■	Roseroot	*Sedum rosea*														■	■					■		1	burgundy
HP	■	Sage, Tilsey	*Artemisia tilesii*								■				■		■						■		5	
HP		Salvia, Russian	*Phlomis tuberosa*															■							4+	pink
HP	■	Saxifrage, Prickly	*Saxifraga tricuspidata*													■	■								0.5	
HP	■	Shooting star	*Dodecatheon frigidum*								■						■	■							1	pink
HP		Sneezewort	*Achillea ptarmica:* The Pearl															■							2.5	white
HP		Snow-in-summer	*Cerastium tomentosum*														■	■							0.5	white
HP		Sour Dock	*Rumex crispus*							■				■	■								■		2	

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
HP		Speedwell	*Veronica incana*														■	■							1.5	lavender
HP	■	Speedwell, Aleutian	*Veronica grandiflora*														■								0.5	lavender
HP		Speedwell, Spike	*Veronica spicata*															■							3	lavender white
HP	■	Starflower	*Trientalis europaeus*															■	■						0.5	white
HP	■	Strawberry Spinach	*Chenopodium capitatum*							■	■		■		■								■		1.5	
HP	■	Sweet Pea, Wild	*Hedysarum Mackenzii*								■		■		■			■							2	pink
HP		Twisted stalk	*Streptopus amplexifolius*																■			■			2.5	
HP	■	Wild Calla	*Calla palustris*											■									■		1	
		Chamomile, Wild	*Tripleurospermum inodoratum*								■		■		■			■							1	white-yellow
HP	■	Wintergreen, Large-flowered	*Pyrola grandiflora*	■	■	■												■	■						0.5	
HP	■	Wintergreen, Pink	*Pyrola asarifolia*	■	■	■											■	■	■						0.5	
HP		Yarrow, Boreal	*Achillea borealis*								■		■												2	white
HP	■	Yarrow, Siberian	*Achillea sibirica*								■		■												2	white

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
Shrub																									
S	■	Alder, Green	*Alnus crispa*				■		■	■					■	■		■	■		■	■	■	■	15	yellow
S	■	Alder, Thinleaf	*Alnus incana*				■		■	■					■	■		■	■		■	■	■	■	15	yellow
S		Almond, Russian	*Prunus triloba*															■							4	pink
S	■	Birch, Dwarf	*Betula nana*						■						■	■	■	■	■			■	■		3	yellow
S	■	Birch, Shrub	*Betula glandulosa*	■	■				■						■			■	■		■	■			10	yellow
S	■	Blueberry, Bog	*Vaccinium uliginosum*	■	■				■									■					■		1-3	white, pinkish
S	■	Bog Rosemary	*Andromeda polifolia*					■	■								■	■							1	pink
S		Cherry, Pin	*Prunus pennsylvanica*															■			■				10	white
S	■	Cinquefoil	*Potentilla fruticosa:* Gold Drop													■		■	■						3	yellow
S	■	Cinquefoil (native)	*Potentilla fruticosa*	■			■		■						■				■						3	yellow
S		Cotoneaster, Peking	*Cotoneaster acutifolius*															■				■		■	4	pink
S		Cranberry, Highbush	*Viburnum trilobum*															■			■	■		■	5+	white
S	■	Cranberry, Highbush (native)	*Viburnum edule*	■	■	■	■			■								■	■		■	■	■	■	5+	white
S	■	Currant, Wild Black	*Ribes hudsonianum*			■												■					■	■	4	
S	■	Currant, Wild Red	*Ribes triste*	■		■												■	■				■	■	3	

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
S	■	Dogwood, Redosier	*Cornus sericea (stolonifera)*							■				■		■		■	■			■		■	5+	white
S		Honeysuckle, Sweetberry	*Lonicera caerulea* var. *edulis*															■				■			5	yellow
S		Honeysuckle, Tatarian	*Lonicera tatarica*															■				■			5+	white, yellow, pink
S	■	Juniper, Common	*Juniperus communis*		■											■		■							4	
S	■	Juniper, Creeping	*Juniperus horizontalis:* Bar Harbor, Yukon Belle,															■	■						1.5	
S	■	Juniper, Creeping (native)	*Juniperus horizontalis*													■		■	■						1	
S	■	Leatherleaf	*Chamaedaphne calyculata*						■					■											3	
S		Lilac, Hybrid	*Syringa* sp., cultivars mostly of Syringa x josiflexa and S. x prestoniae I.e. Royalty, James Macfarlane															■			■				5 +	pink, white, lavender
S		Lilac, Late	*Syringa villosa*															■			■				20	pink, white, lavender
S		Maple, Amur	*Acer ginnala*															■			■				12	

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
S		Mountain Ash, European	*Sorbus aucuparia*															■			■			■	15	white
S	■	Mountain ash, Greene's	*Sorbus scopulina*												■	■		■	■		■			■	15	white
S		Ninebark, Singleseed	*Physocarpus monogynus*															■				■			5	white
S		Peashrub, Siberian	*Caragana arborescens*															■			■	■			15	yellow
S		Pine, Dwarf mugo	*Pinus mugo mughus**															■							4	
S		Rose, Hybrid	*Rosa* sp. (mostly rugosa hybrids): Lac La Nonne, Lac Majeau, Hansa, Altai scotch															■			■			■	3 - 6	pink, white
S	■	Rose, Prickly	*Rosa acicularis*	■	■	■	■	■		■					■	■		■	■			■	■	■	4+	pink
S		Rose, Rugosa	*Rosa rugosa*															■						x	3	pink, white
S	■	Sage, Alaska	*Artemisia alaskana*		■								■		■	■	■	■							1.5	
S	■	Saskatoon, Serviceberry (native)	*Amelanchier alnifolia*												■				■		■	■	■	■	12	white
S	■	Silverberry	*Elaeagnus commutata*				■			■					■			■			■		■	■	8+	yellow
S	■	Soapberry	*Shepherdia canadensis*	■	■		■												■				■		4	
S	■	Spiraea, Alaska	*Spiraea stevenii (beauverdiana)*						■								■	■	■						4	white
S		Spiraea, False	*Sorbaria sorbifolia*															■			■			■	4+	cream
S		Spiraea, Vanhoutte	*Spiraea x vanhouttei*															■				■			4	white
S	■	Sweet gale	*Myrica gale*						■	■				■											3	

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
S	■	Willow, Alaska bog	*Salix fuscescens*						■					■											1	
S	■	Willow, Barclay	*Salix Barclayi:* Long			■			■	■				■							■				10	
S	■	Willow, Bebb	*Saxix bebbiana:* Wilson	■	■	■		■		■					■				■		■	■	■		25	
S	■	Willow, Pacific	*Salix lasiandra:* Roland							■				■							■		■		20	
S	■	Willow, Blueberry	*Salix myrtillifolia*					■	■																1.5	
S	■	Willow, Diamondleaf	*Salix planifolia subsp. pulchra*						■	■				■											6	
S	■	Willow, Feltleaf	*Salix alaxensis,* Rhode	■			■			■				■	■	■					■	■	■		30	
S	■	Willow, Grayleaf	*Salix glauca*					■	■	■															4	
S	■	Willow, Littleleaf	*Salix arbusculoides*	■			■	■		■															12	
S	■	Willow, Scouler	*Salix scouleriana*	■	■	■	■							■											20	
Tree																										
T	■	Birch, Alaska Paper	*Betula neoalaskana*	■		■		■							■	■		■	■	■	■		■	■	60	
T		Chokecherry	*Prunus virginiana*															■			■	■		■	20	white
T		Chokecherry, Amur	*Prunus maackii*															■	■	■	■			■	45	white
T		Chokecherry, Red-leaved	*Prunus virginiana,* Shubert															■	■	■	■			■	20	white
T		Crabapple	*Trailman, Dolgo (warm sites only), Rescue, Heyer 12*															■			■			■	15-20	white, pink
T		Crabapple, Siberian	*Malus baccata*															■	■	■	■	■		■	30	white
T		Elm, Siberian	*Ulmus pumila*															■	■	■	■	■		■	50	
T		Larch, Siberian	*Larix sibirica*															■	■	■	■				100	
T		Pear, Ussurian	*Pyrus ussuriensis*															■	■		■	■		■	15	white

		Common Name	Scientific Name & Cultivars	Locations															Plant Characteristics						
Form	Native, Natualized Plant			White spruce-hardwood forest	Quaking aspen forest	Paper Birch forest	Balsam Poplar Forest	Open, low-growing spruce forest	Bogs	Floodplain shrub thickets	Wildflower meadows	Lawns	Roadsides	ditches/streambanks	Grassy meadows/hillsides	Steep, rocky slopes	Rock Gardens	Ornamental (full sun)	Ornamental (shade or partial shade)	Specimen tree	Visual screen	Hedge	Traditional, native value	Winter interest	Mature Height (ft)	Flower Interest
T		Pine, Lodgepole	*Pinus contorta* var. *latifolia*												■	■		■	■	■	■			■	75	
T		Pine, Scotch	*Pinus sylvestris*															■	■	■	■			■	75	
T		Pine, Siberian	*Pinus sibirica (Pinus cembra sibirica)*															■	■	■	■			■	30	
T		Pine, Swiss Stone	*Pinus cembra*												■			■	■	■				■	30	
T	■	Poplar, Balsam	*Populus balsamifera*				■							■									■		100	
T	■	Spruce, Black	*Picea mariana*		■	■		■													■		■		60	
T	■	Spruce, White	*Picea glauca*	■	■	■	■	■							■	■		■	■	■	■		■	■	80	
T	■	Tamarack	*Larix laricina ssp. alaskensis*					■											■		■		■		60	
T		Birdcherry, European	*Prunus padus*															■	■	■	■			■	45	white

Irrigation from the water truck requires vehicular access and high maintenance.

IRRIGATION

1. Provide irrigation hose bibs for planting areas associated with new buildings, gathering places, parking lots, and roads. Refer to Section 02900 of the UAF Design Standards for specifications.

2. Provide irrigation hose bibs for new lawns and flowerbeds.

3. Design areas adjacent to hose bibs to allow for functional irrigation and maintenance access.

4. In areas where a hose bib is not available, locate planting within reach of the campus water truck and/or where storm water drainage can be collected.

5. Consider installing self-draining underground irrigation piping in raised beds.

SITE FURNISHINGS

Site furnishings include functional elements—such as seating, trash receptacles, and bicycle racks—that help establish and reinforce the image and character of the campus. Standardizing elements helps to unify the campus visually, reduces maintenance, and simplifies replacement.

General

Seating along Yukon Drive is well sited off the pedestrian path, with room for maintenance vehicles.

1. Install a family of stock items that coordinate with campus lighting and signage and that are durable, attractive, and easy to maintain in the subarctic.

2. Coordinate colors and style of similar materials to unify the campus. Avoid painted materials when possible. Natural color of the material is preferred to minimize long-term maintenance and express the campus character. Brushed aluminum is preferred where metal, is used.

3. Use recycled materials when possible. In place of wood, use recycled wood composite in its natural color.

4. Group different site furniture—benches, trash receptacles, ash urns, etc.—where

practical, to enhance use and reduce clutter.

5. Locate light posts, signage, and furnishings in a way that does not interfere with proper maintenance practices, most notably snow removal.

6. Over time, remove and replace site furniture to coordinate with the evolving campus image.

Seating

1. Provide seating throughout the campus to promote collegiality, enjoyment of the outdoor space, and enhance the pedestrian character of the campus.

2. Locate seating in groups and individually at building entrances, in gathering places, and along streets and paths, in sight of campus activity, and to capture distant views.

3. Make seating height between 14 and 18 inches above the pedestrian pavement and level with the horizon. The depth of each seat should also be between 14 and 18 inches. Appropriate materials for seating include low walls, large boulders, as well as benches. Seating with back supports should conform to the human body and contribute to a relaxing place to sit.

4. Use one standard bench that is durable and comfortable. Benches should be linear in design, with a metal frame and recycled wood composite slats. Benches may have back supports as the composition of furnishings allows. Benches without backs are useful where seating is accessible from either side.

5. Locate seating in a way that prevents inappropriate use by skateboards, skates, or activities other than seating.

6. Use picnic tables that have a center post permanently fixed to the pavement. A mix of seating arrangements should be provided, including tables with four seats, three seats (allowing a wheelchair user to sit at the table), and two seats. Locate tables out of the maintenance vehicle path.

7. Provide moveable recycled wood composite lumber picnic tables.

Large boulders provide seating at the base of a slope at the edge of a pedestrian path.

An example of a plant container full of summer color.

Campus trash receptacles

Ski Racks

1. Provide ski racks that have the capability to be locked for secure storage of equipment and locate them as appropriate in snow season in coordination with the North Campus Plan.

Bicycle Racks

1. Provide bicycle racks and lockers to promote non-motorized travel. See UAF Design Standards Section 02800.

2. Locate bicycle racks and lockers where they are accessible and secure in all seasons, and where they do not interfere with pedestrian movement or snow removal.

3. Provide some moveable bike racks for temporary use.

4. Coordinate locations of electric bicycle pumps with UAF Facilities Services and the North Campus Plan.

Plant Containers

1. Provide plant containers for summer flowers that can be moved by maintenance staff and stored when not in use.

2. Locate permanent plant containers as appropriate to complement the site design and allow proper maintenance access.

3. Ensure that all plant containers are within reach of irrigation water and have proper drainage.

4. Select plant containers that complement the seasonal planting and adjacent building materials. Avoid plant containers with lettering, logos, and/ or bold patterns.

Trash Receptacles

1. Locate trash receptacles, as appropriate, at building entries; in high traffic areas, all plazas, gathering areas, outdoor smoking areas, and seating areas; and adjacent to any shuttle bus shelter. Avoid locations where they interfere with pedestrian movement.

2. Locate dumpsters according to UAF Design Standards Section 02000.

3. Locate ash urns at outdoor smoking areas and continue to educate the public about their appropriate use. All receptacles should have easily accessible lids that keep water and birds out. See UAF Design Standards Section 02800.

4. Move designated smoking areas at least 50 feet from main building entrances and/or air handlers.

5. Use trash receptacles that are durable, require low maintenance, and can sustain periodic power-washing.

Bollards

1. Avoid the use of bollards through comprehensive site design. Where required, install removable bollards in emergency access routes.

The seatwall on Yukon is located at the intersection of paths and serves to discourage cutting though the landscape.

SITE LIGHTING

Lighting guidelines are intended to present a unifying concept throughout the area, ensure that safety and security criteria are met, follow applicable Fairbanks North Star Borough ordinances, and protect adjacent users from undesirable light spillage. As stated in the UAF Design Standards, Section 16520: "The ability to see the night sky, including stars and auroras, is an important part of the Alaskan experience and exterior lighting shall be designed with this in mind. Light pollution will be minimized. Up-lighting shall be avoided."

1. Meet the UAF Design Standards for exterior lighting.

2. Use full cutoff shades for street and parking lot lights.

3. Design the lighting of utilities, enclosures, and service areas to complement adjacent land uses, architectural lighting, and/or circulation elements.

4. Provide electrical outlets in light poles along Yukon Drive and at pedestrian gathering areas for special events. Outlets should be readily accessible

Example of the light fixture for streets and parking lots.

Fixture for pedestrian pathways.

University of Alaska Museum's sculpture collection enriches the campus.

Student art work is displayed outdoors throughout the year.

Kinetic sculpture of flying machines at the campus Power Plant is activated by the vents.

CAMPUS ART

Artwork sited in public places can enrich the landscape, showcase efforts of area artists, and further draw the community to the campus. UAF's diverse community and regional leadership provide an excellent opportunity for developing a unique public art program. Programs of other universities and cities should be considered in developing goals and methods for enhanced outdoor art.

1. Obtain approval from the CLS for all installations.
2. Designate funding for maintenance of the artwork and associated site prior to selection.
3. Locate installations according to the CLS's Outdoor Art Plan. Individual art works should be located to assure the intent of the effort is met. Each piece can vary widely in its setting requirements; some may need a simple backdrop, while others need to be in the center of things to be seen from all angles.
4. Ensure that contracts with the artist specify issues including the ownership of each piece, terms of each installation, maintenance, whether temporary or permanent and conditions to protect each party from liability.
5. Use lighting to highlight art works as appropriate.
6. Incorporate art works into the wayfinding plan.
7. Maintain and enhance the campus art walk.

A poem sandblasted into a concrete sidewalk.