## South Denali Visitor Complex

# **Site and Facility Concepts**

Draft: 07/11/08

The South Denali Visitor Complex is a gateway to the Alaska outdoors. Visitors who have meaningful experiences at the site will take home not only fond memories, but also a deeper intellectual and emotional understanding of the region. Effective planning of the site and facilities based on interpretation have a positive effect on visitors, garnering future support of the agencies and organizations that manage Alaska's natural resources.

Intimate outdoor experiences are powerful. People remember the fleeting sight of an animal that they encountered and discovered on their own more than one pointed out to them on a tour bus. They remember the warm feel of the sun as it appears from behind a cloud and the caress of wind that blows constantly over the high reaches of Curry Ridge—a contrast to the climate controlled restaurants and lodging. They remember the adventurous journey around an alpine lake, hearing loons call and seeing the landscape reflected in the mirror-like water—a personal experience more powerful than an audiovisual presentation. The subtle serendipitous and dynamic events of Alaska's wilderness are missed by many visitors, who experience the "natural world" through the glass of a bus window, a train observation car, or the deck of a ship.

The South Denali Visitor Complex has great potential to introduce visitors to the "real Alaska outdoor experience," facilitating meaningful connections between people and the land.

Any developments at the South Denali site must be carefully planned to enhance the personal outdoor experience for visitors.

- Developments must consider ways of minimizing impact on the natural site, including physical impact during construction, visual impact after construction is complete, and physical, visual, and auditory impact when opened to visitation.
- Roads and parking lots will be constructed under the brow of the ridge and screened by vegetation to reduce their visual impact, not only for visitors to the site, but also for recreationists on other parts of the Ridge.
- Structures will be designed to aesthetically blend with the natural landscape, while serving as comfortable visual icons for visitors who may be uneasy about a more isolated "wilderness experience."
- The visitor center will be designed as a warm, comfortable gathering place during inclement weather and special events, while serving as a staging area for visitors' outdoor experiences. Large windows will showcase the landscape scenery of mountains, rivers, and the Ridge. The design of the building will encourage visitors to access outdoor viewing areas and the trail system. Visitors will prepare for their outdoor journeys with interactive media and audio-visual presentations.
- A high quality, well planned trail system is essential for enhancing a visitor's outdoor experience. Trails will follow the natural contours of the landscape and access several different types of habitats, providing ample opportunity to experience the dynamic interplay of wildlife, plants, water, and rock. Loops near

- the visitor center will be planned to minimize the disturbance of tundra and high brush vegetation, while discouraging potentially destructive off-trail use.
- Outdoor media on the trails will interpret resources that can be physically observed or experienced on the site and tie those resources to the broader themes.
   Messages will encourage visitors to touch, smell, listen, and explore the Curry Ridge landscape.
- The holistic visitor experience is multi-sensory. Noise pollution must be limited as much as possible to immerse the visitor in natural sounds and reduce disturbance of resident wildlife.

The following facility and site recommendations cohesively convey the primary interpretive theme, enhance the personal outdoor experience, and serve the needs of visitors and Alaska residents.

## **Rationale for South Denali Visitor Center site**

To maximize the personal outdoor experience for visitors, the Curry Ridge interpretive center must meet the expectations of visitors, including expansive views of Mount McKinley and the Alaska Range, provide easy access to different habitat areas, and provide the possibility of observing wildlife. An ideal location for the South Denali Visitor Center is a flat, rocky overlook north of Lake 1787 marked with a prominent erratic boulder. The site is just above dense thickets of alder on a north brow of the Ridge.

Rationale for this location includes:

## Views of Denali/Mt. McKinley and the Alaska Range

- The site provides unique opportunities for visitors, of all ages and abilities, to be immersed in the landscape of wild Alaska. The panoramic vistas and the grand scale of the Alaska Range are contrasted by the intimacy of the lush, sub-alpine environment at the visitor center site.
- The site offers spectacular views of Denali; the icon that many seek to "experience." The view of the mountain here dramatizes Denali's astounding 18,000 foot vertical elevation above the surrounding landscape. This unique view emphasizes that it has the most dramatic local relief of any of the world's tallest mountains.
- Viewers are engulfed in mountain sunlight, cool air, and a panoramic vista of the Alaska Range and Ruth Glacier, showcased across the deep Chulitna River Valley. Unlike exhibits or audio-visual presentations, this scene is dynamic; storms blow in, eagles soar, or sunlight illuminates the mountain peaks. It can be a rich and serendipitous experience that is more valuable because it cannot be guaranteed.
- This vista permits people to see the historic routes that expeditions and climbers have taken to Denali. The vantage point provides an overview of geologic

- landforms like glaciers, outwash plains, rivers, cirques, and U-shaped valleys. This is an excellent staging area to connect viewers to the sweeping stories of geology and the adventures of explorers, pioneers, and climbing expeditions. The Parks Highway is less visible from this vantage point than other similar lookouts.
- High vantage points will naturally attract visitors for diverse and sweeping views of the Alaska Range and the Chulitna River Valley. Several of these overlook sites have been identified, including a knoll west of the site (providing 360 degree panoramic views), a rocky overlook northwest of Lake 1787 (with an impressive view of the entire lake), and a 1,980 foot hill southeast of Lake 1787 (spectacular view of the lake with Mt. McKinley rising behind). These areas are not ideal candidates for the interpretive facility, as it would be visually intrusive on the landscape and require a longer, more invasive road. However, well constructed trails can be built connecting these high points with the interpretive facility to avoid trampling of the tundra habitat.
- Mt. McKinley and the other prominent peaks of the Alaska Range are spectacular at sunset and sunrise, when the snowy peaks glow in the warm light. With its proximity to the Parks Highway, this unique experience has great potential for attracting visitors.

# **Curry Ridge's Diverse Habitats and Significant Resources**

- On days when Mount McKinley is veiled by clouds, a visitor's attention is refocused to the rich colors and textures of the rocky, sub-alpine vegetation on Curry Ridge. The grand scenery becomes subordinate to the intricate microenvironments of the lush habitat surrounding the visitor center. This site is an ideal area to connect visitors with the local landscape, beyond the grand views or anticipation of large mammals. This is an area where visitors can experience the sounds, colors, and textures of the Alaska/Denali habitat and the complex interplay of plants, animals, geology, and hydrology.
- The habitat of this site at about 1,800 feet is a relatively resilient mixture of high brush, alpine tundra, spruce trees, alders, and willows. Dense stands of alder and willow and pockets of wetlands channel hikers along corridors and assist trail planners in directing traffic. The site has the best potential to provide easy access to portions of tundra habitat while protecting it from extreme disturbance. In contrast, the vast tundra at the top of Curry Ridge above 2,000 feet (northeast of the site, separated by a valley) is far more sensitive to disturbance; footprints and snowmobile tracks are evident throughout. The distance from the proposed visitor center site (3-4 miles) and the difficult terrain (steep valleys and slopes), however, will limit the number of visitors who can access this more fragile area.
- This site is in close proximity (about a half mile to mile loop trail) to significant natural features that can effectively connect visitors to the diverse stories of the region. Features include rocky knolls with 360 degree views, the alpine Lake 1787, spruce forests, diverse sedge meadows and other wetlands, protective thickets of alder and willow, active beaver ponds and streams, miniature worlds of alpine tundra, large erratic boulders, glacial striations, and deep potholes.

• With easy walking access to different habitats, visitors have ample opportunities to experience the smaller wildlife that may be overlooked on tour buses. Wildlife observed during planning visits to the site included a pair of hawk owls swooping to the tops of spruce trees, a bald eagle and raven battling in flight, a flock of northern shrikes, sandhill cranes landing to eat the abundance of berries, Pacific Loons calling and diving on Lake 1787, Spruce Grouse, Boreal Chickadees, a Gyrfalcon, and a porcupine.

# **Location on Curry Ridge**

- The proposed visitor center site is nestled on a small east-west arcing lip of Curry Ridge. It is perched above a deep valley that divides the Ridge into a small discrete, lower elevation knoll to the southwest (where the visitor center site is proposed) and a long, arcing, higher elevation ridge to the northeast.
- The visitor center's orientation to the north completely hides the building from traffic driving on the Parks Highway south of Denali View South. The rugged, high topography of K'esugi Ridge, Troublesome Creek, and Curry Ridge proper north of the site will also minimize the view of the building for Parks Highway travelers north of Denali View South.
- The location of the building on the discrete southwest portion of Curry Ridge leaves the majority of the ridge available in a natural state for backcountry use. Due to its lower elevation, the visitor center will be hidden from view at the Curry Lookout. Only users who continue down the ridge (southwest) from the Lookout will be able to see the visitor center when they approach the descent into the valley. Currently, the most popular backcountry trail in the area is along K'esugi Ridge, where the visitor center will always be hidden from view.
- The visitor center will serve as a hub to recreational activities in the Curry Ridge backcountry. Its proposed location, however, will effectively limit the number of visitors that can reach the more sensitive alpine tundra habitats. The majority of use will be concentrated around the visitor center area. A few hardy adventurers can choose to follow a rustic trail down the dividing valley slope, over beaver streams, and up a steep incline to access the higher elevations of Curry Ridge and the Lookout.
- Ample space would be available in close proximity east of this site for shoulder season parking. Topography and spruce trees would help to hide the lot from the interpretive center, Curry Ridge hiking trails, and Parks Highway below.

### South Denali Visitor Center

Alaska **is** America's Frontier. It is, in the collective minds of Americans, the symbol of wilderness and vast open landscapes. It contains examples of architecture that compliment the scale and the materials seen in the landscape. Many classic Alaskan buildings blend with their settings.

The South Denali Visitor Center should grow from its surroundings and synthesize rustic building practices with today's needs and technology. Native and vernacular materials should be used when feasible but even when other materials are utilized, they should harmonize with the surroundings, be durable, consume less energy, and invite visitation.

The visitor center will serve as a gateway and hub to the real experience out on the site, concentrating intense visitor use within a limited area. This portal will serve as a filter that buffers onsite use of the area. It will provide for visitors' physical comforts and needs, orient them, and prepare people to experience the spirit of this place.

## **Architectural Precedents in the Curry Ridge region**

When buildings are designed and constructed in response to the inherent virtues and limitations of a particular site visitors and residents can develop deeper connections to the region's unique sense of place.

There is a strong heritage and local affinity for rustic architecture and design in the Curry Ridge region. Distinct architectural styles include:

- Rough log construction with locally available materials is the rule. Available timber is relatively small diameter and therefore beam construction is usually round, not squared or sawn.
- Vernacular stone design. Geology is varied. Where stone is available it has been
  used for the first few feet of the first story to avoid snow accumulating on log
  footings and bases where rot might occur. Stone fireplaces and chimneys are
  common and firewood stacks were and still are seasonal fixtures in most rural
  Alaska homes.
- Sod and earthen roofs have been used on some rustic cabins. Metal roofs are quite common. Rooflines tend to be steep to reduce snow loads. Building placement often takes advantage of windbreaks and available sun.
- Traditional vernacular buildings included outhouses and elevated caches near homes. Often antlers are displayed over doors and in roof peaks. Satellite dishes are a recent addition to home exteriors.
- Railroads shaped the landscape and influenced settlement and commerce. They became a dominant cultural force in modifying the natural environment. Bridges, grades, avalanche sheds, and tunnels are noticeable landscape features in Alaska. The railroads also ferried commercial building materials into once remote areas.
- Quonset huts and other temporary structures became familiar sights here during WWII and in the post war era. Many still persist.
- Federal land agencies like the National Parks, Forests, or Bureau of Land Management have erected numerous wilderness and park structures that immolate the classic, rustic park design of the 1930s. Alaskans and visitors are accustomed to seeing these structures in natural settings.
- Mining is an architectural and landscape influence in the region.
- Tourism, which has been traditionally concentrated in the summer season, has greatly influenced transportation, lodging, and dining facilities. Services are

measured out by bus loads. Corporate motels and restaurants have replaced mom and pop businesses along the Parks Highway. Mega lodges with full service tourist packages are expanding in this region.

## **Ecological Influences on Curry Ridge**

The proposed visitor center site is a broad windswept ridge top, at times washed by intense sunlight and at other times muted by cool, gray clouds. Weather conditions, topography, and natural communities are diverse, and can influence the design of the visitor center.

Some ecological considerations include:

- Seasonally strong and abundant sunlight countered with long, dark winters. Clear bright skies or cold, wet and cloudy days.
- Intense freeze-thaw cycles
- Dramatic and dynamic geology (Exposed rock, glaciers, outwash plains etc.)
- Vast landscapes that provide little sense of enclosure or shelter. Alpine areas are particularly windy, bright, and, exhibit contrasting extremes of hot or cold.
- Thin mountain soils are unable to retain moisture or to support lush vegetation.
- Some of the most mountainous and wild terrain in North America surrounds the building site.
- Migrations of large flocks of birds and large mammals that may seasonally cross and travel trails and roadways.

# **Architectural Guidelines for the Curry Ridge Visitor Complex**

Based on the region's cultural and ecological considerations, as well as the visions of the partnering agencies, the desires and concerns of Alaska residents, and the needs of Alaska tourists, the following concepts will guide the development of the South Denali Visitor Complex.

- Respect the local climate, topography, and ecosystems, both natural and human.
  - o Locate structures below the brow of hills and mountains
  - o Place buildings on the edges of clearings and other transitional zones
  - o Attempt to duplicate the forms and rhythms of the landscape in built structures
- Size and scale of structures should be appropriate to the wild grandness of the mountain terrain.
  - o Maintain a low profile in treeless areas
  - o Design the structure to appear rustic and substantial
  - o Break up the mass of larger buildings with unified smaller shapes and elements
  - o Repeat simple forms to increase a unified appearance

 Place the building below the brow of the ridge to keep it harmonious with the site and inconspicuous from the Parks Highway

# • Materials should reflect the natural characteristics of the site and be themed to the culture and natural heritage of the region

- Use stone as a base for walls to compliment the region's rugged geology, to visually tie the building to the ground, and to protect the wall from snow and moisture
- O Use building materials that are in scale with the site. Large rock is proportional to the mountainous terrain, while the fine vegetation textures of the alpine tundra can be repeated as the roof covering
- o Make windows large enough to invite views of the panoramic scenery and take advantage of the cherished sunlight
- o Place entrances in protected locations, such as the leeward side of the building, and provide a vestibule or porch for inclement weather.
- Avoid skylights or place them near the roof peak and isolate them from large mammals like bears or moose that may have seasonal access to the roof
- Unify all signage, bridges, viewing platforms, benches, and other landscape elements by using key features of the buildings architecture, such as stone blocks and wood
- Use elements of the natural environment in all walkways, signs, and landscape elements
- o Celebrate wood but use it only where appropriate and use local wood sources whenever possible

# • Building and landscape color should be consciously planned with regard to the site's seasonal color palette

- o Muted earth tones are appropriate to blend a facility into a natural site
- o Color values should be kept in the medium range in Alaska as a response to frequent grey skies and overcast weather
- o Use light colors indoors to optimize ambient light reflection
- Coordinate the colors of the exterior and interior of the building and the site

# • A program of comprehensive sustainable (green) design most appropriate to the site and location should be applied to the planning, construction, and operation of the Curry Ridge Visitor Complex.

Sustainable design has many precedents in Alaska. Two rating systems are used to achieve long-term cost savings and environmental benefits: LEED (Leadership in Energy and Environmental Design) and the Interior Alaska Green Building Initiative. Both award points that result in bronze/certified, silver, gold, or platinum ratings for sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Some local architects cite weaknesses in the LEED rating system which tends to focus more

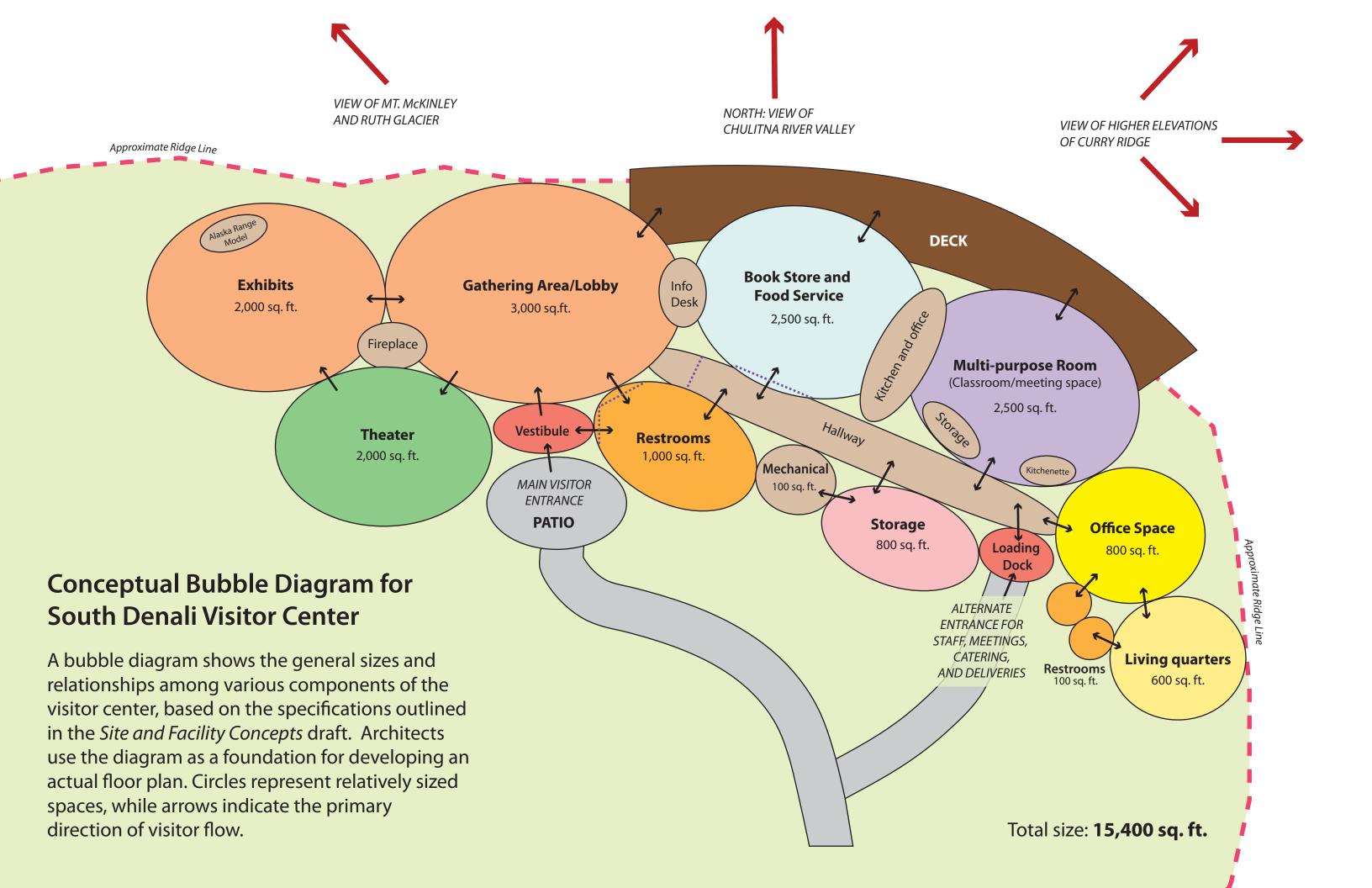
on an arbitrary point system rather than real achievement in appropriate design for efficiency in remote areas of Alaska. The Curry Ridge Visitor Center should strive for the highest possible rating, but temper design decisions with a rational approach with respect for balancing the specific demands of the site, visitor needs, and agency budgets. Building a site specific, sustainable facility should be the goal and a good rating will result.

## Model sustainable design projects include:

- O Eielson Visitor Center in Denali National Park (RIM, Architects) which incorporated an earth-sheltered envelope, green (reclaimed tundra) roof, energy efficient lighting and appliances coupled with solar panel and micro-hydroelectric systems, and recycled materials from the old building. The goal is to achieve a LEED Platinum rating.
- o Homer Public Library (ECI/Hyer Inc., Architects) achieved a LEED silver rating by using almost exclusively local and recycled materials.
- Ocold Climate Housing Research Center at UA Fairbanks used a ceramic heater coupled with hydronic heating coils, a vegetated green roof, a clerestory for lighting, a water recycling system, and many other green design features. The building itself is a testing facility for cold climate design.

# A partial listing of potential sustainable design features:

- o Build on a frost protected shallow foundation
- o Apply a green roof using the plants removed from the construction site
- Use natural day lighting, perhaps with clerestory windows or a wide overhanging roof that minimizes greenhouse heating through glass windows
- o Heat with a natural stone surfaced ceramic heater/fireplace coupled with hydronic heating coils. Use local wood fuels
- o Create natural cross-ventilation throughout
- Use local wood and stone construction materials
- O Use Alaska manufactured cabinets, insulation materials, and other fixtures
- Use efficient toilets and faucets; recycle gray water; consider a composting toilet system; have an onsite water source
- o Use efficient lighting and appliances
- o Create the least site disturbance for the building and access roads
- Consider constructing a net zero energy building, perhaps incorporating a hybrid micro energy system for electricity generation that eliminates the need for running power lines to the site
- Use the Residential Exterior Membrane Outside-insulation Technique (REMOTE) developed by the Cold Climate Housing Research Center which minimizes energy loss and moisture build-up on interior walls



# **Interior Design**

The interior design of the visitor center must assure that there is a smooth flow of visitor traffic from the entry, to the restrooms, past the information desk, through the theater, exhibit hall, sales area, out to the patio and viewing areas, and on to the trail system. It must permit a sense of openness that invites and allows people to move freely from one use area to another.

The interior of the building should encourage visitors to explore, to move quickly through some areas and linger in other spaces. Unobstructed views of the Alaska Range and Chulitna Valley should be provided throughout the interior.

# Patio, Vestibule, and Lobby

The wide walkway **patio** at the front doors is located so that it will be sheltered from prevailing winds and be warmed by sunlight from the south. It should be recognizable as a public entrance and be wide enough to invite large numbers of visitors to pass in each direction.

Glass side lights and doors will allow views into and out of the **vestibule** and help to blend the interior with the out of doors. An air lock is needed to buffer the blustery wind and cold on the ridge. 24 hour emergency telephones will be available here as well as safety information. This entrance is an appropriate location to install shoe cleaning grates which will minimize mud and snow entering the building from the trails. The vestibule could also provide afterhours access to restrooms by locking the doors that lead into the lobby or hallway.

This entrance will provide a clear line of sight through the spacious **lobby** to Mount McKinley. The glass wall will soar to its maximum height at this location offering a panoramic view of the Alaska Range looming above the Chulitna River Valley. This dramatic scene will draw visitors across the room so it is imperative that this lobby area be expansive and open to allow viewers to circulate in an unobstructed manner. This grand, central chamber of the building sets visitors expectations and serves as an open hub for unimpeded travel to other destinations in the building. When visitors near the viewing windows they will see that the adjoining rooms have similar panoramic windows. When the building is crowded, the natural human tendency will be to spread into the other less crowded spaces in the adjacent rooms.

A large scale relief map featuring Denali and the Alaska Range is placed near the windows for orientation to the real peaks seen beyond. When clouds veil portions of the Range, viewers can study the relief map and determine if McKinley is visible in relation to peaks they may be seeing out the window and they can identify them by referencing the corresponding features on the map.

A large stone fireplace (ceramic stove) provides a cozy corner for returning hikers on cool days. This technology works efficiently, burning limited volumes of small diameter wood fuel which is locally available. Comfortable seating and thematic books invite visitors to linger.

For special events in the off season, this spacious room can serve as an elegant hall where groups can gather socially. The large multi-purpose meeting room can be set for meals or other more formal functions while this magnificent room serves for casual mixing with stunning views of the Chulitna Valley, Ruth Glacier, and Mount McKinley.

### **Exhibit Hall**

The viewing windows continue to be a major focus in the exhibit hall. This room contains pods and islands of engaging, three-dimensional exhibits that assist people in understanding the special qualities of the place they are visiting. Exhibits will interpret what is found in the South Denali region.

Themes in the hall may include such topics as the dynamics of the area's geologic processes. Media will be designed for optimal visitor involvement. For example, at one exhibit visitors are challenged to physically uplift a mountain range by turning a sluggish crank and watching the resulting simulated fault rise in the exhibit.

Other exhibits interpret the adaptations that plants and animals have in order to survive in this beautiful, harsh environment.

The exhibit hall's location next to the theater entry promotes extended visitor interaction while they wait for the next film cycle.

#### **Theater**

The theater is large enough to accommodate multiple tour groups. A multi-sensory object theater experience engages visitors in the dramatic geological, ecological and cultural stories of the Alaska Range and Curry Ridge. This dramatic sensory experience brings stories to life and underscores the immersive possibilities awaiting visitors out on the trails.

Object theaters are dynamic presentations that blend moving pictures and audio with real artifacts and objects artistically revealed during the presentation. Special effects, such as surround sound, colored lights, opening curtains, vibrating seats, spray misters, and fans help bring the production to life.

A sample sequence: Climbers on McKinley appear off-screen as shadows inside a tent lighted with a headlamp. The sound of howling wind is accompanied with a breeze through the theater. Voices from the tent converse about the next day's attempt to summit the mountain. Historic photos of the Sourdough and Stuck Expeditions appear on the screen as these first ascents are described by a narrator. A tall spruce pole is lit up on stage with a tattered American flag waving, the air moved by a fan—evidence that the Sourdough Expedition summited the North Peak with little more than homemade equipment, doughnuts, and hot chocolate. The sequence ends with video of modern day climbers on the mountain as the narrator describes the lure and dangers of the climb.

#### Food Concession and Sales Area

This is another large room with a sweeping view of the Alaska Range. It is adjacent to and very visible from the lobby and the front desk. During the shoulder seasons one person can greet visitors and watch the sales area from this location. Peak visitation periods will require that the sales counter be staffed at another location away from this high traffic lobby.

The sales area is integral to the visitor experience. It offers the possibility for profits but also serves crucial public relations needs and can be an effective educational tool. This sales space is large to accommodate surges of customers and to encourage leisurely shopping. Locally produced items can help connect visitors to the site and the community's sense of place.

A small kitchen facilitates limited food preparation by a concessionaire and serves as a staging area for catering special events and meetings in the multi-purpose room. It is centrally located for efficient transportation of food to the meeting room, deck, and indoor dining space. It is located near an exterior wall for access to deliveries from the deck or hallway.

# **Multi-Purpose Room**

This large room is designed for maximum versatility. It can be divided for use as two classrooms for school visits or used for "breakout sessions" in workshops. It can serve community events, be used for formal meetings, and it functions well for catered events. It should have the following features:

- Have a high ceiling, proportional to the room size that facilitates projection onto a large screen.
- Windows and doors for scenic views and access to the deck; light blocking shades on all windows
- Sound proof room divider and sound absorbing floor and ceiling surfaces
- Storage space for tables and chairs

#### Deck

A deck sweeps along the north glassed wall of the sales area and past the meeting room windows. It is accessible from the lobby, book store, and multi-purpose room. During mild weather and peak visitation it provides a comfortable space for eating, relaxing, or for public programs. It allows large outdoor gatherings without fear of trampling vegetation. Its placement permits views of McKinley without blocking the panorama from the lobby and exhibit room windows. A multi-tiered amphitheater on one side of the deck can serve as an ideal outdoor gathering place for interpretive and educational programming.

## Office Space and Living Quarters

The office space serves the seasonal and permanent program staff for the visitor center. It is adjacent to a small efficiency apartment for an on-site caretaker and functions as an off-season contact station. Two small bathrooms serve these areas. These facilities are strategically located to provide views of the parking area, shuttle bus loop and trailheads so that staff can better monitor activity at the site.

### **Public Restrooms**

The restrooms must have enough toilets, urinals, and sinks to accommodate multiple tour groups without lines. The lower visitor services hub should be designed to alleviate some of the demands of these restrooms. As recommended in the section on sustainable design, consideration should be given to water efficiency/recycling technologies and waterless composting toilets.

# Afterhours and Off-Season Use: Alternate Entrance and Closed Spaces

The Alternate Entrance/Loading Dock near one end of the building provides convenient access for staff members, deliveries, catering, and multi-purpose room users.

The visitor center is designed linearly along the ridgeline to maximize views and reduce the footprint on the site. A hallway serves as the spine of the building and offers access to most rooms. This provides a means of closing certain spaces for afterhours or off-season use. The purple dashed lines on the bubble diagram represent areas that might be closed. For example, an evening group could enter through the alternate entrance and have access to the meeting room, hallway, and restrooms, while the other spaces in the building could be locked. This design offers a great deal of flexibility for using the facility. In the off-season, closed spaces could be shut off from electric and heat supplies, thereby enhancing the sustainability and economy of the building.

# Trail System

Since the visitor center will serve as a gateway to the "real Alaska" experience found outside, a high quality network of trails branching out from the visitor center is essential. Well planned pathways will provide opportunities for people to access different habitats of Curry Ridge, observe wildlife in their natural surroundings, and climb to scenic viewing areas, while discouraging off-trail trampling.

The following recommendations will guide the design and layout of the South Denali trail system.

- The visitor center will serve as the heart of a looped, circulatory trail system that is designed to serve concentrations of visitors near the building and provide a continuum of increasingly wild experiences for hikers as they disperse out into the park. Visitors will self-select from a series of experiences that satisfy their schedules, physical abilities, and interests.
- Trail experiences in high use areas near the building will be designed to protect fragile alpine and wetland habitats with boardwalks, bridges, railings, and other barriers that limit human traffic to specific corridors. Trail designers will utilize preexisting natural site barriers as much as possible by routing trails near alder and willow thickets, thick concentrations of ground shrubs, wet swampy areas, and boulders. This site contains a diversity of vegetation and topography that dictates corridors of travel and discourages the creation of shortcuts and off trail travel.
- Trails will be developed to optimize opportunities to explore the mystery, variety, and beauty of the Ridge. Trails will be routed to showcase the diversity of this site. High lookouts will provide panoramic views and offer safe opportunities to see big game. Sheltered, leeward microenvironments on a trail will permit intimate views of plants and small animals. Trails will be designed to offer glimpses of prominent features and destinations, but that also conceal some mysteries that lie ahead.
- Visitors will be encouraged to better appreciate and protect this environment through outdoor interpretive media designed to help connect their interests to the meanings of this unique place.
- Outdoor media materials need to be resistant to the extremes of weather that the Ridge experiences; powerful high-altitude UV sunlight, high winds carrying abrasive dirt and rocks, frigid sub-zero temperatures, and heavy loads of snow and ice.

# **Trail Descriptions**

1. Alpine Interpretive Trails: Main Loop (0.8 mile) and Lake Loop (1.1 miles)

These ADA accessible interpretive loops traverse the alpine area between the visitor center and Lake 1787. The varied topography offers a highly diverse exploration in a very short walk. The loops traverse a variety of alpine plant communities from ridge top to muskeg. Visitors are invited to explore high bare rock ridges, swampy lake shores,

and beaver meadows. Some focal points include a panoramic view from a bald rock knoll that offers a 360 degree view of Curry Ridge and the Alaska Range. Between the visitor center and this scenic destination a boardwalk guides hikers to take a close look at a muskeg pothole in a granite saddle of bedrock. The ridge trail loops through small stands of spruce, past large erratic boulders, and over alpine meadows as it meanders to the knob overlook. A longer boardwalk invites visitors to explore the muskeg bottoms on the edge of the lake.

Interpretation will focus on the messages associated with sub-theme 1: *Curry and K'esugi Ridges are the backbone of Denali State Park, harboring dynamic ecosystems of specially adapted wildlife and plants.* 

Media will encourage visitors to holistically experience the landscape of Curry Ridge with their senses. People will be challenged to see habitats in different ways such as life beneath Lake 1787, the miniature plants of alpine tundra, the inside of a beaver lodge, an eagle's eye view of the ridge. Media will encourage people to use their sense of smell, hearing (songbirds in the spruce forest, loons on the lake, wind, manmade sounds), touch (granite rock... the same found on the summit of Mount McKinley, glacial striations in rock, waxy leaves of tundra plants), and perhaps, on their own initiative, taste as they sample blueberries, crowberries, or low-bush cranberries. To enhance the experience, interpretive media can incorporate participatory components such as tactile models, flip doors, and audio units.

Most visitors to the South Denali Facility will walk these easy loop trails. This intensive use will require careful planning of trail routes and structures. Boardwalks should be used to protect sensitive alpine tundra and wetland habitats. Trails should use natural site features, such as low brush and shrubs, boulders, and wet areas to reduce the temptation of walking out of the corridor. The best viewing points and easiest routes should be identified early in the process, so trails can be planned to logically access them and avoid cutting. In wide open areas with low vegetation (like the higher viewpoints), structures such as decks, boardwalks, and viewing platforms should be built to limit trampling.

### 2. Beaver Meadows Trail (3.1 miles)

This 3.1 mile hiking trail loops across the ridgeline that encircles Lake 1787 and parallels an unnamed stream on the east with a great deal of beaver activity. South of the lake, a 200 feet promontory offers a dramatic view of Mt. McKinley and the Ruth Glacier rising above Lake 1787.

The trail will have moderate use compared to the Loop Trails near the visitor center, but is short enough that many groups will still be able to fit the hike into their schedule. The trail will be widened for comfortable walking in groups and improved with a gravel surface. It will not be strictly ADA compliant, but will be available as a recreational trail for people in wheelchairs. Wayfinding is of the upmost important on this trail, as some visitors may feel uncomfortable venturing this far from the visitor center. Maps and direction signs will reassure them that they are on the correct path. Limited interpretive

media may be placed at natural gathering points (viewing areas, beaver ponds and dams, sedge meadows) to connect visitors with a more holistic story.

# 3. Curry Lookout Trail (4 miles one-way)

This 4-mile wilderness trail (one-way) connects the visitor center to Curry Lookout to the northeast. A spur from the Beaver Meadows Trail steeply climbs about 800 feet to the higher elevation top of Curry Ridge. Once at the top, visitors are rewarded with spectacular views of the Alaska Range, a different perspective on Lake 1787, and an "other worldly" feel of being in the barren, high elevation tundra punctuated by unique rock formations and blue alpine lakes.

Due to the length and difficulty of the hike, this trail will likely experience much lower use than the others. Visitors need to be prepared for this hike, which would take at least a half-day to full-day to complete.

The trail will be well-defined, but more of a narrow "wilderness" type of path. Wayfinding is again an important part of this trail. Visitors especially need to know how much further the Curry Lookout is as distances can be deceiving. There would be little interpretive media on this trail—sign panels would contradict the "wilderness" experience and be difficult for staff to maintain.

Future plans indicate that trails will be developed to connect Curry Lookout with existing paths along K'esugi Ridge. Discussions have also been conducted with Alaska Railroad representatives to potentially rebuild a trail between Curry Lookout and the historic Curry site on the east side of the Susitna River. At present, there is no crossing over the river.

