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*Anchorage Winter Recreation Development Program
Point Campbell | Kincaid Park Master Plan
for the
Municipality of Anchorage*

EDAW, inc. • Tryck, Nyman, Hayes • Lane, Knorr, Plunkett

September, 1983

Acknowledgements

RESPONSIBLE AGENCY

Municipality of Anchorage: Capital Projects office

AGENCY COORDINATION

Municipality of Anchorage: Park and Recreation Advisory Commission
Urban Beautification Commission
Planning and Zoning Commission
Municipal Assembly

ADVISORY

Anchorage Winter Recreation Advisory Committee

Anchorage Winter Recreation Technical Committee

SPECIAL INTEREST

Nordic Ski Club of Anchorage

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Executive Summary

Chapter One

Executive Summary

Chapter One

Purpose: The Municipality of Anchorage, through previous planning efforts, has developed an area-wide winter recreation development program. Under this program the municipality has identified Pt. Campbell/Kincaid Park as a key winter recreational resource. The purpose of this Master Plan is threefold:

1. Identify recreational facilities to be developed for the citizens of Anchorage in 1983 and 1984;
2. Identify recreational facilities to be developed for the citizens of Anchorage beyond 1984;
3. Identify and discuss the facility/event potentials capable of being hosted at the Pt. Campbell/Kincaid Park site. The potentials to be discussed include local, state, national and international (including Olympic) events.

Goals and Objectives: Four major goals and objectives have been identified via the master planning process. First, maximize use of the existing facilities currently found on site. These include existing architectural, utility and site improvements. Second, identify all potential recreational program elements that are feasible to be sited at Pt. Campbell/Kincaid Park. These recreational elements are primarily to be winter recreation oriented; however, summer uses are also to be identified that have a double use function with the planned winter facilities. In addition, the Master Plan is to identify potential uses other than recreation, for which existing facilities could be

utilized. Third, Pt. Campbell/Kincaid Park is to be developed as a pedestrian park with major emphasis being to minimize potential pedestrian/vehicle conflicts. Fourth, all facilities selected to be sited at the Pt. Campbell/Kincaid Park site are to be developed to international standards. The objective of this goal is to allow for hosting of international winter sports competitions. In addition, the objective is to allow for the potential of Anchorage to be designated as an Olympic Training Center site.

Recommendation: The Pt. Campbell/ Kincaid Park Master Plan identifies six alternatives for recreational development on-site. Applying five levels of evaluative criteria, one of the six alternatives was selected. The criteria used for the six alternative evaluations were: 1) community needs as expressed in public meetings, 2) utilization of existing facilities, 3) functional relationships, 4) cost analysis and 5) program element flexibility.

The recommended plan (refer to Chapter 7) best meets all criteria applied through the evaluation process. This plan sites core facilities at the lower Nike site of Pt. Campbell/Kincaid Park. It utilizes the existing A.C.S. access road which bisects the site and improves it from Raspberry Road to the lower Nike site. Auxillary features and recreational elements are sited in three other key locations. These are: 1) Little Campbell Lake, 2) Upper Nike site and 3) the northwest corner of Pt. Campbell/Kincaid Park, as the ski jump location.

The recommended plan is designed to interface with other planned projects affecting the site. These include: 1) Coastal Trail, 2) gravel extraction plans for the northwest corner of the site, 3) FAA request for additional communication equipment to be located on site and 4) maintaining the current temporary use of the motocross site in the southeast corner of the project.

Other factors influencing the selection of the recommended plan included: 1) Utilizes majority of existing facilities, 2) maximizes site opportunities, 3) separates recreational elements functionally, 4) minimizes event loading of users (density/acre), 5) minimization of site work requirements, 6) maintenance of vegetative cover, 7) tolerance to program changes (additive or deductive), 8) minimal security requirements, 9) provides proximity to ski jump location and 10) lowest estimated cost (of the six alternatives studied).

Development of the recommended plan is divided into three parts. Phase 1: the identification of public facilities which are to be constructed in 1983/84 with current available funds (approximately \$2.5 million.) Phase 2: the identification of future public recreational facilities including winter and summer recreation opportunities. Phase 3: identification and description of local, state, national and international winter sport events and associated facility requirements. In addition, the potential for hosting portions of the Winter Olympics and Olympic training center development on-site was studied.

Funding scenarios for the phasing program is limited to 1983/84. Approximately \$2.5 million is allocated for the development of winter recreational facilities on-site. Funding sources for Phase 2 and Phase 3 recreational facilities have not been identified. However, potential funding sources include Municipality of Anchorage and State of Alaska revenues. The potential for private investment exists for concessions and facility development/use. A capital improvement program for Phases 2 and 3 will be generated subsequent to this Master Planning effort by the Department of Parks and Recreation.

The cost of ultimate development of the recommended plan is estimated at \$28,242,000. Phase 1 is estimated to be \$2,590,000 (1.7 million to be developed in 1983/84). Phase 2 cost of facility

development is \$4,489,000. The cost for Phase 3 is estimated at \$21,100,000. Refer to Chapter 9 for a detailed cost estimate.

Several projects have been selected to be developed and constructed during the 1983/84 construction season. These include: construction of the 30 and 50 meter ski jump; additional cross-country ski trails; the renovation of a launch control building into a warming facility, waxing area and temporary visitor center; improvements to the access roads and increased parking area; site work improvements for development of the cross-country start-finish area, signage, handicap accessibility, spectator viewing areas, utility improvements and demolition of designated existing facilities.

In 1982 improvements to the existing cross-country trails were made for the purpose of hosting the National Championship/World Cup for cross-country skiing in March 1983. Temporary facilities, signage and parking facilities were organized to host this event.

Summary:

The Pt. Campbell/Kincaid Park is a large, complicated site, environmentally, socially and politically. It is an important resource with a high potential of providing a significant portion of the recreational needs of the citizens of Anchorage now and into the foreseeable future. Careful development and control of the park is mandatory to ensure the preservation of this natural and recreational resource; not only for the citizens of Anchorage, but for the entire state. The weak link in the chain for the preservation of the Pt. Campbell/Kincaid Park as a natural and recreational resource is that future decision makers will be tempted to develop non-recreational facilities on this site. The Master Plan recommends that adoption of this plan by the Municipal Assembly be considered. In addition, a policy statement should be formulated

for adoption by the Municipal Assembly clarifying the land status of Pt. Campbell acreage. It is recommended that the "public use" language in the transfer agreement be defined as a "Regional Recreational Facility" with a provision that non-recreational public uses be considered if they are determined to be compatible with the existing and proposed recreational facilities programmed for the park. Each proposed non-recreational public use proposal should receive environmental, functional, operational, maintenance and public input scrutiny in the development of the compatibility determination.

Next Steps: This Master Plan represents a long-term commitment by the Municipality of Anchorage to continue development of Pt. Campbell/Kincaid Park as a major regional recreational facility for the citizens of Anchorage and the State of Alaska. During the 1983/84 construction season, the Municipality will begin implementing the Master Plan by investing \$1.7 million in capital improvements specified in the Master Plan effort.

The next major step will be to identify future funding sources. This will not be an easy task considering the significant recent reduction in potential funding sources for the type of projects described in the Master Plan. However, with careful implementation of the goals and policies outlined, the Municipality of Anchorage will preserve for its citizens a highly valuable recreational resource in an increasingly urbanizing area.





Inventory & Analysis
Chapter Two

Inventory & Analysis

Chapter Two

Regional Site Context:

The Pt. Campbell/Kincaid Park site is located in a semi-arid region of southcentral Alaska known as the Anchorage Bowl (refer to Figure 2.1). It is located at the confluence of Knik and Turnagain Arm of Cook Inlet and is bordered by three miles of marine coast line found along its south and west boundaries.

General climatic conditions can be described as being semi-arid, with prevailing winds coming from the north. The temperature varies from -30° to 86°F. Daylight hours vary from 5-1/2 hours in winter to 20 hours in summer. The average annual precipitation at Pt. Campbell/Kincaid Park is approximately 15 inches a year. This site receives an annual average snowfall of 70 inches; however, maximum accumulations average approximately 15 inches.

Half the entire population of the State of Alaska lives within the Anchorage area. Most of these 215,000 people live within one-half hours driving time of the Pt. Campbell/Kincaid Park site. Per capita, Anchorage citizens have the highest winter sports usership of any other city in the United States. The Anchorage International Airport is a primary destination/refueling stop for many of the major Asian and European airlines.

The Pt. Campbell/Kincaid Park site is unique to the Anchorage Bowl for several reasons. Unlike the rest of the bowl, the last glacial age did not override the park site. This has allowed the park to develop climax vegetative communities unique to the region.

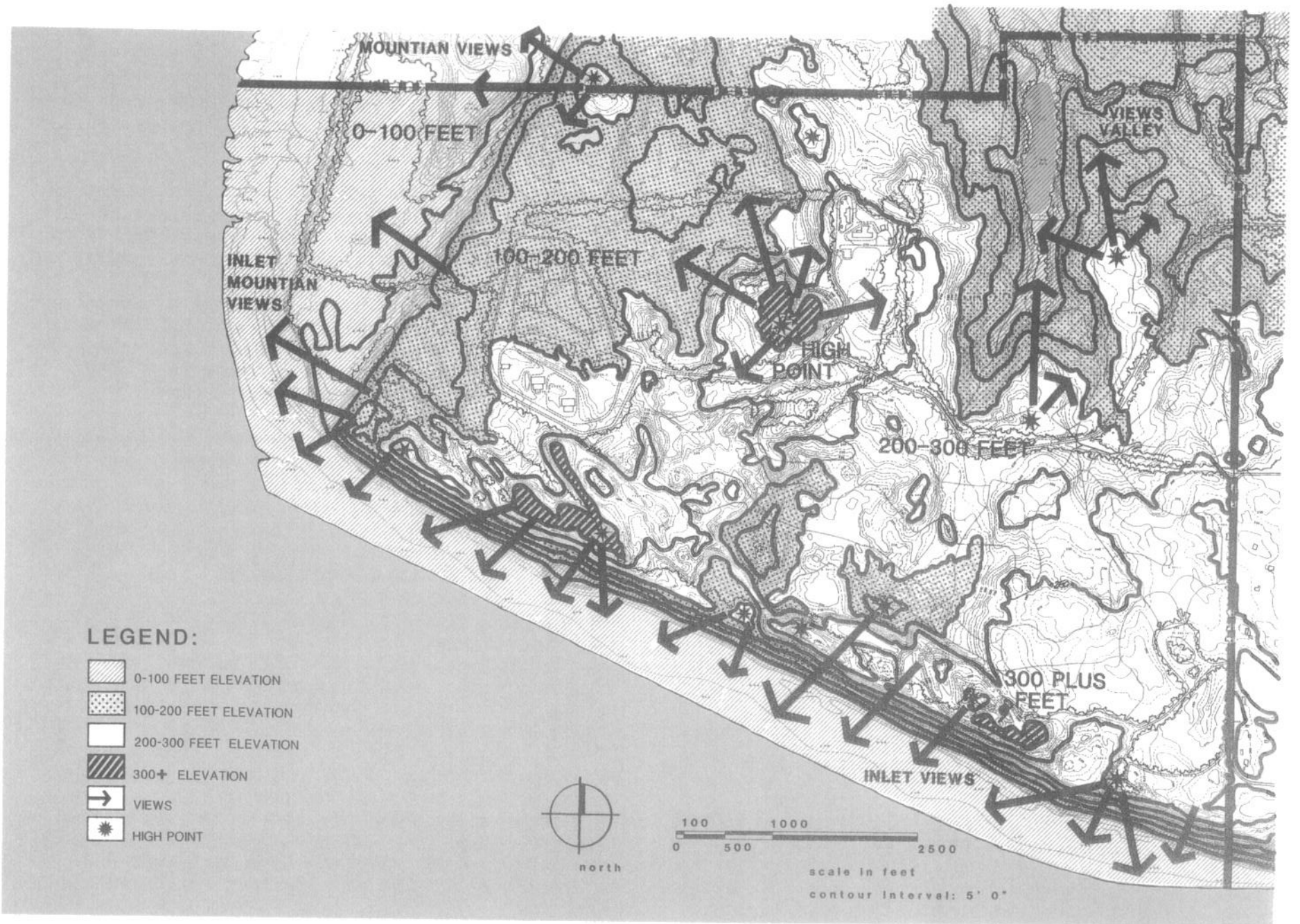
Its topography is more undulating than elsewhere within the Bowl. Of the estimated 1,600 Moose which winter in the Anchorage Bowl Delta several are resident on site.

Historically the site had two uses. The primary use was as an Army Nike base. This base was declared surplus in 1979 and lands were turned over to the State and then transferred to the Municipality of Anchorage in 1982. The Kincaid Park portion of the site has been used for recreational purposes and administered by the Anchorage Park and Recreation Department. Currently, the Municipality owns the entire park site except for a small area which it leases from Anchorage International Airport.

Several planning efforts are currently being conducted that may impact the Pt. Campbell/ Kincaid Park site. These concern; the Coastal Trail, Port of Anchorage (Fire Island Causeway), state prison, golf course, gravel extraction plans, FAA communications equipment and a motor recreation vehicle study. Refer to Chapter 3 for additional information.

In summary, the Pt. Campbell/Kincaid Park is a valuable resource to citizens of Anchorage. The complexities associated with its natural and social context offer an excellent opportunity for development of summer and winter recreational facilities. In a regional context, the Pt. Campbell/Kincaid Park will provide one of the largest municipally owned parks in the State of Alaska. Realizing that the population of Anchorage will double within the next 10 to 20 years, this three square mile park will be of great value in satisfying the recreational needs for the rapidly developing greater Anchorage area, existing residents of Anchorage and for the newcomers to the Anchorage Bowl area.

2.2 TOPOGRAPHY



INVENTORY

Topography:

The topographic features of the Pt. Campbell/Kincaid Park site are highly varied (refer to Figure 2.2). The park is approximately 1,800 acres in size and includes three miles of marine shoreline located to the south and west. The upland is divided into two distinct areas: 1) a lower bench found at the westerly end of the site which rises to 50 feet above mean sea level and 2) an upper bench which rises quickly to 300 feet above mean sea level and comprises approximately 75% of the park land. The interior of the upper bench is quickly undulating largely due to the fact the site was not inundated by the last Wisconsin glaciation allowing surface water runoff and wind erosion to sculpt the park site into its current unique character.

The topography offers several opportunities for recreational development. 1) The size of the Park, within a metropolitan environment, has the ability to host numerous recreational facilities and users. 2) The capability of siting recreational elements in close proximity to one another exists because of the quickly undulating topography. 3) The height of several hills found throughout the site afford spectacular views of Mt. Susitna, Mt. McKinley, the Alaska Range and Cook Inlet.

In summary, due to the site's size and varied topographic features, all recreational facilities identified in the Master Plan can be sited without major land modifications. The only exception is the ski jumps which, because of their unique characteristics, require removal of vegetation and the grading of 5.5 acres on 60-100% slopes located at the north-west corner of the Park. Refer to Pt. Campbell/Kincaid Park Ski Jump Contract Documents for further information.

Soils/Slope:

To determine the developability of the site both soils and slope were evaluated together. Four soil and six slope categories were examined. The potential for landslides, mass wasting, and earthquake is also discussed (refer to Figures 2.3 and 2.4). Source for soils information was The Anchorage Coastal Resource Atlas.

Tuomi Silt Loam: this soil has slight building limitations for structures and moderate limitations for roads due to frost action. Areas of steeper slopes are listed as severe for development of all facilities.

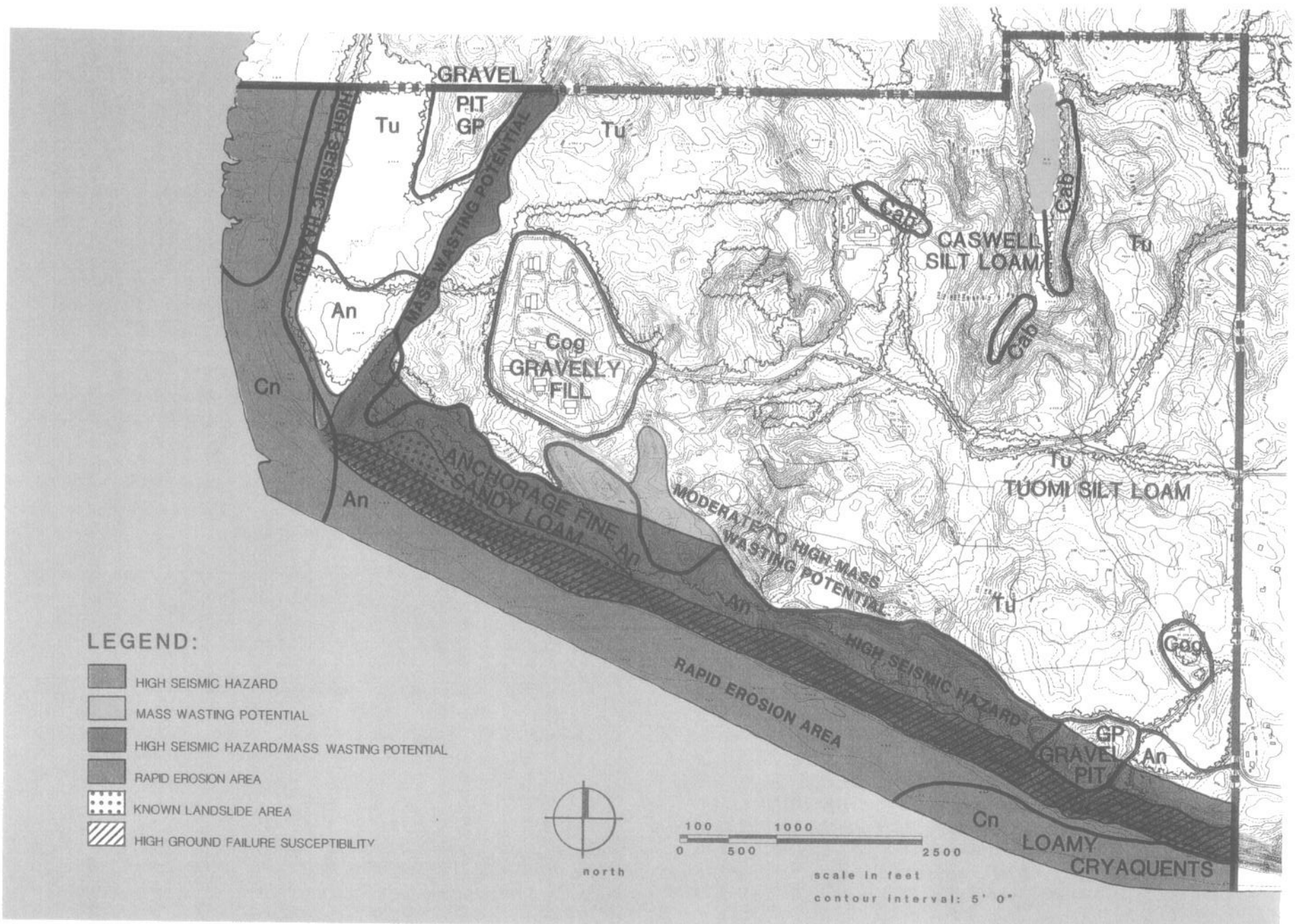
Caswell Silt Loam: this soil has moderate to severe limitations on development due to wetness and frost action.

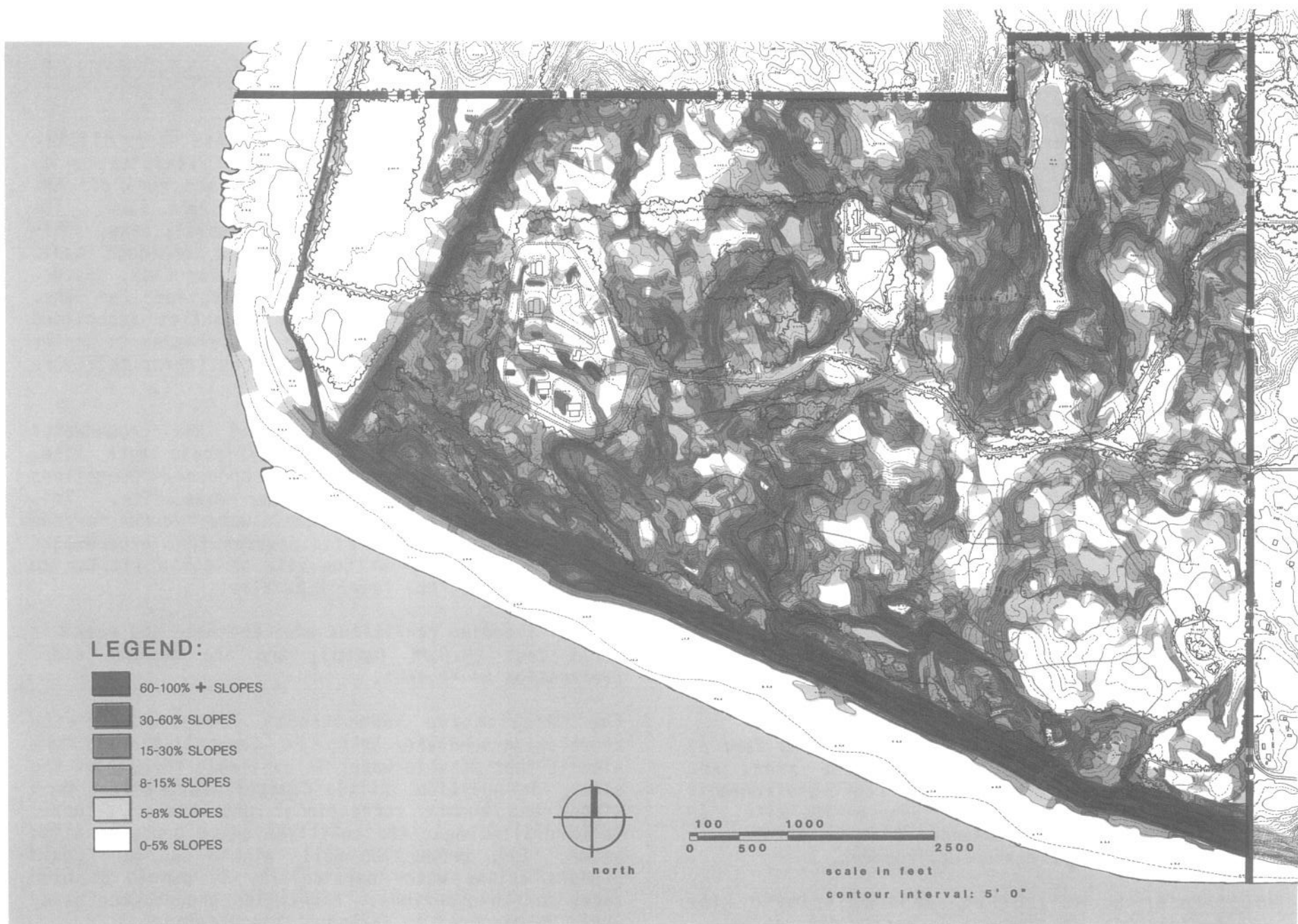
Anchorage Fine Sandy Loam: this soil has slight development limitations on level ground; however, in sloping areas limitations are severe.

Cryaquents: this soil type was not evaluated in the Resource Atlas due to material variability. The Pt. Campbell, Pt. Woronzoff Wetlands Master Plan describes these wetland soils as the following:

"Loamy cryaquents consisting of nearly level, poorly drained sandy, silty and clayey stratified sediments deposited on low-lying coastal plains. It is generally dangerous to walk on, and if sufficiently saturated, tends to act like quick sand."

The majority of this site has moderately low susceptibility to seismic failure. The mud flats and western bench are designated as moderate susceptibility. High susceptibility rating for seismic





failure is recorded along the bluffs with the exception of the lower portions of the southern bluff which is considered to have very high seismic failure potential.

Mass wasting potential due to landslide, flooding or frost action is similarly distributed on the site. On the bluffs the potential is rated moderate to high. In the site interior it is rated moderate, and the mud flats and lower bench are labeled "no known potential". One landslide has been recorded on the site; it occurred along the sandy southern bluffs.

The opportunities identified for the purpose of recreation development at Pt. Campbell/Kincaid Park in relation to slope and soils are fourfold. These are:

1. 20% of the site is compatible for major structural development (buildings and major utility development).
2. 30% of the site can handle medium intensity recreational development (sports fields).
3. 40% of the site is capable of handling low intensity recreational development (picnicking and trails).
4. 10% of the site is not buildable for any form of recreational development. These areas are primarily associated with the bluff environments located along the southern edge of the site. In addition, it is recommended that no development occur within the marine environment.

Note: Refer to suitability zone description for recreational development intensity discussion.

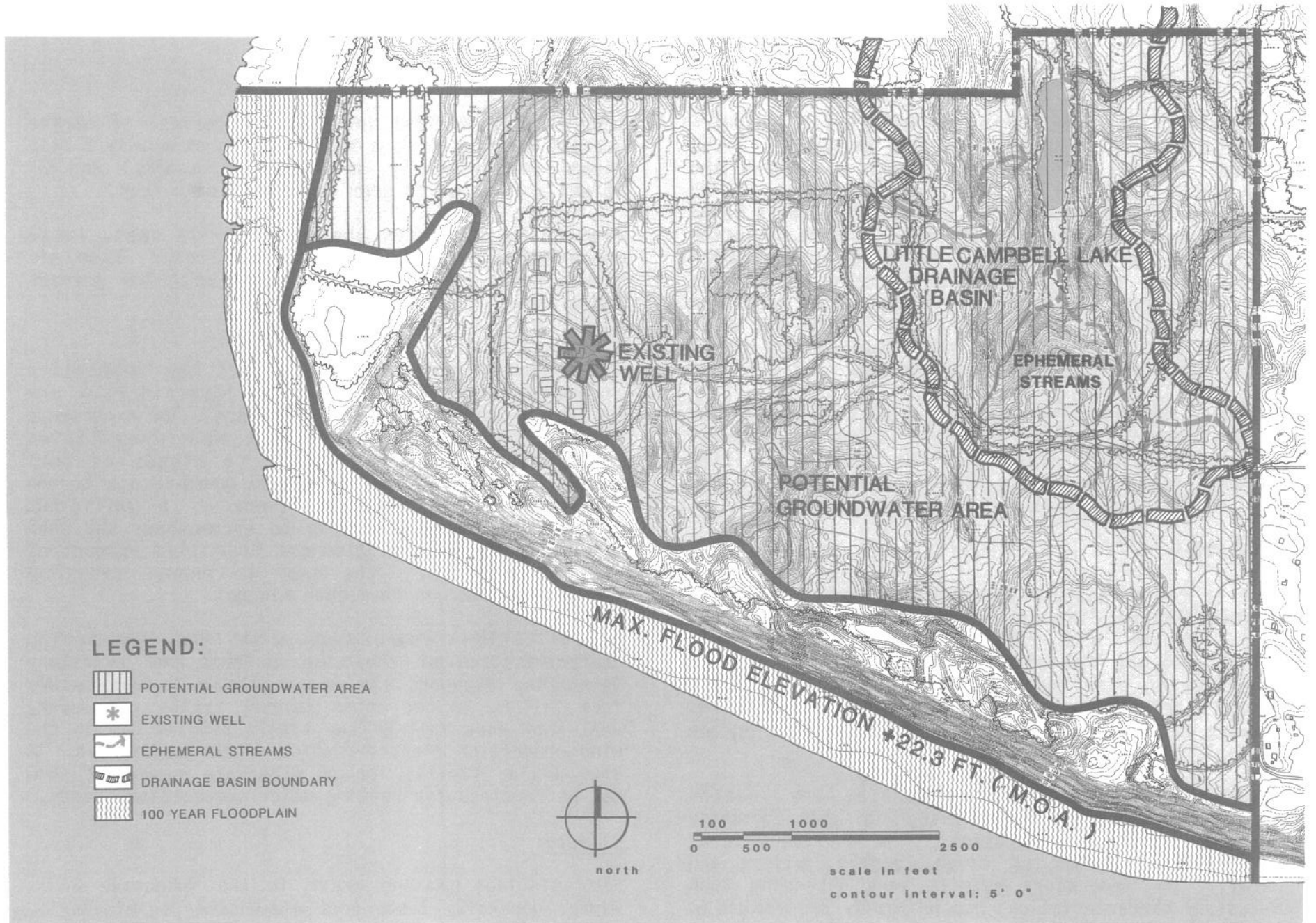
Hydrology/Groundwater:

Pt. Campbell/Kincaid Park exhibits very little evidence of surface water movement. Precipitation is absorbed into the sandy loamy soils and runs off the steeper slopes into Cook Inlet by sheet flow. The major exception to this is Little Campbell Lake. This water body collects runoff from a drainage basin encompassing the northeast corner of the site. Several well defined ephemeral streams also feed the lake. There is no visible surface water outlet associated with Little Campbell Lake. The lake freezes in winter and is subject to overflow conditions (refer to Figure 2.5).

There is very little known about the groundwater conditions at the Pt. Campbell/Kincaid Park site. However, there is a well that has produced 100 gallons per minute located at the lower Nike site. This groundwater was used as a potable water source for the Nike base. The Master Plan assumes that groundwater is available throughout the site in soils similar to those located at the lower Nike site.

Coastal flooding conditions are: the mean sea level is +22.3 feet (M.O.A. Datum), and the maximum tidal fluctuation is 42 feet.

The distinctive opportunity associated with hydrology/groundwater at the Pt. Campbell/Kincaid Park site is that potable water is available throughout the site. In addition, Little Campbell Lake offers both winter and summer recreational potentials. (Note: wells drilled near the coastline could produce saline water. High production wells within the park could produce saline water particularly if pumped at high rates for long periods. A detailed groundwater study would be required to evaluate this potential.)



Limitations associated with the existing hydrology/-groundwater conditions are localized in nature. These include the small depressions found throughout the site which temporarily collect surface water due to the soils rate of percolation or surficial soils being frozen thus preventing percolation. The existing cross-country ski trails occasionally bisect such areas. After rainfall or ice melt, these depressions fill with water, inhibiting trail use. This condition can be avoided by realigning the trail to avoid crossing the lowest point of these depressions and/or by providing a man-made drainage system.

Another limitation is associated with the overflow conditions of Little Campbell Lake. Although competitive events should not be sited on Little Campbell Lake, the Master Plan recommends public use for informal activities in winter and summer.

Vegetation:

Many of the vegetative communities found at the Pt. Campbell/Kincaid Park site are unique to the Anchorage Bowl (refer to Figure 2.6). Some of the largest trees in the area are located at the park. There is a high diversity of plant communities in the park. These communities range from open meadows with grasses growing as tall as 5 feet to stands of 60 foot spruce or poplar trees.

Coniferous areas, primarily spruce, are located throughout the park. The understory of this community is low groundcover vegetation. The deciduous zones include the species of birch, poplar, willow and alder. The understory species vary depending upon overstory characteristics, but primarily are medium to low shrubs and groundcover. The grass communities can

generally be divided into two categories: 1) marine grasses which grow to a height of approximately 3 feet (these are primarily salt tolerant sedges) and 2) upland grasses which grow to heights of 5 feet.

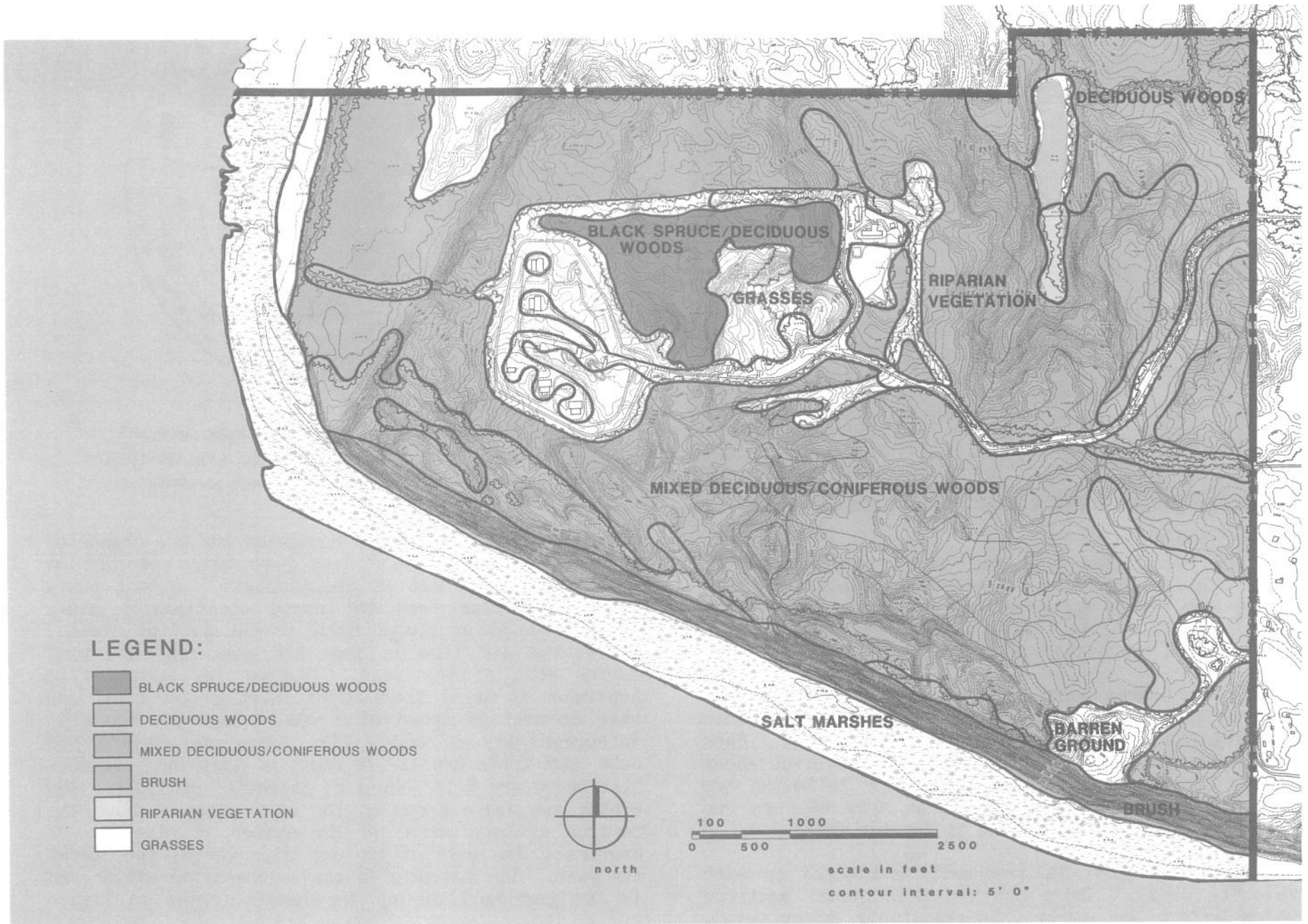
Previously developed areas, primarily open, total approximately 60 acres (4% of the site). These are slowly being re-vegetated naturally with low grasses and willow.

The opportunities associated with the vegetative characteristics at Pt. Campbell/Kincaid Park are primarily oriented to user experience. The experience varies from riparian or fresh water vegetative communities, to open meadows, to stands of tall spruce, to thickets of white bark birch, to a marine environment. In addition, there is a sufficient amount of open meadow lands to accommodate the land intensive recreational elements identified as part of the Master Plan. The need to remove existing vegetative cover is therefore minimal.

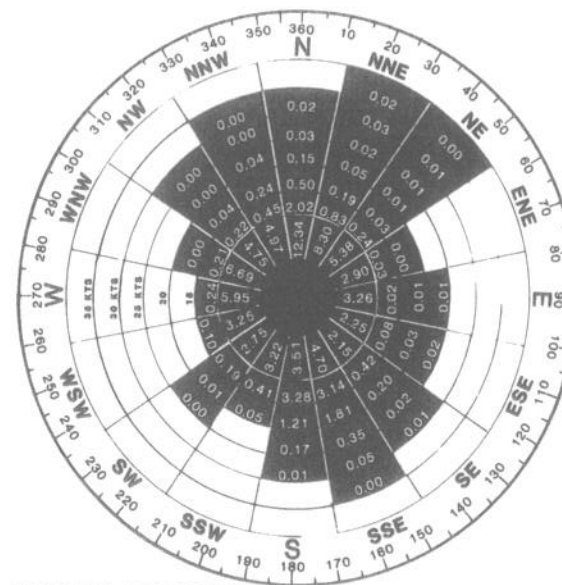
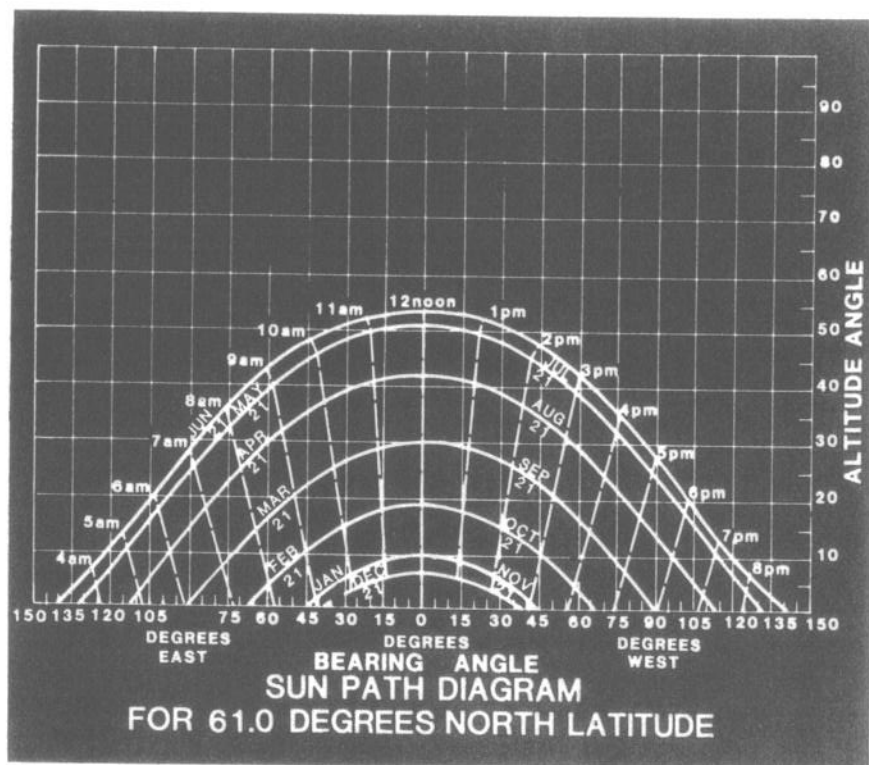
A limitation associated with the vegetation characteristics of the site is that the overstory vegetation disrupts the meager snowfall that occurs from falling on the cross country trails. However, what snow does fall on the trails remains due to the wind protection characteristics of the vegetation. A snow making facility or an alternate source of snow may be required for hosting major competitive events.

Climate:

Four distinct seasons occur in the Anchorage Bowl. Winter generally lasts from mid-October to mid-April. Temperatures may fluctuate from 40° to -30° during



2.7 CLIMATE



WIND ROSE
FOR ANCHORAGE INTERNATIONAL AIRPORT
WIND DATA PERIOD JAN 1 1965-DEC 30 1973
 FREQUENCIES EXPRESSED IN% OF TIME OCCURRING 0.00% INDICATES AN OCCURANCE OF LESS THAN 0.005%

this period. Snowfall has been recorded in the Anchorage area as early as September 20th and as late as May 6th. Snow accumulations in excess of 4 inches occur only 2% of the time and normally do not exceed 15 inches in the Anchorage area.

Summer is broken into two distinct sections, each lasting about two months. From June until the middle of July the weather is warm, sunny and dry. Then cloudy weather moves in, and Anchorage receives about 40% of its annual precipitation in the following two months. Summer temperatures range from 86°F to the low 50's, typically averaging in the mid 60's.

The Anchorage area is frequently subjected to high velocity winds. There are two directional patterns which affect the park. Southeasterly spring winds

flow down from the Chugach Mountains and are channeled through Turnagain Arm. They have been recorded at speeds up to 100 mph at Pt. Campbell. Strong gusty winds also blow from the north occasionally every winter when major storms build in the gulf of Alaska. Prevailing air flow is from the southeast and west during most of the year. During the months from September to April these winds shift to the north and have an average speed of 5 mph. Daylight hours in Anchorage vary 14 hours from summer to winter. On June 21st there are 19-1/2 hours of sunshine; December 21st there are 5-1/2 hours of potential sunlight. The winter sun angle drops as low as 7 degrees above the horizon at noon while in the summer it rises to 53 degrees. The path of the sun also varies throughout the year. The sun sets in the southwest in winter and in the northwest during the summer (refer to Figure 2.7).

The opportunities associated with the climatic conditions at Pt. Campbell/Kincaid Park are twofold: 1) Winter is the longest of the four seasons and rarely gets cold enough to prohibit outdoor activity. The length of season is ideal for the development of winter recreational facilities, and 2) the abundance of daylight hours during the summer months offers the potential for unlighted outdoor summer activities for 19 hours a day.

The limitations associated with the climatic conditions in the Anchorage area are: 1) Limited snowfall, suggesting a potential need for snow making equipment, and 2) short winter daylight, requiring lighting for winter recreational use by the general public, particularly during December and January.

Natural Hazards:

The natural hazards associated with Pt. Campbell/Kincaid Park are related to soils. These include landslide, mass wasting and seismic hazard potentials. No other natural hazards have been identified. Development within these natural hazard areas is to be prohibited (refer to Figures 2.3 and 2.4).

Noise:

Anchorage International Airport is the sole source for noise impact at the site (refer to Figure 2.8). The Anchorage International Airport Master Plan shows a noise equivalency factor (NEF) ratio ranging from 30 to 40 occurring on-site (1990). This form of measurement averages frequency, duration and noise source factors. The area most affected within the park boundaries is Little Campbell Lake. This is because of its proximity to the airport as well as its topographic characteristics. However, the current and projected noise levels are not sufficient to disrupt informal summer or winter use. The same holds true throughout the entire site.

The opportunity associated with existing noise impacts on site is that events generating noise on-site become an acceptable use. This is due to the fact that adjacent land uses will not receive a higher noise equivalence than currently exists. For instance, an outdoor rock concert could be held at the lower Nike site without increasing the noise level impacts currently affecting off-site land owners. Permanent recreational uses that create significant noise impacts, such as all-terrain vehicles, are inappropriate on the site.

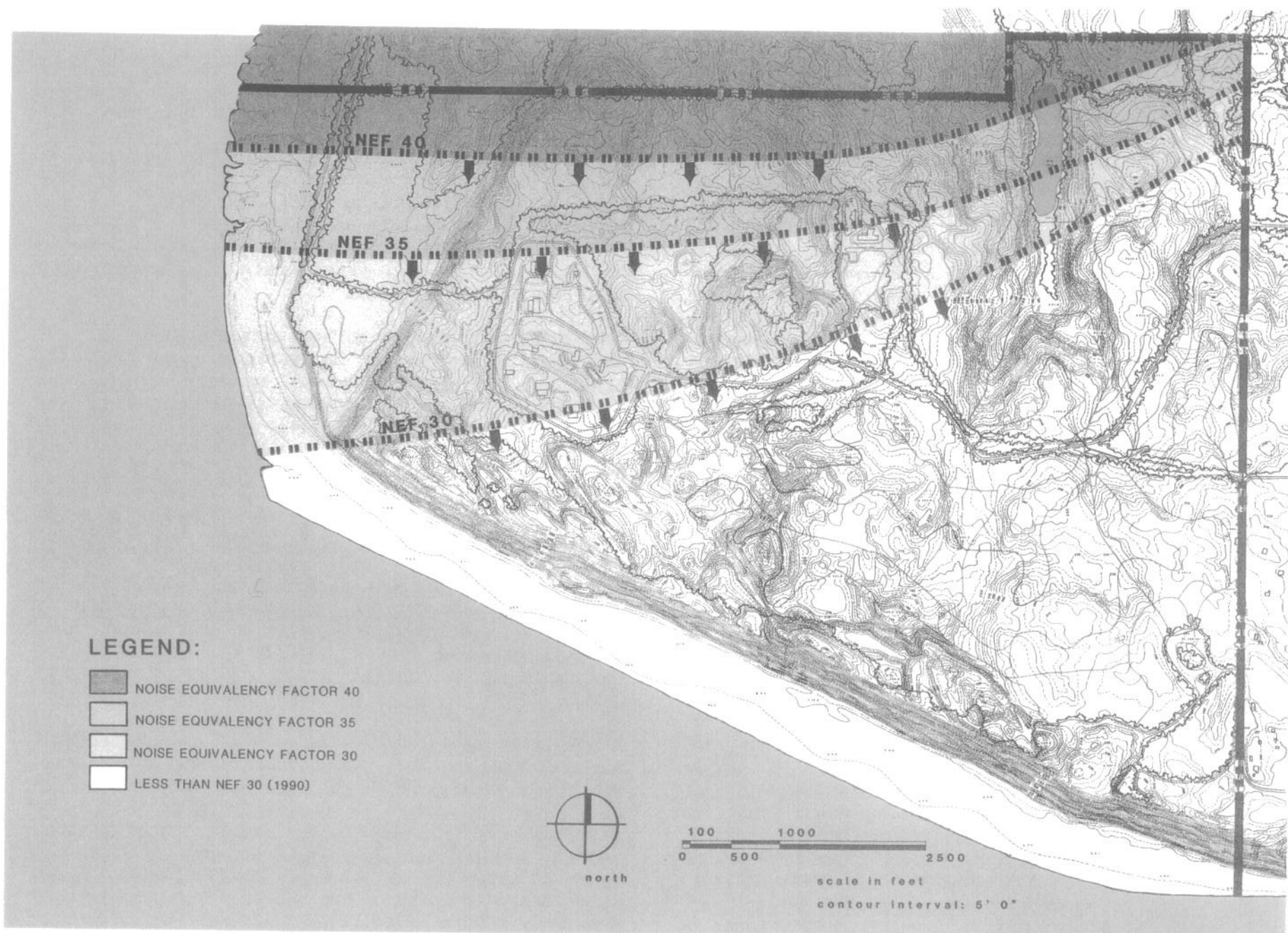
Conflicts identified with the noise impacts on site include a disruption of recreational uses requiring quiet. For instance, an outdoor theatrical performance would be disrupted significantly by the periodic intrusion of air traffic noise.

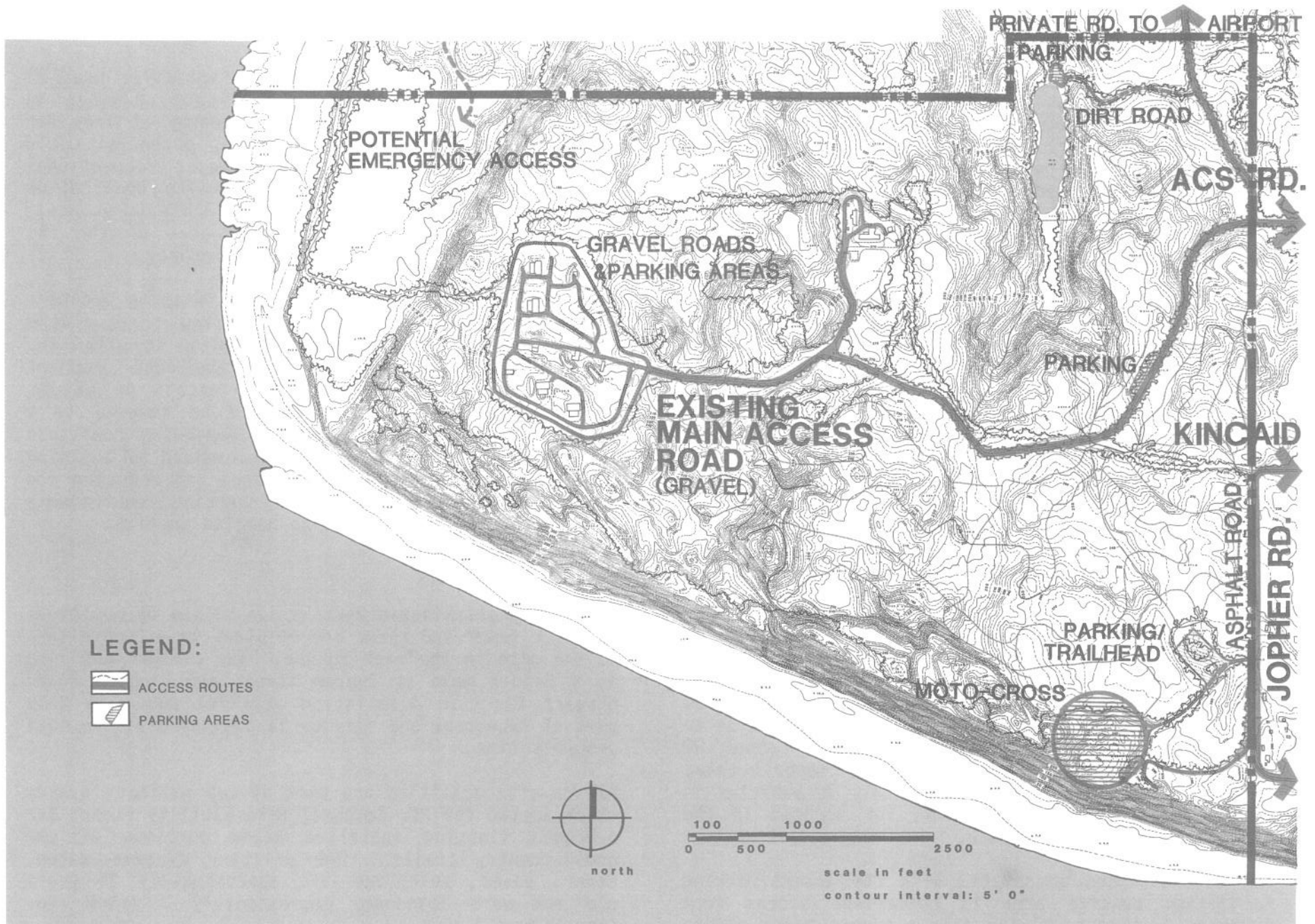
Access/Parking:

Currently, vehicular access to the interior portions of the Pt. Campbell/Kincaid Park site is via the ACS Road (refer to Figure 2.9). The ACS Road is the best access route to the park site because of its proximity to the user service area. A secondary access road is located at the southeast corner of the site. This access serves a trail access parking area for approximately 70 cars, and the existing motocross track.

A potential access point is located on the eastern property boundary at Kincaid Road along an overhead utility corridor. This corridor has been cleared of vegetation in order to provide clearance for the overhead wires. Vehicular access through this corridor would bisect existing cross-country trails at three locations. No previous road construction has been completed within the utility corridor. The service area of Kincaid Road is limited.

2.8 NOISE





The ACS Road between Raspberry and the easterly park boundary is currently in fair condition. It is a gravel road partially paved with asphalt. The condition of this road is poor during spring "break-up". There are no current plans to upgrade this road. However, as the private sector develops adjacent lands for residential housing, costs should be shared for ACS roadway improvements.

The existing on-site road, from the eastern park boundary to the lower Nike site, is approximately two miles in length. This road is in fair condition, approximately 24 feet wide, with one short stretch at 8% gradient. The road which services Little Campbell Lake is gravel surfaced for 50% of its length. It is approximately 18 feet wide and in fair condition. The remaining 50% between the lake and the gravel road is earthen and the soil has a high clay content. When saturated this road becomes impassable for most vehicles. At the end of this road, adjacent to the northern edge of Little Campbell Lake, is a cleared area utilized for parking. The parking lot terminates at the lake's edge and the shore edge condition here is barren.

Two parking areas exist along the main access road. Located approximately 3/8 of a mile west of the eastern property line there is a parking area for approximately 75 cars. Several small parking lots are located at the lower Nike site; approximately 100 cars can be stored in these parking areas. Nearly 70 parking stalls are available at the upper Nike site in front of the existing dorm facilities. About 30 parking stalls are provided at Little Campbell Lake. In addition, parking for approximately 70 vehicles is provided at the Jodphur parking lot located in the southeast corner of the park.

The opportunities associated with the access/parking facilities on-site are: 1) convenient access from downtown Anchorage; 2) The single access point offers

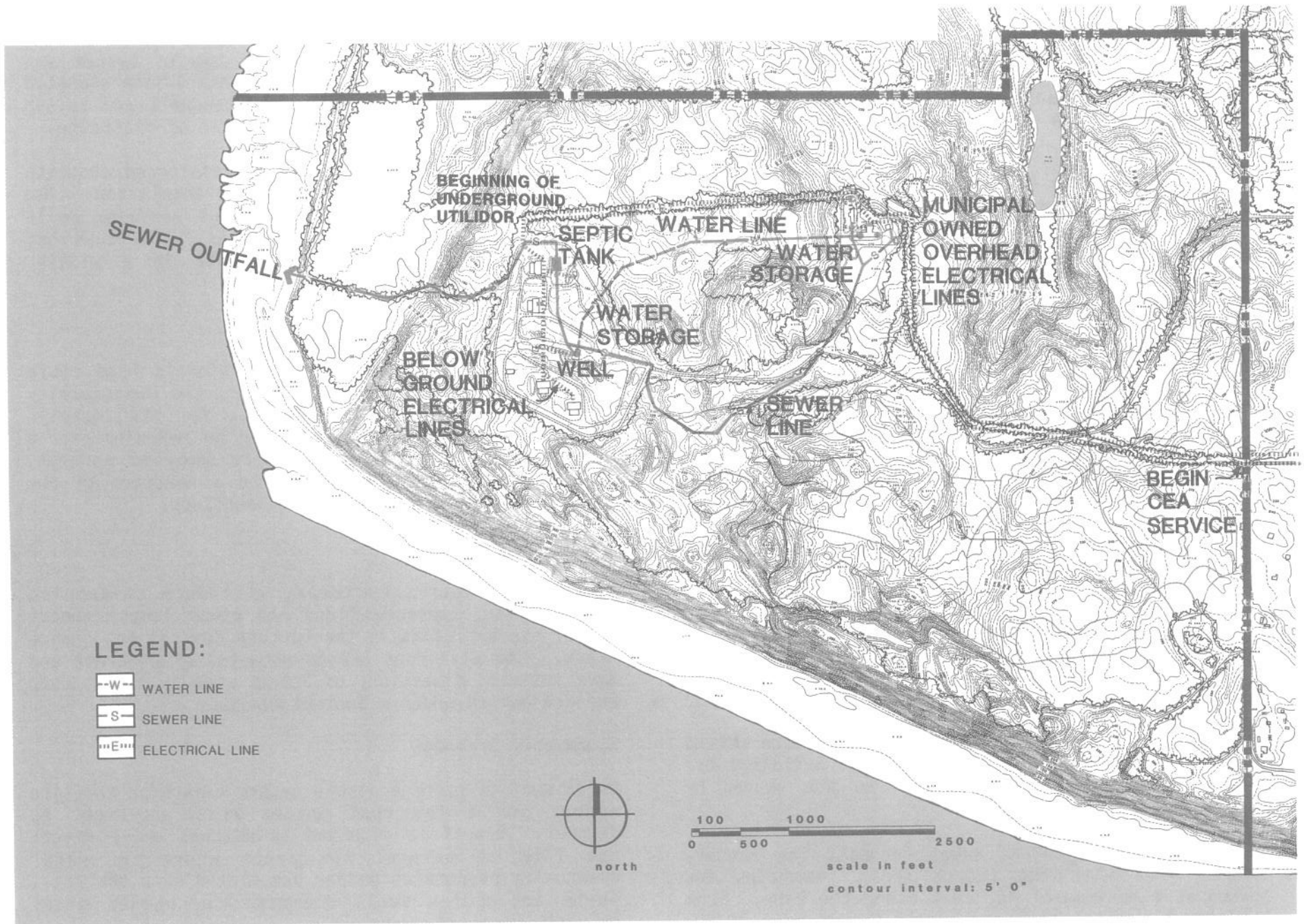
ideal security control for on-site vehicular use; 3) parking for 500 vehicles is available on-site; 4) off-site parking potentials exist nearby at Troy Air and Kulis Airfield (off-site parking potential would be employed in conjunction with major recreational events and a shuttle system to on-site destination points would be required for major athletic events); 5) emergency access to the runout area of the ski jumps is available via the airport property.

The limitations identified with the existing access/parking facilities are: 1) existing road widths on-site are narrow and require widening to allow for an emergency lane; 2) currently the road gradient of the on-site access road is in excess of 6% for approximately 300 feet and should be reduced to a maximum of 6%; 3) pedestrian and vehicular conflicts exist (these conflicts could be minimized by building pedestrian underpasses or overpasses and reducing the number of vehicles on-site); 4) parking requirements at major event times cannot be handled on-site.

Existing Utilities:

Point Campbell/Kincaid Park is not served by municipal water or sewer and there are no plans to extend either to the site in the near future. The closest gas line is a 3-inch main at Ingram Street and Kincaid Road. Chugach Electric Association provides power in this part of Anchorage and service is available at the east property line.

All on-site utilities are part of the military system which served the Pt. Campbell Nike Facility except for overhead lighting installed along portions of the cross-country trails. The military systems--water, sewer, power, telephone--are approximately 25 years old and were abandoned approximately 8 years ago. (See Figure 2.10.)



It is assumed that the utilities are in fair to good condition and can be made operational; they were in use up until the time of their abandonment. However, a detailed field survey of the systems should be conducted during the early stages of site development.

Water System

The military obtained water from a deep well, located near Building 1645 in the Launch Area. A 100 gpm submersible pump pumped water to a 15,000 gallon storage tank located in the Launch Area and two 37,500 gallon storage tanks in the Battery Control Building (Bldg. 16200) through a 3-inch galvanized steel pipeline approximately 4,000 feet long.

In the Launch Area 60 psi pressure was maintained in the system with a 285 gallon hydroneumatic tank and three 10 gpm turbine pumps. The distribution system consisted of 4-inch galvanized steel pipe. A 200 gpm electric motor driven pump and a 200 gpm gasoline engine driven pump provided fire protection.

Similarly, in the Battery Control Area 60 psi pressure was maintained with a 790 gallon hydroneumatic tank and three 30 gpm turbine pumps. The distribution system consisted of 1-1/2 and 4-inch galvanized steel pipe. Fire protection was provided by a 500 gpm dual drive (electric motor and gasoline engine) pump.

Wastewater Systems

All structures in the Battery Control Area were served by sewers. In the Launch Area all eight buildings are served by water; however, only three are served by sewers.

A 6-inch asbestos cement sewer connects the Battery Control Area with the Launch Area. Manholes are spaced at a maximum of 400 feet along the line. From the Launch Control Area wastewater flowed to a 38,000

gallon septic tank located immediately north of the Launch Area. Effluent from the septic system was discharged to the Cook Inlet through a 6-inch asbestos cement outfall line. A concrete headwall and splash pad protected the outfall at the point of discharge.

The septic tank is constructed of reinforced concrete and insulated with 2-inches of rigid insulation. The primary settling chamber in the tank contains coils for heating by circulating hot water. The tank has the capacity of serving 700 people in a visitor situation.

Gas System

The gas line at Ingram Street and Kincaid Road could be extended into the Park; however, the Municipality (or other users) would have to pay for its installation. The cost of the line would be refunded over a period of 10 years if other users were to connect. The amount of the refund would be a function of the size and number of additional connections.

Utilidors

Except for minor structures, utilidors containing water, steam, communications and power lines connect all of the buildings in the Battery Control and Launch Areas. The utilidors are constructed of concrete and have interior dimensions of 3 feet wide by 1 foot deep and are buried under a foot of earth.

Stormwater Drainage

No subsurface storm drainage system exists on the site except for a few roof drains which daylight to ditches. Runoff is directed to ditches which divert the flow to natural low areas where the water eventually evaporates and/or percolates into the soil. There are a few small diameter corrugated metal culverts under roadways.

Electrical Power

Chugach Electric Association serves this part of Anchorage. CEA brings power to the property line of the Park; the Municipality of Anchorage owns the on-site facilities. Overhead power lines serve the upper and lower Nike site. Overhead power drops to transformer banks in each area and is then distributed via underground utilidor to the various structures.

Telephone System

Existing telephone lines are routed along the power line corridors. Currently, no telephone lines are in operation. Capacity of the existing telephone service is not known.

Utility System Opportunities

Opportunities associated with the existing utility systems are: 1) Sufficient potable water sources are available on-site (additional wells may be required). 2) Disposal of sanitary wastes can be conducted on-site with a septic tank/drainfield network. 3) Power transmission lines exist on-site requiring only to be energized. Condition of circuit panels within the existing buildings require inspection. 4) The existing building utilities can be made functional.

Utility System Limitations

Limitations associated with the existing utility system on-site are: 1) No future municipal utility improvements to or at the park site are proposed. 2) Existing outfall to Cook Inlet must be abandoned. 3) Existing septic tank requires a drainfield. 4) Condition of existing utilities are not fully known; a field investigation is required.

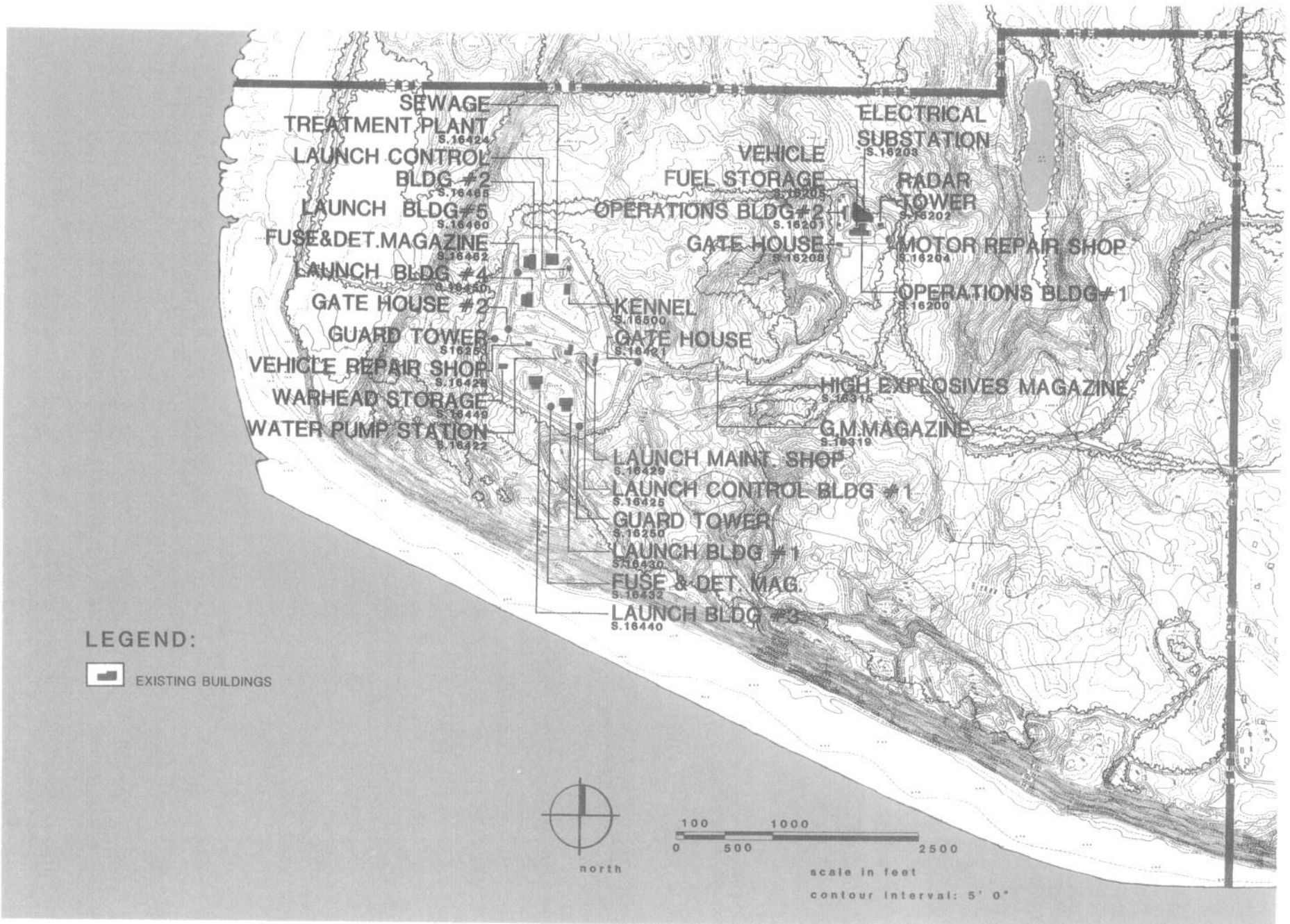
Existing Buildings:

Twenty-six structures currently exist at Pt. Campbell/Kincaid Park (refer to Figure 2.11). All these buildings were part of the Army Nike base. Approximately 50% (based on square footage) of the buildings are wood frame structures and forty percent are reinforced concrete. The remaining ten percent are constructed of steel (refer to Figure 2.12). The general condition of all concrete and steel structures is currently good. All wood structures are in poor condition and should be removed. The two wood frame structures located at the upper Nike site have been left unattended for several years. Currently, these structures have standing water on both floors and it is estimated that the next freeze/thaw period will damage these buildings beyond repair. Other structures include; one mile of cyclone fencing which surrounds the lower Nike site and several gravel blast berms also located at the lower Nike site.

Currently 112,355 total square feet of buildings are located on-site. Of this total 53,040 square feet are to remain; these reinforced concrete structures are considered to be costly to remove. The remaining 59,315 square feet of buildings have been identified for demolition. These structures are primarily wood frame and steel construction. 3,080 square feet of buildings at the upper Nike site and 45,292 square feet of buildings at the lower Nike site have salvage value and the Master Plan recommends that the Municipality initiate contracts to salvage these structures. The salvage value of the buildings is presently undetermined. Additional salvagable materials on-site are the cyclone fence and the gravel blast berms located at the lower Nike site.

The opportunities associated with the existing structures on-site are: 1) Existing structures can provide immediate housing for indoor recreational

2.11 EXISTING BUILDINGS PLANS



facilities (e.g. Launch control buildings). 2) The upper Nike site radar masts with water storage reservoirs can be utilized for fire protection. 3) The monolithic concrete launch control buildings can be utilized for indoor recreational activities such as a warming facility, conferences, racquetball courts, etc. 4) The earth covered vaults can be converted into maintenance storage areas, or can be utilized for limited recreational purposes. 5) The well pumphouse located centrally to the lower Nike site is restorable and can provide the headworks for the water distribution system. 6) Reutilization of the gravel in the blast berms found on-site for widening of the existing access road and/or for leveling coarse material for parking areas is possible. 7) The salvage value of the buildings identified to be demolished could provide a source of funds for development of recreational facilities.

Limitations associated with the existing buildings on-site are: 1) some building configurations prohibit indoor recreational facilities due to ceiling height, interior width and length (e.g. underground bunkers). 2) The program elements identified in the Master Plan process do not fully utilize the existing structures on-site. However, the Master Plan has identified a series of non-recreational uses that can occur within these buildings. When the need arises for these identified uses the Municipality should review their function in relationship to the recreational programming that then exists at Pt. Campbell/Kincaid Park.

Aesthetic considerations for utilization of the existing structures was considered by the Master Plan effort. The Master Plan suggests that with earth berming and revegetation the monolithic structures can be incorporated into the site in a pleasant manner.

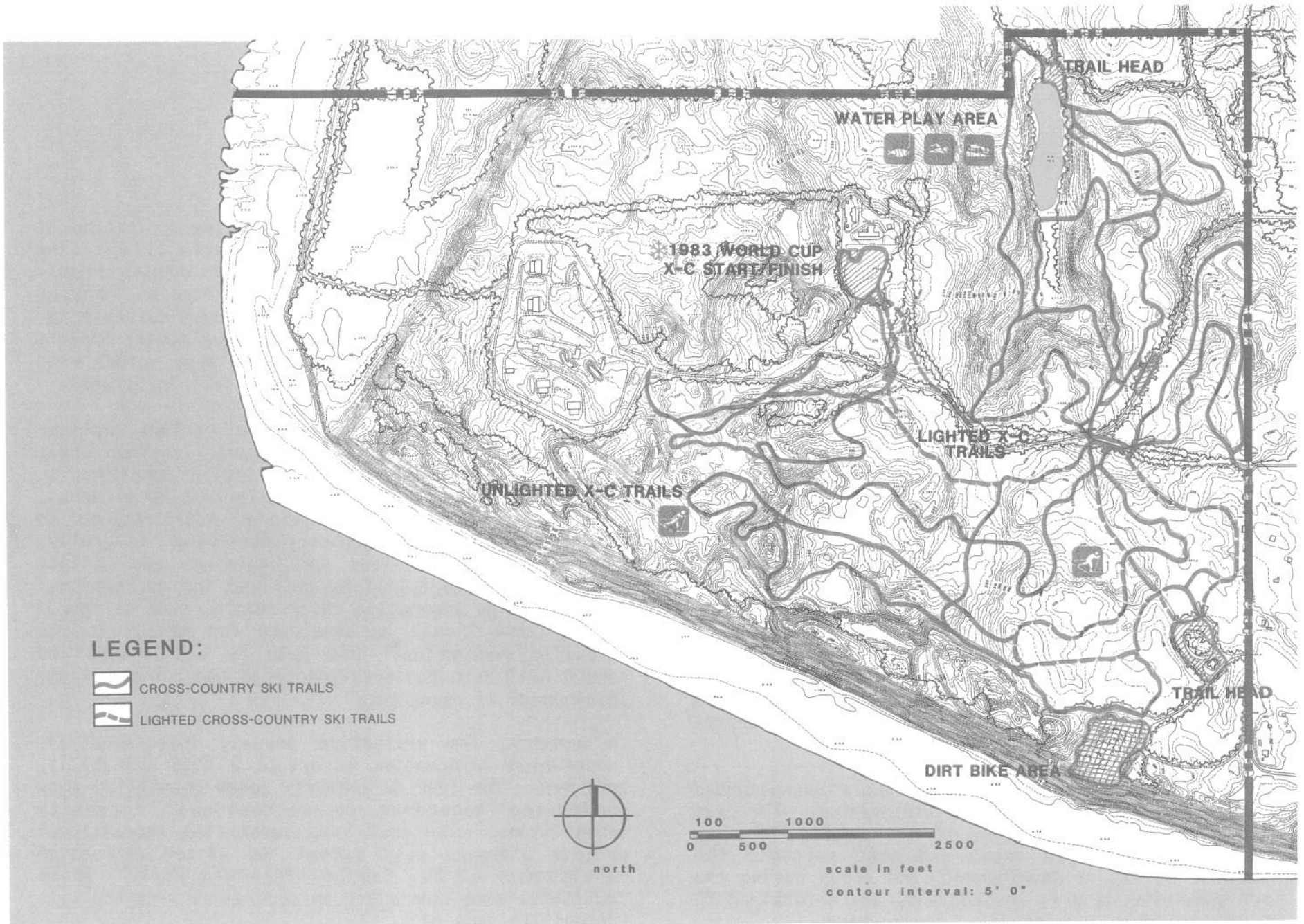
Existing Recreational Facilities:

Existing recreational facilities found at Pt. Campbell/Kincaid Park include 23 kilometers (2-1/2 kilometers lighted) of cross-country ski trails which have recently been improved to international standards, a moto-cross site, boat launch, fishing pier, swimming, non-motorized boating and on-site parking (refer to Figure 2.13). Non-structured recreational opportunities exist throughout the entire site such as nature trails, bird watching and wildlife observation. Approximately 2-1/2 kilometers of lighted ski trails currently exist.

The opportunities associated with the existing recreational facilities at the Park are largely due to the efforts of the Anchorage Nordic Ski Club. With volunteer help the Nordic Ski Club constructed all the original trails at the site. This has provided the impetus to further development of winter recreation facilities. The Municipality of Anchorage, in 1982, improved the existing cross-country trail network to international standards in preparation for the 1983 World Cup.

The limitations associated with the existing recreational facilities include: The Master Plan, under its goal to alleviate pedestrian/vehicular conflicts, does not provide recreational facilities for snow mobiles, all-terrain vehicles or other recreational vehicles.

2.13 EXISTING RECREATIONAL FACILITIES



SITE SUITABILITY ANALYSIS

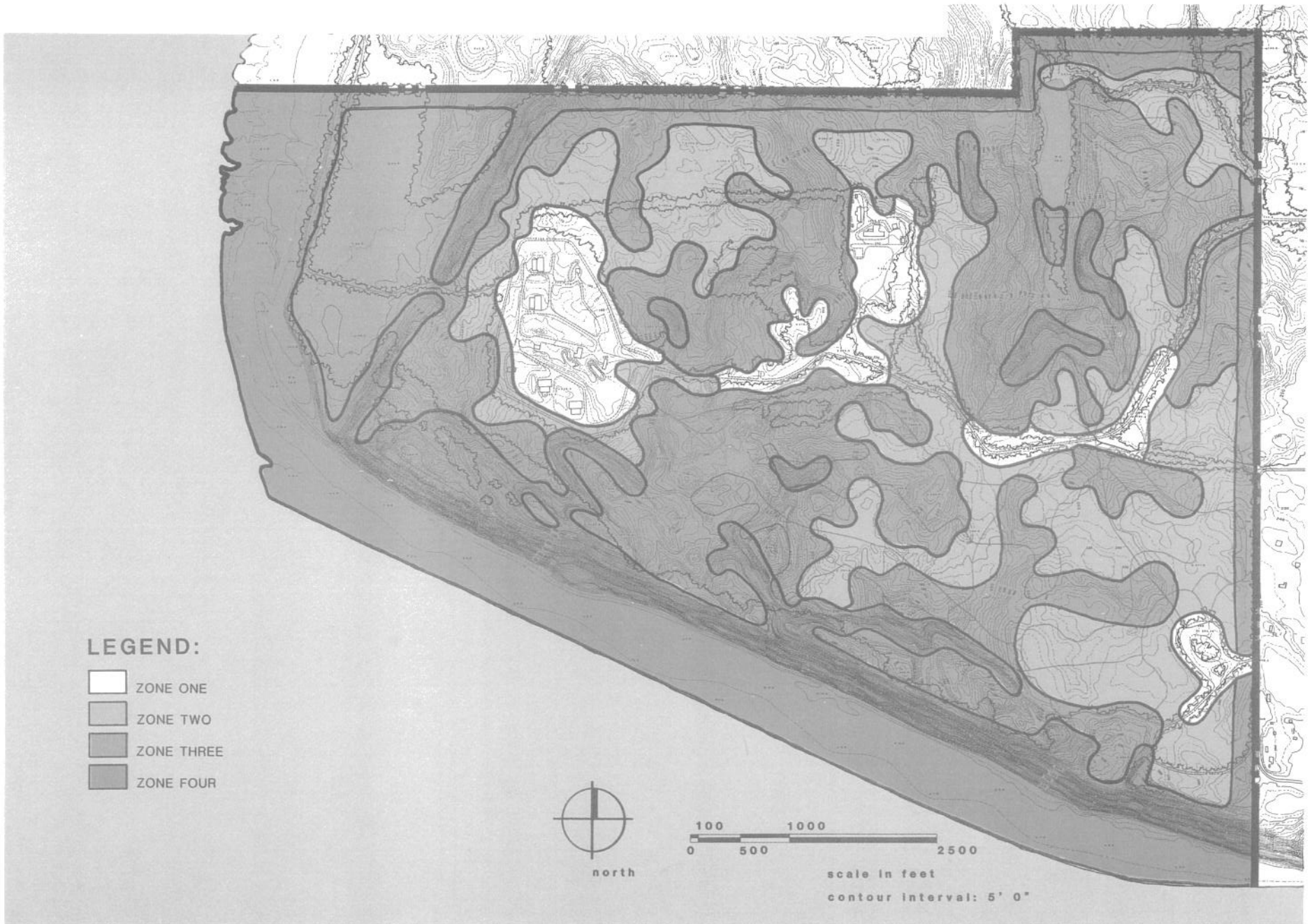
The primary method of analyzing the inventoried information was to develop a site suitability zone map. The evaluation process was designed to determine those areas at Pt. Campbell/Kincaid Park which are suitable for various levels of recreational development. The site suitability zone map represents the result of compositing the natural and man-made systems previously inventoried. The limiting factors that were composited include existing topographic conditions, soils, slope, hydrology and groundwater, vegetative characteristics, climatic conditions, natural hazards, land use, ownership, noise, utilities, buildings and recreational facilities. In addition, potential impacts identified from previous and ongoing planning studies were evaluated: the coastal trail, Fire Island Causeway, gravel extraction, Federal Aviation Administration requirements, potential golf course, all-terrain vehicle study, Anchorage International Airport Master Plan, state prison facility, gold extraction plans, coastal zone management, existing MOA zoning code, MOA comprehensive plan, and the Wetlands Master Plan.

The evaluation process undertaken was a non-weighted compositing of all inventoried information. The bias associated with this form of evaluation is that previously developed areas are most suitable for intensive levels of development, and areas having the most sensitive natural environments are determined to be less suitable for intensive development.

The result of this process was the identification of four suitability zones (refer to Figure 2.14). The four zones reflect the degree of suitability/-sensitivity that a specific area has to varying development intensities. Zone 1 is most suitable for development and least sensitive to development impacts and Zone 4 is most sensitive, and least suitable to intense development. Zones 2 and 3 fall in between.

This form of site analysis does not preclude any area from recreational development, however, certain areas are more compatible in their existing condition to host various levels of identified recreation elements. Siting of the proposed facilities will respond to these identified zones whenever possible. Generally, Zone 1 will be utilized for buildings and utility development; Zone 2 will be utilized for recreational uses requiring vegetative cover removal such as sports fields; Zone 3 will be developed for medium to low intensity recreational use such as picnicking; and Zone 4 will host preservation areas and minimal trail development as required.

In summary, the evaluation process integrated all inventoried information to create a site suitability zone map. The four suitability zones identified were designated according to recreational intensity capabilities. The next step identified recreational program elements most suited for winter recreation development at Pt. Campbell/Kincaid Park. These facilities were then sited in accordance with the site suitability zone map.





Land Use | Ownership | Other Planning Studies

Chapter Three

Land Use | Ownership | Other Planning Studies

Chapter Three

Land Use/Ownership:

Officially declared surplus land by the U.S. Army in 1979, the Pt. Campbell Military Reserve, was passed from federal ownership to the State of Alaska and recently from the State to the Municipality of Anchorage. The Legislature approved transfer of the property to the Municipality under terms of a 1975 land transfer agreement which requires that the Pt. Campbell site be utilized for public use. While under control of the Army it's 1,008 acres were developed as a Nike missile base. Approximately 63 acres were cleared in order to build the necessary facilities. These facilities included four concrete launching structures, two wooden buildings which housed administrative and living quarters for on-site staff, several underground concrete bunkers, a radar dome and several smaller radar masts. All these facilities are currently in place (refer to Figure 3.1).

Adjacent to the military reserve the Municipality of Anchorage owns 389 acres known as Kincaid Park. This area has been previously developed with recreational facilities. These facilities include cross-country ski trails and public access to Little Campbell Lake. In addition, a private group leases approximately 10 acres of land, located in the southeast corner of this parcel, from the Municipality for use as a motocross track. Pt. Campbell/Kincaid Park, although primarily undeveloped, contains approximately 20 kilometers of cross-country ski trails which have been upgraded and expanded for the National Championship/World Cup Races held on-site during March 1983.

The Municipality of Anchorage currently leases from the Division of Aviation a 120 acre parcel located at the northeast corner of the project site. This parcel includes Little Campbell Lake. The Alaska State Department of Fish and Game stocks Little Campbell Lake with rainbow trout every year. The general public has access to Little Campbell Lake which has parking and fishing dock facilities provided.

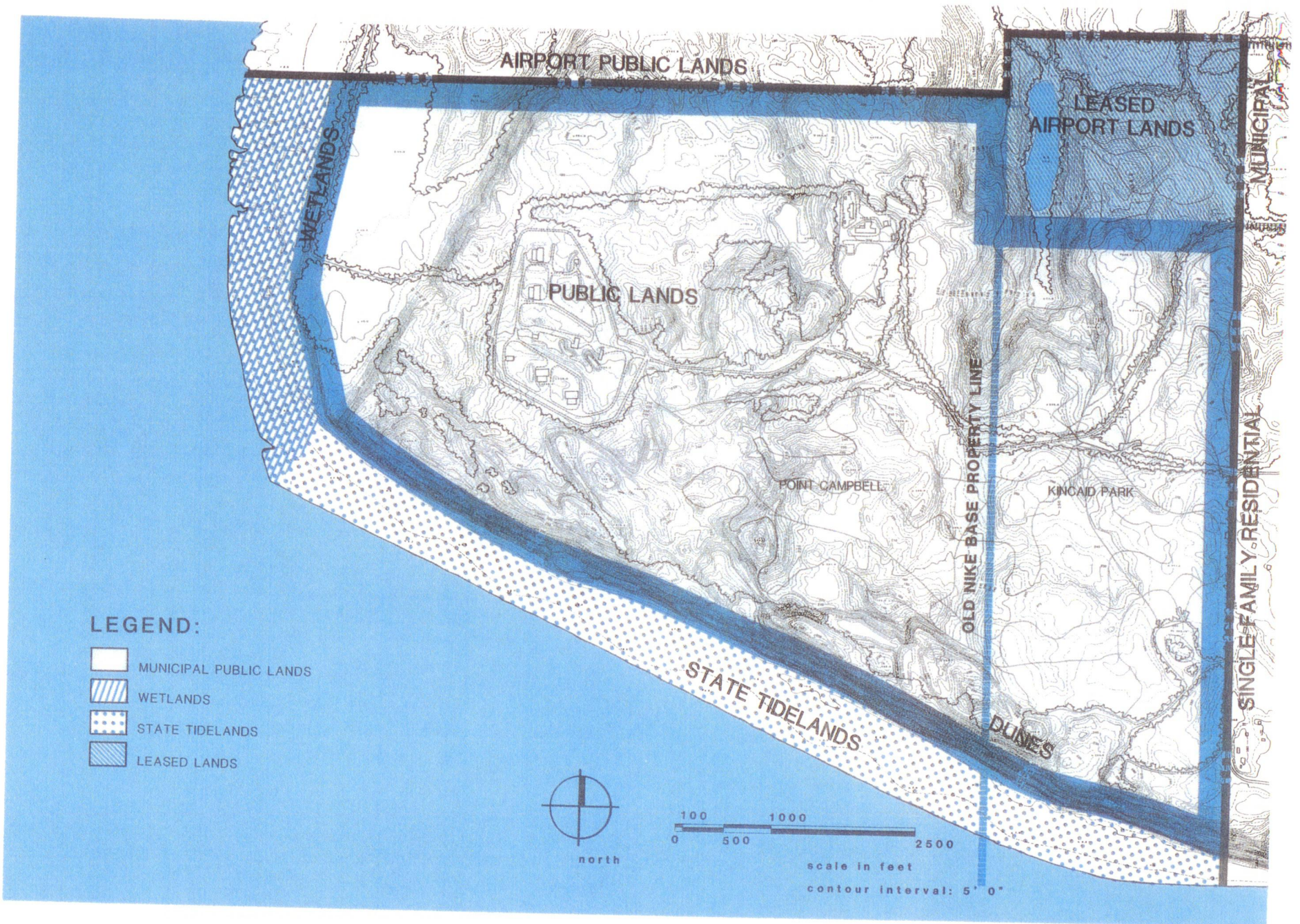
Furthermore, the Alaska Department of Transportation and Public Facilities (DOT/PF) is planning to extract 265,000 cubic yards of gravel at the western most point of the project site. This gravel extraction program is anticipated to last 3 years and will affect 21 acres of natural vegetation.

Currently the marine environment, including tidelands, is designated as either conservation or preservation areas under the Anchorage Wetlands Plan. The Alaska Department of Fish and Game manages the wetlands for habitat preservation and controlled hunting use.

Adjacent land uses to the Pt. Campbell/Kincaid Park are: 1) Located to the north is the Anchorage International Airport. The Airport Master Plan designates the property adjacent to the northern property line of the Pt. Campbell/Kincaid Park site as Public Lands which are not to be developed. Access to this public land is restricted. The benefit of this designation to the park is that this boundary will be preserved in the future. 2) The land use adjacent to the park site, along the eastern boundary, is currently designated as residential in the Anchorage Comprehensive Plan.

The primary opportunity associated with the current adjacent land use/ownership patterns is that there is limited exposure to neighboring airport property development and that adjacent residential development plans are complementary with park goals and policies.

3.1 LAND USE | OWNERSHIP



The abundance of available land consisting of undeveloped woodlands and open meadows, is critically important to the role of Pt. Campbell/Kincaid as a regional park. Nevertheless, this potential suggests the temptation to develop the site beyond those recreational elements identified in the Master Plan. As the Municipality of Anchorage grows and seeks land for community support facilities, Pt. Campbell/Kincaid Park will receive attention. The Master Plan recommends that proposed non-recreational facilities be evaluated for compatibility with the development of the site as a Regional Park, and impose on them the same evaluative and public involvement process as preceded this plan. Preservation of this recreational resource is the primary objective of this Master Plan effort.

Other Planning Studies:

Several policy documents govern the Pt. Campbell/Kincaid Park site. These include the Coastal Zone Management Program, Title 21 zoning code, The Anchorage Comprehensive Plan and the Pt. Woronzoff/Pt. Campbell Wetlands Plan. In addition, there are several ongoing planning efforts and issues which affect Pt. Campbell/Kincaid Park (refer to Figure 3.2). These are:

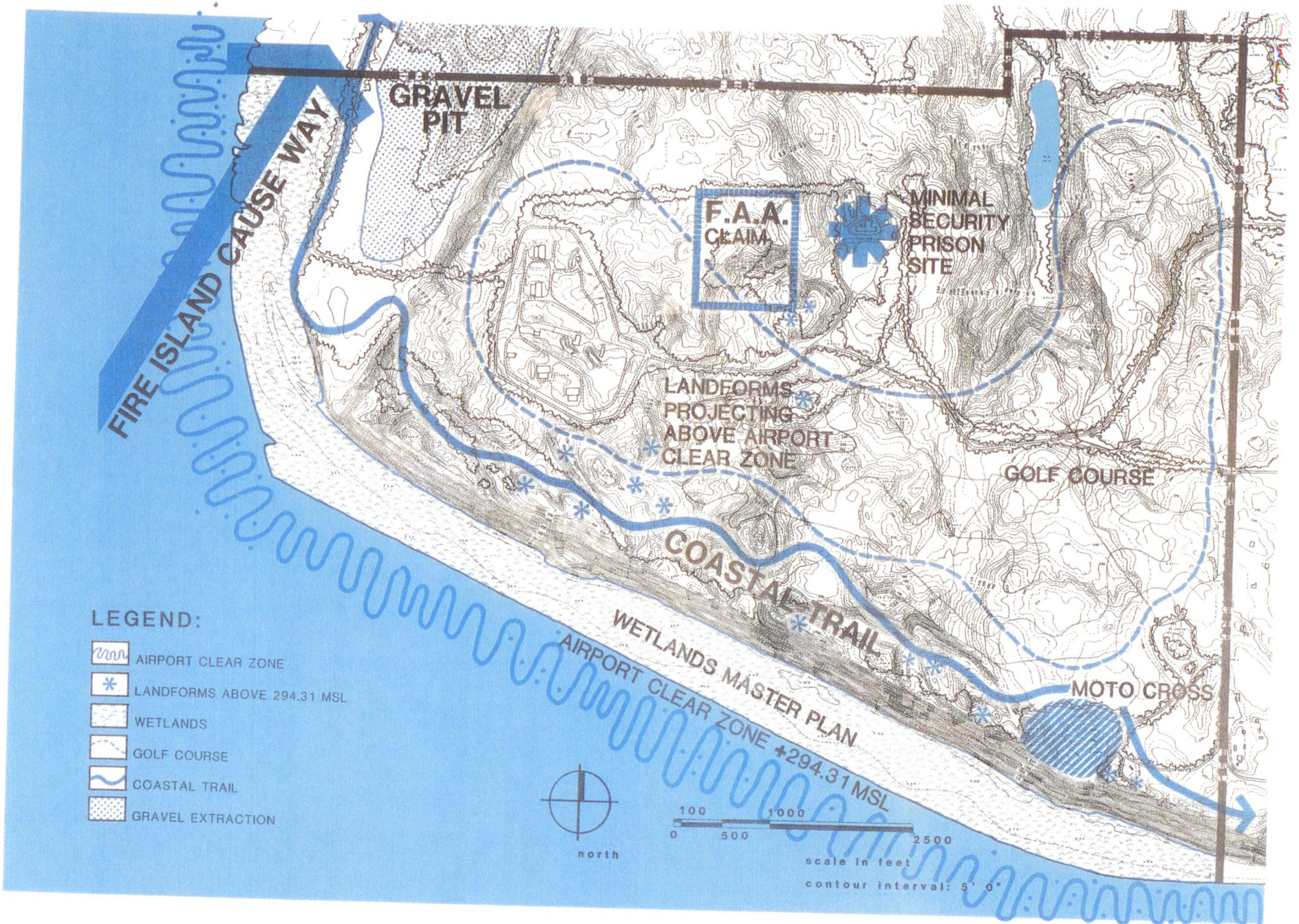
Item 1: Coastal Trail. The Municipality of Anchorage, is currently determining the alignment of a coastal trail between Ship Creek and Potters Marsh which requires traversing the project site. Pt. Campbell/Kincaid Park will provide a significant destination point for users of the Coastal Trail. The Master Plan incorporates the proposed route which best suits the on-site recreational program requirements.

Item 2: Port of Anchorage (Fire Island Causeway). One alternative for port development on Fire Island shows a causeway connecting to the mainland at the westerly portion of the project area. Severe use conflicts exist with this proposal and the proposed coastal trail alignment, ski jump facilities and general park development of the site. The conflicts are: 1) the Coastal Trail would be bisected, displaced from the coastal edge or required to be bridged. 2) the ski jump run-out and spectator area would be impacted by increased traffic noise, visually disrupted and potentially decreased in size dependent upon exact location of the causeway, and 3) the existing unique natural character of the lower bench area representing a sizeable portion of this proposed regional park would be lost for recreational and scenic use.

Recommendation: The Municipality of Anchorage support one of the other access alternatives for Port of Anchorage expansion on Fire Island. The alternative(s) to support should maximize preservation of the existing recreational and visual characteristics of Pt. Campbell/ Kincaid Park.

Item 3: Gravel Extraction. The State of Alaska is planning to extract 265,000 cubic yards of gravel at the western portion of the project over a 3 year period. The area of gravel extraction includes removal of 21 acres of natural vegetation and disrupts the ski jump spectator and run-out areas over the 3-year extraction period. Currently, there is no existing land reclamation plan for this project.

Temporary use conflicts exist between the gravel extraction plans and the Coastal Trail Alignment, as well as with the ski jump facility. The conflict with the Coastal Trail can be mitigated



by designing an extraction plan that will not require any portion of the proposed Coastal Trail alignment (including buffer) to be traversed with vehicular movement or disrupted by equipment storage areas, borrow areas, etc. This will ensure that if trail construction funds become available during the extraction time period, trail construction could commence immediately. The conflict with the ski jump facility can be mitigated by designing a schedule for ski jump use requiring 1) extraction operations be shut down during these times; 2) the state should grade smooth the run-out/spectator areas and 3) the state should import and spread snow as required for the ski jump users.

Recommendations: The Municipality of Anchorage should include the following requirements as part of the agreement with the State of Alaska to extract 265,000 cubic yards of gravel at the Pt. Campbell/Kincaid Park site.

- The State of Alaska design an extraction plan which will not in any way disrupt the development of the Coastal Trail.
- The State of Alaska develop a schedule and temporary facility plan (grading and snow supply) in coordination with ski jump use.
- The State of Alaska design and implement a land reclamation plan which will restore the extraction area to a naturalistic contour with positive drainage, revegetated and graded to allow ski jump use as displayed in the Pt. Campbell/Kincaid Park ski jump contract documents.

- The Municipality of Anchorage should obtain mitigation dollars and/or services from the State of Alaska for displacement of recreational facilities during the gravel extraction period.

Item 4: Federal Aviation Administration. The FAA requires 40 acres of secured high land on-site for future communication facilities. The exact program for and siting of this facility has not been identified. This facility, sited carefully to minimize visual disruption to on-site users, can be incorporated without displacement of the proposed recreational facilities. The potential exists for siting the FAA equipment atop existing or proposed structures.

Recommendations: The Municipality of Anchorage should contact the FAA for the purpose of determining the program, schedule, siting requirements and the real need for development of these communication facilities on-site versus development on existing airport lands. If it is determined that on-site construction of these facilities is the most beneficial alternative to public health, safety and welfare it is recommended that these facilities be sited atop an existing building, or incorporated in the development of a new structure or sited along the northern property line oriented to minimize visual disruption to on-site recreational users.

Item 5: Golf Course. The Pt. Campbell/Kincaid Park site, though not the preferred location, recently was considered as a potential municipal golf course site. Should this site be considered for golf course use in the future several issues must be evaluated: 1) removal of vegetation, 2) existing recreational facilities developed at the time of consideration and 3) infrastructure requirements/impacts (e.g. water, access, parking, etc.).

Recommendation: A golf course, though capable of being located on site, is not a recommended use due to vegetative removal requirements and conflicting recreational use with facilities planned or constructed (e.g. cross-country trails).

Item 6: ATV Use: A motor recreational vehicle study is being conducted for a site located at Pt. Woronzoff.

Recommendation: If the plan is adopted, this Master Plan recommends that the existing on-site moto-cross facility be eliminated. In addition, it is recommended that motor recreational vehicle use not be considered as a program element for Pt. Campbell/-Kincaid Park due to severe conflicts with existing Park use. The cross-county trail network is highly susceptible to damage from motor recreational vehicle use, the noise impact from motor recreational vehicle use is considerable and operation and maintenance costs of the park would increase significantly.

Item 7: Airport Master Plan. A clear zone is required by the Federal Aviation Administration at all airports for aircraft safety, air traffic control and the preservation of the public health, safety and welfare. The Anchorage Airport Master Plan shows a clear zone encompassing the entire Pt. Campbell/Kincaid Park site. The clear zone restricts building height to a maximum of +294.13 feet above mean sea level (M.O.A. Datum). Several natural topographic features penetrate this clear zone elevation. These occur primarily along the southern bluffs except for a knoll located southwest of the existing radar dome. This knoll is +319.3 feet above mean sea level.

Recommendation: It is recommended that the FAA clear zone requirement be respected. Any structure built upon an existing natural topographic feature which penetrates the clear zone elevation should not be any higher than the topographic feature itself.

Item 8: Pt. Campbell-Pt. Woronzoff Wetlands Master Plan. The Pt. Campbell-Pt. Woronzoff Wetlands Master Plan recommends that the associated with Pt. Campbell be made part of the Potter Point State Game Refuge. Currently, there is a bill in the House of Representatives recommending this designation.

Recommendation: The Pt. Campbell/ Kincaid Park Master Plan supports and is compatible with the Pt. Campbell- Pt. Woronzoff Wetlands Master Plan recommendations, objectives and management guidelines.



Item 9: State Prison Facility. The Municipality of Anchorage and the State of Alaska have considered Pt. Campbell/Kincaid Park as a potential prison facility. Initial appraisals have focused on the upper Nike site for a minimum security prison location.

Recommendation: This use is in direct conflict and is absolutely incompatible with the development of Pt. Campbell/Kincaid Park as a regional recreational facility due to personal safety perception requirements of park users, goals and objectives of the Master Plan, master plan recommendations for development and user public input.

Summary:

Pt. Campbell/Kincaid Park is a large site; environmentally, socially and politically complex. It is an important resource with a high potential for satisfying the recreational needs of the citizens of Anchorage, now and into the future. Careful development and control of park uses is essential to ensure the preservation of this natural and recreational resource. The weak link in the chain for preservation of the Pt. Campbell/Kincaid Park as a natural and recreational resource is that future decision makers will be tempted to develop non-recreational public facilities on this site. The Master Plan recommends adoption of this plan by the Municipal Assembly. In addition, a policy statement should be formulated for adoption by the Municipal Assembly clarifying the land status of Pt. Campbell acreage. It is recommended that the "public use" language in the transfer agreement be defined as a "Regional Recreational Facility" with a provision that non-recreational public uses be considered if they are determined to be compatible with existing and proposed recreational facilities. Each proposed non-recreational public use should receive environmental, functional, operational, maintenance and public scrutiny in the development of the compatibility determination.



Recreation Program
Chapter Four

Recreation Program

Chapter Four

The Master program element list was developed by generating a "wish list". This list included all recreational elements proposed through previous planning efforts, by Municipality of Anchorage, the Anchorage Park and Recreation Commission, the Anchorage Winter Recreation Advisory Committee, interest groups and the consultant team. Over 60 recreational items were identified for winter and summer use.

A comparative matrix was then developed for evaluating the functional relationships of the recreational facilities to each other as well as to existing site conditions (refer to Figure 4.1). Recreational elements in clear conflict with each other and/or existing site conditions were initially eliminated from the overall recreational element listing. These findings were then presented to the interested individuals and agencies. Through a series of public meetings a consensus list was formulated. Thirty-eight recreational items were identified and became the recommended program list for the Pt. Campbell/Kincaid Park Winter Recreation Master Plan.

A sophisticated demand/need analysis was not undertaken as part of this Master Plan effort. The Master Plan utilized the findings of a previous demand/need analysis conducted by the Municipality of Anchorage (Winter Recreation: Potential Opportunities for Anchorage; Municipality of Anchorage Project 80's, 1981).

4.2 RECREATIONAL ELEMENT LIST

PROGRAM ELEMENTS	SITE FACTORS													
	DES. 1	DES. 2	DES. 3	DES. 4	DES. 5	DES. 6	DES. 7	DES. 8	DES. 9	DES. 10	DES. 11	DES. 12	DES. 13	DES. 14
WINTER														
WORLD SPADE + START-FRESH AREA + TRAILS + SPECIAL TRAILS														
ALPINE SPADE + START-FRESH AREA + SLOPES														
I.C.E. SKATING + TRACK														
CURLING + CURLING SHEET														
ROG PROFILES + START-FRESH AREA + TRAILS														
ROD-SLEPPING + COURSE + START-FRESH AREA														
SKI JUMPING + TOWER / PUMP + PLATFORMS + LANDING COURSE + SPECTATOR VIEWING														
DARTSLION + START-FRESH AREA + TERRAIN PARK + TRAILS														
SLEPPING + SLEEP HILL														
SUMMER														
BIKING + TRAILS														
HORSEBACK RIDING + TRAILS + STABLES AND CORNALS														
PERIPHERAL ACTIVITIES + TRAILS + SHELTERS, VIEWPOINTS														
FITNESS TRAIL + PUMP COURSE + START-FRESH AREA														
NATURE APPRECIATION + NATURE CENTER + TRAILS + VIEW POINTS														
ORGANIZED SPORTS + FIELD + SHELTERS FACILITIES														
OUTDOOR AMPHITHEATRE + HARBOR + AMPHITHEATRE														
ROLLERBLADING + TRACK + SHELTERS														
PLAY AREAS + STRUCTURES														
HAND GLIDING + TAKE OFF AREA														
WATER SPORTS + BOATING + FISHING + SUNBATHING														
PERMANENT														
BMX HEADQUARTERS + ADMINISTRATION + BIKER SPORTS FACILITY														
VENTING FACILITIES FACILITY + LIVING + TRAILBLAZING														
BMX SECURITY + CONTROL HOUSE + FACILITY														
VENTING DRY LODGE + FACILITY														
MAINTENANCE + MAINTENANCE CENTER + ROADS + PARKING + TRAILBLAZING														

LEGEND: [Symbol] - DESIRED [Symbol] - IMPORTANT [Symbol] - ESSENTIAL [Symbol] - MODERATE SEPARATION [Symbol] - STRONG SEPARATION

It is proposed that the first elements developed serve widest community needs and provide infrastructure for later development of more specialized competitive facilities. Recreational elements shown in Phase 2 and Phase 3 will be developed based on need and policies developed in light of available funding.

The recommended recreational program elements and associated quantities are displayed in Figure 4.2; thirty-eight recreational elements are identified and divided into five separate categories: 1) winter recreational facilities, 2) summer recreational facilities, 3) year-round recreational facilities, 4) international/event/Olympic facilities, 5) infrastructure facilities.

Initial findings at this point include: 1) there is more existing indoor building space available on-site than there are identified indoor recreational needs, 2) approximately 35% of the identified recreational program elements have a dual winter/summer use (example: the Biathlon range could be used as an archery range in summer). 3) The land intensive recreational facilities such as cross-country ski trails and field sports can be accommodated on the site, and 4) other uses proposed for future site development exclusive of the recreational facilities include: A) an arboretum, B) a hostel, C) an arts center which could include ceramics, art studios, visual and performing arts, D) administration facilities, E) exhibit space, F) rental space for dances/ meetings, etc., G) small theatre and/or stage areas, H) indoor and outdoor concerts, I) restaurant/concession areas, J) historical museum, K) regional fair grounds, L) commercial lease space at event times and M) a nature center.



4.1 RECREATIONAL ELEMENT MATRIX

Winter Recreational Facilities:

- o 30 and 50 meter ski jumps
- o 10 kilometers of new unlighted cross-country trails
- o 2 kilometers of new lighted cross-country ski trails
- o Biathlon start/finish area
- o Cross-country start/finish area
- o Snow play area with rope tow
- o Warming facility (6,000 SF)
- o Pedestrian/skier underpass (2)
- o Biathlon range/stadium
- o Cross-country stadium
- o Speed skating oval
- o Snow making facilities

Summer Recreation Facilities:

- o 40 acres of picnic area
- o 16 acres of sports fields/open play areas
- o 100 primitive camping sites
- o Coastal trail (3 miles)
- o Internal bike trails (1.5 miles)
- o Hard surfaced courts (8)
- o Children play areas (2)
- o Amphitheatres (2)
- o Walk-thru archery range
- o Par-Course
- o Hiking/jogging/nature trails
- o Picnic shelters
- o Fishing pier
- o Running track
- o Water sports concessions at Little Campbell Lake
- o Recreational vehicle camping stalls

Year Around Recreational Facilities:

- o Visitor center (10,000 SF)
- o Maintenance center (10,000 SF)
- o Park headquarters facility (4,000 SF)
- o Mass transit staging area (60 buses)
- o Parking areas (500 stalls on-site)
- o Parking area off-site (1,500 vehicles)

International Event/Olympic Facilities

- o Olympic Training Center Headquarters (6,000 SF)
- o Athlete dorms (42,000 SF)
- o Athlete center (10,000 SF)
- o Medical center (8,500 SF)
- o Wax and ski storage (2,500 SF)

Infrastructure Facilities:

- o Access road improvements (2.5 miles)
- o Sanitary sewer improvements
- o Potable water source improvements
- o Fire protection improvements
- o Electrical power improvements
- o Telephone improvements
- o Site lighting
- o Storm drainage improvements
- o Demolition of existing structures (61,800 SF)
- o Grading and revegetation
- o Vehicular signage
- o Pedestrian signage
- o Trail signage
- o Interpretative signage



Design Goals | Policies | Standards

Chapter Five

Design Goals / Policies / Standards

Chapter Five

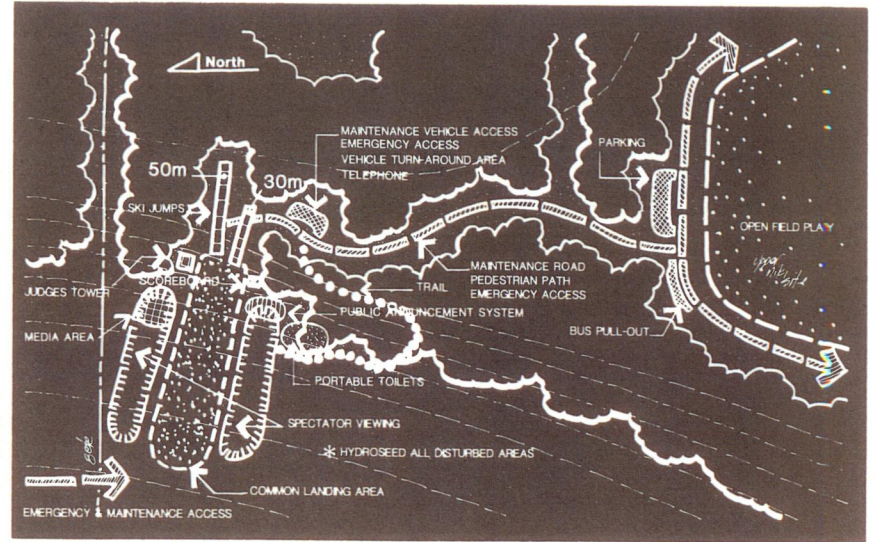
This chapter discusses each recommended program element individually. These include utility requirements, site work requirements and recreational program elements. Each item will be discussed in terms of dimension, quantity, support facilities, and appropriate suitability zone. A cross-section, plan or diagram will accompany each element as appropriate. In addition, specific design criteria will also be discussed. The program elements are divided into four categories: winter recreational facilities, summer recreational facilities, year around facilities, and infrastructure facilities.

WINTER RECREATIONAL FACILITIES

Ski Jumps:

Two ski jumps are proposed for the Pt. Campbell/Kincaid Park site (refer to Figure 5.1). They are to be located at the northwest corner of the park. These two ski jumps are sited side-by-side and share a common run-out area. The 30 meter ski jump is constructed largely on-grade with the end of the ramp terminating atop a retaining wall. The 50 meter ski jump is to be constructed of steel and concrete, with the tower height under the airport clear zone. These two facilities are designed to International Federation of Skiers (F.I.S.) standards. Due to their unique steep slope requirements these two facilities are compatible in Zones 1 through 4.

5.1 SKI JUMP

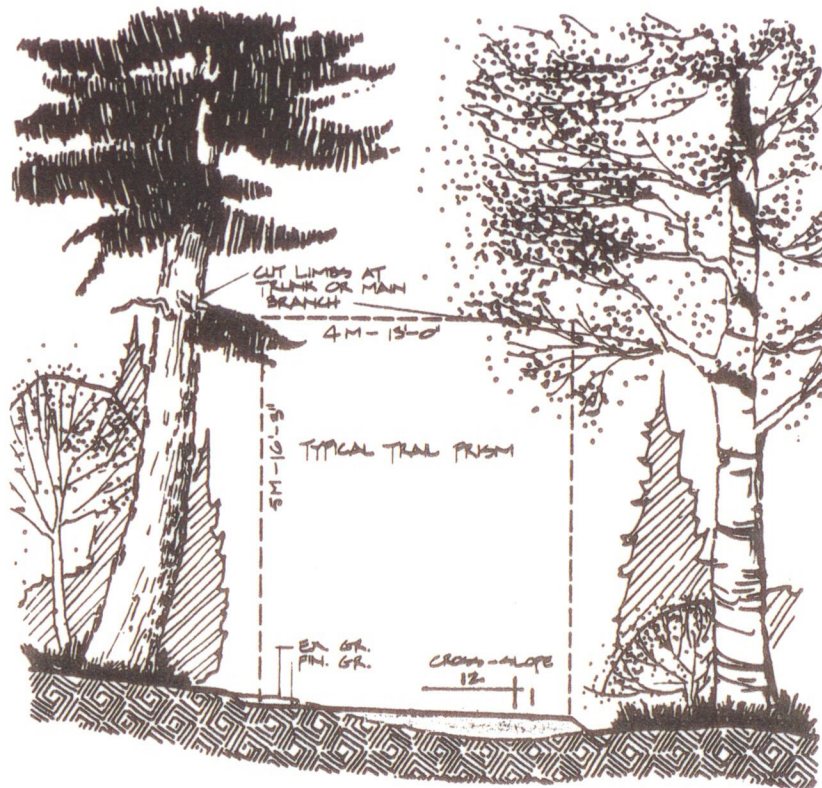


Support facilities include: a 12 foot wide maintenance road which could double as a pedestrian path to the ski jump; a general storage area; a parking area near the ski jump tower for approximately 20 cars; terraced spectator areas along the run-out for approximately 4,000 viewers; an emergency access route to the bottom of the ski jump as well as to the top; a judge's tower; a media area; a public announcement system; portable sanitary facilities; lighting; portable waste receptacles; telephone; and a portable score board to be utilized when hosting events.

General design criteria include: orientation of the jumps to be into predicted wind routes; jumps to be oriented to minimize solar exposure; ski jumps are to be designed to F.I.S. standards including the run-out area.

Due to airport clearance requirements, a 70 meter and 90 meter ski jump cannot be sited at the Pt. Campbell/Kincaid Park site.

5.2 CROSS-COUNTRY SKI TRAIL



Cross-Country Trails:

Ten kilometers of new cross-country ski trails are sited in the northcentral section of Pt. Campbell/Kincaid Park. Two kilometers of these new trails are to be lighted. These trails are to be designed to meet F.I.S. standards (refer to Figure 5.2). All cross-country ski trails can be sited in suitability Zones 1 through 4.

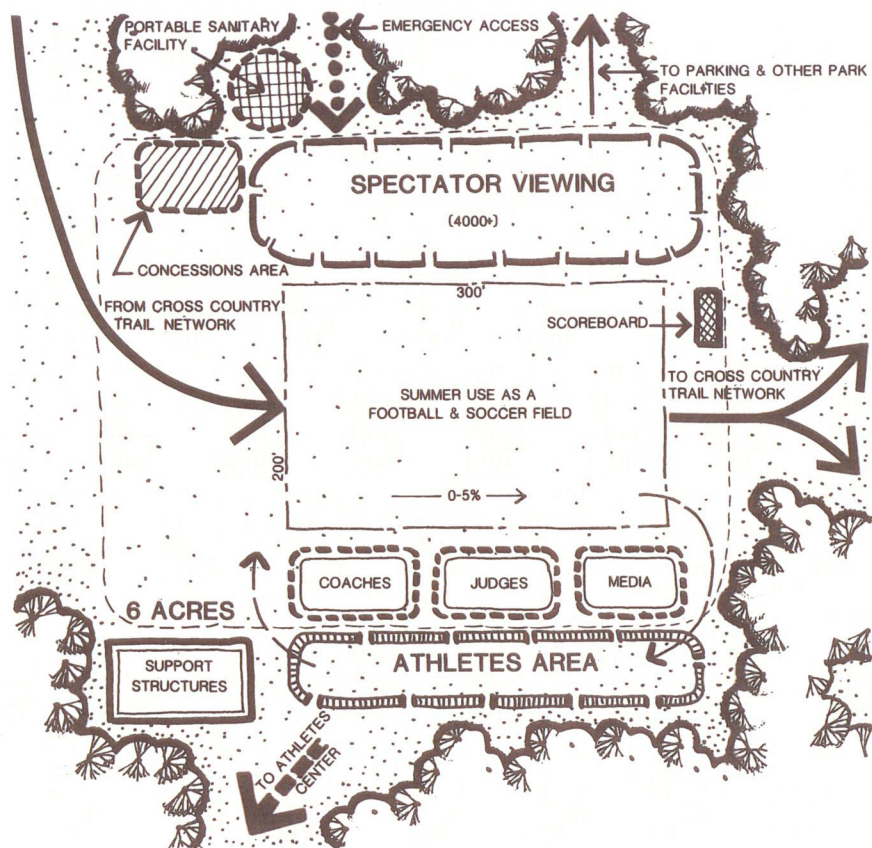
Support facilities include: maintenance access; maintenance equipment storage area; electricity to energize lighted trails; portable sanitary facilities; a warming and waxing facility to house 100 people at one time; and a snow storage area.

General design criteria include: skier overpasses/underpasses; trail prism to be 4 meters wide with a height clearance of 4 meters; the cross-country trails should be sited across terrain which can produce a competitive trail system where generally 1/3 is flat, 1/3 uphill, and 1/3 downhill. The greatest sustained gradient on an uphill cross-country trail over 100 meters in length should not exceed 17%, the greatest gradient on short uphill should not exceed 30%. Major uphill and downhill trail sections should be avoided in the first and last 15% of trail length in relation to the start/finish area. All trail turns should be banked into the turn in relationship to direction of travel. Trails should be sited to avoid exposure to windy areas, bisecting drainage swales, and areas with extreme solar exposure. Cross-country trail signage should communicate level of difficulty, direction of travel, length of trail and, periodically, location. Judges, coaches, media, and spectator viewing areas are to be provided throughout the trail network. (Approximately two areas 15 feet deep by 100 feet in length are to be provided for every kilometer of trail length.) Tree removal in these areas is not required, however, underbrush may be cut back. On lighted trails the light poles are to be set a minimum of 3 feet from the edge of the trail. Lighting should be high pressure sodium lamps with poles located approximately 100 feet on center.

The summer use potential for these cross-country trails are; hiking, jogging and nature trails. In addition, par-course exercise stations can be sited adjacent to the trails.

The entire cross-country trail system is to be hydroseeded to minimize erosion and maintenance costs during summer months. No vehicular access is to be permitted on the cross-country trail systems except for maintenance vehicles.

5.3 CROSS-COUNTRY START-FINISH AREA



Support facilities include: maintenance access; judging and scoring facilities (temporary); site lighting; electrical outlets; general storage area (temporary); spectator viewing area for approximately 4,000 to 5,000 people (bleachers for 2,000 people, temporary); coaches area; warming and waxing area (temporary); athletes quarters at event times; emergency access; portable sanitary facilities; parking area for 150 vehicles; and potable water. At event times a visitors center, concessions and public conveniences, sanitary facilities, water, telephone and mass transit facilities will be required. Site improvements include; grading to allow for positive surface water drainage, hydroseeding, pedestrian pathways, directional and informational signage.

Design criteria include; six acre site ranging between 0 to 5% slopes, hydroseeded for summer use, minimize wind exposure, site lighting to utilize high pressure sodium lamps, pedestrian pathways to be constructed from asphalt to allow for handicap access, seating to be provided for 2,000 people at event times with earthen terraced areas to accommodate 3,000 additional spectators standing. The United States Olympic Committee (U.S.O.C.) recommends that the cross-country start/finish area be sited separately from the biathlon start/finish area.

Cross-Country Start/Finish Area

A cross-country start/finish area requires a parcel approximately 6 acres in size, approximately 200 feet by 300 feet, and must be located on slopes between 0 to 5%. The remainder is utilized for judge's stand, media facilities, spectator viewing areas, and general access requirements (refer to Figure 5.3). Compatible suitability zones for this use are 1 and 2.

A summer use potential for the cross-country start/finish area is field sports. An informal football or senior league soccer field can be incorporated within the start/finish area.

At event times, it is desirable to lay out the competitive race track to allow athletes to enter the start/finish area more than once prior to the conclusion of the race.

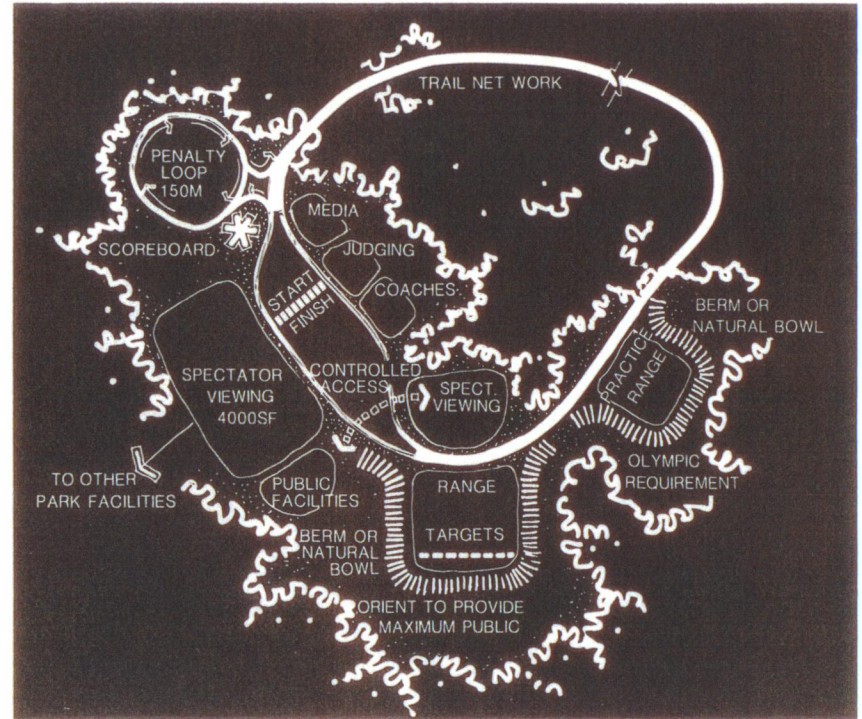
Biathlon Start/Finish Area and Range

The biathlon start/finish area and range requires approximately 10 acres. At event times it is preferred that this start/finish area be separate from the cross-country start/finish area. Three elements make up a biathlon event; 1) The start/finish area and trails, 2) penalty loop, and 3) biathlon firing range. The start/finish area requires a site with 0 to 5% slopes. The penalty loop should be sited with regard to direction of movement so that entering the penalty loop the athlete does not cross over other competitive tracks. The location of the score board is critical in relationship to the start/finish area and penalty loop to assist the athlete in entering the penalty process. The biathlon firing range does not need to be located at the start/finish area. However, if sited along the trail system, provisions need to be made to host spectators, judges, media, and coaches. Refer to Figure 5.4 for a typical Biathlon Facility layout. Compatible suitability zones for this use are 1 and 2.

Support facilities for the biathlon start/finish area are equivalent to those previously discussed in the cross-country start/finish area.

Design criteria for the biathlon start/finish area are equivalent to the cross-country start/finish area with the following additions; penalty loop to be 150 meters in length, separate competition trails from cross-country trails at event times and a firing range designed to F.I.S. standards (site size is approximately 18 acres including range, spectator areas and support facilities), orient range to maximize public safety and to minimize solar glare. The firing line is to be oriented so that over shooting the targets does not cross any trail systems or other recreational facilities accessible to the public at event times. It is desirable to have the target line located at the base of a cleared steep slope with enough vertical height to minimize overshooting conflicts (e.g. 25% slope/60 feet in height).

5.4 BIATHLON START-FINISH AREA AND RANGE

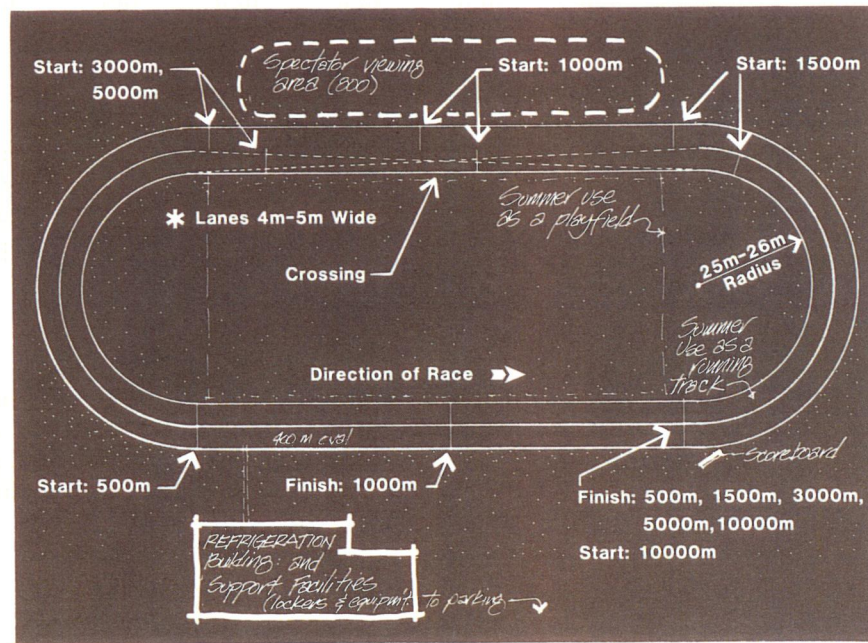


Summer use of the biathlon start/finish area could include informal field sports. In the summer the biathlon firing range could be utilized as an archery range.

Outdoor Speed Skating Rink:

To meet F.I.S. standards an outdoor speed skating rink demands approximately 3 acres. The outdoor ice rink requires mechanical refrigeration to maintain a proper ice surface temperature. The ice rink is an oval configuration 400 meters in length and requires a flat site. The compatible suitability zone is Zone 1.

5.5 SPEED SKATING



Support facilities for the speed skating rink include: refrigeration equipment, athletes warming room, judging area, coaches area, spectator viewing area for approximately 800 people, locker rooms, score board, general storage area, maintenance access, portable sanitary facilities, ice grooming equipment, media area, water, electricity, and a parking area for approximately 25 vehicles.

Design criteria include; a 400 meter oval ice rink, with each single track being 5 meters wide and providing for warm up and practice lanes (refer to Figure 5.5).

The summer use of this facility includes two items. The interior portion of the track can be utilized as a soccer or football field in summer, and the ice track could be utilized as a running track.

Public/Informal Skating:

Little Campbell Lake has the potential of providing informal ice skating activities for the public. It is recommended that site lighting be installed near the edge of Little Campbell Lake to support this recreational use.

Rope Tow:

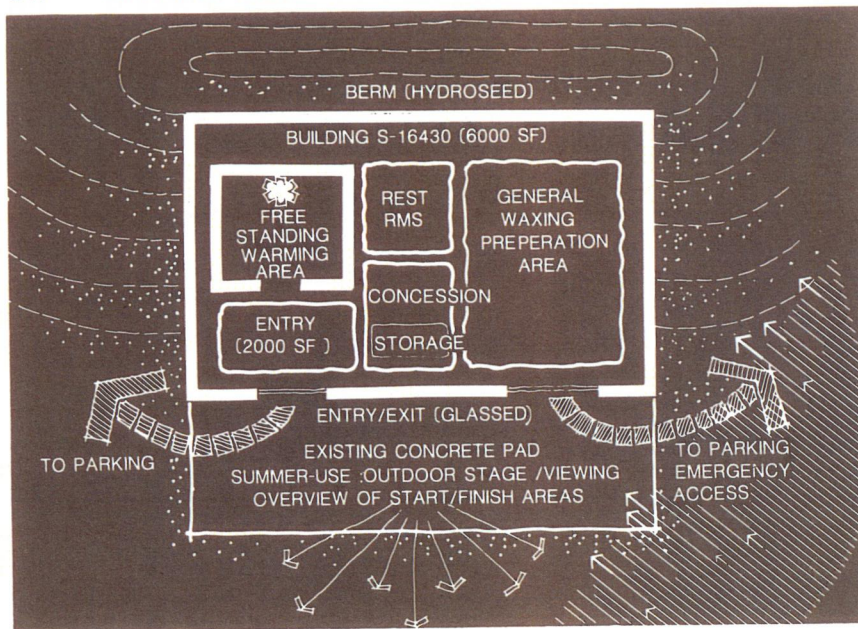
A rope tow facility, approximately 1,000 feet in length, is recommended for use by novice and beginner skiers. This facility is to be located adjacent to the snow play area (refer to Figure 5.6). Originally, this facility was to be sited adjacent to the ski jumps. This relationship was determined to be incompatible for two reasons. First, the slopes adjacent to the ski jumps were too steep and of insufficient length to be useable as a beginner area. Second, a potential conflict existed between a beginner skier out of control crossing the landing area associated with the ski jump.

The rope tow was sited adjacent to the snow play area for two reasons: 1) The rope tow and the snow play area (e.g. sledding hill) could be utilized by handicapped and non-handicapped persons: 2) It could also be utilized as a training area easily accessible to beginner skiers living in south Anchorage area.

Compatible suitability zones for this use are Zones 2 and 3. This is primarily because the maximum slope for this facility should not exceed 10% to be utilized safely by handicapped individuals.

Support facilities include; maintenance access, electricity, emergency access, parking area, operators booth, site lighting and portable sanitary facilities.

5.7 WARMING FACILITY



Design criteria include: handicapped accessible walkways and entries; reduction of visual impact of building by berming against the exterior concrete walls on all sides but the entry; hydroseeded berms; painting interior concrete walls white, overhead truss system jade green, ceiling white, installation of dark grey carpet throughout structure; replacement of steel doors with paned glass windows 2 feet square with metal framework painted jade green; installation of overhead track lighting with incandescent light fixtures; maintenance of existing ceiling height, with the exception being the warming area; warming area cubicle to be freestanding with a ceiling height of 10 feet (total square footage to be 1,500 square feet with seating for 30 people). The warming facility should be heated electrically maintaining a temperature between 55-60°F. Provide fire protection per code, secure all rooms not requiring use, provide paved pedestrian access 12 feet wide from parking area to building entrance designed to be accessible to the handicapped.

Summer use potential for this facility includes: a small visitor/nature center to be housed within the entry area approximately 2,000 square feet in size, educational/classroom facilities for school children, and the existing concrete pad located at the entrance could be utilized as an outdoor stage for concerts, special exhibits and viewing area.

If upon subsequent investigation, these buildings are determined unsuitable for restoration, a new warming facility could be constructed.

Snow Making/Storage Area:

If an international event were programmed for the Pt. Campbell/Kincaid Park site and there were no snow on the ground, snow making and storage capability would be essential. A minimum of 7.5 kilometers of trails 4 meters wide with 10 centimeters of snow cover is required to successfully host the event. This equals approximately 3,500 cubic meters of snow which must either be imported or made on-site, then hauled and spread across the competitive trail network.

Feasible options for making snow on-site are: 1) to have single or multiple water sources capable of producing 3,500 cubic meters of snow and space to stockpile it nearby, or 2) import snow from other places, such as the airport, and store it on-site prior to dispersal along the trail network. Assuming a snow pile averaging a height of 3 meters, the area required to store the snow would be 1/4 acre. The compatible suitability zone for this use is Zone 1. Refer to Technical Appendix: Volume 2 of 2; Appendix D, snow making section for further discussion of snow making options.

Support facilities for snow making include: a well and snow gun at a location adjacent to the snow storage area sized to produce 3,500 cubic yards of snow; electricity; maintenance access; and a small equipment storage area.

Snow stored on-site requires dump truck access, maintenance access, and a small equipment storage area.

Design criteria include: minimal solar and wind exposure, flat terrain, minimal visual impact to recreational users, a loading/unloading area and safety signage.

Summer use for this facility could be temporary storage of maintenance vehicles and equipment for annual park maintenance program.

SUMMER RECREATIONAL FACILITIES

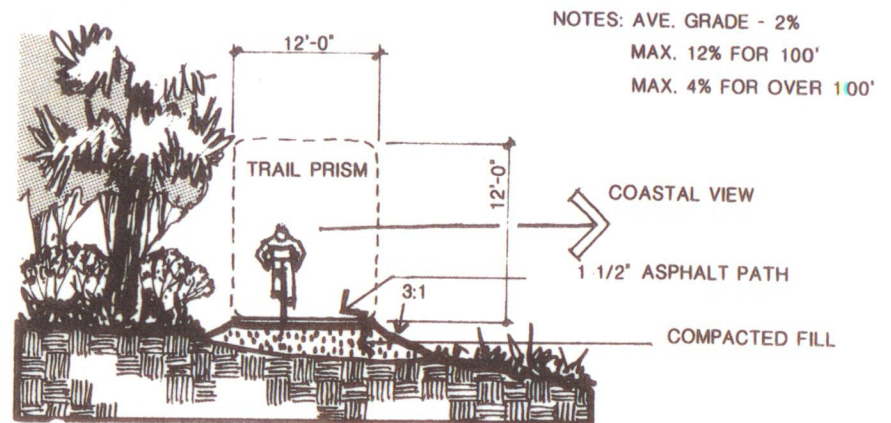
Coastal Trail:

The Municipality of Anchorage is presently determining the alignment of a coastal trail between Ship Creek and Potter Marsh. This trail traverses the project site for a distance of approximately 3.5 miles (refer to Figure 5.8). The compatible suitability zones for this use are 1 through 3.

Support facilities include: signage, maintenance access, parking area for 30 vehicles to be located at the southeast corner of the Park, viewing areas, potable water, and portable sanitary facilities.

Design criteria include; 12 feet wide bed for trail, 8 feet of asphalt surface, 12 foot head clearance, maximum gradient for short runs to be 8%, maximum gradient for long runs to be 4%, average design gradient to be 2%. Trail alignment should not bisect

5.8 COASTAL TRAIL SECTION



the low points of localized drainage basins. Minimum turning radius is to be 15 feet.

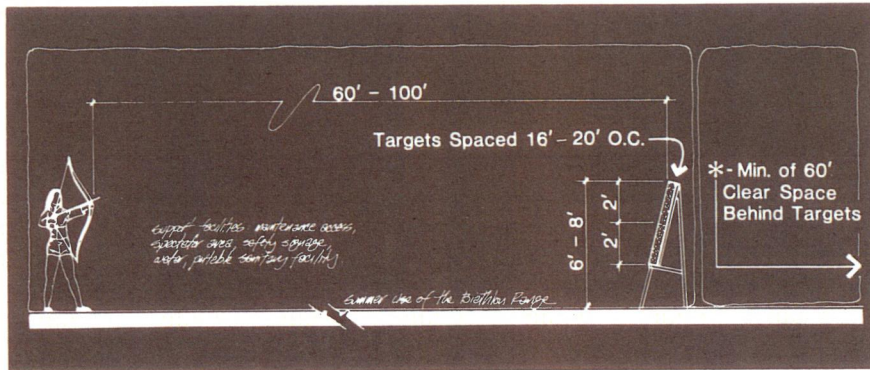
The coastal trail is designed to be both a winter and summer recreational element. The design of internal bike trails to serve Pt. Campbell/Kincaid Park recreational facilities will be to the same standards as the coastal trail. Signage will be provided to distinguish the coastal trail from on-site trails.

Archery Range:

The archery range is a summer use of the biathlon firing range. The dimensional requirements for an archery range vary between 60 and 100 yards in length and 50 to 100 yards in width depending on the number of targets utilized (refer to Figure 5.9). Targets are spaced 16 to 20 feet on center. Compatible suitability zones for this use are 1 and 2.

Support facilities for this use include: access to sanitary facilities and potable water, maintenance access, pedestrian access, access to parking areas, general storage area, spectator area, and safety signage.

5.9 ARCHERY RANGE



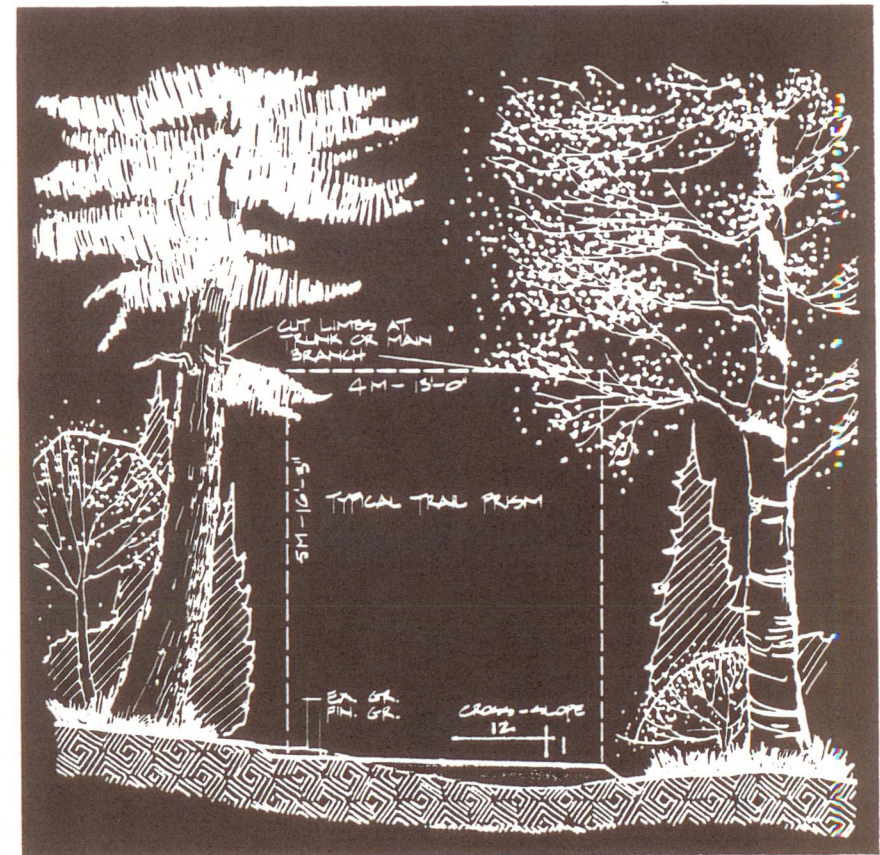
Design criteria include: north-south orientation with a maximum 45° deviation allowed; 60 to 100 yards in length, 50 to 100 yards wide, target space 16 to 20 feet on center, minimum of 60 feet clear space behind targets; minimal wind exposure; requires a relatively flat terrain and sited so as not to conflict with cross-country trail systems.

The potential exists for identifying one of the cross-country trail loops as a walk-through archery range, however, this requires supervisory control and carefully placed safety signage. Costs associated with this form of archery are minimal if volunteer supervisory personnel are provided by the archery association utilizing the facility. It is not recommended that the general public be admitted. A certificate of insurance will be required, by the Municipality, of any user organization.

Hiking, Jogging and Nature Trails:

These are summer uses of the winter cross-country ski trails. The compatible suitability zones, support facilities, and design criteria are the same as those discussed under cross-country ski trails. The jogging, hiking and nature trails are to be hydro-

5.10 HIKING | JOGGING | NATURE TRAIL



seeding. Additional elements include; waste receptacles at trail heads and view points, and interpretative signage for specific nature items (refer to Figure 5.10).

Hiking trails separate from the cross-country ski trails are to be designed 2 to 3 feet wide with an 8 foot vertical clearance. Surface treatment is to be gravel, wood chip or hydroseeding. Suitability zones for this use range from 1 to 4. Trail construction should be done primarily by hand including removal of vegetation and overstory pruning.

Par-Course:

A par-course is an exercise system, prefabricated and installed along existing trail systems. The length of the course is generally 1-1/2 miles long. The exercise stations are sited along an existing trail network and located off the trail to avoid interrupting other trail users. Compatible suitability zones for this use are 1 through 3.

Support facilities include: pedestrian access, parking access near trail head, maintenance access, access to sanitary facilities and potable water, signage, and an existing hydroseeded trail network.

Design criteria include: 10 to 12 exercise stations, exercise stations to be located off the existing trail system, a start/finish area, trail system signage and a warmup-stretching area. The surface treatment of the trail network is to be hydroseeding.

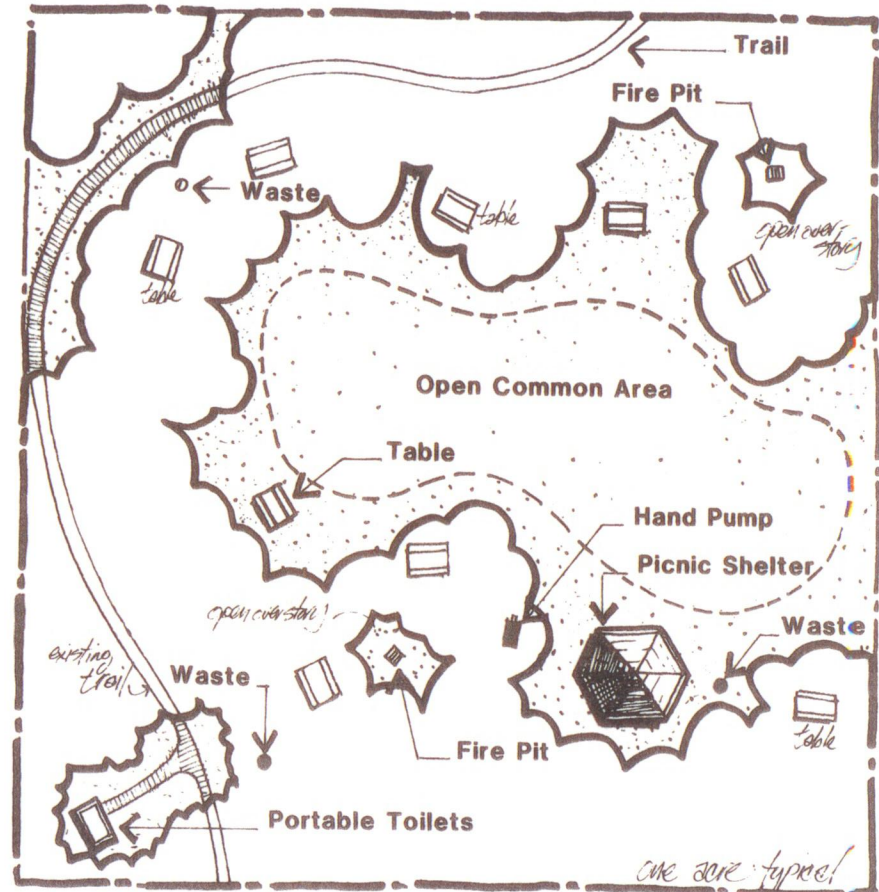
Picnic Areas:

Forty acres of the Pt. Campbell/Kincaid Park site have been identified as potential picnic areas. These can be reached primarily on foot along the existing cross-country ski trails. The areas are generally located within the loop systems of the cross-country trails (refer to Figure 5.11). The compatible suitability zones for this use are 2 and 3.

Support facilities for picnic areas include: potable water, access to parking, signage, maintenance access, portable sanitary facilities, and waste receptacles.

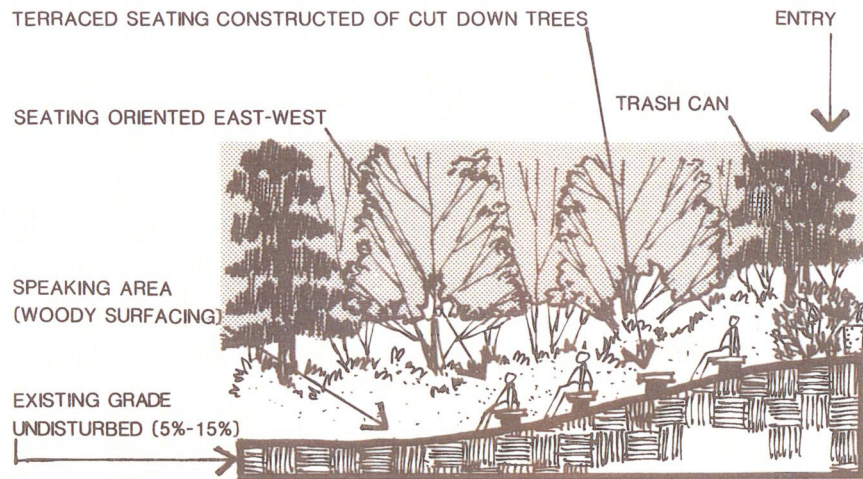
Design criteria for picnic areas include: maximum density of picnic tables not to exceed 10 tables per acre, one potable water source per 8 picnic tables, one waste receptacle per 4 tables, one portable

5.11 PICNIC AREA



sanitary facility per 20 tables, one picnic shelter per 5 acres of picnic area development, one fire pit and/or grill per 4 tables, placement of fire pits and/or grills in an open overstory area, location of picnic tables and picnic shelters at the edge or within wooded areas, and siting of all facilities to minimize vegetative removal.

5.12 AMPHITHEATRE



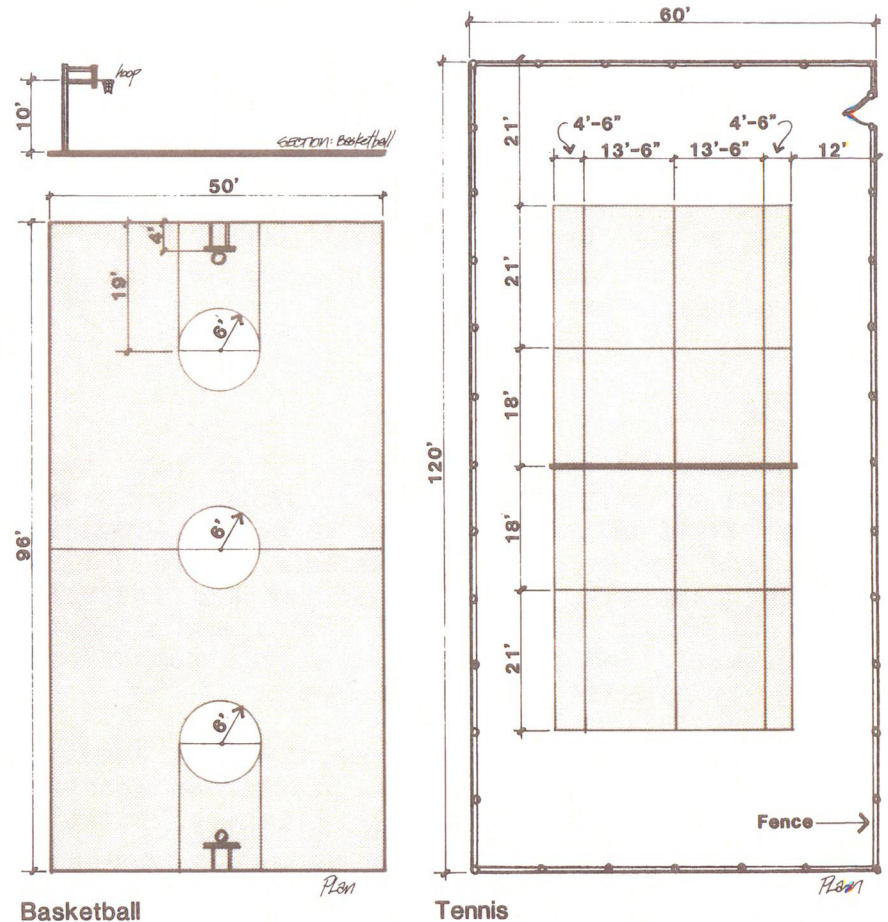
Amphitheatre:

Two amphitheatre sites have been located at the Pt. Campbell/Kincaid Park site. An amphitheatre requires an area of approximately 1/2 acre, with a natural setting. A terraced seating area should be constructed using logs from trees removed to accommodate this use (refer to Figure 5.12). The speaking area or platform should be at grade with a surface treatment to be wood shavings. The compatible suitability zones for this use are 2 and 3.

Support facilities include: maintenance access, access to parking, pedestrian access, access to sanitary facilities, and signage.

Design criteria include: construction materials to be made from the trees that were cut down to construct this facility, minimal wind exposure, seating area to be oriented east-west, well drained soils, 5 to 15% slope, seating terraced to conform to existing grade, and one trash can per amphitheatre.

5.13 HARD SURFACE COURTS



Hard Surface Courts:

One acre of hard surfaced courts for tennis and basketball have been identified to be located at Pt. Campbell/Kincaid Park. (Refer to Figure 5.13). These courts are outdoor non-competition courts. Four tennis courts and three basketball courts have been sited. The compatible suitability zone for this use is 1.

Support facilities include: maintenance access, access to sanitary facilities, access to potable water, access to parking, pedestrian access, spectator viewing area, and signage.

Design criteria for hard surface courts include: minimal wind exposure, removal of overhanging vegetation, flat terrain with sloped surface at 2%, surface treatment to be asphalt or concrete, provision of 10 foot high fencing around tennis courts, tennis courts to be 100' by 60', basketball courts to be 94' by 50'. Orient courts east-west, and provide one waste receptacle per 2 courts.

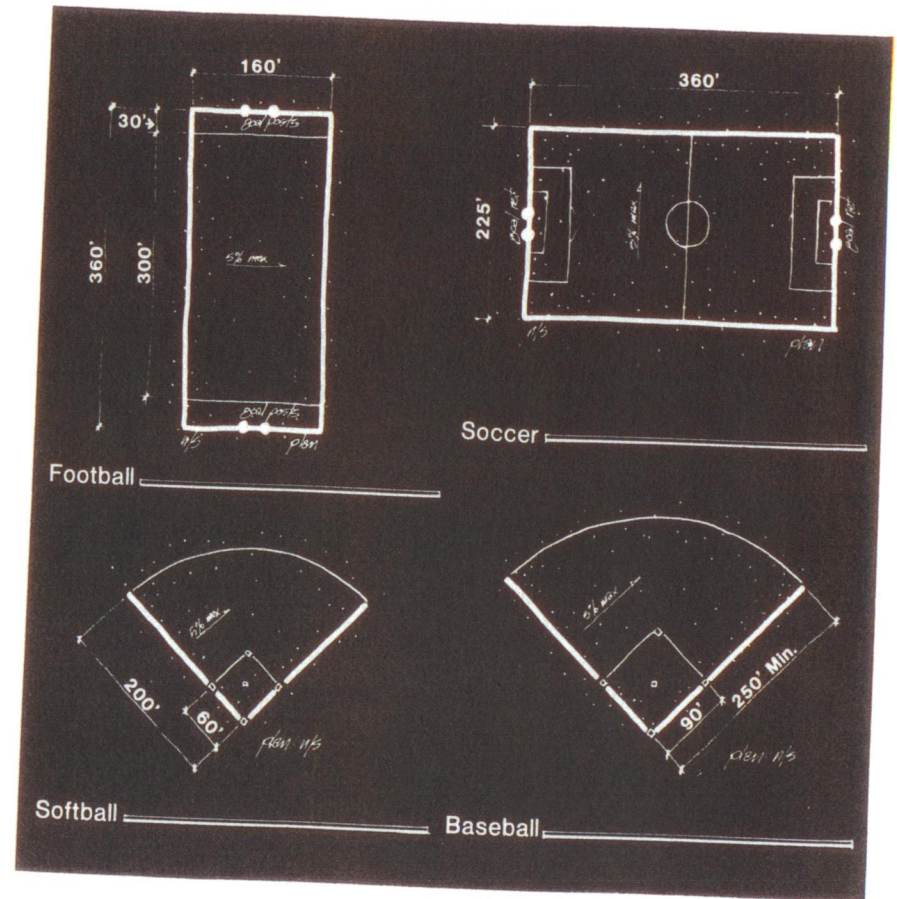
Sport Fields:

Approximately 20 acres of sports fields have been identified as part of the Park. These fields are informal field play areas graded to provide positive sheet flow drainage and hydroseeded. The fields include: baseball, softball, soccer and football (refer to Figure 5.14). Sport fields are sized to meet competition standards. The compatible suitability zone for this use is Zone 1.

Support facilities include: maintenance access, parking, general storage area, pedestrian access, sanitary facility access, site lighting, potable water, and signage.

Design criteria include: slopes from zero to 5%, surface treatment to be hydroseeding, well drained soils, east-west orientation, provide for handicap access, provide one waste receptacle per field, fields to be graded to allow for positive surface water drainage, provide area for spectator viewing, size all fields to meet competition standards (football field to be 360 feet long by 160 feet wide, soccer field to be 360 feet long and 225 feet wide, baseball diamond area to be 90 feet on each leg, softball diamond to be 60 feet per leg).

5.14 SPORT FIELDS



The sports fields double as an open meadow. When not in use the character of the sports field areas will be that of an open lawn. When the sports fields are being utilized for baseball, softball, soccer and/or football the users will stake out their own field of play. The potential exists to construct competition class field sport facilities at the cross-country and biathlon start/finish areas.

Water Sports:

Little Campbell Lake is approximately 8-1/2 acres in size. It currently provides water sport recreational activities such as swimming, fishing, non-motorized boating, winter skating and ice fishing. For the lake to continue to provide recreational opportunities the existing facilities require upgrading. This includes a new fishing pier, an identified safe swimming area and an area designated as a non-vehicular boat launch. In addition, the lake shore requires improvement: prohibiting vehicular access to the lake's edge, regrading and revegetation of all barren areas, a parking area for 50 vehicles, maintenance access, potable water source, site lighting, picnic area, lifeguard station, roped safe swimming area, sanitary facilities, waste receptacles, and signage.

The potential exists for a concession to rent small rowboats and wind surfers. Other amenities may include a shower, bath house, and diving board.

Play Areas:

Three 1/2 acre play areas designed for small children should be provided at Pt. Campbell/Kincaid Park. These play areas have been sited adjacent to major activity areas. The compatible suitability zones for this use are 1 and 2.

Support facilities for this use include: parking, maintenance access, pedestrian/handicapped access, access to sanitary facilities, access to a potable water source, and signage.

Design criteria for this use include: location within viewing distance of the adjacent activity area, maximizing southern exposure and siting on 0 to 6% slopes. Play structures should be designed to safely challenge

a child's strength, coordination, and balance by means of climbing, manipulation, and interaction with other users. The age range of children anticipated to use this facility is between 2 and 8 years old.

Running Track:

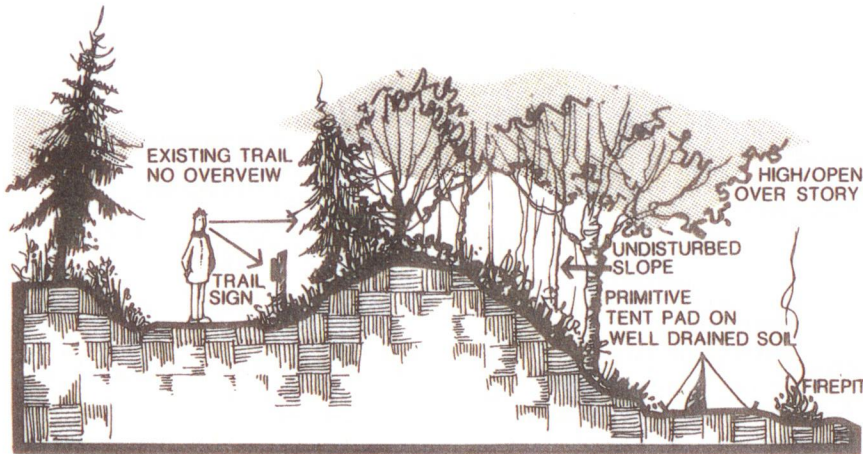
The running track is a summer use of the speed skating oval. The running track would be constructed of crushed cinders. The summer use potential for the interior of the running track includes field sports and track and field events. Refer to speed skating discussion for siting and design criteria.

Primitive Tent Camping:

One hundred primitive walk-in tent camp sites have been sited as part of the Pt. Campbell/Kincaid Park Master Plan. Access to these sites is the existing trail network (refer to Figure 5.15). Sites were selected for their visual privacy from the coastal trail and from other primitive tent sites, high overstory, and ground level enough to pitch a tent. The compatible suitability zones for this use are 2 and 3.

Support facilities for this use include: parking area, trail network, signage, and an enforcement program. The enforcement program is conceived to have a fee associated with the camping privilege, time limit control, a printed brochure locating the approved camping sites, and a series of regulations adopted by the Municipality enabling authorized personnel to enforce the rules. The regulations should cover issues such as tree protection, human waste, solid waste, fires, fees, time limits and prohibited activities.

5.15 PRIMITIVE CAMP SITE

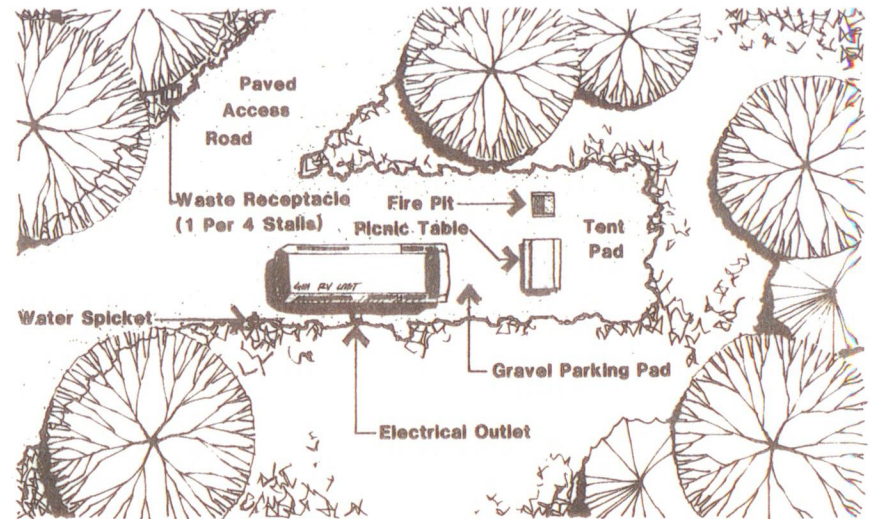


Design criteria for this use include: clearing of underbrush for tent sites to be no greater than 100 square feet, installation of one fire pit per campsite, no vehicular access, maximal visual privacy, minimal wind exposure, water and sanitary facilities not to be provided except for those provided under other facility requirements, isolation of sites from noisy areas, siting on well drained soils, do not site at low point of drainage basins, provide numbered tent camp location signs. Primitive tent camping can occur both in winter and summer.

Recreational Vehicle Camping:

Potential pedestrian/vehicular conflicts must be resolved through careful design of the facility, should the Municipality ultimately choose to build this facility at Pt. Campbell/Kincaid Park. It should be sited separately from all other recreational facilities previously programmed. Recreational vehicle sites (60-80) can be housed at the upper Nike site if the existing buildings were demolished (refer to Figure 5.16). The most compatible suitability zone for this use is Zone 1.

5.16 RECREATIONAL VEHICLE PLAN



Support facilities include: water, electricity, maintenance access, sanitary facilities, sanitary waste pump station, site lighting, paved access road, compacted gravel parking pad, indoor showers, and an enforcement program. The enforcement program should include; three full-time personnel, and Park Department Regulation of fees, time limit, surveillance, tree protection, human waste, solid waste, fires and prohibited activities.

The design criteria for this use include: 60 to 80 R/V stalls, paved access road, compacted gravel vehicular parking pad, one electrical outlet per stall, one potable water spigot per stall, one picnic table per stall, one tent pad per stall, one fire pit per stall, one sanitary pump station, one toll booth, one centralized restroom, showers with hot and cold water, one waste receptacle per four stalls, one large waste receptacle at sanitary pump station, pedestrian pathways to centralized restroom facility, directional signage, camp site location sign, printed brochure, and a general storage area for maintenance equipment.

YEAR ROUND RECREATIONAL FACILITIES

Park headquarters:

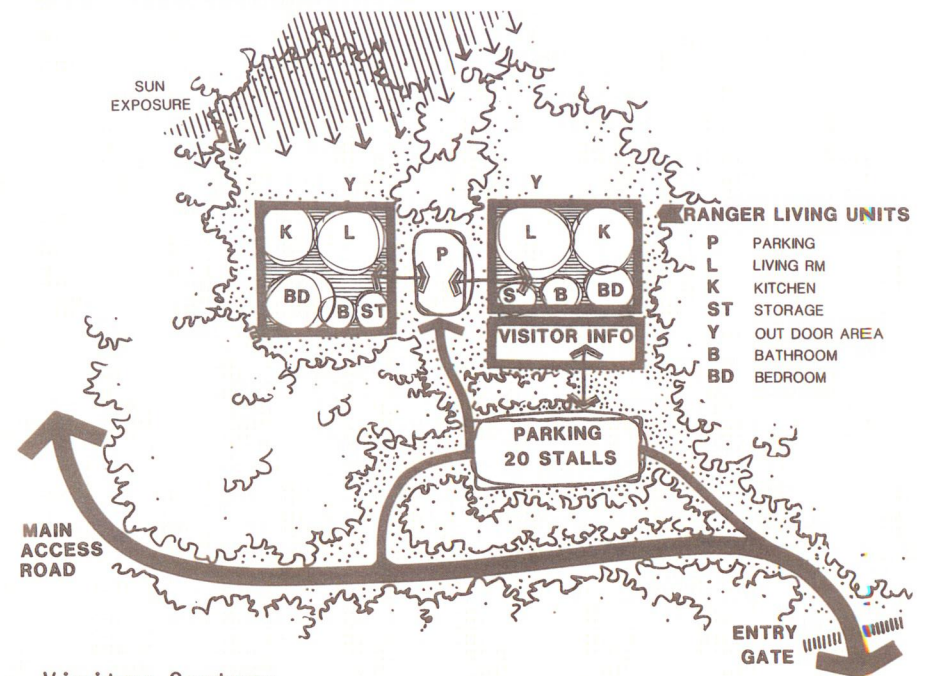
This 4,000 square foot facility will be required as part of Phase III development (refer to Figure 5.17). The square footage represents two 1,800 square foot residences for live-in park rangers. One of the living units will have a 400 square foot visitor information/reception area. The park headquarters is sited at the entry to Pt. Campbell/Kincaid Park along the ACS access road at the eastern park boundary. This siting will allow for excellent security and park use control. The compatible suitability zones for this use are 1 and 2.

Support facilities for the park headquarters include: entry gate, parking area for 20 vehicles, emergency access, maintenance access, site lighting, sanitary facilities including septic system, potable water, electricity, telephone, directional and information signage, and visitor information materials.

Design criteria for the park headquarters facility include: two living units, each with two bedrooms, kitchen, bathroom, living area, storage area, covered parking for one vehicle, and useable outdoor area for lawns and/or a garden.

The structure(s) shall be constructed of wood and sited to minimally disturb existing vegetation and topography. Colors utilized shall be natural in character borrowing from adjacent vegetation. The facility shall be designed to be energy efficient while maximizing penetration of natural light, handicapped accessible, no greater than one story. These structures shall be sited to minimize light intrusion from passing vehicles while maximizing solar orientation to the south.

5.17 PARK HEADQUARTERS

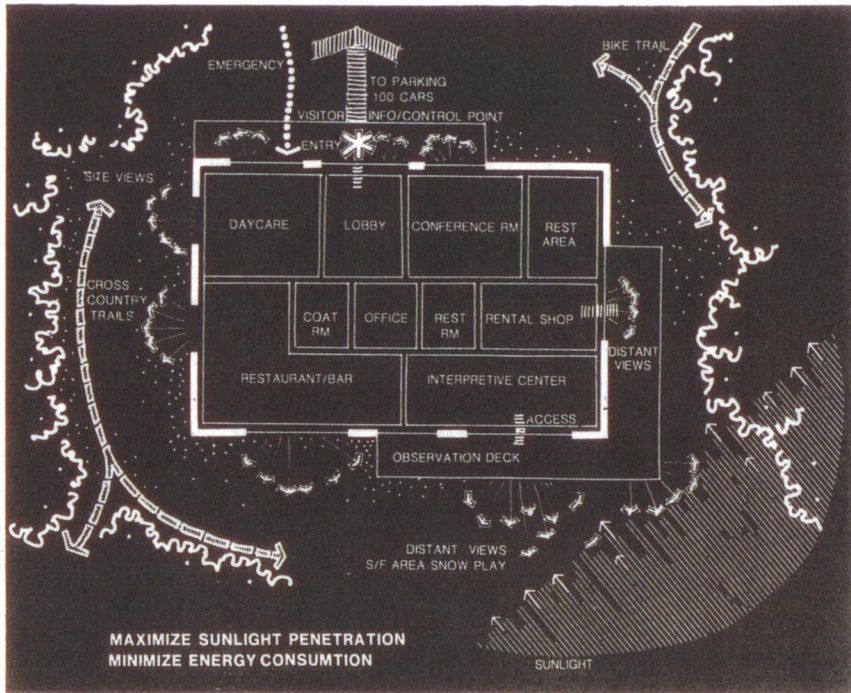


Visitor Center:

The visitor center will act as the major user control point during event times at Pt. Campbell/Kincaid Park (refer to Figure 5.18). This facility will orient the user as to recreational opportunities offered, schedule of events, regulations, and fees as appropriate. Potential uses within this facility are; restaurant/bar, restrooms, entrance, office, coat room, conference room, rest area, equipment rental, day care, outside observation deck and an interpretive nature center. The recommended total square footage is 7,000 square feet. The compatible suitability zones for this use are 1 and 2.

Support facilities include: parking area for 100 vehicles, emergency access, maintenance access, fire protection, sanitary sewer facilities, restroom facilities, potable water, electricity, site lighting, pedestrian pathways, and general storage area.

5.18 VISITOR CENTER



Design criteria for this facility are: utilize one of the launch control buildings at the lower Nike site, remodel interior and create an enclosed structure on top of one of these buildings designed to maximize sunlight, views, and surveillance of surrounding winter and summer activity areas. Facilities to be included within the existing launch control building are; restrooms (700 square feet), lobby entrance (600 square feet), office area (200 square feet), coat room (100 square feet), conference room (1,000 square feet), rest area (600 square feet), equipment rental room (600 square feet), a day care area (300 square feet), and a nature interpretive native center (2,500 square feet). Facilities to be included on the second level of the launch control building include; restaurant/bar (2,000 square feet), restrooms (500 square feet), outside deck (2,000 square feet), and an observation area (500 square feet).

Facilities to be sited adjacent to the visitor center include; cross-country start/finish area, bike trails, hiking trails, field sport areas, and a parking area for 100 vehicles. The existing launch control building is to be modified to allow as much light in as possible. The massive nature of the existing concrete launch control buildings are to be reduced by means of berming along three sides of the structure. These berms are to bury the buildings approximately 60% of their exterior height. The existing large steel doors (2) are to be removed and replaced with glass walls. The concrete pad in front of these areas is to remain and shall be converted to an outdoor entry court.

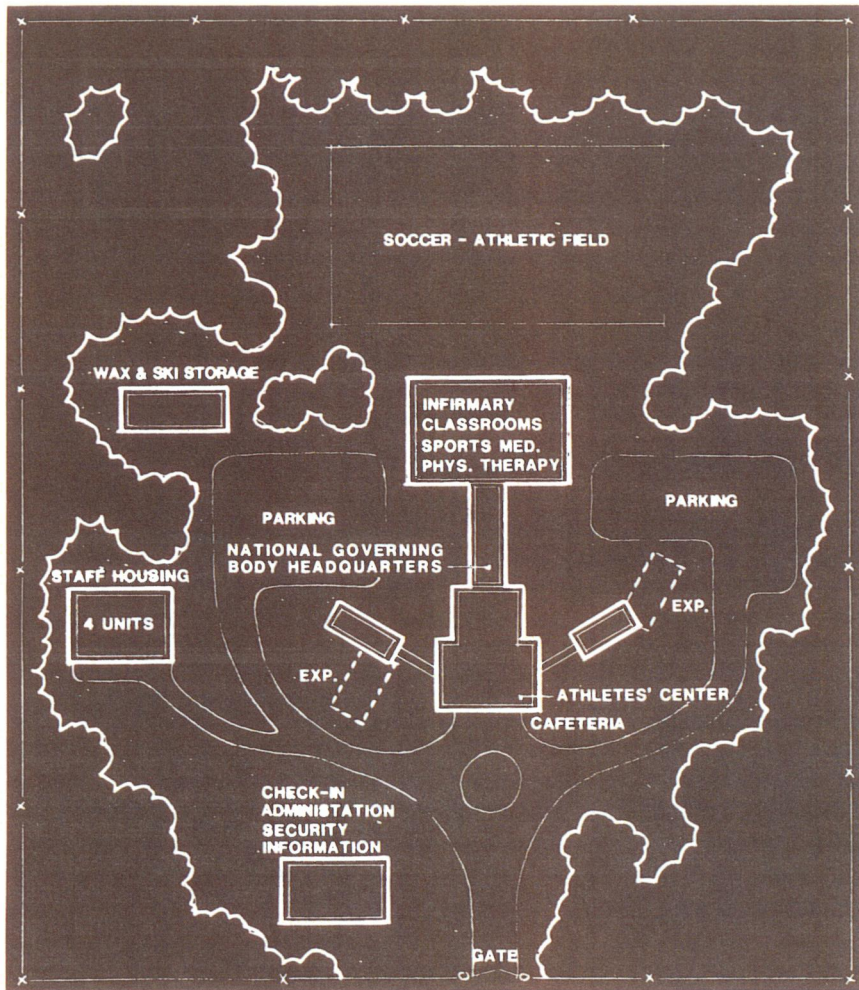
OLYMPIC TRAINING CENTER:

The Olympic Training Center includes; athletes dorms, Olympic training center headquarters, athletes center, medical center, wax and ski storage (refer to Figure 5.19). These facilities represent 69,000 square feet of building space. The compatible suitability zones for this use are 1 and 2.

Support facilities for the Olympic Training Center are: septic system, electricity, telephone, parking, maintenance access, emergency access, security fencing, potable water, fire protection, general storage area, and signage.

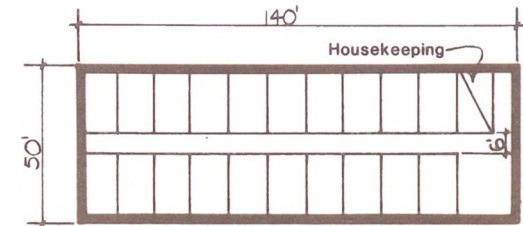
Design criteria for the Olympic Training Center include: athletes dorms (42,000 square feet), OTC headquarters (6,000 square feet), athletes center (10,000 square feet), medical center (8,500 square feet), and wax and ski storage (2,500 square feet). These facilities are not to be over two stories in height. Construction material for these structures are to be concrete, steel and glass and designed to maximize energy efficiency while maximizing solar penetration. All facilities are to be handicapped accessible. This complex is to be constructed as a

5.19 OLYMPIC TRAINING CENTER

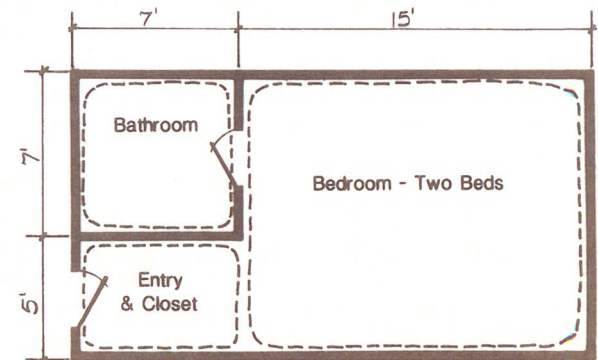


core unit, sharing common utility systems, parking areas, and site improvement areas. Orientation of these facilities are to be parallel to tree lines, minimize wind exposure, maximize southern exposure, foundations to be designed to minimize topographic modification, and a minimum amount of vegetation is to be removed.

The number of users of this facility range from 150 to 350 dependent upon type of event including athletes, coaches and staff.



TYPICAL DORM FLOOR PLAN



TYPICAL DORM ROOM

Athletes Dorms:

Specifications include; maximum 350 people, minimum 150 people, two people per room with provision for roll-away and drop-down beds, laundry, bath in each room, central drying rooms, normal coach/athlete ratio 2:10 (during competitions the coach/athlete ratio is 1:4), bedrooms to be 15' x 12', bathrooms 7' x 7', entry and closet to be 7' x 5', total square footage is 264 feet (22' x 12'), central bath area optional, general dormitory size is 100' x 50', each floor approximately 7,000 square feet, with about 20 rooms per floor, locate near main cafeteria. Miscellaneous facilities include; heating, saunas, meeting rooms, general storage areas, and equipment storage (refer to Figure 5.19).

In general each dorm consists of 40 rooms and is approximately 14,000 square feet in size and will accommodate 75 to 100 people. Four dorms are required to host a major event.

Athletes Center:

Specifications include: 10,000 square feet overall, capacity of 300 seats, cafeteria service with table seating, locate centrally between dormitories, ticketing facility, kitchen facilities, reading room which can be converted to a bunk room, fireplace, desks, piano, lounge chairs, carpeted, well lit, library/books and magazines, small meeting room and game rooms (refer to Figure 5.19).

Capacity figure of 350 people is based on a need to accommodate guests, media and staff. This allows for approximately 28.5 square feet per user.

O.T.C. Headquarters:

Specifications include: 6,000 square feet housing and administrative offices for OTC staff and VIP suites. Office space is required for a general manager/-executive director, assistant manager, secretary, director of transportation and housing, executive chef, health services, chief housekeeper, director of sports and media support center (refer to Figure 5.19).

A 24-hour security service is required for the Olympic Training Center. The location of the O.T.C. headquarters is at the entrance to the center.

The administrative offices of an Olympic Training Center are transportation, assignment of facilities, schedule sports medicine useage, media liaison with Parks sports director, housing, personnel, and budgeting.

Medical Center:

Specifications include: a 12-bed infirmary, full-time nurse, with a doctor on call. The physcial therapy/-training room is to include whirl pools and remedial weight program with a full-time trainer. The sports

medicine complex requires approximately 5,000 square feet and would include the state-of-the-art sports medicine equipment necessary to monitor athlete performance. The cost estimate (refer to Chapter 9) does not reflect the cost associated with sports medicine equipment. The total square footage requirement for the medical center is 8,500 square feet (refer to Figure 5.19).

Wax and Ski Storage:

Specifications include: 2,500 square feet, 150 person capacity, located near or easily accessible to the biathlon and cross-country stadiums. A ski track is necessary from the wax and ski storage building to the training and racing tracks (refer to Figure 5.19).

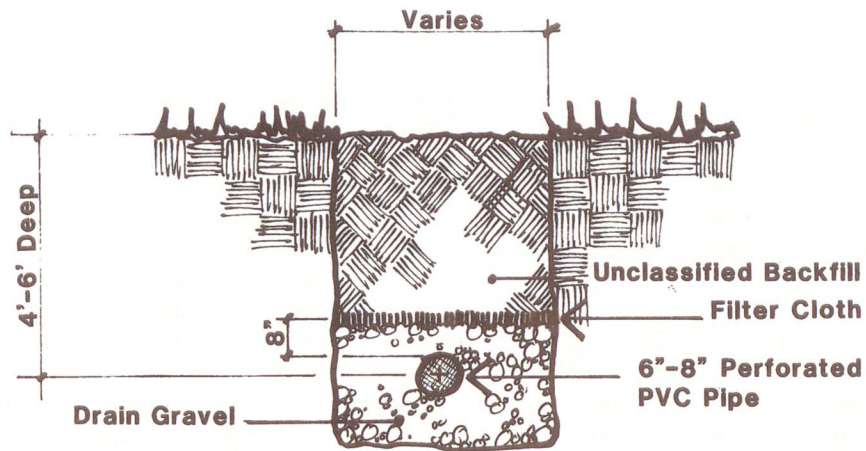
INFRASTRUCTURE

The infrastructure requirements of the Pt. Campbell/-Kincaid Park site are; sanitary sewer, water, power, telephone, roads, parking areas and mass transit staging area.

Wastewater Collection/Treatment:

Sanitary sewer facilities required as part of the Master Plan will utilize the existing system whenever possible (refer to Figure 5.20) including existing sewer lines and septic tank. The sewerage collection system is capable of carrying a wastewater flow of approximately 200 gpm (equivalent to the flow from approximately 1,000 people at peak hour). The septic tank is capable of treating wastewater from approximately 700 people, in a visitor type situation, so the septic tank is the limiting factor of the sewerage

5.20 SANITARY SEWER

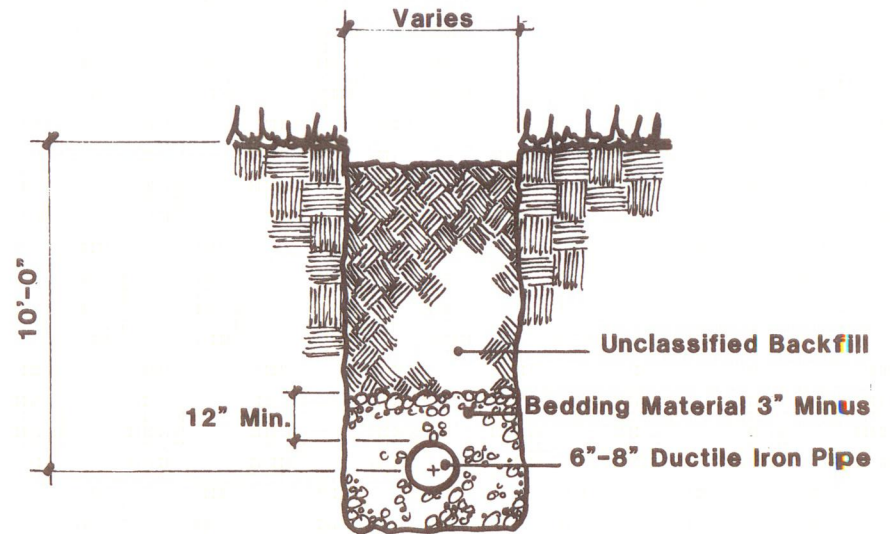


system. A drainfield will have to be constructed since use of the existing outfall must be abandoned. The drainfield should be sited on porous soils to minimize its size. The field should be designed using current practice for institutional on-site wastewater disposal systems.

Water Supply/Distribution:

The potable water system will utilize the existing well and supply pump located at the lower Nike site. Potable water away from the lower Nike site will be obtained from on-site wells. Installation of a 6-inch pipeline from the existing well to the Warming Hut with a fire hydrant at the end, a 50,000 gallon storage tank and a new chlorination system is required. It is recommended that the 500 gpm fire pump at the Battery Control Area be moved to the Launch Area pumphouse. The constant pressure pumps and the penumatic tank at the Battery Control should also be moved to the Launch Area pumphouse. A new water distribution system (refer to Figure 5.21) will require to be installed utilizing a 6 inch ductile iron pipe to the new reservoir.

5.21 POTABLE WATER



The fire protection system in the Launch Area should be designed to provide 500 gpm for two hours duration for concrete structures. New wood structures would require higher flow rates at longer durations. As a minimum, pipelines should be 6-inch; or 8-inch for larger fire flows. Storage capacity must be increased to a minimum of 50,000 gallons and perhaps as much as 150 - 200,000 gallons depending on type of structure. The fire pumps must be replaced with at least 500 gpm pumps, and perhaps as large as 750-1,000 gpm pumps.

Electrical Power and Communications:

The existing power and communications system should be utilized for distribution with modifications and extensions as required to serve future buildings or structures. A condition survey of the existing systems should be made early in the development of the site. At a minimum these facilities will require upgrading to meet current codes.

Stormwater:

Storm drainage via an open ditch system is an adequate method for conveying storm water. However, culverts should have a minimum diameter of 24-inches. Where new road grading/construction occurs, replace 15-inch culverts with 24-inch culverts.

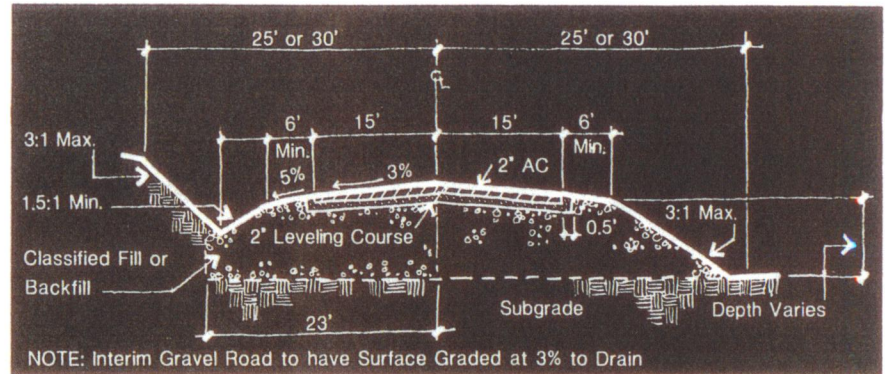
Roadways:

For the most part the existing road system within the park will be utilized for access and circulation. Upgrading of these roads will be required including the road to Little Campbell Lake, the main access road (ACS Road) from Raspberry to the lower Nike site and a spur from the main road to the upper Nike site. The upgrading will be phased over a period of years with the roads remaining gravel surfaced through Phase II of the three phased construction program planned for this facility.

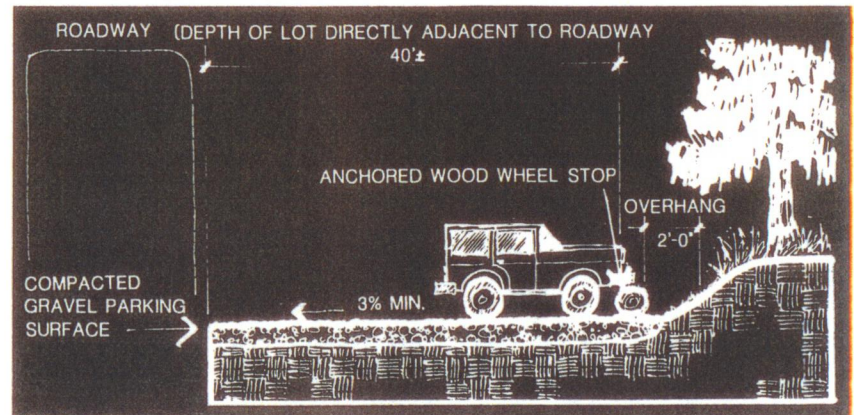
It is suggested that the roads be regraded during Phase II construction and that additional gravel surfacing be placed as required at that time. All work performed should be consistent with the ultimate plan which calls for widening 2-way roads to provide a 26 foot wide asphalt surface (2 inch minimum thickness) with 6 foot wide shoulders. A maximum 6% grade should be maintained throughout the vertical alignment (refer to Figure 5.22).

Additional service roads will be constructed to provide access for maintenance. These will generally provide for one-way traffic and will be gravel surfaced, or in some cases vegetated. Public vehicles would not be allowed on these roads; grades, alignment and dimensional characteristics will depend on the type of equipment which will operate on them.

5.22 ROAD SECTION



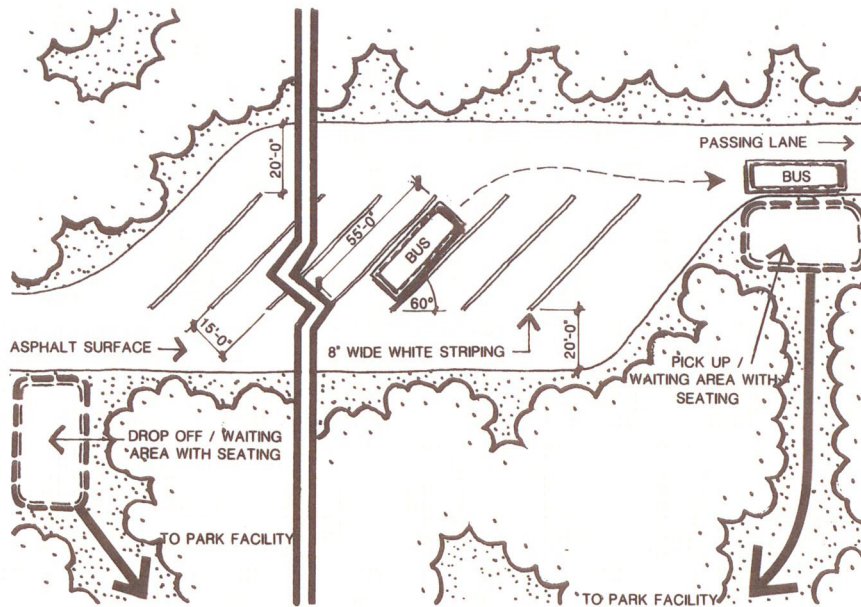
5.23 PARKING AREA



Parking:

Parking areas on-site are to be initially surfaced with gravel in the areas shown on the recommended plan (refer to Figure 5.23). Five hundred parking stalls are provided on-site. At event times off-site parking will be required utilizing a shuttle system. An area able to handle 1,500 vehicles is required off-site during major event times.

5.24 MASS TRANSIT AREA



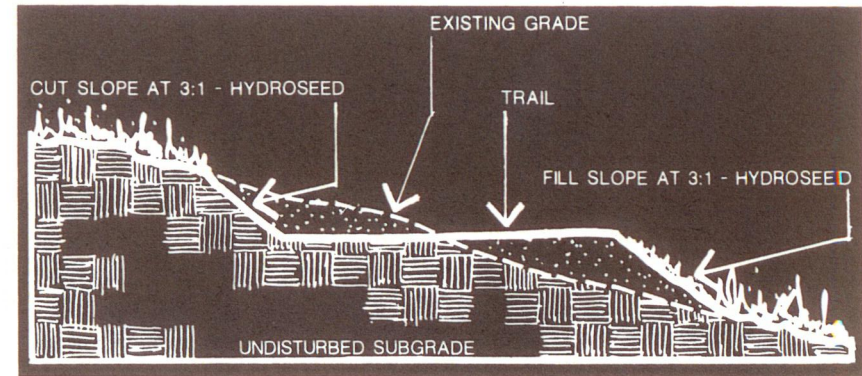
Mass Transit:

A mass transit station area is required as part of the Pt. Campbell/Kincaid Park Master Plan (refer to Figure 5.24). This facility requires three bus drop-off/pick-up areas on-site with a drop-off/pick-up area off-site at the parking area. In addition, a one acre staging area for up to 60 buses is required on-site at major event times. The number of buses required is dependent upon the type of event.

Site Work:

Slopes in cut and fill areas shall not exceed 3:1 (refer to Figure 5.25). All disturbed areas will receive erosion control prevention measures.

5.25 SITE WORK SECTION



Signage:

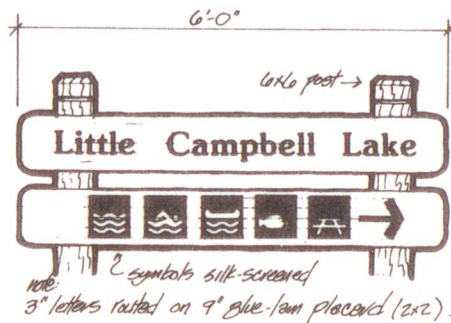
Signage for the Pt. Campbell/Kincaid Park site shall utilize international symbols including all directional, informational, educational and safety signage. The signage construction material shall be wood (refer to Figure 5.26).

The signage system is intended to announce entry, direct all traffic types, inform, educate, orientate, regulate, and provide a safe and enjoyable recreational experience. Four basic sign types have been identified as satisfying the requirements for the park:

Entry sign - this element identifies the park's boundary and announces a special place and time. This sign creates the first and lasting impression on the park user and ultimately becomes the park's signature.

The entry identification sign is to be sited at the park's boundary along the major ingress in full view of the incoming public. Information on the entry sign includes direction of traffic to Little Campbell Lake, the park interior and the recreational opportunities offered.

5.26 SIGNAGE



Regulatory and warning signs such as stop and yield signs, no parking and speed limit signs are typical traffic control signs which will be implemented in accordance with the U.S. Department of Transportation's "Manual on Uniform Traffic Control Devices". The sign posts for these signs should be of wood rather than metal. Signage for the coastal trail and other bicycle facilities in the park will also be implemented in accordance with the "Manual". The design of these signs should be identical to those specified in the "Manual" and uniform in dimension, materials, reflectorization, wording, lettering, color, symbols and shape.

Trail signs are of two types: 1) Trailhead signs should show the entire trail system and locate the user. Trail lengths, degree of difficulty and skiing direction is shown for each trail section. Trail rules are also clearly spelled out and a place for public notices will be provided. The location of the nearest public telephone and the 911 number should also be shown. 2) Inner trail signage should show the trails degree of difficulty, skiing direction, trail distance (either distance from trailhead or distance to trail end). "Do not enter" signage will also be needed at certain trail intersections. Small "you are here" trail maps at intersections will also be required.

Educational/Interpretative - Special and unique geological, biological, physiographical and historical elements within the park merit recognition. Educational/interpretative signs are intended to inform in a passive manner the natural and human events that have resulted in the park's current and changing character, such as the unique-climax vegetative community, active dune building process, glacial history and the Nike Missile Base Development.





NOTE: Recreational items considered as part of this Master Plan but for various reasons were not included are: remodeling of the wood frame structures at the upper Nike site for reasons of economics; 70 and 90 meter ski jumps for the reasons that they would violate the Anchorage International Airport air space requirements; dog mushing trails primarily due to the fact that this use is housed adequately elsewhere; all terrain vehicles as well as motorcycles due to use conflict and potential damage to cross-country trails; and a rifle and pistol range due to perceived public safety and use conflicts.

Potential uses, other than those included in this Master Plan for the existing buildings at the Pt. Campbell/Kincaid Park site are; an art center (ceramics, art studios, visual and performing arts), indoor recreation courts (racquetball, handball), administration facilities (media, judging, VIP area), commercial lease space at event times, fairground facilities, museum facilities, exhibit space, rental space for dances/meetings, restaurant/concessions, small theatre/stage areas, concerts indoor and outdoor, a hostel and arboretum. All these facilities are compatible with the Master Plan goals and objectives.



Concept Plan
Chapter Six

Concept Plan

Chapter Six

The framework from which the six concepts were generated was borne from two major findings of the inventory/analysis phase. These findings were;

- (1) That all utility development serving the recreational facilities identified as part of this Master Plan must be developed on-site. There are no plans for the development of utilities or other municipal services in the project area. This finding suggests that all buildings be consolidated into a core area for the purpose of reducing utility costs or be sited along the existing on-site utility network.
- (2) That a single vehicular access point along the ACS Road at the eastern boundary of Pt. Campbell/Kincaid Park will best serve the development of the park for the following reasons; it currently exists, it is more economical than building a new road, it minimizes the potential for pedestrian/-vehicle conflict, it provides for greatest security/control of Park use, and most importantly, provides easy access for the majority of potential users.

The result of these two findings is that all concepts will consolidate all major buildings into a core area and that the park access will be a single point located on the eastern property boundary at the ACS Road.

Based upon the suitability zone analysis, four locations were identified to host the core facility area. These areas are Little Campbell Lake, Upper Nike site, Lower Nike site, and an area located along the existing access road toward the eastern property boundary. These areas were selected because existing conditions best met the development guidelines for these facilities.

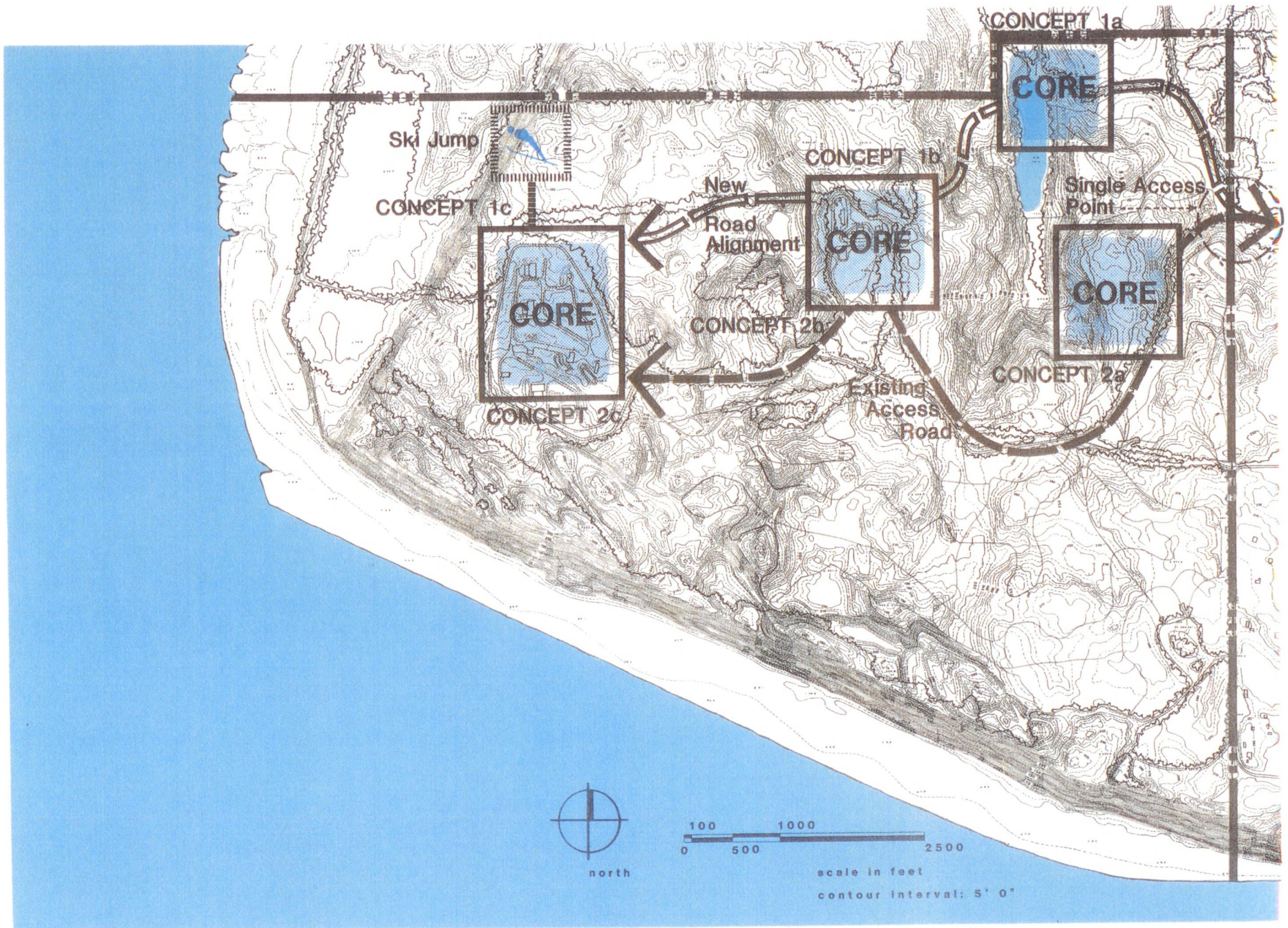
Two internal access routes were selected. First; utilization of the existing access road which bisects the site from the ACS Road access point to the Lower Nike site. Second; a new access route was proposed along the northern property boundary for the purpose of eliminating all potential vehicular/pedestrian conflicts.

Summary:

The information presented above outlines the framework from which the six alternative concepts were generated. The concepts are based on core facility development for the purpose of minimizing utility development. Four areas of core development were considered with two alternative access routes. In each case a single access point to the park was selected. The combination of all these criteria generated six viable alternatives.

Each concept sites all the recreational facilities identified in Chapter 4. In addition, each concept attempts to minimize pedestrian/vehicular conflicts, maximizes use of existing facilities, provides a pedestrian park atmosphere, is capable of hosting a major recreational event, and can be phased in a similar manner.

6.1 CORE CONCEPT



CONCEPT ALTERNATIVES

Six concept alternatives were generated as part of the Master Planning effort. Concepts 1a, 1b, 1c utilize a new access road along the northern property boundary with core development areas occurring at the Lower Nike site, Upper Nike site, and at Little Campbell Lake. Concept 2a, 2b, 2c utilize the existing access road with core development areas at the Lower Nike site, the Upper Nike site, and a location along the existing access road near the eastern property boundary (refer to Figure 6.1).

Concept 1a: (refer to Figure 6.2)

Access for Concept 1a is provided along a new road corridor, from the ACS access point at the eastern property boundary, along the northern end of Little Campbell Lake and terminating at the visitor center located west of Little Campbell Lake. Under this concept the existing access road is removed and revegetated and used as part of the cross-country trail network. The core development area is located at the northeast corner of the project site. This facility includes the Olympic Training Center, speed skating oval, biathlon and cross-country start/finish areas. A new utility system is required for this concept and existing building useage is low. The maintenance area is sited at the Upper Nike site and is accessed via a maintenance road from the visitor center along the northern property boundary. Public parking and mass transit staging areas occur adjacent to the visitor center.

The U.S.O.C. recommends that competitive trails be designated and separated from public trails at event times. The cross-country and biathlon trail system for this concept is designated to occur along the eastern half of the project site. The cross-country/biathlon stadiums are adjacent to the core developed area. No pedestrian/skier underpass or

overpass is required. The 30 and 50 meter ski jumps are located at the northwest corner of the project site and are accessed via a maintenance road from the visitor center. The warming facility for public use is located adjacent to the visitor center. Snow play area with rope tow for handicapped individuals is located adjacent to the visitor center.

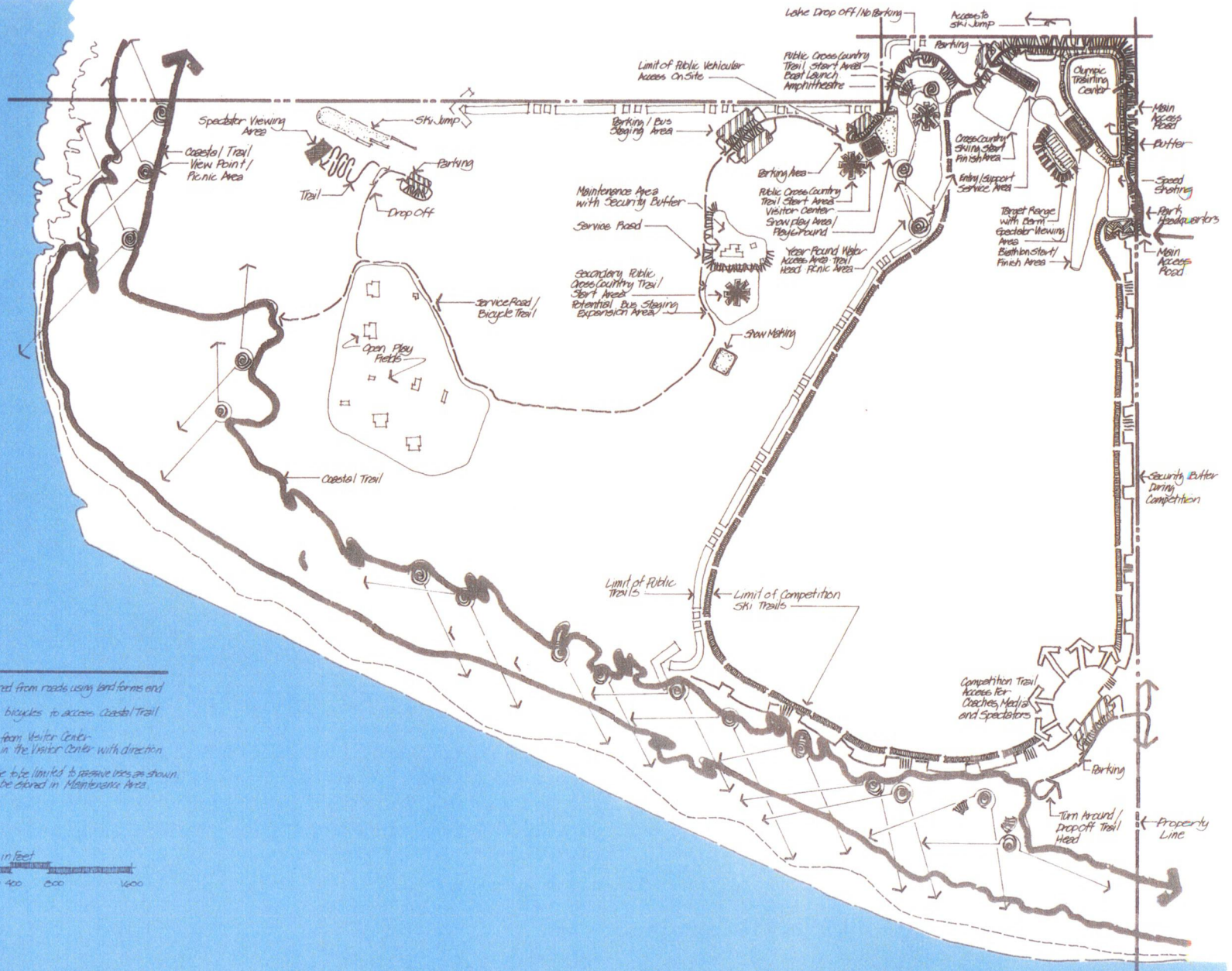
Summer use facilities provided at Little Campbell Lake include a fishing pier, picnic area, picnic shelter and parking area. Additional picnic areas are provided throughout the site. Primitive camping sites are located throughout the western portion of the project site. Jogging, hiking and nature trails are summer uses of the cross-country trail network. Sports fields and open play areas are developed at the Lower Nike site and are accessed via a maintenance road from the core area through the Upper Nike site.

The park headquarters facility is located at the main entry point of the park (ACS Road and eastern boundary). The coastal trail is sited along the southern property boundary.

Concept 1b: (refer to Figure 6.3)

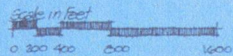
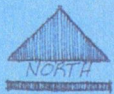
Access for Concept 1b is provided along a new road corridor from the ACS access point around the northern end of Little Campbell Lake and terminating at the Upper Nike site. Under this concept the existing access road is removed and revegetated and used as part of the cross-country trail network. The core development location is designated at the Upper Nike site and includes the Olympic Training Center, speed skating oval, visitor center and the cross-country/biathlon start/finish areas. The existing utility network can serve this concept; existing building useage is moderate. The maintenance area for this concept is designated at the Lower Nike site. The primary public parking/mass transit staging area is sited adjacent to the core development area.

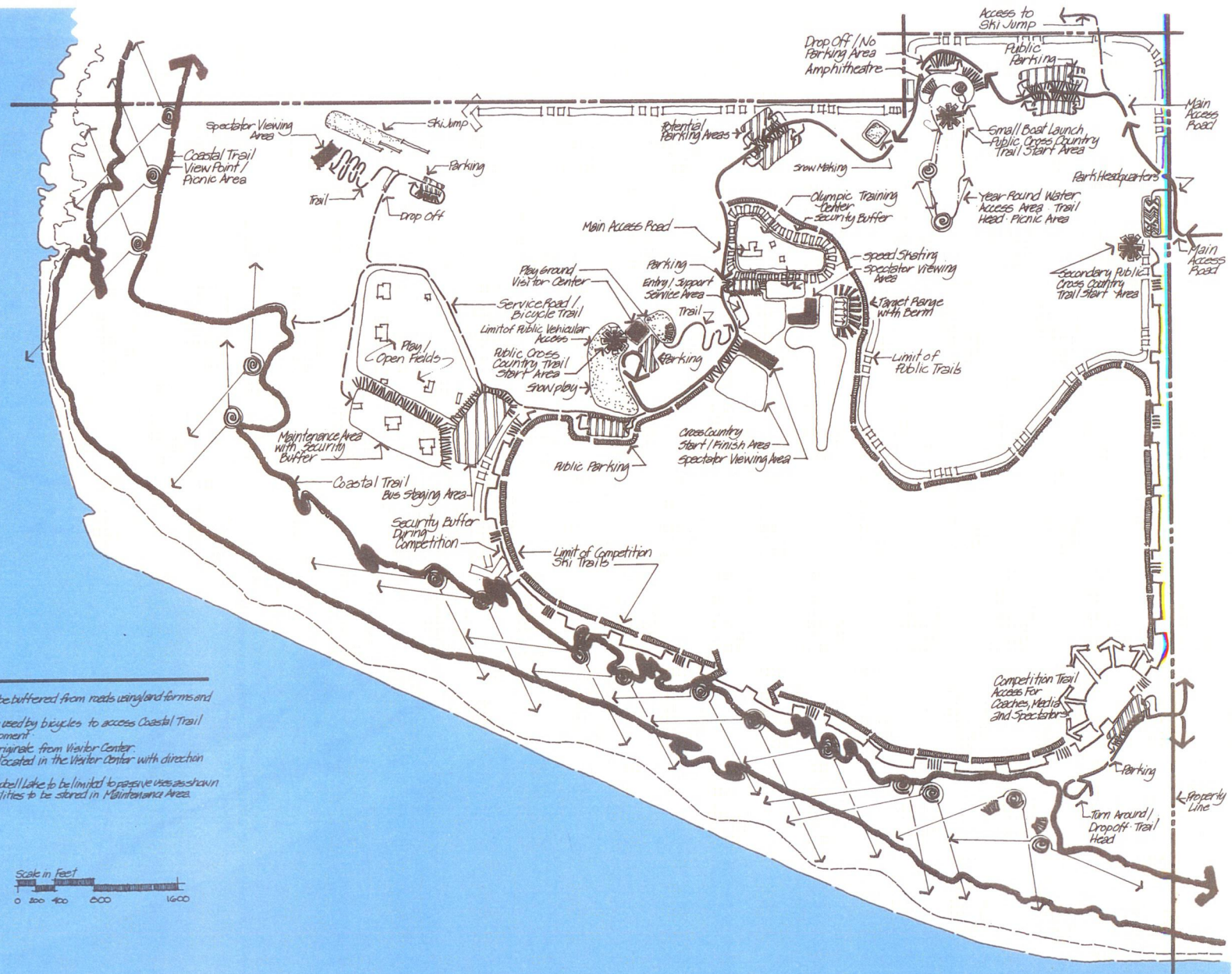
6.2 CONCEPT 1A



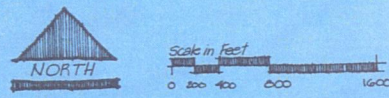
Notes

- All development to be buffered from roads using land forms and vegetation.
- Service roads to be used by bicycles to access Coastal Trail and Site Core Development.
- Parcourse trail to originate from Visitor Center.
- Native Center to be located in the Visitor Center with direction to site trail system.
- Development of Campbell Lake to be limited to passive uses as shown.
- All temporary facilities to be stored in Maintenance Area.

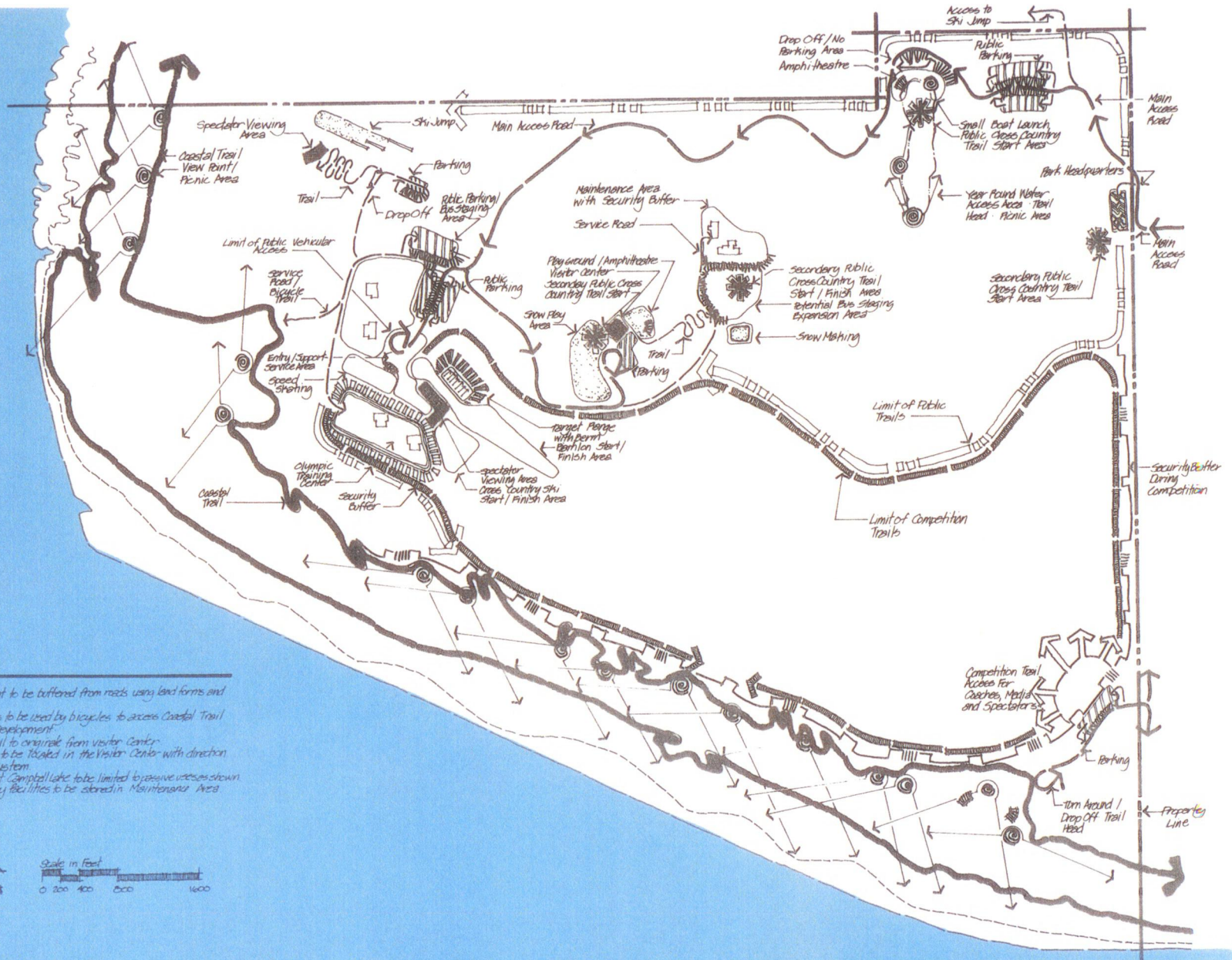




- Notes:**
- All development to be buffered from roads using land forms and vegetation.
 - Service roads to be used by bicycles to access Coastal Trail and Site Core Development.
 - Paracourse trail to originate from Visitor Center.
 - Native Center to be located in the Visitor Center with direction to site trail system.
 - Development on Campbell Lake to be limited to passive uses as shown.
 - All temporary facilities to be stored in Maintenance Area.

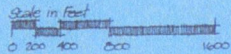
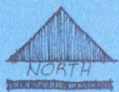


6.4 CONCEPT 1C



Notes

- All development to be buffered from roads using land forms and vegetation
- Service roads to be used by bicycles to access Coastal Trail and Site One Development
- Parcourse trail to originate from visitor center
- Native Center to be located in the Visitor Center with direction to site trail system
- Development of Campbell Lake to be limited to areas shown
- All temporary facilities to be stored in Maintenance Area



The cross-country/biathlon trail network for competition occurs primarily in the southern portion of the project site. The cross-country/biathlon stadiums occur adjacent to the core development area. No pedestrian/skier underpass or overpass structures are required. The 30 and 50 meter ski jumps are located at the northwest corner of the Park. The warming facility for public use is sited adjacent to the core development area. A snow play area with rope tow for handicapped individuals is provided adjacent to the visitor center.

Summer use facilities provided at Little Campbell Lake include a fishing pier, picnic areas, picnic shelter and parking area. Additional picnic areas are sited throughout the project site. Primitive camping areas are provided along the northern and southern property boundaries. Jogging, hiking and nature trails are summer use activities for the cross-country trail network. Field sports and open play areas are developed at the Lower Nike site.

The park headquarters facility is sited at the main access point to the park. The visitor center is sited adjacent to the core development area atop a knoll affording spectacular views. The coastal trail is sited along the southern property boundary.

Concept 1c:
(refer to Figure 6.4)

Access for Concept 1c is provided near a new road corridor sited along the northern property boundary. Under this concept the existing access road is removed and revegetated and used as part of the cross-country trail network. The core development location for this concept is located at the Lower Nike site. This facility includes the Olympic Training Center, speed skating oval, visitor center, biathlon and cross-country start/finish areas. The existing utility network can be utilized under this concept and existing building useage is maximized. The

maintenance area is located at the Upper Nike site. The primary public parking/mass transit staging area is sited at the Lower Nike site.

The cross-country/biathlon trail network for competition use is sited in the southern half of the park. The cross-country/biathlon stadiums are located adjacent to the core development zone. No pedestrian/skier underpass or overpass structures are required. The 30 and 50 meter ski jump facilities are provided at the northwest corner of the park. The warming facility for public use is sited adjacent to the core development zone. The snow play area with rope tow for handicapped individuals is located adjacent to the visitor center.

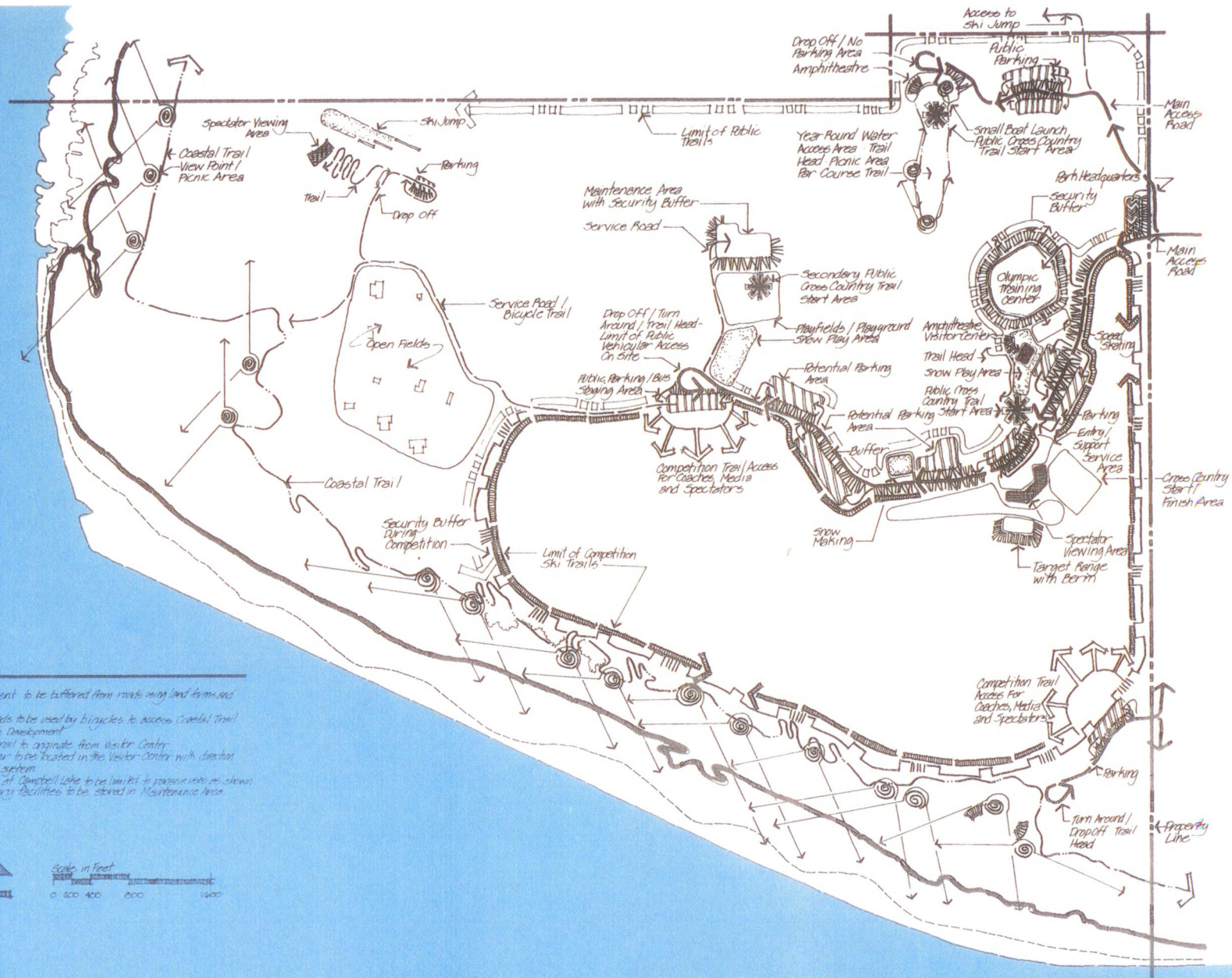
Summer use facilities provided at Little Campbell Lake include a fishing pier, picnic areas, picnic shelter, and parking. Additional picnic areas are sited throughout the project. Primitive camping locations are located along the southern and northern property boundaries. Jogging, hiking and nature trails are summer uses of the cross-country trail network. Field sports and open play areas are sited at the Lower Nike site.

The park headquarters is located at the main access point to the park. The visitor center is located between the Lower and Upper Nike site atop a knoll affording spectacular views. The coastal trail is sited along the southern property boundary.

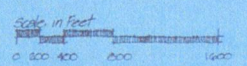
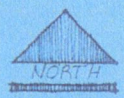
Concept 2a:
(refer to Figure 6.5)

Concept 2a utilizes the existing Pt. Campbell/Kincaid Park access road. The core location is located approximately one-half kilometer into the project site. The core facilities include the Olympic Training Center, speed skating oval, visitor center, cross-country and biathlon start/finish areas. This concept requires installation of a new utility system.

6.5 CONCEPT 2A



- Notes
- All development to be buffered from roads using land forms and vegetation
 - Service roads to be used by bicycles to access Coastal Trail and Site Core Development
 - Parcourse trail to originate from Visitor Center
 - Nature Center to be located in the Visitor Center with direction to site trail system
 - Development of Campbell Lake to be limited to passive uses as shown
 - All temporary facilities to be stored in Maintenance Area



Utilization of existing buildings is low under this concept. The maintenance area has been designated to be at the Upper Nike site. The main public parking area and mass transit staging area is located central to the site, along the existing access road.

The cross-country and biathlon trails for competition are designated in the southern half of the project site. The cross-country/biathlon stadiums are adjacent to the core developed area. New cross-country trails are developed in the northcentral section of the site. The 30 and 50 meter ski jumps are located at the northwest corner of the Park. A warming facility for public use is sited in the core area. Snow play area with rope tow for handicapped individuals is located central to the park site.

Summer use facilities that are provided at Little Campbell Lake include; fishing pier, picnic areas, picnic shelter and parking. Additional picnic areas are sited throughout the project and primitive camping areas are sited along the southern and northern boundaries. Hiking, jogging and nature trails are summer uses of the cross-country/biathlon trails. Sports fields and open play areas are provided at the Lower Nike site and at Little Campbell Lake.

The park headquarters is sited at the main vehicular access point to the Park (ACS Road and the eastern park boundary). The coastal trail is located along the southern portion of the site.

Concept 2b:
(refer to Figure 6.6)

Concept 2b utilizes the existing Park access road. The core area is located at the Upper Nike site and includes the Olympic Training Center, speed skating oval, visitor center, cross-country and biathlon start/finish areas. The existing utility system can be utilized for this core development. The existing buildings at the Upper Nike site and the Lower Nike

site are moderately utilized under this concept. Two of the launch control buildings located at the Lower Nike site are used as maintenance buildings. Public parking and mass transit staging area is provided between the Upper and Lower Nike site.

The cross-country/biathlon trails for competition are located on the southern half of the site. Additional public cross-country trails are provided in the north-central portion of the Park and the biathlon and cross-country stadiums are adjacent to the core developed area. A warming facility for public use is provided adjacent to the core. Snow play area with rope tow for handicapped individuals is located adjacent to the visitor center.

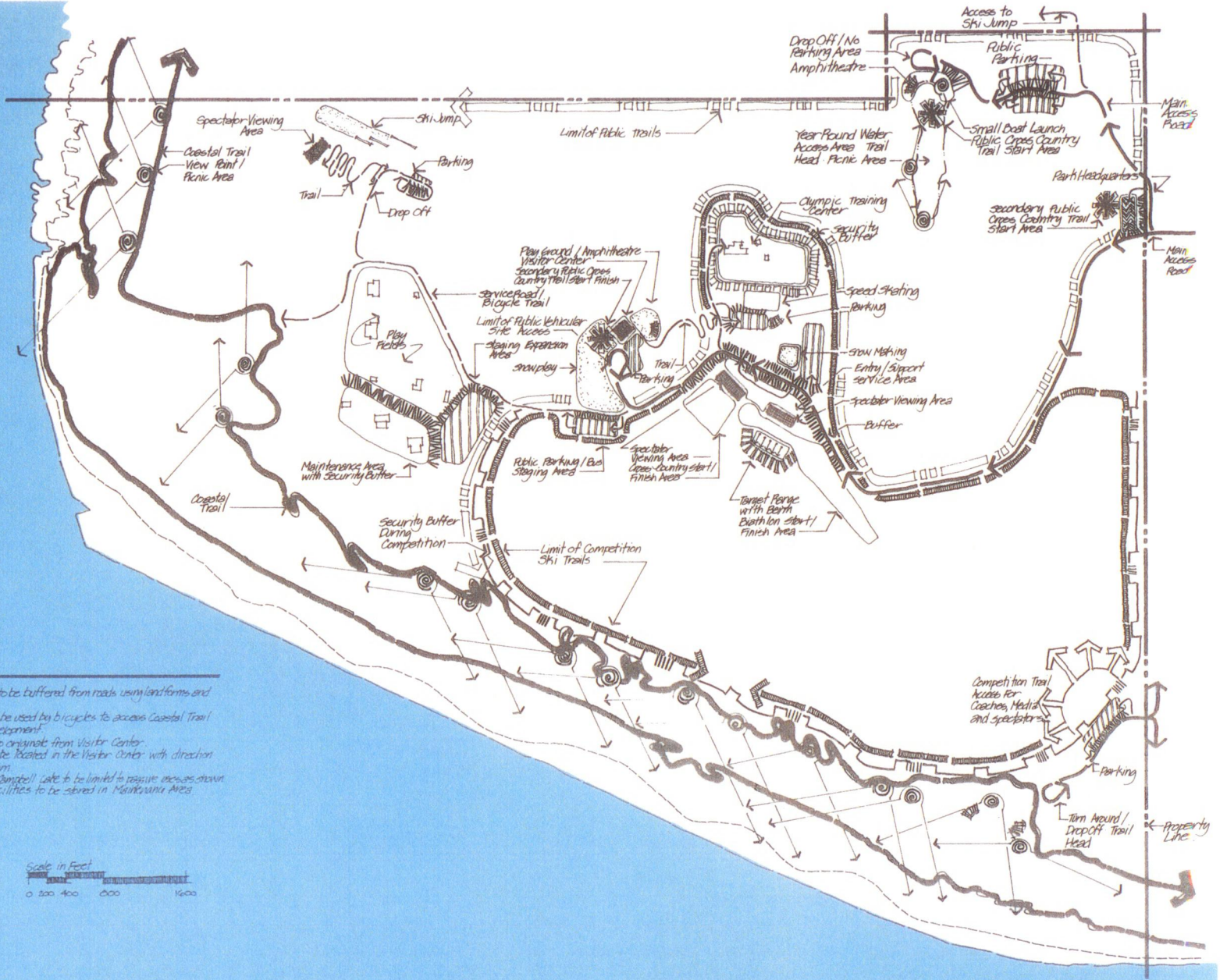
Summer use facilities provided at Little Campbell Lake include a picnic area, fishing pier and picnic shelter with parking. Additional picnic areas are sited throughout the park. Primitive camping sites are located along the southern and northern boundaries while open play and sports fields are developed at the Lower Nike site.

The park headquarters is located at the main vehicular access point to the Park (at ACS Road and the eastern park boundary). The visitor center is sited adjacent to the core area atop a knoll affording spectacular views. This facility can tap the existing utility network. The coastal trail is sited along the southern boundary of the Park.

Concept 2c:
(refer to Figure 6.7)

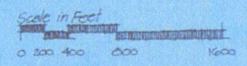
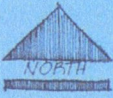
Concept 2c utilizes the existing access road to Pt. Campbell/Kincaid Park. Core development is at the Lower Nike site. Facilities in the core include the Olympic Training Center, speed skating oval, visitor center and cross-country/biathlon start/finish areas. The existing utility network is utilized under this concept and use of existing buildings is maximized.

6.6 CONCEPT 2B



Notes:

- All development to be buffered from roads using land forms and vegetation
- Service roads to be used by bicycles to access Caspate Trail and site core development.
- Racecourse trail to originate from Visitor Center.
- Visitor Center to be located in the Visitor Center with direction to site trail system.
- Development of downhill take to be limited to passive areas shown.
- All temporary facilities to be stored in Maintenance Area.



The maintenance area is designated to be at the Upper Nike site utilizing the existing utility network. The public parking/mass transit staging areas occur between the Lower and Upper Nike site.

The cross-country and biathlon trails for competition are designated primarily in the southern half of the Park. The cross-country/ biathlon stadiums occur adjacent to the core area. The warming facility for public use occurs in an existing structure at the Lower Nike site. The 30 and 50 meter ski jumps are sited at the northwest corner of the site. A snow play area with rope tow for handicapped individuals is sited adjacent to the visitor center.

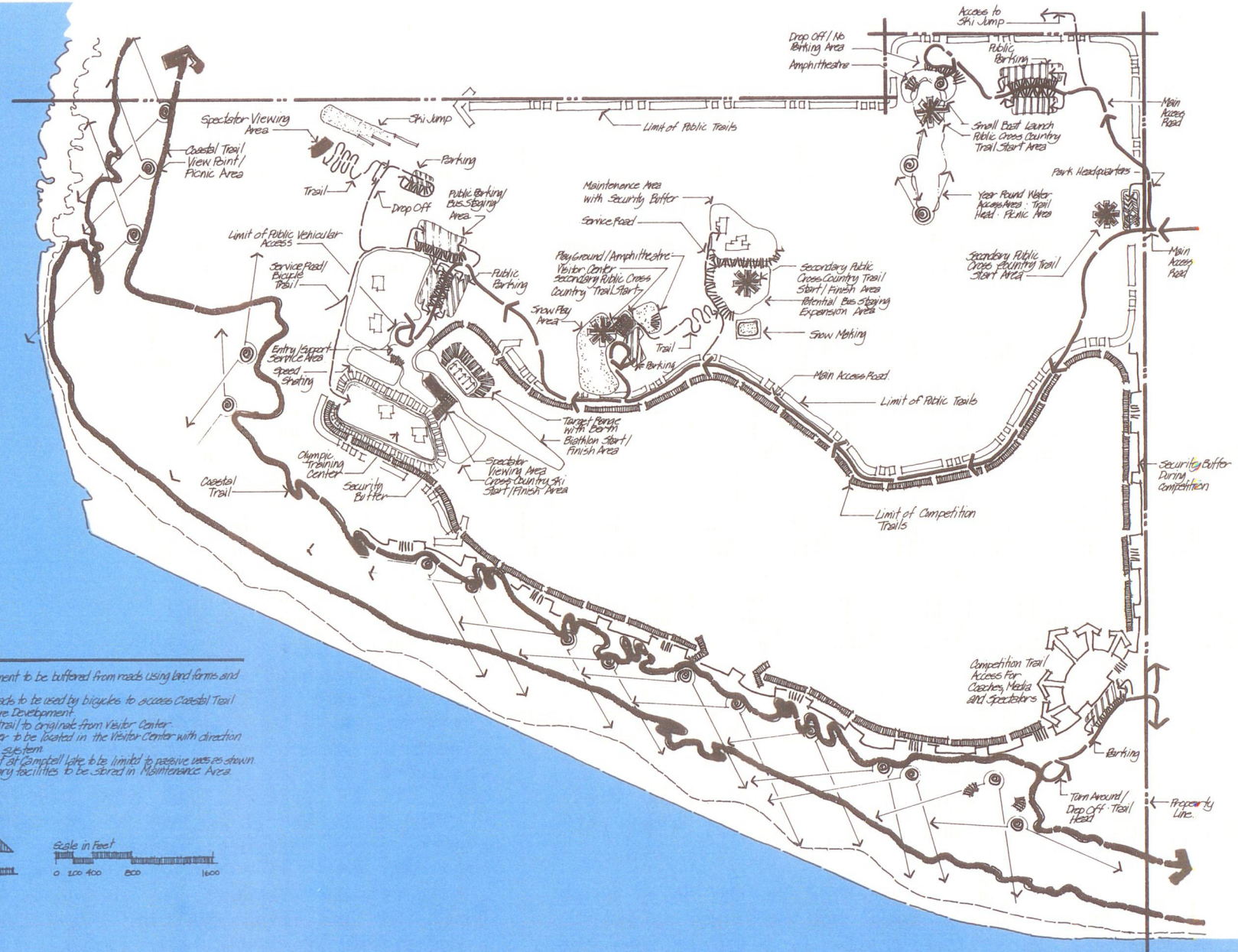
Summer use facilities provided at Little Campbell Lake include a fishing pier, picnic areas, picnic shelter, and parking; additional picnic areas are provided throughout the site. Primitive camping areas are provided along the southern and northern property boundaries. Jogging, hiking and nature trails are designated summer uses of the cross-country ski trail system. Sports fields and open play areas are provided at the Lower Nike site.

The park headquarters is located at the entry point into the Park (ACS Road and eastern property boundary). The visitor center is sited between the Lower and Upper Nike sites atop a knoll affording spectacular views. This facility can utilize the existing utility system. The coastal trail is sited along the southern property boundary.



Summary:

All six conceptual alternatives previously discussed were developed utilizing the same criteria. This criteria included; siting the same recreational elements, utilizing a single access point, and complying with the suitability zone analysis. However, it is evident that some concepts match the desired goals and objectives of the park better than others. For instance, Concepts 1a, 1b and 1c best meet the goal of minimizing pedestrian/vehicular conflicts; and Concepts 2a, 2b and 2c best meet the goals for utilizing existing facilities. All six alternatives presented are viable. However, they differ significantly when considering capital costs, utilization, function, and feasibility. Refer to Chapter 7 for evaluation of the concepts presented in this chapter.



Notes:

- All development to be buffered from roads using land forms and vegetation.
- Service roads to be used by bicycles to access Coastal Trail and Site Core Development.
- Percourse trail to originate from Visitor Center.
- Native Center to be located in the Visitor Center with direction to site trail system.
- Development at Campbell Lake to be limited to passive uses as shown.
- All temporary facilities to be stored in Maintenance Area.





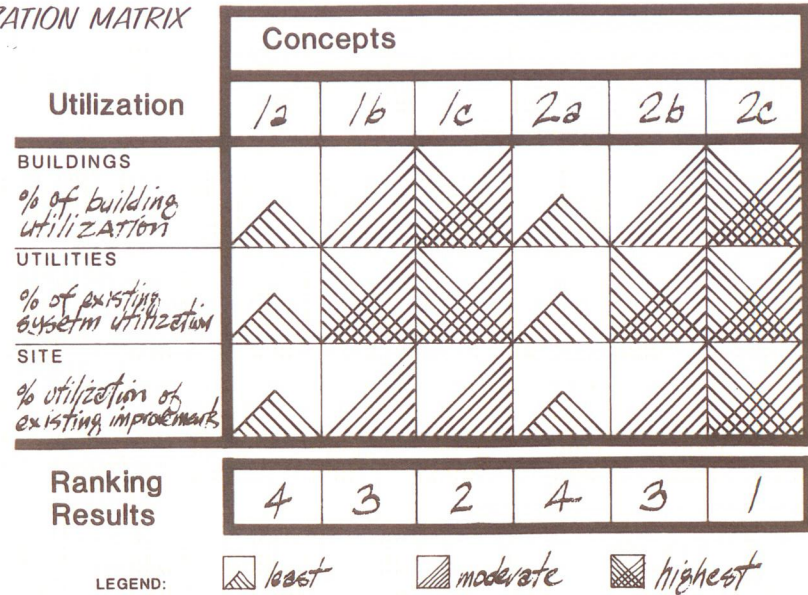
Recommended Plan

Chapter Seven

Recommended Plan

Chapter Seven

7.1 UTILIZATION MATRIX



Through the Master Planning process Concept 2C was selected as the "Recommended Plan." The selection was made as a result of a seven step evaluation process: 1) utilization of existing buildings analysis and evaluation; 2) functional relationship evaluation; 3) capital cost evaluation; 4) flexibility analysis (ability to accommodate program changes); 5) public involvement; 6) agency recommendation and 7) consultant recommendation.

Utilization:

The first criteria evaluated for each of the six concepts was utilization to determine which of the six concepts best utilized the existing facilities. These facilities included buildings, utilities, and site improvements. Refer to Figure 7.1.

In summary, Concept 2C best utilized all three elements of evaluation. It utilized 60%+ of the buildings, 75% of the utility network, and over 75% of the site improvements. Concept 1C ranked second, Concepts 1B and 2B ranked equally third and Concepts 1A and 2A ranked equally fourth.

Functional Relationships:

Functional success of each of the six concepts was measured on three levels: First; program element proximity evaluated how each concept complied with the core concept. Second; site sensitivity evaluated which concept complied with the suitability zone analysis best. Third, event loading capacity analysis measured how many people per acre could be accommodated at each of the core development areas per concept (assuming 10,000 people attending an event each concept divided that number (10,000) by the number of acres available at the core area which determined the density). Concept 2C and 1C rated highest in this analysis; both could hold the same amount of people at less density than any of the other concepts (200/acre). Refer to Figure 7.2.

In summary, Concept 2C best met all three evaluation levels. The slight difference between 2C and 1C was the requirement of 1C to install a new road system through existing undisturbed natural areas. Concept

7.2 FUNCTIONAL MATRIX

Function	Concepts					
	1a	1b	1c	2a	2b	2c
Program element relationships (core concept compliance)						
Site Sensitivity (suitability zone)						
Event loading Capacity (Density/acre)	1000/acre	600+/acre		1000/acre	600+/acre	
Ranking Results	6	4	2	5	3	1

LEGEND:

least
 moderate
 good
 highest

2C does not unnecessarily disturb natural conditions, can host an event of 10,000 people with a density of only 200 people per acre at the start/ finish areas and the major building facilities are grouped to take advantage of the existing utility network.

Capital Costs:

The six concepts were evaluated based on estimates of three capital cost items; infrastructure, buildings, and site improvements. These initial cost estimates did not include construction contingencies, design contingencies, operations and maintenance costs. Refer to Figure 7.3.

Concept 2C was the least costly of the six alternatives. The difference between Concept 2C and 1C was the access road requirements of Concept 1C. It was estimated that all concepts had the same site improvement costs, the differences between building and infrastructure costs reflect the utilization of existing facilities.

7.3 CAPITAL COST MATRIX

Capital Costs	Concepts					
	1a	1b	1c	2a	2b	2c
Infrastructure	972 K	966 K	1,319 K	805 K	812 K	958 K
Buildings	14,075 K	13,005 K	12,225 K	14,075 K	13,005 K	12,225 K
Site	3,072 K	3,072 K	3,072 K	3,072 K	3,072 K	3,072 K
Ranking Results	6	4	2	5	3	1

Flexibility:

The flexibility analysis conducted for each of the concepts was designed to evaluate how vulnerable each concept was to a major program element change. The primary program element of concern was the Olympic Training Center development. Refer to Figure 7.4.

Concepts 1C and 2C best met this evaluation due to the fact that they utilized existing buildings most successfully if an Olympic Training Center was never to be developed at Pt. Campbell/Kincaid Park. In addition, these two concepts do not depend upon Olympic Training Center development to provide the infrastructure facilities required for other recreational elements.

7.4 FLEXIBILITY MATRIX

		Concepts					
Flexibility		1a	1b	1c	2a	2b	2c
How vulnerable are concepts to O.T.C. Non-Devel.							
LEGEND:							
		least					
		partially					
		most					
Ranking Results		3	2	1	3	2	1

Evaluation Summary:

The evaluation summary matrix shown in Figure 7.5 displays the relative rankings of each of the six concepts. Concept 2C ranked No. 1, Concept 1C ranked No. 2, Concept 2B ranked No. 3, Concept 1B ranked No. 4, Concept 2A ranked No. 5, and Concept 1A ranked No. 6. Concept 2C ranked first for the following reasons:

- o Utilized over 60% of the existing buildings
- o Utilized 75% of existing utility network
- o Utilized over 75% of existing site improvements
- o Most successful core development compliance
- o Suitability zone compliance
- o Highest event loading capacity (200/ac)
- o Lowest capital cost
- o Low vulnerability to major program element changes

General Loading Data	QUANTITY	NOTES
Number of athletes	150-300	• 150 sf per athlete for dorm space (2 per room) • Dorm size ranges 22,500 ft ² - 45,000 ft ² (42,500 sf. will house approx. 275 athletes)
Number of Coaches, V.I.P. staff etc.	100-150	Coach/athlete ratio varies (1:4 maximum)
Number of users (spectators)	5-10,000	source: from similar events elsewhere
Parking Requirement.	100 1500 60	- stalls for athletes/coaches/staff/etc. - on-site stalls for public (1000 required off-site) - Buses - mass transit staging area.
ASSUME:	International Olympic Event	

7.5 SUMMARY MATRIX

Summary Evaluation Matrix		CONCEPTS						COMMENTS
		1a	1b	1c	2a	2b	2c	
CAPITAL COSTS	infrastructure	▨	▨	▨	▨	▨	▨	utilities & roads
	Buildings	▨	▨	▨	▨	▨	▨	lower cost
	site	▨	▨	▨	▨	▨	▨	sitework required
UTILIZATION	Buildings	▨	▨	▨	▨	▨	▨	% utilized
	utilities	▨	▨	▨	▨	▨	▨	utilities & roads
	site	▨	▨	▨	▨	▨	▨	previous improvements
FUNCTION	Program Element	▨	▨	▨	▨	▨	▨	relationship to Core
	site sensitivity	▨	▨	▨	▨	▨	▨	site suitability
	Event loading	▨	▨	▨	▨	▨	▨	density per acre
FLEXIBILITY	change in program	▨	▨	▨	▨	▨	▨	primarily O.T.C.
RANKING RESULTS		6 4 2 5 3 1						
LEGEND:		▨ least	▨ moderate	▨ good	▨ highest			

Siting Summary:

The siting of the recreational program elements (refer to Figure 7.6) illustrated in the recommended plan are in compliance with the design criteria outlined in Chapter 5. The specific areas of development for each recreational element represent a compatible relationship between the goals and objectives, environmental analysis, functional requirements and design criteria presented within this Master Plan (refer to Chapters 2-6, 8 and 9). Program elements can be located other than as shown on the recommended plan provided that the new location adequately meets the goals and objectives, environmental analysis and design criteria presented in Chapters 1, 2 and 5. Enlargements of specific development areas are displayed in Figures 7.7, 7.8, 7.9, 7.10, 7.11, 7.12.

Public Involvement:

Upon presentation to the Municipality of Anchorage, the Anchorage Winter Recreation Advisory Committee, the Anchorage Park Board, and special interest groups, a consensus was obtained supporting the selection of Concept 2C as the Recommendation Master Plan.

Upon successful implementation of the Recommended Plan, the City of Anchorage and its residents will have at their immediate disposal, a world class winter recreational facility which will also provide a wide range of summer uses.

Phasing:

A three phase program has been identified to implement ultimate development of the Pt. Campbell/Kincaid Park Recommended Plan. The three phases are; 1) Public Facilities for immediate development (1983/84), 2) Future Public Facilities and 3) Future International Event/Olympic Facilities. Each phase is presented separately including a discussion of program element development, cost and a phasing diagram.

Phase 1: Immediate Public Facilities (1983/1984)

The elements identified for Phase 1 are primarily to serve winter sports with additional summer recreational use opportunity (refer to Figure 7.13). Seventeen recreational elements are identified under Phase 1 with a total cost estimated to be \$2,653,000. These elements include; 30 and 50 meter ski jumps, 10 kilometers of unlighted cross-country ski trails, two kilometers of lighted cross-country trails, warming facility, cross-country start/finish area, hiking/jogging/nature trails, picnic areas, picnic shelter, one soccer field, 6 ball fields, 150 parking stalls, access road improvements, fishing pier, Lower Nike site grading/revegetation, 5 acres of picnic facilities, utility improvements, 5,800 square feet of demolition, site lighting, signage and miscellaneous site improvements.

The total amount available for construction of these facilities at the Pt. Campbell/Kincaid Park site for 1983/84 is approximately \$2.5 million.

Refer to Chapter 9, Cost Summary for itemized program element listing and detailed cost spread sheets.



Phase 2: Future Public Facilities

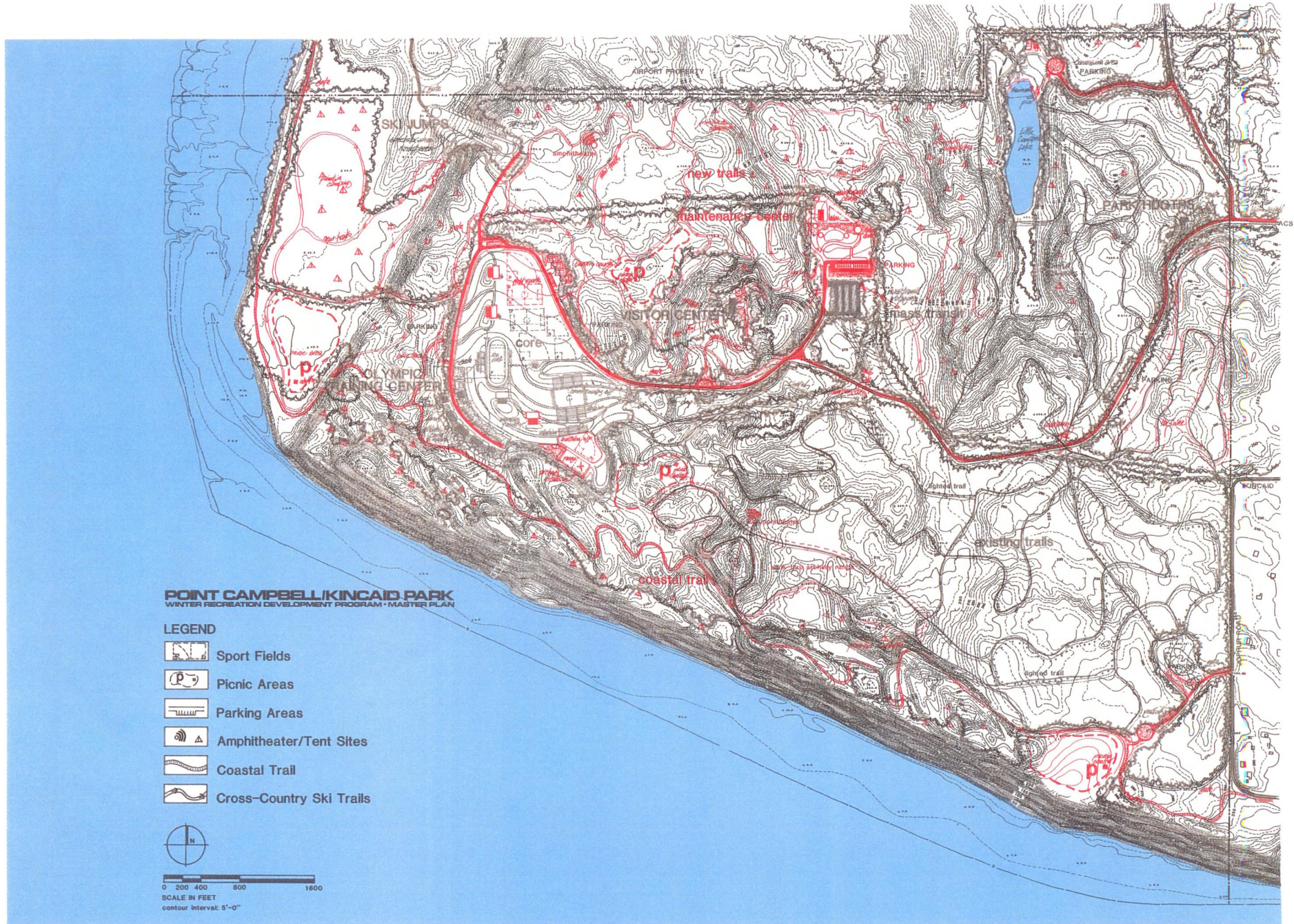
The program elements identified for Phase 2 development are primarily summer use facilities (refer to Figure 7.14). However, several infrastructure items and winter recreation facilities are included. Twenty-three recreational development items are shown for Phase 2. The total cost for these facilities is \$4,489,000. The program elements identified for Phase 2 are; 35 acres of picnic areas, 10 acres of sports fields, 100 primitive camping sites, 80 RV camping stalls (not recommended), 3,000 square foot interim visitor center, 10,000 square foot maintenance center, three miles of coastal trail, 1.5 miles of internal bike trails, 8 hard surfaced courts, two children play areas, two amphitheatres, one walk-thru archery range, one archery stadium, one par-course, lake shore

improvements, water sports area, utilities, 100 parking stalls, 2.5 miles of access road improvements, signage, miscellaneous site improvements, snow play area with rope tow, pedestrian/skier underpass and a picnic shelter at Little Campbell Lake.

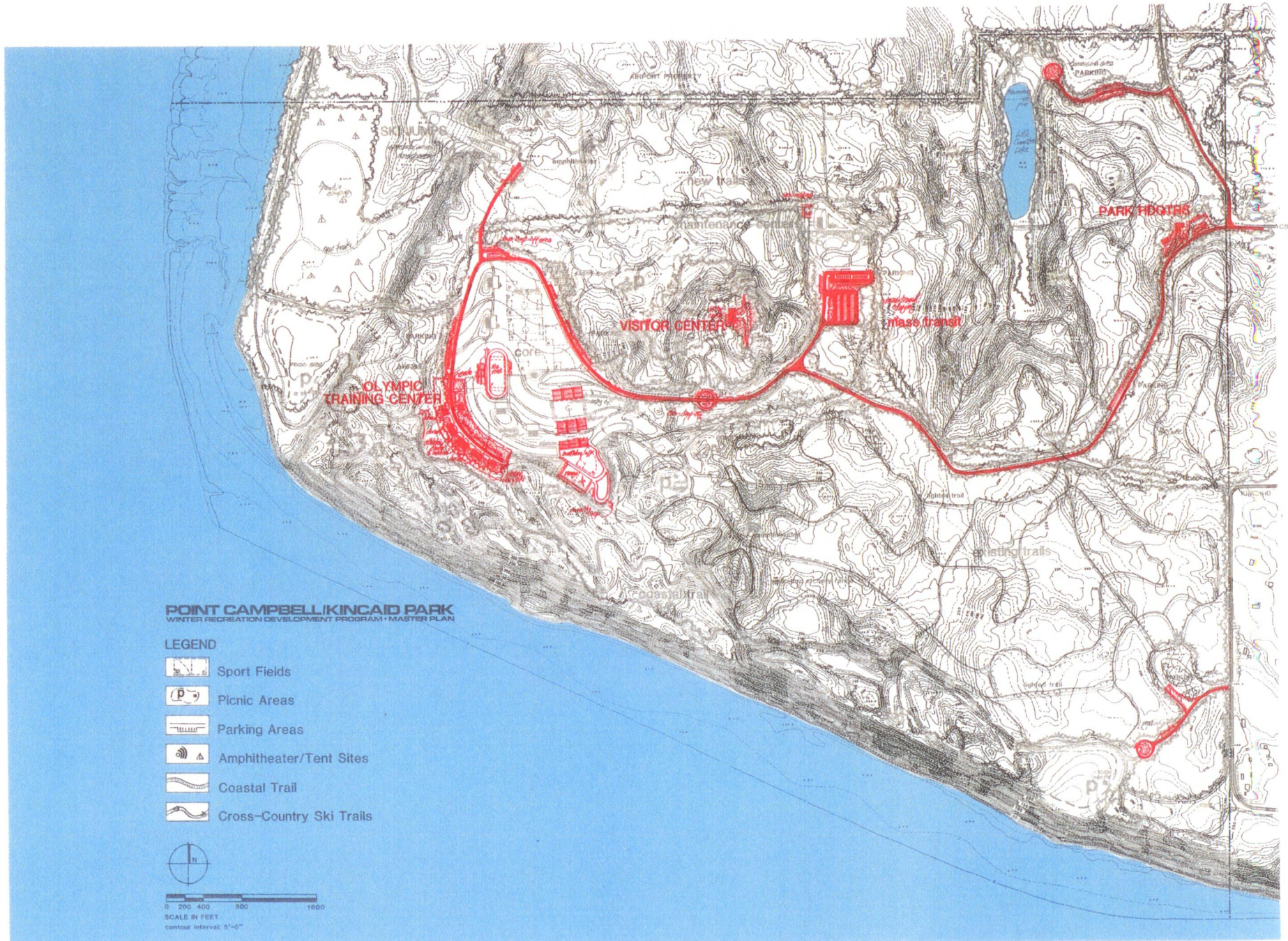
Neither a funding source or a development schedule has been identified for Phase 2 development. Refer to Chapter 9, Cost Summary, for itemized program element listing and cost spread sheets.

7.7 PHASE ONE PLAN





7.9 PHASE THREE PLAN

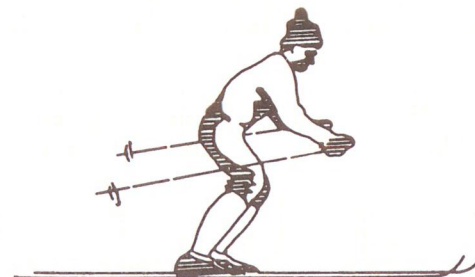


Phase 3: Future International Event/Olympic Facilities

The recreational facilities identified for Phase 3 are primarily high capital cost elements associated with international competition and Olympic related facility development (refer to Figure 7.15). Elements included under Phase 3 are: 4,000 square foot park headquarters, 7,000 square foot visitor center addition, athlete dorms, Olympic Training Center headquarters, athlete center, medical center, wax and ski storage, speed skating oval, running track, biathlon range/stadium, cross-country stadium, mass transit staging area, snow making facilities, off-site parking areas, access road improvements, and demolition.

The 17 items identified for Phase 3 development have a total cost of \$21,070,000; approximately 50% of the cost is associated with Olympic Training Center facilities. Olympic Training Center annual O&M costs are estimated to be \$370,000.

Neither a funding source nor a development schedule has been identified for Phase 3 recreational facilities. Refer to Chapter 9, Cost Summary, for itemized recreational program element listing and detailed cost spread sheets.





Winter Sport Competitive Event Requirements

Chapter Eight

Winter Sport Competitive Event Requirements Chapter Eight

As a basis for developing the following event requirement data contacts were made with officials of the U.S. Olympic Committee, the International Federation of Skiing, various amateur and professional governing bodies for winter sports, and other potential users.

The result of these contacts are presented below by winter sport type. Each winter sport discussion includes; type of events, frequency with which various events occur, the time of the year they generally occur, the opportunity for being a host of the event, Anchorage's competitive position as a host and facility requirements associated with the particular events.

The underlying assumption for the following discussion is that a central authority will aggressively seek and promote the various indicated events for Anchorage and will be responsible for committing and scheduling facility use and lodging for competitors and their support personnel.

CROSS COUNTRY EVENTS/FACILITIES

1. Olympic Games/World Championships

Olympic Games/World Championships are awarded every four years, staggered two years, (viz. 1980, 1984, 1988, etc. for the Olympics; 1982, 1986, 1990 for the World Championships). Sites for the Olympic Games through 1988 have been selected; in 1984 it will be held in Calgary, Alberta, Canada. The earliest Anchorage would be eligible for hosting an Olympic Event is in the years 1996-2004.

Pt. Campbell/Kincaid Park can fulfill the physical requirements for development of cross-country trails for Olympic and World Championship competitions. However, in hosting the Olympics, cross-country skiing is only one event of many and the selected site must fulfill the requirements of all the competitive events.

Building requirements associated with hosting an Olympic Nordic race include three basic structures (Refer to Chapter 5). The main building known as the VIP Headquarters would become the chief administration area and a focal point for officials to meet and plan the day's activities. This building should also contain the team rooms for waxing and storage, toilet facilities, a snack bar and an area for ski patrol related functions. During non-competitive sessions this VIP building would become the base of ski touring operations with the team rooms being allocated for retail, rental and ski school. The second structure would be a Timing Building whose space would be used for announcing, electric timing, hand timing, calculations and reproduction of results. The third essential structure of the cross-country center would be the spectators stadium. The race trails should be designed such that both the start and finish lines are common to the stadium arena. It is also essential that it be strategically placed on the lower elevations of the course to ensure the proper race profile. At Lake Placid the stadium constructed for the 1980 Olympic Games accommodated 5,000 spectators. This included standing space for 4,750 and 250 seats for VIP's. The timing building and stadium are primarily built for competitions and should not be converted to other functions during recreational ski touring use periods.

To develop International, Olympic or World Championship courses consideration must be given to the minimum and maximum criteria for both men's and ladies' competition. The guidelines for cross-country course location and construction direct the design,

safety and construction of the course. The technical installation and preparation of cross-country ski trails relates to the specific criteria of men's and ladies' race courses with regard to length, height differences and marking of the courses. Generally for a major Olympic competition a special 5 kilometer, 10 kilometer, 20 kilometer and a 3 x 5 kilometer relay for women and 10, 15, 30 and 50 kilometer courses for men would be developed.

The Pt. Campbell/Kincaid Park site is capable of developing the requirements for an International, Olympic or World Championship races. The development of race trails will create the foundation for a fine recreational touring center for non-competitive periods. However, it is necessary that beginner and novice trails also be developed to help broaden the market for the recreational touring center. Operationally, there is a need for tight control on the usage of trails with regard to training, racing and recreation. A minimum of 2.5 kilometers of training trails are required year-round in association with an Olympic Training Center. A minimum of 7.5 kilometers of racing trails are required to host an international competitive or Olympic event during race times (snow condition dependent). Recreational ski touring trails are to be made accessible to the public at all times (length of trail and locations are dependent on race layout requirements and snow conditions). This control will ensure a quality experience for all users.

2. World Cup Events (International) (Cross-Country)

Site selection for World Cup races is based on results of the previous years competition. The four top countries in team performance are automatically granted a World Cup event; the overseas nations (Europe, Asia, etc.) being granted two men's races and two women's races every other year. This season,



1982-83, the U.S. Men's team, due to their high finish last year, gained a World Cup event in this country as well as a World Cup event in 1983-1984 based on the rotation schedule. The actual site selection within our country is decided by a bid process to the United States Ski Association (USSA) and is based on the potential of the site to accommodate athletes and officials, track record of past performances and physical terrain qualifications.

A World Cup competition event could be sited once in every eight years in Anchorage due to the rotation schedule between countries and assuming a local desire to host the event. Anchorage would compete with potential host communities. The events would be made up of either a 15, 20, or 50 kilometer race for men or a 5, 10, or 20 kilometer race for women. The cross-country system at Kincaid is physically capable of accommodating World Cup competitions (March 1983, Anchorage held its first World Cup event). Hosting this event requires a support staff of approximately 150 to 200 individuals for 80 men and 60 women competitors.

3. Nor-Am Events
(Cross-Country)

The Nor-Am events are an international race competition primarily consisting of competitors from the United States and Canada. Sites and scheduling are set up by the USSA and the Canadian Ski Association with events for four classes of skiers, Junior Men and Women and Senior Men and Women. Approximately 200 racers enter these competitions.

It has been suggested that Anchorage would be a likely candidate for the Nor-Am Series on an annual basis, possibly to be incorporated into a series of spring Nor-Am races to include Anchorage, Fairbanks and Whitehorse. The USSA tries to group races in particular regions of the country to promote good competitions and maximize the number of races in a geographical area thus minimizing travel.

4. Junior World Championships
(Cross-Country)

The Junior World Championships involve approximately 100 to 150 competitors from around the world and is a cross-country event that should be pursued by Anchorage. The site selection is awarded by a bid process through the International Federation of Skiers (FIS) Congress which is a self governing body charged with regulating competitive standards, safety standards and designation of host sites. It is reasonable to expect

that this competition could be awarded to Anchorage one year out of ten based on the rotation schedule and assuming a local desire to host the event. Again, Anchorage would have to compete with other potential host communities.

5. National Senior and National Junior Championships
(Cross-Country)

Events of this nature are geographically distributed to cross-country sites around the country. In order to obtain an award for such an event, the bid must pass through the USSA Competition Committee. The selection process is done on an divisional rotation basis. There are eight divisions nationally. These events could be hosted in Anchorage a maximum of once every eight years.

Anchorage's facilities are adequate, but not unique, for these competitions. However, if the area can prove itself in terms of presenting premiere races in the next five years, including arrangements for accommodations and airfares, chances would increase for awarding these competitions on a repetitive basis.

The races for the Senior Nationals would include a men's 3 x 10 kilometer relay, a 15 kilometer, a 30 kilometer and 50 kilometer race. The senior women would compete in a 5 kilometer relay, a 7.5 kilometer special, a 10 kilometer special and a 20 kilometer special. The Junior Nationals would include races in durations from 3 kilometers to 10 kilometers. The Nationals would draw 250 to 400 competitors.

6. Regional/State/Local Competitions
(Cross-Country)

The events included in The Regional/State races would be broken down into United States Ski Association (USSA) races, collegiate and high school competitions.

a. USSA

o Dannon Series

This is a National series race open to Class I competitors and could draw up to 150 participants. The course requirements for the race range between 10 to 30 kilometers for the men and 5 to 20 kilometers for the women. The USSA is responsible for placing this event on its calendar and it is possible that Anchorage could be the host of a Dannon Series race each season.

o Marathon Series

This race series is quite popular in the lower 48 states and generally attracts 200 to 300 competitors. The course usually covers 50 kilometers of varied terrain. It is conceivable that Anchorage could hold one of these national races annually.

o Senior and Junior National Tryouts

The National tryouts are held annually to pick the representatives for the Senior and Junior National Championships. Anchorage could hold these tryouts annually and expect up to 200 competitors.

o Citizen Races

The citizen races are open races that could attract between 300 to 600 competitors.



b. School Races

o The high school races could be either sanctioned by the USSA or as an interscholastic competition. Generally a field of 200 - 250 competitors could be expected to compete in races ranging in distance from 5 kilometers to 10 kilometers. These races could take place as often as weekly from mid November through the end of February.

o The University of Alaska at Anchorage could be expected to use the facilities at the Park, perhaps a minimum of twice a year for competitions with approximately 40 to 50 contestants.

7. Training Camps
(Cross-Country)

The U.S. Ski Team, the USSA Alaska Division, local schools, clubs and regional colleges would make up the bulk of competitors using Pt. Campbell/Kincaid Park for training camps. The main advantage the facility has over other areas in the country is early snow. At the present time competitors are forced to travel to Europe for early training. The main disadvantage for attracting national and international training camps is its geographical distance and resulting cost of travel to reach the facility.

BIATHLON EVENT/FACILITIES

Biathlon is a growing competitive sport nationally and internationally. Its combination of cross-country skiing and shooting provides for a unique spectator sport.

The Biathlon event is a cross-country race that involves target shooting with a rifle (.22 caliber). It is designed to test a competitor's marksmanship as well as his skiing ability. Given the unique characteristics of the event it is recommended that the Biathlon facilities be separate from the other competitive and recreational facilities. This separation will assist management and avoid problems during competition and training.

In this country Biathlon is governed by the recently formed U.S. Biathlon Association (USBA), formerly part of the U.S. Pentathlon group. Internationally it is governed by the Union International of Pentathlon Moderne and Biathlon (UIPMB).

1. Olympic Games/World Championships

The IOC awards the overall Olympic site based on a very extensive bid process. The Biathlon site for an Olympic competition consists of a shooting range, penalty loop, a series of buildings for officials, timing and warming, and a network of trails starting and finishing at the shooting range. The Biathlon network proposed for Pt. Campbell/Kincaid Park would meet the requirements of hosting the Olympics. The design of the facilities should incorporate television coverage requirements. This could prove to be a bargaining element in the bidding for major international events.

An Olympic competition would be made up of 80 - 100 competitors. One of the special requirements needed for an Olympic competition, in fact for any major

international competition, would be an additional shooting range for sighting in rifles prior to competition.

The building facilities needed for Biathlon are similar to those described under the cross-country section and if both cross-country and Biathlon events are awarded to Anchorage the athlete facilities could be shared. However, the start/finish areas, spectator stadium and range require separation. It would be ideal if the spectator stadium and firing range could be incorporated into the overall recreational trails so that spectators could stop and view the sport of Biathlon during training and competition while at the same time enjoying lunch.

Other building requirements include the timing structure providing space for electric timing, hand timing, calculations and announcing. A third facility should be located near the firing line as a work and storage area for range personnel.

The site size requirement is approximately 19 acres, including all the above facilities, target area approach and depart trails, public and restricted access milling areas, security and buffer areas.

The specific course requirements for an Olympic Biathlon competition are a 7.5 kilometer relay, a 10 kilometer and a 20 kilometer special race. A penalty loop of 150 meters should be provided for each target area. This loop is usually placed behind the firing line and each contestant, based on his target misses, is required to ski the penalty loop (one miss, one loop). The penalty loop is only used in the 7.5 kilometer relay and the 10 kilometer sprint. In the 20 kilometer event a minute penalty is assessed for each target missed.

The Olympic Biathlon 7.5 relay should consist of three separate 2.5 kilometer courses that enter the firing line each time from the same direction. A 10

kilometer course should utilize two of these 2.5 kilometer courses and a 5 kilometer course. The sequence of running these three loops should be first a 2.5 loop and shoot, then the 5 kilometer and shoot and finally the second 2.5 kilometer loop. The 20 kilometer race is made up of three 5 kilometer loops and two 2.5 kilometer loops. A typical sequence for running a 20 kilometer race would be to run the 2.5 loops at the beginning and end, with the three 5 kilometer loops in between.

As mentioned earlier, it is recommended that the Biathlon facility be physically separated from the recreational trails and the other competitive facilities. However, consideration should be given to allowing smaller competitions in the Biathlon area when it is not being used by the biathletes.

Due to the sophisticated design and emphasis on safety, the Biathlon target range could be used for summer target competition and practice.

2. World University Games (Biathlon)

The World University Games are set up through a bid process that is reviewed and awarded by the FISU. These games take place every two years between the Olympics and World Championships. The facilities required are similar to those needed for the Olympic games and in Biathlon approximately 80 - 100 contestants participate. The competitors are university students from all over the world.

3. World Cup Competitions (Biathlon)

The World Cup competitions are UIPB events, controlled by the World Cup Committee. There are five sites awarded each season, one preferably the World

Championships. Each event includes a 20 kilometer and one 10 kilometer competition. The United States has a World Cup designation in 1987 at Lake Placid that will precede the pre-Olympic competition at Calgary, Canada. Given the fact the competitors will be in North America, a possibility exists that an additional World Cup site will be awarded. Competing for the event would be Underhill, Vermont, Labrador City, Labrador, and Val Cartier, Quebec. Up to 150 competitors could be expected to participate.

4. Senior and Junior World Championships (Biathlon)

The Senior and Junior World Championships are an annual event, except for the seniors in an Olympic year. The time of the championships should take place between February 15th and March 5th. The number of participants competing in the Championships would be 80 to 100 competitors including Seniors and Juniors. The competition would span a five day period. It is not mandatory to hold the Seniors with the Juniors, therefore a possibility exists to bid for one championship and not the other. Anchorage, given its proposed development plans will have the potential to host either the Senior or Junior World Championships.

5. United States National Guard Biathlon Championships (Biathlon)

The U.S. National Guard Biathlon Championships are held on an annual basis and would include approximately 200 competitors. Pt. Campbell/Kincaid Park would have a good chance of being selected as a host for these competitions. The fact that the National Guard could supply their own air transportation would help the decision making process of the Site Selection Committee.

6. National Seniors and Juniors
(Biathlon)

The Nationals are governed by the United States Biathlon Association and are held annually. At the present time two sites exist that have the potential to host the national championships. The third upon its development would be the Pt. Campbell/Kincaid Park facility. The likelihood of acquiring the championships could possibly be two out of every five years depending on the success of the Alaskan program. The Senior National Championship would draw 50 to 80 skiers, while the Junior National Championships would involve 30 to 50 skiers.

7. National Team Selection Race Series
(Biathlon)

As the name indicates, this series of races decides the national team based on performance at these races. During the 1982-83 season, events were held at West Yellowstone, Montana, Bozeman, Montana, Minneapolis, Minnesota, Rosendale, New York, Lake Placid, New York, Hanover, New Hampshire, and Underhill, Vermont. The possibility of Anchorage obtaining one of these races is feasible, given the success of developing a viable program. The number of participants involved would be 50 - 60 senior men, 12 juniors and approximately 12 women.

8. Can-Am Series
(Biathlon)

This series of races has not been fully developed, thus lies the opportunity to competitively seek a bid for hosting such an event. It is basically an international competition between the United States and Canada. It will involve 50 - 80 competitors.

9. Arctic Winter Games
(Biathlon)

These highly respected games consists of many events including cross-country skiing, biathlon, alpine skiing, snowshoe races, etc. It is exclusively limited to teams from arctic regions around the world. Approximately 50 - 80 biathletes would be competing.

10. Regional/State/Local Competitions
(Biathlon)

Biathlon clubs from Anchorage and Fairbanks would use the facility for competitive events. Each of these races would involve 30 to 50 participants. The Kincaid Park Biathlon Center would also see weekly use by the Anchorage National Guard.

11. Training
(Biathlon)

The Biathlon facility could comfortably handle 20 to 40 skiers at any one training session. More could use the facility during the course of one day; however, it would be imperative that scheduling be coordinated through one source. The U.S. National Biathlon Team might use the facility due to the possibility of early and late snow. However, this would have to be tied in with a housing package such as that provided by an Olympic Training Center.

The summer usage of the Biathlon facility could also be quite active. This would entail skiing for part of

the day at either Turnigan Pass or Eklutna Glacier and then returning to the Biathlon range for shooting practice. Such an opportunity would enable the National team members to forego a summer European trip to find snow.

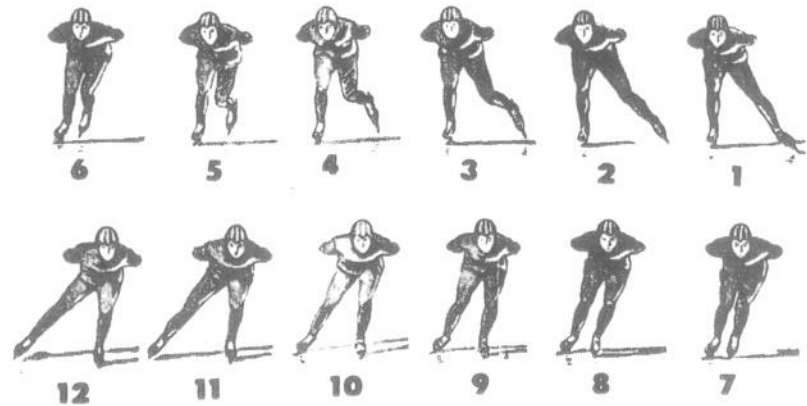
NORDIC COMBINED EVENT/FACILITIES

Nordic Combined consists of two events, ski jumping and cross-country. In this competition the top combined score of the two events represents the individual winner. This combined event is held at competitions all the way from local programs to the Olympics. If Anchorage builds 30m and 50m jumps they will have the qualifications to host a Junior National event. The requirements for this competition include a 10 kilometer cross-country race and a 30m and 50m ski jump event. Approximately 40 competitors would attend. Anchorage will also be able to hold Regional/State competitions including high school competitions. Colleges would not compete in the Nordic Combined due to the fact that the NCAA (National Collegiate Athletic Assoc.) has dropped ski jumping as a competitive event.

SKI JUMPING EVENTS/FACILITIES

The ability to draw international jumping competitions to Pt. Campbell/ Kincaid Park is severely limited due to the sizes of the proposed 30m and 50m jumps. Major international competitions require, at a minimum, a 70m hill and 90m hill. These jumps will have to be constructed on another site in Anchorage if an Olympic competition or major international ski jumping event is to be hosted by Anchorage.

Given the 30m and 50m jumps, potential exists to hold divisional championships for both Senior and Junior competitors at the Pt. Campbell/Kincaid Park site. In addition, the 30 meter and 50 meter hills are ideal for jumping development.



SPEED SKATING EVENT/FACILITIES

Amateur speed skating competition is governed in the United States by the U.S. International Skating Association (USISA). The association has about 250 members and 100 metric-style competitors centered around West Allis, Wisconsin. The procedure for becoming a host for a major speed skating event is to submit a bid to the USISA one year in advance for national events and three years in advance for international competition. However, in view of the current concentration of speed skaters in the West Allis area, Anchorage will probably find it difficult to host many major events until it develops a similar base of competitors in its own region. Until that happens Anchorage would probably have to defray the expenses of the West Allis skaters to travel and stay in Anchorage.

1. Olympic Games/World Championships
(Speed Skating)

A speed skating facility for the Olympics should consist of a headquarters to include ticket sales, skate storage, mechanical spaces (electric/-maintenance), men's changing room, women's changing room, warming area, judges' room and a Zamboni garage. If possible, the speed skating facility should be located adjacent to other facilities (i.e., field house). In such a situation the field house could provide dressing rooms, rest rooms, warm-up facilities, etc. for participants, officials and general public thus reducing some of the recommended area in the headquarters building.

Other required structures would be a small judges building adjacent to the finish line, a bleachers area, and media rooms. Both the bleachers and media rooms could be structures that are brought in for the Olympic competition.

The speed skating oval required for an Olympic competition is 400 meters, and should provide three interior practice skating lanes. A refrigerated speed skating oval exists in West Allis, Wisconsin, but generally speed skating events (non-Olympic or International competitions) are held on frozen lakes where the oval course is temporarily laid out for the events. The distances for the Olympic Games are for men 500, 1000, 1500, 5000, and 10,000 meters; and for women 500, 1000, 1500, and 3000 meters. Night lighting should be made available to lengthen the usage time of the speed skating oval.

A speed skating oval provides a good opportunity for recreational purposes during non-competitive periods. The headquarters building could be used during recreational times for skate rental, food service, and as a warming hut.

2. World Sprint Championships
(Speed Skating)

World Speed Skating Championships consist of two separate events conducted each February: the sprint events and all-around events. Since the center of world speed skating is in Europe, it is difficult for the United States to hold a World Championship more than every five years. Moreover, this is likely to be a sprint championship, since U.S. skaters are most competitive in these events. To successfully obtain a bid for the World Championship would probably necessitate a refrigerated track.

3. World Junior Championship
(Speed Skating)

It may be possible for Anchorage to host the World Junior Championships once every five years. These championships are most likely to be sprint rather than all-around events. Generally they would attract anywhere from 20 - 80 competitors.

4. National Championships
(Speed Skating)

Each January the National Championships are scheduled. If Anchorage develops a strong local program, it would have the potential to host these competitions once or twice every five years. This series of events would draw approximately 100 skaters.

5. Regional/State/Local Competitions
(Speed Skating)

The potential use of a speed skating oval for regional, state and local competitions would only be as strong as the development program in each of the above areas. West Allis, Wisconsin draws competitive fields up to 400 for some of its regional competitions.

OLYMPIC TRAINING CENTER (OTC)

The OTC is a physical network of buildings designed to accommodate athletes, coaches and trainers during competitions, clinics and training sessions. The designation of such a center will require that Anchorage form 1) a non-profit sports organization with whom the USOC would negotiate, 2) a viable budget that would include housing and feeding of the athletes, costs for use of the training facilities and other support services and 3) the development of a financial package for capital investments and ongoing operational expenses. Additional information would include an analysis of local transportation, the available sports medicine program, office space for visiting athletes and other governing bodies, the accommodations for offered sports and their respective schedules, etc.

A fully developed Olympic Training Center includes seven major facilities which could be housed in one to seven structures (refer to Chapter 5). Included in this complex would be a dormitory that, initially, should be designed to accommodate 150 people with an ultimate design capacity of 400. This study uses the lower limit of 150 as a reasonable estimate for the initial stages of development. Ideally, this facility would provide a laundry room, meeting room, saunas and equipment storage. The bedrooms should be designed for two people with private baths and be approximately 264 square feet in size. The hub of the OTC buildings would be the Athletes Center. Its main function would be the feeding of the athletes and officials who were housed in the center. The seating capacity of the facility should contain approximately 300 seats and be serviced with commercial scaled kitchen equipment. This facility should also contain a library/reading room and a recreation room.

The administrative/security offices are to be located at the entrance to the center's secured area and be the operations center for the OTC. Its personnel would include a general manager, an assistant, secretary, Director of Transportation and Housing and a security force. The main function of this building besides operations would be an intercept/ information and security checkpoint. Also to be included in the OTC compound would be an infirmary, physical therapy area, sports medicine facility, a wax building/ski storage, staff housing, and meeting rooms.

In addition to the OTC, a site is required for an Athletic Training Center. Development of the Athletic Training Center as a dual participation center for both the public and OTC provides what could be, through proper management, an athletic center where visiting athletes could mingle with the public. Construction of such a complex for just the OTC would not make economic sense.

It is envisioned that this facility would include courts for basketball, racquet ball, squash, indoor/outdoor tennis and volleyball, gymnastics, indoor swimming, nautilus, steam baths, saunas and an indoor shooting range.

The other main facility that would be crucial to the operations of the OTC, the cross-country trails, the biathlon center, and the Park itself is the maintenance facility. This facility would be the responsibility of the Park administrator. It should have sufficient size, space, equipment and manpower to maintain all buildings, roads, trails and snow making as well as sufficient space for offices, lockers, showers and a parts room. Refer to the Technical Appendices of this Master Plan for information covering management, employee requirements and security needs for the O.T.C. facility.

1. Objectives of the Olympic Training Center Concept

The concept of an Olympic Training Center grew out of the increasing role of the United States Olympic Committee (USOC) in sports development. The primary function of the USOC is to select athletes to represent the United States in the Olympic and Pan-American games. In each of the 33 sports that are eligible for inclusion in these major international events the Committee is also responsible for administering the logistics of sending U.S. teams to the competition. However, since the 1964 Olympics, the USOC has become increasingly involved in promoting and funding development programs aimed at improving performances of U.S. amateur athletes.

USOC's objective in the training center concept is to establish regional training facilities capable of world-caliber competition to serve as focal points where the National Governing Bodies may conduct training and competition programs for world class athletes. A second purpose of the training centers is to facilitate the USOC's interest in promoting sports medicine research by bringing together relatively large numbers of elite athletes for testing purposes.

The USOC first implemented the Olympic Training Center concept when it opened Squaw Valley, California Training Center in May 1977. Then in early 1978, it opened its second training center in Colorado Springs, Colorado. Both were viewed as experimental projects to test and improve upon the concept. In fact, the concept proved to be financially unfeasible at Squaw Valley due to low utilization and focus on winter sports. This training center was closed in September 1980. As a result of the Squaw Valley failure a thorough evaluation of the concept was undertaken by the USOC. The evaluation included such basic concepts as defining eligible development programs for each sport, and the sharing of cost for facilities use and

participant housing and transportation between the USOC and the governing bodies of each sport that use the training center. Upon the closing of Squaw Valley a void was created for winter sports teams which primarily were its users. To fulfill this need for a winter sports facility Lake Placid was designated as a new Winter Sports Training Center in 1982. Refer to Technical Appendix and Item 2 (this section) for the U.S.O.C. requirements and guidelines for O.T.C. designation.

At present, Lake Placid has some of the best designed Winter Olympic facilities in the world. The facilities are well maintained since they are essentially brand new. Lake Placid had many advantages in being named. First of all, the ongoing capital expenditures would not be the responsibility of the USOC, the facilities were in excellent shape and in place, the housing and feeding of the athletes is available at a reasonable price to the USOC, the geographical location is central with respect to major population centers and particularly with respect to the relatively large numbers of winter sports competitors in the East and mid-West.

2. Criteria and Procedures for Olympic Training Center Designation

In order to determine the need and potential selection of additional regional training centers, the USOC has formed a National Training Center Committee. The function of this committee is to entertain bids from organizations that wish to become training centers, and to negotiate facilities and housing costs and scheduling plans with the bidders. Staff support for the Committee is provided by the USOC Director of Operations, who is responsible for all Training Center operations. This Committee will then make its recommendations to the 70 member executive board of the USOC, which meets 3 or 4 times per year. The latter then approves or disapproves the selection.

Interested communities, in order to be considered for designation as a USOC Training Center, must meet the following conditions for the remainder of the 81-84 quadrennial period:

- a. The community must designate one organization, city agency, state agency, or non-profit sports organization with whom the USOC would negotiate. A description of this organization must be included in this proposal to the USOC.
- b. This local non-profit organization must submit to the USOC a viable budget that includes housing and feeding of the athletes, cost for use of the training facilities, other support service costs and identification of funding sources.
- c. The local non-profit organization will be responsible for developing the necessary financial package for both capital investments and ongoing operational expenses for the Training Center. A plan for how these funds will be obtained must accompany the proposal.
- d. The proposal must include information on the infrastructure to include:

1. Management and administration

- a) Principal contact with whom the USOC will negotiate.
- b) Availability of on-site office space for USOC employees.
- c) Office space for athletes' meetings, NGB meetings, and USOC meetings.
- d) Local transportation. Vehicles and manpower to move athletes from housing site to training site and return.



- e) Sports Medicine. The organization will provide the necessary space and assist in securing equipment to conduct sports medicine program.
- f) Accommodation of sports and schedule. The organization must submit in their presentation the sports they are prepared to accommodate. The organization must also submit the availability of training facilities that includes period of the year, days of the week, and daily schedule.

e. Miscellaneous

- 1. Educational and Vocational Opportunities. The organization must use their best efforts in assisting USOC personnel to assist athletes in finding jobs and in placing athletes in educational institutions.
- 2. Olympic marks and logo.
 - a) The organization will not be permitted to use the USOC marks or logo unless prior approval is received by USOC Headquarters.

- b) No other organization in the community will be permitted to use USOC marks or logo.
- c) Any community desiring to be designated an Olympic Training Center should utilize existing Training Center facilities to the maximum.
- d) The USOC will not favorably consider proposals for Training Centers that contains development of multi-million dollar capital facility construction.

4. Anchorage's Prospects for Becoming an Olympic Training Center

Unfortunately, there are some major questions proposed by the winter sports governing bodies and the USOC as to the potential of Anchorage being designated as an Olympic Training Center site. The biggest issues are its geographical remoteness and consequently high transportation costs for athletes, other than Alaskans, wishing to train or compete at the facilities. Unless Anchorage is willing to provide a major portion of the athletes transportation, housing and facility operation and maintenance costs, it is extremely unlikely that Anchorage would be designated as an Olympic Training Center site regardless of the quality of facilities provided. This is all overlain with the fact that even if all conditions were met by Anchorage there is still no guarantee that Anchorage would receive permanent and official U.S.O.C. training center status. The construction cost for an Olympic Training Center and its infrastructure requirements is estimated to be over \$18 million with an annual operations and maintenance cost estimated at \$370,000.



Recommendations: 1) Community should proceed with Phases I and II, laying the foundation for competitive and other community facilities. 2) Postpone O.T.C. development until market and funding prospects improve.



Cost Summary
Chapter Nine

Cost Summary

Chapter Nine

Detailed costs for all recreational program elements of the Recommended Plan are itemized, by phase, as discussed in Chapter 7 of the Master Plan. Each item is itemized by quantity, unit, unit cost, total construction cost, construction contingency, design contingency, total project cost and an estimated operations and maintenance cost on an annual basis.

The recreational items, 19 in total, listed under Phase 1 represent the Master Plan's recommendations for immediate public improvements for the 1983-84 construction season. However, more items have been identified than there are current funds available. Items shown with a double asterisk are those recreational elements approved by a Municipality, Park and Recreation Commission and the Anchorage Winter Recreation Advisory Committee for development in the 1983-84 construction season. Currently, approximately \$2.5 million is available for construction of these facilities in 1983/84 (refer to Figure 9.1).

The recreational items listed under Phase 2, 20 in total, represent the recommendation of the Master Plan for development of future public facilities (refer to Figure 9.2). These items are primarily summer use elements. Refer to Chapter 4 for a general discussion of the facilities related with each recreational element listed.

The recreational elements listed under Phase 3, 17 in total, represent the facilities needed for development of the future international/Olympic facilities (refer to Figure 9.3). These items are high capital cost items some of which have a double summer use potential. Approximately 50% of the identified capital improvement items are Olympic Training Center related. The development of these facilities must



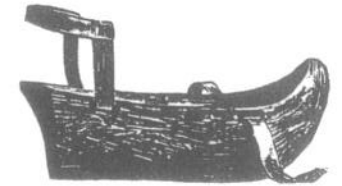
precede a bid for designation as an Olympic Training Center. Construction of these facilities would give Anchorage the physical facilities to host any international, regional, state or local competition.

Refer to Chapter 5 for general discussion of facilities related with all recreational elements listed in Figures 9.1, 9.2, and 9.3. Refer to Chapter 7 for location of the recreational elements by phase.

Summary:

A total of \$28,242,000 of recreational facilities have been identified by the Master Plan; \$7,172,000 of recreational facilities have been identified for public improvements. The remaining \$21,070,000 of recreational facilities are primarily for the development of an Olympic Training Center and hosting an Olympic event.

NOTE: The cost displayed in Figures 9.1, 9.2 and 9.3 are in 1983 dollars.



9.1 PHASE ONE COSTS

PHASE ONE* 1983-84 Public Improvements	Quantity	Unit	Unit Cost	Construction Cost	Constr. Contingency @ 20%+/-	Design Contingency @ 20%+/-	Project Cost	O&M Cost (Annual)
1. Ski Jumps** (30m & 50m)	1 ea	LS	604,000	604,000	117,500	117,500	839,000	53,000***
2. Cross-Country Trails								
. lighted**	2	K	42,000	84,000	16,500	16,500	117,000	5,400***
. Unlighted**	1.5	K	14,250	21,375	6,975	7,000	36,000	(Included in Item 2)
3. Warming Facility** (w/o Util)	2,000***	SF	185	370,000	72,500	72,500	515,000***	104,644***
4. Cross-country start/finish area** (6 ac)	6	Ac.	5,100	30,600	6,200	6,200	43,000	4,000
5. Hiking/jogging/nature trails (no cost-double use of ski trails)					-	-	-	(included in Item 2)
6. Picnic Areas	5	Ac.	5,000	25,000*	5,000	5,000	35,000	5,000***
7. Fishing Pier	1	LS	47,000	47,000	9,000	9,000	65,000	(included in Item 8)
8. Sport Fields (1 soccer)** 6 Ball Fields***	6	-	-	-	-	-	114,000***	67,791***
9. Parking Areas**	150	Stall	1,444	216,600	41,700	41,700	300,000	3,000
10. Access Road Improvements	2.5	Mi.	-	-	-	-	111,000***	2,000***
11. Lower Nike Grading/reveq.	44	Ac.	3,000	132,000	26,000	26,000	184,000	50,000
12. Utility Improvements (U.G.)	Allow	LS	72,000	72,000	14,000	14,000	100,000	2,000
13. Demolition**	5,800	SF	17	98,600	(Salvage Value 50% + Credit)		50,000	-
14. Site Lighting	1	K	42,000	42,000	8,000	8,000	58,000	(included in Item 11)
15. Signage **	Allow	LS	20,000	20,000	4,000	4,000	28,000	200
16. Misc. Site Improvements**	Allow	LS	42,000	42,000	8,000	8,000	58,000	-
17. Security	-	-	-	-	-	-	-	27,000***

Costs shown are in 1983 dollars.

TOTAL: \$2,653,000 \$324,035/Yr.

* General discussion of facilities included in cost estimates - refer to Chapter 5.

** Elements approved by the Municipality, Park Board, and Winter Recreation Advisory Committee to be developed in 1983-84 (\$1.7 million available in 1983/\$.8 million appropriation anticipated for 1984).

***Source: Municipality of Anchorage.

9.2 PHASE TWO COSTS

THE "COLUMBUS" NEWEST SKATE INVENTION.

Awarded at the Vienna
Industrial Exhibition, 1890, with
the First Diploma of Honor.



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PHASE TWO*	Quantity	Unit	Unit Cost	Construction Cost	Constr. Contingency @ 20%+/-	Design Contingency @20%+/-	Project Cost	O&M Cost (Annual)
Future Public Improvements								
1. Picnic Areas	35	Ac.	9,000	315,000	63,000	63,000	441,000	17,500
2. Sports Fields	10	Ac.	18,500	185,000	37,000	37,000	259,000	5,000
3. Primitive Camping	100	Sites	1,500	150,000	30,000	30,000	210,000	1,000
4. R.V. Camping	80	Stalls	6,000	480,000	96,000	96,000	672,000	50,000
5. Visitor Center (interim)	3,000	SF	40	120,000	24,000	24,000	168,000	4,000
6. Maintenance Center	10,000	SF	40	400,000	80,000	80,000	560,000	2,000
7. Coastal Trail	3	Mi.	-	-	-	-	-	-
8. Internal Bike Trails	1.5	Mi.	90,000	135,000	27,000	27,000	189,000	2,250
9. Hard Surface Courts	8	Ea.	18,000	144,000	28,800	28,800	201,600	1,500
10. Children Play Areas	2	Ea.	15,000	30,000	6,000	6,000	42,000	500
11. Amphitheaters	2	Ea.	8,000	16,000	3,200	3,200	22,400	400
12. Archery Range								
. Walk Thru	1	LS	4,000	4,000	800	800	5,600	-
. Stadium	1	LS	6,000	6,000	1,200	1,200	8,400	-
13. Par-course	1	LS	50,000	50,000	10,000	10,000	70,000	300
14. Lake Shore Improvement	500	LF	200	100,000	20,000	20,000	140,000	2,500
15. Water Sports (Concession)		No public investment		-	-	-	-	-
16. Utilities	Allow	LS	150,000	150,000	30,000	30,000	210,000	2,000
17. Parking	100	Stalls	400	40,000	8,000	8,000	56,000	1,000
18. Access Roads	2.5	Mi.	250,000	625,000	125,000	125,000	875,000	9,000
19. Signage	Allow	LS	25,000	25,000	5,000	5,000	35,000	400
20. Misc. Site Improvements	Allow	LS	50,000	50,000	10,000	10,000	70,000	-
21. Snow Play Area with Rope Tow	10	Ac.	2,000	20,000	4,000	4,000	28,000	4,000
22. Pedestrian/Skier Underpass	2	Ea.	61,200	122,400	23,800	23,800	170,000	-
23. Picnic Shelter	1	Ea.	40,000	40,000	8,000	8,000	56,000	500

Costs shown are in 1983 dollars

TOTAL: \$4,489,000 \$103,850

* Refer to Chapter 5; general discussion of facilities included in unit cost estimates.

9.3 PHASE THREE COSTS



PHASE THREE* Future International/Olympic Facilities	Quantity	Unit	Unit Cost	Construction Cost	Constr. Contingency @ 20%+/-	Design Contingency @ 20%+/-	Project Cost	O&M Cost (Annual)
1. Park Headquarters	4,000	SF	120	480,000	96,000	96,000	672,000	90,000
2. Visitor Center	7,000	SF	130	910,000	182,000	182,000	1,274,000	50,000
3. Athletes Dorms	42,000	SF	125	5,250,000	1,050,000	1,050,000	7,350,000	87,500
4. O.T.C. Headquarters	6,000	SF	130	780,000	156,000	156,000	1,092,000	87,000
5. Athletes Center	10,000	SF	150	1,500,000	300,000	300,000	2,100,000	45,000
6. Medical Center	8,500	SF	200	1,700,000	340,000	340,000	2,380,000	30,000
7. Wax & Ski Storage	2,500	SF	100	250,000	50,000	50,000	350,000	1,000
8. Speed Skating	1	LS	400,000	400,000	80,000	80,000	560,000	94,000
9. Running Track	3,000	SY	1,125	34,650	6,930	6,930	48,510	1,000
10. Biathlon Range/Stadium	10	Ac.	7,000	70,000	14,000	14,000	98,000	2,500
11. Cross-Country Stadium	8	Ac.	8,000	64,000	12,800	12,800	89,600	2,000
12. Mass Transit Area	60	Stalls	600	36,000	7,200	7,200	50,400	1,000
13. Snow Making Facility	1	LS	210,000	210,000	42,000	42,000	294,000	12,000
14. Parking (off-site)	1,500	Stalls	-	-	-	-	-	10,000
15. Access Road Improvements	2.5	Mi.	450,000	125,000	225,000	225,000	1,575,000	4,000
16. Utility Improvements	Allow	LS	2,000,000	2,000,000	400,000	400,000	2,800,000	5,000
17. Demolition	56,000	SF	10	560,000	Salvage credit @ 40%		336,000	-

Costs shown are in 1983 dollars.

TOTAL: \$21,069,510 \$522,000/Yr.

* Refer to Chapter 5; general discussion of facilities included in unit cost estimates.



Public Involvement | Study Team | Study Process

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Public Involvement

Public involvement responsibility of the consultant team included presentations, on a monthly basis, to the Anchorage Winter Recreation Advisory Committee. In addition, a presentation of the recommended plan to the Parks and Recreation Advisory Commission, The Urban Beautification Commission, the Planning and Zoning Commission and the Municipal Assembly were required. Interest groups, such as the Nordic Ski Club of Anchorage, were to be represented by the past planning studies conducted and via representatives on the Anchorage Winter Recreation Advisory Committee. Throughout the study Tryck, Nyman, Hayes had an open door policy allowing any interested individuals or agency representative to visit and become familiar with the Master Plan process.

Fourteen public meetings were conducted as part of the Master Plan effort. Six meetings were held with the Anchorage Winter Recreation Advisory Committee, two meetings with the Anchorage Winter Recreation Technical Committee (a subset of the Advisory Committee); three meetings with the Anchorage Park and Recreation Commission; one meeting with the Anchorage Planning and Zoning Commission, one meeting with the Anchorage Urban Beautification Committee, and one meeting/presentation to the Anchorage Municipal Assembly. In addition, several contacts were made with special interest groups.

Refer to Figure 10.1 for a chronological summary listing of the public meetings conducted as part of the Master Planning effort.



10.1 PUBLIC INVOLVEMENT SUMMARY



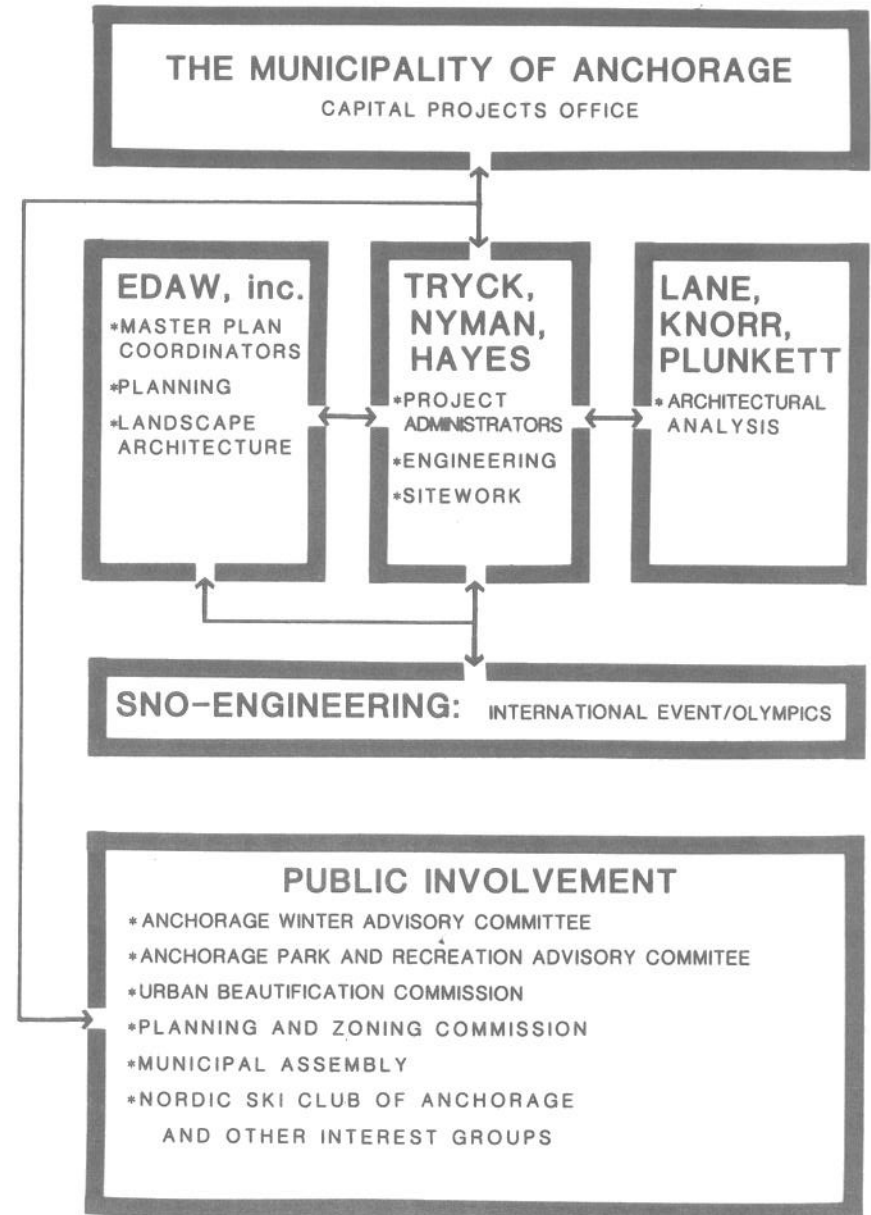
July 8, 1982	Agency: Winter Recreation Advisory Committee Purpose: Ski jump design progress report Result: Presentation made; questions as to design schedule, construction and costs were addressed.	October 28, 1982	Agency: Joint Park and Recreation Board and Winter Recreation Advisory Committee Purpose: Draft Preliminary Master Plan presentation: Concept recommendation. Result: Preliminary findings and recommendations were presented. Six concepts were discussed. No recommendation was made. Issues of access, methodology and product format were raised.
August 4, 1982	Agency: Winter Recreation Advisory Committee Purpose: Ski jump progress report. Master Plan inventory and analysis presentation. Result: Ski jump progress report made - no questions. Master Plan inventory and analysis presentation made; questions as to evaluation methodology and graphic interpretation were answered. Meeting adjourned.	November 29, 1982	Agency: Special Interest Group Meeting Purpose: Public Input/Concept Recommendation Result: Concept 2c was selected for development into the recommended plan.
August 4, 1982	Agency: Winter Recreation Technical Committee Purpose: Technical data and other planning study coordination. Result: Consultant team informed as to what other planning efforts were underway that may affect Master Planning effort.	January 5, 1983	Agency: Winter Recreation Advisory Committee Purpose: Development plan for 1983/84 construction season approval. Result: Ski jumps and warming facility development plan approved.
August 8, 1982	Agency: Anchorage Park Board and Winter Recreation Technical Committee Purpose: Recreational program element list review and approval. Result: A recreation program list of over 60 items was discussed. Approximately 15 items were eliminated and 6 items were flagged as questionable. Consultant team was directed to further study the questionable items.	January 13, 1983	Agency: Anchorage Park Board Purpose: Development plan for 1983/84 construction season approval Result: Ski jumps and warming facility development plan approved.
		May 11, 1983	Agency: Winter Recreation Advisory Committee Purpose: Preliminary Master Plan Presentation Result: Recommended plan adopted in concept.
		May 12, 1983	Agency: Anchorage Park & Recreation Commission Purpose: Preliminary Master Plan presentation Result: Recommended plan adopted in concept.
		(date to be determined)	Agency: Anchorage Planning and Zoning Commission Purpose: Preliminary Master Plan Approval Result: (Yet to be determined)
		(date to be determined)	Agency: Anchorage Urban Beautification Committee Purpose: Preliminary Master Plan Approval Result: (Yet to be determined)
		(date to be determined)	Agency: Anchorage Municipal Assembly Purpose: Preliminary Master Plan Approval Result: (Yet to be determined).

10.2 STUDY TEAM

In summary, the Master Plan has responded to and in most cases incorporated all public comment. The Master Plan encourages additional public comment subsequent to publication. Please send all comments to Municipality of Anchorage, Capital Projects office.

Study Team: On December 18, 1981 the Municipality of Anchorage advertised for architectural engineering services to provide a Master Plan and overall design and construction management services for a comprehensive winter recreational development program at the Pt. Campbell/Kincaid Park site. On June 9, 1982 the Municipality selected the consultant team of Tryck, Nyman, Hayes; EDAW, Inc., and Lane, Knorr, Plunkett. Sno-Engineering was utilized as a sub-consultant to the project team. The structure for the Master Planning effort is diagrammed in Figure 10.2.

The Master Plan was administered by the Capital Projects Office of the Municipality of Anchorage, with Tryck, Nyman, Hayes acting as the consultant administrative team leader. Tryck, Nyman, Hayes responsibilities included conducting the administrative, engineering and site work aspects associated with the Master Plan. EDAW, Inc. was responsible for team coordination of the Master Plan, landscape architectural design and planning efforts. Lane, Knorr, Plunkett was responsible for the identification, inventory, analysis and schematic design for architectural facilities on-site. Sno-Engineering was utilized for the purpose of providing technical information as to international standards, event requirements and Olympic facilities.



Study Process: The study process for the Pt. Campbell/Kincaid Park Master Plan was an eight step process (refer to Figure 10.3).

First, the project goals and objectives were identified through a series of in-house consultant team meetings and subsequently through public involvement process. Four major goals and objective sets were identified.

Second, an inventory and analysis phase was undertaken which evaluated natural systems, social systems, previous planning efforts and current/proposed planning efforts and condition of existing facilities.

Third, was the identification of all recreational program elements that could feasibly be developed on-site to meet the winter recreation needs of the local citizens and future event potentials. This was a two-step process. First, the consultant team identified over 60 recreational elements and secondly, through a screening process including public involvement, the consultant team reduced the overall list to approximately 38 items. The screening process included a function/compatibility analysis, responded to agency direction, responded to interest group directions, and through a series of meetings developed a consensus program element listing.

Fourth, was to identify design goals, policies and standards for each of the program elements previously identified. The purpose of this step was to define by dimension, and/or clarify design intent for each of the program elements.

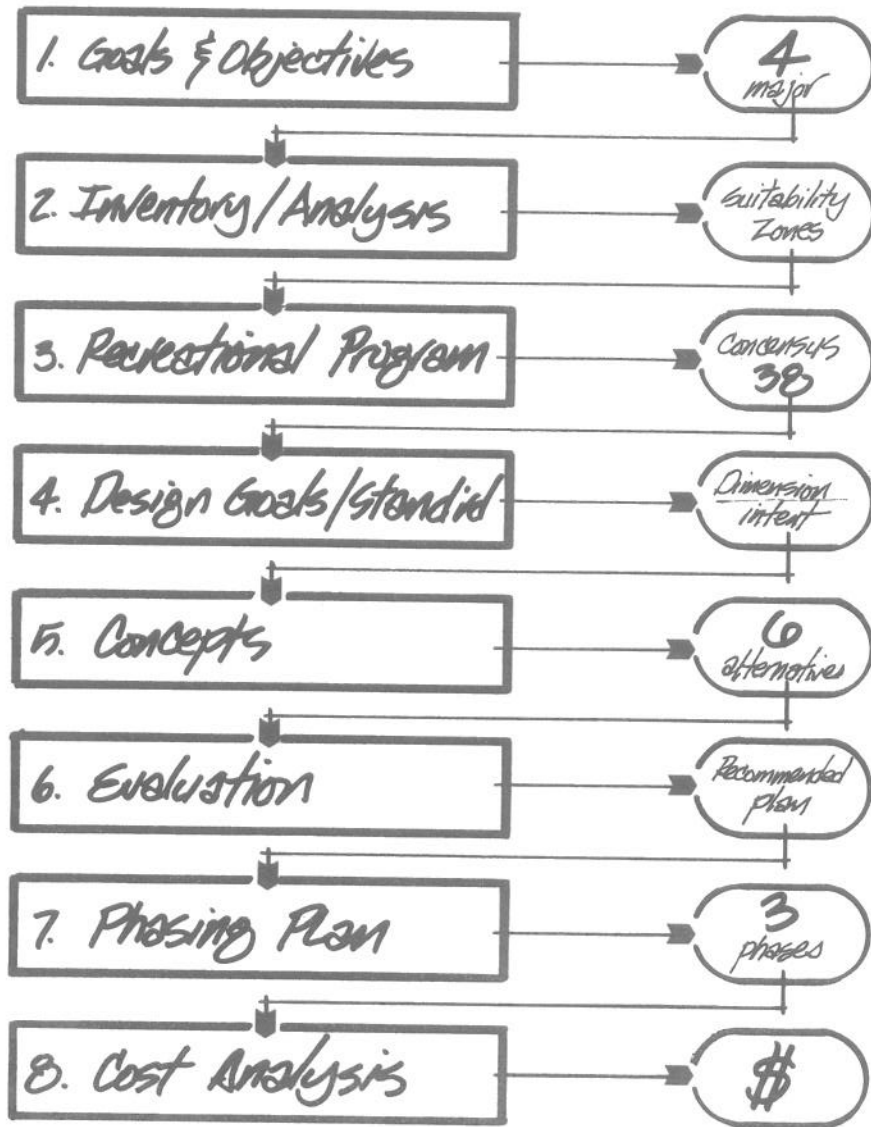
Fifth, was the identification of development concepts. In this step of the process six concept alternatives were formulated. The alternatives were all based on the same criteria.

Sixth, a screening process was developed which included public involvement, functional criteria, cost criteria, flexibility criteria and utilization of existing facilities. The recommended concept was selected based on the findings of this evaluation.

Seventh, was to identify a phasing plan for the implementation of the recommended plan. This was a three part phasing program. Phase 1 included those public facilities which could be constructed with available funds in 1983/84. Phase 2 was the identification of public facilities to be developed in the future as funds became available and Phase 3 was the identification and description of winter recreation events/facilities capable of being hosted on-site. These included local, state, national and international events. In addition, an Olympic Training Center site plan was developed for reference should this potential use be hosted on-site in the future.

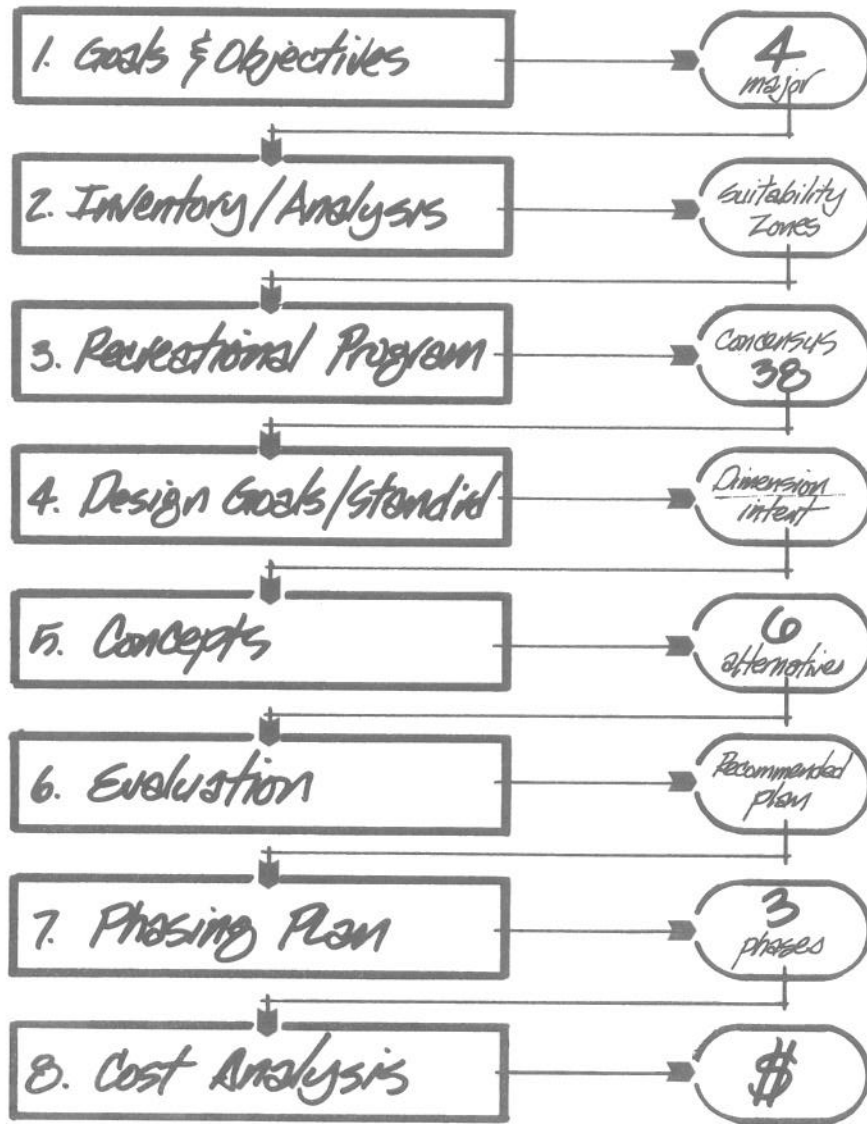
Eighth, was the identification of each program element with an estimated total project cost. A capital improvement program was not generated as part of the Master Plan effort. The primary purpose of this cost summary was to provide referencing in the future as funds became available.

10.3 STUDY PROCESS



Study Products: The products generated by this Master Planning effort include: 1) Master Plan document, 2) base mapping at three scales (200 and 400 scale for the entire site, 40 scale for 6 enlargement areas), 3) two technical base data notebooks, 4) a set of preliminary draft posters which acted as summaries of the Master Plan process approximately 60% through the planning effort, 5) aerial photography at 200 scale for the entire site, and 6) a project slide file. All study products are available for review at the Municipality of Anchorage Capital Projects Office.

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Bibliography
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2 of 9.

Storm Drain - Corps of Engineers. Sheet Serial
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