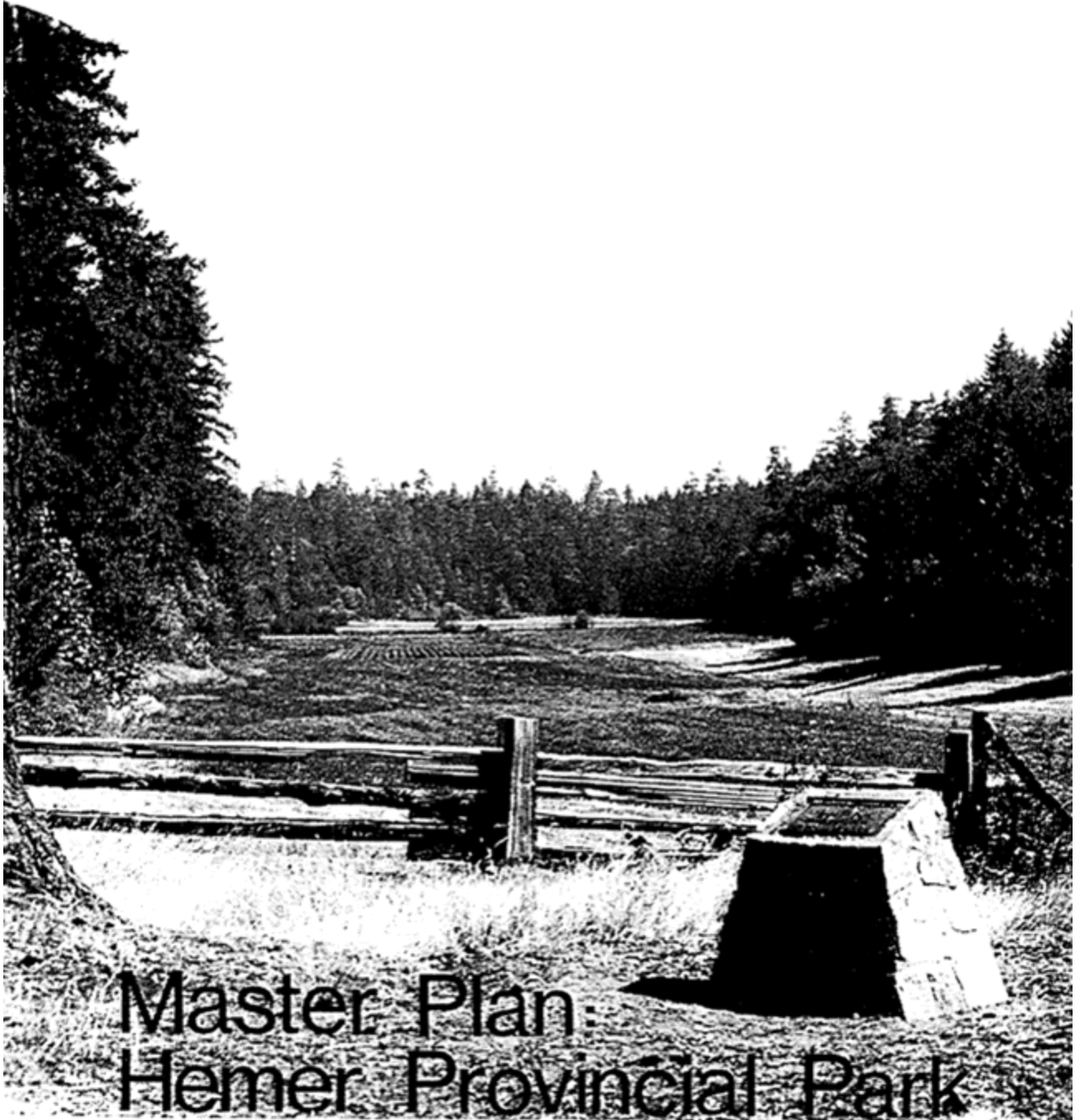




Province of British Columbia
Ministry of Lands, Parks, and Housing
Parks and Outdoor Recreation Division

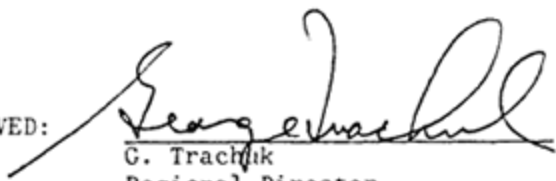


Mr. C. Trachuk
Regional Director
South Coast. Region
Parks & Outdoor Recreation Division
Ministry of Lands, Parks & Housing

This Master Plan for Hemer Provincial Park is submitted for your approval.

RECOMMENDED:   Mar 27/86.
Date

J. Gillings
District Manager
Strathcona District

APPROVED:  March 27/86
Date

G. Trachuk
Regional Director
South Coast Region

South Coast Region
Parks and Outdoor Recreation Division
Ministry of Lands, Parks and Housing

HEMER PROVINCIAL PARK

MASTER PLAN

COMPILED BY:

PAVELEK & ASSOCIATES LTD.
Vancouver, B.C.

UNDER THE DIRECTION OF:

J. Morris, Planner, South Coast Region
M. Turner, Manager, Planning, South Coast Region

FEBRUARY, 1986

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PART I: SUMMARY AND BACKGROUND

A. PLAN SUMMARY

Hemer Provincial Park is located near significant population centres, including Nanaimo and Ladysmith, and is readily accessible by road. The major land uses surrounding the park include agriculture and rural/suburban housing. Hemer Park offers a representative natural landscape of the East Vancouver Island Lowlands, and a representative cultural landscape of the small scale family farms of the Nanaimo area.

Because of its size and location, Hemer Provincial Park has a regional focus in terms of its recreation opportunities. Hemer is a nature-oriented destination park serving the day-use outdoor recreation needs of residents in the Nanaimo and the Cowichan Valley Regional Districts.

At present, the outdoor recreation potential of Hemer Park appears underutilized. The magnificent passive recreation experience of Hemer Park is enjoyed by a limited number of visitors living in close proximity to the park.

For Hemer Park to reach its potential, the Parks and Outdoor Recreation Division should firstly undertake further development of facilities/amenities to expand recreation opportunities, attract greater visitation and improve access within the Park (i.e. park centre, interpretive displays, signage, picnic areas, trails, docks). Further, the feasibility of operating community based education and recreation programs (i.e. nature interpretive and cultural interpretive presentation, instruction/demonstrations for outdoor recreation skill development, guided walks) as well as the feasibility of Park additions around the northwest arm and southern tip of Holden Lake should be evaluated in the future.

The Park has good climatic suitability for outdoor recreation, primarily in summer, and secondarily in spring and autumn.

While such resource factors as the frequent occurrence of gravelly/well-drained soils, stable geological formations, and gently to moderately rolling slopes support development potential within the park, the following resource factors limit development potential:

- ? Poor stability of organic soils in the farm area.
- ? Reduced flexibility in servicing park facilities because of shallow depth to bedrock.
- ? Low soil productivity and thus low vegetation recovery potential.
- ? Severe surface soil erosion potential.
- ? Low visual absorption capability.

Hemer Park has a relatively high level of scenic quality. Features such as views of Holden Lake, the variety of plant associations in the Park, and the bird and small mammal wildlife will attract visitors to Hemer Park.

Mayo Holdings Ltd. owns substantial subsurface mineral rights in Hemer Park. However, no mineral claims or coal licences have been issued under the Mineral Act. Any claims on land tenures in the future should be resolved to preserve the integrity of Hemer Park. Miss Violet Hemer holds life occupancy in the farm area of the Park. This area will remain off-limits to the public for the term of this tenancy.

Existing facilities are appropriate for a day-use destination park in a natural environment setting. Facilities are in good condition.

Based on accepted standards for trail use, the existing trails in Hemer Park have sufficient capacity to accommodate current levels of use. Nearby provincial parks provide a variety of settings for camping, picnicking, swimming, fishing and hiking. Facility development and thus park useage must respond to the physical carrying capacity of the park, the intended quality of recreation experience, and the recreation opportunities in areas surrounding the park.

Hemer Park was divided into three units based on existing land use and landscape character, as follows: The Upland Forest, The Holden Lakeshore, and the Hemer Farm.

The Upland Forest is seen as a natural environment zone that could offer outdoor recreation facilities like the following: Hiking/ walking trails, an equestrian trail, interpretive displays, and rest areas.

The Holden Lakeshore is seen as a natural environment zone adjacent to and complimentary to Holden Lake, that could offer outdoor recreation facilities like the following: Vehicular access to Holden Lake, parking, potable water supply, docks for boat launching/landing, viewpoint/rest area, and picnic area.

The Hemer Farm is seen as a development zone. Subject to the findings of a visitor's services plan and action plan in the future, the Hemer Farm could offer facilities like the following: park entrance, parking, park centre, group camping and picnic area, bog/meadow, and hiking/walking trails. Alternate uses of parts of the farm must be considered because of their fragile nature.

The outdoor recreation activities in Hemer Park could include the following: hiking/walking, viewing, recording, picnicking, unorganized games, group camping, horseback riding, boat launching/landing, fishing from shore, and nature/cultural interpretation.

The potential of linking of Hemer Park with other historic points of interest via a regional trail system is considered a very positive development for outdoor recreation in the Nanaimo area.

B. REGIONAL AND PROVINCIAL CONTEXT

Hemer Provincial Park consists of 93 hectares of forested and cultivated land on the shores of Holden Lake. The park is located about 12 kilometers south-east of Nanaimo, in the Cedar Land District (49 degrees, 6 minutes latitude; 123 degrees, 50 minutes longitude). The park is accessible from Cedar Road, via Hemer Road or Tiesu Road (See Regional Map).

The park was established in 1981, and was made possible by a donation of land by the Hemer Family of Cedar, B.C. Miss Violet Hemer retains a life estate in the farm portion of the park.

About 64 hectares of the park consists of undulating/rolling terrain covered by mature Douglas Fir forest. The vegetation in this area is fairly uniform. Trails have been established over time by local residents.

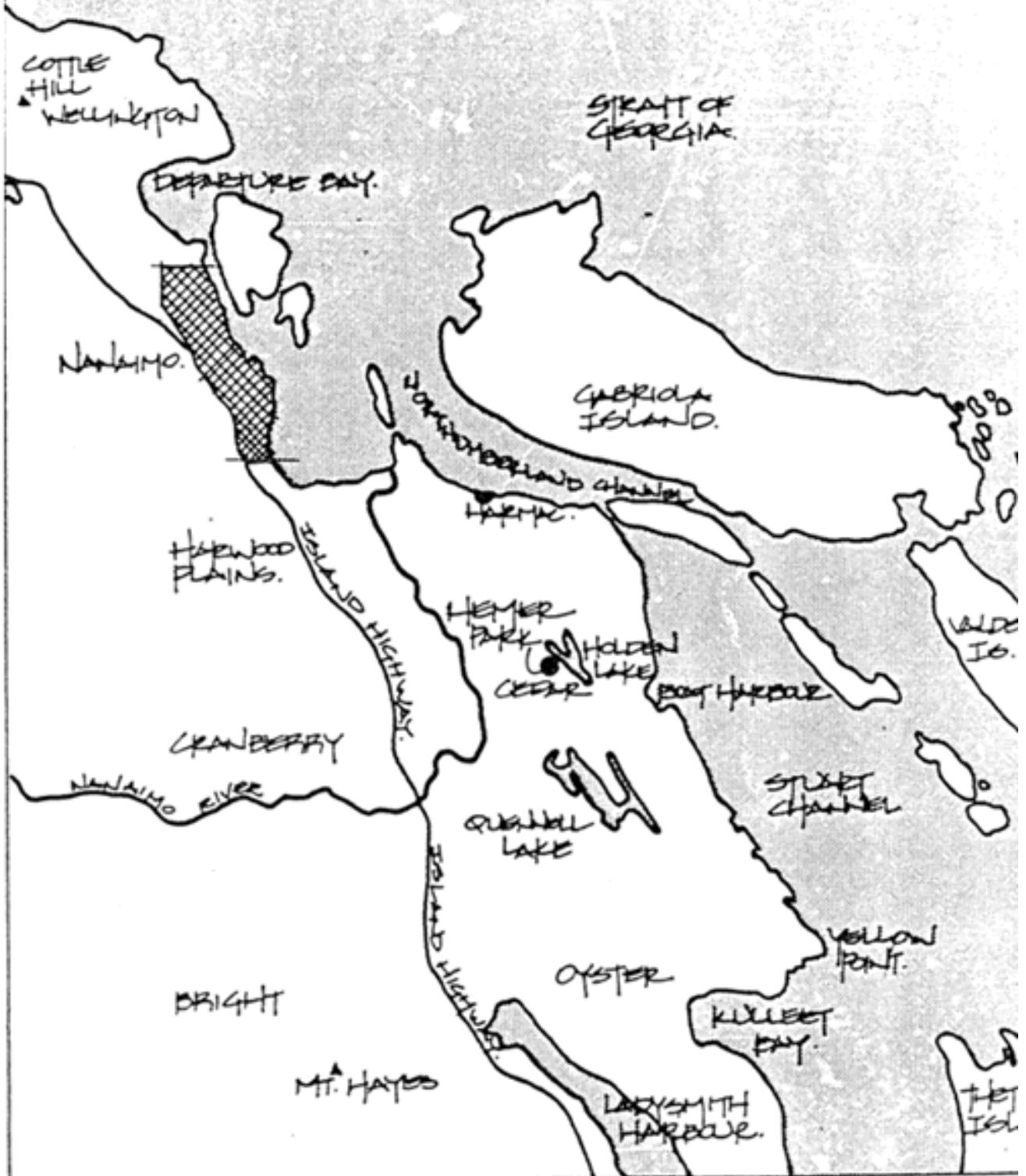
About 14 hectares of the Park is located at the edge of Holden Lake. The lakeshore trail on the west side of Holden Lake (i.e. within the Park) is located on the old Pacific Coal Company Railway right-of-way. While outside the Park, Holden Lake is likely the major feature attracting visitors to Hemer Park, for boating, fishing, and nature observation.

About 15 hectares of the Park is farmland. This area includes a house, farm buildings and fields. The farm is currently occupied and operated by the Hemer Family.

Hemer Provincial Park has a regional focus in terms of its recreation opportunities. Hemer is a destination park serving the day-use outdoor recreation needs of residents in the Nanaimo and the Cowichan Valley Regional Districts, that is, the residents of Nanaimo, Cedar, and Ladysmith.

The overall goals for Hemer Provincial Park include the following:

- ? To preserve and interpret a representative landscape of East Vancouver Island: a representative natural landscape of the East Vancouver Island Lowlands, and a representative cultural landscape of the small-scale family farms of the Nanaimo area.



REGIONAL MAP
SCALE: 1:125,000

HEMER PROVINCIAL PARK
Cedar Land District, B.C.

- ? To develop and manage Hemer Park in response to the outdoor recreation needs of local residents of the Nanaimo and the Cowichan Valley Regional Districts for passive recreation, nature interpretation, water-oriented recreation, cultural interpretation, and outdoor education.

The Objectives For Hemer Park Include the Following:

1. To develop a day-use park that serves as a destination park for local residents.
2. To expand the recreation opportunities within Hemer Park and thereby better serve the recreational needs of local residents.
3. To ensure that the Park is developed and managed in a manner that preserves and enhances resources within the park, as well as adjoining resources like Holden Lake.
4. To monitor the ecosystems within Hemer Park: identify potential detrimental conditions (i.e. vegetation stress from over-use), take action to rectify problems, and thereby insure long-term viability of the Park.
5. To monitor use of the Park and thereby identify levels of use and likely preferred recreation opportunities.
6. To resolve any outstanding land titles issues, that may arise in the future to ensure the long-term integrity of Hemer Park.
7. To explore the feasibility of future acquisitions of land adjoining Hemer Park, and thereby expand recreation opportunities and further preserve the landscape of which Hemer Park forms a part.

C. HEMER PARK RESOURCES

1.0 NATURAL RESOURCES:

1.1 NATURAL REGION/REGIONAL LANDSCAPE

Hemer Park is located within an area called the East Coast Lowlands of Vancouver Island. This area is a part of the Coastal Trench (Georgia Depression) Physiographic Division. In British Columbia, the Coastal Trench takes the form of a series of submerged longitudinal basins. Hemer Park is part of the Coastal Plains portion of the Coastal Trench. The topography of the Coastal Plains consists mainly of undulating to rolling upland surfaces. (Day et al 1959)

Hemer Park is part of the Nanaimo Harbour Drainage District. The Nanaimo River is the major collector in the area. The Nanaimo River is located about 1.5 miles west of Hemer Park. The sand and gravel deposits over much of the Nanaimo River Valley form an extensive aquifer which supplies about 23 million gallons of water daily. (Surficial Geology of Nanaimo 1963)

The Coastal Plains area is generally considered to be well-drained. However, variability in moisture conditions occurs in most localities. A sequence of excessively drained knolls and terraces, adequately drained slopes, poorly drained flats, and undrained swamps, is not uncommon. The most common soils in the East Coast Lowlands are brown podzolic and concretionary brown soils. (Day et al 1959)

The climate of the Coastal Plains portion of Vancouver Island is influenced by the Olympic and Insular Mountains, and is described as the inner-coast climate. Precipitation and cloudyness are reduced (i.e. "rain shadow") and temperatures are higher than adjacent areas. (Day et al 1959)

Hemer Park is located within the Coastal Douglas Fir Biogeoclimatic Zone. Further, the Douglas Fir - Western Hemlock - Salal Association is considered to be the climax association for the area. This association indicates the presence of well-drained uplands and fluvio-glacial benches. Often, little or no lateral movement of moisture occurs, and vegetation depends on rain water for the most part.

Hemer Park is located within the Cedar Land District. The character of the Cedar District is rural/agricultural. The Cedar District was settled as a farming community, and in recent years, various residential developments have been build. The Harmac Pulp Mill/Saw Mill complex is the one major industrial development in the district, and is located at the north end of the land district on Northumberland Channel.

1.2 CLIMATE

As identified in the Natural Region/Regional Landscape section, the climate of the Coastal Plains area is described as the inner-coastal climate. The climate normals (1951-1980) for sunshine, wind, temperature, precipitation and frost taken at the Nanaimo Airport (49 degrees , 3 minutes North / 123 degrees 52 minutes West) near Hemer Park, are presented in Appendix I.

Bennett (1977) evaluated climatic suitability for outdoor recreation on a province-wide basis. His classification scheme has the following features:

- ? The scheme is B.C. specific, areas were classified relative to other sites in B.C.
- ? Temperature, precipitation, sunshine and wind were the climatic parameters used to assess climatic suitability. Climate normals 1941 - 1970 for these factors were used in the assessment.
- ? Recreational activities, availability of climatic data, seasonal variation in climate, and regional variation in climate were considered in evaluating climatic suitability.

Appendix II presents a more complete discussion of Bennett's classification scheme.

Bennett's assessment of conditions at Nanaimo Airport are assumed to be closely comparable to Hemer Park. The following table gives the climatic suitability assessment for conditions at the Nanaimo Airport:

SEASON	TEMPERATURE	PRECIPITATION	WIND	SUN
SUMMER (June - August)	CLASS 1 (Land-passive recreation)	CLASS 1	CLASS 1	CLASS 1
TRANSITION (April, May September, October)	CLASS 2 K (cold) (Land-passive recreation)	CLASS 3	CLASS 1	CLASS 2
WINTER (December- February)	CLASS 4 H (hot) (Land-active recreation)	CLASS 3	CLASS 1	CLASS 4

(NOTE: CLASS 1 = Most suitable; CLASS 5 = Least Suitable)

Hemer Provincial Park is highly suitable for outdoor recreation in the summer season from June to August (i.e. CLASS 1) for land-based passive recreation activities like walking, picnicking and nature observation. Climatic suitability ratings deteriorate in the transition and winter seasons. While ratings in the transition period are average or above average, cool temperatures, greater precipitation and less sunshine contribute to poorer suitability ratings for land-based passive outdoor recreation. In winter, temperatures are too warm for land-based active pursuits like cross-country skiing. Further, more precipitation and less sunshine contribute to poorer suitability ratings. Wind conditions are a favorable factor throughout the year. Thus, from the perspective of climate, Hemer Park is most suitable for outdoor recreation in the summer season from June to August, and will likely experience its highest levels of use.

Smoke discharge from the Harmac Pulp Mill reaches Hemer Park, and impacts negatively on outdoor recreation suitability. The pulp mill is located about four kilometers north (i.e. north - north-west to north) of Hemer Park. The climate normals (1951 - 1980) for winds from the N.N.W and N. through the year are as follows:

**NORTH AND NORTH-NORTH-WEST (combined)
(Percent Frequency)**

JANUARY	2.9%
FEBRUARY	5.3%
MARCH	4.8%
APRIL	6.2%
MAY	7.9%
JUNE	6.8%
JULY	7.5%
AUGUST	7.2%
SEPTEMBER	7.7%
OCTOBER	6.5%
NOVEMBER	4.8%
DECEMBER	3.7%
YEAR	6.0%

The predominant wind direction in this area (i.e. based on the Nanaimo Airport information) is from the West.

This frequency distribution could be interpreted as follows, in any twelve hour period from May through September, winds would likely come from the North and North-North-West for about 50-60 minutes. The smoke from Harmac would negatively impact on the park assuming that the Mill is operating.

At the average mean wind speed of 8.9 km/hr. for the period May - September (for North and North-North-West), smoke would reach the site in about 30 minutes. Thus, the duration of impact is reduced.

For short periods of North and North-North-West winds, the smoke may not reach the site (e.g. duration less than 30 minutes). For North and North-North-West winds of longer duration, the impact period is reduced by the travel time to the site. Once the smoke does reach the site, however, it seems to linger, perhaps because of the large percentage of calm periods.

Thus, based on the wind patterns for this area, the smoke from the Harmac Pulp Mill is considered to have a medium to low impact on outdoor recreation at Hemer Park. Further, this impact is highest in the spring, summer and fall seasons.

1.3 PHYSIOGRAPHY

1.3.1 GEOLOGY/GEOMORPHOLOGY

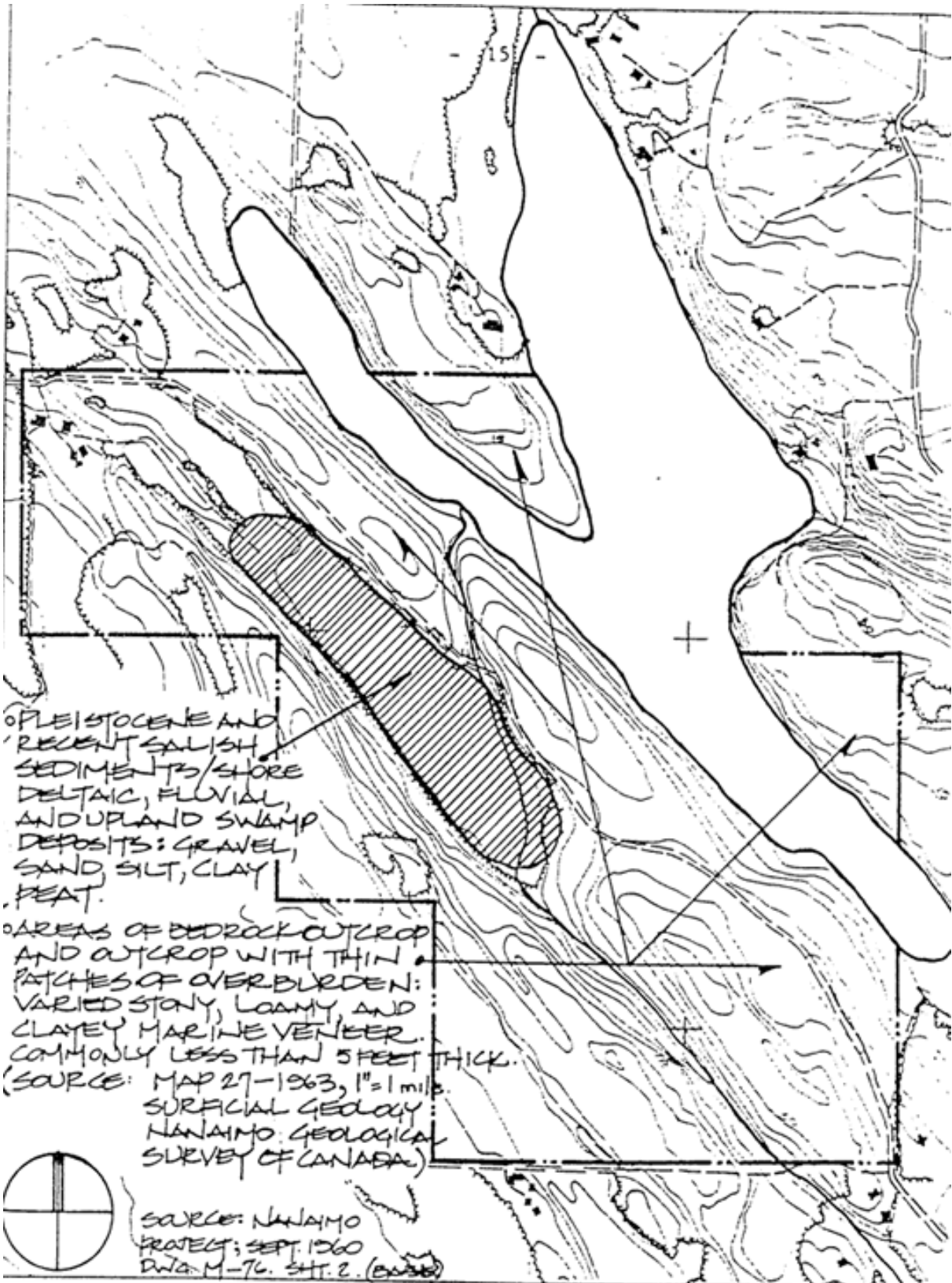
Hemer Park is located in an area referred to as the East Coast Lowlands of Vancouver Island. The bedrock that underlies the lowlands consists of shale, sandstone, and conglomerate. Weaker units have been eroded to form longitudinal valleys (e.g. Holden Lake occupies the deepened part of one of these valleys), and more resistant units form cuesta-like ridges. Glacial action in this area tended to round and polish rock surfaces and deepen longitudinal valleys, but deposited very little material. Bedrock lies at the surface or is covered by a few feet of marine veneer, chiefly clay. (Geological Survey of Canada 1963)

IMAGE NOT AVAILABLE

Most of the soils of the lowlands of Vancouver Island were developed on materials that have been deposited in the sea or modified by the sea. These marine materials are stoney, gravelly, sandy, loamy and clayey in texture and typically form a veneer (or mantle) one to five feet thick on hills or slopes, and one to thirty feet thick on low ground. This marine mantle was formed by the washing action of waves on the surface materials of slopes and hilltops and consists of fine materials containing few stones on the low ground and coarser materials containing many stones on sloping ground. The marine soils are most varied in texture (ranging from clay to stoney sand) where the former sea shores were underlain by sandy till and were exposed to sizeable waves. These conditions apply to the greater part of the eastern coastal lowlands of Vancouver Island. (Day et al 1959)

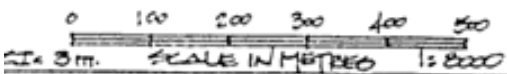
The surficial geology for the majority of Hemer Park (See Surficial Geology Map) is described as areas of bedrock with a stoney, loamy, and clayey marine veneer commonly less than 1.5 metres (5 feet) thick. The Hemer Farm area is the exception. This area is composed of swamp deposits which filled in this upland depression which was left from glacial action.

Thus, most of the formations in Hemer Park offer solid bearing for structures.



SURFICIAL GEOLOGY.

**HEMER PROVINCIAL PARK
Cedar Land District, B.C.**



1.3.2 SOILS

The soils mapping generated by the B.C. Ministry of Environment for Southern Vancouver Island identified the following soil types within Hemer Park: (See Soils and Soil Characteristics Map)

Area 1 - 80% Tzuhalem; 20% Haslam Soil Association.

The Tzuhalem soil association has colluvium parent material, and has a gravelly, sandy loam texture. These soils are rapidly draining (i.e. holds little moisture after rain). The most common soil in this association is Orthic Dystric Brunisol (shallow lithic). These soils were formed on sandstone or conglomerate bedrock.

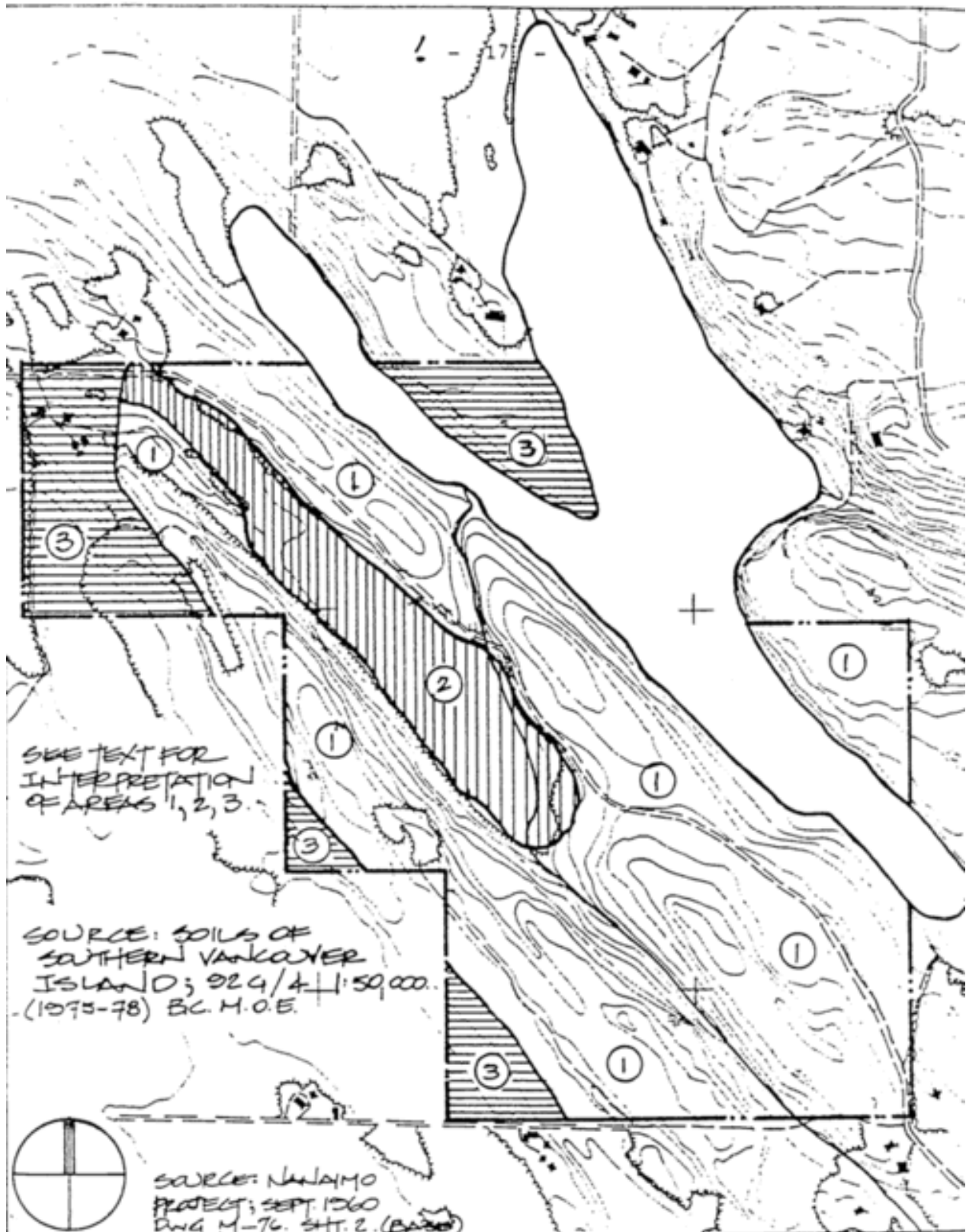
The Haslam Soil Association has paralithic contact to siltstone and these soils were formed on moraine parent material. Haslam soils have a gravelly loam texture and are well-drained (i.e. no excessive moisture for most of the year). The most common soils in this association are Orthic Dystric Brunisol.

Area 2 - Azilian Soil Association

The soils in this association have organic parent material and are themselves moderately decomposed organic material. Their texture is described as Mesic (i.e. organic). These soils are very poorly drained, that is, free water remains at or within 30 centimeters of the surface for most of the year. The most common soil in this association is Terric Mesisol.

Area 3 - 60% Haslam; 40% Tzuhalem Soil Association

Thus, the majority of soils have a gravelly loamy texture, and are well-drained. The exception, is the organic soils in the Hemer Farm area which are very poorly drained.



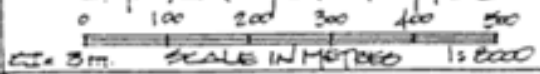
SEE TEXT FOR
INTERPRETATION
OF AREAS 1, 2, 3.

SOURCE: SOILS OF
SOUTHERN VANCOUVER
ISLAND; 924/4 | 1:50,000.
(1975-78) B.C. M.O.E.



SOURCE: NANAIMO
PROJECT; SEPT 1960
Dwg. M-76. SH. 2. (BASE)

SOILS AND SOIL
CHARACTERISTICS.

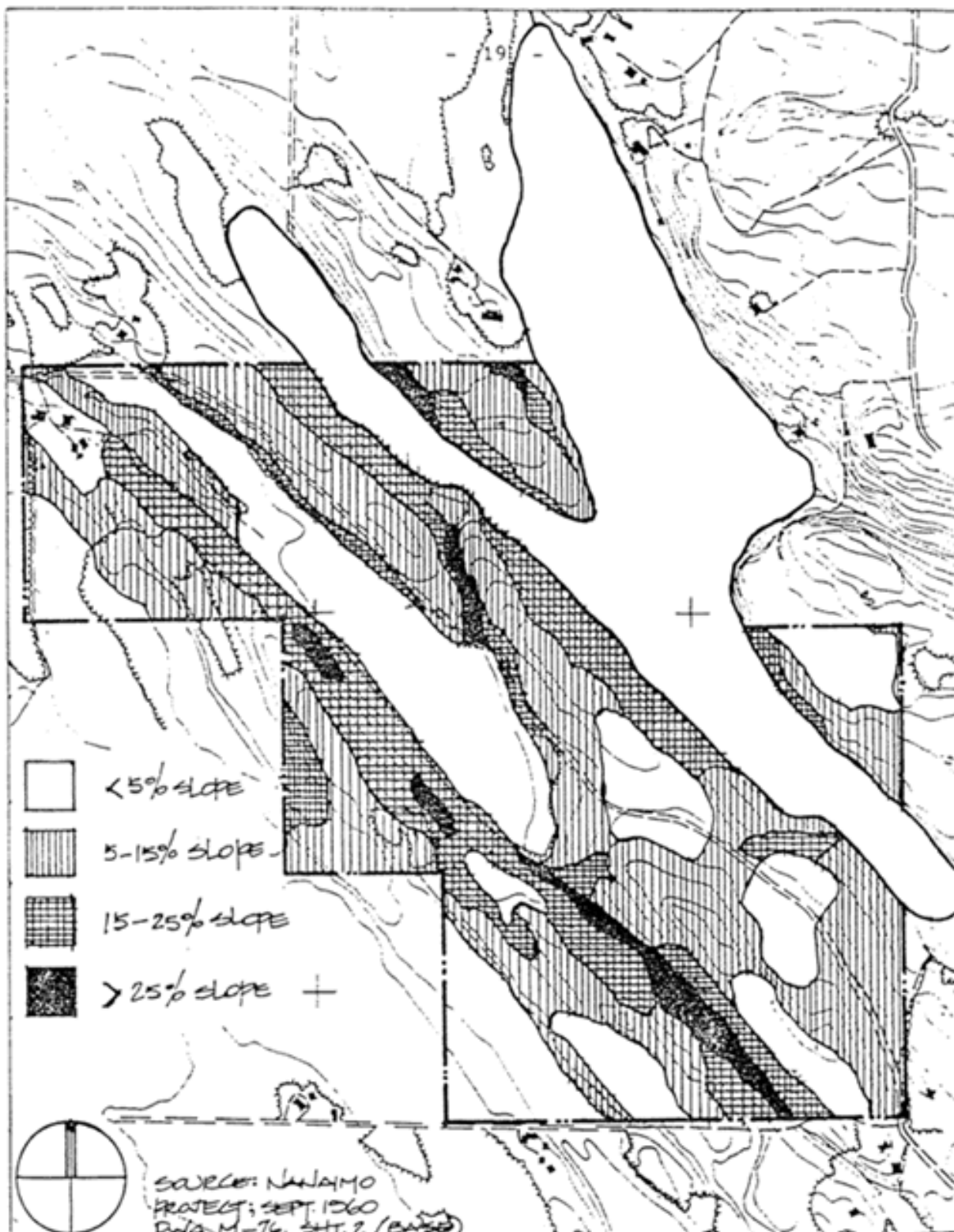


HEMER PROVINCIAL PARK
Cedar Land District, B.C.

1.3.3 TOPOGRAPHY

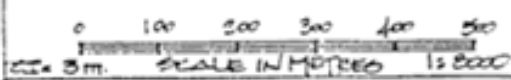
The topography of Hemer Park is complex, that is, multiple slopes are common (i.e. irregular surface versus simple topography, single slopes, regular surface).

The majority of the slopes in Hemer Park fall within the 0 - 15% slope classes, that is, undulating, gently rolling, and moderately rolling. These slopes are considered buildable. (See Slope Analysis Map) Other slopes fall within the over 15% slope classes, that is, strongly rolling to hilly, and slopes at the lower end of these slope classes require specific construction practices (i.e. erosion protection) to be buildable.



SOURCE: NANAIMO
PROJECT; SEPT. 1960
DWA. M-76. SHEET 2 (REVISED)

SLOPE ANALYSIS



HEMER PROVINCIAL PARK
Cedar Land District, B.C.

1.3.4 LAND CAPABILITY FOR AGRICULTURE

The following factors are often considered in developing criteria for land capability assessment: Soil texture, depth, moisture holding capacity, natural fertility, drainage, permeability, topography, and stoniness. Further, some non-soil factors are considered as well, such as inadequacy of precipitation and availability of irrigation water.

Land capability for agriculture was included in the evaluation of Hemer Park's resources to give an indication of soil productivity and vegetation recovery potential.

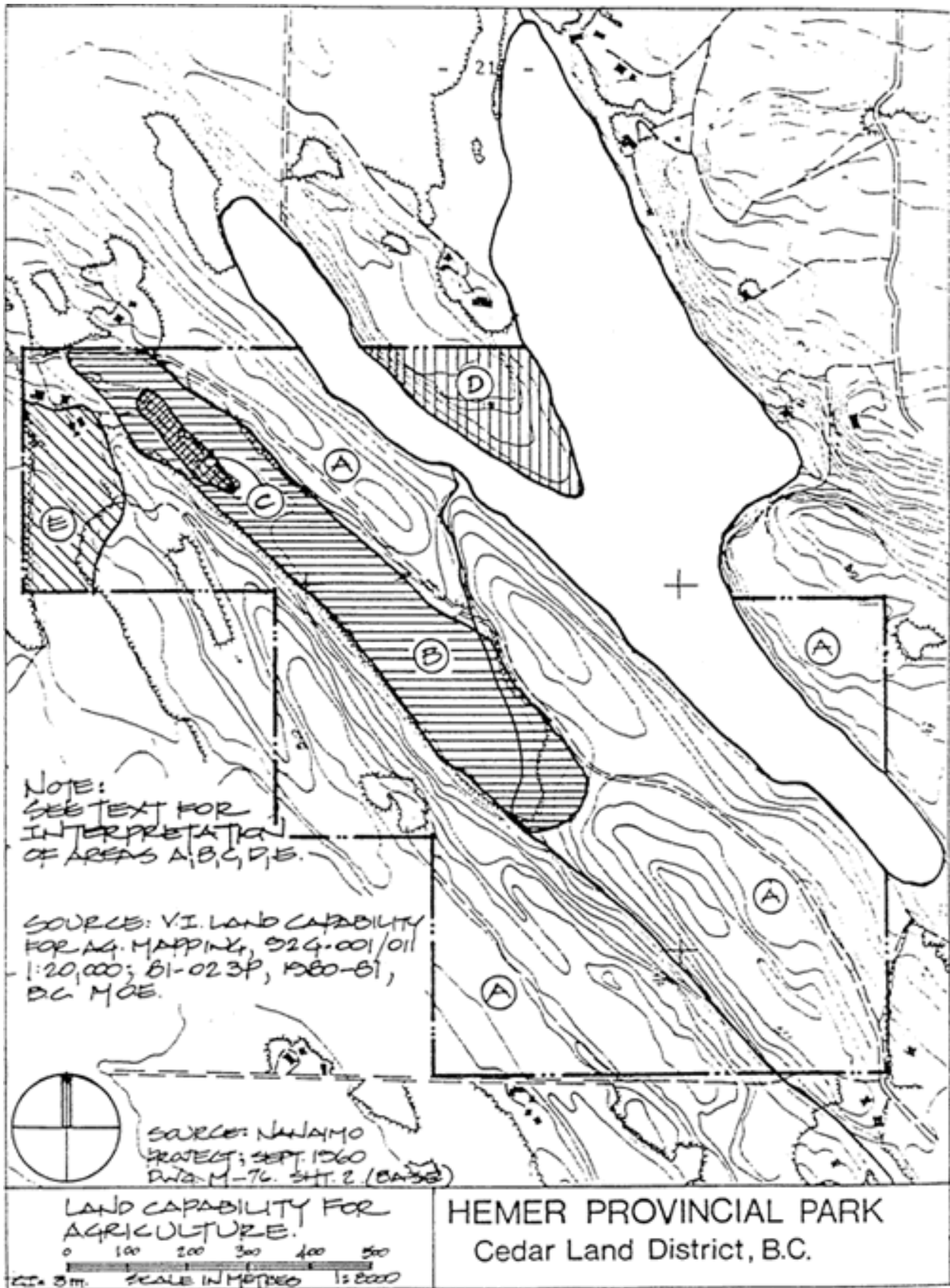
The Ministry of Environment's land capability for agriculture mapping identified the following classifications for land within Hemer Park: (See Land Capability for Agriculture Map)

Area A.

Area A is composed of mineral soils. 40% of the land is CLASS 5, that is, land limited to producing perennial forage crops or other specially adapted crops because of droughtiness (i.e. soil moisture deficiency). These soils could be improved marginally to CLASS 4 with irrigation, but agricultural capability is still restricted by shallow depth to bedrock and topography conditions.

40% of the land is CLASS 5, that is, land limited to producing perennial forage crops or other specially adapted crops because of stoniness (i.e. coarse fragments significantly hindering tillage, planting and harvesting), and topography. These conditions are considered unimprovable.

20% of the land is CLASS 7, that is, land with no capability for arable culture or sustained natural grazing because of shallow depth-to-bedrock and topography. The land is considered unimprovable.



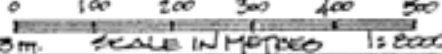
NOTE:
SEE TEXT FOR
INTERPRETATION
OF AREAS A, B, C, D, E.

SOURCE: VI. LAND CAPABILITY
FOR AG. MAPPING, S24-001/011
1:20,000; 61-023P, 1960-61,
BC MGE.



SOURCE: NANAIMO
PROJECT; SEPT. 1960
DATA: M-76. SH. 2 (BASE)

LAND CAPABILITY FOR
AGRICULTURE.



HEMER PROVINCIAL PARK
Cedar Land District, B.C.

Area B.

Area B is composed of organic soils with capability CLASS 5. Because of excess free water, the capability of the land is restricted to producing perennial forage crops or specially adapted crops. Water conditions may result from poor drainage, high water tables, seepage and/or runoff from surrounding areas.

Area C.

Area C contains mineral soils with a capability CLASS 7. This land has no capability for arable culture or sustained natural grazing because bedrock is at or near the surface, thus restricting cultivation and rooting depth. Further, the topography limits the use of farm machinery, decreases the uniformity of growth and maturity of crops, and/or increases the potential for water erosion.

Area D.

Area D is composed of mineral soils. 80% of the land is designated CLASS 5, that is, land limited to producing perennial forage crops or other specially adapted crops, because of droughtiness and topography.

20% of the land is designated as CLASS 7, that is, land that has no capability for arable culture or sustained natural grazing, because of shallow depth to bedrock and topography. This land is considered unimprovable.

With irrigation, 40% of the CLASS 5 land in Area D could be upgraded to CLASS 4. The limitations at this point would include shallow depth-to-bedrock and topography. The remaining 40% would stay as CLASS 5 land with topography and stoniness restricting improvement.

Area E.

Area E contains mineral soils with capability CLASS 4, that is, land requiring special management practices or a severely restricted range of crops, or both. Droughtiness (i.e. soil moisture deficiency) is the major problem contributing to this rating.

With irrigation these soils could be improved to CLASS 2, that is, lands with minor limitations requiring good ongoing management practices or a slightly restricted range of crops. The minor limitations include topographic conditions, and less than desirable soil structure and/or low perviousness.

Thus in general, the land in Hemer Park has a low capability for agriculture because of conditions such as shallow depth-to-bedrock, droughtiness, topography, and stoniness. There is limited potential for improving the capability for these soils. An exception is some of the land within Hemer Farm. While this farmland has low capability in its indigenous state, it can be improved through modifications like drainage.

1.3.5 SURFACE SOIL EROSION POTENTIAL

Soil data and climate data were evaluated in the B.C. Ministry of Environment's assessment of surface soil erosion potential. The assessment employed the universal soil loss equation, and is primarily applicable to agricultural lands. Further, the erosion assessment is based on the soil loss values of the upper 25cm of mineral soils in an area.

Differences across the landscape in soil erosion, slope steepness, and rainfall factors were evaluated but slope length was assumed to be a constant. Worst case conditions of bare soil (no crop cover) and no soil erosion control practices were assumed. As a result, actual soil loss values will usually be lower than reported potential values. The ratings do indicate the relative susceptibility to soil loss of individual areas. (B.C. Ministry of Environment 1984)

The surface soil erosion potential mapping identified the following areas and classes: (see Land Capability for Agriculture Map).

Area A: Class 4 - Severe Surface Erosion Potential
(22-33 t./ha./yr.)

Combined crop management and erosion control practices are required to reduce soil losses.

Area B. Class 0 - Insignificant Surface Erosion Potential.

Area C: - Bedrock.

Area D: Class 4 - Severe Surface Erosion Potential.

Area E: Class 2 - Slight Surface Erosion Potential
(6-11 t./ha./yr.)

No special practices are normally required, except for shallow soils and soils adjacent to water bodies.

Thus, most of the surface soils in Hemer Park have severe soil erosion potential. Most of this area has a dense forest cover at present. The soils in the Hemer Farm area have insignificant to slight surface soil erosion potential and will likely require no special management practices.

1.3.6 SOIL CONSTRAINTS AFFECTING SEPTIC TANK ABSORPTION

Specific site and soil properties were evaluated in assessing potential absorption of effluent from conventional septic tank systems. The following site and soil properties were evaluated: depths-to-bedrock, depth to other restricting layers, depth to water table, perviousness (as an estimation of percolation rate), flood hazard, percentage of cobbles and stones (by volume) at and near the soil surface, slope, soil drainage, soil texture, and total soil coarse fragment content. Four constraint classes were identified: slight, moderate, severe, and very severe. (B.C. Ministry of Environment 1984)

The soil constraints affecting septic tanks effluent absorption mapping identified the following areas and ratings: (see Land Capability for Agriculture)

Area A. - 80% severe constraints; 200 very severe constraints. Site and soil properties seriously limit effluent disposal. The properties usually do not meet minimum legal requirements (if applicable) and successful operation of conventional absorption fields is usually not possible. Special innovative designs or construction may partially overcome severe constraints, but costs are likely to be excessive and overall performance less than desirable. A more technically advanced type of sewage treatment and alternative disposal system is generally required.

Area B. - Very severe constraints.

Area C. - Bedrock - No constraint rating is provided.

Area D. - 80% severe constraints; 200 very severe constraints.

Area E. - Very severe constraints.

Thus, virtually all of Hemer Park has severe to very severe soil constraints affecting septic tank effluent absorption. Successful operation of conventional absorption fields will likely not be possible.

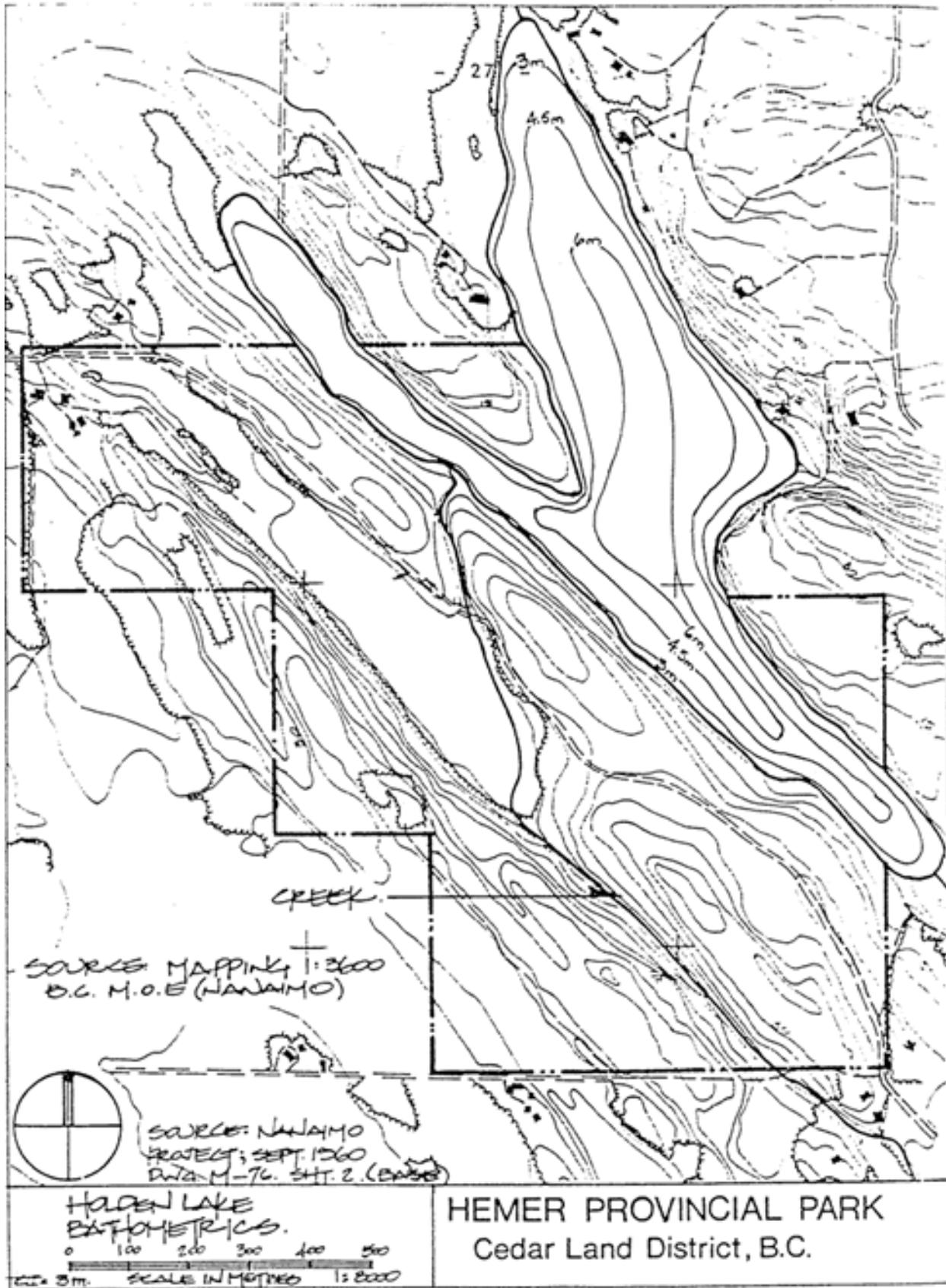
1.4 WATER

The major hydrological features within and adjacent to Hemer Park are Holden Lake and an un-named creek flowing northward through the Park into Holden Lake. While Holden Lake is outside Hemer Park and under the jurisdiction of the B.C. Ministry of the Environment, the Lake is considered an important recreation feature adjacent to the Park. Further, the quality of Holden Lake compliments the recreation potential of Hemer Park.

The most recent survey of Holden Lake was performed by the Fish and Wildlife Branch of the B.C. Ministry of the Environment (May, 1959). The Lake is described as follows:

- ? Holden Lake: Region #1; Management Unit #5; Nanaimo Harbour District
- ? Holden Lake has two inlets; an un-named creek (flowing northward through Hemer Park) and an inlet through the marsh area at the south end of Holden Lake. Holden Lake has one outlet from the northeast arm of the Lake, which flows towards to Nanaimo Harbour.
- ? The physical characteristics of the Lake were described as follows:
 - ? Surface Area (full): 38 Hectares (93 Acres)
 - ? Volume: 165 x 10 m (1341 Acre-feet)
 - ? Shoreline Perimeter: 5624 m (18450 feet)
 - ? Maximum Depth: 6.4 m (21 feet)
 - ? Minimum Depth: 4.0 m (14.4 feet)

Generally, the Lake bottom drops off sharply at the Lake edge. The attached map illustrates bathometric information gathered on Holden Lake, and shows the Lake bottom configuration (see Holden Lake Bathometrics Map).

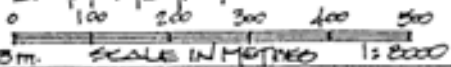


SOURCE MAPPING 1:3600
B.C. M.O.E (NANAIMO)



SOURCE: NANAIMO
PROJECT; SEPT. 1960
DATA: M-76. SHT. 2. (BASE)

Holden Lake
 Bathymetrics.



HEMER PROVINCIAL PARK
Cedar Land District, B.C.

- ? The water chemistry of the lake was described as having 101 P.P.M. total dissolved solids.
- ? No information was gathered on temperature - oxygen profile or littoral substrate.

The Ministry of the Environment has no record of studies of the un-named creek in Hemer Park which flows into Holden Lake.

Thus, the lake bottom configuration lends itself to activities like shoreline fishing, and launching/landing boats.

An updated assessment of Holden Lake should be performed to determine water quality and sports fishing potential.

1.5 VEGETATION

Hemer Park is located within the Coastal Douglas Fir Biogeoclimatic Zone. This zone is a lowland zone that occupies much of the physiographic region called the Coastal Trench (Georgia Depression). The CDF is further divided into a drier and wetter sub-zone, and Hemer Park is part of the drier sub-zone. The climax ecosystem within an intermediate soil and moisture regime is the Douglas Fir - Salal - Oregon Grape association. This association is located on well to moderately well-drained soils of middle slopes, gently sloping hilltops, and on loamy fluvial deposits. Douglas Fir is the main component of fully stocked tree layers. Western Hemlock and Western Red Cedar are present in variable mixtures in the lower tree layer. The shrub layer is very well developed and dominated by Salal and Huckleberry. Less dominant species include Oregon Grape, Dwarf Rose and Ocean Spray. The herb layer is poorly developed.

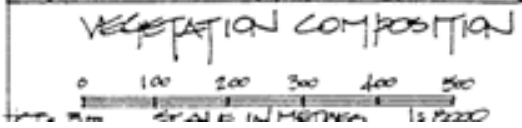
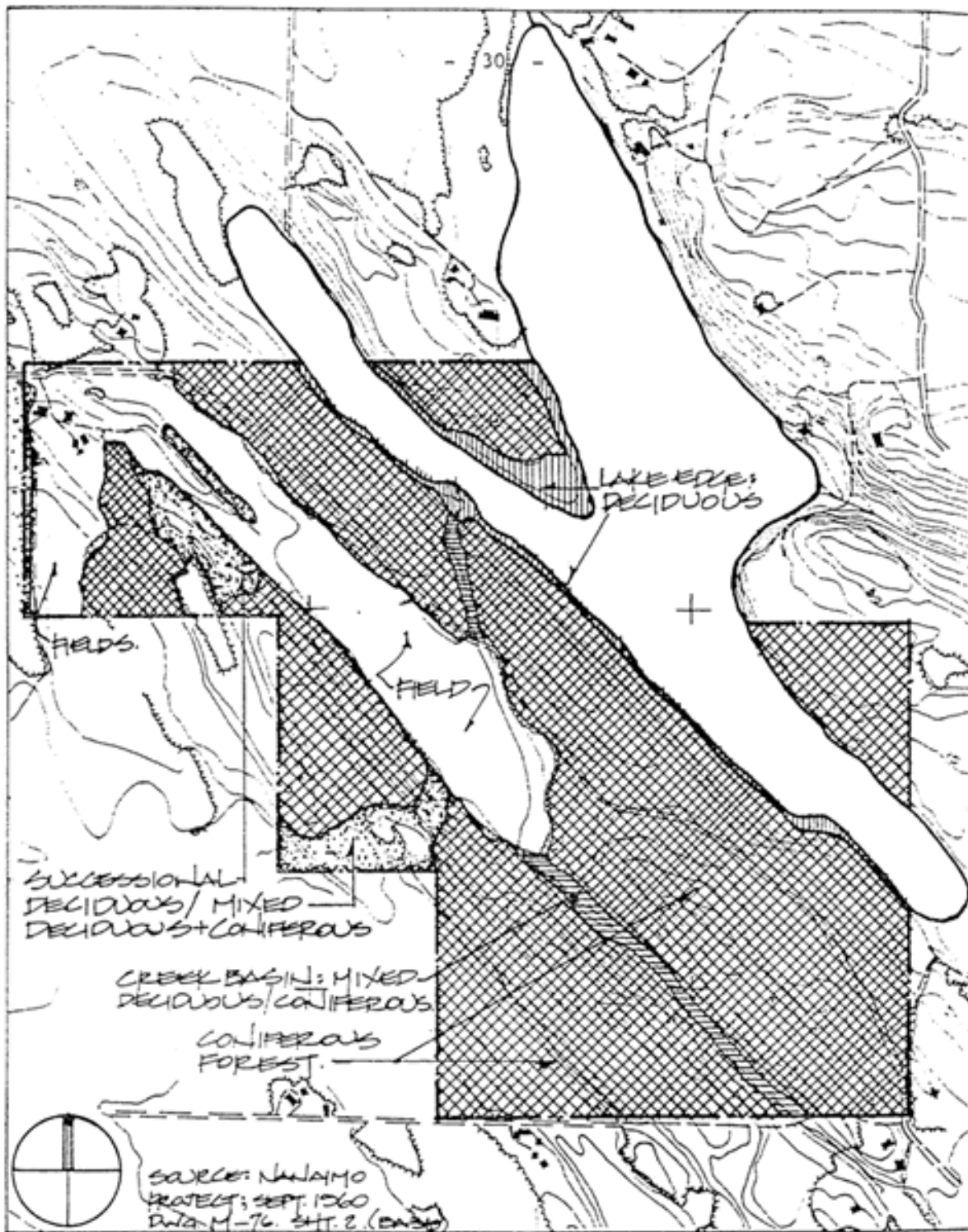
The types of vegetation found within Hemer Park are as follows: (see Vegetation Composition Map)

? Coniferous Forest:

The coniferous forest is generally uniform, and appears to be representative of the Douglas Fir - Salal - Oregon Grape Association. Western Sword Fern is present in areas with more abundant soil moisture conditions.

? Creek Basin: Mixed deciduous/coniferous.

The vegetation composition along the creek banks varies from the surrounding coniferous forest because of moisture regime. Moisture loving species such as Red Alder, Western Red Cedar and Western Sword Fern tend to dominate in this area. As well, Broad-leafed Maple and Black Cottonwood are well represented.



VEGETATION COMPOSITION
 HEMER PROVINCIAL PARK
 Cedar Land District, B.C.

? Lake Edge: Deciduous

The lake edge vegetation is moisture loving and deciduous. Representative species include Red Alder, Black Cottonwood, Willow, and Douglas Spiraea. The presence of Douglas Spiraea in this area indicates poor soil fertility. (Klinka et al 1984)

? Fields/Old Field

The Hemer Farm is under cultivation. The vegetation at the edges of this area consists of successional meadow tree and shrub species, and some ornamental shrub species. Typical species include Red Alder, Broad-leafed Maple, Rose, Salmonberry, and Ocean Spray.

? Successional Deciduous/Mixed Deciduous and Coniferous.

Some areas have been cleared in the past, and are now vegetated with successional deciduous tree species like Red Alder and Broad-Leafed Maple.

Thus, while Hemer Park contains a variety of plant associations reflecting various soil and moisture regimes, and management practices, the majority of the park is vegetated with coniferous forest representative of the Douglas Fir - Salal - Oregon Grape association.

1.6 WILDLIFE

A determination of the ability of Hemer Park to support wildlife requires an evaluation of habitat conditions (i.e. shelter, food, and water). The number of wildlife species and diversity of wildlife species can be explained by a number of factors including the following:

- ? Habitat Area (i.e. amount of space)
Wildlife species differ in their home range requirements.
- ? Vegetation Structure or Complexity (i.e. stage of forest succession)
Later successional forest stages are more complex and can offer food and shelter to a wider range of wildlife species.
- ? Edge (i.e. Ecotones)
Edge conditions (i.e. the areas where ecosystems meet) have a greater diversity of vegetation. Thus, these areas can fulfill the food and shelter requirements of a broader range of wildlife species.
- ? Vegetation Continuity (i.e. habitat islands, wildlife corridors)
Habitat configuration will influence the capability of an area to support wildlife.

The coniferous forest and Holden Lakeshore areas of Hemer Park will support larger numbers and a greater diversity of wildlife species than the Hemer Farm area. The edge areas between the coniferous forest and Hemer Farm, and also between the coniferous forest and Holden Lake will support larger numbers and a greater diversity wildlife because of the varied vegetation in these areas (i.e. type and structure).

Hemer Park contains about 64 hectares of coniferous forest, 15 hectares of coniferous forest/lakeshore vegetation, and 14 hectares of farm land. While the amount of forest in the environs of Hemer Park is substantial, this habitat is divided (i.e. separated) by roads, housing developments and farmland. The area of Hemer Park and the adjacent (i.e. contiguous) forested areas is about 330 hectares (825 acres). This area is about the size of the internal forested area of Stanley Park in Vancouver. The wildlife population supported by an area of this size is likely restricted to bird and small mammal species.

Holden Lake was surveyed by the Fish and Wildlife Branch of the B.C. Ministry of Environment in May, 1959. Lake fish species were sampled by gill netting. The species reported were as follows:

- ? Trout, Char: Cut Throat and Steelhead (Kamloops)
- ? Minnow: Pea-mouth Chum
- ? Sculpins: Prickley

2.0 CULTURAL RESOURCES

2.1 ARCHAEOLOGICAL

The Heritage Conservation Branch has surveyed the shoreline of Holden Lake in its entirety, and the only archaeological site is located outside the park boundaries on the east side of the Lake. This site is a petroglyph designated DgRw 40. (see APPENDIX III for information on the site)

The park land away from the lake shore has not been surveyed. However, these areas are regarded as not having a high potential as significant archaeological sites, in the opinion of the Heritage Conservation Branch.

2.2 HISTORICAL

One of the major industries in the area surrounding the Cedar District was coal mining. Coal mining in the Nanaimo area was started in 1852 by the Hudson's Bay Company. The last coal mine closed in the early 1950's. It was located in the South Wellington Area. (see Regional Context Map)

By 1860, the Cedar District's potential for farming had been identified. B.W. Pierce reported that with the exception of the extreme northern and southern areas, the Cedar District was available for cultivation with little labour. He reported that the soil was very fertile and of good depth, and springs of good water were plentiful. The Cedar District was settled as a farming community and has remained so since. (Johnson 1958,1966)

The Pacific Coal Company Railway travelled along the west shore of Holden Lake (i.e. within Hemer Park), transporting coal from Fiddicks and the Morden Mines to Boat Harbour on Stewart Channel. Most of this right-of-way is crown-owned, and has been identified as having potential as a recreation corridor linking historic points -of-interest in the Nanaimo area (i.e. "Heritage Way", see Gillings n.d.)

3.0 VISUAL RESOURCE

Hemer Park was divided into three setting units as follows, based on existing land use, terrain, and vegetative cover:

- ? The Upland Forest Unit (undulating to rolling topography; mature forest)
- ? The Holden Lakeshore Unit (lake and lakeshore vegetation)
- ? The Hemer Farm Unit (level topography; farm land use)

Significant scenic quality is often associated with lush vegetation, sloping terrain, and water bodies. Overall, Hemer Park has a relatively high level of scenic quality. The lush mature forest over its terrain contribute to this assessment. Holden Lakeshore would likely receive the highest scenic rating because of its interest potential for visitors and its diversity. Areas at the boundaries between setting units such as the Holden Lakeshore trail or the trail along the Hemer Farm fence (i.e. edges or ecotones), have greater diversity and complexity, and thus have a greater level of scenic quality.

IMAGE NOT AVAILABLE

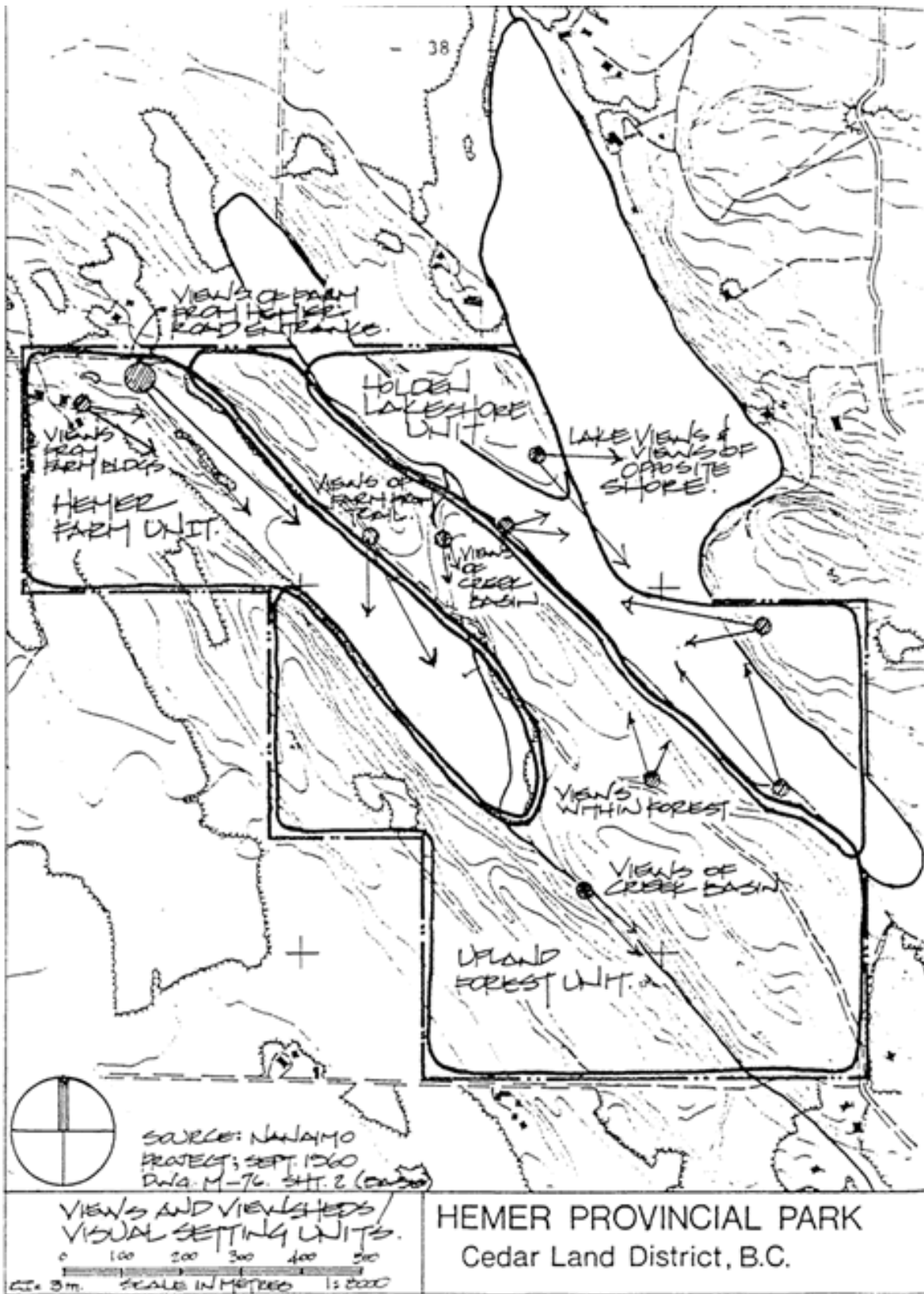
Views and viewsheds were identified. (see Views and Viewsheds/Visual Setting Units Map) The views of Holden Lake from the shoreline trail are considered to be of the highest scenic quality within the park. Another important view is that from the Hemer Farm house, looking east and south over the cultivated fields of Hemer Farm. The Hemer residence is located on the ledge overlooking the farmlands in the basin below. The forest covers the hills sloping down on either side of the basin. From this vantage point, the relationship between the upland forest and the farm components of the park is well-displayed.

Landscapes are capable of absorbing changes (i.e. disturbance) to varying degrees. Visual absorption capability is a measure of the ability of a landscape to absorb alteration of its physical character without damage to its scenic quality. The Barratt (1980) assessment of the visual absorption capability of the Cheakamus River - Whistler corridor, identified three factors important in determining visual absorption capability as follows: slope class, vegetative pattern diversity, and soil productivity.

Slope is the most significant visual absorption capability factor. Steep slopes, that is, slopes greater than 60% have low absorption capability, where as gentle slopes, that is, 0-30% have high VAC. An unbroken canopy cover has low VAC. Broken or open landscapes with color and species variety have inherently high VAC.

Soil productivity or site class, reflects vegetation growth and thus regeneration potential. Land of high growing capacity revegetates early and through quick green up, it has high visual absorption capability. Conversely, poor soil conditions reflect slow green up and low VAC.

While the slopes at Hemer Park are gentle, the dense cover in the upland forest unit and the generally low soil productivity (i.e. CLASS 5-6 Land Capability for Agriculture) contribute to a low level of visual absorption capability. Thus, the upland forest zone could withstand very little clearing before having a detrimental effect on scenic quality.



4.0 ANALYSIS

OPPORTUNITIES

NATURAL RESOURCES:

- ? Hemer Park has a high climatic suitability for outdoor recreation during the summer season from June to August, and an average to above average suitability during the transition season of April, May, September, and October.
- ? Most of the geological formations in Hemer Park offer solid bearing for structures. The parent material does not impede the movement of water or roots.
- ? Most of the soils in Hemer Park are well-drained, a positive feature in building facilities like trails.
- ? The majority of slopes in Hemer Park fall with the 0-15% slope classes, and are buildable.
- ? The Holden Lake bottom drops off sharply from the waters edge, and lends itself to activities like shoreline fishing and boat launching/landing.
- ? While Hemer Park contains a variety of plant associations reflecting various soil and moisture regimes, and management practices, the majority of the park is vegetated with coniferous forest representative of the Douglas Fir - Salal - Oregon Grape Association.
- ? The wildlife populations supported by Hemer Park and adjacent (i.e. contiguous) forested areas (i.e. about 330 hectares) are likely restricted to bird and small mammal species.
- ? Several species of fish were found in Holden Lake during a B.C. Ministry of Environment Survey in 1959.

VISUAL RESOURCES:

- ? Hemer Park has a relatively high level of scenic quality. Areas such as the Holden Lake shoreline trail or the trail along the Hemer Farm fence have greater diversity and complexity of landscape elements (i.e. vegetation, land/water) and thus have higher levels of scenic quality.

CONSTRAINTS

NATURAL RESOURCES:

- ? Hemer Park has an average to below average climatic suitability for outdoor recreation during the winter season from December to February.
- ? The smoke discharge from the Harmac Pulp Mill has a medium to low level of impact on outdoor recreation at Hemer Park.
- ? The geological formations in Hemer Park limit flexibility in servicing structures.
- ? Some of the soils in the Hemer Farm area are very poorly drained organic soils. These soils require specific construction practices to be buildable.
- ? The majority of lands in Hemer Park have a low capability for agriculture. This capability assessment was included as an indicator of soil productivity and vegetation recovery potential.

(Note: Peepre (1983) reported that the carrying capacity of the Douglas Fir - Salal - Oregon Grape Association is considered high because of the natural resilience of the shrub layer. The coniferous trees in this association have lower growth potential because of low soil fertility, low water holding capacity, and rapid internal drainage)

- ? Most of the surface soils (i.e. upper 25 cm) in Hemer Park have severe soil erosion potential in an unvegetated state. (i.e. during construction)
- ? Virtually all of Hemer Park has severe to very severe soil constraints affecting septic tank effluent absorption. Successful operation of conventional absorption fields will likely not be possible, thus requiring alternate sewage treatment and disposal systems, or restricted levels of use.

VISUAL RESOURCES:

- ? The upland forest and Holden Lake setting units in Hemer Park are considered to have low visual absorption capability (i.e. ability to absorb alteration) because of the dense vegetation pattern, and the low soil productivity.

D. LAND TENURES, OCCUPANCY RIGHTS, AND JURISDICTIONS

Hemer Provincial Park is a CLASS "A" Provincial Park, 93 hectares in area which was established on May 8, 1981. The Park was made possible through a donation of land by the Hemer Family. Administrative information for the park area is as follows:

- ? **NTS Map:** #92G4/W
- ? **Park Region:** Vancouver Island
- ? **Regional District:** Nanaimo
- ? **Land District:** Cedar
- ? **Islands Trust:** N/A
- ? **Mines District:** Nanaimo
- ? **F/W Management Unit:** 1-5
- ? **Highway Region:** 6
- ? **Park District:** Arrowsmith
- ? **Electoral District:** Nanaimo
- ? **Assessment District:** 4
- ? **School District:** 68
- ? **L.T.O.:** Victoria
- ? **District Forester:** 19 - Parksville
- ? **Highway District:** Nanaimo

Other Park status information is as follows:

? **Section 6 Lands (Park Act):** N/A

? **Miscellaneous:** N/A

Resource Conservation:

? **ALR:** Partial (see A.L.R. Lands Map)

? **Archaeological sites:** N/A (see Part I, C., 2.1)

? **Ecological reserves (established):** N/A

? **Ecological reserves (proposed):** N/A

? **Wildlife management reserve or project:** N/A

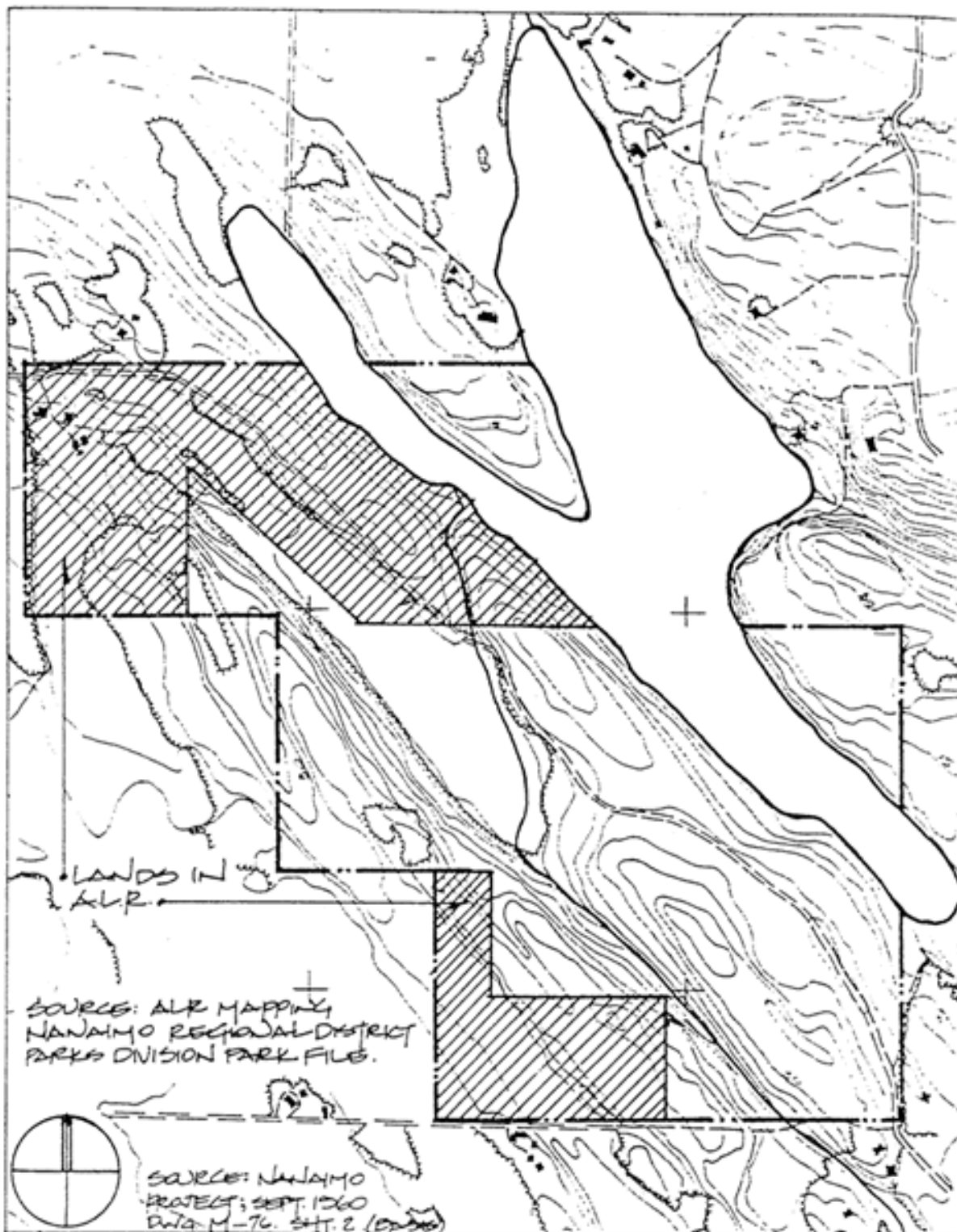
Encumbrances:

? **P.U.P.(s):** N/A

? **Mineral claims:**

The B.C. Ministry of Energy, Mines and Petroleum Resources advised that the disposition of subsurface mineral rights for land in Hemer Park are as follows: (see Ownership of Subsurface Mineral Rights Map)

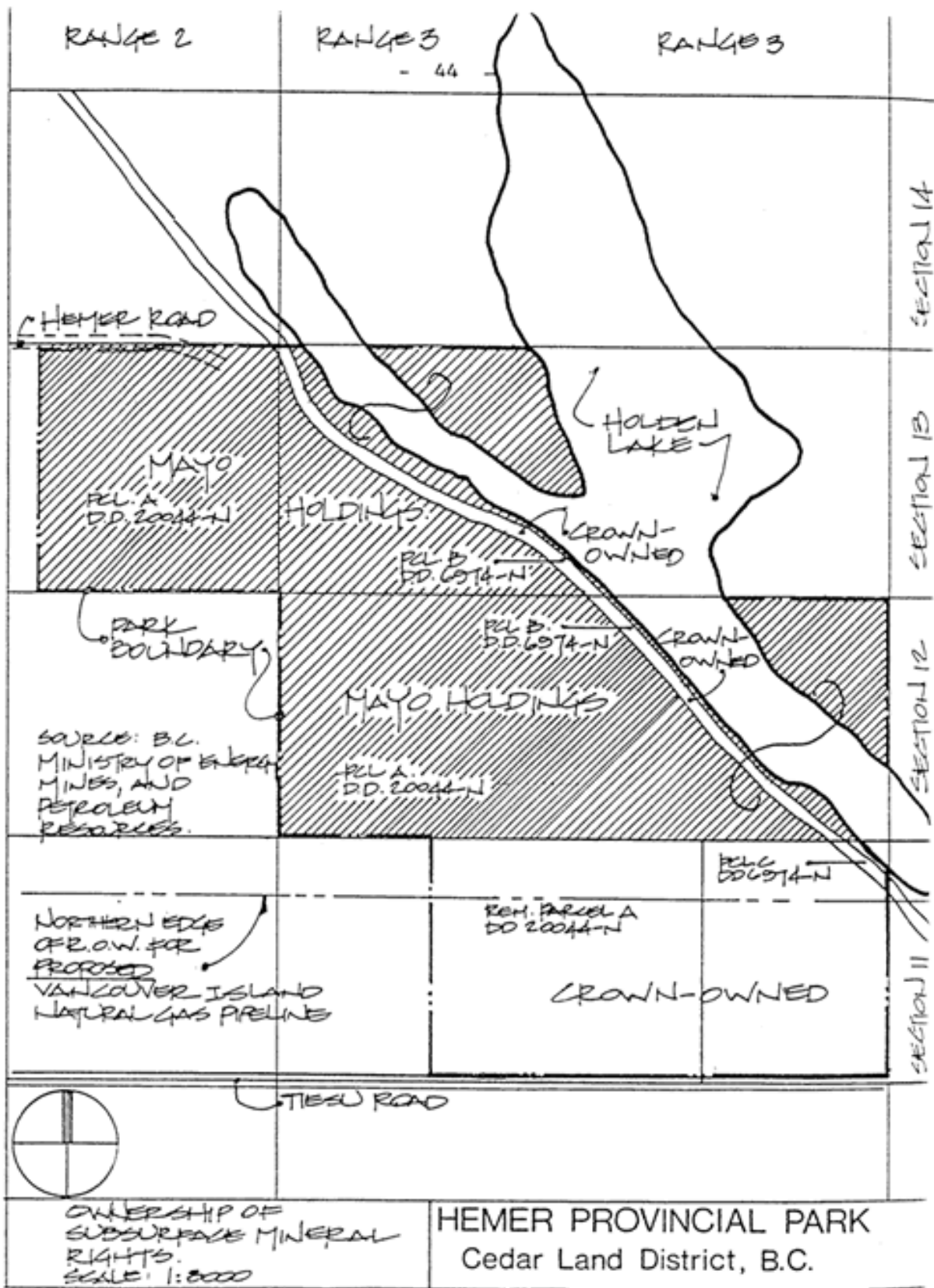
- ? Section 11 Range 3 - Crown owns the minerals.
- ? Section 12 Range 3 - Mayo Holdings owns the minerals except in Parcel B which the Crown owns.
- ? Section 13 Range 3 - Mayo Holdings owns minerals in the west portion of this block except in Parcel B which the Crown owns.
- ? Section 13 Range 2 - Mayo Holdings owns the minerals in the east 40 acres of this block except in parcel B which the Crown owns.



AGRICULTURAL LAND
RESERVE LANDS.

0 100 200 300 400 500
SCALE IN METRES 1:2000

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The Ministry confirmed that no mineral claims or coal licences have been issued under the Mineral Act. A Petroleum and Natural Gas Permit has been issued in this area, but Hemer Provincial Park was excluded. (see Appendix IV: Letter from Energy Mines, and Petroleum Resources)

The current information on the Hemer Provincial Park file (Park and Outdoor Recreation Division, Ministry of Lands, Parks, and Housing) regarding charges and reservations on titles is as follows: (see Charges and Reservations on Land Titles Map)

- ? Parcel A (DD20044-N) of Section 13, Range 2 and of Sections 11, 12, and 13, Range 3, except out of said Section 11, Range 3, that part included within the boundaries of Plan 9785 and except out of said Section 13, Range 2, that part included on Ministry of Highways Plan 61-J-2A6, Cedar District.

C of T: J115321

Charge No: 85918-G: Exceptions & Reservations

Held by: E & N Rly. Co.

Covers: That part of Parcel A within Section 11, Range 3.

Charge No: 373811-G: Under-surface Charge

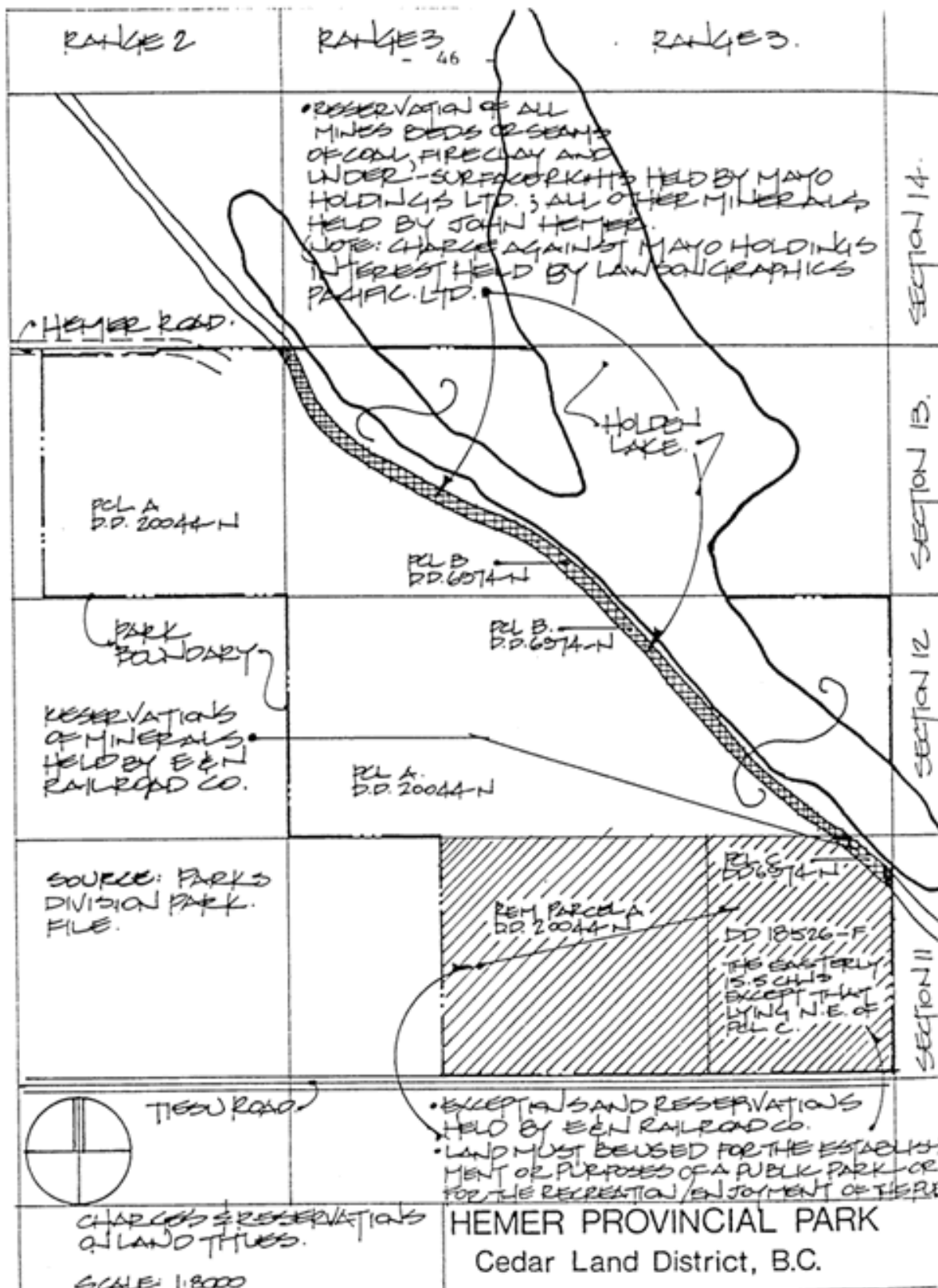
Held by: Mayo Holdings Ltd.

Covers: All of Parcel A, except that part within Section 11, Range 3.

Charge No: J117161:

The land must be used for the establishment or purposes of a public park for the recreation and enjoyment of the public.

- ? The easterly 311.8 meters (DD 18526-F) of Section 11, Range 3, except that part lying northeast of Parcel C (DD6974-N) and except Parcel C (DD6974-N), Cedar District.



C of T: J115322
Charge No: 83956-G: Exceptions & Reservations
 Held by: E & N Rly. Co.

Condition: J117162: The land must be used for the establishment or purposes of a public park for the recreation and enjoyment of the public.

? Parcel B (DD6974-N) of Section 13, Range 2 and of Sections 12 and 13, Range 3, Cedar District.

C of T: 84290-W
Charge No: 53397-G: Reservation of all mines, beds or seams of coal, fireclay, and under-surface rights.
 Held by: Mayo Holdings Ltd.

Charge No: 53406-G: Reservation of all other minerals.
 Held by: John Hemer

Charge No: J82945: Against Mayo Holdings Ltd. interest under 53397-G
 Held by: Lawson Graphics Pacific Ltd.

? Parcel C (DD 6974-N) of Section 11, Range 3, Cedar District.

C of T: 84290-W
Charge No: 53407-G: Reservations of minerals, etc.
 Held by: E & N Rly. Co.

The discrepancy between these sets of information occurs along the old railroad right-of-way (i.e. Parcel B; D.D.6974-N). Energy, Mines and Petroleum Resource files show this area as Crown-owned, while the Parks Division files show this area as coal rights being held by Mayo Holdings and all other mineral rights being held by John Hemer.

- ? **Water Rights:** N/A
- ? **Permits/Leases:** N/A
- ? **Shore Leases:** N/A
- ? **Boarding Restrictions:** N/A
- ? **Air Navigation Orders:** N/A
- ? **Forest Tenure (s):** N/A
- ? **Trapping:** N/A
- ? **Guiding/Outfitting:** N/A
- ? **Rights of Way:** N/A

The northern edge of the Vancouver Island natural gas pipeline right-of-way cuts through the southern portion of Hemer Park. (see Ownership of Subsurface Mineral Rights Map) The natural gas pipeline project is currently on hold and this information is provided for reference only.

- ? **In Holdings:** N/A
- ? **Informal Tenures (including life tenancies):** Life occupancy granted to Hemers 80-10-08.

The conditions of Miss Violet Hemer's life occupancy are as follows:

- ? She is granted life occupancy of her permanent residence and use of the land as long as she continues to reside on the property, that is, the land used for farming.
- ? She is granted the use of the existing home site on the property and to replace at her discretion and her expense, any of the existing structures which may be destroyed by fire or other causes.

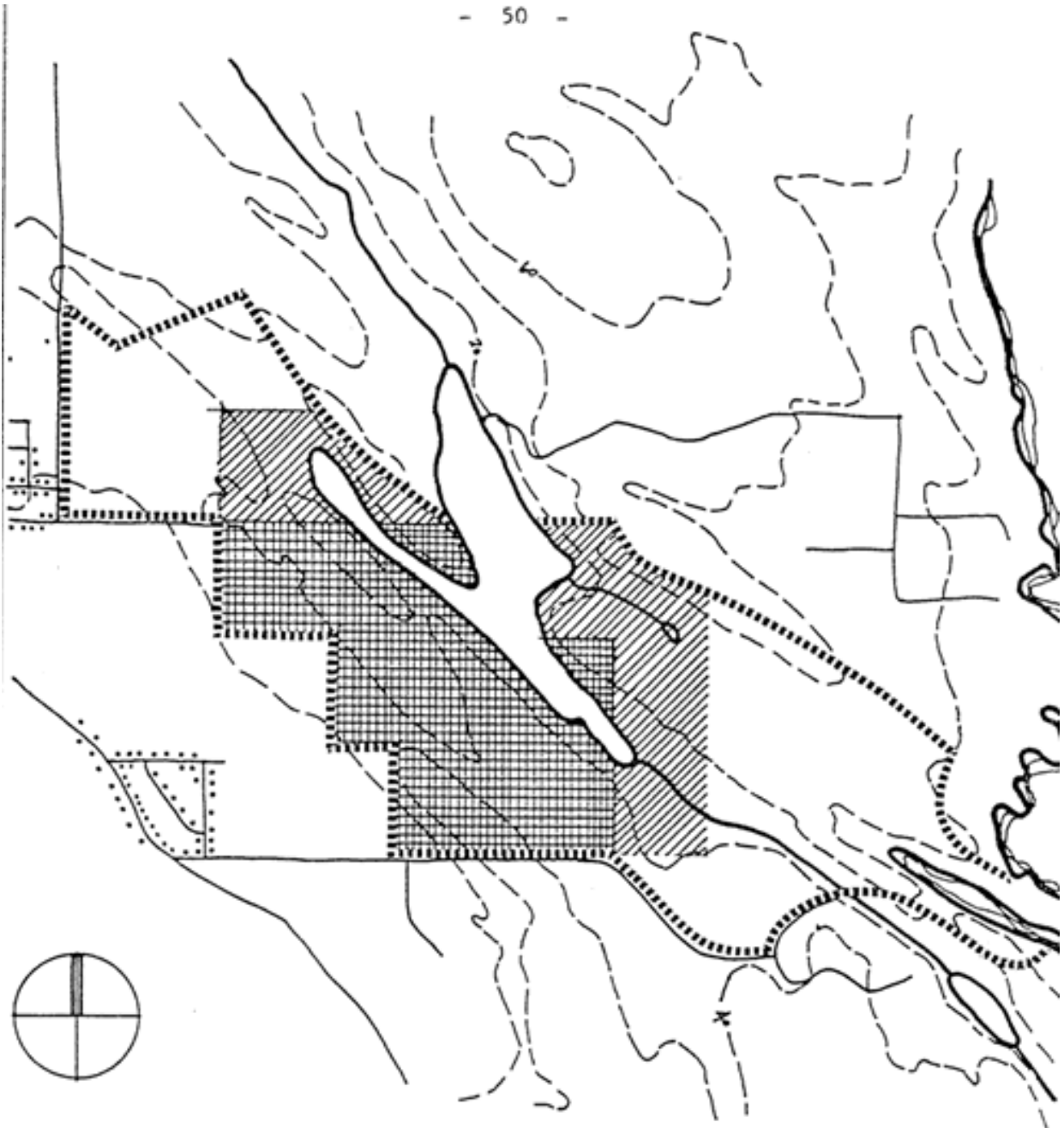
- ? She is granted the right to collect firewood for her personal use by cutting dead, dying, or down timber on the property.




The benefit of the life occupancy commitment may not be transferred or assigned. If such an event occurs, the commitment will terminate.

? **Major Additions and Boundary Adjustments**

Park additions and boundary adjustments for Hemer Park should be reviewed in the future, in light of the findings of the upcoming Sub-System Plan for this area. The addition of lands contiguous with the Park around the northwest arm and the southern tip of Holden lake could provide a land base to expand recreation opportunities and raise the provincial significance of the Park. Further, these additions would help to preserve the integrity of the shoreline of Holden Lake.

The proposed park additions map identifies desirable lands for park expansion. Further, the map identifies higher and lower priority areas for addition to Hemer Park.



- EXTENT OF EXISTING PARK AND PROPOSED PARK ADDITIONS.
-  EXISTING PARK
-  HIGHER PRIORITY ADDITIONS
-  LOWER PRIORITY ADDITIONS.

PROPOSED PARK ADDITIONS.

SCALE: 1:20,000

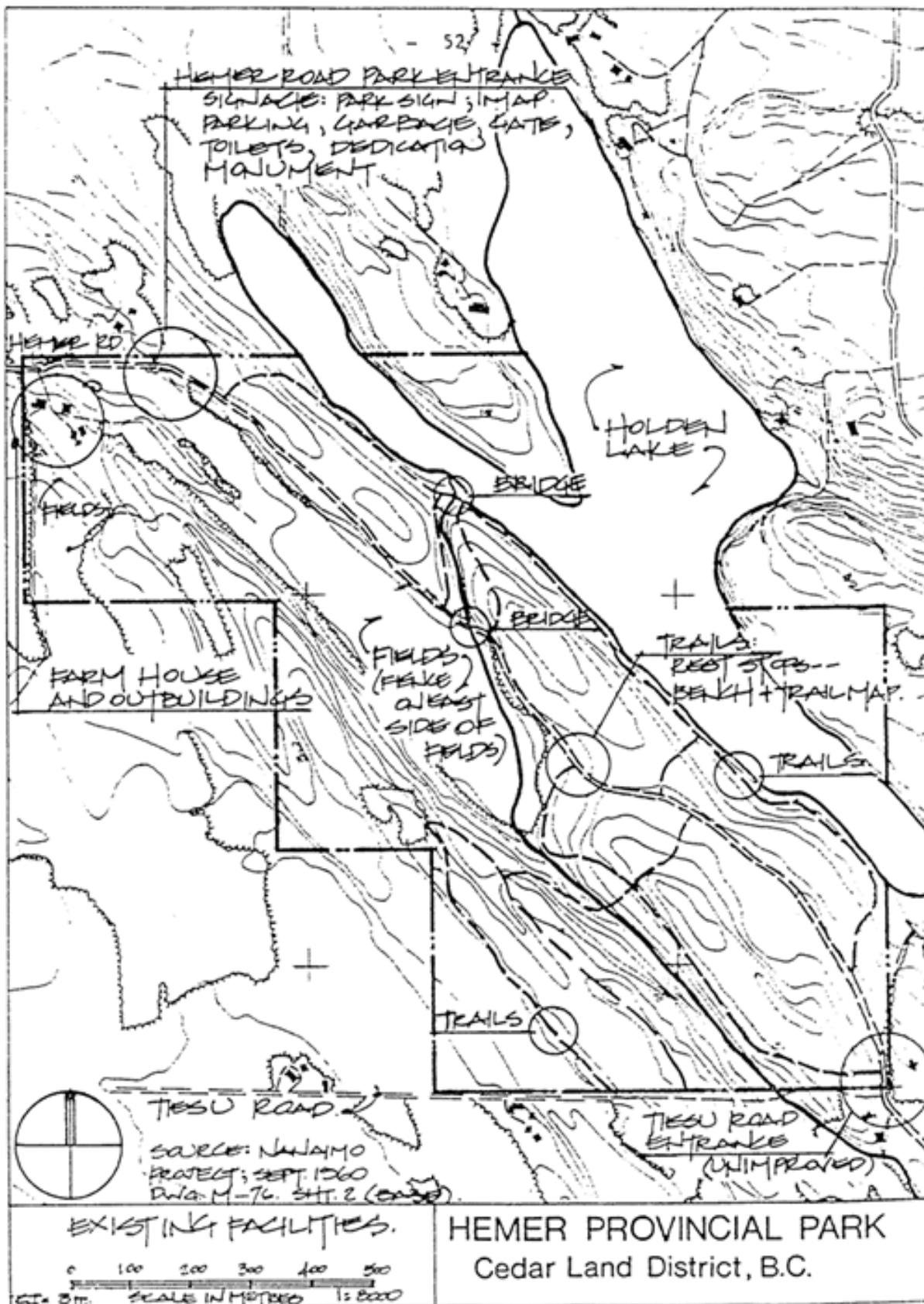
HEMER PROVINCIAL PARK
Cedar Land District, B.C.

E. EXISTING FACILITIES

Hemer Park has the following facilities in place: (see Existing Facilities Map)

- ? Upland Forest:
Trails, benches, trail maps (7), pit toilets (2), bridges (2).
- ? Hemer Road Entrance:
Parking lot (8 spaces), shelter with park map (1), garbage can, access barrier, dedication monument.
- ? Holden Lakeshore:
Trails, benches.
- ? Hemer Farm: (off-limits to public)
House, barns and other out-buildings, fencing.

Existing facilities are appropriate to a day-use destination park in a natural environment setting. Facilities are in good condition.



F. MARKET ANALYSIS

1.0 EXISTING USE

A limited amount of day use attendance data was gathered for Hemer Park during 1983 and 1984. The results of these surveys are, as follows:

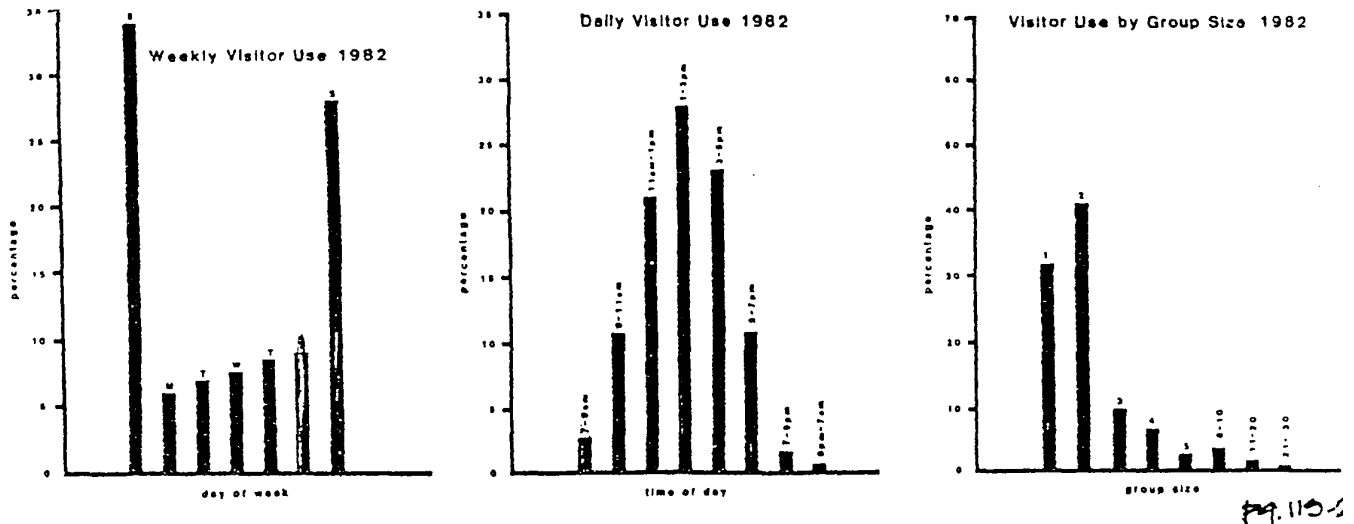
	Day-use Attendance (in parties)*	
	1983	1984
JANUARY	-	527
FEBRUARY	-	479
MARCH	-	574
APRIL	-	618
MAY	-	701
JUNE	370 (1/2 month only)	663
JULY	630	671
AUGUST	587	640
SEPTEMBER	550	239
OCTOBER	562	243
NOVEMBER	478	698
DECEMBER	341	407
<hr/>		
TOTAL -	3,718	6,258

(Note: 3.5 people per party)

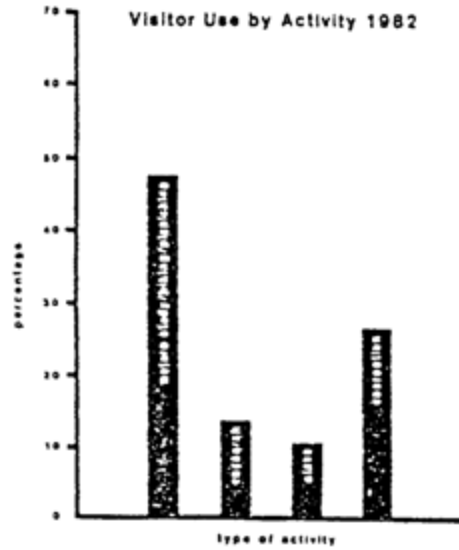
Source: Parks and Outdoor Recreation Division.

Based on limited day-use attendance figures, Hemer Park has its heaviest use in the Spring and Summer seasons from March through to August. During Spring and Summer, about 645 parties visit Hemer Park per month.

Dawson (1985) reported the following findings on weekly and daily visitor-use, and visitor-use by group site in a study of a nature reserve comparable in size to Hemer Park (112 hectares vs. 93 hectares), located about 25 minutes by car from the University of California Davis Campus.



The results of the study showed that visitor use increased through the week, and was heaviest on Saturday and Sunday. The period from 11:00 A.M. to 5:00 P.M. was the period of heaviest use through the day. The most frequent group size was parties of two, followed by parties of one and then three. An analysis of visitor use by activity showed that nature study / hiking / picnicking (i.e. nature appreciation related activities) were most frequent, followed by recreation.



Using the Dawson (1985) study results, Hemer Park has the following weekend visitor use patterns:

		PEAK USE (1 - 3 P.M.)
Sunday	55 Parties (110 People)	15 Parties (30 People)
Saturday	45 Parties (90 People)	12 Parties (24 People)

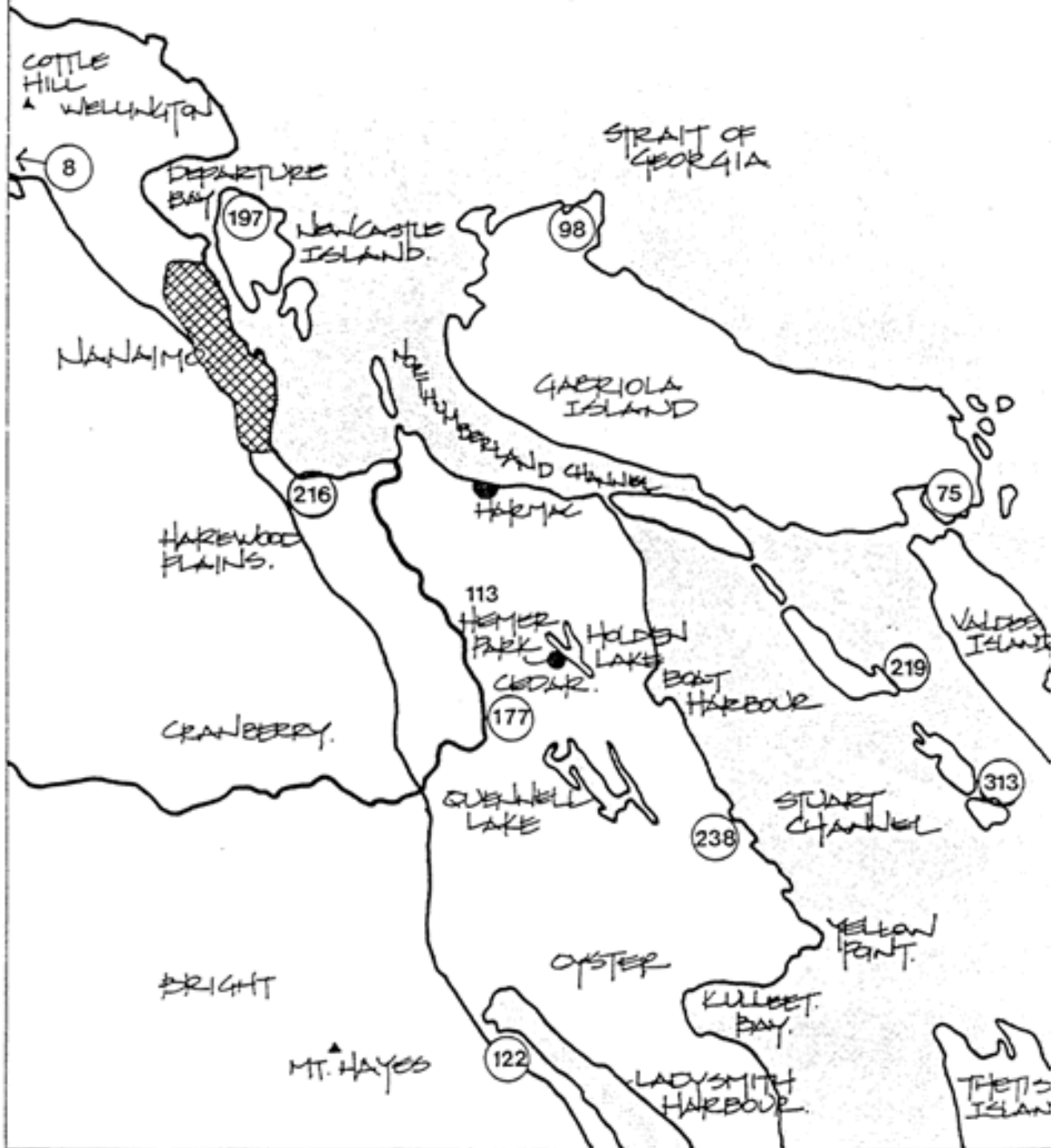
Based on a standard of 16 people per mile of trail in non-wilderness areas (Miller, n.d.), the existing trails in Hemer Provincial Park could accommodate about 50 people at any one time. Thus, the existing trail system has sufficient capacity to accommodate current levels of use.

Directions to Hemer Park along local roads (e.g. Cedar Road) are non-existent. Thus, Hemer Park has low visibility.

2.0 SUPPLY INFORMATION

The attached table outlines the facilities available in provincial parks nearby Hemer Provincial Park. Vehicles/tent campsites are available at Ivy Green Park, and wilderness walk-in camping is available on Newcastle Island and at Pirates Cove on the Gulf Islands. Nearby provincial parks provide a variety of settings for picnicking, swimming, fishing, and hiking. Thus, a local orientation for Hemer Provincial Park is deemed to be appropriate.

Reference Number	Park Name	Road Access	Vehicle/Tent Campsites	Wilderness Walk In Camping	Picnicking/Day Use	Sani-Station	Swimming	Fishing	Boat Launch	Hiking
VANCOUVER ISLAND:										
8	Arbutus Grove	No								
113	Hemer	Yes						*		*
122	Ivy Green (Returned to local Indian Band)	Yes	51 Sites		*	*	*	*		*
177	Morden Colliery	Yes								
197	Newcastle Island	No		18 Sites	*		*	*		*
216	Petroglyph	Yes								
238	Roberts Memorial	Yes			*		*	*		*
GULF ISLANDS:										
75	Drumbeg	Ferry			*		*	*		*
98	Gabriola Sands	Ferry			*		*			
219	Pirates Cove	No		12 Sites	*		*	*		*
313	Whaleboat Island	No						*		



Park Location Map.

HEMER PROVINCIAL PARK
Cedar Land District, B.C.

G. PLANNING ISSUES

1.0 INTRODUCTION

The overall goals for Hemer Park are as follows:

- ? To preserve and interpret a representative natural and cultural landscape of East Vancouver Island.
- ? To develop and manage the park in response to the recreation needs of local residents.

Based on this statement of purpose, and an evaluation of the preceding natural/cultural/visual resources, land tenure, facility, and marketing factors, the focal issues for the Hemer Park Master Plan are discussed as follows:

2.0 ISSUES RELATED TO OUTDOOR RECREATION OPPORTUNITIES

Hemer Park has a local focus (i.e. regional district) in terms of its recreation opportunities, because of its size and location. Hemer can serve as a day-use/destination park for Nanaimo and Cowichan Valley Regional District residents. Further, because of its location on the Crown-owned Railroad Right-of-way to Boat Harbour, Hemer Park could be linked by a recreation corridor with other historic points-of-interest in the Nanaimo area.

The range of outdoor recreation opportunities in Hemer Park should be oriented primarily, to summer season activities, and secondarily, to transition season (i.e. Spring/Fall) activities based on climatic suitability studies. Representative activities include the following: walking / hiking, viewing, recording, picnicking, unorganized games, group camping, horseback riding, boat launching / landing, fishing from shore, and nature interpretation.

The Holden Lake bottom lends itself to activities like fishing from shore, and boat launching / landing.

Hemer Park has a relatively high level of scenic quality. Features such as views of Holden Lake, the variety of plant associations in the Park, and the bird and small mammal wildlife will attract visitors to Hemer Park.

3.0 ISSUES RELATED TO THE NATURAL AND CULTURAL LANDSCAPE

The following factors support the development potential of the Park:

- ? The majority of the soils are gravelly and well-drained and do not restrict the construction of facilities like trails.
- ? The geological formations in the park offer solid bearing for structures.
- ? The majority of slopes are considered buildable. Buildable slopes are distributed through the park so as not to overly restrict the development of a trail system. Steeper slopes will require specific construction practices (e.g. Water collection; revegetation) to be buildable.

The following factors limit the development potential of the Park:

- ? Organic soils in the farm area require specific construction practices to be buildable.
- ? The geological formations restrict flexibility in servicing park structures.
- ? The capability for agriculture of the park lands suggests poor soil productivity and low vegetation recovery potential. These conditions limit the recreational carrying capacity of the park. The carrying capacity is improved by the natural resilience of the shrub layer.
- ? Most of the surface soils have severe soil erosion potential in their unvegetated state, and erosion control practices must be followed during any facility construction.
- ? The severe soil constraints affecting septic tank effluent absorption requires that alternate sewage treatment and disposal systems be incorporated into public gathering facilities (e.g. a park centre).
- ? The low visual absorption capability of the upland forest and Holden Lake setting units limits development potential within the Park.

4.0 ISSUES RELATED TO LAND TENURE, EXISTING PARK FACILITIES AND MARKET ANALYSIS

Mayo Holdings Ltd. owns substantial subsurface mineral rights in Hemer Park. The B.C. Ministry of Energy, Mines and Petroleum Resources confirmed that no mineral claims or coal licences have been issued under the *Mineral Act*. Further, placer staking is not permitted in the Nanaimo area.

Miss Violet Hemer holds life occupancy (i.e. a life estate) in the farm area. The farm will remain off-limits to the public as long as she resides on the property.

Existing park facilities are quite compatible with the anticipated use of the Park as a predominantly day-use/ destination park for local residents, in Summer, Spring, and Autumn. Further, existing facilities are in good condition.

Based on recognized standards for trail use, the existing trails in Hemer Park have sufficient capacity to accommodate current levels of use.

Directions to Hemer Park along local roads are non-existent. Thus, Hemer Park has low visibility.

Since nearby provincial parks provide a variety of settings for picnicking, swimming, fishing, and hiking, a local orientation is seen as appropriate for Hemer Park.

In order to expand the recreation potential of Hemer Park and to preserve the integrity of the Holden Lakeshore, park additions and boundary adjustments could be considered in the future. Park boundaries could be adjusted to include land around the north-west arm and the southern end of Holden Lake.

PART II: THE PLAN

A. SPECIFIC OBJECTIVES FOR HEMER PROVINCIAL PARK

The purpose of Hemer Provincial Park is two-fold: Firstly, to preserve and interpret a representative landscape of the East Vancouver Island area, a representative natural landscape of the East Vancouver Island Lowlands, and a representative cultural landscape of the small-scale family farms of the Nanaimo area; and secondly, to accommodate the day-use nature-oriented recreational needs of local residents of the Nanaimo and Cowichan Valley Regional Districts.

The specific objectives for Hemer Park are as follows:

(NOTE: Facility capacity levels respond to the physical carrying capacity of the Park, the intended quality of recreational experience and the recreational opportunities in areas surrounding the Park.)

- ? To develop a park entry and park centre for Hemer Park, and thereby identify and introduce the park to visitors, and interpret the natural and cultural landscapes of which Hemer Park forms a part.
- ? To develop interpretive farm displays which explain the operation of a small-scale family farm.
- ? To develop nature interpretive displays which explain the formation of the local landscape and its various plant associations.
- ? To develop interpretive facilities that will accommodate about 60 visitors (i.e. about 2 classes of school age children).
- ? To develop picnic opportunities within the farm area for ten parties, that is about 25 visitors.
- ? To develop group camping opportunities for groups of up to 75 visitors (ie. scouts, guides), for overnight visits to the Park and the opportunity to learn a broader range of outdoor skills.

- ? To restore a 3-hectare section of bog within the farm area and allow the interpretation of this aspect of the site's geomorphological/biotic development.
- ? To refine the trail system within the Park by linking and interpreting the various biotic/physical features on site and by providing various levels of recreation challenge for park visitors.
- ? To limit use of trails to non-motorized modes of transport; to separate conflicting modes of transport (e.g. equestrian/ pedestrian), and thereby promote safety within the Park.
- ? To improve access to Holden Lake, and thereby improve the recreational potential of the Park, by upgrading vehicular access and boat launching facilities; to provide parking for ten vehicles in conjunction with boat launching and vehicular access facilities.
- ? To provide opportunities for fishing and lake-edge vegetation/ wildlife viewing along the Holden Lakeshore.
- ? To provide opportunities for picnicking along the lakeshore for 5 parties, that is about 15 people.
- ? To provide rest spots/viewpoints for boaters along the Holden Lakeshore.
- ? To assess the feasibility of acquiring land around the southern tip of the Lake and around the northwest arm of the Lake in order to expand the recreational opportunities along the Lakeshore, and to preserve the integrity of the Holden Lakeshore.

B. ZONING

Two zones are represented in the Hemer Provincial Park: Natural Environment Zone and Development Zone. (See Zoning Map) The objective for the Natural Environment Zone is to provide for intermediate levels of outdoor recreational opportunities/use in a natural setting. Development and use within this zone are consistent with the maintenance of natural conditions.

The objective for the Development Zone is to provide for variety of facility oriented recreational opportunities. Development and use within this zone may necessitate intensive management in order to achieve a high quality of recreation and interpretation experience.

Hemer Provincial Park was divided into three units, based on existing land use and landscape character, and an appropriate zoning designation was applied, as follows:

1. Natural Environmental Zone

? The Upland Forest: (64 Hectares)

This area of undulating/rolling terrain is covered with a mature Douglas Fir forest. A creek runs through this unit and drains into Holden Lake. The area has numerous trails which were established over a period of time by Cedar residence.

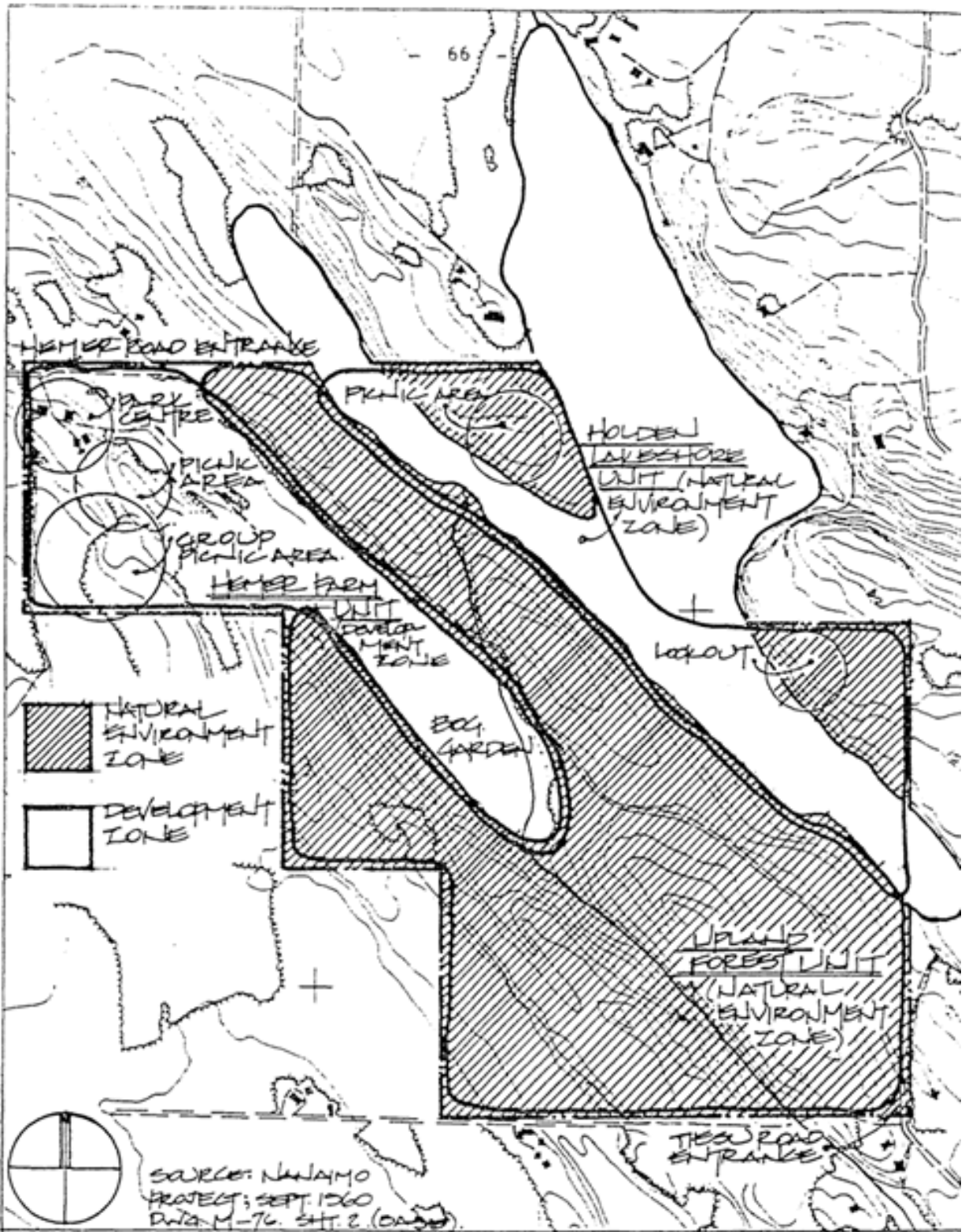
? Holden Lakeshore: (14 Hectares)

The major feature of this area is Holden Lake (i.e. outside the Park). This unit includes the shoreline trail on the west side of Holden Lake, and two parcels of land on the lakeshore to the North and on the East side of the Lake.

2. Development Zone

? The Hemer Farm: (15 Hectares)

This unit is clearly identifiable as cultivated land. The Hemer family has a life estate in this portion of the Park, and they operate a small-scale farm on the property. The farm is enclosed by a fence and the area is off-limits to the public. For the term of their life estate, the Hemer Family is responsible for the care and maintenance of this portion of the Park. Physiographically, much of the farm is located in a depressional area that collected water and filled in with vegetation and now contains organic soils. The area was cleared and drained, and is now being farmed. Typical crops on organic soils in the Cedar area include oats, hay, corn, potatoes, and vegetable crops.



SOURCE: NANAIMO PROJECT; SEPT. 1960 DATA: M-76. SHEET 2 (CONT.)

ZONING PLAN.

0 100 200 300 400 500
 METERS SCALE IN METERS 1:2000

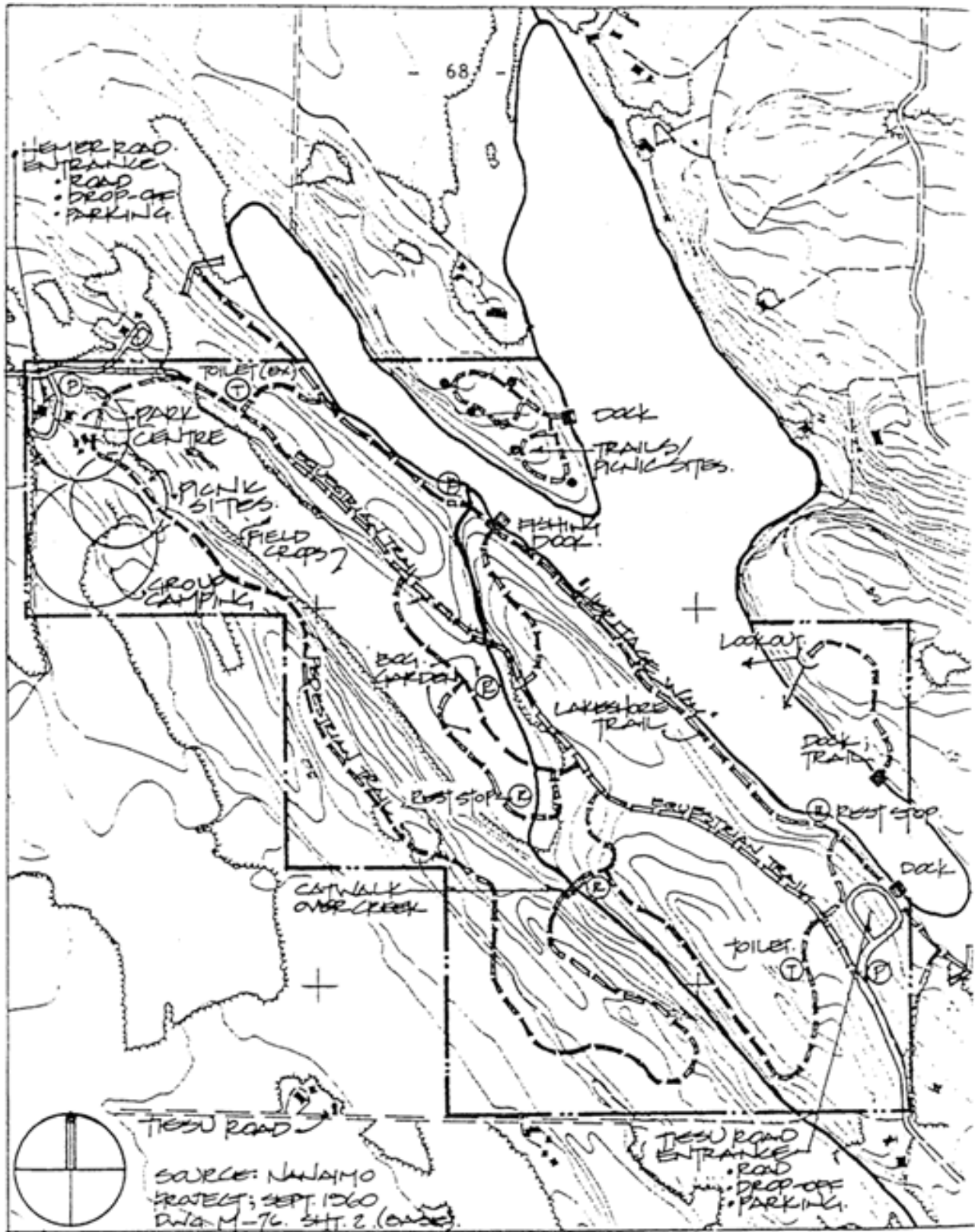
HEMER PROVINCIAL PARK
 Cedar Land District, B.C.

C. DEVELOPMENT PLAN

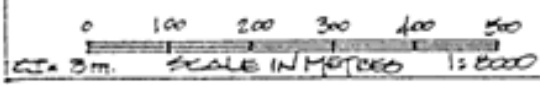
1.0 INTRODUCTION

Hemer Provincial Park can be characterized as a natural to pastoral landscape. This natural/pastoral landscape should be preserved during the development of the Park. Park facilities should be predominantly day-use oriented, and facility capacity should be set by levels required to accommodate local recreational needs. Given a carrying capacity standard of 16 people per mile of trail (Miller n.d.), the proposed Hemer Park trail system could accommodate about 85 people at any one time.

The facilities proposed for the long-term development of Hemer Park are identified by phases in the following sections (refer to Development Map). These improvements are consistent with the Park character, and would improve the recreation potential of Hemer Park.



DEVELOPMENT PLAN.



HEMER PROVINCIAL PARK
 Cedar Land District, B.C.

2.0 PHASE 1

2.1 THE UPLAND FOREST

The upland forest unit is seen as a natural environment zone. The upland forests could provide an appropriate setting for intermediate levels of outdoor recreational opportunities/use. Over time, the recreational activities would remain as they are currently, and would include activities like walking/hiking, viewing, recording, horseback riding, and nature interpretation.

The trail system would connect with the park centre (i.e. Hemer Farm) and link various features within this area, such as the creek flowing into Holden Lake, and the diverse vegetation edge between Hemer Farm and the upland forest.

Interpretive displays along the trail system would point out examples of information and theories introduced at the park centre (e.g. plant associations, bedrock formation, soil development). The trail displays would be organized and designed to encourage self-guided exploration.

In addition to interpretive displays, other amenities along the trails would be developed, and include such items as trail maps (some existing), rest areas with benches at focal points (some existing), and a limited number of toilets.

Access within this zone would be limited to non-motorized modes of transportation. Further, horseback riding would be restricted to designated trails.

? Current Park Entry:

- Upgrade the current entrance at the end of Hemer Road with a turnaround and additional native plantings.
- Install a turnaround and parking.
- Install a potable water supply.

? Trails:

- Develop/modify the existing trail system as shown on the Development Map.
- Limit access into the park off Tiesu Road; provide access at the south-east corner of the Park.
- Build a "catwalk"/bridge across the creek, as shown on the Development Map, to permit the viewing of the complex vegetation structure in this area.
- Develop interpretive displays along the trails.
- Build an additional set of toilets as shown on the Development Map, to service the boat launch area (see 2.2).
- Develop rest areas with a trail map (existing), bench, and garbage can at points shown on the Development Map.

IMAGE NOT AVAILABLE

2.2 THE HOLDEN LAKESHORE

2.0 HOLDEN LAKESHORE

The Holden Lakeshore is seen as a natural environment zone adjacent to and complimentary to Holden Lake. This area would provide an appropriate setting for a variety of water-oriented recreational opportunities/uses.

The purpose of this zone is to facilitate both visual and physical access to Holden Lake by providing opportunities for walking, viewing, nature observation, fishing from shore, small boat/canoe launching, and picnicking.

The major trail in this unit is existing and runs along the west shore of Holden Lake. This trail was the right-of-way for the Pacific Coal Company Railway. The trails in this unit would connect with the overall park trail system, and further could connect with a future regional trail system beyond the Park.

? Road Access/Boat Launching:

- Build an access road with turnaround from Tiesu Road to Holden Lake as shown on the Development Map to improve access to the lake; provide parking alongside the roadway.
- Provide a potable water supply at the turnaround; provide a garbage can.
- Build a dock and gravelly beach area at the lake-edge to facilitate boat launching/landing.

? Lakeshore Amenities

- Build a dock as shown on the Development Map along the lakeshore trail for fishing and viewing lake-edge vegetation and wildlife.
- Develop a picnic area on the land between the northern arms of Holden Lake, as a destination point for boaters:
 - Clear undergrowth; hydroseed
 - Thin overstory
 - Install 5 picnic sites
 - Build picnic shelter
 - Install a dock

- Develop a rest area/viewpoint on the parcel of land on the eastern shore of Holden Lake, as a resting place for boaters.
 - Build a dock
 - Clear a trail as shown on the Development Map
 - Develop a viewpoint
- ? Park Additions/Boundary Expansions
 - Review the feasibility of adding lakeshore land around the southern tip and the north-western arm of Holden Lake to the Park.

IMAGE NOT AVAILABLE

3.0 PHASE 2

3.1 THE HEMER FARM

When the Hemer Farm portion of the Park opens to the public, it could provide an appropriate setting for a variety of facility-oriented recreational opportunities. The north-west portion of this unit (see Development Map) would form the main park entrance and park centre. The experience of entering the Park should be well-conceived and well-executed. The Hemer Farm offers a pleasing transition from the rural/agricultural countryside surrounding the Park, to its densely forested interior.

The feasibility of using the existing farm buildings for park centre functions should be explored, thereby promoting an agricultural theme for this area. The Hemer residence is located on a ledge overlooking the farmlands in the basin below. The forest covers the hills on either side of the basin. From this vantage point, the relationship between the upland forest and the farm components of the Park is well displayed. Thus, the farmhouse area offers a pleasing introduction to the Park and also displays the upland forest and cultivated valley / basin components of the Park.

IMAGE NOT AVAILABLE

The function of the Park centre would be to provide a focus, to greet and introduce visitors to the Park by interpreting the natural and cultural character of the area, and to encourage visitors to explore Hemer Park further. Nature interpretive displays could illustrate and explain such features as the geomorphological formation of the East Vancouver Island Lowlands and the plant associations of the local Coastal Douglas Fir forests. Cultural and interpretive displays could explain the operation of typical small-scale farms in the area, including animal husbandry and feedcrop production. The target group for these displays would be groups of school children, families with children and special interest groups (e.g. seniors' clubs).

Other facilities in the park centre area could include parking and washrooms. Adjacent to the park centre area, group camping and picnic facilities could help to extend and make better use of the park centre facilities. Further service yard facilities could be provided for equipment storage and stock piling bulk materials.

Adjacent to the park centre, an area for demonstrating traditional agricultural practices could be established.

The south-east portion of the Hemer Farm unit is a basin which contains organic soils. These soils have limited potential for heavy recreation use (e.g. group camping). This area is seen as having potential as a bog garden. The bog could be re-established by blocking drainage to the creek and transplanting typical plants from bogs in the Cedar area.

The park centre area could be the start of the Hemer Park trail system. Trail maps would illustrate various routes through the Park and information about features en route, like length of trail and travel time.

A visitor services plan for the Hemer Farm area and an action plan for the farm buildings is recommended. Subject to the findings of these plans, the development plan for the Hemer Farm is as follows:

? Park Entrance:

- Install park signs at the park entrance off Hemer Road, and at the intersection of Hemer Road and Cedar Road, to direct visitors to the Park.

- Re-forest the current entrance to Hemer Park at the end of Hemer Road with native plant material.
- ? Park Centre:
- Build an access road off Hemer Road to the park centre; build a drop-off area by the park centre.
 - Build a parking lot adjacent to park centre.
 - Renovate existing farm buildings if feasible to accommodate various park center functions.
 - Establish a display orchard and vegetable/herb garden
 - Build an outdoor gathering area as a "trailhead" for the parks trail system.
 - Upgrade water and sewage service to provide washroom facilities.
- ? Demonstration Area for Field Crops:
- Establish an area for demonstration of traditional agricultural practices adjacent to the park centre, to help explain the cultural heritage of the Cedar area.
- ? Group Camping and Picnic Area:
- Build a picnic shelter.
 - Maintain an area in meadow grasses to accommodate group campers; install fireplaces (i.e. pad and grate) and a group fire ring.
 - Provide 10 picnic sites.
 - Provide water and washroom facilities.
- ? Bog/Meadow:
- Restore about 3 hectares of bog; block drainage from the bog to the creek.

- Build a reinforced trail through the bog (i.e. trail to be suitable for organic soil conditions).
 - Transplant indigenous bog plant species.
- ? Trails:
- Connect the park centre with the Park's trail system.

D. MANAGEMENT POLICIES

1.0 RESOURCES

1.1 LAND

- ? Promote site planning and construction practices consistent with the capabilities of the Park resources to sustain long-term use.
- ? Ensure that erosion control practices are followed during any construction. Restore slopes immediately following disturbance by retaining water and revegetating with fast growing grasses (e.g. rye grass). Implement permanent revegetation strategy once slopes are stabilized.
- ? Ensure a resolution of any land tenure claims so as to preserve the integrity of the Park.
- ? Extend the recreation potential of Hemer Park, and preserve the integrity of the shoreline of Holden Lake through park additions and boundary adjustments: the feasibility of including land around the north-west arm and the southern tip of Holden Lake within the park should be reviewed. These additions would incorporate contiguous habitat within the Park, and protect it against future land use changes.

1.2 WATER

- ? Make an assessment of Holden Lake (i.e. water quality, sports fishing potential) and take steps to ensure its long-term viability.
- ? Minimize creek siltation by retaining ground cover, shrub, and tree material around the creek; avoid drainage to the creek via culverts and drainage ditches; surface drainage should be allowed to percolate slowly into forest retention areas by sheet flow.

1.3 VEGETATION

- ? Monitor vegetation within the Park to assess its condition and health, and to ensure long-term viability.
- ? Re-establish past vegetation patterns where feasible (e.g. farm area -- bog garden).
- ? Minimize disturbance to natural vegetation during installation and maintenance of all park facilities; minimize the potential for blow down when facilities are sited for construction (i.e. viable retention units of 10 metres by 10 metres).

1.4 WILDLIFE

- ? Promote the establishment of wildlife habitat: "feather" vegetation at edges, that is, the full range of the vegetation stages should be represented where vegetation units meet (i.e. Upland Forest and Hemer Farm).

1.5 CULTURAL

- ? As a standard practice, perform basic archaeological surface survey work in areas where physical development will occur.
- ? Assess the structures in the Hemer Farm area to establish their potential for use in park centre/interpretive functions; based on this assessment, maintain the structures for future use.

1.6 VISUAL

- ? Work with government ministries and agencies to establish and enforce set-back, buffering and other development guidelines, to preserve the character of the Holden Lakeshore (i.e. the eastern shore of Holden Lake).

2.0 PUBLIC USES

2.1 RECREATION

- ? Acceptable types of recreation in Hemer Provincial Park include the following:

Walking/hiking, viewing, recording, picnicking, unorganized games, group camping, horseback riding, boat launching/ landing, fishing from shore, and nature/cultural interpretation.

- ? Support the development of a regional trail system connecting Hemer Park with other points-of-interest in the Nanaimo area.

2.2 EDUCATION

- ? Develop an interpretive program addressing the natural and cultural features of the region: develop a flexible program that is interesting to a range of visitors, and that is useable on a guided or self-guided (i.e. independent) basis.
- ? Manage park resources for research and education in conjunction with local community colleges.
- ? Provide information to visitors on how to use the Park responsibly and contribute to its efficient management.

2.3 RESEARCH

- ? Implement a system of recording visitor data on a regular basis.
- ? Visitor surveys should be conducted regularly (i.e. 3-5 years).

2.4 VISITOR SERVICES AND FACILITIES

- ? The Parks Division will provide all necessary facilities.
- ? Although maintenance of facilities and operation of services may be contracted, the Division should establish and enforce clear guidelines for conducting such activities consistent with the character of the Park.

2.5 SPECIAL AND OTHER USES

- ? Special permits may be used as a means of securing needed parkland from adjacent areas.

F. PLAN IMPLEMENTATION

For Hemer Park to reach its potential, further development of park facilities and amenities should be undertaken to expand recreational opportunities, attract greater visitation, and improve access within the park. The following sequence of facility development is recommended.

PHASE I: (HIGH PRIORITY)

Given that the Holden Lakeshore offers an area of high recreational amenity, high priority should be placed on improving access to the lakeshore, and upgrading facilities along the lakeshore, as follows:

- ? An access road from Tiesu Road to Holden Lake
- ? A boat launching area including a dock and gravelly beach.
- ? A potable water supply
- ? An additional set of toilets
- ? A dock along the lakeshore trail
- ? A picnic area on the land between the northern arms of Holden Lake
- ? Signs on Cedar Road to direct visitors to the Park

PHASE II: (MEDIUM PRIORITY)

- ? Modify the existing trail system
- ? Interpretive displays along the trails
- ? Additional rest areas along the trails

PHASE III: (LOW PRIORITY)

A visitor services plan for the Hemer Farm and an action plan for the farm buildings should be developed. Subject to the findings of these plans, the following improvements are recommended.

- ? A park centre facility using existing farm buildings if feasible, for interpretive displays, meetings and lectures
- ? An access road, drop-off area, and parking lot to service the Park Centre
- ? Display orchard, vegetable/herb garden, and demonstration area for fieldcrops

- ? Outdoor gathering area as a trailhead for the parks trail system
- ? Group camping and picnic area
- ? Bog garden

Subject to the recommendations of the sub-system plan for the Arrowsmith Park District, the feasibility of including land around the north-west arm and the southern tip of Holden Lake within the Park should be reviewed.

APPENDIX I

CLIMATE NORMALS

APPENDIX I: CLIMATE NORMALS (1951 - 1980)
NANAIMO AIRPORT (49 Degrees 3 Minutes
North / 123 Degrees 52 Feet Minutes

	TOTAL BRIGHT SUNSHINE (HOURS) 1951-81
JANUARY	50.3
FEBRUARY	78.7
MARCH	125.9
APRIL	166.3
MAY	231.7
JUNE	218.6
JULY	287.4
AUGUST	244.6
SEPTEMBER	177.1
OCTOBER	122.0
NOVEMBER	65.1
DECEMBER	43.4
<hr/> YEAR	1,811.1

WIND

NANAIMO A B.C.

PERIOD 1955-80 PERIODE

Lat. 49°03'N Long. 123°52'W

Elevation 30 m Altitude

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
	JANY	FEY	MARS	AVR	MAJ	JUN	JUL	AOUT	SEPT	OCT	NOV	DEC	ANNUEL	
PERCENTAGE FREQUENCY													FREQUENCE EN %	
N	1.9	3.8	3.1	4.5	5.8	5.0	5.7	5.5	5.7	4.8	3.2	2.3	4.3	N
NNE	0.8	2.3	2.8	3.8	5.8	6.6	8.6	7.1	6.4	3.2	2.1	1.0	4.2	NNE
NE	1.1	2.8	2.9	4.8	7.6	7.5	8.4	7.3	5.3	3.6	1.7	1.2	4.5	NE
ENE	0.7	1.3	2.1	2.6	3.5	4.2	4.1	3.6	2.3	0.9	0.6	0.5	2.2	ENE
E	2.9	3.2	3.7	4.2	4.8	5.1	5.6	4.2	3.4	2.8	2.4	2.1	3.7	E
ESE	3.9	3.5	5.1	3.1	2.7	3.0	3.1	2.8	1.9	3.7	3.3	4.0	3.3	ESE
SE	9.4	7.5	9.1	7.3	5.7	6.3	5.5	4.4	5.1	8.1	8.3	8.7	7.1	SE
SSE	5.0	5.8	6.3	5.6	3.7	4.4	4.1	4.4	4.7	6.8	5.7	6.7	5.3	SSE
S	4.7	4.1	5.1	4.0	3.8	4.0	3.6	3.6	4.5	5.4	4.3	4.3	4.3	S
SSW	2.5	2.3	2.9	2.8	1.9	1.9	1.5	1.7	1.5	2.1	2.5	2.1	2.1	SSW
SW	4.9	3.9	4.9	5.2	3.9	3.9	2.9	3.1	2.7	2.9	4.5	4.1	3.9	SW
WSW	4.2	4.7	5.0	6.5	5.4	4.6	4.0	4.0	3.3	2.9	4.5	4.3	4.4	WSW
W	13.5	12.6	13.0	14.0	14.2	10.8	9.8	12.3	11.2	11.5	14.1	13.7	12.6	W
WNW	4.6	5.9	5.3	5.1	4.9	4.4	4.2	4.3	5.4	4.8	6.3	5.4	5.1	WNW
NW	3.1	4.2	3.8	4.0	3.9	3.4	3.2	3.1	4.1	4.0	4.4	3.5	3.7	NW
NNW	1.0	1.7	1.7	1.7	2.1	1.8	1.8	1.7	2.0	1.7	1.6	1.4	1.7	NNW
Calm	35.8	30.6	23.2	20.8	20.5	23.1	23.9	26.9	30.5	30.8	30.5	34.7	27.6	Calme

MEAN WIND SPEED IN KILOMETRES PER HOUR
VITESSE MOYENNE DES VENTS EN KILOMETRES PAR HEURE

N	6.4	6.7	8.2	10.0	10.4	9.2	10.3	9.4	7.8	6.2	5.9	6.0	8.0	N
NNE	7.2	9.1	10.5	11.4	11.4	10.8	11.9	10.7	10.3	8.6	6.8	6.6	9.6	NNE
NE	7.7	7.6	8.6	9.4	9.4	9.1	9.6	9.1	8.2	7.6	6.5	7.1	8.3	NE
ENE	8.9	9.9	9.4	10.3	10.3	10.3	10.3	9.6	8.0	7.7	7.8	10.5	9.4	ENE
E	10.6	9.2	10.2	10.5	10.1	9.6	9.5	9.4	8.1	8.2	9.1	10.4	9.6	E
ESE	13.6	13.4	14.6	12.0	11.4	11.3	10.6	10.3	10.1	11.3	12.9	14.5	12.2	ESE
SE	13.2	12.3	12.9	12.7	11.0	10.4	10.0	10.0	9.8	12.3	12.7	13.8	11.8	SE
SSE	12.7	11.3	12.5	11.9	11.0	9.8	9.6	11.1	10.0	11.6	11.9	12.8	11.4	SSE
S	7.7	7.8	8.1	9.0	8.7	7.9	8.2	7.8	7.3	7.5	7.5	8.0	8.0	S
SSW	7.4	7.7	9.6	11.8	9.3	8.7	7.7	7.8	7.9	8.4	7.6	8.3	8.5	SSW
SW	5.5	6.8	7.9	8.9	8.4	8.2	6.8	7.2	5.9	7.0	6.2	6.8	7.1	SW
WSW	7.3	7.3	8.3	9.2	9.2	8.1	7.2	6.8	7.3	7.0	7.2	7.6	7.7	WSW
W	8.4	7.2	7.6	8.1	8.3	7.4	7.2	6.8	6.9	6.6	6.8	6.5	7.2	W
WNW	8.1	9.2	9.1	9.4	9.0	7.5	7.7	7.3	8.1	8.2	8.7	7.3	8.3	WNW
NW	6.3	8.0	9.3	9.2	8.0	7.8	7.1	7.2	7.7	6.6	8.1	6.7	7.7	NW
NNW	6.6	8.8	8.6	10.7	9.4	8.5	8.4	7.2	8.5	7.7	8.9	7.0	8.4	NNW
All Directions													Toutes directions	
	5.7	6.2	7.5	7.9	7.6	6.9	6.9	6.3	5.7	5.9	6.0	5.9	6.5	
Maximum Hourly Speed													Vitesse horaire maximale	
	51	40	48	45	34	37	32	32	35	37	40	48	51	
	SE	W	SSW	SVL	SE	WSW	SVL	SSE	NE	SE	SVL	SVL	SE	
Maximum Gust Speed													Vitesse maximale des rafales	
	82	64	71	56	51	69	48	42	55	72	64	64	82	
	SSW	WNW	NW	NNE	SSW	SW	NNW	SW	WNW	SSW	NNW	W	SSW	

Height of anemometer 10.1 m hauteur de l'anémomètre

STATION INFORMATION

Airport is located 10 km south-southeast from city. Country is mountainous from south through west to north. Airport is open to Strait of Georgia only in northeast and south-southeast directions.

DONNÉES RELATIVES À LA STATION

L'aéroport est situé à 10 km au sud-sud-est de la ville. Le région est montagneuse du sud au nord en passant par l'ouest. L'aéroport n'est exposé au Détroit de George qu'au nord-est et au sud-sud-est.

TEMPERATURE/PRECIPITATION

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
	JAN	FÉV	MAR	AVR	MAI	JUIN	JUIL	AOÛT	SEPT	OCT	NOV	DEC	ANNEE
NANAIMO AIRPORT													
49° 3' N 123° 52' W 30 m													
Daily Maximum Temperature	5.2	8.1	10.1	13.8	18.0	20.7	24.3	23.9	20.5	14.7	9.0	6.4	14.6
Daily Minimum Temperature	-1.7	-0.5	-0.1	2.2	5.5	8.7	10.4	10.3	7.7	4.2	0.9	-0.3	3.9
Daily Temperature	1.8	3.8	6.0	8.0	11.7	14.8	17.4	17.1	14.1	9.5	5.0	3.0	9.3
Standard Deviation, Daily Temperature	1.7	1.3	1.1	0.9	1.2	1.5	1.3	1.3	1.0	0.7	1.2	1.5	0.5
Extreme Maximum Temperature	15.6	18.3	19.6	25.6	31.7	34.4	36.1	36.7	32.2	25.6	19.4	17.5	36.7
Years of Record	33	33	33	34	34	33	32	34	32	34	33	33	
Extreme Minimum Temperature	-17.8	-16.7	-12.2	-5.0	-4.4	0.6	2.8	3.3	-1.1	-6.7	-16.1	-20.0	-20.0
Years of Record	33	33	33	34	34	33	33	34	32	34	33	32	
Rainfall	139.3	102.3	96.9	57.4	38.4	39.7	22.6	32.7	45.3	101.2	154.8	174.2	1004.8
Snowfall	36.7	13.0	11.1	0.1	T	0.0	0.0	0.0	0.0	0.0	5.2	26.2	92.3
Total Precipitation	177.5	117.1	108.4	57.5	38.4	39.7	22.6	32.7	45.3	101.2	161.4	201.8	1103.6
Standard Deviation, Total Precipitation	76.7	52.4	54.8	28.7	18.2	22.1	15.2	25.8	26.5	65.2	79.9	70.7	163.3
Greatest Rainfall in 24 hours	70.6	55.1	46.0	58.7	30.2	29.9	23.8	50.3	47.2	91.7	84.1	74.4	91.7
Years of Record	33	33	33	34	33	33	33	33	33	33	33	34	
Greatest Snowfall in 24 hours	38.6	73.7	29.5	1.3	T	0.0	0.0	0.0	T	0.0	25.9	47.8	73.7
Years of Record	33	33	33	34	34	33	33	34	34	33	33	33	
Greatest Precipitation in 24 hours	70.6	84.6	46.0	58.7	30.2	29.9	23.8	50.3	47.2	91.7	84.1	74.4	91.7
Years of Record	33	33	33	34	33	33	33	33	33	33	33	33	
Days with Rain	17	14	15	12	11	10	6	8	10	14	18	19	154
Days with Snow	6	2	2		0	0	0	0	0	0	1	3	14
Days with Precipitation	20	15	15	12	11	10	6	8	10	14	18	21	160

FROST

AVERAGES AND EXTREMES: NANAIMO AIRPORT

AVERAGES BASED ON 1951 - 1980 PERIOD OF RECORD

YEARS: 30

Frost-free

Period (days): 155

Last Frost (Spring): May 3rd

First Frost (Fall): October 6th

EXTREMES BASED ON FULL PERIOD OF RECORD

YEARS: 34

LAST FROST (SPRING)

Earliest: April 9th

Latest: May 31st

FIRST FROST (FALL)

Earliest: September 12th

Latest: November 20th

LONGEST

Last Frost (Spring): April 20th

First Frost (Fall): November 20th

Number of Days: 213

SHORTEST

Last Frost (Spring): May 16th

First Frost (Fall): September 12th

Number of Days: 118

APPENDIX II:

**CLASSIFICATION SCHEME FOR CLIMATIC
SUITABILITY FOR OUTDOOR RECREATION**

**APPENDIX II: CLASSIFICATION SCHEME FOR CLIMATIC
SUITABILITY FOR OUTDOOR RECREATION IN B.C., R. C.
BENNETT (1977)**

Outdoor recreation involves a complex interaction between people and the physical environment. Since weather is a key determiner of personal comfort, climate is an important consideration in the assessment of outdoor recreation suitability. Personal comfort levels are difficult to establish and require the assessment of numerous variables. However, reliable classification schemes have been developed. Personal comfort variables include ambient air temperature, wind, relative humidity, solar radiation, as well as activity levels and clothing.

Classification schemes rely on available climatic data. Further, most schemes ignore rapid and small-scale variations associated with the weather.

Bennett (1977) chose the following climatic parameters for his classification scheme of climatic suitability for outdoor recreation in B.C.: Temperature, precipitation, sunshine, and wind. "In developing a scheme for classifying areas as to their climatic suitability for recreation, there were four main factors considered:

- 1) the range of recreational activities and the weather conditions which affect their pursuit;
- 2) the availability of climatic data;
- 3) the seasonal variation of climatic condition;
- 4) the range of values of the climatic parameters encountered over the whole Province.

A compromise was sought between the limited climatic information and the limited understanding of climate-recreation relations." (Pg. 6)

Bennett's classification scheme is B.C. specific, areas are classified relative to other sites in British Columbia. Suitability classes for precipitation, wind, and sunshine were developed to fit the range of climatic conditions prevalent in B.C.

Three broad groupings of recreation activity levels were chosen for their temperature-based suitability ratings: Land-Active, Land-Passive, Aquatic-Passive. Representative activities associated with the three levels of outdoor recreation activity are as follows:

ACTIVITY CLASSES	REPRESENTATIVE ACTIVITY	
1. land-active	bicycling	cross-country skiing
	team sports	skating
	tennis	tobogganing
	snow shoeing	fishing
	snow mobiling	alpine skiing
	hiking	
2. land-passive	walking	family camping
	gardening	beach use
	picnicking	golf
	visiting outdoor sites of special interest (Zoos)	
3. aquatic-passive	boating	fishing from a boat
	sailing	swimming

Temperature and precipitation were deemed to be the primary variables in evaluating province-wide suitability for outdoor recreation. Wind and hours of sunshine were secondary parameters used to establish suitability at a regional level.

Bennett established suitability ratings for three periods or seasons, as follows:

Summer	June - August
Transition	April, May, September, October
Winter	December - February

March and November were not included since they are difficult to typify because of rapid changes in climatic variables.

The data base for the climatic suitability classification was 1941 - 1970 climate normals.

Climatic parameter criteria for various activity levels and seasons are as follows:

APPENDIX II:**CLASSIFICATION SCHEME FOR CLIMATIC SUITABILITY FOR OUTDOOR RECREATION IN B.C.**

R. C. Bennett (1977) pgs. 21 - 23

SUMMARY OF CRITERIA FOR THE CLIMATIC SUITABILITY FOR RECREATION CLASSIFICATION

Ranking	1 - most suitable to 5 - least suitable	
Seasons	S - summer T - transition W - winter	June - August April, May, September, October December - February
Limiting Factors	h - too warm k - too cold p - precipitation	

1. TEMPERATURE - by activity level

T(max) = maximum temperature

T(mean) = mean temperature

a) Land Active

summer/transition		winter	
class	T(max)	class	T(mean)
4h	>28°C	4h	>0°C
3h	24-28	3h	0 to -4
2h	20-24	2h	-4 to -8
1	16-20	1	-8 to -12
2k	12-16	2k	-12 to -16
3k	8-12	3k	-16 to -20
4k	<8	4k	<-20

b) Land Passive

summer/transition		winter	
class	T(max)	class	T(mean)
3h	>28°C	2h	>0°C
2h	24-28	1	0 to -4
1	20-24	2k	-4 to -8
2k	16-20	3k	-8 to -12
3k	12-16	4k	-12 to -16
4k	8-12	5k	<-16
5k	<8		

c) Aquatic Passive

summer/transition	
class	T(max)
2h	>28°C
1	24-28
2k	20-24
3k	16-20
4k	12-16
5k	<12

2. PRECIPITATION

N = number of days per season with measurable precipitation

P = total seasonal precipitation

R = precipitation index

$R = N + 4P/N$ when P is in millimetres

$R = N + 100P/N$ when P is in inches

	Summer	Transition	Winter
class	R	R	R
1	<40	<40	<40
2	40-50	40-60	40-65
3	50-60	60-80	65-90
4	60-70	80-100	90-115
5	>70	>100	>115

3. WIND

V = wind index

S = mean wind speed in dominant direction

%C = frequency of calms in per cent

$$V = KS - \%C$$

K = 1 if S is in miles per hour

K = 2.24 if S is in metres per second

class	V
1	<5
2	5-10
3	10-15
4	15-20
5	>20

4. SUNSHINE

%S = mean hours of bright sunshine expressed as a percentage of maximum possible sunshine duration.

class	%S
1	>50%
2	40-50
3	30-40
4	20-30
5	<20

APPENDIX III

ARCHAEOLOGICAL SITE ON HOLDEN LAKE



Province of
British Columbia

Ministry of
Provincial Secretary
and Government Services

Heritage Conservation Branch
Parliament Buildings
Victoria
British Columbia
V8V 1X4

- 95 -

October 9, 1985

RECEIVED

OCT 17 1985

Pavelek and Associates Ltd.
148 Alexander Street
Vancouver, B.C.
V6A 1B5

Attention: Mr. Gregory Paris

Dear Sir:

Re: Hemer Provincial Park

In reference to your correspondence of September 10 of this year, we have now had a chance to review our files. The only recorded archaeological site in this specific area is DgRw 40, a petroglyph which is located on the east side of Holden Lake and to the north of the park boundary (i.e., not inside the park).

The lake shoreline has been surveyed in its entirety and no other sites have been discovered. Park land away from the lake has not been surveyed, but it is regarded as not having a high potential for sites.

In spite of the lack of known sites, it is the opinion of this Branch that Parks should carry out basic surface survey work in areas where physical development is to occur as a standard practice.

I have also enclosed a copy of this Branch's Guidelines for Heritage Resource Impact Assessment in B.C. as you have requested. Please contact me directly if you have any further questions.

Sincerely,

John Stephenson

JS/ds
bcgeu

BRITISH COLUMBIA ARCHÆOLOGICAL SITE SURVEY FORM

1. Location and access Near Nanaimo, on Holden Lake. Turn east of Cedar. Take Holden-Corso Road. Just past crossroads (Brightman Rd. and Holden-Corso Rd.) is property owned by Mr. Joseph Plant. Petroglyph is on their property, on sandstone at the very edge of Holden Lake. Bearing 218° to point at land to SW across lake. UTM 397393

Sec. Lot Plan 49° 06' 17.1" N. 123° 49' 32" W.

2. Site name Holden Lake Petroglyph Site 19. Owner(s)/tenant(s) past and present

3. Previous designations

4. Type petroglyph

5. Dimensions 20. Attitude to excavation

6. Depth of deposit 21. Camping facilities

7. Elevation 6' above lake level

8. Water fresh water lake 22. Historically territory of

9. Vegetation on site Halkomelem Indians

moss, grasses, small rose 23. Site was/was not occupied by Indians in historic

10. Surrounding vegetation fir, honeysuckle, alder, times until

willow 24. Informants

11. Fill of site sandstone with moss growing

over 25. Map 92G/4W

12. Subsoil and surrounding soil 26. Air photo

13. Burials 27. Photographs Rubbings in Arch'l Division, BCPM

prints, slides on file 28. Published references

Beth and Ray Hill, Indian petroglyphs of

the Pacific Northwest. 1974

29. Remarks and recommendations Mrs. Plant said

that this corner of Holden Lake was suppose

to have been an Indian burial place. Old-

timers remembered boxes in trees.

17. Possibility of future disturbance not likely

18. Known finds and present location

30. Reported by E. Hill (petroglyph recording

Group) May 1972

31. Observed by S. Acheson, C. Claxton

32. Recorded by

33. Date June 10, 1975

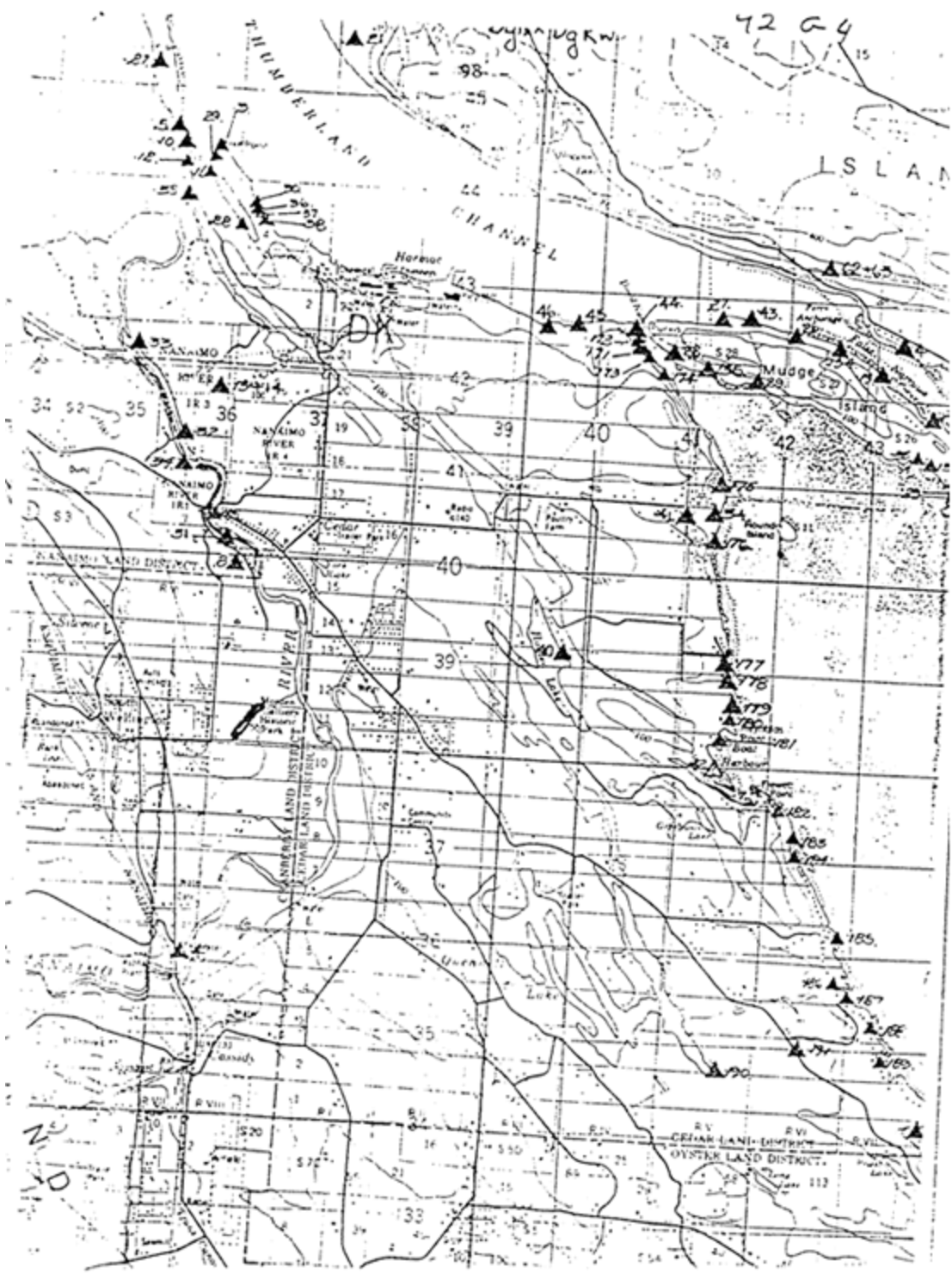
DESCRIPTION OF SITE

Site No.

(Continue or expand on back if necessary. Sketch map is desirable.)



Handwritten text, possibly a signature or name, located to the left of the figure.



APPENDIX IV:

**LETTER ON OWNERSHIP OF SUBSURFACE RIGHTS,
HEMER PROVINCIAL PARK**



September 26, 1985

RECEIVED
SEP 30 1985

Mr. Gregory Paris
Pavelek & Associates
148 Alexander Street
Vancouver, B.C.
V6A 1B5

Dear Mr. Paris:

Re: Ownership of Subsurface Rights, Hemer Provincial Park

Please be advised that the disposition of subsurface mineral rights for those blocks of land on which Hemer Park is situated is as follows:


- Section 11 Range 3 - Crown owns minerals.
- Section 12 Range 3 - Mayo Holdings owns minerals except in parcel B which Crown owns.
- Section 13 Range 3 - Mayo Holdings owns minerals in west portion of this block except in parcel B which Crown owns.
- Section 13 Range 2 - Mayo Holdings owns minerals in east 40 acres of this block except in parcel B which Crown owns.

Disposition of surface rights is available at the Land Title Office under file number DD22 463F (Cedar Land District).

There are no mineral claims issued under the Mineral Act nor coal licences here. Placer staking is not permitted in this area. A petroleum and natural gas permit has been issued here but the park area has been excluded from the permit.

Should you require further information, please contact me.

Yours truly,


Ann Ratel
Land Use Coordinator

AR/lr

Enclosures

APPENDIX V

DESCRIPTIONS OF PARK INTERPRETIVE PROGRAMS

INTRODUCTION

The consensus of an informal survey of professional working in parks interpretation (i.e. conducted while gathering information on interpretive programs) was that the key to a successful interpretive centre was creative staff (full-time core staff for continuity) and innovative programming; elaborate facilities are not essential.

Successful models of existing interpretive centres surveyed reported that the possibility of involving local naturalists, historians, educators, and community volunteers should be explored as a valuable means of expanding the range of services offered and of nurturing community participation in the Park. Effective management of volunteer services requires an established program with one or more full-time staff responsible for developing programs, promoting the programs to the school and community, and coordinating seasonal staff and volunteers.

As an example of a frame work for an interpretive program, the Greater Vancouver Regional District has adopted the following objectives (and associated programs/facilities) for interpretation at regional parks.

OBJECTIVES	PROGRAMS/FACILITIES
<p>1. ORIENTATION/INFORMATION</p> <p>Provide information and maps to tell visitors of park attractions and facilities, and their location.</p>	<p>Information centres, signs park staff in attendance.</p>
<p>2. INFORMATION AND EDUCATION</p> <p>Interpret the features of the park site and the environment (historical and natural) for park visitors (i.e. increase awareness).</p>	<p>Guided walks, visitor centres, self-guided trails, campfire displays, demonstrations, publications.</p>
<p>3. SKILL DEVELOPMENT</p> <p>Provide instruction aimed at developing skills to improve the public's knowledge and use of the outdoors.</p>	<p>Continuing programmes/courses (usually more than two sessions), educational kits, publications, A/V presentations.</p>
<p>4. VISITOR MANAGEMENT</p> <p>Attract or discourage use of certain areas; increase visitor awareness of sensitivity of some park areas, encourage appropriate visitor behaviour</p>	<p>Publications, displays, trail design and layout, selective advertisement of areas or selective provision of programs. (pg. 15, G.V.R.D., n.d.)</p>

Beyond the basic orientation/information function, the Hemer Park interpretive program could address the following themes related to the site:

- Ecological/nature themes based on local plant associations, and wildlife.
- Historical themes related to coal mining in the region, for example the Pacific Coal Mines Railway once linking Morden Colliery and Boat Harbour.
- Historical/cultural themes exploring the tradition of small-scale family farming in the region.
- Learning outdoor skills (e.g. camping, pathfinding)

TYPE 1: NATURE CENTRES**RICHMOND NATURE PARK**

Located in Richmond, British Columbia. In the site of 200 acres, bisected by Highway 99, features bog, pond and forest environments.

In 1984, 305,631 people came to the Park and of these, 84,915 visited the Nature House. Programs for school children had 2,851 school participants.

FACILITIES / PROGRAM**DESCRIPTION:**

- ? Interpretation of nature for an urban population; self-guiding tours, guided tours and interpretive program.
- ? Programs designed for pre-school children, children & adults.
- ? Nature House, approx. 2,500 sq.ft. to be expanded to provide more staff working and storage space. Presently includes rotating and permanent displays.
- ? Boardwalk, signed trails, viewpoints.
- ? Co-ordinator attributes success to strong programming responsive to local needs.

MANAGEMENT**BUDGET STAFF:**

- ? Township of Richmond owns the Park. It employs a Chief Naturalist, Co-ordinator and part-time Secretary, and provides part of operating budget.
- ? Active volunteer program uses volunteers for guiding tours, maintenance, and displays.
- ? Richmond Nature Park Society, was a citizen's group active in founding the Park, fund raising, policy and projects.
- ? 1984 Budget : \$148,000.

LYNN CANYON PARK ECOLOGY CENTRE

Located in Lynn Canyon Park, North Vancouver, B.C. Includes 325 acres of park and reserve, featuring a second growth forest and canyon with a creek.

The Ecology Centre is free of charge and attracted 30,076 visitors in 1984. Most visitors are adults and tourists. School participation has decreased with funding cutbacks for school buses.

FACILITIES / PROGRAM DESCRIPTION

- ? Ecology Centre acts as a nature house for Park but major theme is interpretation of ecology through displays illustrating laws of ecology.
- ? 3,500 sq.ft. Ecology Centre: includes permanent displays, community wing (variable), film wing, large classroom.
- ? Park has easy hiking trails and suspension bridge 72 metres above the creek.
- ? De-emphasis on scheduled programs guided walks etc.

MANAGEMENT BUDGET STAFF

- ? Part of District of North Vancouver's Parks Section (Engineering Department).
- ? Two full-time staff; Manager/Chief Naturalist and Assistant Naturalist and one or two summer students.
- ? Funded by municipal government; 1984 budget \$92,000.00
- ? No significant volunteer program.

CAMPBELL VALLEY REGIONAL PARK

Located in the southwest of Langley Township, B.C. (GVRD) It contains 285 hectares open to public.

In 1984 approximately 150,000 people visited Campbell Valley. The summer interpretive programs, (six years old), attracted approximately 400 people.

FACILITIES / PROGRAM

DESCRIPTION:

- ? Nature Park with walking/hiking trails, 14km equestrian trail with barn and equestrian track.
- ? Overnight group camping (40-60 persons) very popular year round.
- ? Small visitor centre under construction.
- ? Informal nature study, and organized field programs for school children, guided tours.
- ? School programs, community programs, interpretive events, children's programs.

MANAGEMENT

BUDGET STAFF:

Greater Vancouver Regional District:

- ? Summer seasonal Naturalist participated in nature programs at three regional parks.
A trailer was used as the mobile Naturalist's office.
- ? Funding shared by Provincial and Federal Grants, and the GVRD.

BURNABY LAKE

Located in the district of Burnaby, B.C. The 300 hectare parksite is half controlled by GVRD. It features pond, marsh and wooded habitats.

FACILITIES / PROGRAM**DESCRIPTION:**

- ? Primarily a wildlife sanctuary and nature park.
- ? Small Nature House (approx 100 sq.ft.) used for classes and slides with limited permanent displays, and displays of live animals. Displays cater to drop-in visitors.
- ? Programs mostly oriented to pre-registered groups, schools, scheduled programs organized by age groups.
- ? Canoeing, birdwatching, and self-guiding trail.

MANAGEMENT**BUDGET STAFF:**

- ? Owned and operated by the Greater Vancouver Regional District.
- ? Two full-time Naturalists are required to conceive, organize and promote programs.
- ? Trend is to hire full-time staff for continuity, and to find alternative funding for seasonal staff.
- ? Plans to initiate volunteer program to create a highly participative park system.
- ? Funding shared by Provincial and Federal Grants, and the GVRD.

TYPE II: DISPLAY FARMS**MAPLEWOOD FARM**

Located in the district of North Vancouver, B.C. The 5 acres display farm was developed from an old farmsite and has been operating since 1975.

Approximately 50,000 visitors a year come to Maplewood Farm, mostly children.

**FACILITIES / PROGRAM
DESCRIPTION:**

- ? Features the display of and interaction with domestic farm animals and birds.
- ? Facilities include: livestock barn, barn for equipment storage, outdoor animal pens for petting and trails around the site.
- ? Part of storage barn is being converted into display house and indoor facility for lectures, slides, and programs on rainy days.
- ? Booklet for self guided tours.
- ? Special seasonal events - i.e. milking demonstration.
- ? Staff comment that the facility was well researched but that the site plan has problems because it was built around the existing structures/layout.

**MANAGEMENT
BUDGET STAFF:**

- ? Operated by District of North Vancouver.
- ? Used to have tour guides until budget cutbacks, now self guided.
- ? Staff is skeletal: one Manager and two attendants who help with running the farm (union wages).
- ? Budget information not available.

TYPE III: CAMPS**CAMP CAPILANO**

Founded in 1951, Camp Capilano is located in Capilano Canyon Park, North Vancouver, B.C.

Visitors are mostly from the Lower Mainland, but some come from as far away as Japan. Statistics for 1984 are: 600 visitors in summer; 2000 visitors in the fall and winter (mostly on weekends)

**FACILITIES / PROGRAM
DESCRIPTION**

- ? A public camp facility available for rental to groups for camps and conferences.
- ? Facilities consist of 2 Panabode dorms sleeping 20 each; a dining hall with fireplace; and a common room.
- ? The City of Vancouver operates summer camps. For the remainder of the year it is rented on a fee basis to other groups.

**MANAGEMENT
BUDGET STAFF:**

- ? The facilities are owned by the Greater Vancouver Regional District.
- ? The City of Vancouver Parks Board operates summer camp and pays the Supervisor's salary year round. User fees provide the balance of funds for the operating budget.
- ? Supervisor organizes budget, maintenance, and programs.
- ? Budget is around \$100,000.
- ? Budget cuts to schools have diminished their available funds to book the camp. The demand exists for this type of facility but the present funding structure is precarious.

CAMP LONG

Camp Long is situated on a 68 acre forested site in the City of Seattle, Washington.

The camp attracts intensive year round use due to its well developed programs and its convenient location.

**FACILITY / PROGRAM
DESCRIPTION:**

- ? A multi-purpose complex catering to organized and informal public recreation (focus on outdoor skills).
- ? Lodge (wood & stone) provides space for main hall, kitchen, offices, Caretaker residence, storage & meeting rooms for program activities and private rentals.
- ? 10 rustic cabins with 2 restrooms and sheltered picnic area available to the public for a nominal fee.
- ? Scheduled nature walks, special programs for children and adults (fee basis).
- ? 15 mile self-guided trail with booklet for all ages, paved self-guided trail for wheelchair users under construction.
- ? Climbing rock, simulated glacier face, orienteering programs.
- ? No display space at present.

**MANAGEMENT
BUDGET STAFF:**

- ? Owned and operated by the City of Seattle.
- ? Citizen's Advisory Council advises on finance and program direction.
- ? Core staff of Senior Naturalist, Recreation Attendant and Caretaker.
- ? 5 seasonal staff on contract during summer.

APPENDIX VI

**CORRESPONDENCE WITH NANAIMO REGIONAL DISTRICT
AND CITY OF NANAIMO REPRESENTATIVES**

RDN
113
regional district of nanaimo
incorporated august 24, 1967.

December 6, 1985

RECEIVED
DEC 11 1985

Our File:

Your File:

Pavelek & Associates
148 Alexander Street
Vancouver, B.C.
V6A 1B5

Attention: Mr. Gregory J. Paris

Dear Sir:

In June of this year you wrote to the Regional District of Nanaimo to advise that your firm has been retained by the B.C. Ministry of Lands, Parks & Housing to develop a master plan for Hemer Provincial Park.

On August 8, 1985, Mr. Furlong, Director, Parks & Recreation, Regional District of Nanaimo, responded to your request for information and direction with respect to plans for development. Mr. Furlong noted the predominant feeling of the community to be that the park remain in its natural state, as was the intention of the donors, Miss Violet Hemer and her brother, John Hemer, now deceased. Mr. Furlong also noted that as the Director representing the area, I would solicit the opinions of other residents.

Since then, I have done so and can report that without exception residents wish to see Hemer Park maintained as is, subject only to selective clearing and regular maintenance. Beyond that, it is agreed that if boat launching from the park to Holden Lake is to be considered, then it be limited to a simple jetty for launching a canoe or kayak. The suggested location for such a jetty is the upper end of the west arm of the lake, (Sec. 13, Range 3). This would provide access via the first trail to the lake from the parking lot, from which the canoe or kayak would have to be carried. A launching facility for power boats to Holden Lake is not acceptable for a number of reasons indicated in an earlier survey. The lake is small, shallow and secluded. It is best suited for small, quiet craft in keeping with the serenity of the park and the expressed wishes of the Hemers.

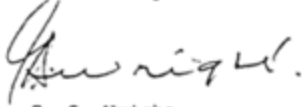
One resident suggests the emplacement of a few picnic tables and garbage cans. Another cross path or two have been suggested so that walkers, particularly the elderly, might walk a circuit rather than have to retrace their steps.

With respect to the present farm, opposition has been expressed to its use for any form of active recreation. Rather, that it continue to be used as 'growing' land, ie., arboretum, tree farm, garden plots or even leasing to a farmer. One respondent suggested an interpretive centre be considered, with a hands-on room for children and guided walks and gave the Padilla Bay Centre (between Anacortes and Burlington in Washington State) as an example, even though it is a much larger park.

Mr. G. Paris
December 6, 1985
Page 2

Overall, it is clearly evident that the wish of those who use the park is that it remains 'as is', recognizing that this will require careful and selective clearing and maintenance which in time will see the present natural state of the park enhanced to even greater grandeur.

Yours truly,



G. S. Wright
Chairman

GSW:so

cc: J. Furlong
Director of Parks & Recreation

RDN
- 115 -
regional district of nanaimo
incorporated august 24, 1967.

RECEIVED

AUG 14 1985

Our File:

Your File:

August 8, 1985

Gregory J. Paris
Pavelek & Associates
148 Alexander Street
Vancouver, B.C.
V6A 1B5

Thank you for your letter of June 17th, 1985 with respect to Hemer Provincial Park. We, at the Regional District of Nanaimo, are giving this matter very careful consideration as Hemer Park is a particularly sensitive and valued recreational sanctuary to the people of the area.

This letter will be followed by an official response from the Regional District of Nanaimo Board Chairman who is also the elected representative for the area. He is presently soliciting formal input from residents and other interested parties and will be preparing a recommendation for our Board's approval.

However, it should be noted immediately that there appears to be an overwhelming feeling in the area to preserve the Park in its present natural state and that if any funds were to be spent, ongoing maintenance is seen as the priority. There may also be a case for some selective clearing of underbrush so as some of the beautiful waterfront areas can be seen and accessed from the Park's trails. An occasional picnic table or park bench may also be desirable.

It is our understanding that when this land was handed over for park purposes by the Hemer family that there was a covenant placed on it to protect and maintain it in its natural state.

The farmland in the Park is presently being used by Miss Violet Hemer. In the future when this land forms part of the usable Park, active forms of recreation could perhaps be accommodated there. Repairs to the fence between the farmland and the rest of the Park needs to be completed.

.../2

There is general consensus that perhaps representatives from your firm should meet with our officials in the future, to walk the Park so as the issues and concerns can be addressed more appropriately.

Thank you for contacting us.

REGIONAL DISTRICT OF NANAIMO

John Furlong
Director, Parks & Recreation

JF/jt

cc: Stuart Wright, Regional District of Nanaimo Board Chairman



CITY OF NANAIMO
- 117 -
Parks and Recreation Department

TELEPHONE 753-7788 500 BOWEN ROAD, NANAIMO, B.C. V9R 1Z7

PLEASE REFER TO FILE NO. D1-7-2

1985-Jun-28

RECEIVED
JUL - 4 1985

Mr. Gregory J. Paris
Pavelch & Associates
148 Alexander Street
Vancouver, B.C. V6A 1B5

Dear Mr. Paris:

Re: Hemer Provincial Park

I was most appreciative of receiving your letter of 1985-Jun-17 asking for input into the development of a master plan for Hemer Provincial Park. It is refreshing to have planners contact people within the surrounding areas for input.

I would like very much to meet with you the next time you are in Nanaimo. At such meeting we could review our Parks system along with five to seven year projections and possibly walk the trails of Hemer Park and review topographical highlights.

Looking forward to our meeting and discussions.

Sincerely,


H.R. Wippen
Director
Parks and Recreation Department

HRW/sm



August 1, 2, 3, 4

Nanaimo, Home of the 1985 B. C. Summer Games

A Project of the Government of British Columbia



CITY OF NANAIMO

TELEPHONE (604) 754-4251

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CITY HALL
455 WALLACE ST.,
NANAIMO, BRITISH COLUMBIA
CANADA V9R 5J6

1985-JUN-25

FILED
JUL - 2 1985

Pavelek & Associates
Landscape/Interior Architects Ltd.
148 Alexander Street
Vancouver, B.C. V6A 1B5

Attention: Gregory J. Paris

Dear Sir:

This is in response to your letter dated 1985-JUN-17 in which you inform me that your firm had been retained by the B.C. Ministry of Lands, Parks, and Housing to develop a master plan for Hemer Provincial Park.

By a copy of this letter to our Director of Parks and Recreation, Mr. H. Wipper, I would hope that our Parks and Recreation Department would be able to provide you with some indication of recreational opportunities suitable for Hemer Park.

Thank you, in advance, for keeping us informed of your activities and I am sure Mr. Wipper's staff will be able to satisfy any of your concerns.

Yours truly,

W. S. Mackay
Director
Planning, Business, Industry
and Employment Expansion

WSM/gh

cc: H. R. Wipper, Director, Parks and Recreation

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CONTACTS

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R. N. GREEN, Research Pedologist, Research Section, B.C. Ministry of Forests.

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G. REID, B.C. Ministry of Environment, Nanaimo.

G. SCOLTON, Lakes Branch, B.C. Ministry of Environment, Nanaimo.

G. STALLARD, Planner, Regional District of Nanaimo, Lantzville, B.C.

D. SUTTILL, Heritage Conservation Officer, Heritage Conservation Branch, B.C. Ministry of Provincial Secretary and Government Services.

H. R. WIPPER, Director, Parks and Recreation, Nanaimo, B.C.