



**LAND AND WATER
BRITISH COLUMBIA INC.**

LAC DES ROCHES / BIRCH LAKE

Lakeside Resort Community

Planning and Conceptual Design Outline

December 2004



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INTRODUCTION

Land and Water British Columbia Inc. (LWBC) has been leading planning and conceptual design work for a waterfront property on Lac des Roches and Birch Lake (the subject) in south central British Columbia. LWBC's corporate mission is to act as an advocate for economic development and revenue generation by encouraging investment and optimal use of Crown land and water resources, in the context of environmental sustainability. LWBC has conducted an extensive public consultation process and received considerable input regarding environmental values. This process and the key issues raised therein are summarized in a document titled *Overview of Public Consultation to October 2004* included in *LWBC's Information Package*. Any development proposed for Lac des Roches and Birch Lake must respect and respond to these concerns.

LWBC has also consulted with other provincial agencies regarding the proposed disposition of this Crown land. In particular, the Ministry of Forests notes that the subject is adjacent to and surrounded by a working forest. The Ministry has requested the registration of a covenant to ensure that subsequent property owners for all or part of the subject are aware of potential conflicts between private land use and logging activity. The Ministry also confirmed that Mountain Pine Beetle is active in the area, and that viewsapes in the area will likely be impacted by future logging activity.

Please note that the planning and conceptual design work done to date by LWBC and its consultants is one example only. Any development that is proposed by a private sector developer will need to conform to regulations under the jurisdiction of various government agencies. The developer is responsible for meeting these regulations and obtaining the appropriate approvals.

The subject is located off of Highway 24 approximately 25 Km west of Little Fort. Known as the "fishing highway", the road corridor provides access to hundreds of productive fishing lakes varying in size and remoteness. The development area includes waterfront property on both Lac des Roches and Birch Lake, two of the larger lakes found in the Highway 24 lakes district. The subject is in reasonable proximity to four major metropolitan cities including Vancouver (5 hours), Seattle (7 hours), Edmonton (8 hours), and Calgary (9 hours). The closest urban centres are Kamloops (1.5 hours) a community of 80,000 and 100 Mile House (1/2 hour) with a population of 5,000.

One potential development vision for the subject that has been applied to both conceptual plans is: an award winning, environmentally sensitive, all-season lakeside resort community offering a mix of housing choices and sites within the development area. This would be a master planned development of approximately 228 units incorporating community infrastructure, amenities, and services. The community focus might be a resort centre including commercial uses and higher density accommodation.

Environmental considerations have been integral to project planning to date including selection of the development property, site planning, and adherence to existing density regulations. **The**

purpose of this document is to provide an example of what this proposed development might look like.

Potential project characteristics envisioned that reinforce the resort community concept and build market identity might include common amenity facilities (marina, community centre, parks, trail system), community sewage collection and treatment system, optional community services (maintenance, security, boat storage), optional rental income and property management, and a resort centre with guest accommodation, dining, retail, convenience store, and office centre.

The outstanding lakeside and backcountry setting, area amenities, resort qualities, project scale and diversity of housing types might combine to create a unique recreation development opportunity in the Southern B.C. Interior.

LOCATION

The subject is 25 Km west of Little Fort on Highway 24.

APPROVALS

The project requires the approval of the Thompson-Nicola Regional District (TNRD) and various government agencies. Preliminary land use and resort centre concept plans have been presented to the TNRD and are supported in principle at this stage. The planning and preliminary concept design work has been prepared in accordance with TNRD's Lakeshore Development Guidelines and allowable densities. Formal application for approvals has not been submitted.

THE DEVELOPMENT

The proposed project is a lakeside resort community. The development contemplated offers approximately 228 housing units including examples of lakefront single family, hillside single family, lakefront clusters, strata-title resort hotels, a marina, community parks and trail system, community centre, and resort commercial centre.

LWBC retained the firms of Lindros Project Development and Urban Systems Ltd. to assess development opportunities in a lake cluster area within the Highway 24 corridor

The consulting team investigated lakes and backshore areas within areas of the cluster most suitable for recreational property development. In addition to identifying suitable development locations, the type and form of development was also explored. The result is a potential vision for development at Lac des Roches and Birch Lake (the subject) that serves as 1) a starting point for determination of interest by a developer and 2) an example of a development plan.

It should be clear that the development concept has not yet been submitted for approval to the TNRD. However, the potential project vision as represented in this report has been presented to the TNRD with favourable response.

In addition, the reader should understand that the conceptual development plans presented at this time are not considered as fixed. The project vision and plans represent flexible development scenarios that meet the general intent of creating an environmentally responsible and comprehensive master planned lakeside development.

Lindros Project Development and Urban Systems Ltd. have been retained by LWBC to prepare conceptual development plans for the subject property as well as this document. This report does not purport to contain all information that a prospective purchaser may require in making an investment decision. The information provided is based on development planning work completed to date that does not include land appraisal, market, or financial analysis. Neither Lindros Project Development, Urban Systems Ltd., nor LWBC make any representations, declarations, or warranties as to the viability of the development opportunity and expressly disclaim any Liability for any errors or omissions in this report.

THE SITE

The subject is shown in bold outline on the *Subject Lands Map* included in *LWBC's Information Package*. This outline includes the cells that have development potential indicated by the planning to date. Additional lands may be required to accommodate features such as roads, trails, or shared septic systems. The land area inside the bold outline is estimated at 180 ha (445 acres).

The subject offers a diversity of environments to accommodate various types of real estate. All of the residential and commercial development cells indicated in the conceptual design plans are located in areas considered suitable for development based on preliminary site analysis; however, more thorough site investigation will be required by the developer to confirm suitability of site conditions (i.e., slope, drainage, soils, bedrock). The environments include: lakeside forest, hillside forest, and upland forest.

Lakeside Forest

The majority of the development property indicated in land use plans can be classified as lakeside forest. These lands are typically sloping between 10% and 20% and have medium-to-dense tree cover consisting primarily of coniferous species. The forest extends to lake edge, which offers high quality off-shore conditions pertaining to water depth, clarity, and circulation.

Hillside Forest

These lands are suitable for hillside development that would offer outstanding views overlooking the lake and background scenery. The slopes vary between 10% and 25%, and tree cover is a mix of mature coniferous species.

The Lac des Roches and Birch Lake area offers a very scenic backdrop for a recreational property development. The viewshed is contained by forested slopes with an undulating ridge line, particularly along the east side of Birch Lake. The visual interest and quality of the terrain is complimented by the variable size and shape of the lakes. Lac des Roches is a 9 mile long lake with a maximum width of approximately 1400 m and depth of 47.24 m. The east end of the lake, where the bulk of development would occur, includes sheltered bays that are very suitable for water recreation and boat moorage. Birch Lake is smaller, oval shaped, has a maximum width of 1285 m, a maximum depth of 39.62 m, and also has a modulating shoreline creating several bays. In addition to being linked to Lac des Roches by a small stream, Birch Lake is also connected to two smaller undeveloped lakes, Phinetta and Tortoise.

The diversity of lake types and the scenic, accessible, and usable backcountry terrain creates an excellent setting for outdoor recreation enthusiasts. Recreational opportunities include swimming, canoeing, wind surfing, kayaking, fishing, hiking, biking, snow mobiling, cross country skiing, snow shoeing, wildlife viewing, ice fishing, hunting, and horseback riding.

Climate

The southern interior region of B.C. offers the driest and warmest climate in the province. The climate in the plateau areas is generally 3 to 5 degrees cooler in summer and winter than the valleys below; however, the hours of sunshine are somewhat greater. The climate tends to be warm and dry in summer with the occasional thunderstorm. With an elevation of 1128 m at lake level, the area receives ample snow accumulation to accommodate winter recreation. The lakes begin to ice over in late November and open up by mid May. The micro climate of the subject is affected by wind and sun exposure with the prevailing winds blowing from the southwest. The following information, collected at the 100 Mile House weather station, provides a good indication of average annual weather conditions experienced at the Lac des Roches and Birch Lake area:

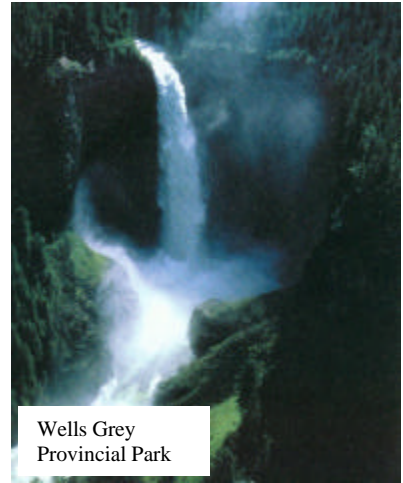
- hours of sunshine 1800 hrs
- rainfall 294.3 mm
- snowfall 159 cm
- frost free days 157
- mean max. temp. 10.7 degree Celsius
- mean min. temp. -2.4 degree Celsius
- growing season May to September
- wind speed 4-6 m/s

SURROUNDING AREA



Cross country at 100 Mile House

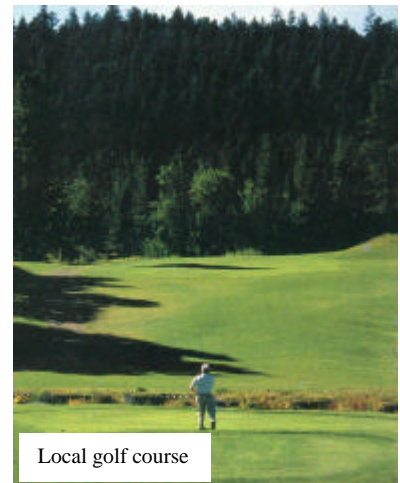
The surrounding region also has a lot to offer. In terms of shopping and services, the towns of 100 Mile house, Barriere, and Clearwater are 30, 40, and 50 minutes away, respectively. Recreational opportunities within an hour-and-a-half include the pristine Wells Gray Provincial Park, Sun Peaks Mountain Resort, Mike Weigle’s Heli-Skiing Resort, and over a thousand lakes of varying size. Within an hour are numerous high quality golf courses and



Wells Gray Provincial Park

world class cross country skiing facilities. The nearby Highway 24 communities of Bridge Lake, Lone Butte, and Interlakes offer an interesting mix of small village, tourist orientated shops, and Highway 24 corridor is a bustling tourist and cottage destination in the summer months. Highway 24 is referred to as “the fishing highway” because of the proximity to hundreds of lakes considered as prime trout fishing territory. The two existing resorts on Lac des Roches and the single resort on Birch Lake attract fishers from across Western Canada and the Pacific Northwest. The quality of the fishing resource is outstanding and any new development should take every step necessary to ensure the resource value is retained for the benefit of all lake users.

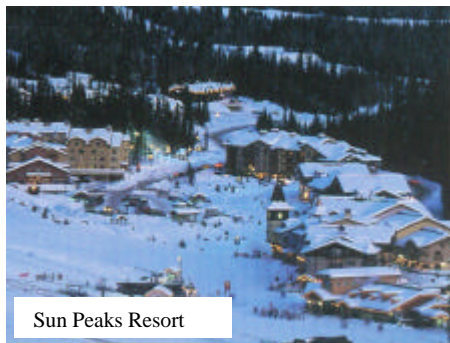
amenities recognizing that the



Local golf course



Local ski doo trails



Sun Peaks Resort



The fishing highway

DEVELOPMENT PRINCIPLES

The conceptual design plans described in this document and shown in *LWBC's Information Package* are considered flexible so as to allow for refinement by the purchaser in response to their own market assessment and corresponding development plan. The planning and conceptual design work done to date incorporated guiding principles that attempted to conform to the values of various stakeholders. The developer may consider using similar guiding principles, modify these guiding principles, or develop new guiding principles. The guiding principles used to date include:

1. respect and accommodate the needs of various existing users including lake users, trail users, recreation property owners, resort owners, ranchers, and logging companies;
2. respect and accommodate the needs of wildlife in the development area including migratory patterns and year round habitat;
3. prior to development, minimize potential environmental impacts of the project through sound planning, design, and construction practices that incorporate environmentally responsible/conservation design features;
4. and after development, manage and protect the environmental values of the lake and backcountry resource and ensure long-term performance of the community utility infrastructure.

CONCEPT RATIONALE

- The lakeside resort community concept is based on an assessment of site attributes and market considerations. The subject offers an impressive natural setting and semi-remote quality. Buyers and visitors might be attracted to a long list of outdoor recreation activities found within the development and surrounding area. A major feature of the subject is having lake frontage and access to both Lac des Roches and Birch Lake. The two lakes combine to offer potential buyers and guests a variety of real estate choices and outdoor recreation opportunities. To compliment natural attributes, the conceptual designs incorporate resort and community qualities to maximize project appeal. The critical mass of a resort community, the diverse mix of amenities, the services and programs, and sense of community might enhance project marketability and compliment the outstanding natural setting.
- The resort community concept meets the objective of incorporating higher density nodes within the subject. By incorporating cottage clusters and resort lodges into the building program, it would be possible to reduce the extent and length of developed shoreline. Achieving the allowable density target with a conventional single-family lake frontage plan would maximize the length of developed shoreline. A mix of residential types that is more typically associated with a resort community would require less lake frontage.
- The resort community model might be well suited to the introduction of community site services that form an environmental perspective that is highly desirable.

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- To have appeal as a four season resort community, a development proposal might include resort facilities, amenities, and services to help meet this objective.
 - The resort community model might be well suited to both encouraging and accommodating extended visits versus weekend visits only.
 - The potential for revenues from unit rental might be a significant motivation to purchase. The resort model would provide rental revenue opportunities.
 - The lakeside and backcountry resort community concept might provide added value and appeal to the development by building in a level of service and amenities to enhance the cottage experience.
 - The resort concept might distinguish the development from most lakefront ownership opportunities in the Southern B.C. Interior.
 - The mix of resort amenities and services with property ownership opportunities is a proven development formula at Canadian ski hill and golf resorts. The resort model at Canadian lakeside developments has also proven successful and is marketed in large part on the basis of the resort amenities and experience offered either within the development or nearby. The difference between the development of a lakeside resort community versus a lakeside property development project is the recognition that with the former the purchaser is buying into a resort community. Rather than simply buying a lot on the lake, the developer is selling the resort experience versus just real estate.
 - The scale of the subject and the allowable density suggest that a comprehensive master planned community is the most appropriate form of development.

DEVELOPMENT SUMMARY

The project is proposed as a lakeside resort community with the real estate product orientated to young families and active pre-retirement and retirement market segments. The following provides an outline of maximum development potential under the TNRD's Lakeshore Development Guidelines:

Lac des Roches:

Classification by TNRD:	Development Lake
Total surface area within TNRD:	± 240 hectares
Total allowable units within TNRD:	160
Existing units within TNRD:	62 (including resorts)
Potential additional units in TNRD:	98
Allowable percentage of shoreline development:	35%
Existing percentage of shoreline development:	8%

Birch Lake:

Classification by TNRD:	Development Lake
Total surface area within TNRD:	± 240 hectares
Total allowable units within TNRD:	160
Existing units within TNRD:	30 (including resorts)
Potential additional units in TNRD:	130
Allowable percentage of shoreline development:	35%
Existing percentage of shoreline development:	7.6%

RESORT RESIDENCES

The residential development represented in the preliminary development concept includes a mix of housing options and locations to provide a range of real estate product in terms of cost, experience, and ownership type. Options might include single-family, cottage clusters, and stratalodge.

Two types of freehold single family lots might be available including road access lakefront lots, and hillside road access view lots. The various single-family development cells would offer a diversity of physical settings to suit owner preference including sun exposure, views, and lake recreation, (Lac des Roches is better suited for more intensive lake recreation uses).

A more compact and affordable housing option might be the lakefront and upland cottage cluster developments. These clusters might be developed either on a freehold or strata basis and might incorporate fractional ownership and rental revenues. The cottage clusters might share a common lakefront and boat moorage facilities.

The third form of real estate might be the strata-title suite lodges overlooking the water. As with the cottage clusters, these units would share amenities within the development and provide owners with rental pool income. The lodges might include retail and dining opportunities to be enjoyed by both resort residents and guests. The strata lodge units would be the most affordable real estate option available.

RECREATION AND AMENITIES

All units within the resort might share a community centre/clubhouse that would serve as the social and recreation centre for the development. Components might include a marina, fitness centre, social event and games room, barbeque facilities, playground, tennis court, lawn sports, and other amenities to enhance the resort experience. Dry boat storage might also be provided in the vicinity and residents of boat access lots would leave their automobiles here.

Several parks are possible to meet the needs of both resort residents, guests and the public. A major day use area with boat launch, picnic area and beach might be created on Birch Lake. Smaller lakefront parks would be community orientated and create conservation zones to protect natural features as well as provide lake access and boat moorage for residents of hillside single family lots.

A multi-use trail system might provide access into the backcountry for hiking, biking, cross country skiing, and snowmobiling. The system might be designed to separate incompatible uses and utilize existing roads and trails in the surrounding Crown lands. The trail system might provide access to several smaller, undeveloped lakes and offer spectacular views overlooking the water and surrounding countryside. Some of these trails exist already; and some have been designated as trails by the Ministry of Forest.

Within the development, pedestrian circulation might also be accommodated with a trail system connecting Lac des Roches and Birch Lake as well as linking together the cottage clusters, stratalodges, community centre, retail centre, and day use park.

LAND USE AND RESORT CENTRE PLANS

In exploring development potential for the subject, two land use plans were prepared to indicate variations of the resort community development vision. The primary difference between the two plans is the mix of real estate options and the extent of land developed. **The preliminary land use plans contained in this report are intended to assist the developer in assessing the development opportunity.** Land use plans are supplemented by corresponding resort centre conceptual plans that provide a higher level of site planning detail in the core development area.

The land use and site planning philosophy for the Lakeside Resort Community focused on the need to minimize environmental impacts, maximize compatibility with existing user groups, create a resort community identity, and take full advantage of the natural setting. Planning, design, and suggested operation policy that might meet these objectives include:

Minimize Environmental Impacts

- Achieve the allowable number of units with a development pattern that includes higher density clusters of units as opposed to stringing the entire residential property out along the shoreline in a uniform manner.
- Contain the extent of developed shoreline within a restricted area to maximize the extent of a continuous edge of undeveloped shoreline.
- Incorporate common/shared lakefront access areas including boat moorage.
- Provide deep lakefront lots that will allow for maximum setbacks from lake edge.
- Build a road network that connects the various development nodes and allows for a cost effective, staged development while minimizing road length and site disturbance.
- Create conservation zones along the water's edge through setbacks, buffer zones, and no development designations.

Maximize Compatibility with Existing User Groups

- Create a public day use park on Birch Lake and Lac des Roches.
- Maintain separate access to existing cottages on Birch Lake.
- Avoid locating new recreational properties in the direct view of existing recreational properties.
- Participate in a Lake Association to maintain boat size and speed restrictions to retain the low key, fishing lake quality of both lakes.
- Incorporate existing trail systems into a resort community trail network.
- Provide trail linkages connecting existing cottages with the resort centre and overall trail system.
- Provide public boat moorage at the stratalodge and community centre.

- Develop the trail system in collaboration with existing users.
- Install fencing as needed to restrict movement of grazing cattle into the resort development.
- Make community centre facilities and amenities accessible to existing residents and cottages.

Create a Resort Community Identity

- Create a resort centre in and around the lands separating the east end of Lac des Roches and the west shoreline of Birch Lake including a concentration of higher density residential properties, a commercial centre, community centre, marina, public day use park with beach, and trails linking all resort centre facilities.
- Create a community centre as a social focal point for residents of the resort .
- Apply architectural design guidelines throughout the development.
- Incorporate goods and services in the commercial centre to support the resort community.

Utilization of Natural Features

- Provide real estate opportunities in a variety of settings to satisfy a range of preferences pertaining to sun exposure, wind protection, views, lake use, proximity to resort centre, accessibility, privacy, tree cover, slope, etc.
- Create an extensive multi-use trail system providing year round recreational opportunities in the surrounding backcountry.
- Provide trail access to smaller lakes in the immediate vicinity.
- Implement site development planning and design controls that will retain scenic values (i.e., screening parking lots, selective tree removal, and generous building setbacks).
- Provide a trail linkage between the two lakes and boat moorage trail heads to allow resort residents, guests, area residents, and public to experience the full diversity of the Lac des Roches and Birch Lake recreational and scenic resource.