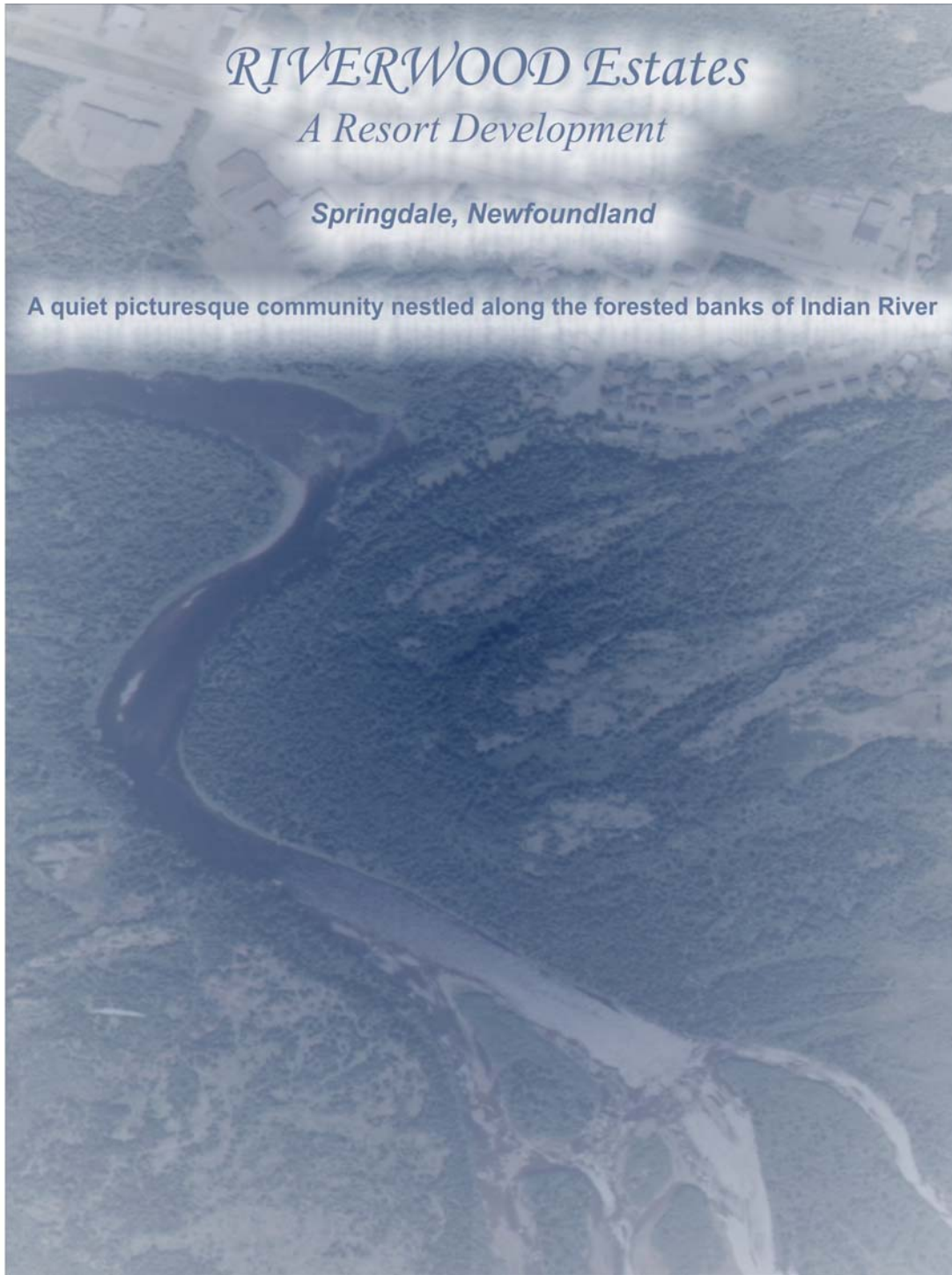


*ENVIRONMENTAL ASSESSMENT
REGISTRATION DOCUMENT*



RIVERWOOD Estates

A Resort Development

Springdale, Newfoundland

A quiet picturesque community nestled along the forested banks of Indian River

Prepared by: Chad Wells

Prepared for: Department of Environment & Conservation

March 2006

TABLE OF CONTENTS

1.0 Background Information	
1.1 Name of Undertaking.....	1
1.2 The Proponent	
2.0 The Undertaking	
2.1 Nature of the Undertaking	
2.2 Rationale for the Project	
3.0 Description of the Undertaking	
3.1 Geographical Location	
3.2 Physical Features.....	2
3.2.1 Major Physical Features of the Undertaking	
A. Land Development	
B. Access Road	
C. Utilities	
(1) Electrical	
(2) Water.....	5
(3) Sewer	
3.2.2 Area to be Affected by the Undertaking	
(a) Climate	
(b) Geology.....	6
(c) Vegetation	
(d) Fish & Fish Habitat	
(e) Mammals, Furbearers, & waterfowl.....	7
(f) Human Activities	
3.3 Construction and Operational Issues	
3.3.1 Construction Time Frame	
3.3.2 Potential Sources of Pollutants	
3.3.2.1 Mitigation Measures	
(a) Silt and Sediment	
(b) Dust.....	8
(c) Construction Debris	
(d) Sewage	
(e) Fluid Spillage	
(f) Airborne Emissions	
(g) Noise Pollution	
3.3.3 Resource Conflicts	
(a) Vegetation	
(b) Fish and Fish Habitat	
(c) Mammals and Waterfowl.....	9
(d) Human Activities	
3.4 Occupations	
3.5 Project Related Documents	

4.0 Approvals Required for Undertaking

4.1 Approvals Required by Department(s)

5.0 Schedule.....10

6.0 Project Funding.....10

7.0 Signature.....10

FIGURES

3.1 Proposed Development Location Map - (2001) Aerial Photo.....3

3.2 A Topographic View of the Proposed Location in a Regional Context.....4

TABLES

3.1.1 Climate Description.....6

1.0 Background Information

1.1 Name of Undertaking

RiverWood Estates Resort Development

1.2 The Proponent

Name of Corporate Body: RiverWood Holdings Inc. c/o Chad Wells (Landowner)

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Principal Contact Person: Chad Wells, B.Sc.

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2.0 The Undertaking

2.1 Nature of the Undertaking

The proposed development will require the subdividing of approximately 25 acres of land along an existing 500-meter roadway servicing an accommodation facility – the RiverWood Inn, adjacent Indian River in the community of Springdale, Newfoundland. The project is envisaged to include the subdividing of the 25-acre property into a resort style development consisting of 14 residential lots of ~ ¾ acre in size.

2.2 Rationale for the Project

Over the past several years the ambience of Newfoundland's natural settings and attractions has lead to a desire amongst many of this nation's affluent, retiring residents to prefer high-end "country living". The very essence and ambience of a meandering river valley setting like Indian River represents a superior natural location to pursue a resort style, residential development in the heart of Green Bay, Newfoundland. The timing also appears to be excellent with respect to this particular proposal because although most of the resort development to date has been focussed in the Humber Valley there appears to be growing demand both locally and abroad for development in other areas of the province. Springdale is an especially attractive location for such a development as it is a mere 100 kilometers from the successful Humber Valley developments and is one of the few communities in rural Newfoundland that has experienced residential growth and property demand in recent years. The RiverWood development will be strategically located within the community, but favourably nestled in a "seemingly" remote river valley offering sought after, practical, country living. The development concept has been received with an enthusiastic level of support at the community level and as such the Town of Springdale has included it in its' "pending" 10-year Municipal Plan a new Land Use Zone – Residential Tourism (RT), to specifically accommodate this development concept.

3.0 Description of the Undertaking

3.1 Geographical Location

The project is located adjacent Indian River in the community of Springdale – central Newfoundland, N.T.S Map Sheets 12H/8-9. The site consists of approximately 25 acres of partially developed private land that is bounded by the town of Springdale on the north and east sides, and the riverbank of Indian River to the south and west. The immediate location of the proposed resort/residential subdivision will be accessed via a recently constructed 7-metre wide roadway servicing a 5-room commercial inn (The RiverWood Inn) near the rear of the property.

The proposed 14-lot subdivision will require modest cultivation within each respective 3/4 –acre private lot to accommodate house construction. Seven of the proposed 14 lots will have rear yards backing on Indian River, however, no construction will occur within the minimum 30.45 meter Non- development river reservation corridor. A minimum of thirty meters (30 meters \approx 100 ft) of vegetated forest will stagger the lot construction footprint(s) and the 1-100 year high-water mark of Indian River.

Access to the site will be provided via an existing 500-metre road that connects to Circular Road. The road will be upgraded to Municipal subdivision standards following the granting of an “Approval In Principle” from the Town of Springdale regarding this development concept.

Figure 3.1 illustrates the proposed development location and existing access routes on a recent (2001) aerial photo of the area and Figure 3.2 provides a 1:50,000 topographic perspective of the proposed development location within a map view that is the Springdale Municipal planning area.

3.2 Physical Features

3.2.1 Major Physical Features of the Undertaking

The proposed land development will consist of the subdivision and sale of 14 individual serviced residential lots that will connect with Circular Road by way of an upgraded paved public road (*RiverWood Drive*). Single dwelling houses ranging in size from 1200 to 3000 square feet are anticipated. Both the land sale and subsequent house construction will be responsibly controlled by existing municipal regulations guiding orderly, responsible development.

A. Land Development

The property package will be subdivided into approximately 14, 3/4-acre lots. Houses to be constructed on riverfront lots will be a minimum of 20.45 metres from the edge of the property boundary (30.48 m from river edge), which is the 10.03 m river reservation mark along Indian River. Each lot will require water, sewer, and electrical servicing. Water services will likely be obtained by connecting into the existing nearby municipal water services while sewer disposal will be via an approved septic field. Both the water and septic installation will be implemented under the guidance and regulations set forth by the Town of Springdale and Department of Works and Services, respectively. Electrical servicing will be made available through connection to a pending pole line being installed by Newfoundland Power to service the commercial inn on the property.

B. Access Road

The access road through the property will be further upgraded to acceptable municipal standards as part of the guidelines set out in the Municipal Plan and Land Uses of the Development Regulations for the Town of Springdale.

C. Utilities

(1) Electrical

The development will reserve specific electrical right-of-way to service each lot following consultation with Newfoundland Power and the Municipal Authority. Newfoundland Power will be responsible for the provision of electrical power within this development.

Appropriate approvals will be obtained prior to the installation of any culverts if required.

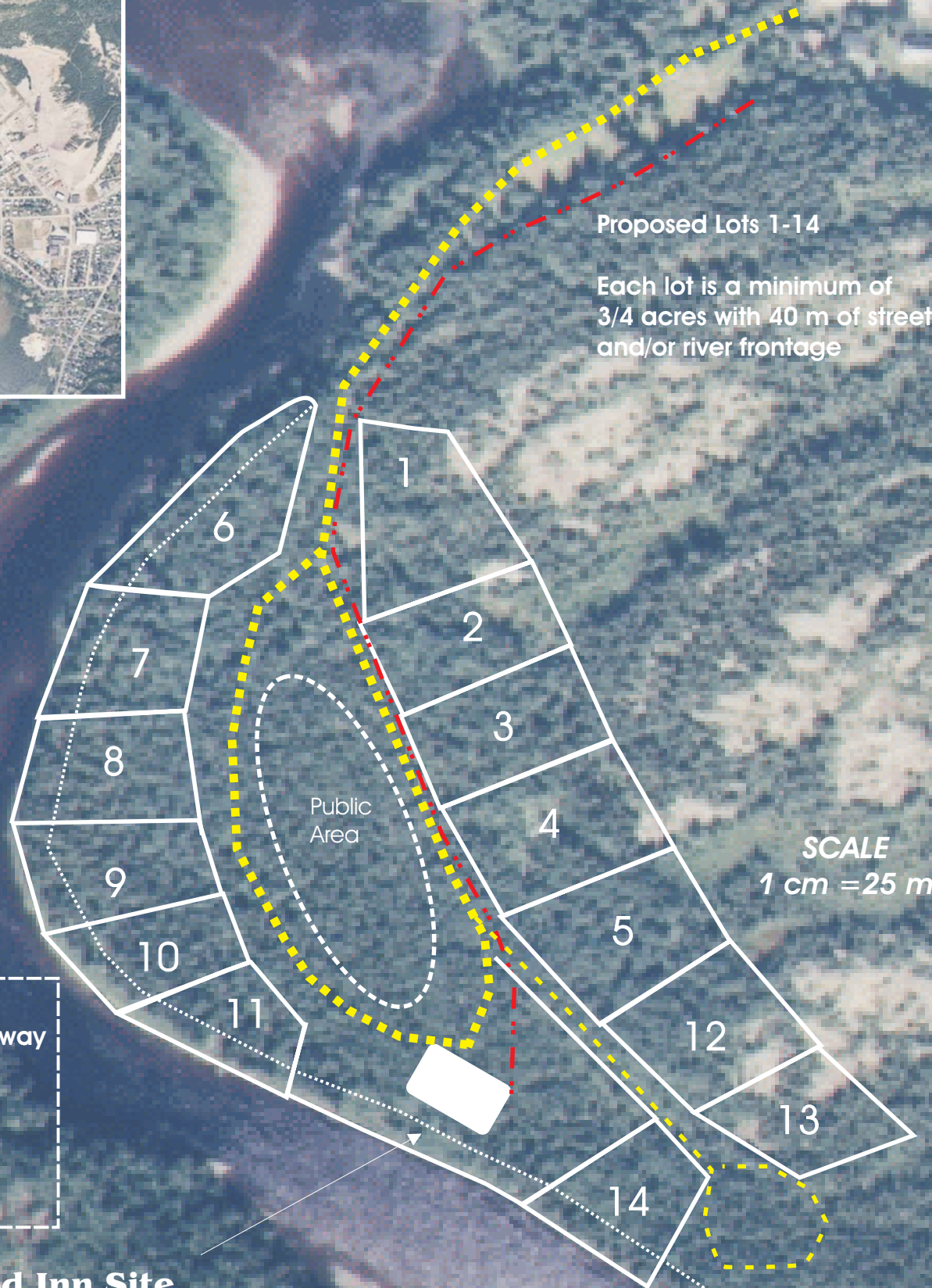
RIVERWOOD ESTATES RESORT & DEVELOPMENT

An exclusive picturesque community nestled along the forested banks of Indian River

Figure 3.1 Comprehensive Development "Concept"



Springdale Area



Proposed Lots 1-14

Each lot is a minimum of 3/4 acres with 40 m of street and/or river frontage

SCALE
1 cm = 25 m

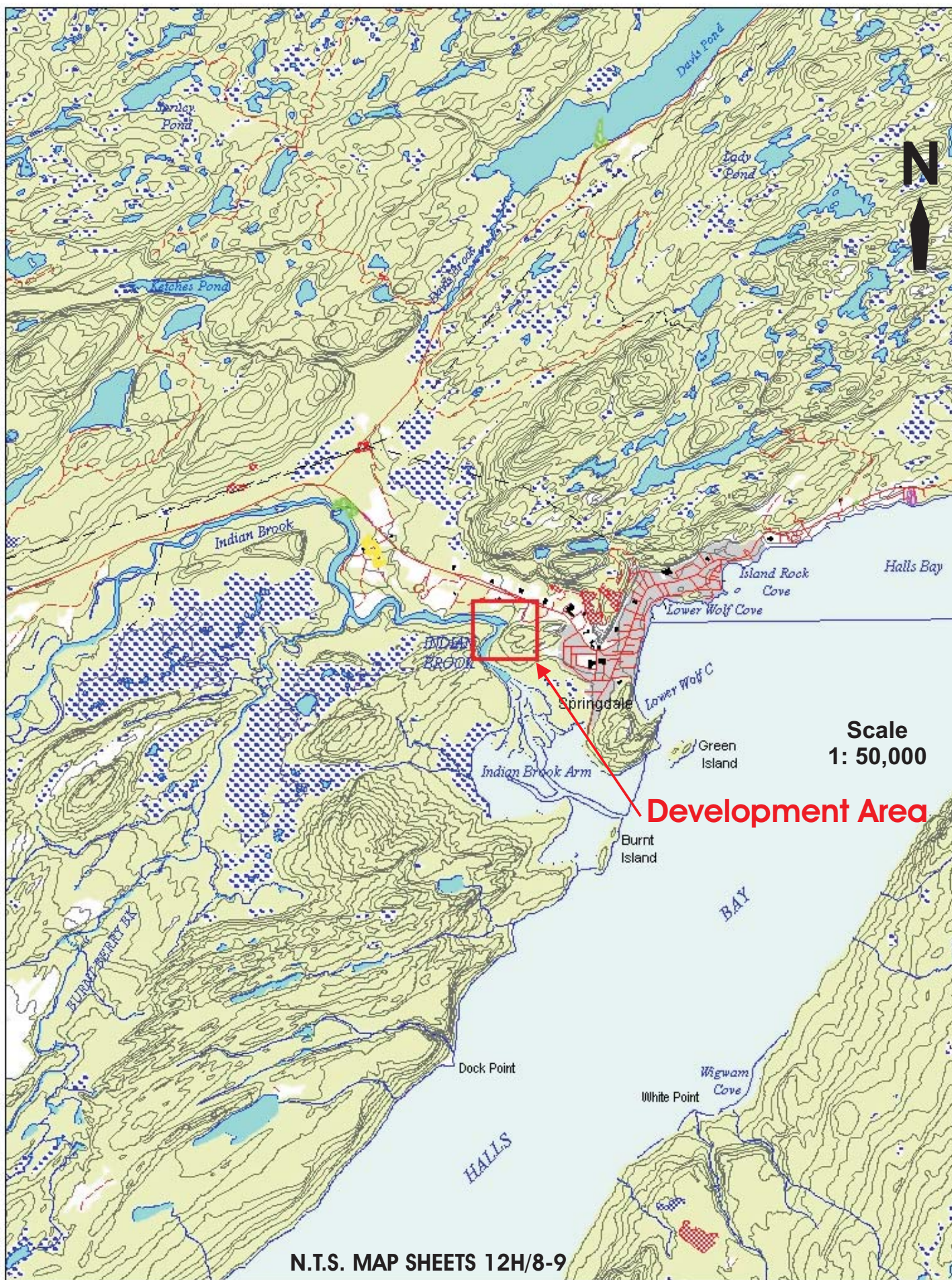
Legend

- Existing 45 ft road way
- Pole line route
- RiverWood Inn

RiverWood Inn Site

Minimum 30.45 m
"Development Buffer"

Figure 3.2 Topographic view of the proposed development location within the Springdale Municipal planning area



(2) Water

The source of water for the development will likely be the Springdale municipal water system. The water supply from the municipality will be extended to service the entire site. Alternatively, an artesian well may be appropriately drilled and utilized as the primary water source for each lot should extension of the municipal water supply prove too costly or cumbersome. Whatever the case, water services will be installed to the standards deemed acceptable by the municipal Authority and appropriate government agencies.

(3) Sewer

Sewer services for each lot dwelling will be provided by means of a Septic Tank and Disposal Field System. The systems will be designed and installed by professional personnel as outlined in the accepted standards for “Location, Design and Construction of Private Sewage Disposal Systems” in accordance with Sanitation regulations of the Public Health Act. An Application to Develop will be submitted to the local Government Service Centre for review and approval. Once the system has been installed a final inspection will be arranged to ensure a Final Approval Certificate.

3.2.2 Area to be affected by the Undertaking

Research of available literature and personal communications with various government departments and personnel as well as local familiarity with the region (past resident) has helped to provide the information basis to assess the physical, biological and socio-economic features of the project.

The area directly affected by the proposed project includes the physically impacted area within the development footprint, but nearby community and regional areas are also indirectly affected. During the implementation of this project all efforts will be made to protect the environment and to have minimal impact on the natural environment in the immediate area. Vegetation will be maintained to provide an effective buffer between the project and Indian River. No activity will take place within 30.45 meters of the high-water mark of Indian River as currently regulated. Another impact outside of the immediate area will be the socio-economic benefit for the town and region. A responsibly developed residential/resort style neighbourhood will encourage new residents to settle in the community and region.

It is the very essence and ambience of Indian River’s ecosystem and its natural setting that makes it such a strategic place to pursue this sort of development. The preservation and maintenance of the existing innate river locale will be essential for any sort of residential / resort development activity to succeed.

(a) Climate

Environment Canada information reveals that the area adjacent to the proposed development is characterized by cool temperatures with an inland influence due to its distance from the Gulf of St. Lawrence. Table 3-1 below shows the average monthly highs and lows and average monthly precipitation for the development site.

Table 3-1**Month Avg. High Avg. Low Avg. Precip.****January** -4/-2° C -12/-10° C 95/100 mm**February** -4/-2° C -14/-12° C 70/75 mm**March** -0/2° C -10/-8° C 70/75 mm**April** 5/7° C -4/-2° C 60/65 mm**May** 11/13° C 0/2° C 65/70 mm**June** 17/19° C 5/7° C 80/85 mm**July** 21/23° C 10/12° C 80/85 mm**August** 20/22° C 10/12° C 100/105 mm**September** 16/18° C 6/8° C 90/95 mm**October** 10/12° C 1/3° C 100/105 mm**November** 4/6° C -3/-1° C 105/110 mm**December** -1/1° C -9/-7° C 100/105 mm*(b) Geology*

In terms of geology, the site is located within a terrane of outcropping sub-aerial volcanic sediments of the Silurian aged Springdale Group. The Springdale group is part of the Dunnage Zone, which is one of the four principal tectonic divisions in Newfoundland. Lithologies in the immediate vicinity of the development appear similar to most other parts of the Springdale Group and are described as maroon-red, medium to well-sorted conglomerates and lesser sandstones. A thin cover of moss and humus is typical of the ground surface in the development footprint while the subsurface soil profile is typical and consists of a thin red-brown B horizon (30 cm), underlain by a gravelly C horizon interpreted to be “ancient” transported river gravels and lesser weathered bedrock material. Large 50-100 cm sandstone boulders are relatively common at the southern end of the property. Preliminary evaluations of the property grounds suggest the site will be quite conducive to septic system design and drainage.

(c) Vegetation

The proposed development is situated in an area that is predominantly covered with black spruce and balsam fir as well as lesser deciduous species, aspen & birch.

(d) Fish and Fish Habitat

The proposed development is located in close proximity to Indian River, a scheduled Atlantic salmon (*Salmo salar*) river with populations of brook trout (*Salvelinus fontinalis*). The river is a favorable salmon producing river in Central Newfoundland and extends more than 30 kilometers from the headwaters at Indian Pond to the river mouth in Halls Bay. All work done on the site will adhere to federal, provincial and local regulations and guidelines to ensure as little impact as possible on the river and the salmon population. I feel it prudent to mention the proponent is an avid fly fisherman and has spent many a morning, afternoon, and evening fly-fishing the waters of Indian River and thus selfishly respects and protects the sensitiveness of the Indian River ecosystem.

It has also been proposed by the proponent to implement the “Indian River Stewardship Fund” as part of a longer-term co-operative initiative with the municipality to enhance and protect fish and fish habitat throughout the entire Indian River watershed. Approximately 5% of all land sale revenues in RiverWood Estates will be donated to this worthy venture.

(e) Mammals, Furbearers, & Waterfowl

The proposed development is located in Moose Hunting Area 14 (Baie Verte); however, given the location of the project in the municipal boundaries of the Town of Springdale no hunting is permitted in the proximity of the development. The site is in close proximity to the Indian River, which has been known to have many species of waterfowl including an abundance of the common merganser (*mergus merganser*), black ducks (*Anas rubripes*), green-winged teals (*Anas crecca*), common goldeneye (*Bucephala clangula*), common pintail (*Anas acuta*), and even Canada geese (*Branta canadensis*). Several varieties of furbearers including beaver (*Castor canadensis*) and otter are sometimes present along the Indian River shoreline but no specific concentrations have been identified close to the development area.

(f) Human Activities

The proposed development site is close to the Indian River where use of canoe and kayak is relatively common. Motorized watercraft is rare due to shoal portions along the riverbed both above and below the proposed development site.

3.3 Construction and Operational Issues

3.3.1 Construction Time Frame

The developer plans to start work on the project in the summer-fall of 2006. The first phase of the project will involve a comprehensive consultation session with the municipal Authority to identify the obligations of the developer as it pertains to the required infrastructure upgrades and/or services to meet public municipal standards. Once the municipal standards are reasonably identified and agreed upon, a comprehensive development plan for RiverWood Estates will be submitted to the Municipal Authority for review pending an "Approval in Principle". The second phase will focus on required upgrade of the municipal services, lot surveying and subdivision, and landscaping, as well as modest cultivation of the property grounds. The commencement of this phase of 'physical' work will be heavily dependant on the overall support from the municipality and formal adoption of the pending 10-year Municipal Plan. Assuming the infrastructure works and services can be upgraded and implemented to acceptable municipal standards by the fall of 2006, a broad marketing and advertising campaign will be launched for full-scale lot sale and housing construction by spring 2007.

3.3.2 Potential Sources of Pollutants

There are numerous potential sources of pollutants during the construction phase of most projects. The pollutants likely to be encountered and thus require responsible monitoring include:

- silt and sediment
- possible dust
- very limited construction debris
- sewage from construction personnel
- risk of fuel, lubricant and hydraulic fluid spillage
- airborne emissions from construction equipment
- noise pollution

3.3.2.1 Mitigation Measures

(a) Silt and Sediment

Ground disturbance will be limited to modest excavation associated with installation of infrastructure requiring burial, like water and septic services. Minor upgrade to the access road, will also potentially result in silt and sediment discharge but should be limited. However, the

developers will ensure that any run off from construction areas will not be discharged directly into the river system. Where necessary, run off will be diverted to settling basins to ensure silt is settled out prior to the final release of the water and then silt screens will also be utilized.

(b) Dust

Only limited heavy construction equipment will be utilized during the periods of excavation and road upgrading so the creation of dust should be minimal. However, water will be utilized during activities that create excessive dust, if required. No chemicals or oils will be used to control dust.

(c) Construction Debris

Construction debris will be very limited in the earlier phases of this project but any debris will be temporarily placed in bins to be later disposed of off site at the approved municipal disposal site. Solid waste and garbage from any and all construction activities will be minimized. Materials will be collected on a regular basis and disposed of at an approved disposal site.

(d) Sewage

The sewage generated during construction activities will be collected using a portable toilet that will be cleaned by a licensed operator on a regular basis. No sewage will be released into the local ecosystem.

(e) Fluid Spillage

To minimize the risk of a fuel, lubricant or hydrocarbon release, the minor construction equipment utilized will not be refueled within the development area but rather at a community service station. If fuel storage is necessary, though very unlikely, it will only be done in approved containers.

(f) Airborne Emissions

Construction equipment will be required to have their exhaust systems maintained to provide emission releases that conform to the manufacturers and Canadian emission standard guidelines.

(g) Noise Pollution

Exhaust systems will be maintained to ensure that noise levels are within the design specifications for the equipment.

3.3.3 Resource Conflicts

Resource conflicts are expected to be minimal to nil.

(a) Vegetation

The developers will not cut any vegetation that is not necessary for the development. Any wood cut during the project will be salvaged for either logs or firewood. It is the intention to keep as much green space as possible on the site to maintain the natural serenity of the setting. Also following subdivision and lot sale, owners will be bounded by the specific Land Use policies enforced by the municipal Authority that clearly limits and monitors cultivation activities, especially the removal of large mature trees.

(b) Fish and Fish Habitat

A minimum 30.45-metre buffer will be maintained between any dwelling construction (footprint) and Indian River. This buffer, along with the other mitigation measures outlined in this document

and currently legislated by various government departments, will ensure that this project has no effect on the fish or fish habitat in Indian River.

(c) Mammals and Waterfowl

The development is anticipated to have no effect on the distribution of big game animals or furbearers. The construction at the site is not anticipated to have any negative effects on waterfowl populations. The Wildlife Department will be consulted to ensure the protection of any nesting birds or other waterfowl that may visit the site.

(d) Human Activities

A potential conflict was identified with members of the local population who presently use the site area for hiking and snowmobiling activities, therefore walking and snowmobiling trail reservations have been allocated as part of the 45 ft road right of way in the development plan. The proponent has already addressed the issue with community representatives and has tentatively agreed to incorporate walking and snowmobile trails in co-operation with the town. The shoreline of Indian River and/or public waterway access will not be affected by the project or construction activities.

3.4 Occupations

There will be a limited number of construction and landscaping jobs involved with the project development and cultivation. These construction jobs will be typical of small residential subdivision development, i.e. carpenters, framers, roofers, laborers, tradesmen, surveyors, equipment operators, landscapers, etc. Majority of the work services required will be contracted to local businesses suited to the construction and landscaping business. It is anticipated the construction phase of the project will employ 10-15 workers with construction backgrounds and experience for a period of 1-2 years.

3.5 Project Related Documents

The Property has been subject to recent (2003-2005) environmental “screening” by both provincial and federal government agencies as part of an approval process for the ongoing construction of a commercial inn at the site. For further details of these comprehensive studies and subsequent approvals please refer to the following files:

- **CEAA (Ref. No. 04-01-7179)** - CANADIAN ENVIRONMENTAL ASSESSMENT and APPROVAL - Environmental Services, Public Works and Government Services Canada
- **DFO (Ref. No. 3-05-084)** - MITIGATION MEASURES TO PROTECT FISH and/or FISH HABITAT – *Letter of Advice* - Department of Fisheries and Oceans, Oceans and Habitat Management

4.0 Approvals Required for Undertaking

4.1 Approvals Required by Department

The proposed project or components of the project may require some or all of the following approvals. The following section lists the issuing agencies and the permits, approvals or authorizations that may be required.

Minister, Environment and Conservation

Registration and Approval of an Undertaking

Water Resources Division, Department of Environment and Conservation

-Construction site drainage, Certificate of Approval

- Culvert installation, Certificate of Approval
- Groundwater well license (if municipal water service is not practical)

Engineering Services, Department of Government Services

- Approval under the National Building Code of Canada
- Approval under the National Fire Code of Canada

Operations Division, Department of Government Services

- Building accessibility design registration
- Fuel storage and handling

Department of Government Services – water and sewage plans

- Application to Develop Land, Septic Tank Design and Assessment, Certificate of Approval, Culvert installation, Certificate of Approval

Customer Services, Department of Government Services

- Approval to erect private signs
- Electrical permits

Forest Fire Protection Specialist, Forest Resources

- Permit to burn brush

Government of Newfoundland & Labrador Municipal Water, Sewer, and Roads Specification

Town of Springdale – Approve “Conceptual” Comprehensive Development plan and issue Approval in Principle for Development

- road upgrades, building permits, and Municipal water

Department of Fisheries and Oceans, Oceans and Habitat Management

- Mitigation Measures to Protect Fish and/or Fish Habitat – Consultation and Letter of Advice

5.0 Schedule

The developer hopes to start work on the property in September 2006 pending Approval for the Undertaking and all other required municipal approvals.

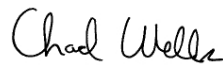
6.0 Project Funding

This project is currently being privately funded. An estimate of the capital costs required for the infrastructure upgrade and delivery to the property to ensure final Municipal approval for the subdivision of land for sale is ~\$100,000.

7.0 Signature

February 24, 2006

Date



Signature of Proponent