



COUNTY OF BARRHEAD NO. 11

Province of Alberta

BY-LAW NO. 7-2016

Lake Point Resort Area Structure Plan

Page 1 of 1

A By-law of the County of Barrhead No. 11, in the province of Alberta, for the purpose of repealing Bylaw 5-2013 and adopting the Lake Point Resort Area Structure Plan

WHEREAS the Municipal Government Act, being Chapter M-26 of the Revised Statutes of Alberta, 2000, as amended, authorizes a municipality to adopt an Area Structure Plan; and

WHEREAS a new Area Structure Plan has been prepared for Lot 3, Block 1, Plan 112 4641 within the NE 26-57-3-W5, based on public input and studies of land use, development and other relevant data; and

WHEREAS the aforesaid Area Structure Plan describes the way in which the future development of Lot 3, Block 1, Plan 112 4641 within the County of Barrhead No. 11 may be carried out in an orderly and economic manner.

NOW THEREFORE the Council of the County of Barrhead No. 11, duly assembled, and pursuant to the authority conferred upon it by the Municipal Government Act R.S.A. 2000, c. M-26 as amended, enacts as follows:

1. THAT this new Bylaw may be cited as "The Lake Point Resort Area Structure Plan" bylaw.
2. THAT the text and maps attached hereto as Schedule "A" be adopted as the Lake Point Resort Area Structure Plan.
3. Bylaw 5-2013, as amended, being the previous Vandoo Area Structure Plan of the County of Barrhead No. 11, is hereby repealed.
4. THAT this Bylaw may be amended by Bylaw in accordance with the Municipal Government Act R.S.A. 2000, c. M-26, as amended.
5. THE invalidity of any section, clause, sentence, or provision of this bylaw shall not affect the validity of any other part of this bylaw, which can be given effect with such invalid part or parts.
6. This by-law comes into force upon third and final reading and signing in accordance with the Municipal Government Act.

FIRST READING GIVEN the 6th day of December, 2016.

SECOND READING GIVEN the 7th day of March, 2017.

THIRD READING GIVEN the 7th day of March, 2017.


Reeve

Seal


County Manager

ADVERTISED in the Barrhead Leader on:

February 7, 2017, and

February 14, 2017.

PUBLIC HEARING held on February 22, 2017.



November 25, 2016

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1. INTRODUCTION

1.1 Purpose of the Area Structure Plan

This Area Structure Plan (ASP) has been prepared on behalf of the landowner. The purpose of this plan is to provide a framework for the development of a Bareland Condominium Residential Recreation Resort located within the County of Barrhead No. 11, legal address Plan 1124641, Block 1, Lot 3, all within sec. 26-57-3-W5. The plan embraces various environmentally conservative design aspects to be in harmony with Lac La Nonne and the neighbouring lands.

1.2 Location of Subject Land

This land parcel of 23.53 Ha. (58.14 Acres), consisting mostly treed land, and is registered as Plan 1124641, Block 1, Lot 3 (certificate of title 112-310-219) all within sec. 26-57-3-W5

The subject land is located approximately 2.4 km south of Hwy. 651, on the west side of Range Road 31, abutting the east shore Lac La Nonne as shown in Figure 1.

To the west of the property is Lac La Nonne, where other existing urban, institutional, commercial and residential recreational properties also abut onto the lake.

To the north is the existing long established Elks Beach Campground, a commercial recreational development.

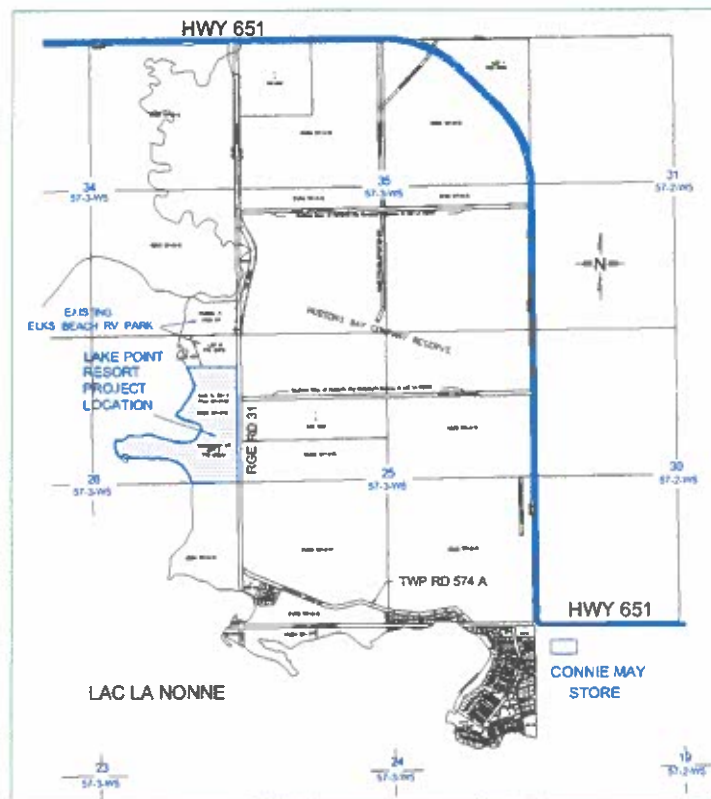


FIG. 1 - LOCATION PLAN

To the east, the lands remain undeveloped, mostly treed and presently zoned under the Rural Conservation District.

To the south, the land is mostly treed. There is an existing residence approximately 450m from the common property line, and is presently zoned commercial recreational development.

1.3 Policy Context

The Lake Point Resort ASP has been prepared in accordance with the statutory requirements of the Municipal Government Act, and to respect the vision and intent of Lac La Nonne Intermunicipal Development Plan (IDP). Lake Point Resort follows the vision and policies set forth within the Intermunicipal Development Plan Bylaw No. 7-2001, however the proposed change to the Lake Point Resort ASP from a rental to ownership model will trigger an amendment to the Lac La Nonne IDP to reflect the land use change from Commercial Recreation Zone to Residential Recreation Zone.

The MDP is the County's principal guiding policy document which encourages diversification of the local economy while encouraging sustainable growth. The MDP supports the preservation of significant environmental, recreational and historical areas while encouraging different land uses and development alternatives in order to ensure that the existing community and future generations have a desirable place to live, work and enjoy leisurely activities. The development objectives of Lake Point Resort have been aligned with those of the Municipal Development Plan and the Intermunicipal Development Plan.

1.4 Neighbourhood Development Context

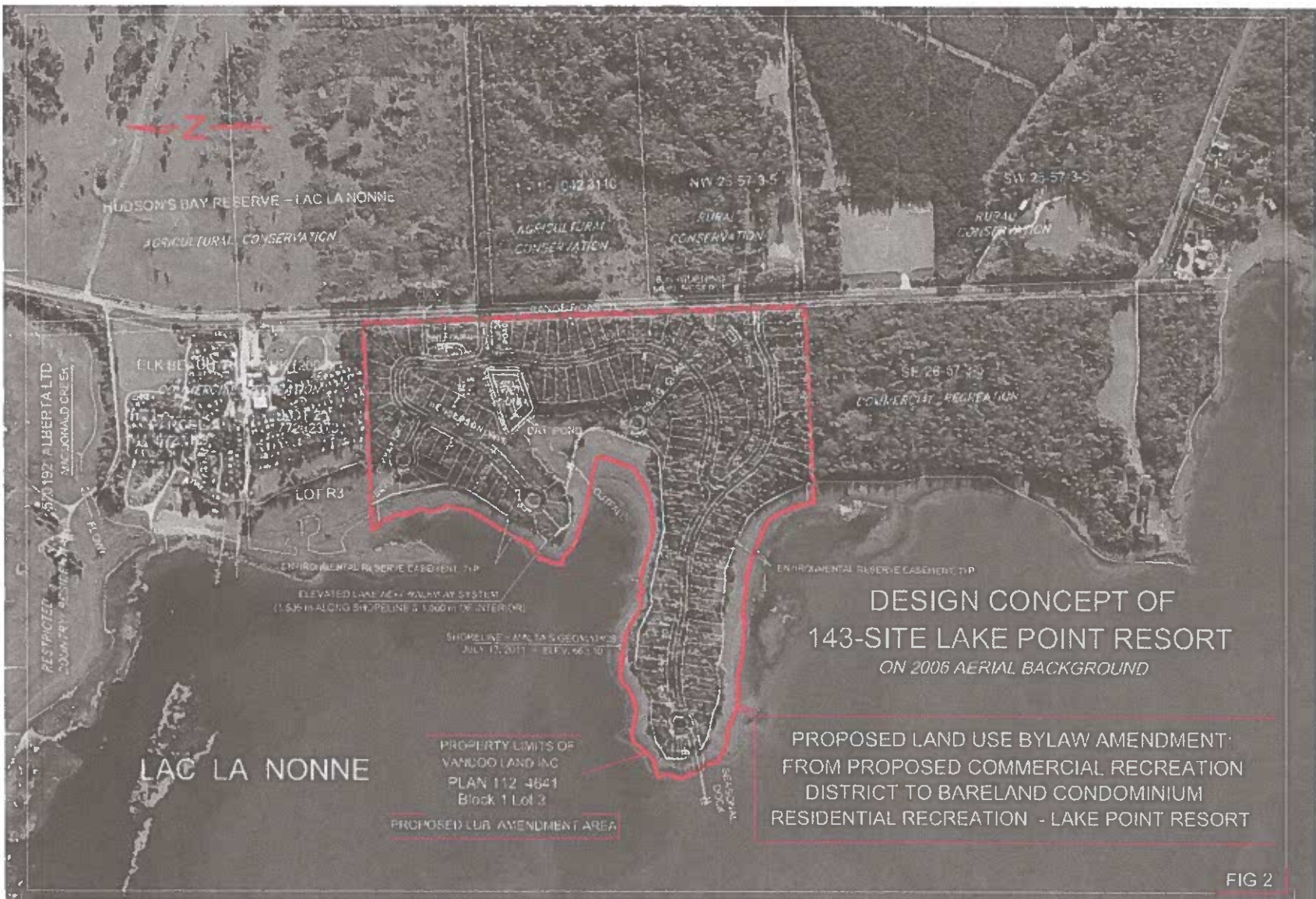
The parcel is presently zoned under the County of Barrhead's Land Use By-law No. 5-2010 under the Commercial Recreation District (C-RC). To allow the ownership model of the resort, the subject site will be redistricted from (C-RC) Commercial Recreation District to site specific Bareland Condominium Residential Recreation District. At present, there is a very high demand for RV Recreational opportunities in the Lac La Nonne area. Existing RV parks operators around the lake have long lists of customers waiting for seasonal lots.

SEE FIG. 2 ~ Design Concept with Neighbourhood Air Photo

2. PLAN OBJECTIVE

2.1 Overview

The development objective of the Lake Point Resort is to be compatible with the surrounding natural environment, to be developed with the existing contours of the land, while preserving the natural shoreline of Lac La Nonne with appropriate environmental setbacks. The goal is to minimize the impact of human activity and development on the natural environment. The intention is to limit clearing areas for RV sites and to preserve natural trees. The development is designed to attract clients that would seek quiet and secluded RV site opportunities. This will be complimented by long walks along the shoreline for the enjoyment of a continuous view of the lake, while providing wildlife viewing opportunities along their walks. To that end, the Lake Point Resort has incorporated environmentally friendly design features.



2.2 Riparian Zone Protection

Lake Point Resort plans to construct a continuously raised gravelled footpath along the entire 1.54 km of shoreline as a physical separation from the development's campsites to the riparian zone. The raised footpath is proposed to follow the existing natural ridge where present and will assist in the separation and protection and the lake's bed and shore. The elevated footpath shall also help provide the users an uninterrupted view of the lake, minimizing the obstructions by the late summer's tall vegetation. Interpretive signage will be placed along the footpath to educate users about the surrounding lake, wildlife and vegetation.

The environment reserve easement follows the guidelines of the *Public Lands Act*, and also the *Stepping Back from the Water (2012)* principles and the management practices guide for new development near water bodies in Alberta, as published by *Alberta Environment and Water*. The mooring and/or dragging of boats, or other water crafts across the protected riparian zone or the use of ATV's within said zone will be strictly prohibited and signed accordingly. Permanent or temporary docks, unless installed and maintained by Lake Point Resort, will be strictly prohibited.

SEE FIG. 3 ~ Overall Site Plan

3. SITE CONDITION

3.1 Topography

The majority of the plan area's topography has a rolling terrain along ridges paralleling the lake's shoreline. The terrain is mostly forest which covers approximately three quarters of the plan area, with the exception of the low lying central portion of the parcel surrounding a small bay. The forested site area consists of mainly poplar and aspen, with a small amount of birch and alder. Willows are almost continuous along the 1.54 km of shoreline.

The general drainage direction of the plan area is to the low lying area or directly to Lac La Nonne. From the existing roadway culvert under Range Road 31 to the central low lying area, there is a mostly undefined drainage watercourse.

3.2 Soil and Landform

The soil composition generally consists of clay till with layers of silt, clay, sand and/or sand & gravel, all covered with surficial topsoil of depth mostly in the 50 to 250mm range, but up to 460mm in the low lying area of test hole # 9. All test holes, 5.3m to 5.75m in depth, were dry on completion, except for moisture found in test holes # 1 & 2, located on the SW peninsula of the land.

According to the Phase 1 Environmental Site Assessment, there is no historical or visible evidence indicating the site has been impacted by contaminants above the generally accepted levels associated with land uses of this nature.

(See Appendix I for the Soils Report details prepared by Shelby Engineering Ltd. and Appendix IV for the Phase 1 Environmental Site Assessment by Thurber Engineering Ltd.)

The rolling terrain provides adequate drainage for most of the development, with the exception of the northeast area where water enters the site from the catchment area (east of Range Road No. 31) of about 47 Ha. (115 Acres). This area will be provided with adequate drainage ditches, culverts and imported fill as necessary to keep the area well drained.

3.3 Regional Vegetation Diversity

An abundance and diversity in plant species have been identified within the area, as published in the Final Report - Riparian Health Summary, Lac La Nonne, December 2010, by Alberta Riparian Habitat Management Society.

29 species of grass and grass-like plants and 91 species of broad leaved plants (forbs) 68% (82 species) are the non-woody plants recorded as native plants. Native plants provide riparian functions including deep, binding root mass and summer and winter habitat for livestock and wildlife.

Two plants with poisonous properties, common horsetail (*Equisetum arvense*) and water hemlock (*Cicuta maculate*) were recorded in the project area, but in very limited quantity.

3.4 Hydrology

According to the County's Groundwater Potential Evaluation report, prepared in September 1998 by Hydrogeological Consultants Ltd, (Page 5) the probable long term yields of water wells in the majority of the County are expected to be in the order of 30 and 150 cubic metres per day (m³/day).

This site can expect an apparent transmissivity of up to 4 m³/day, and a safe yield in the order of 50 to 300m³/day. Hagstrom Geotechnical Services Ltd. has performed a Groundwater Supply Evaluation and analyzed the results of the 48-hr drawdown and recovery tests in accordance with *Alberta Environment and Sustainable Resource Development* guidelines. Results of the water well drilling have been filled to the Alberta Environment, Groundwater Information Centre and demonstrated that the aquifer can be pumped safely at a rate of 76m³ per day, or 27,000m³/year.

The Groundwater Supply Evaluation Report, prepared by Hagstrom Geotechnical Services Ltd., was previously submitted in August, 2011.

3.5 Wildlife and Fish

White-tailed deer are frequently seen in the area, but mule deer have also been seen on the subject land, along with the occasional moose sighting.

The 1.54 km shoreline consisting of a tall grass is home to a wide variety of birds, including Lesser Scaup, Redheads, White-winged Scoters, Common Goldeneye, Blue-winged Teal, Mallard, Western Grebes, gulls and Common Loons (Ducks Unltd). The lake is also home to American white pelicans during the summer months, as well as Eagles and great horned owls (Wyton 2011)

The lakeshore marshland is also home to a wide variety of lake shore mammal, including beaver, and muskrat. Seven species of fish have been reported in Lac La Nonne, including white fish, walleye, northern pike, yellow perch, cisco, turbot and white sucker. (Mitchell and Prepas, 1990)

3.6 Historical Archaeology Investigation

An archaeological research permit was issued by Alberta Culture (Permit: 2011-190) for the purpose of locating, recovering, analyzing and interpreting archaeological resources found on the site.

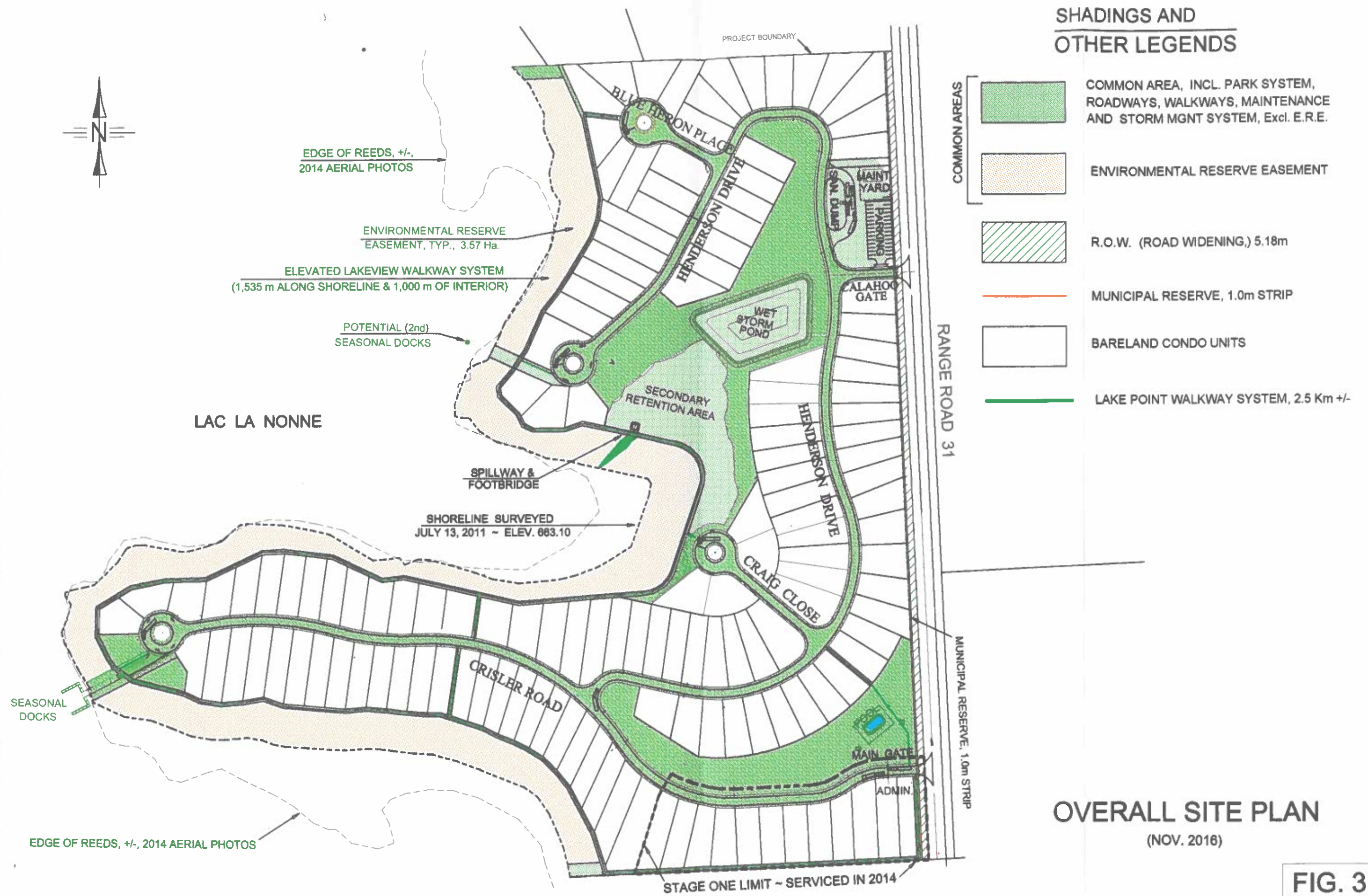
A stage 1 archaeological investigation was performed by Treetime Services Inc. between April and July, 2011. The excavation consisted of 47 m² at various locations along the south west peninsula of the property, in most part mostly along its south shore. Thousands of artifacts, mainly fire cracked rock, were recovered, analyzed and recorded.

A stage 2 archaeological investigation was excavated and performed between August and October of 2011. A total, about 80m² were excavated, and 13,486 artifacts were recovered, analyzed and recorded. The excavation results suggest that this very site was likely occupied by migrating native bands 3,000, to 5,000 years ago, and even as early as 10,000 years ago (page 67 of the Mitigation Excavation Results).

Evidence of more recent history include recovery of complete horse humerus, metal shears, ferrous metal, one square nail, all associated with the fur trade activities, Oblate missionaries, Metis people, gold prospectors and later homesteading immigrants.

See Final Report, 2011 Mitigation Excavation Results, Permit 2011-190, by Christie Grekul, MA, by Treeline Service Inc. previously submitted in August, 2011. See also Appendix II: Historical Resource Act Clearance Letter.





Today's forestation state would suggest that the area was commercially logged in the 1960s" or 1970s' era, and the land left unoccupied since.



Photo of archaeological excavations – May 15, 2012

4. THE DEVELOPMENT CONCEPT

4.1 Development Objective

The primary objective of the Lake Point Resort Area Structure Plan is to allow for the development of a condominium recreational vehicle resort that retains as much of the existing forest as possible, by applying conservation design principles. The ownership model will provide The County of Barrhead with stable seasonal residents who will have a stake in preserving the quality of the natural environment.

Each developed RV site will retain as much existing vegetation as possible, with approximately 50% of each site developed and 50% to remain covered by vegetation. This means that a significant portion of forest and land will remain undisturbed, thereby protecting an important wildlife habitat for the enjoyment of users and for future generations. The design incorporates and recognizes the topography contours of the Plan area. Disturbance of the existing landscapes will be minimized as much as possible.

The Environment Reserve Easement protects the bed and shores of Lac La Nonne in accordance with provincial requirements. Construction of the raised gravel footpath along the outside of the reserve provides a physical separation of the development limits. The provision of clear defined pathways often allows for the best monitoring of unauthorized or illegal activities within the reserve easement. Evidence of past and present ATV use within the bed and shores of Lac La Nonne exist. Through public awareness and provision for safe, enjoyable wildlife and lake viewing areas, protection of lake bed and shores achieves the vision of sustainable recreation development. As noted above, interpretive signage will be placed along the footpath to educate users about the surrounding lake, wildlife and vegetation.

4.2 Land Use

The land use proposes to create 143 recreational vehicle lots ranging in size from approximately between 697 to 930m² (7,500 to 10,000 square feet), with only approximately 50% of each lot to be developed, and approximately 50% of each lot to remain covered in vegetation. If vegetation is removed in the development of the lot, it will be replanted within a year of completion of the required infrastructure. The requirement for each lot to provide approximately 50% vegetative cover will be implemented through the registration of a restrictive covenant which identifies a clearing pocket of approximately 50% on each lot.

Recreational uses (swimming pool, footpaths, and toddler park), and Public Utilities (sani dump station area and storm pond) will serve residents of the development. Common areas include provisions of comfort stations (washrooms), on-site recreational amenities such as: swimming pool, horseshoe pits, sand volleyball courts, toddler play areas, picnic tables and guest tenting areas. To ensure adequate parking is provided for seasonal residents and visitors, two parking spaces will be required per bareland condominium lot unit, and approximately 30 overflow visitor/boat parking spots will be provided in the Maintenance Area.

The land within the Environmental Reserve Easement is to be separated from the campsites and common areas with a continuous lakeshore 'promenade' walkway. The Environmental Reserve Easement will be signed as *Environmentally Sensitive Area, Please Keep Out*. The nature of the easement will be in accordance to Section 32 (1) and (2) of the Alberta Land Stewardship Act.

No ATV or dragging of boats will be permitted in the Environmental Reserve Easement area.

Table 1 provides a summary of the land use breakdown proposed by the Lake Point Recreation Resort Development Concept.

Table 1 – Land Use Area Breakdown

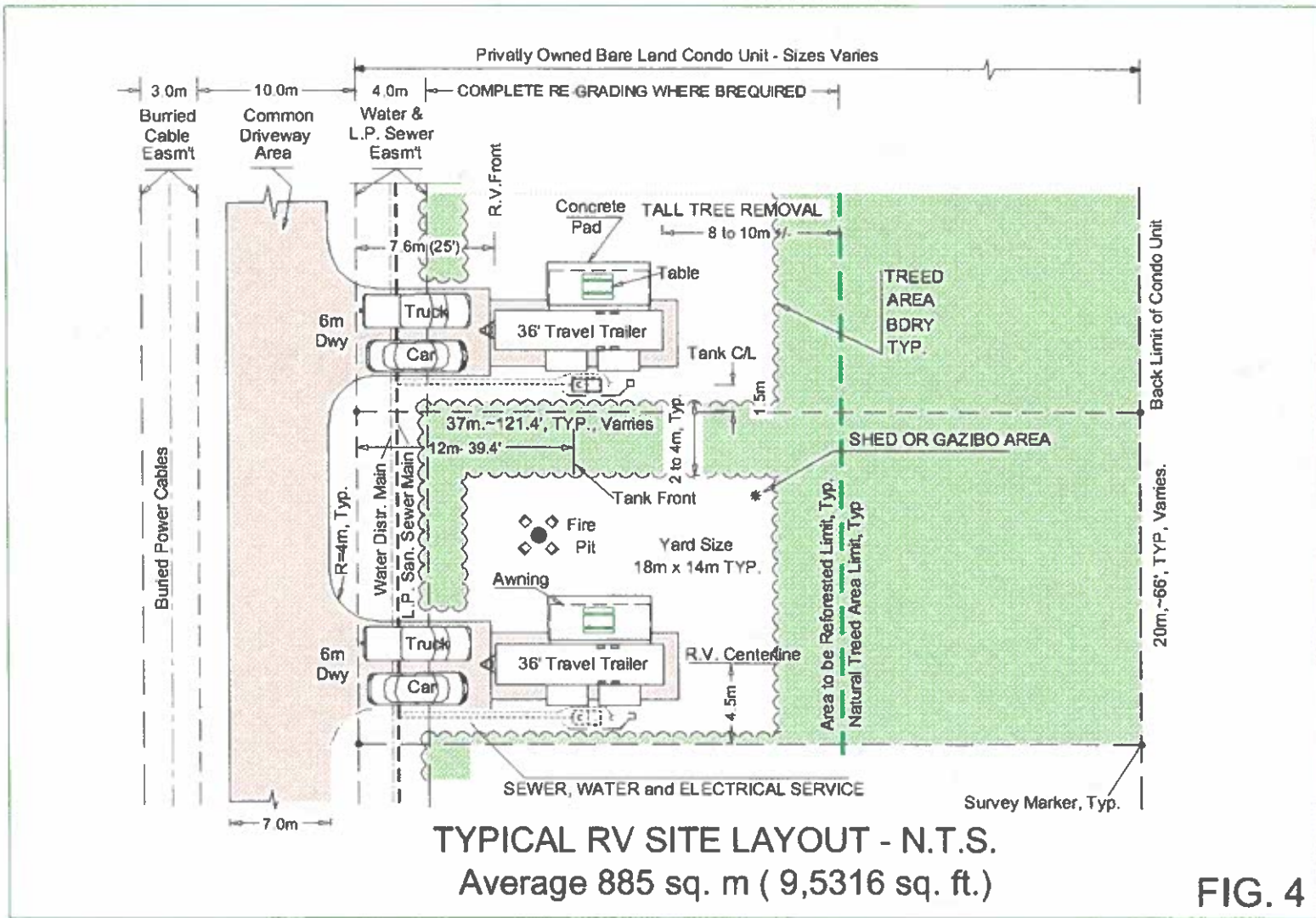
	Hectares	(Acres)	%
Gross Area (Legal Plan # 1124641)	23.53	58.14	100.00
Environmental Reserve Easement	3.57	8.82	15.17
Gross Developable Area	19.96	49.32	84.83
Road R.O.W. widening	0.33	0.82	1.40
Municipal Reserve	0.06	0.15	0.003
Common Area	7.00	17.30	29.75
Area of 143 Condominium Units	12.57	31.06	53.68

* The remaining Municipal Reserve balance is to be provided as cash in lieu to the County of Barrhead.

4.3 Large treed sites

The 143 units are between 609 to 1882m² (6,555 to 20,258 sq. ft.) in size, averaging 885m² (9,531 sq. ft.) per unit, with only approximately 50% of each unit to be developed, and approximately 50% of each unit to remain covered in vegetation. If vegetation is removed in the development of any unit that may require major regrading, it will be replanted within a year of completion of the required infrastructure. The requirement for each lot to provide approximately 50% vegetative cover will be implemented through the registration of a restrictive covenant which identifies a clearing pocket of approximately 50% on each lot.

To avoid the likelihood of older trees falling on RV's, some treed area will be cleared and replanted with young trees and shrubs to create a buffer between sites. Approximately half of the development will be left in its natural state.



5. SERVICES

5.1 Stormwater Drainage

In general, the RV resort development allows for minimal changes to topography and drainage patterns to the area. The site has 6 catchment areas as shown on figure 5

Area 1 ~ The southerly catchment area directs existing drainage from peninsula directly to Lac La Nonne or to the adjacent south parcel, as per pre-development.

Area 2 ~ The north portion of the peninsula's surface run-off discharging northerly into Lac La Nonne.

Area 3 ~ This central catchment area directs existing run-off from portions of Range Road 31 and approximately 47 ha (115 acres) of undeveloped lands east of Range Road 31 through a mostly undefined drainage course to the proposed storm water management facility. Within the proposed development, drainage will be conveyed to the proposed storm water management facility by ditches and overland from the natural contours. This facility is proposed to be constructed with two containment areas as is illustrated in Figure 5 and will be approximately 1.05 ha in size. This concept takes advantage of the existing low lying area to create primary and secondary storm water management containment areas.

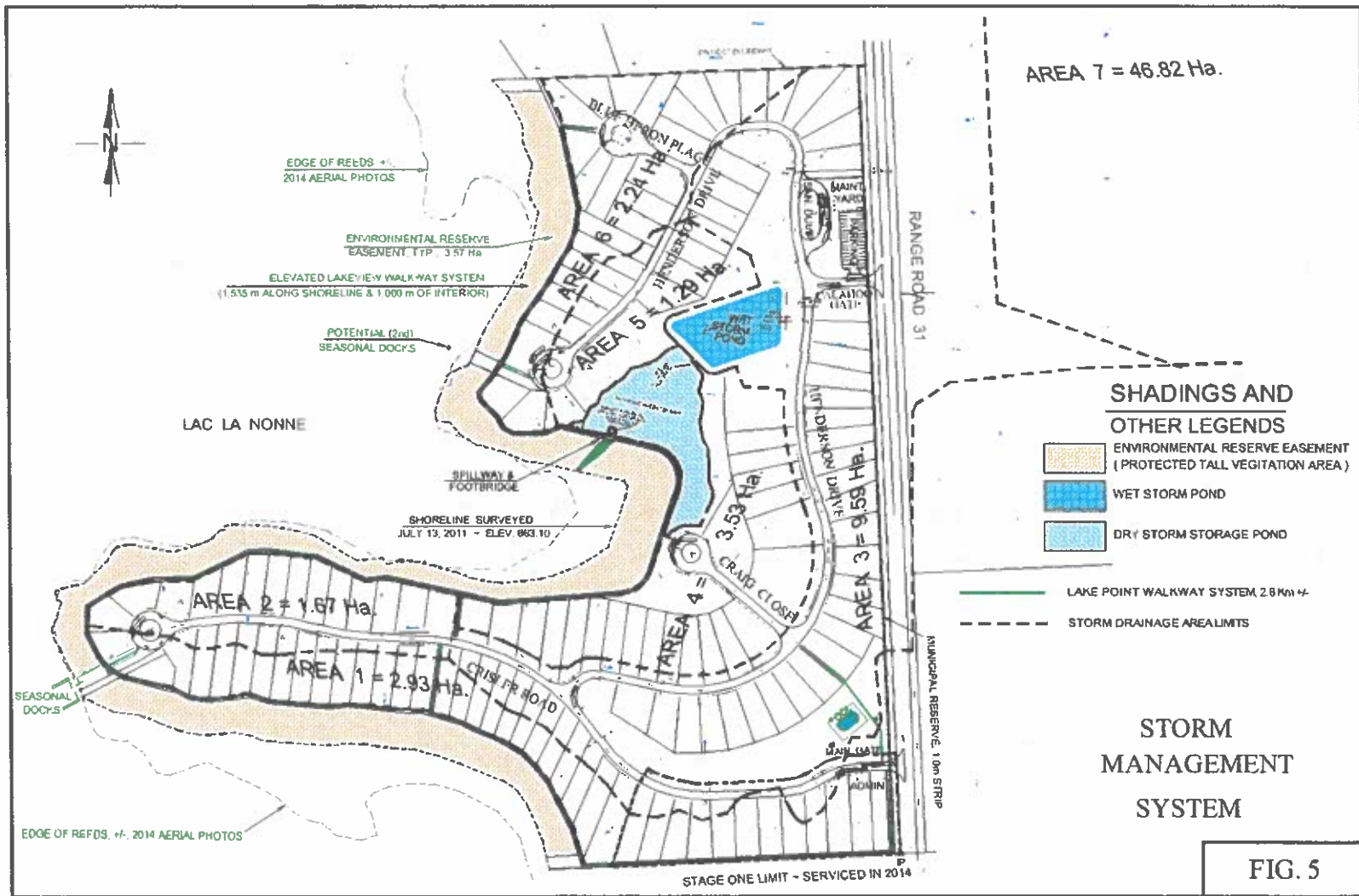
Area 4 ~ This west central portion area directs drainage to the proposed storm water management facility by ditches or overland from the natural contours.

Area 5 ~ This northeast catchment area also directs drainage to the proposed storm water management facility by ditches or overland from the natural contours.

Area 6 ~ This northwest catchment area directs existing drainage directly to Lac La Nonne or to the adjacent north parcel, mostly as pre-development.

Due to the topographic features and preserving the pre-development conditions, portions of basin areas 1, 2 & 6 will drain towards Lac La Nonne and not into the Storm Water Management Facilities. The naturally vegetated buffer strips of land with low slopes and runoff velocities from the rear of the proposed R.V. lots clearing will provide conventional pollutant removal through detention, filtration by vegetation and infiltration. The proposed construction of the walking trail paralleling the shoreline of Lac La Nonne will further assist at reducing runoff velocities for natural vegetation pollutant removal and will include culvert crossing under the walking trail at existing natural topographic low points. Culverts will be constructed with proper end treatments to eliminate point source erosion.

The retention of the proposed storm water management facility of the off-site area will offset the small basin areas of the development impractical to retain. The storm flow from those small areas will still be retained and filtered through vegetation and a large riparian zone prior to reaching the lake water.



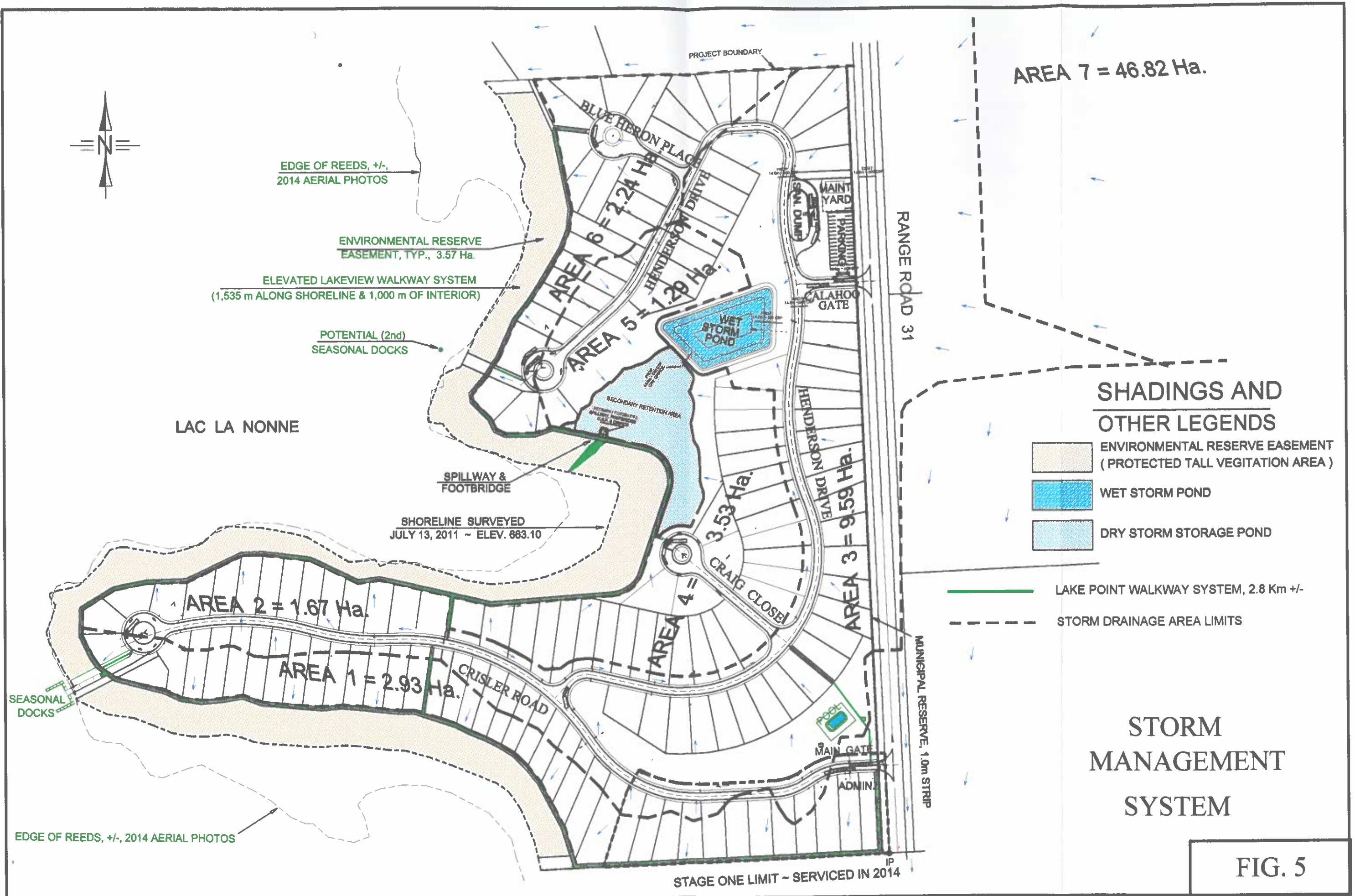


FIG. 5

5.2 Water Supply

Water supply to the RV Resort is proposed to be from on-site water wells and supply lines. Two water wells have been drilled under the direction of Hagstrom Geotechnical Services Ltd. A Production Well (No. 1) and an Observation Well (N. 2) were constructed at the SE area of the property, each at depths of 45m., with perforated casings from 40 to 45m for the production well and 39 to 45m for the observation well.

Hagstrom Geotechnical Services Ltd. analyzed the results of the 48-hr drawdown and recovery tests and calculated that the aquifer can be pumped safely at a rate of 76m³ (16,720 l.G.) per day, or 27,740m³ (6.10 million l.G.) per year. As a result of the well water analyses, we anticipate to supply the entire development directly from production well No. 1

A second production well could eventually be added in the north section of the development, if required. All water and sewer piping are will be buried to a full 3.0m cover. *See Hagstrom Geotechnical Services Ltd. Report, previously submitted in August, 2011.*

The RV Resort potable water system will be initially served by a single water well ~ and a water distributed network with water servicing to each site. The lines of water distribution mains and the sanitary sewer main will both be Heavy Duty Polyethylene (HDPE) fused pipes installed in a common trench, to minimize tree clearing requirement along the roadway.

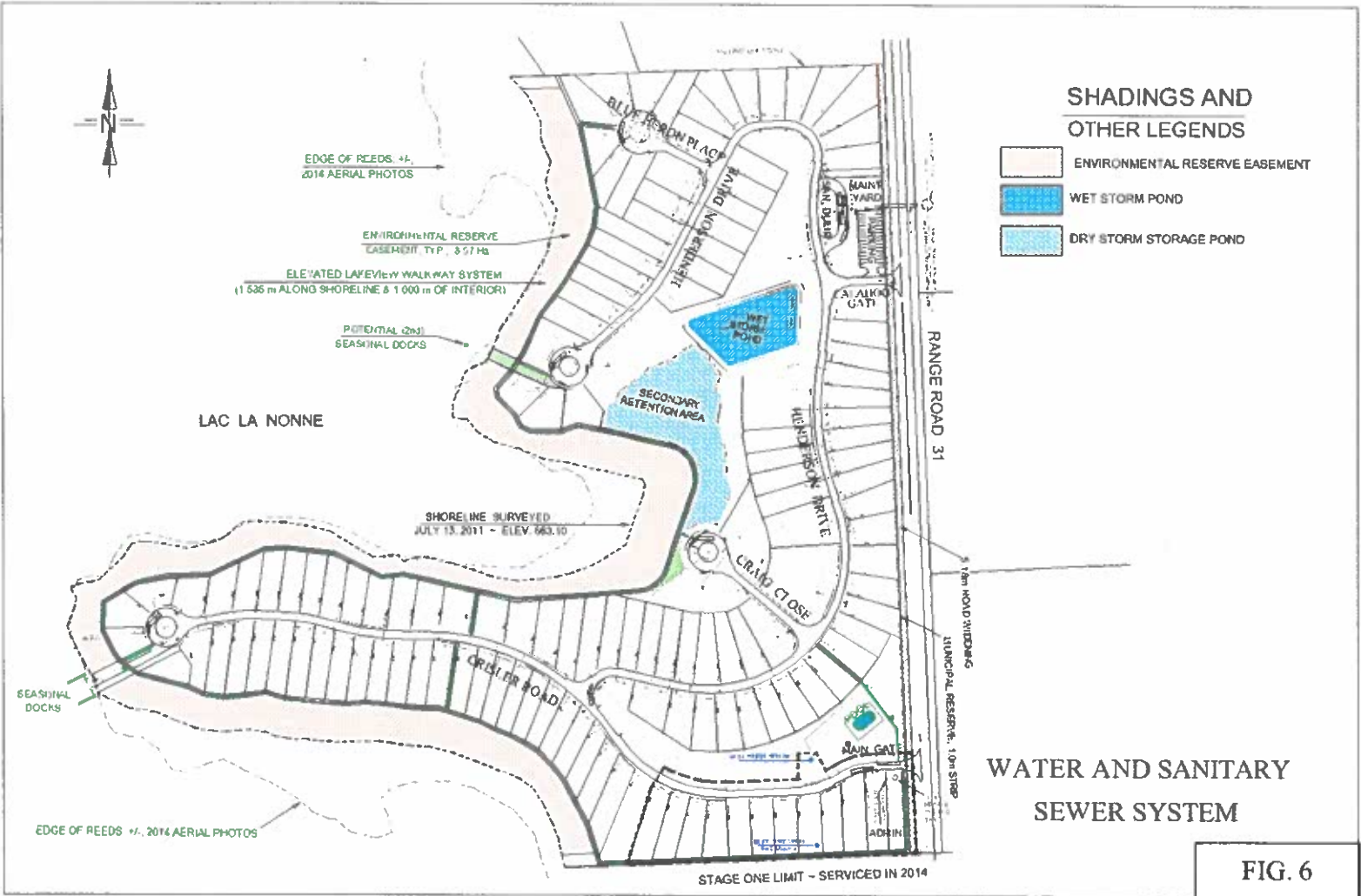
5.3 Sanitary Water System

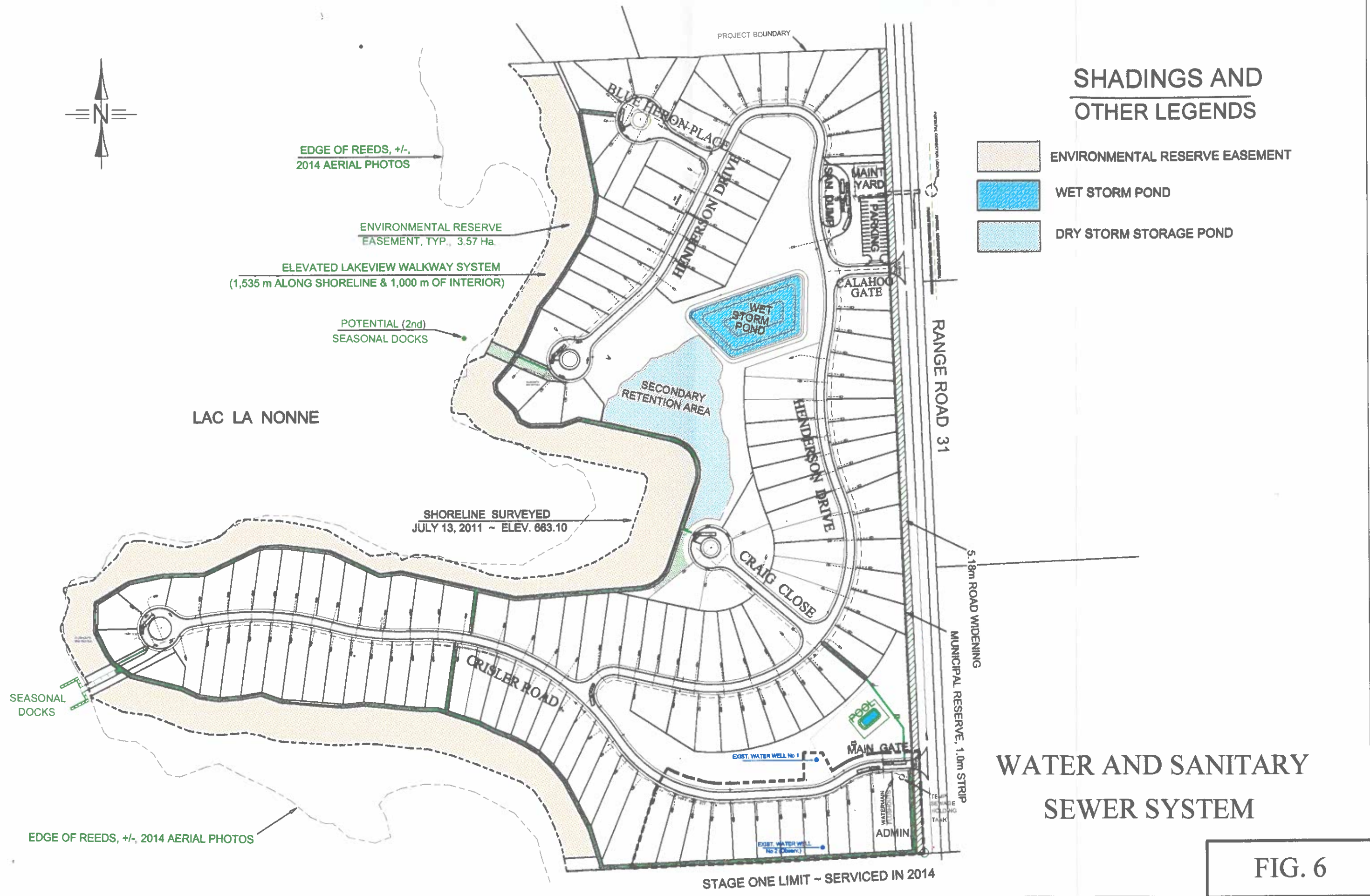
The RV Resort proposes to install an on-site private low pressure sewage collection system. The system is designed to incorporate individual septic tanks installed within each unit and comfort station, and to be connected via a low pressure sewer. Settled sewage effluent will be pumped from the individual septic tanks to a centralized collection tank just west of Range Road 31. The central collector sewage tank will be approximately 300m from the lake, and close to the proposed location of the future regional sewer collection system.

In an effort to protect Lac La Nonne's water quality, Lac Ste. Anne County, the County of Barrhead No.11, the Summer Village of Beach Cove, and Nakamun Park have recently completed a Sanitary Sewage Collection and Water Transmission Study. Lake Point Resort is a strong supporter of a proposed regional sewer and water system, thereby preventing a significant portion of the nutrient load from entering the lake.

In the interim, until the regional Sanitary Sewage Collection is constructed along Range Rd. 31 to service this development area, a centralized sewage collection tank will be pumped out and truck hauled for proper treatment and disposal. Lake Point Resort's design of the private Low Pressure Sanitary Sewer System will be fully compatible to pump into the future regional system when available.

The main sewage tank will be pumped out as required and hauled to the recently built regional lagoon, approximately 3 km west of the lake, for proper wastewater treatment and disposal.





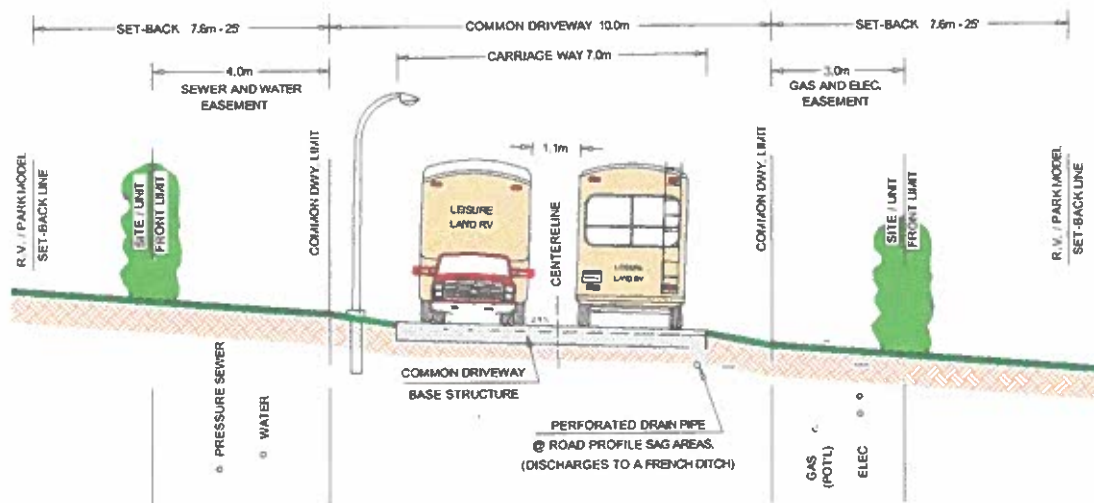
In an endeavour to avoid the possibility of individual sewage tank accidental overflow, Lake Point Resort will provide a sewage tank alarm system at each site. The central collector tank will also alarm the haul truck operator by phone, with an auto-dial system.

Pumping of sewage effluent to a central sewage collector tank will be through Heavy Duty Polyethylene pipes, thereby greatly minimizing line break possibilities.

SEE FIG. 6 ~ Water and Sanitary Sewer Concept

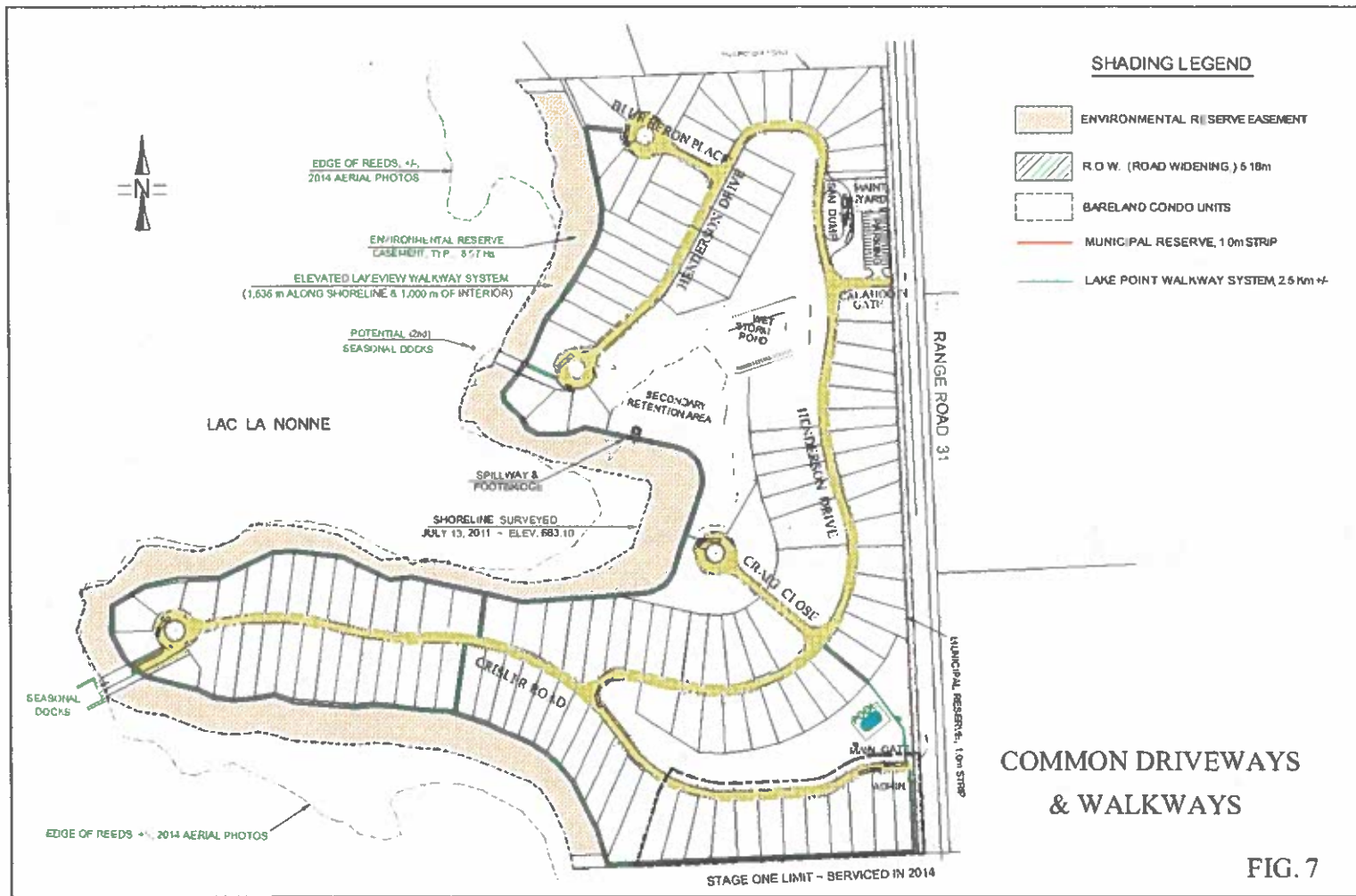
5.4 Transportation

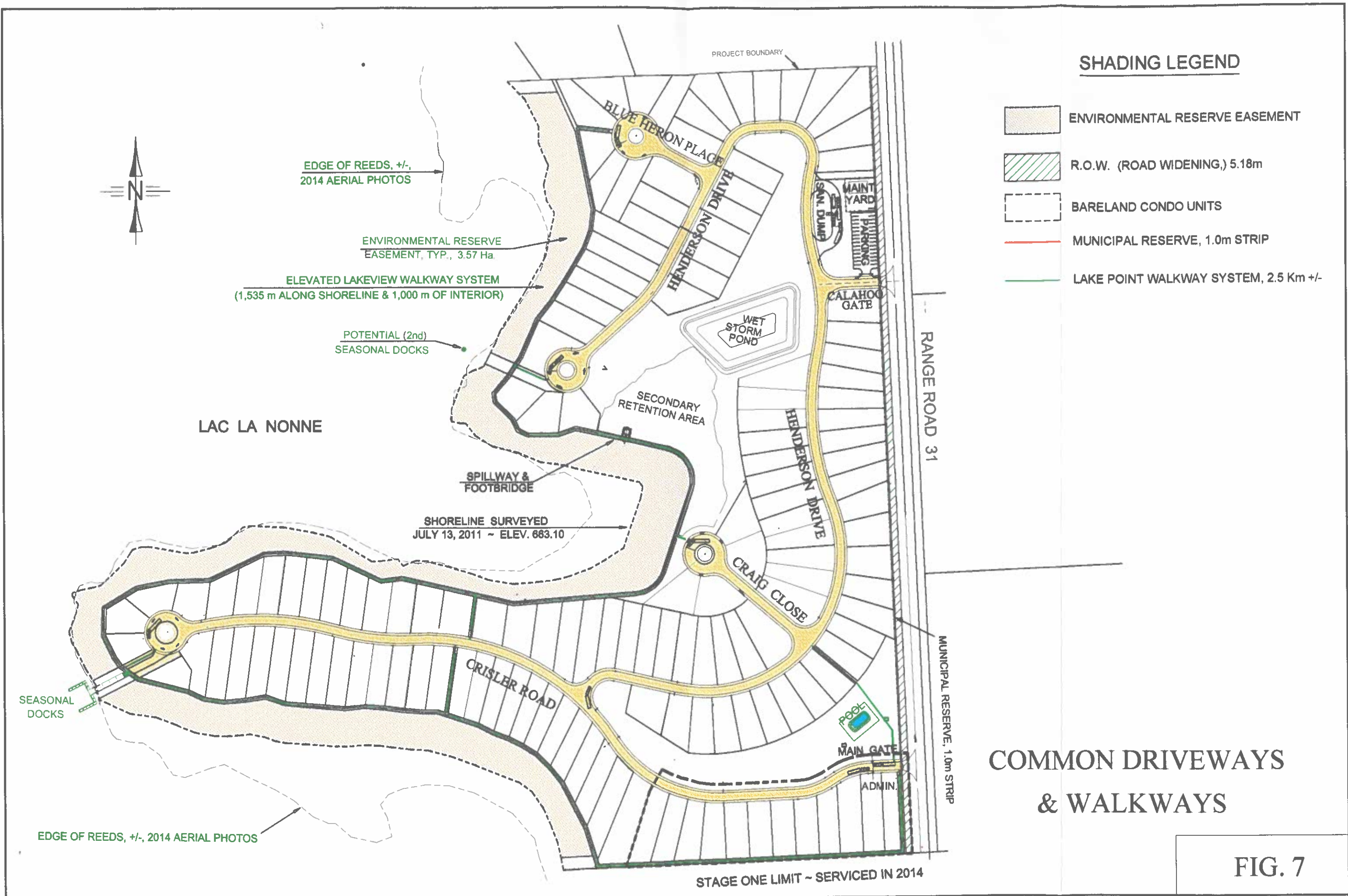
Two existing accesses to the internal road network will be improved from the west side of Range Road 31. Also, 5.0m road widening along the west side of Range Rd. 31 has been dedicated, as per County requirements. The internal road system will consist of 7.0m wide gravel top. The gravel road could ultimately be paved during the lifespan of this finished development, to provide dust control and reduce maintenance. The four road end cul-de-sacs will be provided with 18-m turning radii, which is suitable for larger RV's and for accommodating emergency vehicles. Roadway and trail lighting will be provided, for security and pedestrian safety.



TYPICAL CROSS-FALL CROSS SECTION
FOR CROSS SLOPE (MOST COMMON) AREAS

SEE FIG. 7 ~ Internal Roadways and Walkways





5.5 Shallow Utilities and Lightning

Power and telephone utilities exist along Range Rd. 31 adjacent to the site, and accordingly these services will be extended where required.

Buried cables will supply power to individual sites. Telephone and cable TV is not anticipated to be in demand, as popularity to wireless technologies is ever increasing. Seasonal RV Resort telephone and cable TV will not be installed to individual sites.

Ample lighting standards will be provided at each entrance in accordance with sec. 7.12 of the Land Use Bylaw, with adequate spacing along roadways and adjacent to washrooms, as per applicable electrical code.

6. AMENITIES

The development will have the following amenities:

6.1 Foot paths

The major development attraction will be a 1.54 km of gravel footpath along the shoreline, elevated enough to afford a good view of the lake over the tall grass and to enjoy bird watching and the occasional spotting of wildlife. An additional 1 km of internal path will connect the shoreline path to all parts of the development.

6.2 Swimming Pool

An outdoor swimming pool has been incorporated into the park amenity design, at the southeast portion of the development. The nearby washroom will also be used as a change house and will include a pool maintenance mechanical room.

6.3 Comfort Stations without laundry facilities

The development includes 3 separate comfort stations (washrooms), located as shown on the overall plan (Figure No. 2), and includes showers.

Laundry facilities are deliberately excluded from this development, thereby eliminating probable phosphorous from laundry soap to add nutrient load to the nearby water bodies, via the regional lagoon. The resort owners will likely to do most of their laundry at their full-time residences.

6.4 Storm Pond

Storm water 'wet' pond will incorporate a floating fountain, for aeration and esthetics.

6.5 Firefighting water storage

The storm pond will also include a fire truck filling hydrant and will serve as a water storage facility to fight fire in the development and the neighbourhood.

6.6 Seasonal boat docking and potential permanent boat launch

Once approved by the Province there will be two floating communal seasonal boat docks installed in the lake at the beginning of each camping season and removed every fall, for the park patron's use.

6.7 Gathering area

A gathering area will be provided within the administration office area, with a few tables and chairs and some coffee pots or machine, for resort patrons to socialize.

In support of existing local business the Lake Point Resort will have no commercial developments.

6.8 Other Park amenities

Other amenities will include Toddler Play Areas with swings, slides and sand boxes, Beach Volley Ball Courts, Horseshoe Pitches and various extra picnic tables for leisure and relaxation.

7. DEVELOPMENT, IMPLEMENTATION & CONSTRUCTION STAGING

The timing of various phases of this 143-site RV Park project is totally dependent on the market demand, which in turn will vary in accordance with the local and Canadian economies. Realistically, the project completion is anticipated to be 10 years, as describe below with possible staging.

Stage 1 – (2014 – 2015)

Develop 12 'demo sites' to be services with a generator and a few individual sewage holding tanks.

Clear the road R.O.W. and build a 'temporary' narrow access road to the *pre-marked sites* of the entire development.

Stage 2

Develop another 13 sites (approximately), c/w some piping – sewage to be hauled from each site at this stage.

Construct the wet pond portion of the storm management pond & fire truck fill station.

Construct first comfort station, small maintenance building.

Construct the main internal driveway to access the 13 more sites.

Comfort station (communal washroom) near future swimming pool.

Construct part of the electrical system.

Stage 3

Develop an additional 12 sites (approximately) – sewage to be hauled from each tank

Add second entrance and electronic control gates.

Construct about 30% of the park amenities.

Install a pre-fabricated seasonal dock.

Stage 4

Develop an additional 10 sites (approximately).

Construct another comfort station, the sewage dump station and the main sewage collector tank.

Construct the dry pond portion of the storm sewer system, along with flow control structure and foot bridge.
Install 47 sewage pumps and initiate the low pressure sewage collection system.

Stage 5

Develop an additional 11 sites (approximately), c/w underground power.
Construct 1 km +/- of internal walkway.

Stage 6

Develop an additional 13 sites (approximately), c/w underground power.
Construct the communal swimming pool,
Construct 1535m +/- of shoreline walkway,
Complete storm dry pond, c/w control structure.

Stage 7

Develop an additional 15 sites (approximately), c/w underground power.
Construct large maintenance building.

Stage 8

Develop an additional 17 sites (approximately), c/w underground power.
Install fencing of maintenance yard and near entrances.

Stage 9

Develop an additional 19 sites (approximately), c/w underground power.
Re-grade and gravel parking, storage and other common area.
Install shrubberies and plant flowers throughout the entire development.

Stage 10

Develop the last 21 sites (approximately) ~ for a total of 143 sites, c/w underground power.
Possibly pave of all roadways (over 18,000 m2), and possibly the approaches, parking areas and the walkways (over 3,000m2).
Clean-up and improve the entire park's general appearance.

To a certain extent, the leasers' choice will dictate which sites will be developed first. However, the market demand will dictate the speed of the total construction time frame. Some of the stages may be built concurrently.

Respectfully Submitted



CORMIER TECHNOLOGY
Yvon J. Cormier, P.L. (Eng.)

APPENDIX I

Soils Report

Prepared by Shelby Engineering Ltd.

(Available from County of Barrhead)

APPENDIX II

Historical Resource Act Clearance

(Available from County of Barrhead)

Appendix III:

Alberta Environment Registrations and licences:

- a) Storm Drainage System.....Registration No. 321730-00-00
- b) Water Well.....Approval No. 00315814-00-00
- c) Water Well.....Licence to Divert No. 00314972-00-00

(Available from the County of Barrhead)

APPENDIX IV

Phase 1 Environmental Site Assessment

Prepared by Thurber Engineering Ltd.

(Available from the County of Barrhead)