



COUNTY OF BARRHEAD NO. 11
Province of Alberta
BYLAW NO. 1-2022
LAKEVIEW ESTATES AREA STRUCTURE PLAN

Page 1 of 1

A Bylaw of the County of Barrhead No. 11, in the Province of Alberta, adopting the Lakeview Estates Area Structure Plan.

WHEREAS the *Municipal Government Act*, R.S.A 2000, as amended authorizes a municipality to adopt by bylaw an Area Structure Plan; and

WHEREAS an Area Structure Plan has been prepared for Lot 1, Block 1, Plan 1022082, within the NW 18-57-2-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 1, Block 1, Plan 1022082 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 bylaw may be cited as the “Lakeview Estates Area Structure Plan.”
2. That the text and maps attached hereto as Schedule “A” be adopted as the Lakeview Estates Area Structure Plan.
3. 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.
4. That this bylaw shall come into force and take effect upon third reading.

FIRST READING GIVEN THE 1ST DAY OF FEBRUARY 2022.

SECOND READING GIVEN THE 3RD DAY OF MAY 2022.

THIRD READING GIVEN the 7TH DAY OF JUNE, 2022.

ORIGINAL SIGNED

D. Drozd

Reeve

Seal

D. Oyarzun

County Manager

ADVERTISED in Barrhead Leader on:

February 8, 2022, and

February 15, 2022.

PUBLIC HEARING held on March 1, 2022.



Lakeview Estates at Lac La Nonne

Area Structure Plan

Lot 1 Block 1 Plan 102-2082

& Plan 142-0619

Within

NW 18-57-2-W5

County of Barrhead No. 11

May 26, 2022

File #8050300

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1 Background information

1.1 Introduction

In response to the demand for recreational development that is readily accessible to Edmonton and other urban municipalities, the proponent of the *Lakeview Estates at Lac La Nonne Area Structure Plan* is proposing to develop a staged subdivision to meet this need. The subdivision will provide to its residents a lake front recreational development for four season use on Lac La Nonne. The subject parcel is approximately 60 minutes north west of Edmonton on Moonlight Bay on the east side of Lac La Nonne in *Barrhead County No. 11*. The proposed development will consist of individually owned lots. The total plan area is approximately 18.1 ha (45 acres) and is districted for the proposed use (Residential Recreation-RR).

1.2 Purpose

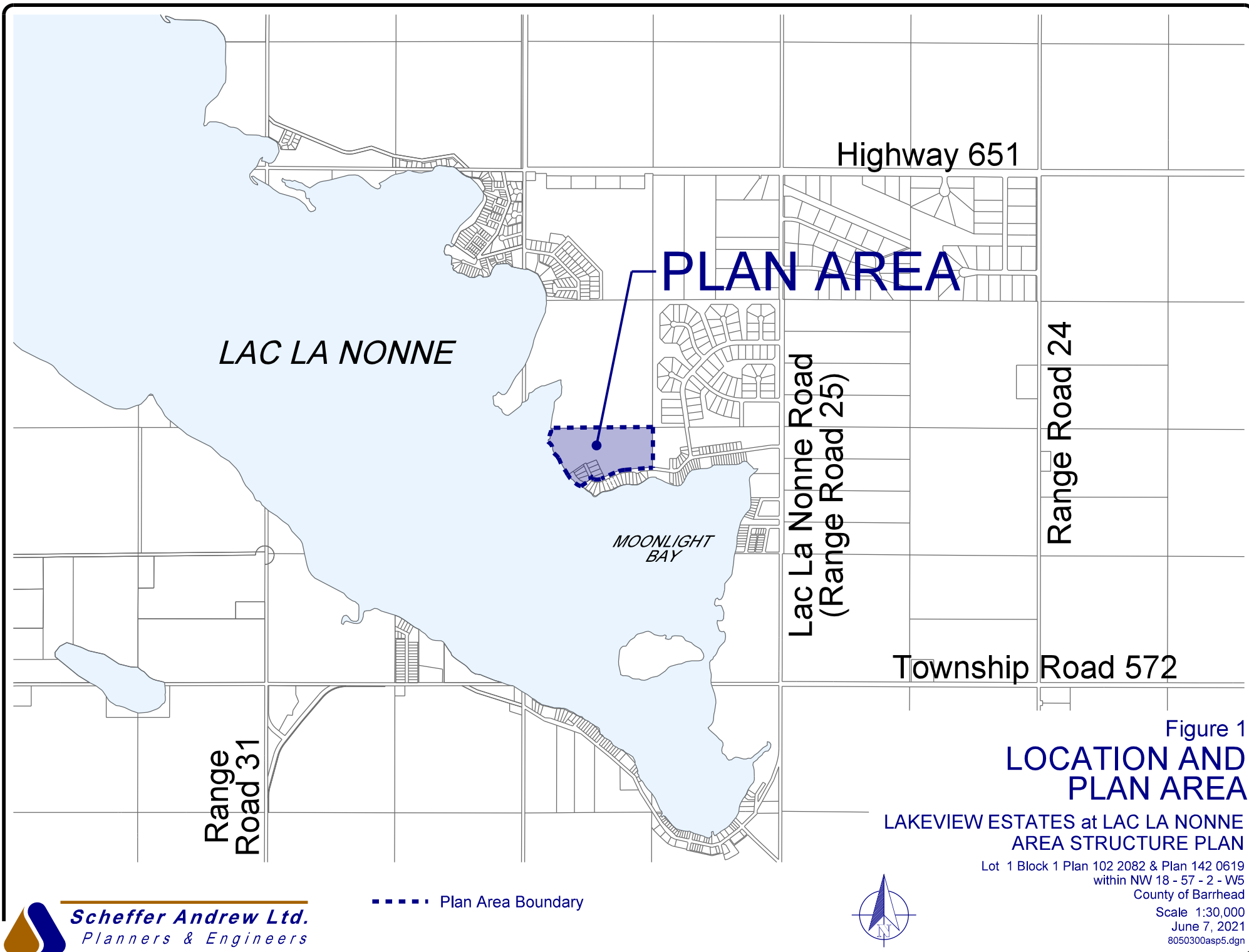
The *Lakeview Estates at Lac La Nonne Area Structure Plan (ASP)* provides an overview of the land use concept including open space, describes the subject area, servicing requirements needed to support the proposed development including environmental protection for the lake. This ASP will support future subdivision applications.

1.3 Plan Area and Location

The plan area, within the NW 18-57-2-W5, is located along the eastern shore of Lac La Nonne in Moonlight Bay in Barrhead County No. 11 (Barrhead County) southwest of the intersection of Highway 651 and Range Road 25 (Lac La Nonne Road). The plan area can be accessed via Duncan Road, which intersects Range Road 25 to the east of the plan area. Figure 1 **Location and Plan Area** depicts the location of the parcel.

1.4 Ownership

This Area Structure Plan has been prepared on behalf of *RTD Property Development Inc.*, the registered owner of the original plan area of 18.1 ha. The first stage of development of six lots was registered in 2014 and two of these lots have been transferred to new ownership. There are no registrations on the parent title that would encumber future development. There is a temporary turnaround registered on the parcel which can be discharged by the Municipality when a new turnaround is constructed to support future stages.



2 Policy Context

2.1 Upper Athabasca Regional Plan (UARP)

The development plan for Lakeview Estates at Lac La Nonne falls within the boundary of the Upper Athabasca Regional Plan yet to be developed by the Alberta Government (UARP). The UARP will be prepared under the *Land Use Framework* which is guided by the *Alberta Land Stewardship Act*. The proposed ASP will incorporate the intent of the Land Use Framework including efficient use of land to reduce the human footprint and conservation and stewardship on private and public land.

2.2 Municipal Development Plan

The proposed *Lakeview Estates at Lac La Nonne Area Structure Plan* is consistent with the *Barrhead County Municipal Development Plan Bylaw No. 4-2010 (MDP)*.

Under Section 3.4 Lakeshore Country Residential Development

The proponent is proposing a fee simple residential development adjacent to Lac La Nonne with a subdivision design incorporating environmental protection and municipal reserves that is compliance with this section. Lake quality will be maintained and environmental degradation minimized with a storm water management system designed to Provincial standards to cleanse all water entering the lake from the site and no wells or on-site sewage disposal systems allowed. As part of the development process, the applicant will prepare a formal Stormwater Management Report (SWMR) that will be submitted for review and approval to the County and provincial approval agencies to fulfil what is anticipated to be a requirement of the conditional subdivision approval.

Under Section 4.1 Reserves and Conservation Easements

The bed and shore of Lac La Nonne, as environmentally sensitive land, will be protected by a 30.0m environmental reserve. All other environmentally significant areas identified in the biophysical assessment will be recognized within the Plan area and will also be protected by an environmental reserve.

All open space owing under the *Municipal Government Act* within the Plan area will be dedicated as land and sited so as to provide open spaces to benefit all County residents and provide connectivity for wildlife.

2.3 Lac La Nonne Intermunicipal Development Plan

The proposed ASP is consistent with the development guidelines within the *Lac La Nonne Intermunicipal Development Plan (IDP)* between the Summer Village of Birch Cove and Lac Ste. Anne and Barrhead County. The proponent is proposing residential recreation development in an area designated for that use in the IDP. The subject parcel consists of marginally productive farmland and, due to lake proximity, has a high recreational and scenic value. Consistent with the IDP, the bed and shore of the lake will be protected by an Environmental Reserve and water released from the site will not be detrimental to the environmental quality of the lake or lake shore.

2.4 Area Structure Plan

The subject parcels are not included in an approved area structure plan. This ASP is being prepared for Council's consideration and approval to support future subdivision applications.

2.5 Land Use Bylaw

The subject parcels are currently districted RR – Residential Recreational, in *Barrhead County Land Use Bylaw No. 5-2010*, which provides opportunities for multi-lot recreational residential development for developable parcels adjacent to *Lac La Nonne* and *Thunder Lake*. The proposed future lots for the fee simple development will have a minimum area of 0.2 ha (0.5 acres). A subdivision approval is required prior to implementation of the proposed use.

3 Site Analysis

3.1 Site Description

The topography at the site is undulating with a maximum elevation difference of 6 to 7 metres. The land on the property and surrounding land slopes from the east and northeast, downward toward the southwest and the shore of the lake. A rise extends inland through the west boundary of the site with two knobs of land, one near the northwest and other near the southwest part of the property. There are low marshy areas in the north central area, southwest corner east of the bend of Duncan Road into the parcel and along the east boundary.

The subject lands are heavily treed with trees cleared during the first stage of development in order to accommodate the extension of Duncan Road to the north parcel boundary and the building sites for the first stage of development. The majority of the site is vegetated with a mixed wood deciduous forest with well drained soils.

The east shore of *Lac La Nonne* defines the western boundary of the plan area. There is a transition of vegetation types from the water's edge with bulrushes on muddy shores to reed grass transitioning to upland grasses and to the deciduous forest.

Along the west side and centre of the site the deciduous forest is dominated by mature trembling aspen. Balsam poplar is found particularly in lower wetter locations and all of the forest has an understory of shrubs and trees. The north central and east low area contains a thicket vegetated by willows around the periphery. The center of this thicket is vegetated with sedges and marsh reed grass. The lower area in the southwest part of the property also contains a small thicket again with willows on the periphery and marsh reed grass in the center.

There is approximately 1250 m (4100 feet) of shore line of *Lac La Nonne* adjacent to the subject lands. The original township survey established the bed and shore of the lake in 1903. The bed and shore of *Lac La Nonne* within the titled area was subsequently surveyed by L. Chad Finner, A.L.S. on August 26, 2008, along with the top of bank. The determination of the change in the bed and shore was accepted by the Provincial Government and was registered in 2010 as Plan 102-2082.

An **Air Photograph** for the plan area is depicted in Figure 2 and was flown in the summer of 2014. Figure 3 indicates the **Topography** of the plan area.

3.2 Land Use Context

The lands directly north of the subject parcel are undeveloped and is a treed site similar to the subject lands. To the northeast and east are existing country residential development. Southeast and south of the site are existing recreational residential lots with both full time and seasonal use. The parcel is bounded by *Lac La Nonne* to the west. The proposed residential use is compatible with the existing residential uses surrounding the parcel.



Figure 2
AIR PHOTOGRAPH
LAKEVIEW ESTATES at LAC LA NONNE
AREA STRUCTURE PLAN

Lot 1 Block 1 Plan 102 2082 & Plan 142 0619
 within NW 18 - 57 - 2 - W5
 County of Barhead

Scale 1:3000
 June 7, 2021
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Lac La Nonne

----- Plan Boundary

BLOCK R4

Plan 142 0619

Lot 1 Block 1
Plan 102 2082

Lot 14, Block 10
Plan 172 3327

Lot R1, Block 4
Plan 772 1956

SW 1/4 Sec 19 - 57 - 2 - W5

Duncan Road

SUBDIVISION PLAN 3161 TR
BLOCK 12

Figure 3 TOPOGRAPHY

LAKEVIEW ESTATES at LAC LA NONNE
AREA STRUCTURE PLAN

Lot 1 Block 1 Plan 102 2082 & Plan 142 0619
within NW 18 - 57 - 2 - W5
County of Barrhead

Scale 1:3000
June 7, 2021
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3.3 Biophysical Assessment

A **Biophysical Impact Assessment** was prepared by *Green Plan Ltd.* dated May 2021 for the Area Structure Plan area. This report identifies significant and sensitive environmental natural features in the Plan area and makes recommendations what mitigation and monitoring measures are necessary to achieve sustainability of the site. It also provides details on the diversity of upland vegetation in terms of the range of tree cover and general structure (vertical and spatial complexity) and the wetland features. The range of biological diversity on the subject lands provides a viable habitat for many forms of wildlife including ungulates, amphibians and migratory birds. A copy of this report will be submitted under separate cover.

Specifically, this report identified environmental effects that may occur from lake shore development and provided recommendations for mitigation from these potential effects on both the aquatic and terrestrial ecosystem. Examples of recommendations from Section 6.2 Wetland Impact Avoidance and Minimization of the BIA include:

- Protection of significant Wetlands, which will be achieved by dedicating wetlands as Environmental Reserve .
- Managing surface runoff and water quality to the Lake will be achieved by a Storm Water Management Plan via proposed sedimentation bays.
- General Best Management Practices during construction will be complied with during the construction of the proposed stages by the Contractor, including petroleum products will not be stored within 100 m of the lakeshore, silt fences will be installed around soil stockpiles, and environmentally sensitive areas will be delineated by staking.

Furthermore, the ASP will protect the riparian areas, lake shore and wetlands, and in turn the wildlife and natural features, by:

- Dedicating a minimum 30.0 m Environmental Reserve adjacent to the Lake plus a minimum 6.0 m setback from the Top of Bank to the property line of the lots. Development will not be allowed in this area.
- Provision of channeling public access to the lake via a linear Municipal Reserve to the Environmental Reserve thus reducing the potential of individual lot owners cutting their own access illegally across the Environmental Reserve lot
- Utilizing natural drainage and topography, thus minimizing the direct and indirect impacts to the wetlands.

3.4 Geotechnical Assessment

A **Geotechnical Site Investigation Report** for the site was prepared by *Hagstrom Geotechnical Services Ltd.* dated October 20, 2008 and provides an assessment on the parcel subsurface conditions and provides recommendations for the development of municipal infrastructure and homes. The subsurface conditions of the titled area are favourable in most areas for the proposed development.

The geotechnical report provides an assessment of groundwater conditions. **Figure 4** indicates areas of high water table at the time of the drilling. The report does not preclude construction of homes in areas of high ground water table and recommends additional testing by the home owner to support home construction. Specifically, it is recommended that at least two test holes be drilled by a qualified geotechnical professional at each home location to confirm the soil and groundwater conditions. This qualified professional may make additional home site specific recommendations. The County of Barrhead may require a Geotechnical Site Investigation Report to support future subdivision applications.

The geotechnical report will be submitted under separate cover to the municipality.

3.5 Resource Extraction

A land development package dated June 2008 was received from the Energy Resources Conversation Board (ERCB). A review of the package indicates that there are no constraints to development on the quarter section or on adjacent lands from resource development that would affect residential development. A review of the Abadata website on January 14, 2022 confirms the same conclusions as the ERCB package. There are no abandoned well sites on the subject lands or in close proximity. **Appendix A** contains a map generated from the *Alberta Energy Regulator* website on “Alberta Abandoned Well Locations” dated February 16, 2021 indicating the location of abandoned wells in the map area.

3.6 Phase I Environmental Site Assessment

Wood Environment & Infrastructure Solutions were engaged to prepare a *Phase I Environmental Site Assessment* to identify actual or potential environmental contamination of the subject lands that may have resulted from previous land use, construction, management or operation of the property. This document, dated May 2018, identified no concerns on the site that would require additional investigation. A copy of the report will be submitted under separate cover.

3.7 Historical Resources

The **Historic Resources Act Clearance** letter with conditions from *Alberta Culture Heritage Division* was received December 2, 2009 for the first stage of subdivision within the plan area. To support this clearance request, *Alberta Western Heritage, Inc.* was engaged by the developer to prepare a *Historical Resource Impact Assessment* of the parcel. Two archaeological sites were discovered during the heritage assessment and additional testing was completed to ascertain the extent of the sites. The report is dated April 2009 and will be submitted under separate cover. The first stage of development did not encroach into the archaeological sites thus partial clearance for the parcel was given.

In order to obtain clearance for the balance of the parcel, *AMEC Environment & Infrastructure* was contracted by the client to conduct a detailed field study on the site immediately adjacent to the lake. The report, *Historic Resource Impact Assessment* dated January 2015 will be submitted under separate cover to the municipality.

The **Historic Resources Act Clearance** letter with conditions from *Alberta Culture Heritage Division* was received September 1, 2015. Development on the balance of the site is allowed under this Provincial Act, except for the area in the southeast portion of the parcel which is to be excluded from development. This site was not examined further in a field study similar to the site on the west portion of the parcel which was examined in detail. When subdivided, this excluded area will be protected by a non-credit Municipal Reserve lot. A Caveat will be registered on the title of the MR parcel in Stage 4 (identified with a *) to protect the archeological site and prevent it from being developed until such time a HRIA clearance has been obtained for the subject parcel. Figure 4 **Constraints to Development** delineates the identified archaeological sites. Copies of the Clearance Letters are included in **Appendix B**.

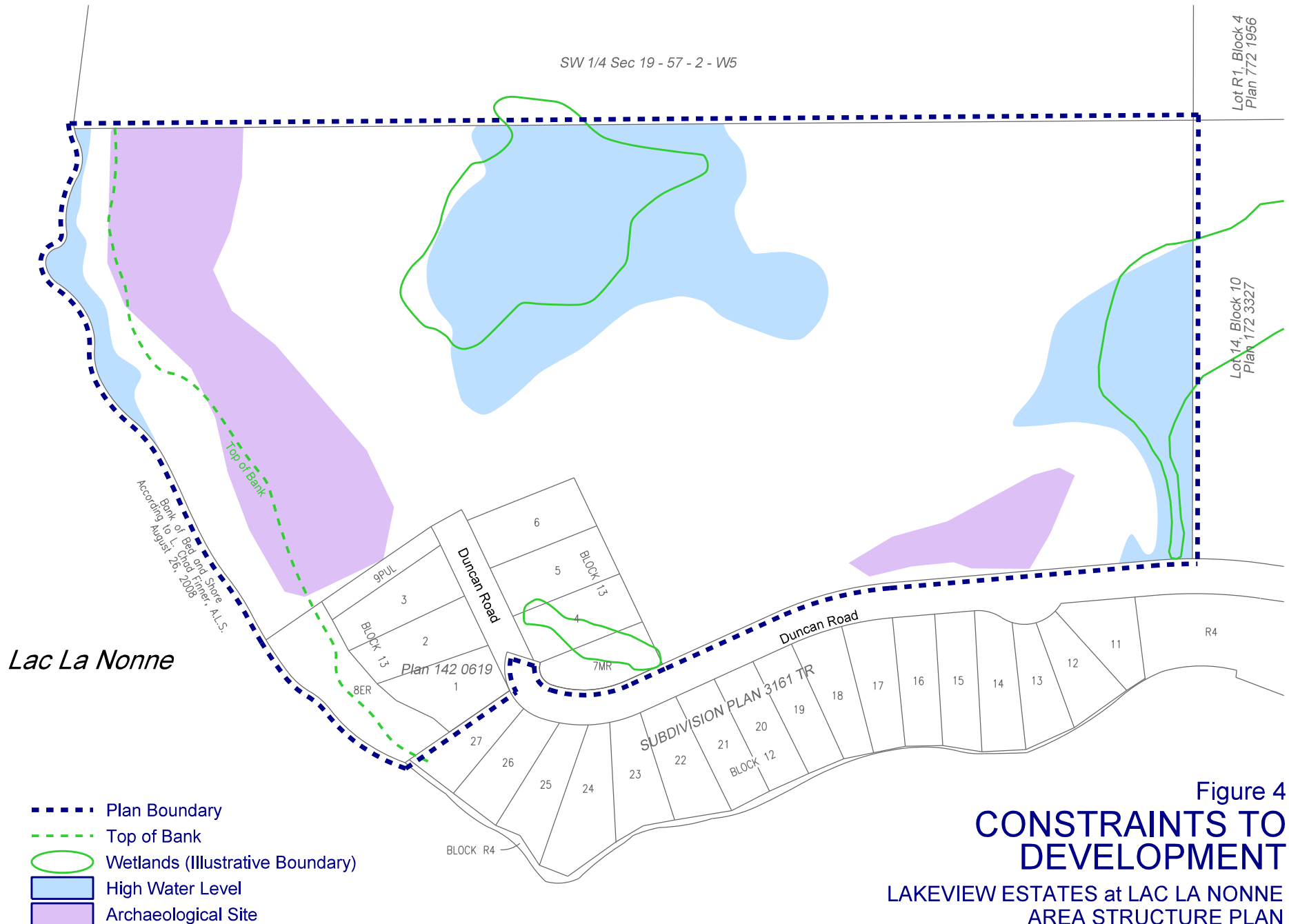


Figure 4
**CONSTRAINTS TO
DEVELOPMENT**

**LAKEVIEW ESTATES at LAC LA NONNE
AREA STRUCTURE PLAN**

Lot 1 Block 1 Plan 102 2082 & Plan 142 0619
within NW 18 - 57 - 2 - W5
County of Barrhead

Scale 1:3000
June 7, 2021
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4 Development Concept

4.1 Overall Concept

Figure 5 depicts the **Development Concept** for *Lakeview Estates at Lac La Nonne*. The logical extension of Duncan Road in conjunction with avoidance of the central and east wetland is the guiding factor of the development concept along with provision of green space adjacent to as many lots as possible and to provide buffering to existing development to the south.

There are two roads proposed with residential recreational development on both sides. The westerly road is an extension of Duncan Road and will currently dead-end until such time the lands to the north are developed. This road is in the Stage 1 and 2 development. The future development (unknown timeline) to the north will provide the connection between Duncan Road and the Idle Hours Road. The Stage 5 lot will be held off the market on the east side of Duncan Road to provide room for the development of a temporary turnaround until such time the landowners to the north chose to develop and extend Duncan Road. The second proposed road is a cul-de-sac heading east north of Stage 1, basically in parallel to Duncan Road to the south. Stages 3 and 4 are located within the cul-de-sac with a central park area.

All lots are to be developed will be as per the current Land Use Bylaw for the district which maintains a minimum lot area of 0.2 ha (0.5 acres). It is anticipated that there will be a maximum of 37 lots developed in the five stages. The majority of lots are backing onto green space which is a combination of Environmental (ER) and Municipal Reserve (MR). Duplexes shall not be permitted within the plan area.

In order to ensure a high standard of development within the Plan area, the Developer has prepared a Restrictive Covenant with Architectural Controls that will be registered on the title of each residential lot. The Architectural Controls include such items as requiring the constructed dwelling to be a minimum square footage of 1400 sq. feet for a single storey house or 1100 sq feet for a two storey house on one floor and this excludes the area of an attached garage, separate garages to have a similar exterior style as the house and be not less than 2 car and not more than 4 car, allowable fence material, and so on.

Stage 1 and 2 development design is guided by the provision of lake front lots on the west side of Duncan Road and lots fronting Duncan Road on the east side. Three MR parcels are being dedicated in Stage 2 which will provide access to the lake shore and provide a green buffer adjacent to existing development to the south side of Duncan Road. Additionally, Stage 2 will include the registration of 2 ER lots including: the central wetland and the lands adjacent to the bed and shore of Lac La Nonne. Stage 4 will provide the balance of the green buffer to the east and to the south development. A central green area (MR) has also been provided in the cul-de-sac to provide additional privacy for lots fronting each other. The majority of the perimeter of the Stage 3 and 4 development will be surrounded by land left in its natural stage (combination of MR and ER).

The Stage 5 lot will be marketed at such time as when the temporary turnaround can be removed from Duncan Road. This will occur when the parcel to the north develops and extends Duncan Road accordingly into their development area and provides either a connection to the Idle Hours Road or constructs another temporary turnaround within its plan area.

A combination of Environmental Reserve (ER) and Municipal Reserve (MR) will be dedicated within the plan area to protect areas of environmental (central and east wetland), historical (archaeological) concern, provide buffering to existing development to the east and south and to provide public open space and green space in close proximity to as many lots as possible. It is anticipated that there will no formal park space development except for the possibility of a trail developed from the public road to the lakeshore to provide easy access for residents in the development to access the lakeshore via the linear MR lot. If topography and the County allows, a trail could be developed thru this MR lot, across the ER lot to the lake shore. This could provide access to a future seasonal community dock.

Municipal Reserve owing under the current Municipal Government Act (MGA) will be dedicated as land and there will also be non-credit Municipal Reserve dedication for the Stage 1 Municipal Reserve parcel and the proposed MR parcel to protect the archaeological site in the Stage 4 development. This parcel on the development concept has been identified with an asterik (*). As noted above in Section 3.7 Historical Resources, a Caveat will be registered on the title of this non-credit MR parcel in Stage 4 to protect the archeological site and prevent it from being developed until such time as a HRIA clearance has been granted. It is noted that the Area Structure Plan proposes dedication of Municipal Reserve in excess of the required amount as per the MGA.

The dedication of an Environmental Reserve lots at the time of plan registration for Stage 1 and 2 will maintain the riparian area adjacent to Lac La Nonne. The width of the Environmental Reserve will be a minimum of 30.0m from the legally defined bed and shore. An additional 6.0m setback from the legal surveyed top of bank will also be protected within the Environmental Reserve. It is anticipated that approximately 40% of the total area structure plan parcel will be left in its natural state.

4.2 Site Usage

The statistics for capacity projections and proposed projections for the land use concept are as follows. Density of development is assuming 2.8 persons per unit. This is a conceptual density subject to the review and approval of future subdivision applications by Barrhead County. It is anticipated that the majority of the residents will not be utilizing these homes for full time use thus student generation for schools was not calculated.

Designated Site Usage	Stage 1 Area (ha)	Stage 2 Area (ha)	Stage 3 Area (ha)	Stage 4 Area (ha)	Stage 5 Area (ha)	Total Area 18.05	% of Total Area
Municipal Reserve	0.00	0.63 *	0.63	0.64	0.00	1.91	10.6%
Municipal Reserve (non-credit)	0.16	0.68	0.00	0.00	0.00	0.84	4.7%
Environmental Reserve	0.35	3.43	0.00	0.81	0.00	4.59	25.4%
Road	0.18	0.53	0.68	0.46	0.00	1.85	10.2%
Public Utility Lots	0.09	0.06	0.09	0.00	0.00	0.24	1.3%
Residential Lots	1.19	2.44	2.46	2.28	0.26	8.63	47.8%
Total Area	1.97	7.77	3.86	4.20	0.26	18.05	100.0%
MR obligation (ha) by stage	0.16	0.43	0.39	0.34	0.03	1.35	
Proposed number of residential lots	6	11	11	9	1	37	

*stage 2 dedicating additional 0.16 ha for stage 1 and 0.03 ha for stage 5 obligation

Table 1: Designated Site Usage by Stage

Stage	Number of Units	Population
1	6	17
2	11	31
3	10	28
4	9	26
5	1	3
Total	37	105

Table 2: Population by Stage

Designated site usage	Percentage of total site	Area
Municipal Reserve	15.2%	2.75 ha
Environmental Reserve	25.4%	4.59 ha
Road	10.2%	1.85 ha
Public Utility Lots	1.3%	0.24 ha
Residential Lots	47.8%	8.63 ha
Total	100.0%	18.05 ha

Table 3: Designated site usage

SW 1/4 Sec 19 - 57 - 2 - W5

Lot R1, Block 4
Plan 772 1956

Lot 14, Block 10
Plan 172 3327

Lac La Nonne

- Plan Boundary
- Residential Lots
- Municipal Reserve (MR)
- Environmental Reserve (ER)
- Public Utility Lot (PUL)

BLOCK R4

Duncan Road

Duncan Road

SUBDIVISION PLAN 3161 TR
BLOCK 12

Plan 142 0619

BLOCK 13

BLOCK 13

R4

Figure 5 DEVELOPMENT CONCEPT LAKEVIEW ESTATES at LAC LA NONNE AREA STRUCTURE PLAN

Lot 1 Block 1 Plan 102 2082 & Plan 142 0619
within NW 18 - 57 - 2 - W5
County of Barrhead

Scale 1:3000
June 7, 2021
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4.3 Environmental Protection

Environmental stewardship of land tends to be enhanced when there is ownership of the land. Future owners of the lots within this ASP are investing into a lifestyle based upon the surrounding physical environment. Thus, maintaining or improving the ecosystems both onsite and offsite will be of paramount concern including the quality of water entering *Lac La Nonne*.

a) Septic handling

As per the *Alberta Private Sewage Systems Standard of Practice 2015*, a soil based wastewater treatment is not permitted within 90 metres of a lake shore. Beyond 90 metres a soil based treatment system is permitted. However, on the subject parcel, the geotechnical investigation has indicated that the subject soils are not suitable for on-site soil based treatment system. Therefore, a caveat will be registered on all new residential lot titles notifying that soil-based treatment is prohibited. Each residential development will then require either a holding tank with pump out by vacuum truck or other alternative wastewater treatment system that is non-soil based for treatment. This will ensure that there is no possibility of leaching of sanitary effluent into the water table and lake.

All sewage disposal systems will be required to meet the requirements of the *Alberta Private Sewage System Standard of Practice 2015* or as amended. At the time of the development permit application for the lot development by the lot owner, the applicable permit for the selected method of wastewater treatment will be required.

b) Control of surface runoff

Release of oils or hydrocarbons is very unlikely within the ASP area, given that it features no commercial or industrial land uses, and contains very low density recreational uses. Therefore, no specific measures are proposed for isolation and removal of oils and/or hydrocarbons. Design of the sediment bays might consider oils and other floatables, which will be part of the SWM Report process to review and determine.

On-site stripping and grading of the individual lots is not anticipated at the time of road construction. The intent is to maintain existing drainage patterns where possible with channelling of drainage from lots that enters the ditches thru the proposed sedimentation bays prior to release to Lac La Nonne.

c) Tree Removal

Minimizing the removal of trees in the development is crucial as the intent of the development is to provide ownership of lots in a natural environment. Removal of natural vegetation will be mitigated and reduced to only what is required to provide a suitable building pocket. A maximum of 75% of the lot may be cleared of vegetative cover (including trees) as the building pocket. The building pocket will be identified within the Restrictive Covenant that will be prepared by the developer for approval by the County at time of subdivision and registered on the title of the new lots as a condition of subdivision authority approval. Further, the clearing of vegetation within the ASP area will require a development permit and will generally only be allowed within the building pockets identified in the restrictive covenant. Exceptions may be made to remove deadfall, hazardous trees and invasive vegetation.

d) Mitigation Measure During Construction and the Warranty Period

As a condition of the conditional subdivision approval, the developer will be required to enter into a Development Agreement with the County of Barrhead. As part of the Development Agreement, the developer will be responsible for ensuring the mitigation measures identified in 6.3 of the Biophysical Impact Assessment will be implemented and maintained during and after construction of the development, until the Final Acceptance Certificate (FAC) is issued. Once the FAC is issued which is the end of the warranty period of the constructed infrastructure, the Developer's responsibility ends.

5 Infrastructure

5.1 Access and Circulation

The overall transportation and circulation patterns for the ASP area are shown on Figure 6 **Transportation Network**. Initial legal and physical access to the site will be via Duncan Road, accessed off of Lac La Nonne Road (Range Road 25) which is to the east. The Range Road provides a connection either north to Highway 651 or south on the County rural road network.

Stage 1 and 2 will be developed on both sides of the extension of Duncan Road to the north boundary of the plan area. The existing temporary turnaround for Stage 1 will be removed after the construction of the Stage 2 temporary turnaround at the north boundary of the plan area. Stages 3 and 4 are accessed by an internal cul-de-sac to the eastern portion of the plan area north of Stage 1.

A temporary turnaround is proposed to remain on the north end of Duncan Road until such time the road is continued to the north and tied into the road in Idle Hours Resort. Stage 5 contains the lot that will be registered with the removal of the temporary turnaround. This road connection will only occur if the landowners to the north chose to develop. It is noted that east of the subject site, there is an undeveloped legal road right of way connecting Duncan Road to the Moonlight Bay Estates development which would provide an alternative road connection to Duncan Road. The timing of the development of this alternative road connection is at the discretion of the municipality. The alignment of Duncan Road and the future connection to the north and tie into the road in Idle Hours Resort was chosen to avoid impacting the Environmental (including wetlands) and Municipal Reserve lots abutting Duncan Road.

A *Traffic Impact Assessment Report* was not required by the municipality to support the ASP and the second stage of development (estimated 11 lots) as the projected timeline for the full development of the plan area is unknown. At the time of each subdivision application, Barrhead County may require a *Traffic Impact Assessment* to support the proposed subdivision application. The internal roads will be hard surfaced as per *Barrhead County* requirements. The cross section will meet all regulations of the County for rural developments. A trail connection may be provided from the county road west thru the linear Municipal Reserve and Environmental Reserve to the lake shore if topography and municipality allows.

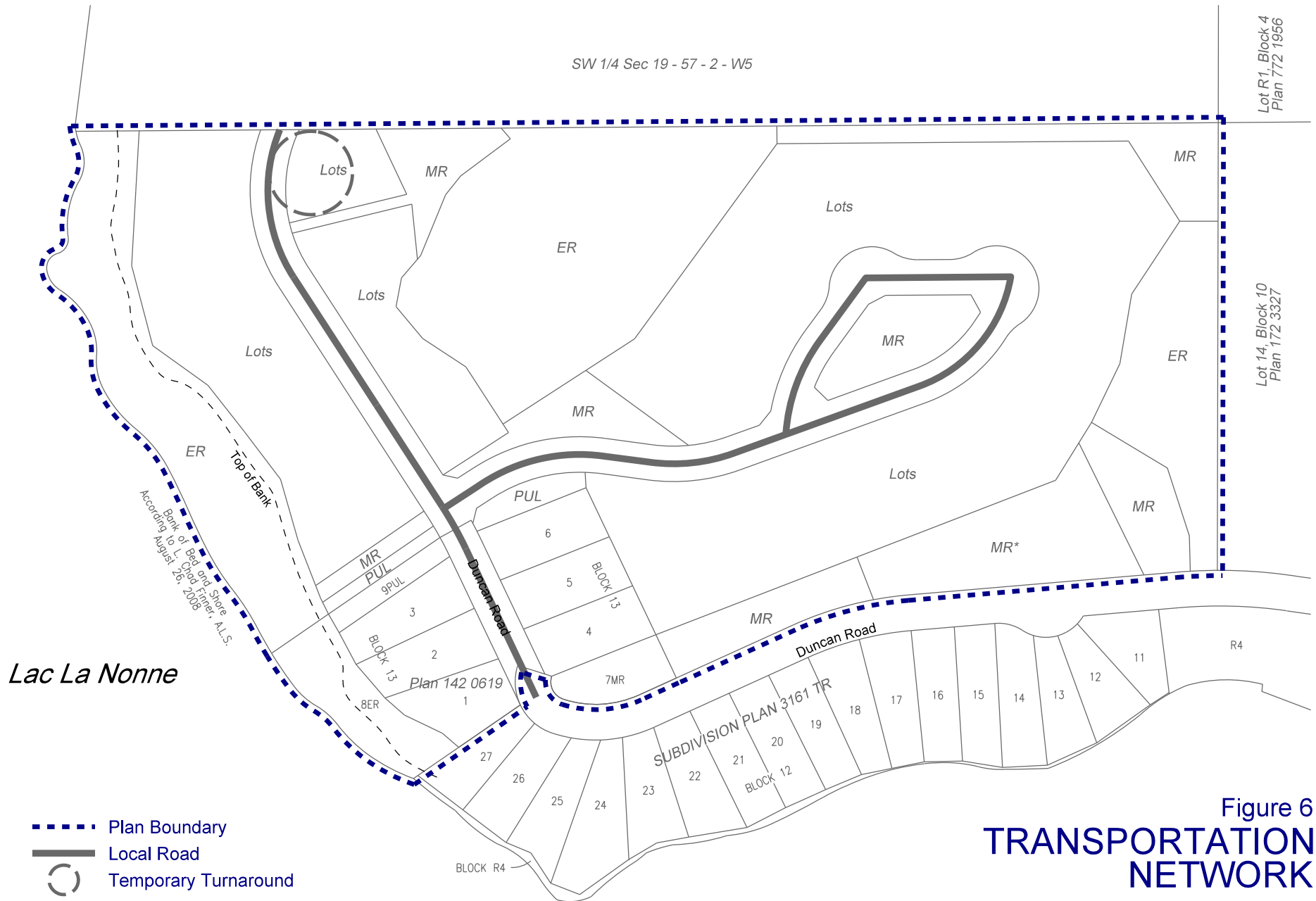


Figure 6
**TRANSPORTATION
NETWORK**

**LAKEVIEW ESTATES at LAC LA NONNE
AREA STRUCTURE PLAN**

Lot 1 Block 1 Plan 102 2082 & Plan 142 0619
within NW 18 - 57 - 2 - W5
County of Barrhead

Scale 1:3000
June 7, 2021
8050300asp5.dgn



5.2 Stormwater Management System

Sedimentation bays (sediment traps) are proposed within the development area to manage runoff from residential lots. A series of ditches and culverts will convey runoff to the sedimentation bays and ultimately to the lake. Some upgrades to existing ditches may be necessary. The bays will provide sediment removal from stormwater runoff during a 1:5 year storm before discharge to the lake. Water quality improvements are planned to be provided by the stormwater management system prior to discharge into the lake, which includes removal of sediment via sedimentation bays, infiltration by soils, and filtration through vegetation. Water quality improvements will be designed to meet Alberta Environment (AEP) guidelines.

The first stage sedimentation bay will require upgrades to properly manage sedimentation removal from future stages of development. These upgrades include increased capacity/size and adjusted shape to serve a larger area and will be constructed with the Stage 2 development. A second sedimentation bay may be added when needed as development progresses in the plan area. The Public Utility Lot for the future sedimentation bay will be registered with the Stage 3 development. Existing low areas A and B are expected to remain undeveloped and drainage patterns feeding the areas not anticipated to change with development. Figure 7 **Proposed Stormwater Management Plan** shows how overland surface drainage will be routed to manage the minor and major storm runoff for the proposed development.

Further details, including calculations will be provided to the County and to AEP with the SWM Report prior to or concurrently with the detailed engineering designs of the development stage(s) within the ASP. Discharge to Lac La Nonne will not be formally controlled to a specific release rate given that the development given the size of the receiving water body. Some water detention will also be provided by roadside ditch culverts by virtue of their normal function. During 1:100 storm events, ditch culverts normally provide some water detention by limiting the hydraulic capacity of the ditch to convey water. This strategy has been previously approved by Alberta Environment and Parks for the existing development and we anticipate this will continue to be the case for future stages of development within the proposed ASP. Design of the sediment bays might consider oils and other floatables, which will be part of the SWM Report process to review and determine. However, release of oils or hydrocarbons is very unlikely within this ASP plan area given that it has no commercial or industrial land uses, and contains very low density recreational uses. The existing stormwater discharge channel to Lac La Nonne is protected by existing erosion control measures. Existing erosion control measures will be evaluated prior and/or during detailed engineering design and upgraded, if necessary.

To minimize the conveyance of sediment and/or contaminants in surface water runoff during site construction, the Development Authority may require development permit applications for: lot grading and drainage, the clearing of vegetation, landscaping and/or the construction of new dwellings and garages on lots within the plan area to include sediment control plans that identify retention areas and or other silt retention measures that will be employed on site during construction to control run off.

5.3 Wastewater

Wastewater will not be allowed to treated by soil-based treatment methods due to the proximity to the lakeshore and that the soil type is not suitable for soil based treatment as determined by the geotechnical engineer.

The installation of the holding tank or alternative non soil based treatment will be at the time of the development of the lot by the future owner. Removal of the waste water will be via a vacuum pump truck and transported to an offsite treatment facility. All tanks will comply with *Alberta Environment and Sustainable Resource Development*, Safety Codes and County of Barrhead standards. Permits for wastewater holding tanks will be granted by the County assigned approving authorities part of the development permit application and be in compliance with the requirements of the *Alberta Private Sewage System Standard of Practice* 2015 or as amended.

5.4 Water Servicing

A **Preliminary Groundwater Potential Study** prepared by *Hagstrom Geotechnical Services Ltd.*, dated December 19, 2008 reviewed the potential availability of groundwater for residential development on the parcel. The report concluded that the bedrock aquifer could support about six additional lots and that cisterns for hauled water should be utilized for additional lots. Stage 2 and onwards development will require a caveat registered on each residential title with respect to notifying future landowners that the owner would be in contravention of Provincial Regulations if a well was to be dug.

5.5 Shallow Utilities

A power service will be provided to each unit via a buried power line and street lights will illuminate the public road. Telephone service and gas will be provided to the property line of each lot at the time of the construction of each stage.

5.6 Onsite Fire Protection

The proposed development will follow the *FireSmart Guidebook for Community Protection* issued by the Province of Alberta in February 2013, or as amended. The Guidebook outlines best practices and proactive measures that can be taken to reduce the risk of fire damage to settlement areas, where there is an interface between forested natural areas, and areas that have been developed for human occupation. This will include onsite vegetation management for fuel removal and fuel reduction. The Guidebook recommends that landscaping provides a 10m space immediately surrounding homes that is fuel free and that thinning and pruning trees to reduce wild fire risk in the area that is between 10-30m from the buildings.

5.7 Community Services

The closest municipality to the plan area with services is the *Town of Barrhead*. Emergency services including fire, disaster and emergency medical services (EMS) are based in the Town. Police services will also be from the Barrhead Detachment of the R.C.M.P

As this is anticipated to be a recreational development with no continuous occupancy, there was no analysis of local school population generation for County schools.

6 Public Input

Two public engagement sessions were held to provide the community with the opportunity to learn about the proposed ASP and provide feedback. The first public engagement session was held in the afternoon of Saturday, March 24, 2018. A public open house was held at Dunstable School approximately 8 km from the site to inform residents of the preparation of the proposed Area Structure Plan. Notification of the open house with contact information and purpose was advertised for two consecutive weeks in the *Barrhead Leader* and mailed out to landowners by Scheffer Andrew Ltd. within a radius as provided by Barrhead County staff on March 2, 2018. Based on the sign-in sheet, 37 people were in attendance. There were 11 questionnaires received of which one included 20 signatures requesting the relocation of the stage 3 and 4 road intersection with Duncan Road from the south to the west and 8 inquiries via phone and email.

Feedback was requested on the Proposed Development Concept, Servicing and Storm Water Management, Transportation, Environmental Comments and general comments. The

feedback was reviewed and in response to concerns the following changes were made to the proposed layout. The road network was revised so that the connection of stages 3 and 4 to Duncan Road occurred on the west leg of Duncan Road between proposed Stages 1 and 2 instead of connecting directly south adjacent to pre-existing development, and the buffer between Stage 3 and 4 and existing residences to the south was increased.

A second public engagement session was held December 7 to December 21, 2021 on the revised Lakeview Estates at Lac La Nonne ASP. The ASP was revised based on community feedback from the Open Houses held March 24, 2018. To comply with Provincial Public Health Orders regarding COVID-19, the community was provided with online options to provide feedback, including:

- 1) Project information was posted on our website (www.schefferandrew.com notices section) with a survey.
- 2) Contact information was provided for the Project Planner at Scheffer Andrew Ltd. to learn more about the proposed development and provide feedback.

Notification of the public engagement session with contact information and purpose was advertised for two consecutive weeks in the *Barrhead Leader* and mailed out to landowners by Scheffer Andrew Ltd. within a radius as provided by Barrhead County staff on December 2, 2021.

Feedback was requested on the revised Proposed Development Concept, as well as the Transportation Concept, Servicing and Stormwater Management Concept, and Environment. Most of the public feedback was received by Municipal Planning Services (MPS), with seven separate landowners providing their feedback to MPS. One landowner provided comments on two separate occasions (September 27, 2021, and December 13, 2021). Scheffer Andrew Ltd. received 2 responses (1 phone call and 1 follow up email) and 1 email. A summary of the comments from both of the developer public engagement sessions are in **Appendix C: Summary of Public Engagement Comments**.

7 Implementation

7.1 Development Sequence

Staging is indicated in Figure 8 **Development Sequence**. All stages may be developed concurrently, in singular or plural depending on market conditions and logical extension of the road infrastructure.

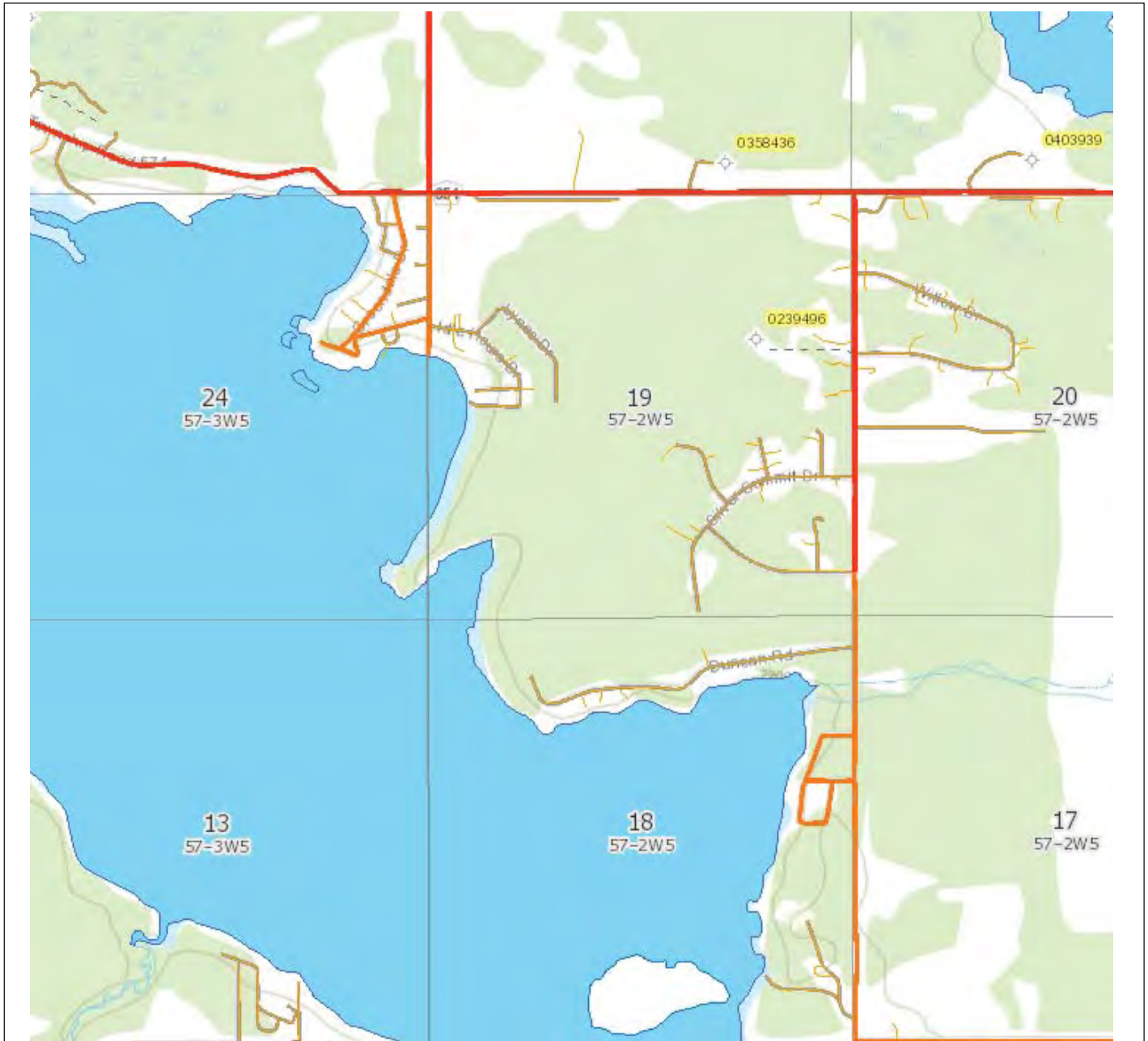
At the time of this document preparation, it is unknown on what the uptake for new residential lots adjacent to Lac La Nonne will be. Therefore, it is anticipated that given the residential nature on the proposed development and adjoining lands, that this document will not be rescinded by Council in totality in any given time frame. At the discretion of the developer, amendments to the approved ASP may be brought forward to Barrhead County Council for their consideration.

7.1 Approval Process

Approval of the *Lakeview Estates at Lac La Nonne Area Structure Plan* is required to support future subdivision applications within the plan area. All applications shall meet requirements as set out in the *Barrhead County Land Use Bylaw* and other statutory documents.



Appendix A: Abandoned Well Map



Abandoned Well Map	Base Data provided by: Government of Alberta	
	Author Scheffer Andrew Ltd.	Printing Date: 2/16/2021
Legend <ul style="list-style-type: none"> ◇ Abandoned Well (Large Scale) ○ Revised Well Location (Large Scale) — Revised Location Pointer — Road Paved — Road Gravel — Road Other — Driveway - - Winter Road or Truck Trail — Unimproved or Unclassified Road Rail Line + Rail Line 	Date Date (if applicable)	
	<p>The Alberta Energy Regulator (AER) has not verified and makes no representation or warranty as to the accuracy, completeness, or reliability of any information or data in this document or that it will be suitable for any particular purpose or use. The AER is not responsible for any inaccuracies, errors or omissions in the information or data and is not liable for any direct or indirect losses arising out of any use of this information. For additional information about the limitations and restrictions applicable to this document, please refer to the AER Copyright & Disclaimer webpage: http://www.aer.ca/copyright-disclaimer.</p>	<p>Scale: 36,111.91</p> <p>0.55 Kilometers 0</p>
		<p>Projection and Datum:</p> <p>WGS84 Web Mercator Auxiliary Sphere</p>

Appendix B: HRIA Clearance Letters

December 2, 2009

Project File: 4835-08-149

Ms. Aime Stewart
Scheffer Andrew Ltd.
12204 – 145 Street NW
Edmonton, Alberta
T5L 4V7

Dear Ms. Stewart:

SUBJECT: RTD PROPERTY DEVELOPMENT INC.
PROPOSED SUBDIVISION
PART OF NW 18-57-2-W5M & ROAD PLAN 3161 TR
HISTORICAL RESOURCES ACT REQUIREMENTS

Staff of the Historic Resources Management Branch (HRMB) of Alberta Culture and Community Spirit have received a copy of the captioned subdivision application from Municipal Planning Services (Alberta) Ltd. This application is for a portion of a larger Area Structure Plan/subdivision development proposal that was the subject of an Historic Resources Impact Assessment (HRIA) conducted under Permit 2009-093 on behalf of RTD Property Development Inc.

Two new archaeological sites (FIPn-4 & 5) were recorded in the course of that HRIA. Both of these sites are considered to have archaeological significance (HRV 4) and RTD Property Development Inc. was advised that the sites had to be either avoided or additional studies at the sites would be required prior to development occurring.

Staff of the HRMB have reviewed the potential for the currently proposed development to impact historic resources and have concluded that neither of these sites will be affected by this proposal. Therefore *Historical Resources Act* clearance is granted for this project as outlined in the subdivision application on the understanding that archaeological sites FIPn-4 and 5 will not be impacted by development. Should either of these sites be threatened by future development, additional studies will be required prior to development proceeding.

HISTORICAL RESOURCES ACT REQUIREMENTS

Reporting the discovery of historic resources: Pursuant to Section 31 of the *Historical Resources Act*, should any additional archaeological resources, palaeontological resources, Aboriginal traditional use sites and/or historic period sites be encountered during any activities associated with land surface disturbance operations, the Historic Resources Management Branch must be contacted immediately. It may then be necessary to issue further instructions regarding the documentation of these resources.

...cont.



Ms. Aime Stewart
December 2, 2009
Page 2

Should you require additional information or have any questions concerning the above, please contact me at (780) 431-2330, (8820 - 112 Street, Edmonton, Alberta, T6G 2P8), fax (780) 422-3106 or by e-mail at barry.newton@gov.ab.ca.

On behalf of the Historic Resources Management Branch, I would like to thank you and officials of RTD Property Development Inc. for your cooperation in our endeavour to conserve Alberta's past.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Barry Newton', written in a cursive style.

Barry Newton
Land Use Planner

cc: Shelly Cole, Municipal Planning Services (Alberta) Ltd.

Via e-mail: DenisS@EdmontonTrailer.com

September 01, 2015

Project File: 4835-08-0149-002
OPaC HR Appl #: 006527939
Permit File: 2014-109

Mr. Denis St. Andre
RTD Property Development Inc.
2700, 10155-102 St
Edmonton AB
T5J 4GB

Dear Mr. St. Andre:

**SUBJECT: HISTORICAL RESOURCES ACT (HRA) APPROVAL
RTD PROPERTY DEVELOPMENT INC.
HISTORIC RESOURCE IMPACT ASSESSMENT OF RTD PROPERTY
DEVELOPMENT INC. LAC LA NONNE SUBDIVISION
RESIDENTIAL SUBDIVISION**

Acting on behalf of RTD Property Development Inc. (Proponent) and in accordance with Section 37(2)(a)(b) of the *Historical Resources Act*, AMEC Environment and Infrastructure:

- carried out the required Stage 1 studies at archaeological site FIPn-5 for the Historic Resource Impact Assessment of RTD Property Development Inc. Lac La Nonne Subdivision (Project); and,
- provided Alberta Culture and Tourism with copies of the final report summarizing the HRIA, *Historic Resource Impact Assessment of RTD Property Development Inc. Subdivision Lac La Nonne Mitigation of Archaeological Site FIPn-5 Final Report for Permit 14-190 Township 57, Range 2, W5M Lac La Nonne, Alberta* (Archaeology Permit: 2014-190).

HISTORIC RESOURCES IMPACT ASSESSMENT

Terms of Reference

The terms of reference for the HRIA were outlined in Schedule "B" of my letter dated September 17, 2009. These requirements included avoidance or additional studies at archaeological sites FIPn-4 and FIPn-5.

ARCHAEOLOGICAL RESEARCH PERMIT NO. 2014-190

Under Archaeological Research Permit No. 2014-190, AMEC Environment and Infrastructure conducted the required Stage 1 studies at archaeological site FIPn-5. Additionally, the consultant has indicated in the report that archaeological site FIPn-4 will be placed in an Environmental Reserve Easement to ensure avoidance as outlined in the attached Schedule "C".

HISTORICAL RESOURCES ACT (HRA) APPROVAL

Based upon the results of the HRIA studies, *Historical Resources Act* approval is granted to the Proponent for the Project, as illustrated on the attached plan, on the understanding that site FIPn-4 will be avoided.

Terms and Conditions of Approval

The Proponent must comply with standard conditions applicable to all land surface disturbance activities in the Province. The Proponent must also confirm that site FIPn-4 has been placed in an Environmental Reserve Easement. Should this site be threatened by future development, additional studies will be required prior to development proceeding.

Section 31 of the *Historical Resources Act* requires the Proponent and their agent to report the discovery of any archaeological resources, palaeontological resources, historic period sites and/or Aboriginal traditional use site(s) of a type considered to be historic resources under the *Historical Resources Act*, the Proponent may be ordered to undertake further salvage, preservative or protective measures or take any other actions that the Minister responsible for the *Historical Resources Act* considers necessary.

Should you require additional information or have any questions concerning this approval, contact Barry Newton, Land Use Planner, at 780-431-2330 (toll-free 310-0000) or barry.newton@gov.ab.ca.

I would like to thank representatives of RTD Property Development Inc. for their cooperation in our endeavour to document the Province's historic resources.

Sincerely,



David Link, PhD
Assistant Deputy Minister

Attachments

Historic Resources Application

Activity Administration

Date Received: April 24, 2015

HRA Number: 4835-08-0149-002

Project Category: Subdivisions (4835)

Application Purpose: ☒ Requesting HRA Approval / Requirements

Lands Affected ☒ All New Lands

Project Type: ☒ Residential Subdivision ESRI Shapefiles are attached (yes/no) yes

Project Name: HISTORIC RESOURCE IMPACT ASSESSMENT OF RTD PROPERTY DEVELOPMENT INC.

Additional Name(s):

Key Contact: Mr Aidan Burford	Affiliation: AMEC Environment and Infrastructure
Address: 5681 70 Street	City / Province: Edmonton, AB
Postal Code: T6B 3P6	Phone: (780) 989-4546
E-mail: aidan.burford@amec.com	Fax: () -
	Your File Number:

Proponent: RTD Property Development Inc.	Contact Name: Denis St Andre
Address: 2700, 10155-102 St	City / Province: Edmonton, AB
Postal Code: T5J 4GB	Phone: (780) 962-8195
E-mail: DenisS@EdmontonTrailer.com	Fax: (780) 962-8604

Proposed Development Area					Land Ownership			
MER	RGE	TWP	SEC	LSD List	FRH	SA	CU	CT
5	2	57	18	13,14	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Historical Resources Impact Assessment:For archaeological resources:Has a HRIA been conducted? ☒ Yes ☐ No

Permit Number (if applicable): 14-190

For palaeontological resource:Has a HRIA been conducted? ☐ Yes ☒ No

Permit Number (if applicable):

Historical Resources Act approval is granted for the activities described on this application and its attached plan(s)/sketch(es) subject to the conditions specified in the attached document(s).



Chris Robinson
Acting Assistant Deputy Minister

September 03, 2015

Date

HISTORICAL RESOURCES ACT APPROVAL

**RTD PROPERTY DEVELOPMENT INC.
HISTORIC RESOURCE IMPACT ASSESSMENT OF RTD PROPERTY
DEVELOPMENT INC. LAC LA NONNE SUBDIVISION
RESIDENTIAL SUBDIVISION**

HRA REQUIREMENTS PROJECT FILE: 4835-08-0149-002

(Schedule "C")

For the purposes of this Schedule RTD Property Development Inc. shall be referred to as the "Proponent" and Historic Resource Impact Assessment of RTD Property Development Inc. Lac La Nonne Subdivision shall be referred to as the "Project".

Avoidance or further studies are required for any potentially impacted historic resources during the conduct of the Project. Part I provides the Proponent with *Historical Resources Act* approval for components of the Project while Part II outlines the conditions attached to this approval.

I. HISTORICAL RESOURCES ACT APPROVAL

Historical Resources Act approval is granted to the Proponent for the Project, as illustrated on the attached plan.

II. TERMS AND CONDITIONS OF APPROVAL

The Proponent is granted *Historical Resources Act* approval to proceed with this Project on the understanding that avoidance of archaeological site FIPn-4 will occur, as outlined below.

1.0 ARCHAEOLOGICAL RESOURCES

The potential for the Project to affect archaeological resources is high.

1.1 Contacting the Archaeological Survey

For further information regarding the acquisition of a Permit to Excavate Archaeological Resources and/or archaeological consultants obligations under Alberta Regulation 254/2002, please contact Martina Purdon, Head, Regulatory Approvals & Information Management at 780-431-2331 (toll-free 310-0000) or martina.purdon@gov.ab.ca

September 3, 2015

1.2 Avoidance

The consultant has indicated that archaeological site FIPn-4 is to be placed in an Environmental Reserve Easement to ensure avoidance. The Proponent is required to confirm that the site will be placed in an Environmental Reserve Easement. HRA approval of the project is granted subject to this confirmation as outlined in Table 1.0 below.

2.0 STANDARD CONDITIONS UNDER THE *HISTORICAL RESOURCES ACT*

The Proponent must comply with standard conditions under the *Historical Resources Act*, which are applicable to all land surface disturbance activities in the Province. Standard conditions require applicants to report the discovery of historic resources. These requirements are stated in Attachment 1, *Standard Requirements under the Historical Resources Act, Reporting the Discovery of Historic Resources*.

3.0 FURTHER SALVAGE, PRESERVATIVE OR PROTECTIVE MEASURES

Upon reporting the discovery of archaeological resources, palaeontological resources, historic period sites and/or Aboriginal Traditional Use Site(s) of a type described in Attachment 2, the Proponent may be ordered to undertake further salvage, preservative or protective measures or take any other actions that the Minister responsible for the *Historical Resources Act* considers necessary.

4.0 COMPLIANCE IS MANDATORY

These conditions shall be considered directions of the Minister of Alberta Culture and Tourism under the *Act*. The Proponent and agents acting on behalf of the Proponent are required to become knowledgeable of the conditions. Failure to abide by the conditions will result in *Historical Resources Act* approval not being granted, or delayed.

ATTACHMENT 1

STANDARD REQUIREMENTS UNDER THE *HISTORICAL RESOURCES ACT* REPORTING THE DISCOVERY OF HISTORIC RESOURCES

Pursuant to Section 31 of the *Historical Resources Act*, Proponents are required to report the discovery of historic resources. These requirements are applicable to all activities in the Province. This bulletin provides Proponents and their agents with instructions for contacting the Heritage Division of Alberta Culture.

1.0 ARCHAEOLOGICAL RESOURCES

1.1 Reporting the discovery of archaeological resources

During the conduct of developments, Proponents and/or their agents may become aware of and/or encounter archaeological resources. The discovery of archaeological resources is to be reported to Martina Purdon, Head, Archaeological Information and Regulatory Approvals at 780-431-2331 (toll-free 310-0000), or e-mail martina.purdon@gov.ab.ca.

2.0 PALAEOONTOLOGICAL RESOURCES

2.1 Reporting the discovery of palaeontological resources

During the conduct of developments, Proponents and/or their agents may encounter palaeontological resources. The discovery of palaeontological resources is to be reported to Dan Spivak, Head, Resource Management, Royal Tyrrell Museum of Palaeontology at 403-820-6210 (toll-free 310-0000), or e-mail dan.spivak@gov.ab.ca.

3.0 HISTORIC PERIOD SITES

3.1 Reporting the discovery of historic period sites

During the conduct of developments, Proponents and/or their agents may become aware of and/or encounter historic period sites. The discovery of historic period sites is to be reported to Martina Purdon, Head, Archaeological Information and Regulatory Approvals at 780-431-2331 (toll-free 310-0000), or e-mail martina.purdon@gov.ab.ca. Please note that some historic period sites may also be considered Aboriginal Traditional Use Sites.

...continued

ATTACHMENT 1 REPORTING THE DISCOVERY OF HISTORIC RESOURCES

4.0 ABORIGINAL TRADITIONAL USE SITES

4.1 Reporting the discovery of Aboriginal traditional use sites

During the conduct of consultation processes and/or activities associated with developments, Proponents and/or their agents may become aware of and/or encounter Aboriginal Traditional Use Sites which Alberta Culture may consider as historic resources under the *Historical Resources Act*. A listing of Aboriginal Traditional Use Sites considered as historic resources under the *Historical Resources Act* is provided in Attachment 2. The discovery of any Aboriginal Traditional Use Site that is of a type described in Attachment 2 is to be reported to Valerie Knaga, Director, Aboriginal Heritage Section at 780-431-2371 (toll-free 310-0000), or e-mail valerie.k.knaga@gov.ab.ca.

4.2 Aboriginal traditional use sites and Alberta Culture's Consultation Guidelines

Under the circumstance described in Condition 4.1 *Reporting the discovery of Aboriginal traditional use sites*, Proponents must comply with Part V *Tourism, Parks, Recreation and Culture Guidelines for First Nations Consultation on Resource Development and Land Management* (Alberta Culture's Consultation Guidelines) of *Alberta's First Nations Consultation Guidelines on Land Management and Resource Development*.

5.0 FURTHER SALVAGE, PRESERVATIVE OR PROTECTIVE MEASURES

Based upon the results of reporting of the discovery of archaeological resources, palaeontological resources, historic period sites and/or Aboriginal Traditional Use Site(s), Proponents may be ordered to undertake further salvage, preservative or protective measures or take any other actions that the Minister responsible for the *Historical Resources Act* considers necessary.

This bulletin may be cited as:

Standard Requirements under the Historical Resources Act, Reporting the discovery of historic resources. Land Use Planning, Archaeological Survey, Historic Resources Management Branch, Heritage Division, Alberta Culture, Edmonton, Alberta.

Dated: July 2013

ATTACHMENT 2

ABORIGINAL TRADITIONAL USE SITES

Aboriginal Traditional Use Sites considered by Alberta Culture and Tourism as historic resources under the *Historical Resources Act* may include:

Historic cabin remains;
Historic cabin (unoccupied);
Cultural or historical community camp site;
Ceremonial site/Spiritual site;
Gravesite(s);
Historic settlement/Homestead;
Historic site;
Oral history site;
Ceremonial plant or mineral gathering site;
Historical Trail Features; and,
Sweat/Thirst/Fasting Lodge Sites

RTD PROPERTY DEVELOPMENT INC.
HISTORIC RESOURCE IMPACT ASSESSMENT OF RTD PROPERTY DEVELOPMENT INC.
HISTORICAL RESOURCES ACT REQUIREMENTS/APPROVAL
(PROJECT FILE: 4835-08-0149-002; PERMIT FILE: 14-190)

TABLE 1.0

SITE	HRV	LEGAL DESCRIPTION	SITE DESCRIPTION	REQUIREMENTS/APPROVAL
FIPn-4	4	LSD 14-18-57-2-W5M	Prehistoric subsurface campsite/scatter >10	<p>The consultant has indicated that the site will be placed in an Environmental Reserve Easement to ensure long term avoidance. The Proponent is required to provide confirmation that the site has been placed in an Environmental Reserve Easement. HRA approval for the project is granted on the understanding that this requirement will be met.</p> <p>Any future development in the vicinity of this site will require further studies.</p>
FIPn-5	0	LSD 13-18-57-2-W5M LDS 4-19-57-2-W5M	Prehistoric subsurface campsite/scatter >10	<p>HRA APPROVAL GRANTED for the assessed Project footprint. There are no further HRA requirements for this site and development may proceed in the site area.</p>

Appendix C: Summary of Public Engagement Comments

Lakeview Estates at Lac La Nonne Proposed Area Structure Plan Open House

March 24, 2018 Open House

Summary of Comments and Responses

Number of Persons in Attendance (according to the sign-in sheet): 37

Number of Survey Responses: 11

1. PROPOSED DEVELOPMENT CONCEPT

- *"I am completely opposed to Stage 3 & 4. I believe this development is too large for this area."*
- *"We want to make sure that the developers and future owners of the sites are well informed about the **current** condition of Lac la Nonne relative to the health of the water. This development has been in the works since at least 2009 and conditions have dramatically altered in that period. We highly recommend that they spend time there in mid to late July and August so they understand the smell and the presence of blue green algae especially during those prime recreation months. Any development, no matter how carefully done, will increase existing problems and will NOT improve the quality of the already challenged ecosystem of Lac La Nonne. It would be a shame for the developer and future owners to purchase property only to see decreasing values for property and ever increasing environmental issues. Consultation with realtors and residents will increase awareness of the declining property values, increasing taxes, and markedly reduced services (e.g., fire; the once a year garbage pickup no longer exists, and hours for the landfills are very limited). One feels that the county is most interested in potential revenues as opposed to provision of services to landowners in this area or improving the ecosystem of this lovely area."*
- *"I would suggest @ 1/2 acre your lot sizes are on the small size. I would like to see the lots be at least 1 acre. I did not see anything in the information you sent to me regarding the deforestation of the top of the hill. If the trees are removed from the bank and the top of the hill, then there could be significant erosion issues down the road."*
- *"We feel you should be fencing the perimeter of your development where it borders our land. As we own right to the water line, we would like to see a chain link fence at least 8 ft high that runs along the property line between our properties right to the water's edge."*
- *"We have historically had serious problems with trespassers on our land and by increasing the population bordering our property that raises our concerns with increased trespassing incidents."*
- *"We have some environmentally sensitive areas and nesting habitats for native species and the increased activity in the area may adversely affect them."*



2. SERVICING & STORM WATER MANAGEMENT

- *"No wells, cisterns only. Better drainage"*
- *"How will positioning of roadways affect storm water runoff, will it accelerate or decelerate water flow speeds towards the lake? What criteria is used to determine use of cistern or drilled wells?"*
- *"County of Barrhead lagoon cannot handle what is being disposed of now. What plan is in place to increase the size of the existing lagoon to accommodate the additional residences?"*
- *"Allowing 6 lots to have wells needs to be carefully considered. I assume that these will likely be the first 6 lots. Perhaps there could be a communal well or have wells only available to year round residents of the development who actually need a well. As a recreational user of our property, we (and a neighbour) have intentionally decided NOT to drill a well. We care about the environment."*
- *"More details are needed relative to how the sediment basins will work and how contaminants such as fertilizers/ weed control products will not run into the environmental reserves or into the lake. Perhaps this development could ban fertilizers and other contaminants."*
- *"I am concerned with the increased pollutants in the water runoff. The amount of runoff should not change but the environment which it runs off does change. Soil and fertilizers will be carried by the water to the lake impacting the water quality even more. Catch basins may collect some sediment but not fertilizer. How is this going to be controlled and monitored in this new development?"*
- *"Your proposal mentions the use of cisterns for both drinking and waste water management. I tried to view these units on line and could find information on cisterns used for fresh water but nothing for waste water. My concern with waste water is that it will drain down into our bay and will contaminate it. There is no drainage from the bottom of the bay and the prevailing winds blow into the bay which would mean very high concentrations of effluent. We would like be assured that any systems put into the development would not allow for drainage of waste water that would filter into the bay. Again my concern with water runoff is if the lots on the water side clear cut the trees & scrub to the edge leaving nothing to catch the rain. Ultimately this will lead to more sediment to filter into the water."*

3. TRANSPORTATION

- *"The increased heavy traffic on the current road (Duncan) will further impact the poor quality of the road. What is the County doing to improve or prevent further deterioration? The future roads indicated on development plans may never happen leaving only one escape route."*
- *"Width of road & traffic volumes. Also access & exit routes in case of emergencies/fire etc."*
- *"We are strongly opposed to any connections between Duncan Road and other developments. That option needs to be removed from plans even though it is likely there in an effort to demonstrate that not all traffic (including septic and water trucks and a marked increase in traffic) will have to use a poorly constructed road. Duncan Road is used by so many residents for walking their dogs and children and walking/cycling for exercise. It also serves a crime prevention function as there is only one exit (unless you swipe a boat) and residents become familiar with each other's vehicles and who is a stranger. We are concerned with damage to the existing road during the construction phase and then ultimately due to the increased vehicle traffic going to the development."*
- *"The present road will not be able to sustain all of the traffic - width only allows for basically 1 vehicle (many pedestrians are active along the road). We feel it will not be able to sustain the heavy vehicles (pump out trucks, water trucks) that will be utilized more frequently with the new development. The road will definitely not sustain with the construction that will take place."*
- *"Roads need to be fixed & new road created at end of road (phase 2) for emergency egress. Roads must be paved properly to handle extra traffic, heavy trucks, sewer & septic trucks, water trucks. Needs to be done prior to any new construction. Proposed road near the entrance (RR25) is/would be useless!! Developer needs to be responsible for road construction not existing owners tax dollars!!"*
- *"The roadway approach to phase 3 / 4 does not need to impact existing development if it is moved past the phase 1 development. Also much safer during construction for kids and residents – keep all construction equipment away from existing development. (see note on front page map). Also increased traffic concerns with water trucks, sewage trucks etc. Excess municipal bylaw enforcement/road bans. Roadway (existing asphalt) will be destroyed. Not built for this size/usage." (Residents in agreement to the notes shown -signed by 20 residents)*
- *We are aware that there is a petition to redirect the planned road for Phase 3 & 4. We are opposed to the change as it would result in all of the traffic for all phases rather than only phase 1 & 2 funneling down to the end of the road. If necessary, we can petition to keep the planned road as it was presented. Will that be necessary?*
- *"Duncan Road needs to be completely remade. We need proper drainage and the road needs to have weight & speed limits placed on it."*

- *“Concerned with increased traffic flow on narrow roads creating potential safety hazards for existing lot owners in peak summer season. The proposed roads add a colorful splash to the pictures but realistically what are the chances of them actually being built?”*
- *“Your information showing a proposed road connecting your development to Idlehours Drive is of concern, as that road would appear to be crossing our land and we have not given permission to anyone for such a development. Nor do we intend to have our property used as a short cut for the 2 developments.”*
- *“Your Transportation plan has a purple line to the water’s edge titled Trail Connection, as there is no trail there I don’t understand what that is supposed to represent. We have no intention of granting unauthorized access to our property.”*
- *“You also make no mention of docks or boat mooring / docking off of the property. What are your plans for those activities?”*

4. Environmental Comments

- *“The “clear cut” that they have done on stage 1 is sickening – they have removed trees & shrubs that have been used for years for wildlife.”*
- *“There is currently a large problem with blue-green algae, weeds and pollution in Lac La Nonne. Appropriate measures must be implemented and maintained to ensure that the water quality does not deteriorate further.”*
- *“Will there be checks & balances put in place after this development takes place & construction on homes completed to ensure the wetlands remain intact along with the sedimentation basins?”*
- *“The lake is spring fed. It is unclear if the environmental studies will include determination if the lake and watershed can support the size of this additional development.”*
- *“We were pleased that there is now some token recognition of environmentally sensitive lands bordering the development and within the development area. We are very concerned about areas near/within the development which are the breeding grounds for frogs and other amphibians. Based on our experience observing wildlife, some of these areas are missing from the identified reserves and it is strongly encouraged that these areas to be identified based on existing patterns of breeding and access to the lake. We do not mow a portion of the ditch near our cabin entrance in order to provide habitat for frogs/toads and one would like to see consideration of the natural habitat included in guidelines for owners within the development.”*
- *“Statements regarding 30.0m minimum environmental reserve need to be more clearly defined in regards to fluctuation of water levels. What stipulations are in place to prevent lot owners from changing lot elevation and therefore affecting runoff patterns and flow to the lake.”*

- *"Drainage – lack thereof! Concerns that phase 2 lakeside owners will try develop lake front land so they have boat/lake access. Need to have strict laws on developing front lots. Concerned the lake can sustain any more lots / lake traffic."*
- *"Drainage to the lake. We have concerns with the present water way (public utility area) and how Phase 1 has proven to drain toward the front lake properties. This needs to be fixed. All sites must have a collection tank for their wastewater, including any outhouses."*
- *"This development will disturb the fragile eco system that is present on our land and for that reason all precautions need to be taken by the developer to ensure that no future harm comes the area."*

5. GENERAL COMMENTS

- *"I am not opposed to the development in general terms however I am concerned about its effect on the lake in terms of water quality as well as recreational quality for existing landowners."*
- *"I would appreciate a reply regarding the concerns listed above" (signed by 2 existing land owners)*
- *"These plans appear to be based on the future development of the north quarter. There is nothing in the plan to address the potential possibility that this land may not be developed."*
- *"There must be some steps included within the plan to prevent trespass on neighboring private property."*
- *"I don't oppose the phases, however I have concerns over the volume of traffic, quads, ATV's & heavy trucks / equipment on the road. Council needs to look at what our tax dollars are being spent on as fixing the existing road with gravel/tar is not sufficient. Also concerns over traffic that comes down the road looking for lake access. Unfortunately, I think council will approve the project regardless of what existing owners request due to tax dollars!"*
- *"Property Value to be maintained. We would like some insurance that the present caveats set for the subdivision are upheld. No camp ground area, no mobile homes, no motorhomes, no garage development without home but a development to be maintained as per specs of 1400 square foot homes & more. We do not want this to end up being a Bolduc Subdivision and nothing but a party in our backyard."*
- *"We are pleased that access to the lake will be maintained through a trail though this may need to be widened to allow wildlife access as well. Naturally we would prefer that this development be much smaller and that it demonstrate cutting edge knowledge for minimizing impact on the environment both natural and social. However, our property has been in the family for enough years (since the 1980s) that we have seen how leadership on this front does not come from the County of Barrhead or the Subdivision Authority and that seeking input is really a matter of ticking off a box. Our input will likely have no impact on the future direction of the development but we thank you for making it possible to at least document our concerns."*

- *"If possible an expansion for more green area, we hate to lose the beauty of nature surrounding us."*
- *"We own right to the water's edge. We would need to have your development fully fenced to prevent trespassers from accessing our land either along the shore or along the property line. There seems to be an assumption by land users that they have the right to trespass on our land without permission and this is not the case. We are happy to work with anyone who would like to come onto our property for a specific reason ie: berry picking or perhaps taking photos. We do NOT permit hunting, the use of ATVs, Side By Sides, Motorcycles or Snowmobiles on our land as they are destroying the natural habitat."*
- *We understand why the property owners adjacent to phase 3 & 4 are concerned. We are in lot 27 and believe nobody has been impacted by this development more than we have. Perhaps a solution would be to have more green space along Duncan Road so that development of the back lots won't be as intrusive to the long-time lake front property owners. The developer electing to 'clear cut' lots 4-6 rather than taking out only those trees necessary to build in lot 5 really has everyone on the road concerned and upset. Lot 4 was a natural marsh area that hosted numerous frogs and toads where water fowl nested in the spring. If the developer does the same thing for the rest of the lots as the development progresses rather than allow the buyers to clear as the lots are sold there will continue to be animosity and hostility. Gradual change typically meets with less resistance. For 50 years the owners along Duncan Road have enjoyed a more natural setting and a quiet road with a dead end that did not promote a lot of traffic.*
- *Most residents understand and believe the developer has the right to move forward and 'make money' on his investment but naturally no one wants their 'backyard' impacted by the change. We believe the planned development and road for all 4 phases as presented on March 24, 2018 is a good compromise for all if a wider green space is added along Duncan Road.*

**Public Engagement Summary #2, Summary of Feedback received by Scheffer Andrew Ltd.
Lakeview Estates at Lac La Nonne Proposed/Revised Area Structure Plan Public
Engagement**

December 7 to December 21, 2021

Number of Respondents: 2 respondents (1 phone call and 1 follow up email) and 1 email

Number of Survey Responses: 0

1. PROPOSED DEVELOPMENT CONCEPT

- Email #2: As we look at the aerial view of our area we notice that the proposed 37 lots are crammed in an area about one quarter the size of Moonlight Bay Estates which hold about 90 large lots.
- Email #2: The statement “The subdivision will provide to its residents a lake front recreational development for four season use on Lac La Nonne. It is not true and is false advertising. A proper access to the lake from the back lots has not been proposed.”

2. SERVICING & STORM WATER MANAGEMENT

- Phone Call: Barrhead County septic lagoon is full and septic waste has to be sent to Lac Ste. Anne. Want developer to pay for a new septic lagoon.
- Email #1: *Lack of supporting infrastructure:*
Lack of septic facilities. Currently there is no septic lagoon available as the County of Barrhead lagoon at Dunstable is closed. This has resulted in additional costs as septic needs to be disposed of in another county. Is the developer going to provide funding to support the building or rebuilding of the septic lagoon to sustain all of the additional housing? Again, future expansion should halted until this issue has been addressed.
- Email #2: Also, the Barrhead County needs to be aware that their county lagoon can no longer sustain their liquid waste and it needs to be transported and dumped in Lac St. Anne County lagoon, for added cost to us.

3. TRANSPORTATION

- Phone Call: Not supportive of Duncan Road being re-aligned. Currently own Lot 1 (Stage 1) and Lot 27 (development to the south). Want to start a petition to relocate the road entrance to the other end of the development (to the north) or to connect with the cul de sac (Stage 4). Current alignment of

Duncan Road interferes with numerous lakefront properties. Concerned Duncan Road is one way in and one way out, potential issue for emergency vehicles. Do not want Stage 4 allowed unless a second access is built. The developer paved over lot 4 so why care about Environmental Reserve at the other end.

- Email #1: *Only one way in and one way out with no exit to Duncan Road.* Future expansion of lots on Duncan Road (stage 3 & 4) should be halted until or unless there is a way to have traffic exit Duncan Road without back tracking. A turnaround is not the solution. For example, how would emergency vehicles access if the road became blocked?

The entrance to the stage 3 & 4 cul de sac. The original plan had the entrance adjacent to lot 17 resulting in cul de sac traffic passing by 7 lots (lots 11 -17). The way the entrance is drawn now results in traffic disrupting 16 additional lots (lots 18 – 27 plus the 6 lots in stage 1). It is apparent that all original lot owners 11-27 are concerned about additional road traffic that would result from the cul de sac. It is not logical to have cul de sac traffic driving the entire length of the road only to travel all the way back into the cul de sac. It was explained that the entrance could not be by lot 11 due to environmental reserve. We question that logic when clearly there was zero concern placed on the environmental wetlands that existed on lot 4. These were destroyed and will now be home to the developer's personal garage.

- Email #2: Duncan Road was never constructed or maintained to handle the heavy commercial traffic that is using it now. The road has been abused by heavy construction vehicles ever since the first stages of this construction has begun. We believe a secondary road should have been made mandatory by the County of Barrhead. This road would run from Lac La Nonne Road, along the south side of Moonlight Bay Estates, and enter the Lakeview Estates along the north side of that proposed development. This second road would take pressure off Duncan Road and would create a circle road which would address safety features that were raised in the comments. (Ambulance, construction vehicles, the vacuum pump truck, the water trucks to fill water cisterns).

4. Environmental Comments

- Phone Call: Developer doesn't care about the impact on the lake.

5. GENERAL COMMENTS

- Email #2 - We are totally opposed to the proposed construction of the Lakeview Estates. We feel the County of Barrhead, RTD Property Dev. Inc. and Scheffer Andrew Ltd. has had very little concern about most of the issues that were raised in the comments that were made by residents of Duncan Road and neighbouring subdivisions. We feel it is very unfair that the companies and County are attempting to push this through at this time of year when most cottage dwellers are away from the area and not able to talk amongst each other. There really needs to be another meeting before this is accepted.