

***Qualico Communities***

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***Palm Cove  
Concept Plan***

***W ½ Section 34 – 39 – 2 – W5th***

***Sylvan Lake  
Lacombe County  
Alberta***

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**MH**

**Project Planning**

**July 2010**

# **Qualico Communities**

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## ***Palm Cove Concept Plan***

***W ½ Section 34 – 39 – 2 – W5th***

***Sylvan Lake  
Lacombe County  
Alberta***

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Land Planning & Project Management

**July 2010**

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Table 1      Land Use Summary

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### **1.0 INTRODUCTION**

This proposed Concept Plan; “*Palm Cove*”, is located on the north west shore of Sylvan Lake and accessible directly from Rainy Creek Road. The development of the proposed Palm Cove is a logical extension of the residential and recreational opportunities already available and planned for Sylvan Lake. This Concept Plan describes in detail the land use scheme proposed for the initial stage of development only. In the future, following the adoption of the Sylvan Lake Area Structure Plan by County Council, specific types and densities of residential land uses will have been established for this site which can then be applied to those portions of this property which lie outside the scope of the first development stage.

All site-specific technical studies that are required by the County to be prepared in support of multi-lot residential developments such as this proposal, have been completed for the entire area of this property including those portions which will be developed in subsequent stages.



### **1.1 Plan Purpose**

The requirement to prepare a Concept Plan as an integral part of the hierarchy of statutory planning documents comes from Lacombe County’s Municipal Development Plan; Sylvan Lake Management Plan, 2000 Update; and the County’s Land Use Bylaw No.1056/07. The specific content and the supporting technical studies which provided the framework for this Concept Plan, comply in all respects to the detailed terms of reference prepared by Lacombe County’s Planning Services.

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In terms of detail and scope, a Concept Plan makes the intermediate step between the County's statutory land use plans and site specific rezoning and subdivision approvals, prior to the physical development of the property.

The level of detail contained within the Concept Plan will describe the land uses proposed for the subject lands having due regard for the general land use designations of the County's Municipal Development Plan, Land Use By-law and the Sylvan Lake Management Plan; the sequence of development proposed for the plan area; physical features of the property; the density of housing units that could be generated from the type, pattern and intensity of land uses proposed; and the location of major transportation routes and public utilities that may be required to serve the plan area.

In addition to the statutory plans mentioned above, this Concept Plan will also consider the land use policies, directions and regulations contained in the draft Sylvan Lake Area Structure Plan.

### **1.2 Plan Location**

The plan area comprises 63.26 hectares ( 156.32 acres ) within the west half of Quarter Section 34– Township 39 – Range 2 – west of the 5<sup>th</sup> Meridian, Lacombe County, Alberta. As shown in Exhibit 1: Regional Context, this property is located on the north-west shore of Sylvan Lake, south of Rainy Creek Road. Secondary Highway #20 intersects with Rainy Creek Road approximately 9 kilometres to the east of the site and Provincial Highway #2 lies a further 17 kilometres eastward.

The summer village of Sunbreaker Cove is located less than 1 kilometre to the east on the shore of Sylvan Lake. To the west of the property, Palm Bay Road provides access to a small number of existing residences on Sylvan Lake, which abut the western boundary of this Concept Plan. To the north of the property, across Rainy Creek Road, lands are under agricultural cultivation.

### **1.3 Land Ownership**

All of the lands included in the proposed Concept Plan are owned by Qualico Developments West Ltd. The property is encumbered by one utility right-of-way, registered by Gull Lake Natural Gas Co-op Limited, which pertains to a r/w located immediately adjacent to Rainy Creek Road and does not impose any development constraints on the Concept Plan, as currently configured.

There are no other registrations against the title to this property that would influence nor constrain the development of this land.

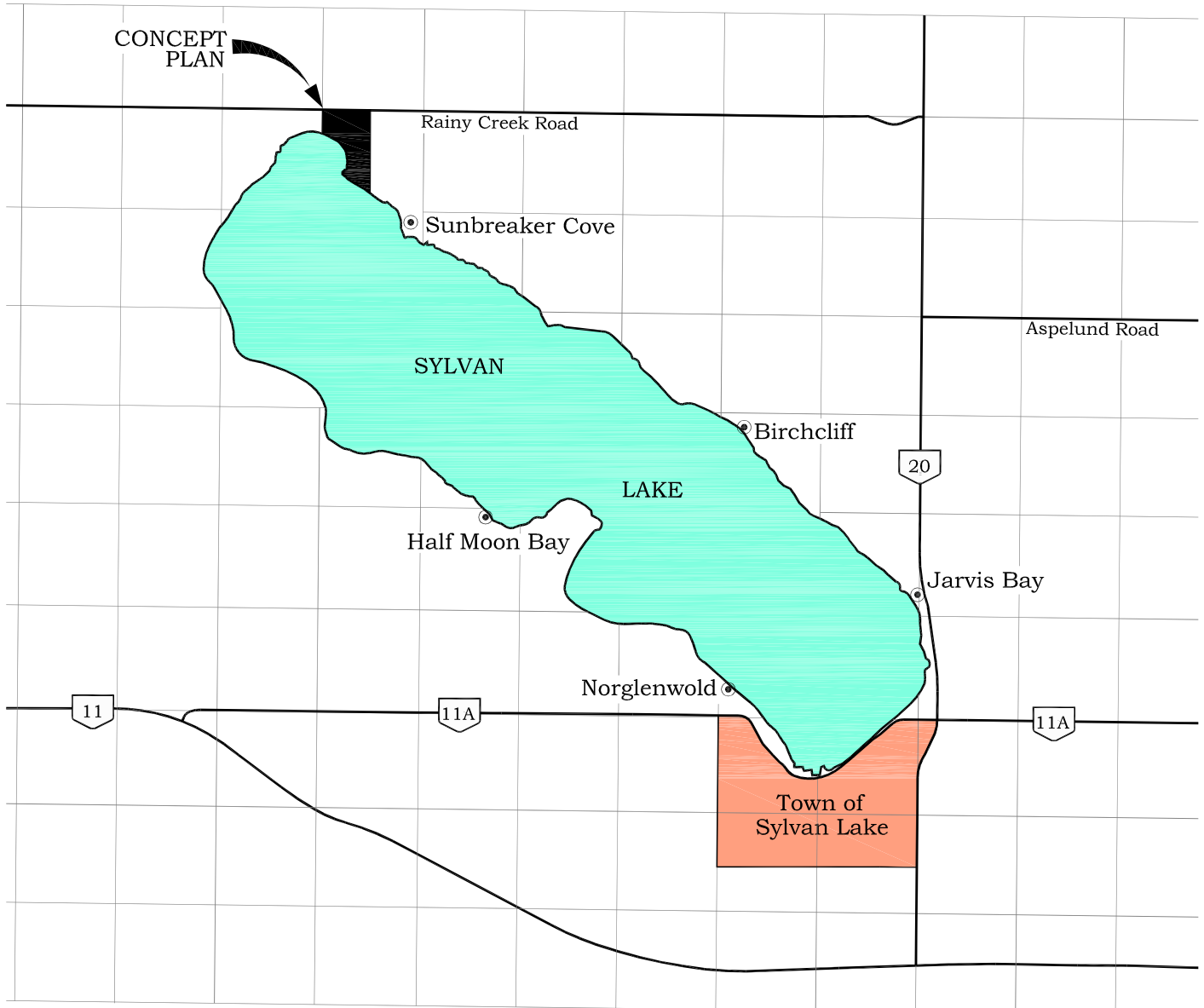


Exhibit 1  
Regional Context

## **2.0 STATUTORY CONTEXT**

The preparation of a Concept Plan must consider and comply with land use policies contained in a number of statutory planning documents including:

- Lacombe County's Municipal Development Plan
- Sylvan Lake Management Plan, 2000 Update
- Lacombe County Land Use Bylaw No.1056/07
- *Draft Sylvan Lake Area Structure Plan*

Although not yet adopted by the County, the land use policies, directions and regulations contained in the draft Sylvan Lake Area Structure Plan have been reviewed and adhered to in almost all respects.

A detailed description of these Plans and their relationship to this Concept Plan follows.

### **2.1 Lacombe County Municipal Development Plan**

The future direction and pattern of growth has been established by the adoption of the County's Municipal Development Plan. While this Concept Plan is in conformance with the general intent and policies of the Municipal Development Plan, the following section highlights a number of significant policy directives which are particularly pertinent when reviewing the development opportunities and constraints for this property.

The Section numbers and headings cited below correspond to the MDP. Paragraphs preceded by ( • ) describe how the proposed development addresses the referenced regulatory policies and guidelines.

#### *2.3 Growth Management Strategy*

*"Demand for housing will inevitably increase putting pressure on the County to expand opportunities for residential development. ... Opportunities for greater housing diversity, including mullet-unit development, will provide housing solutions for a broader mix of the population, including seniors, first-time buyers and those seeking recreational properties."*

#### *Environmental Stewardship*

*"Environmental stewardship was clearly identified as a priority during the community consultation process and is addressed in the balanced growth management strategy. Of particular importance are the County's lakes, rivers, streams and wetlands".*

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- The proposed development at Palm Cove will include clustering of smaller lots ( $\pm 0.2$  hectare) to achieve greater preservation of the natural areas throughout the property;
- Extensive dedication of Reserve areas will protect and maintain areas of woodlands, wildlife corridors, wetlands and the shore of Sylvan Lake.

### ***4.2 Areas Suited for Multi-Lot Residential Subdivisions***

*“Multi-lot residential development shall only be considered in the areas conceptually shown as ..., Higher Density/Lakeshore Residential on Map 2 – Future Land Use Concept.”*

- The location of this Concept Plan is designated for Higher Density Lakeshore Residential, as shown on Map 2 of the County’s Municipal Development Plan.

### ***4.4 Concept Plans***

*“An applicant shall be required to prepare a Concept Plan in support of a rezoning application for any multi-lot residential subdivision. Terms of reference for the preparation of a concept plan are described in Appendix B – Multi-Lot Residential Development Proposals: A Guide to the Approval Process approved by County Council.”*

- This Concept Plan has been prepared in support of the rezoning of a portion of this property from the current A-Agricultural District to R-RCC, Residential Conservation Cluster District. As stated in Section 1.1 of this Concept Plan, this report has been prepared in compliance with these County-approved terms of reference.

### ***4.5 Residential Conservation Cluster Subdivision Design***

*“Lacombe County shall promote conservation (cluster) subdivision design to protect the County’s rural character and to preserve environmentally sensitive areas and natural features. This development approach allows for the clustering of smaller-sized lots at low rural densities while providing opportunities for landscape and view protection with common open space.*

*Areas particularly suited to conservation (cluster) subdivision design include natural features such as woodlands, stream corridors, steep slopes, wetlands, shorelands, ridge tops, wildlife corridors and critical species habitat.”*

### ***7.2 Environmental Setbacks from Waterbodies and Watercourses***

*“The County shall require an environmental reserve of not less than 30 metres in width from the high water mark of waterbodies to the lot line.”*

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### **7.5 Environmental Reserve Dedication**

*“Lacombe County shall require, wherever possible, environmental reserves shall be linked with municipal reserves to create continuous greenways with enhanced public access. “*

- the lotting concept for this development follows the principles of conservation/cluster design. The smaller-sized lots (0.2 hectare) are proposed in a number of small groupings (clusters) which mitigate impacts on significant natural areas identified by the detailed biophysical assessments prepared in support of this Concept Plan.
- Environmentally sensitive areas of wetlands, woodlands and species habitat have been substantially preserved within Reserve parcels to be dedicated around the residential clusters. These Reserve areas, both Environmental and Municipal, have been configured to not only maintain and protect wildlife corridors but to provide the opportunities for interconnected open spaces with an extensive trail network and interpretive nodes at areas of particular interest.
- As currently proposed, this Concept Plan provides more than 30% of the area of the property for lands to be dedicated as both Environmental and Municipal Reserves. This amount of open space dedication is well in excess of the contemplated 20% stipulation for the density transfer/bonus system regulations contained in the County’s Land Use Bylaw.

### **8.3 Maintaining Public Access to Waterbodies**

*“The intensification of development near and adjacent to waterbodies and watercourses within the County will increase the need for new and improved lake and river access facilities.”*

- Environmental Reserve parcels, 30 metres in width, are proposed along the entire shoreline of Sylvan Lake. An additional Municipal Reserve strip of at least 5 metres in width is located between this lakefront ER and the lot lines of any proposed residential lots. In most instances, lands immediately adjacent to the shoreline ER are to be dedicated as Municipal Reserve parcels to accommodate public access to beach areas, boat launch facilities and the historic area known as the Palm Homestead.
- The development of this property includes provision for extensive, public access to the waters of Sylvan Lake, including beachfront facilities, regional trail system and boat launch facility. In addition to lake-related opportunities, this property includes the historic site of the Palm Homestead. Public access and interpretive program describing the homestead, including the Lake’s first Post Office, will be designed in to the overall lakefront reserves.

## **2.2 Sylvan Lake Management Plan, 2000 Update**

The Section numbers and headings cited below correspond to the Lake Management Plan. Paragraphs preceded by ( • ) describe how the proposed development addresses the referenced regulatory policies and guidelines.

### *1.2 Purpose of the Plan*

*“The general purpose of the Sylvan Lake Management Plan 2000 is to promote responsible land use and development around Sylvan Lake.”*

### *3.2.1 Lake Development Area*

*“The Lake Development Area covers lands within ±1.6 kilometres of the lake. ..the demand for residential and recreational development is expected to be high, drawn by the need for access to the lake or the opportunity for views of the lake.”*

### *Policy Directions*

*“1. All major multi-lot residential or other significant development proposals will be subject to an environmental review. ... The purpose of the review is to assess all potential impacts of the development and the extent to which these impacts may be mitigated through project design, construction procedures and operational (or management) practices.”*

*“2. As a general policy, no development will be considered for approval, unless the following criteria are met:*

*(a) the integrity of the natural environment and ecosystems is protected, sustained and if possible, enhanced. Development will not be permitted if it detrimentally affects an environmentally sensitive area;*

*(c) there is sufficient groundwater supply available on-site to meet the needs of the proposed development, and not interfere with any existing surrounding water users;*

*(h) the development is designed to protect significant stands of trees, drainage courses, wetlands, wildlife corridors or other natural features through the dedication of reserves, the use of conservation or environmental reserve easements or other means acceptable to the local municipality.”*

- A Biophysical Assessment of this property was conducted by Stantec Consulting including an extensive program of field surveys. Natural areas throughout the site were ranked according to potential for environmental sustainability and these areas will be preserved and protected wherever possible by the dedication of reserves and conservation easements. A summary of the results of the assessment can be found in Section 3.2 of this Concept Plan.

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- The groundwater under this property was evaluated by Stantec Consulting in order to confirm adequate supply of potable water for the proposed residential development and also to determine whether the effects of this project on the local groundwater system would have any adverse affects on existing well water users. The results of the evaluation did verify adequate supply of groundwater from on-site wells of a quality that meets the requirements of the Canadian Guidelines for Drinking Water Quality. The testing conducted also confirmed that the diversion of groundwater required to serve this project over a 20-year horizon will not interfere with the water supply wells of any other nearby users drawing from the same aquifer. Section 3.3 of this concept Plan includes further details of the results of this groundwater evaluation.

*“4. Developers will be expected to provide opportunities for improved public access to the lake as an integral part of their developments.”*

- The development of this property includes provision for extensive, public access to the waters of Sylvan Lake, including beachfront facilities, regional trail system and boat launch facility. Public access to the lake will be preserved by the dedication of extensive areas of reserves which will be dedicated at the time of subdivision of the first stage of development.

*“5. Where feasible to do so, a clustered pattern of development will be encouraged to minimize the impact of the development on both lakeshore and upland areas, leaving the majority of any natural areas undisturbed.”*

- the lotting concept for this development follows the principles of conservation/cluster design. The smaller-sized lots (0.2 hectare) are proposed in a number of small groupings (clusters) which mitigate impacts on significant natural areas identified by the detailed biophysical assessments prepared in support of this Concept Plan.
- Environmentally sensitive areas of wetlands, woodlands and species habitat have been substantially preserved within Reserve parcels to be dedicated around the residential clusters. These Reserve areas, both Environmental and Municipal, have been configured to not only maintain and protect wildlife corridors but to provide the opportunities for interconnected open spaces with an extensive trail network and interpretive nodes at areas of particular interest.

### **3.2.4 Water Access**

*“In order to respond to the increasing demand and to avoid over-concentration of water-related activities on particular parts of the lake, new public access will need to be developed.”*

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### *Policy Directions*

*"1. High priority will be given to the development of new public boat launch for lake users."*

*"7. Subject to the protection of environmentally sensitive areas, boat docking facilities, where feasible, will be limited to single access locations in new multi-lot residential and resort developments."*

- As currently proposed, the development concept for this residential project includes the provision for installation of a public-use boat launch facility located in the western portion of the lake front. Subject to the results and recommendation of the fisheries assessment conducted as part of the Biophysical Assessment, the precise location, extent and construction details of this launch facility will be require review and approved by provincial and federal regulators.

### **2.3 Lacombe County Land use Bylaw**

This Concept Plan has been prepared in support of a proposed rezoning of the subject property from A, Agricultural to R-RCC, Residential Conservation (Cluster) District. The stated purpose of the R-RCC District is:

*"to allow clustering of smaller lots to encourage a developer to preserve sensitive areas, historic sites, agricultural land or other unique characteristics of the land being subdivided."*

This site is located adjacent to Sylvan Lake and includes contiguous forested areas, wetlands, shore and upland habitat as well as the Palm Homestead historic settlement site. The application of the regulations contained in the Residential Conservation Cluster District will ensure that development will occur with minimal impacts to the natural and historically significant features that currently exist and in addition will provide the means to maintain and protect these features for the general public and future residents of this proposed residential community.

The development concept proposed by this Concept Plan includes in its initial stage of development, a total of fifty-nine (59) single-family lots each a minimum of 0.2 hectares (  $\frac{1}{2}$  acre) in size.

Each lot in the development will be accessed by a County-standard public roadway and will be serviced by a communal water distribution system utilizing well-sourced groundwater.

Sanitary sewer service for each lot will include on-site septic tank and individual pump to discharge waste to a communal collection tank which will be emptied by septic truck service. In the future when the County's regional sanitary sewer

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system has been extended to this property, the communal collection system will be permanently tied into that facility.

Stormwater will be managed by a gravity system of swales and ditches to convey run-off to two storm pond facilities. Water quality and environmental issues related to stormwater will be mitigated by settlement within the storm ponds as well as implementation of *best management practices* and *low impact development measures*.

The balance of site-specific and house building regulations contained in the R-RCC District will be enforced and applied through the County's development permit process for each home.

### **2.4 Draft Sylvan Lake Area Structure Plan**

The Sylvan Lake Area Structure Plan has been prepared to respond to the growing demand for residential and recreational development adjacent to the lake and surrounding lands. The Area Structure Plan includes policy direction and specific regulations to ensure that future development takes place in a manner that protects the lake water quality, provides public access to the lake and maintains a high quality experience for both permanent residents and seasonal visitors.

As stated in the Lake Development Areas portion of the Area Structure Plan;

*“ the approach pursued in this ASP is that development around the lake should not be restricted or curtailed without clear and defensible scientific or other rationale. Instead, development will be allowed to proceed in phases under a carefully monitored regime to a maximum of 8,500 dwelling units. ”*

Extensive public consultation with various stakeholder groups has preceded the preparation of the draft Area Structure Plan. The draft ASP is in final stages of refinement and is scheduled for consideration by County Council and public hearing prior to adoption in the fall of 2010. Although the ASP is not yet a statutory planning document, this Concept Plan has been prepared with regard to all of the policies contained in the draft Area Structure Plan.

The following policies of the draft Area Structure Plan have been particularly relevant for this Concept Plan and the principles have been incorporated wholly or in part, by the proposed development concept for this residential community.

#### **2.5.1 Key Principles of Land Use & Development** **(a) Conservation Cluster Development**

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*“The plan promotes conservation cluster development as a preferred land use pattern rather than traditional country residential subdivisions.*

*Conservation cluster principles require that generally new development is concentrated onto one portion of the “development area” of a parcel, while the remainder is retained in its current state.*

*Conservation cluster development would emphasize attributes offered by the natural and cultural-historical setting by retaining a portion of the parcel in an undeveloped form resulting in an overall more attractive and sustainable lake area environment. The conservation cluster development concept would contribute to achieving the basic objectives of this Area Structure Plan by protecting water quality and maximizing public access to the lake.”*

*(b) Multi-Unit (Multi-Family) Housing*

*“The County may consider higher density housing development along Sylvan Lake provided publicly accessible open space with lakefront access is provided as a trade off for increased density. The following planning policies shall apply to a higher density lakeshore residential development.*

- (a) a density transfer/bonus system will be used to dedicate publicly accessible open space as outlined in the Land Use Bylaw;*
- (b) residential and commercial lots shall be serviced only by communal water supply and wastewater collection system or alternatively, may be connected directly to municipal or regional systems;*
- (c) the dedication of reserve shall be required to protect environmentally sensitive lands, such as riparian areas, and to provide interconnected green spaces for trails and connections to other public recreation facilities;*
- (d) along the lakeshores the County shall require 20% of the lakeshore frontage to be provided as municipal reserve.”*

### **2.5.7 Municipal Reserves**

- (a) “Municipal Reserve Dedication in Lakeshore Subdivisions*
- i. full Municipal Reserve (MR) dedication (10%) shall be taken;*
  - ii. lakeshore subdivisions within multi-unit nodes shall apply a density transfer/bonus system as described in section 2.5.2(b);*
  - iii. Municipal reserve must be developable and useable land. The location and configuration of reserve parcels should ensure access is provided to regional pathway and lakefront park space.*

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iv. *Municipal reserve where possible should be integrated (physically linked) with the shoreline environmental reserve to create a public access site suitable for day use.*

*The length of the municipal reserve parcel must not be less than 20% of the total length of the shoreline frontage of the parcel of land proposed to be developed;*

v. *a municipal reserve strip not less than 5 metres wide will be dedicated adjoining the entire length of the shoreline environmental reserve. This reserve is designed to accommodate a trail along the top of the bank. However it is also meant to stop private encroachments from lakefront lots onto environmental reserves."*

### **2.5.8 Public Access & Recreation**

#### **(a) Lakeshore Development & Lake Access**

*"Any development proposals with the capability of providing public lake access will be expected to protect such access through the dedication of environmental and municipal reserve. This ASP has identified general locations where such public access on lakeshore properties should be considered."*

*"Of the six privately owned parcels that the Public Access Study Background Report identifies as having lake access suitability, five of the parcels are located together on the southwest side of Sylvan Lake and one lone parcel is located at the north end on Palm Bay."*

#### **(j) Trails**

*"Residential and commercial developments shall provide designated trail corridors, within and through the subdivision. ... The objective is to build a lake-wide trail/regional pathway system."*

*The regional trail will create connections between adjacent developments and will be located as close to the lake as possible, normally along the top of bank within the 5 metre wide municipal reserve strip. The regional trail/pathway will be built to a paved standard to facilitate more diverse use. In specific locations where a trail (including the regional pathway) goes through an environmentally sensitive area (eg. wetland, marsh, bog), the trail would be boardwalk or finished to a wood chip or mulch surface."*

### **2.6.1 Protecting Lake Water Quality & the Watershed**

#### **(c) Riparian Setbacks, Environmental Reserves and Easements**

*"Lacombe County's MDP requires a 30 metre setback from the lake edge to not less than 5m beyond the top of bank."*

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*This strip is designated as environmental reserve (ER) and may be supplemented with a 5 metre or greater strip of municipal reserve. The riparian setbacks for wetlands within or adjacent to development sites will be determined on a site specific basis but will not be less than 15 metres.*

*A 15 metre setback will be applied to permanent streams flowing into the lake to protect from erosion and contamination. For intermitten/seasonal streams, a minimum ER setback of 10 metres on either side of streams is recommended.”*

**(d) The Importance of Natural Vegetation**

*“Natural vegetation, particularly riparian vegetation and terrestrial vegetation (forest cover) near the lake is important for maintaining water quality. Shoreline vegetation and forest cover act as buffers, filtering nutrients and sediments before they enter the lake.”*

*“The preservation of forest cover policies below reflect the values of water quality protection and also the protection of terrestrial vegetation and wildlife:*

*1. Developers and private landowners shall endeavour to preserve the remaining forest cover (large forest blocks) surrounding the lake when planning a new development, to the greatest extent possible.*

*4. Connectivity of large forest blocks shall be preserved.*

*5. In instances where at least 75% of a parcel is covered by forest/vegetation \*(SW34-39-2-5), a minimum of 50% of the parcel shall be preserved and retained in its current state, with development only occurring on the remaining 50% of the parcel. A forested area in this circumstance must retain its appearance as a heavily wooded area once development is complete, to the greatest extent possible.*

*7. Developers of lakeshore subdivisions shall preserve vegetation along and in close proximity of the shoreline of the parcel to the greatest extent possible.”*



Concept Plan  
Boundary

Exhibit 2  
Aerial Photograph



July 2010

PALM COVE  
SYLVAN LAKE, ALBERTA

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Communities

### **3.0 SITE CONTEXT**

#### **3.1 Site Features**

Exhibit 2: Aerial Photograph is a recent view of the property and adjacent lands. The extensive shoreline, more than 1 300m metres in length, is the prominent feature of the property. Although not discernable from the overhead photograph, the site slopes generally from north to south and as a result, the northern portions of the property have unobstructed, panoramic views of Sylvan Lake and southern shores of the lake in the distance.

The general topography of the site is open pasture land with heavy rolling hills in the NW quarter. The south edge of the NW quarter is heavily treed with the lake shore intercepting the south west corner. There is a significant slope in this corner of the NW quarter sloping towards the lake shore with elevation changes from 937.0m to 951.0m. The SW quarter is all heavily treed with the lake shore running along the southern and western edges. The topography of the SW quarter is also rolling hills but with smaller slopes than the large slope into the NW quarter. The elevations of the site range from 937.0m along the shoreline to 971.0m in the NE corner. Exhibit 3: Physical Features, presents this topographic information as well as drainage courses, tree cover and areas of greater slopes.

#### **3.2 Biophysical Assessment**

As part of their biophysical assessment of this property, Stantec Consulting carried out an extensive field investigation program in order to attain a high level of ecological knowledge of the site.

##### **Vegetation**

The shoreline portion of the site was quite variable and ranged from exposed south facing shores of varying topography to sheltered, west to southwest facing bay. Emergent vegetation zones are wide and diverse in some areas, and nearly non-existent in others.

Inland the topography was knob and kettle, and was a mixture of agricultural and forested areas. Three distinct vegetation communities dominated the upland native forest portions of this property including Tambling Aspen/Rose/Tall Forb, Balsam Poplar/Willow, and Trembling Aspen/Saskatoon. The cultivated areas were hay field or previously disturbed as part of the historic Palm homestead.

Throughout the upland areas numerous overland drainage areas as well as linked and isolated wetlands were observed. Thirteen wetlands were classified, all being Class II and III, the exception a Class VII fen pond.



RAINY CREEK ROAD

PALM BAY ROAD

SYLVAN  
LAKE

-  Contours 1m Intervals
-  Creek
-  Tree Cover
-  Wetlands
-  % Slope

Exhibit 3  
Physical Features



July 2010

PALM COVE  
SYLVAN LAKE, ALBERTA

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### **Wildlife**

The site contains a wide variety of habitat types including grassland, deciduous forest, mixedwood forest, wetland and riparian areas, deepwater and all the transition zones in between. Due to this habitat variety, the site is rich in faunal species diversity with 47 separate bird species observed and a concentration of large and medium-sized mammals utilizing the forested areas along the shoreline, the transition areas, and within the large contiguous forested area. Numerous small mammals, frog and toads, and one reptile were identified during the field surveys.

In addition to land-based surveys, a fisheries assessment was conducted for the bed of Sylvan Lake immediately adjacent to the property. The assessment concluded that this shore area has been identified as a key environmentally sensitive area in regards to fish habitat due to the presence of emergent vegetation and the valuable fish spawning habitat, including whitefish.

### **Rare Species**

A search of Fisheries and Wildlife Information System did not identify any occurrence reports of rare species within the subject property. Considerable effort was made during the field surveys searching the property for rare vascular plants. During three surveys conducted in early season, mid-season and late-season, no rare plant species were observed.

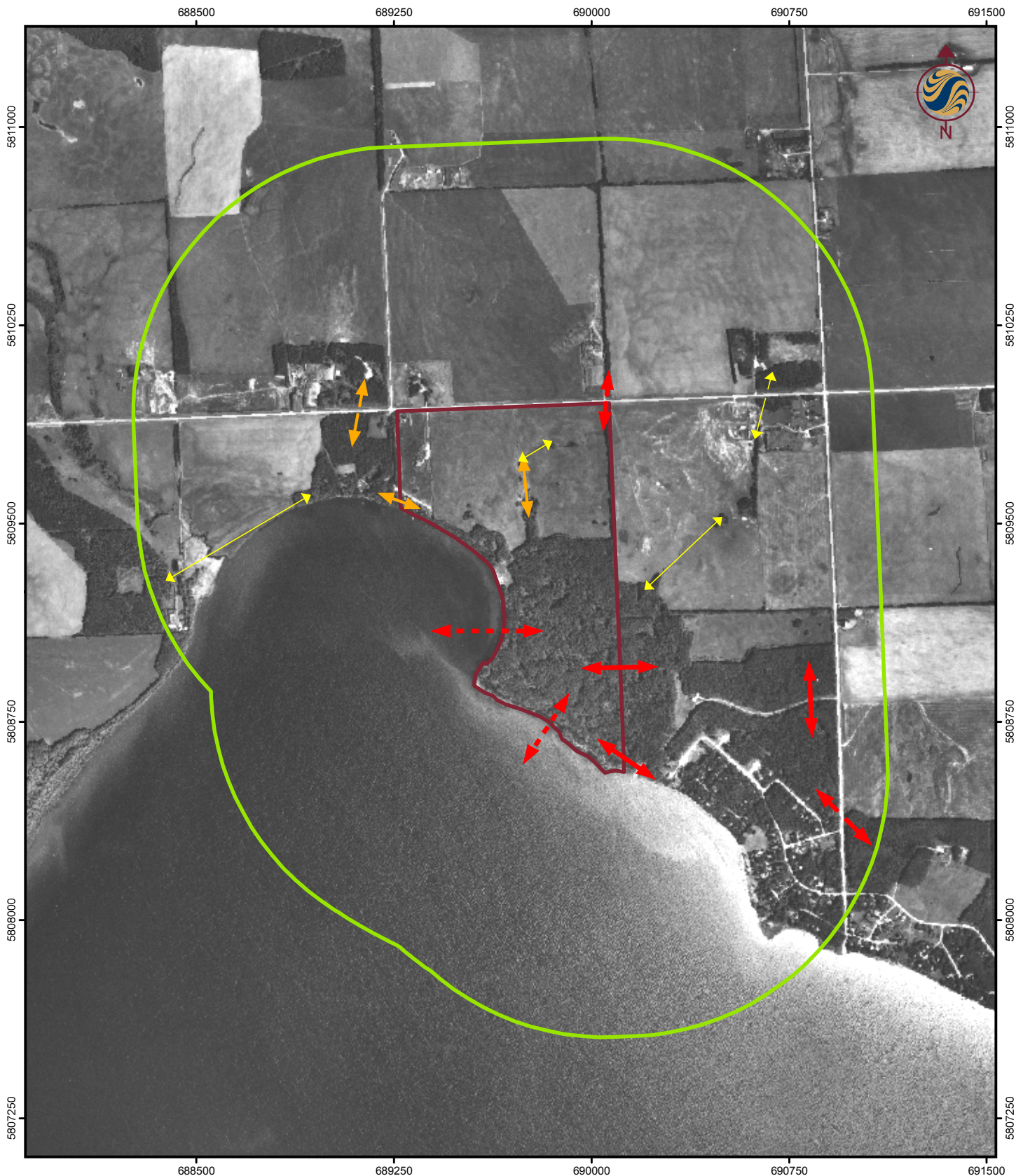
### **Potential for Conservation**

Overall the site was ranked into three priority categories based on several factors including environmental sensitivity and sustainability. The agricultural areas were determined to be of low priority due to a high level of disturbance, concentration of non-native plant species, lack of wildlife habitat and low connectivity potential.

The transition areas, narrow window on the east edge of the property, small, forested area to the west, and portions of the north drainage course were considered of moderate priority due lack of connectivity and higher degree of fragmentation. An exhibit which has been excerpted from the biophysical assessment shows habit connectivity on the site and adjacent properties. .

The area with the highest potential for ecological sustainability and the highest priority for conservation were the large contiguous forested area and nested wetlands residing in the south portions of the property and the shoreline associated with this forested area. These areas were ranked due to their contiguity with natural areas within the site and to adjacent natural areas, the multitude of variable vegetation communities, and richness of species.

The use of Conservation Easements (CE) or strategically placed Municipal Reserve (MR) or Environmental Reserve (ER) within the proposed development could aid in maintaining the ecological integrity of these high priority areas.



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March, 2010  
 1102-17665



**Stantec**

Projection: UTM Zone 12 Datum: NAD 83  
 Imagery obtained from Alberta Sustainable  
 Resource Development, 1993.



Client/Project  
**QUALICO DEVELOPMENTS WEST LTD.**  
**BIOPHYSICAL ASSESSMENT**

Figure No.  
**9.0**

Title  
**HABITAT CONNECTIVITY**

### **3.3 Groundwater Investigations**

Stantec Consulting Ltd. conducted an evaluation of the groundwater on this site in February 2010 to ensure adequate supply for the proposed residential development and to analyze the potential impact on existing groundwater. Two wells were drilled on the property to a depth of 49 metres below the land surface.

As a result of Stantec's testing in accordance with the Alberta Groundwater Evaluation Guidelines, they have determined that the theoretical interference caused by the diversion of groundwater for this development over a 20-year period would be  $\pm 42 - 52$  cm in the vicinity of the nearest other well-users whose wells are completed in the same aquifer. This level of diversion is considered insignificant and would not affect other water supply wells in the vicinity.

The evaluation also determined that there is adequate recharge to meet the needs of the proposed development, and that the supply well will not induce infiltration from the lake above the natural flow-through amount, nor affect the safe yield of the sandstone aquifer from which it draws.

This suggests that the aquifer tested for this project is not under the influence of the surface water associated with Sylvan Lake.

Chemical analysis performed on water samples taken from the on-site well confirmed that recommended limits for health objectives have not been exceeded, as set by Alberta Environment, according to the Canadian Guidelines Drinking Water Quality..

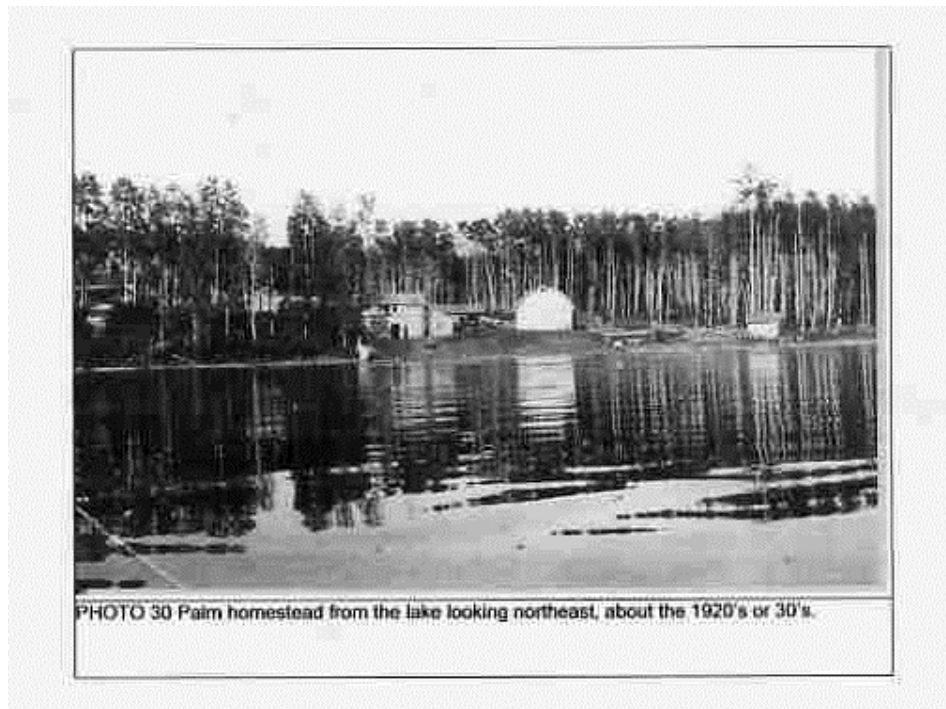
### **3.4 Historical Resources**

Early in the sequence of technical studies performed in support of this Concept Plan, Archeologists with Stantec Consulting were retained to complete a Historical Resources Impact Assessment for the property. In that initial study Stantec recommended that a detailed assessment and geophysical survey be conducted on significant features of the Palm Homestead. The Palm Homestead is a historic Finnish homestead on the shores of Sylvan Lake.

The features to be examined included the Palm infant burials, whose precise location needed to be determined; the main Palm house, the sauna, a root cellar, and a privy depression. In addition, all other visible features on the site were to be recorded into an accurate site map. Structure no longer visible on the ground, but whose general locations were pointed out by Palm descendants, were also to be included.

## Palm Cove, Sylvan Lake - Concept Plan Qualico Communities

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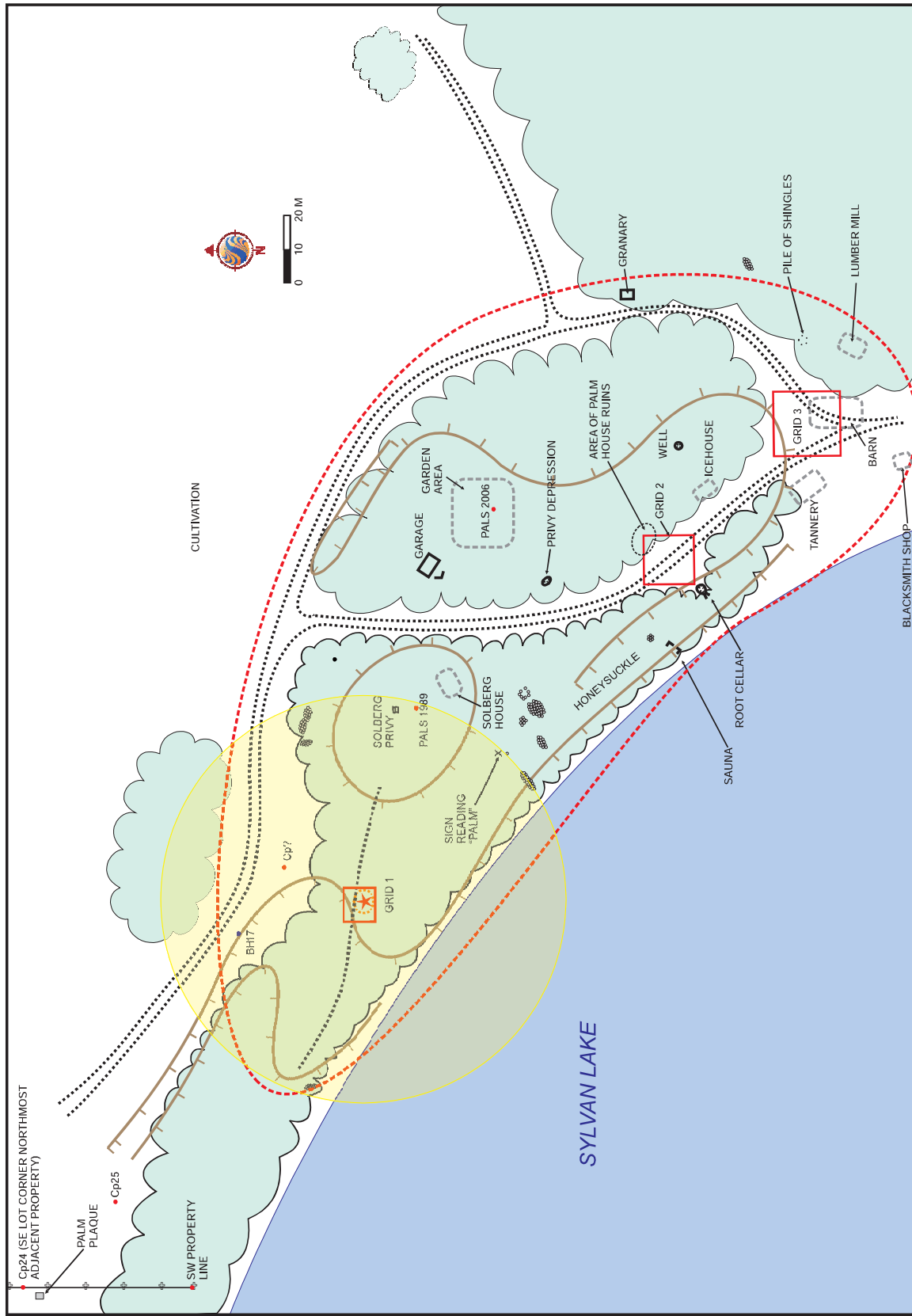


The objective of the proposed project was to generate recommendations for what further work, if any, should be done on the Palm homestead features in the event of impact by the development of this site.

The Concept Plan proposes that for all features of the Palm homestead will be avoided and therefore there will be no disturbances caused by development activities. Municipal Reserve parcels will be created to transfer the site to the Province at the time of subdivision of the initial stage.

The Palm homestead is historically and culturally significant because it belongs to a discernable ethnic homestead group, with intact archeological features that are unique to that group (sauna). The homestead was occupied for a discrete and historically important time period ( 1905 – 1938 ) encompassing the homestead era but largely uncontaminated with artifacts from the post World War II era. The Palm homestead was significant to the larger homestead community because it housed a post office from 1916 to 1927 and was the location of many social gatherings. The Palm infants burial site has been legally surveyed and a permanent avoidance setback of 50 metres radius will be implemented at the outset of this development.

One of the final recommendations for the Palm homestead was to interpret the features to the recreational public. This could include interpretive signage on walking trails. A map showing the layout of the homestead as determined by this study is attached.



# Legend:

- Archaeological Site Boundary
- General area of grave locations, pointed out by oral informants
- Possible Grave
- Standing Building
- Area of Ruined Building
- Depression
- Corner of Ruined Building
- Footpath
- Roadside
- Fence Post
- Trail
- Fence
- Break in Slope
- Control Point
- Bore Hole
- Plaque Monument
- Lake
- Wooded Area
- 50 m Buffer of Avoidance Around Burials

- Fence building or feature pointed out by oral informants. Neither size, shape, or location are exact.
- Em38 Survey Grid
- 50 m Buffer of Avoidance Around Burials

Client/Project:

QUALICO DEVELOPMENT HRIA OF SYLVAN LAKE  
SUBDIVISION IN W 1/2 34-39-2-W5M

Figure No.: 3

Title: DETAILED FINAL MAP OF THE PALM HOMESTEAD  
(FcPn-17)



Stantec  
11077006

## **Palm Cove, Sylvan Lake - Concept Plan Qualico Communities**

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The entire area encompassing the identified Palm homestead and associated out-buildings will be dedicated as Municipal Reserve.

In addition to the historic features associated with the homestead, an archeological site containing precontact projectile points and piled stones has been found on the property on the shore of the lake. This feature is referred to as a Stone Cairn and its location is shown on the development concept.

Alberta Tourism, Parks, Recreation and Culture have reviewed the historical assessments and have accepted the findings and conclusions in these studies. A letter from the Province's Historic Resources Management Branch dated December 12, 2007 stated that Qualico Developments has Historic Resource Act clearance for the "Palm Cove" subdivision subject to the following two conditions:

- FcPn-16 – Precontact Stone Cairn, complete avoidance by setback of development 10 metres radius;
- FcPn-17 – Palm Infant Burial Site, complete avoidance by setback of 50 metres from development activities.

The Concept Plan complies fully with these directions Alberta Culture and Community Spirit (ACCS) and proposes Reserve parcels surrounding these features of no less distance than the specified development setbacks.

### **3.5 Geotechnical Investigations**

Parkland Geotechnical Consulting Ltd. conducted on-site investigations during the period September 13, 2007 and October 29, 2007. Their investigations included drilling twenty (20) boreholes, in order to determine the geologic conditions of the site and to recommend considerations for the design and installation of underground services, residential foundations, roadway subgrades and flexible pavement design for light residential and collector roads.

The general soil profile encountered on the site consisted of topsoil, underlain by silty clay and below this layer, clay till. A layer of sand was encountered in a three boreholes while bedrock was found below the till in five. The local till had a variable mixture of clay, silt, sand with a trace amount of gravel and occasional inclusions of cobble and coal fragment. In general, the proportions of sand, silt and clay are roughly equal in the clay till, and the plasticity of the till was low to medium and the consistency of till was stiff to very stiff. Moisture contents in the till ranged from 11 to 22 percent.

The predominant local bedrock is a soft rock composed of weathered clay shale that has the consistency of very hard soil. The bedrock typically becomes stronger and more competent with depth.

## **Palm Cove, Sylvan Lake - Concept Plan Qualico Communities**

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Soil samples at a depth of 2.0m from all boreholes at the site were tested for soluble sulphates. The concentrations of water soluble sulphate were between 0.04 and 0.08 which indicates a “legible potential for sulphate attack on buried concrete in direct contact with soil”.

Groundwater levels were measured during borehole drilling in September 26, 2007 and again on October 26, 2007. The groundwater levels encountered were considered to be typical for this area. The observed groundwater is considered to be near or below the seasonal average. Groundwater elevations are expected to fluctuate higher on a seasonal basis.

In summary, geotechnical conditions at this site are considered to be similar to typical conditions found around Sylvan Lake. The subsurface conditions at this site are considered to be suitable for the proposed residential subdivision. It is understood that some site grading cut/fills may be undertaken to level and raise areas to smooth out grades at the site. The main geotechnical issues regarding the development of this site are:

- The silty and sandy surficial soil is relatively sensitive to disturbance which can result in potential problems during grading and road construction depending on actual weather and ground conditions. An observational approach based on actual conditions at the time of construction is considered the best way to optimize costs by identifying problem areas before construction activity leads to subgrade failure;
- Relatively loose and sensitive lacustrine soils may be encountered during site development, depending on where the final grade is set. The clay soils are considered to be marginally suitable for use as road base, provided they can be dried to a workable soil moisture content since these soils can be very sensitive to disturbance when wet. Alternatively, wet soils should be mixed or replaced with drier fill or selectively sanded for general site fill. The fill are considered to be better suited for use as an engineered fill.
- Siltier surficial soils will be highly frost susceptible if they are given access to free water or groundwater within the zone of seasonal frost (estimated to an average depth of 2.5m). In general, the depth to the local water table for some of the site is relatively shallow and within the potential depth of frost.
- General residential foundation conditions at this site are considered to be good. Conventional footings will be capable of supporting light foundation loads for houses. The site is also suited to several pile options.

### **3.6 Slope Stability Assessment**

The upland portion of this site is bordered by a slope overlooking the shore line of Sylvan Lake. The slope height varies from  $\pm 10$  to 12 metres along the southwest facing slope with the NW quarter to  $\pm 4$  to 6 metres along the westward facing slope. The shoreline with the SW quarter is low lying and has no significant slope. Lacombe County top-of-bank escarpment policy sets an arbitrary default

setback of 30 metres from all slopes as a buffer for development near slopes. This slope stability assessment was conducted to assess sensitivity of the local escarpment to potential residential development on the upland area of this site.

Slope stability is described in terms of a factor of safety (FS) against slope failure. In general, an FS of less than 1 indicates that failure is expected and an FS greater than 1 indicates that the slope is stable. A steepened slope will slump back over time to establish a stable profile for the existing soil and groundwater conditions. The FS of a slope will increase as vegetation is established on the face to protect the subgrade soil from weathering. Given the possibility of soil variation, groundwater fluctuation, erosion and other factors, slopes with FS ranging between 1.0 and 1.3 are considered to be marginally stable and a "long term" stable slope is considered to have an FS over 1.3.

With respect to the subject site, the shoreline escarpment is a mature slope with tree cover on the slope face. Geologically, the local slope was considered to be a remnant of glaciation which has been formed by old slope regressions into the local till and bedrock formations followed by subsequent wind and water erosion. The crest area of the slope was generally rounded.

Based on site observations, a review of the topographic survey information, and a review of aerial photographs, there was no evidence of significant erosion or slope movement along the shoreline escarpment within the proposed subdivision. A review of aerial photos indicated no signs of deep movement. During the site visits there was no sign of springs or seeps in the slope. No tilting trees were observed during the site visits, indicating that the slope has not been subject to any recent movement.

The findings of the slope stability analysis were in general agreement with local experience in the Sylvan Lake area, which suggests that local lacustrine soil slopes regress over the long term to stable slope angles. The slopes at this site were considered to be natural and free from crest area fills and other development disturbance.

The long term assessment at this site is that the slopes overlooking Sylvan Lake are marginally stable (FS greater than 1.3) and the potential for a major slope movement is low under present normal conditions. Under reasonably adverse soil

**Palm Cove, Sylvan Lake - Concept Plan**  
**Qualico Communities**

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moisture and groundwater conditions, the FS for a point  $\pm 15$  metres from the crest of the slope was estimated to have an FS greater than 1.5 for the assumed representative local slope profile on the escarpment.

For residential lots backing onto the shoreline slope area, the minimum recommended setback distance to the nearest property line to the crest should be equal to the height of slope with a minimum of 5 metres. The minimum recommended setback distance for proposed permanent structures on these lots

is 15 metres. This setback will provide an adequate buffer between the house and the slope.

The natural slope in the area of the proposed residential development is considered to be relatively stable. The removal of soil from the basement excavations near the crest will have a net stabilizing effect on the slope.

General municipal guidelines typically allow unrestricted development on sloping sites where slopes are no steeper than 15 percent. The site has several small knolls and slopes with typical slope angles flatter than 25 percent. The development site has many areas of grade flatter than 15 percent which would support unrestricted development related to slope concerns. The overall assessment remains that slope issues will not be a significant obstacle to safe construction of residences on this property provided that reasonable design and construction practices are followed.

This slope stability assessment was carried out by Parkland Geotechnical Consultants Ltd.

**Palm Cove, Sylvan Lake - Concept Plan  
Qualico Communities**

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## **4.0 DEVELOPMENT CONCEPT**

### **4.1 Residential**

The development concept illustrated in Exhibit 6 follows closely the cluster design principles set out in the various statutory planning documents that regulate the development and use of this property. The concept proposes a total of fifty-nine (59) single-family lots most of which are 0.2 hectares (1/2 acre) in size. The lotting scheme includes four clusters which are defined by the surrounding environmental features which form their edges. Each of these clusters will remain in well-treed enclaves as a result of the municipal reserves to be dedicated as well as tree conservation easements to be registered on the majority of lots in the concept plan.

**Table 1: Development Concept Land Use Summary**

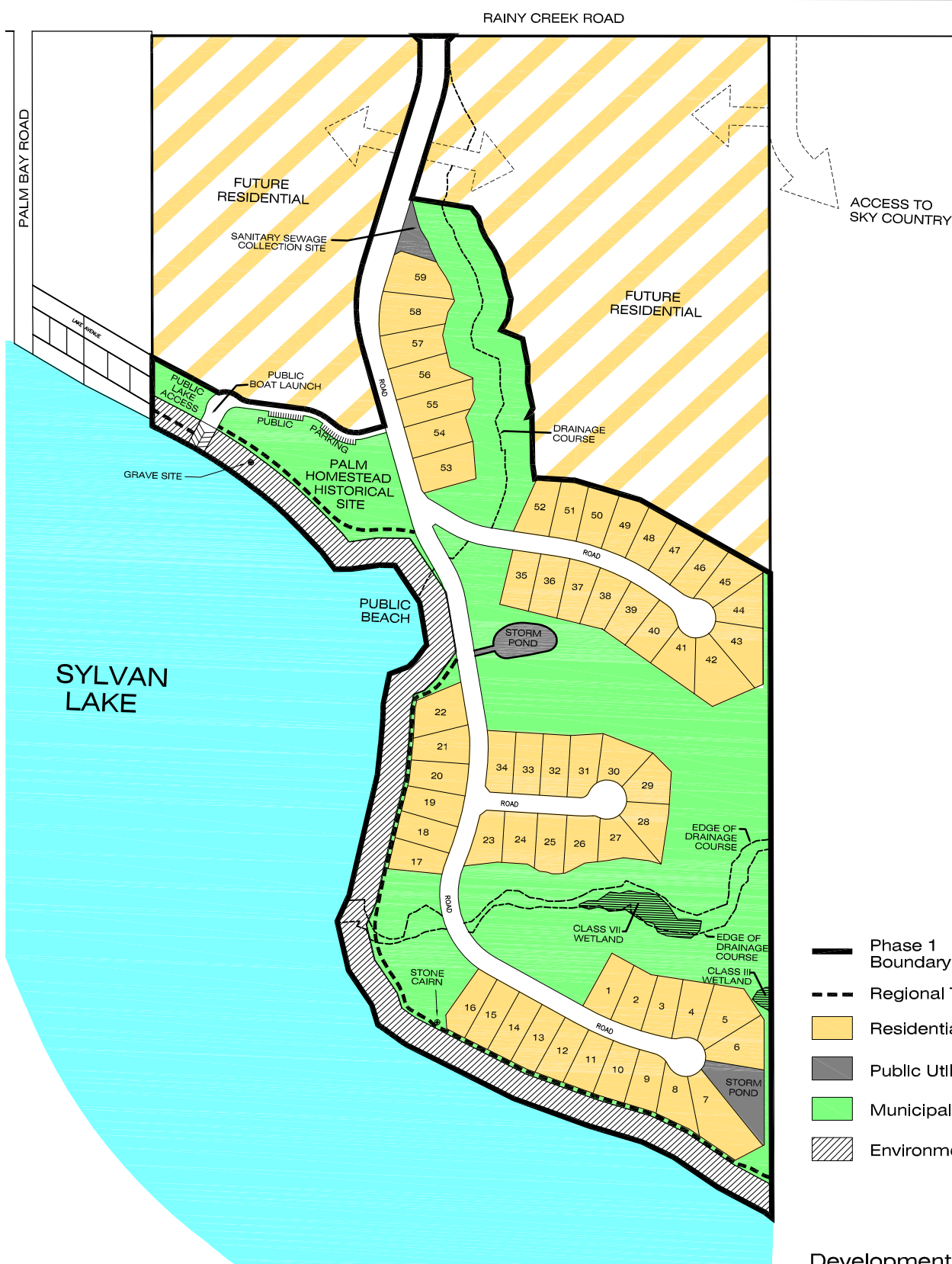
Land Use	Hectares	Percent
Total Area on Title	63.26	
Environmental Reserves	4.06	6.42
Municipal Reserves	15.57	24.61
Future Development	21.22	33.54
Stage I Residential	16.70	26.40
Local Roadways	5.04	7.97
Public Utility Lots	0.67	1.06
Totals	63.26 hectares	100.00%

This Concept Plan has been prepared in support of an application to rezone the area of Stage I to R-RCC, Residential Conservation (Cluster) District.

Details of the support infrastructure required to serve these residences are provided in further sections of the Concept Plan.

### **4.2 Trail System & Reserves**

As shown in the preceding land use summary, reserves account of more than 31% of the area of this property. Municipal Reserves comprise more than 24 hectares of land accounting for close to one-quarter of the total land area. The largest area of MR corresponds directly to the identified expanse of forested area and wetlands to ensure the long-term sustainability of these natural areas. In addition to encompassing the mentioned natural area, the municipal reserve parcel extends to the lakefront with direct linkages to the shoreline ER and the proposed regional trail network.



- Phase 1 Boundary
- Regional Trail
- Residential
- Public Utility
- Municipal Reserve
- Environmental Reserve

Exhibit 6  
Development Concept



July 2010

# PALM COVE

SYLVAN LAKE, ALBERTA



## **Palm Cove, Sylvan Lake - Concept Plan Qualico Communities**

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The other area of expansive municipal reserve dedication in this development concept is located in the western portion of the property and will serve to protect and preserve the historic Palm Homestead. A comprehensive trail system will provide viewing and interpretive opportunities throughout this cultural resource and connects to the regional pathway and further trail system proposed throughout the remainder of the development.

Additional areas of reserve dedication will maintain wildlife corridors and provide linkages between lake shore and upland areas of the development.

The proposed routes of the regional pathway and local trail system as well as locations of the reserve parcels are shown on Exhibit 7: Open Space/Trail System.

### **4.3 Lake Access**

This property located on the northern shore of Sylvan Lake on Palm Bay has been identified as being suitable for lake access opportunities. A Public Access Study suggests that this property is the only lake access opportunity on private land not located on the south/southwest shores of Sylvan Lake.

In addition to the continuous Environmental Reserve to be dedicated along the entire shoreline, extensive adjacent areas of Municipal Reserve are proposed. These municipal reserve parcels account for more than 40% of the total 1300 metres of lake frontage. Together these reserve areas will provide direct public access to Sylvan Lake.

Tentative proposals for this lakeshore area include an extensive trail system and interpretive program, day-use beachfront facilities, boat launch and parking areas. These potential improvements are in addition to the public access and interpretive opportunities that are presented by the preservation and enhancement of the historic Palm Homestead which will share the lakefront with the day-use recreational activities.

### **4.4 Future Development Stages**

This Concept Plan has been specifically prepared in support of the initial development of this property, comprising 59 single family lots, clustered throughout the central and southern portions of the property. The undeveloped portion of the site, located in the northern portions adjacent to Rainy Creek Road, accounts for about 36% of the total and contains 21.2 hectares of land.

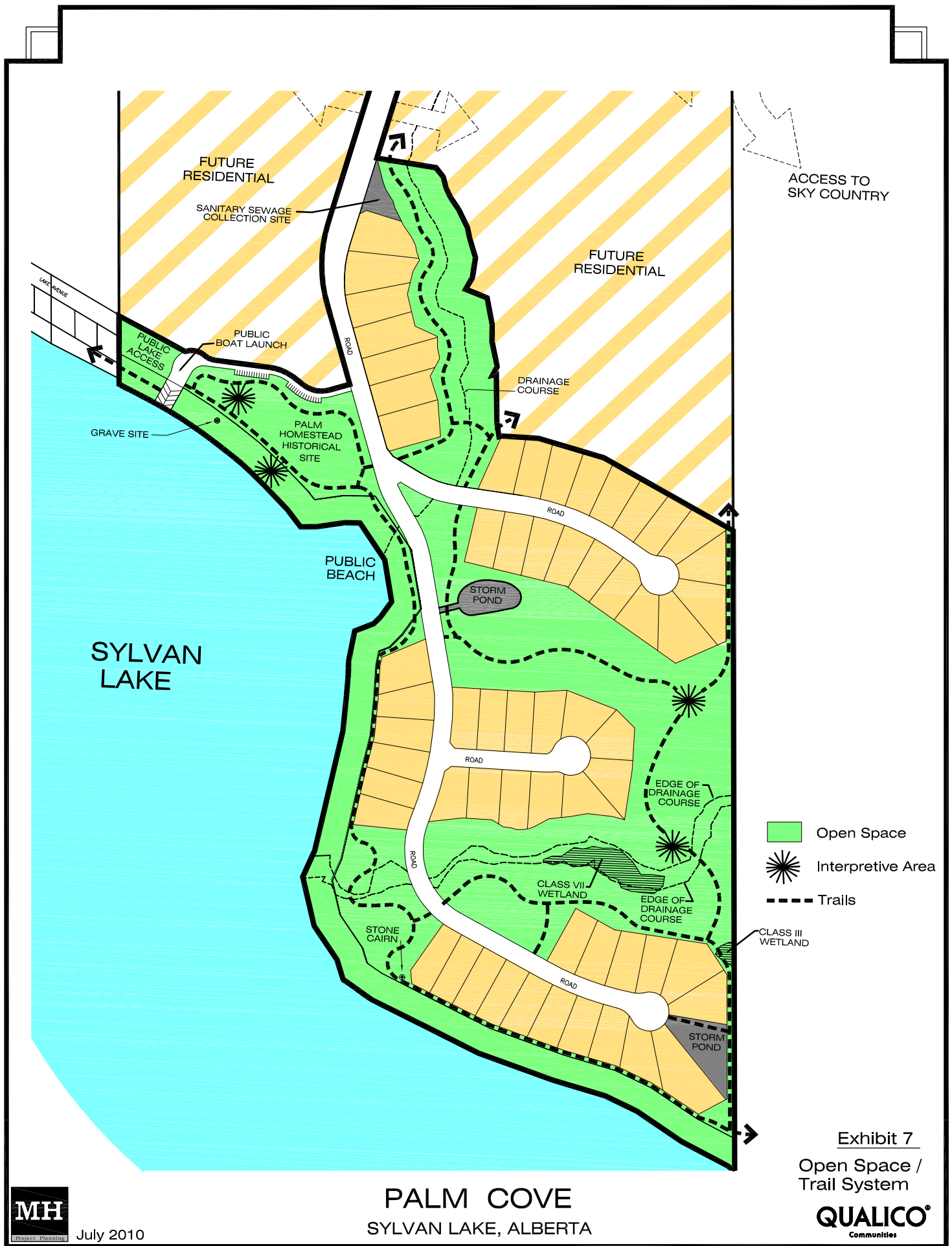


Exhibit 7  
Open Space /  
Trail System

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Communities

## **Palm Cove, Sylvan Lake - Concept Plan Qualico Communities**

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Although the precise designation for these remainder lands will not be set until adoption of the Sylvan Lake Area Structure Plan, the potential land use proposed by the ASP is “Multi-Unit Node”. The draft policy of the Area Structure Plan for this designation states that at least 15% of the total residential units in the development must be in the form of higher density housing such as townhouses and apartments. Following the adoption of the Sylvan Lake ASP, amendments to the Higher Density Lakeshore Residential District (R-HDLR) of the County’s Land Use Bylaw will be required to accommodate the densities proposed for multi-family housing.

In addition to the potential for multi-family units, the draft Area Structure Plan also suggests that the portion of Rainy Creek Road adjacent to this property is an appropriate location for auto-oriented commercial development. The ASP cites a number of locational attributes to support this proposal such as the higher traffic volume and capacity of Rainy Creek Road and its proximity to the Lake; and the future growth in population that will occur over time in this area of the Lake, located at a distance from the shopping opportunities available in the Town of Sylvan Lake.

Once a definitive land use concept has been prepared for the lands outside of the first stage of development, application will be made to the County for the appropriate rezoning which corresponds to the land uses proposed.

## **5.0 TRANSPORTATION and UTILITIES**

### **5.1 Traffic Impact Assessment**

A traffic impact assessment has been completed by MMM Group Limited in support of the 59-lot first stage of development as well as the estimated “ultimate” build-out condition. For estimating purposes it was assumed that the development would accommodate a maximum of 450 single family homes and be assessed for a 20-year horizon. This assessment reviewed the 2010 (Stage I) and 2030 (build-out) weekday morning and afternoon peak hours as well as the estimated daily traffic volumes for the post-development scenario.

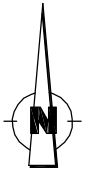
The intersection of Rainy Creek Road at the proposed development access will have one stop control on the site access road and allow free flow to be maintained on Rainy Creek Road. All approach traffic movements will operate at a level of service (LOS) of B or better.

A Type IVa intersection will be required at the proposed development access and Rainy Creek Road based on the 2030 post-development traffic volumes. Traffic analysis software was used to confirm the need for storage bays and their length for right turn and left turn movements.

The assessment showed that the weekday afternoon peak hour flow is greater than the weekday morning peak hour flow. During the weekday afternoon peak period, the proposed 59-lot residential development is expected to generate  $\pm 70$  vehicle trips per hour and 640 trips per day. At ultimate build-out of the development, year 2030, an estimated 450 trips will occur in the afternoon peak hour and a total of 4310 vehicle trips per day.

### **5.2 Local Roadways**

The transportation network in the development concept is to consist of a single local collector with one connection to Rainy Creek Road. When future stages of development occur a secondary access route will be provided to connect with Sky Country’s roadway system to the east. The portion of the local roadway south from Rainy Creek to the sanitary sewer collection site will be designed to a Main Access Road standard with 30.48 metre right-of-way, to accommodate trucks servicing this communal facility. The balance of the roadways throughout the development will be designed to a Country Residential Subdivision Road standard with 20.12 metre right-of-way.



STORM FACILITY OUTFALL  
TO EX. DRAINAGE COURSE

#### LEGEND

• 941.0

PROPOSED ROAD

ELEVATION



DRAINAGE DITCH FLOW

DIRECTION



STORM OUTFALL

CULVERT



STORM SEWER MANHOLE



PROPOSED CATCHMENT

BOUNDARY



DEVELOPMENT BOUNDARY

FLAGGED TOP OF  
BANK

SYLVAN  
LAKE

EDGE OF WATER  
MAY 22, 2007

NATURAL  
BOUNDARY

STORM FACILITY OUTFALL  
TO EX. DRAINAGE COURSE

SCALE 1:4000

0 40 80m

MODIFIED DATE: 2010 06 14

S: \Projects\4537 Sylvan Lake Development\CAD\Drawings\Figures\FIG 5.1 STORM SEWER.dwg

SCALE 1:5000

0 40 80m

RED DEER PROPERTY DEVELOPMENTS LTD.  
SYLVAN LAKE RESIDENTIAL DEVELOPMENT

STORMWATER MANAGEMENT PLAN

FIGURE 5.1



#200, 10576 - 113 Street  
Edmonton, AB T5H 3H5  
t: 780.423.4123  
f: 780.426.0659  
www.mmm.ca

### **5.3 Storm Water Management**

The stormwater management (SWM) system will be controlled in a manner that is comprised of grassed swales and ditches that will convey runoff from the post-development catchments to one of two storm ponds, as shown on the Stormwater Management Plan (Fig. 5.1). These storm ponds will provide detention storage and will have a controlled discharge to Sylvan Lake via outfalls to the existing drainage courses that transect the site. Water quality will be given a high priority during design of the facilities and will be achieved through comprehensive implementation of Best Management Practices.

The stormwater collection system for Stage I of the development consist of a rural road cross-section with grass swales and ditches which convey surface runoff to the stormwater management facilities. Wherever feasible, the proposed system directs drainage from the proposed residential lots and road surfaces to the two storm ponds. These facilities will be developed to enhance the use of the natural depressions, and sized to handle the additional flow for the major storm event while limiting the discharge to the allowable release rate.

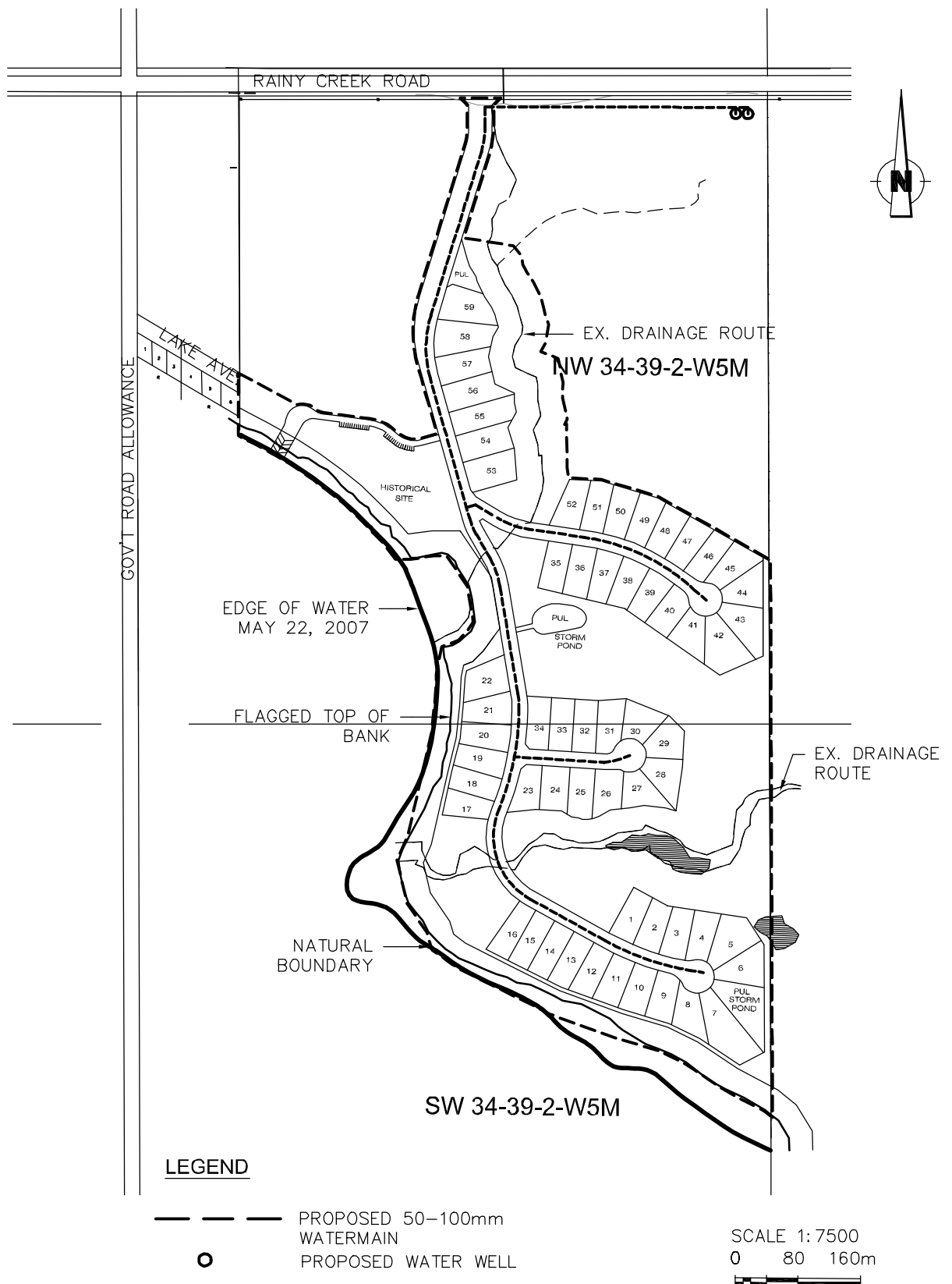
The ultimate stormwater management system preliminary design will be developed following the adoption of the Sylvan Lake Area Structure Plan when the future land use for the balance of the site has been determined. Based on topographic review it is anticipated that the drainage from the majority of the future

development areas can be directed to one of the storm ponds constructed in Stage I. As such, the lot configuration and design has been set to facilitate the expansion of the storm facilities.

### **5.4 Water Service**

The Lacombe County Communal System Design Guidelines outline the design criteria for the water system, including:

- Each lot requires a separate service connection
- Well source groundwater treatment requires continuous disinfection
- Water reservoir storage requires adequate volume to meet disinfection contact time
- Design is based on year-round unit occupation
- Design to be in general accordance with Lacombe County and Alberta Environment design criteria



MODIFIED DATE: 2010 06 14

S: \Projects\4537 Sylvan Lake Development\CAD\Drawings\Figures\FIG 3.1 WATER.dwg

RED DEER PROPERTY DEVELOPMENTS LTD.  
SYLVAN LAKE RESIDENTIAL DEVELOPMENT

WATER SYSTEM PLAN

FIGURE 3.1



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## **Palm Cove, Sylvan Lake - Concept Plan Qualico Communities**

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The water distribution system for the initial stage of development will utilize well sourced groundwater. Water supply wells will be located in the north east areas of the site where the elevation is the highest. The system is planned to operate as “trickle-feed” comprised of two water wells, a communal reservoir with disinfection system, pump, and a distribution system with service connection to each lot in Stage I. The proposed Stage I water system will be designed to facilitate the future expansion of the ultimate development and is illustrated in the Water System Plan (Fig.3.1).

The ultimate water system will be determined following adoption of the Sylvan Lake Area Structure Plan at which time future land use and corresponding population is known. Consideration will be given to make the Stage I system expandable and to ensure that it is compatible with the potential to the future regional waterline.

### **5.5 Sanitary Sewer System**

The design and configuration of this system will adhere to the Lacombe County Communal System Design Guidelines, including:

- Each lot requires a separate service connection
- Private tank storage requires a minimum 3-days storage capacity
- Communal storage tank to provide a minimum of 2-days storage
- Storage tanks are to be located to reduce the affects of freezing and the impacts of potential leakage contamination
  
- All design to be in general accordance with the Lacombe County Design Guidelines

For Stage I of the development, A Septic Tank Effluent Pumping (STEP) system is proposed. With the provision of this system, each lot will be equipped with a septic tank and a pump. Once the septic tank reaches a pre-determined capacity the pump will discharge the effluent to a communal low pressure system. This low pressure system will be constructed throughout Stage I as shown on the Sanitary Sewer Plan (Fig.4.1), discharging to an undergrounds storage tank located to the north. This communal tank will be located within a public utility lot adjacent to the development's main access road. The communal tank will collect and store sanitary waste pumped by Stage I residents for collection and disposal by septic truck services. The roadway and access to the tank site will be designed to meet the needs of typical maintenance vehicles.

Future stages of development will be designed to be compatible with the future regional sewer system and make provision for tie-in to this pipeline.



## **5.6 Development Staging**

The development concept proposed by this Concept Plan includes fifty-nine (59) single-family lots and the associated support infrastructure of roadways and servicing for this residential community. The remainder of the property outside the boundaries of the initial stage will be the subject of further land use planning following the adoption of the Sylvan Lake Area Structure Plan.

The location and extent of the first stage of development is shown in *Exhibit 8: Development Staging.*



RAINY CREEK ROAD

PALM BAY ROAD

FUTURE  
STAGE

FUTURE  
STAGE

SYLVAN

LAKE

STAGE  
1

Exhibit 8

Development Staging



July 2010

PALM COVE  
SYLVAN LAKE, ALBERTA

**QUALICO**  
Communities

## **6.0 IMPLEMENTATION**

### **6.1 Land Use By-law Amendment**

The property is currently districted A, Agricultural. Rezoning a portion of the property which corresponds to the location of the proposed first stage of development to R-RCC, Residential Conservation (Cluster) District will be required in order to permit the development of this residential project.

The balance of the property is to remain in its current Agricultural designation.

Following the adoption of the Sylvan Lake Area Structure Plan, a residential land use concept will be prepared for the undeveloped portions of the property. Rezoning to an appropriate land use district which corresponds to the type and density of housing proposed will be sought in the future, in accordance with County application requirements in affect at that time.

*Exhibit 9: Proposed Rezoning* shows the proposed zoning change for Stage I as well as the current land use districts on adjacent lands.



RAINY CREEK ROAD

PALM BAY ROAD

A-AGRICULTURAL

A-AGRICULTURAL

R-RVR

R-RLA

SYLVAN

LAKE

R-RCC



A-AGRICULTURAL DISTRICT  
to  
R-RCC RESIDENTIAL CONSERVATION  
(CLUSTER) DISTRICT

Exhibit 9

Proposed Rezoning



July 2010

PALM COVE  
SYLVAN LAKE, ALBERTA

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