

**FISCHER ESTATES
AREA STRUCTURE PLAN**

March 21, 2003

CITY OF COLD LAKE

**CITY OF COLD LAKE
BYLAW #144-LU-03**

A BYLAW OF THE CITY OF COLD LAKE, IN THE PROVINCE OF ALBERTA, TO PROVIDE FOR AN AREA STRUCTURE PLAN IN SE 34-62-2-4.

WHEREAS, it is deemed expedient to provide a framework for subsequent subdivision and development of the land legally described as SE 34-62-2-4, and;

WHEREAS, the Council of the City of Cold Lake has deemed it expedient and proper to describe the sequence of development of SE 34-62-2-4, and;

WHEREAS, it is further deemed expedient to identify land uses generally and with respect to specific parts of SE 34-62-2-4, and;

WHEREAS, it is deemed expedient to identify the density of population proposed for the areas generally in respect of SE 34-62-2-4, and;

WHEREAS, it is deemed expedient to provide a general location of major transportation routes and public utilities in SE 34-62-2-4

THEREFORE, pursuant to the authority of the Municipal Government Act, Statutes of Alberta, 1994, Chapter M-26.1, Section 663, the Council of the City of Cold Lake, duly assembled, enacts as follows:

That an Area Structure Plan be approved for SE 34-62-2-4 as attached to and forming part of this bylaw as Appendix "A".

1. That this bylaw shall take effect on the date of the final passing thereof.

FIRST READING passed in open Council duly assembled in the City of Cold Lake, in the Province of Alberta, this 28th day of January, A.D. 2003, on motion by Councillor Young.

**CARRIED
UNANIMOUSLY**

SECOND READING passed in open Council duly assembled in the City of Cold Lake, in the Province of Alberta, this 11th day of March, A.D. 2003, on motion by Councillor _____.

**CARRIED
UNANIMOUSLY**

THIRD AND FINAL READING passed in open Council duly assembled in the City of Cold Lake, in the Province of Alberta, this 11th day of March, A.D. 2003, on motion by Councillor _____.

**CARRIED
UNANIMOUSLY**

CITY OF COLD LAKE

MAYOR

CHIEF ADMINISTRATIVE OFFICER

TABLE OF CONTENTS

1	INTRODUCTION	1
2	LOCATION	1
3	FACTORS INFLUENCING DEVELOPMENT	1
3.1	Policy Context	1
3.2	Ownership.....	3
3.3	Resource Extraction.....	3
3.4	Existing Land Use	3
3.5	Adjacent Land Use	3
3.6	Natural Features	3
3.7	Phase I Environmental Site Assessment.....	6
3.8	Historical/Cultural Resources	6
4	DEVELOPMENT CONCEPT	6
4.1	Land Use	6
4.2	Transportation and Access	10
4.3	Municipal Services	10
4.4	Community Services	14
5	DEVELOPMENT SEQUENCE.....	16

1 INTRODUCTION

This Area Structure Plan supports future applications for general residential and commercial development on the SE ¼ Section 34-62-2-4, in the City of Cold Lake.

This plan has been prepared for the current owner of the majority of the land within the plan area. The owner hopes to develop a range of housing forms, including entry level single detached and semi-detached housing, and affordable medium density row housing and/or walk-up apartments.

2 LOCATION

The subject land is located west of 50 Street (Highway 28) and north of the future alignment of 34 Avenue arterial in the southeast quarter of 34-62-2-4. The plan area includes approximately 63.5 hectares.

3 FACTORS INFLUENCING DEVELOPMENT

3.1 Policy Context

3.1.1 Municipal Development Plan

This Area Structure Plan does not entirely conform to the Cold Lake's Municipal Development Plan (MDP), which was approved in 1997. The MDP designates the subject area as urban reserve with a strip of commercial along the west side of 50 Street. The general residential development proposed is not consistent with this designation.

The MDP also calls for the extension of a collector road west of 50 Street from 38 Avenue. This area structure plan proposes to use the 40 Avenue alignment for this collector.

Approval of this area structure plan will require the simultaneous approval of an amendment to the Municipal Development Plan.

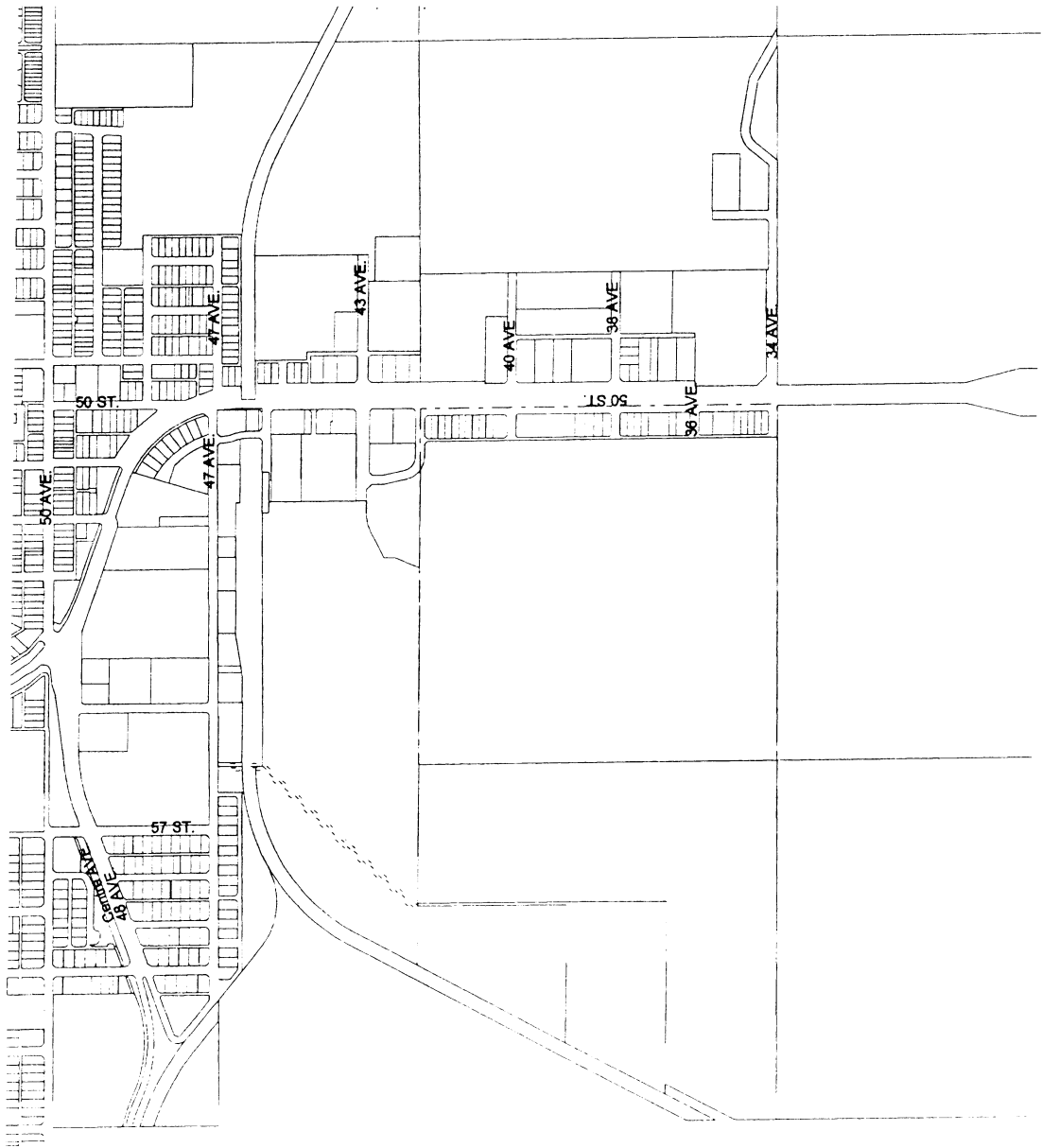
3.1.2 Land Use Bylaw

The Land Use Bylaw, adopted in 1998, presently districts the majority of the subject land as "UR Urban Reserve" and "C2 Arterial Commercial". Amendments to the Land Use Bylaw will be required prior to subdivision.

City of Cold Lake
Fischer Estates
Area Structure Plan

Figure 1
Location Plan

N.T.S.
January 20, 2003



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3.2 Ownership

This area structure plan has been prepared on behalf of the registered owner of SE 43-6-2-4. The current owner of the subject land is C.A. Fischer Lumber Co. Ltd.

The ownership of the land in the area is shown in Figure 2.

3.3 Resource Extraction

In a letter dated October 10, 2002, the Energy Utilities Board indicated that there are no sour gas facilities in the vicinity of the proposed development.

There are no pipelines, oil or gas wells, or other such features to constrain development in the area.

3.4 Existing Land Use

The subject land is currently in agricultural use or in its natural state. There is current development activity in the central east portion of the plan area on a site south of 40 Avenue where the Cold Lake Building Supply Home Centre is being built.

3.5 Adjacent Land Use

To the immediate south and west of the area structure plan area, the majority of the land is in agricultural use. The National Defense Establishment, 4 Wing is 0.8 km west of the subject land. Land to the north is presently in generally agricultural use, but is identified as future residential in the recently approved area structure plan. Along the eastern boundary of the ASP is an existing highway commercial area.

West of the plan area, beyond the Britannia Construction lands, two lots are currently in City ownership. Some of this land was the former site of the municipal sewage lagoons. This site was abandoned and has since been reclaimed. It does not constrain development in the plan area.

3.6 Natural Features

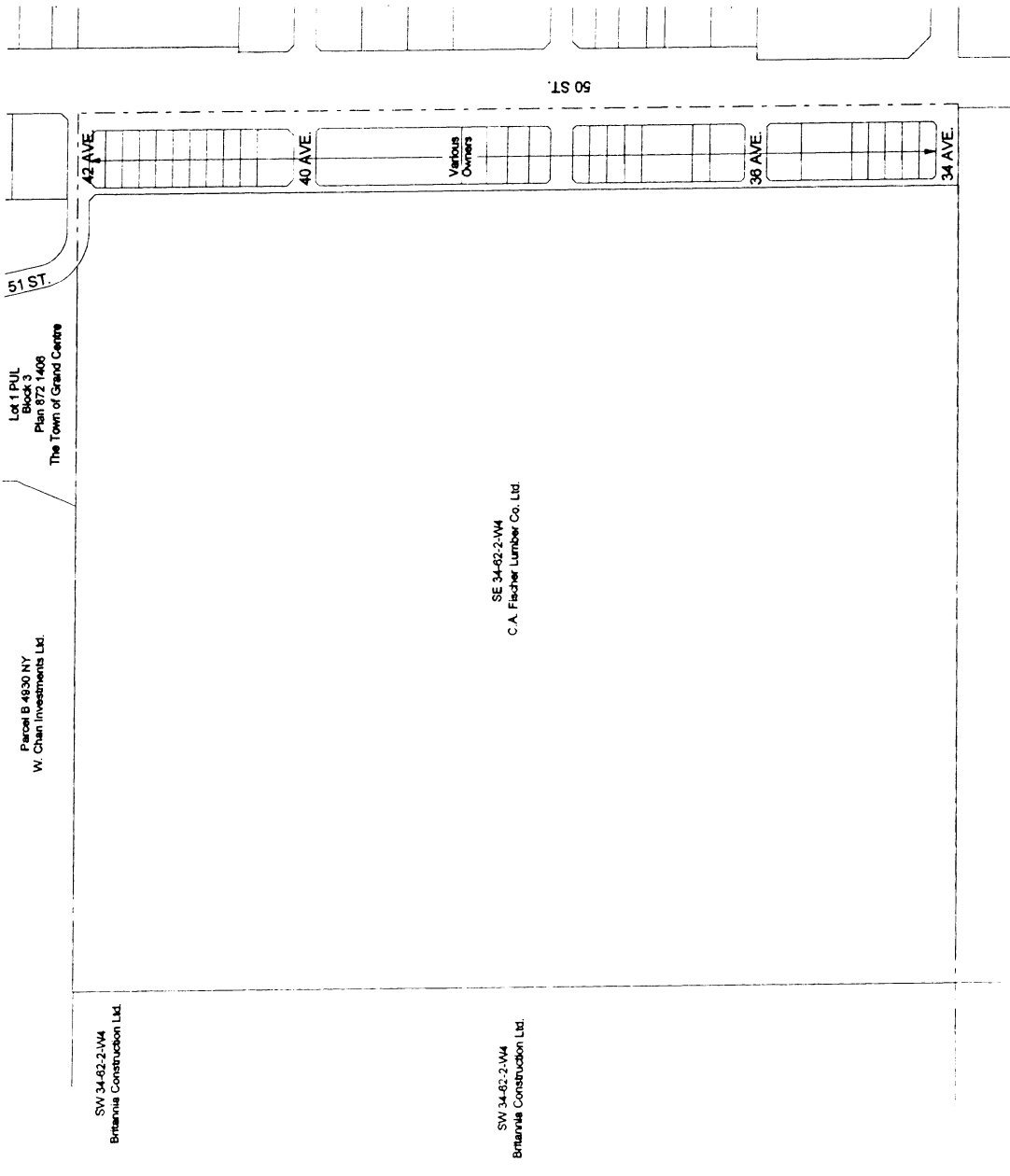
Natural features are shown in Figure 3. As noted above, there is an existing slough in the northeast corner of the plan area. It is the City's intention to utilize the slough as "Pond 4" for storm water management purposes.

Topography within the plan area is generally quite flat, sloping from the west to the east. The general topographic variation is approximately 5 m. However, along the north boundary, immediately west of the public utility slough, there is a treed ridge that varies

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Fischer Estates
Area Structure Plan

Figure 2
Ownership

Scale 1:4000
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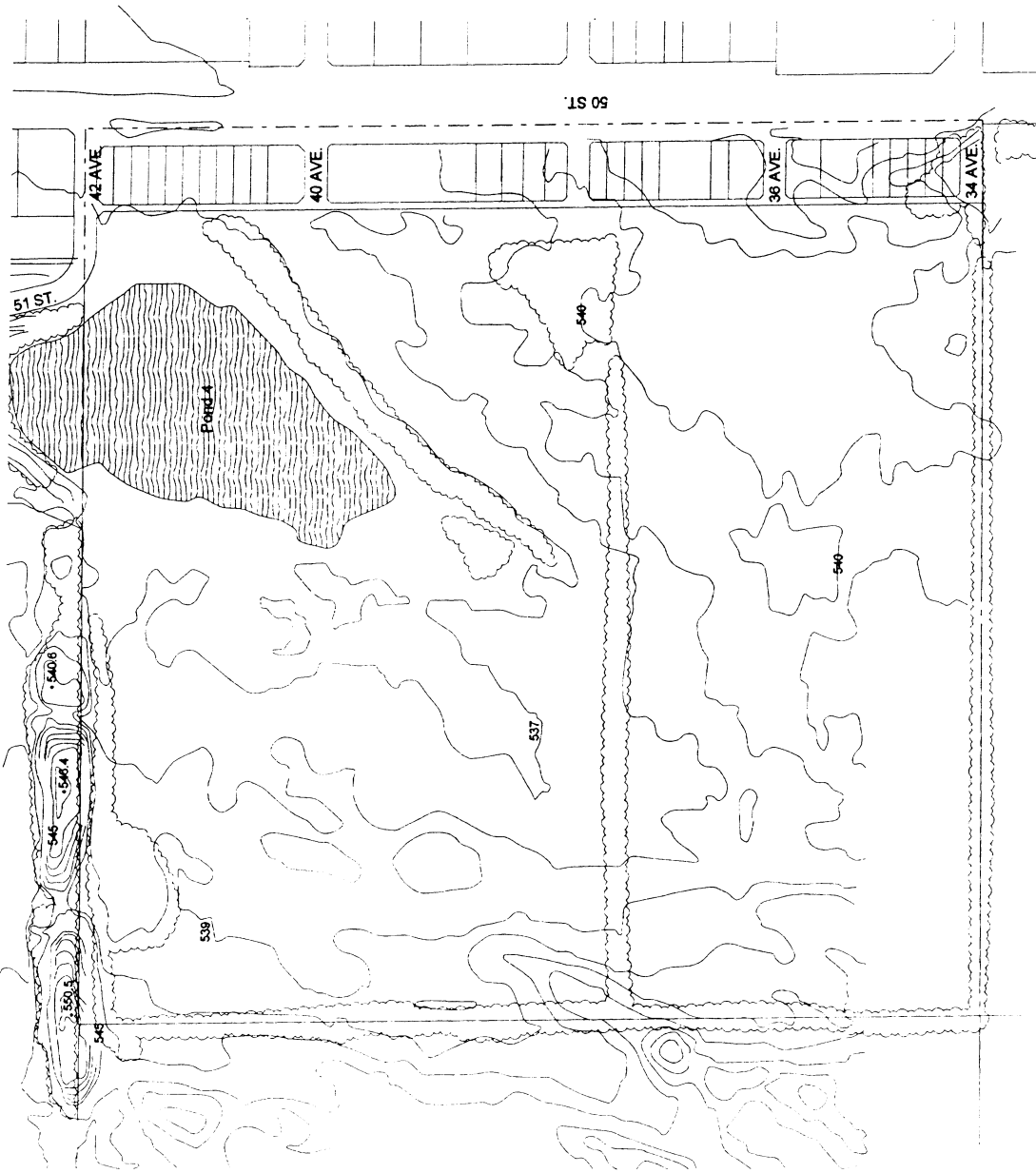
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City of Cold Lake
Fischer Estates
Area Structure Plan

Figure 3
Natural Features

Scale 1:4000
January 20, 2003

Storm Water Management
Treed Area



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in height to approximately 10 m. This ridge appears to consist of artificially placed topsoil.

With the exception of the trees on the ridge, and some scrub bush along the perimeter of Pond 4, there is no significant vegetation within the plan area.

3.7 Phase I Environmental Site Assessment

A Phase 1 Environmental Site Assessment was prepared for this property and previously submitted to the City.

3.8 Historical/Cultural Resources

In a letter dated November 27, 2002, Alberta Community Development indicated that a Historical Resources Impact Assessment is not required.

4 DEVELOPMENT CONCEPT

The development concept is shown in Figure 4. Table 1 shows a breakdown of the land uses proposed.

4.1 Land Use

4.1.1 Storm Water Management

The 1988 Municipal Servicing Study identifies the slough in the northeast of the plan area as a facility for storm water management purposes. This plan proposes that portions of this area required for storm water management be dedicated as a public utility lot as subdivision occurs.

At the subdivision and engineering design stage, some adjustments to the specific boundaries of the public utility lot will likely be required. These adjustments can be made without a formal amendment to this area structure plan.

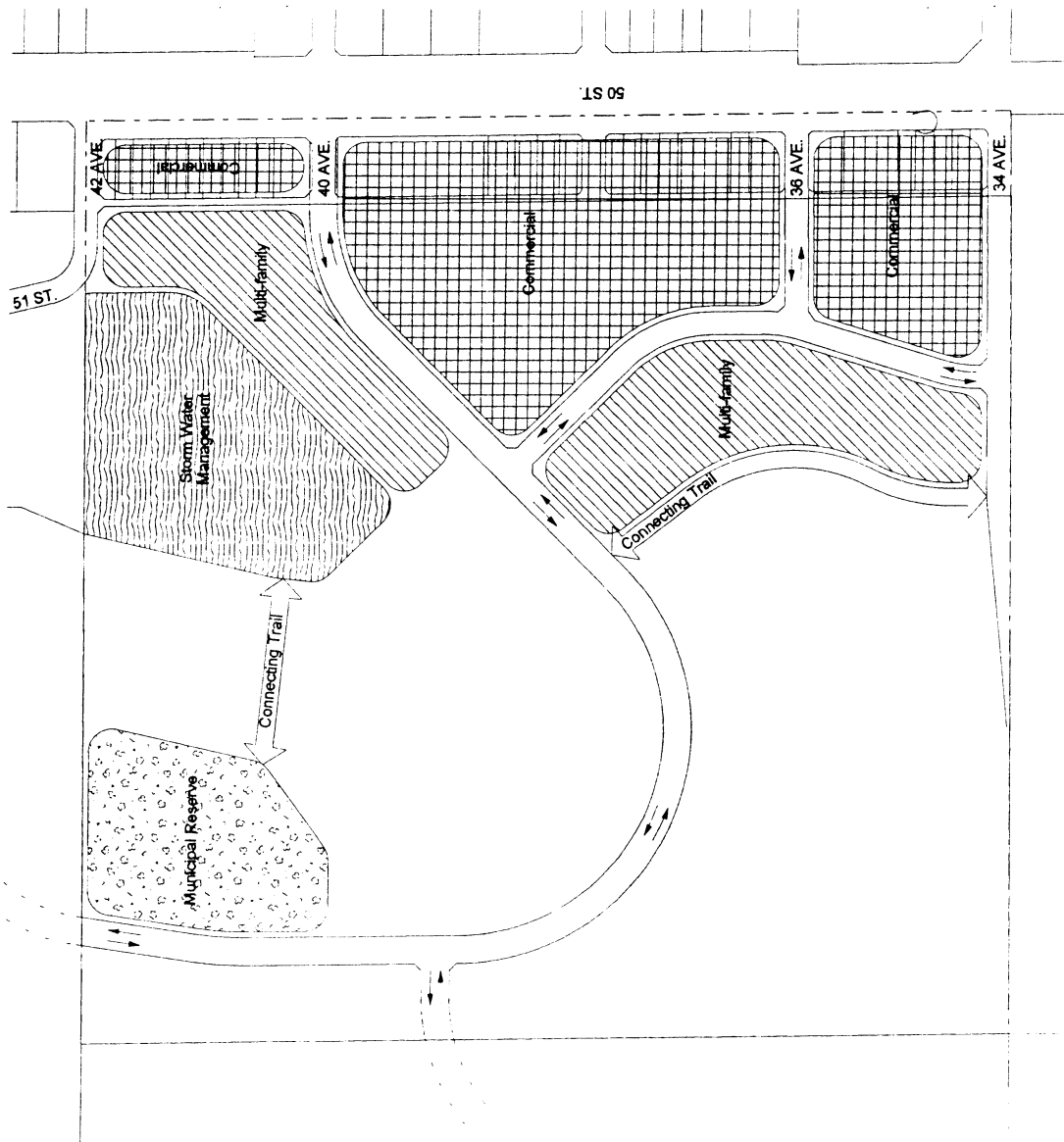
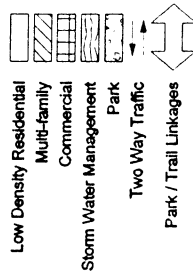
4.1.2 Residential

The term "Low Density Residential" is intended to include single detached and semi-detached residential development. The specific distribution of these built forms will be determined at the zoning stage.

City of Cold Lake
Fischer Estates
Area Structure Plan

Figure 4
Development Concept

Scale 1:4000
January 20, 2003



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Table 1 Land Use Distribution

Gross Developable Area	300.8	743.3	100%
Environmental Reserve	79.8	197.2	26.53%
Net Developable Area	221	546.1	73.5%
18 Hole Golf Course	37	91.4	12.3%
Park/Trails (estimated)	22	54.4	7.3%
Recreation/MR	59	145.8	19.6%
Total Residential	113.82	281.3	37.8%
Residual - roads/storm	48.18	119.1	16.0%

Table 2 Demographic Profile

	Area	Units/Ha	Units	%	People/Unit	Population
Low Density Residential	25.0	18	449	60.4%	3.4	1,528
Medium Density Residential	5.9	50	295	39.6%	2.5	738
Total Residential	30.9		744	100.0%		2,265
	Density	38.5	ppgda			

The development concept designates three multi-dwelling sites: two in the southeast corner of the plan area; and one just southeast of the public utility lot/slough between the east/west collector road and the storm water management pond. The third site takes advantage of the amenity offered by the storm water management facility and by the access available via 40 Avenue. The southern sites are located on the collector connecting the plan area to the future arterial roadway bounding the plan to the south.

The remainder of the plan area, not designated for other uses, is intended to be developed for Low Density Residential uses.

Table 2 shows the anticipated demographic profile of the plan area.

4.1.3 Public Open Space

The development concept calls for two types of public open space:

- An area of municipal reserve is proposed to be located on the east side of the collector as it passes out of the plan area and into the proposed residential area to the north. This is intended to become part of a larger site that will be completed as development in the area to the north progresses. It could accommodate a larger neighbourhood park and possible school, if required.
- Linear park/trails are proposed within the plan area to connect to the proposed trail system north of the plan area, which ultimately connects to the railway right-of-way open space. These linkages will vary in width from a minimum of 6m.

Table 3 shows the balance of municipal reserve generation/dedication. The municipal reserve dedication expected is based on the existing deferred reserve caveat on the land. No other municipal reserve dedication is anticipated. This is balanced against the municipal reserve requirement identified in the development concept.

Table 3 Municipal Reserve

Generation (in ha)	
10% of Titled Area (SE 34-62-2-4)	5.80
Requirement (in ha)	
School/Park Site	4.20
Park/Trails	0.80
<i>Total</i>	<i>5.00</i>

4.1.4 Commercial

A substantial commercial area has been proposed in the eastern portion of the plan area. This area incorporates the existing commercial lands west of 50 Street and adds a significant commercial land base to this entrance to the City. This location will take advantage of traffic flows from the east and south into the plan area and traffic along 50 Street.

4.2 Transportation and Access

Collector access to the plan area from surrounding arterials will be primarily from 50 Street on the westward extension of 40 Avenue, and a southern connection to the future arterial ring-road. A 24 m wide collector, 52 Street, has been provided for future connection with the approved residential area structure plan to the north and 34 Avenue to the south. The extension of the 40 Avenue collector west to the 52 Street collector has already been partially constructed on a 20 m wide right-of-way. This right-of-way width will be retained for 40 Avenue.

Direct access to individual lots will be permitted from the collector roads.

From these collector roads, a network of local crescents and cul-de-sacs will be designed at the subdivision stage. Public walkways between the residential lots will also be included at the subdivision stage to supplement the park/trail system and to ensure convenient pedestrian access to neighbourhood destinations such as the public open spaces.

Signalized intersection spacing on 34th Avenue (South Arterial) will be limited to 400 metres so that future, smooth traffic flow can be maintained with synchronized signals. The same spacing will apply to 50th Street (Highway 28).

4.3 Municipal Services

4.3.1 Storm Drainage

It is anticipated that a 1200mm trunk will be extended from Palm Creek to the old railway right-of-way by 2005, if funding is available. The outfall portion to the Creek has been tendered and will be constructed in 2003.

Storm water currently drains to the existing pond at the location of future Storm Water Management (SWM) Pond 4. The trunk line from future SWM Pond 3 has been constructed from Walmart across 50 Street, but at depth for future Pond 4 which will eventually be 2-3 meters deeper than existing water level. The Walmart trunk is pumped out periodically to the pond so it can receive flow from the developed Walmart site.

Water is presently pumped from the existing pond to the existing storm system at Park View Crescent. The existing system has limited capacity at that location.

Water is also supplied to the Golf Course from the existing pond, but some residents are concerned about effect of a decrease in water levels on wildlife.

In order to delay major capital expenditures on the storm trunks, it may be cost effective to dredge the pond to provide greater storage, and to continue using the existing pump system, restricted to after rainfall events, so as to overcome the existing downstream capacity problem during rainstorms. Pond deepening will be required in any event, so money spent on dredging would not be wasted. The technical and cost implications of this proposal will be further investigated before future approval stages.

4.3.2 Sanitary Sewer

Proposed ultimate sanitary sewer servicing is to the northeast across 50 Street, and then north on 49 Street to tie to the SE Lift Station. This trunk system has been largely constructed through Walmart lands and downstream of 50 Avenue. A three block section between the former railroad right of way and 50 Avenue has to be augered.

For lands west of 50 Street, existing interim servicing is to the lift station north of Pond 4 with a forcemain to the existing system in Park View Crescent. For lands east of 50 Street, interim servicing is to the Walmart pump station with a forcemain to the existing system in the service road east of 50 Street, south of 47 Avenue.

Neither pump station is near capacity. However, problems with basement backup occur on the west side when the downstream system is blocked, because the pump keeps pumping. The east system does not experience problems except that pumps do not start up often enough. The upstream portion of east receiving line used to freeze up, but does not do so now because of greater flow produced by the Walmart area.

Possible options for servicing of the first stages of development are as follows:

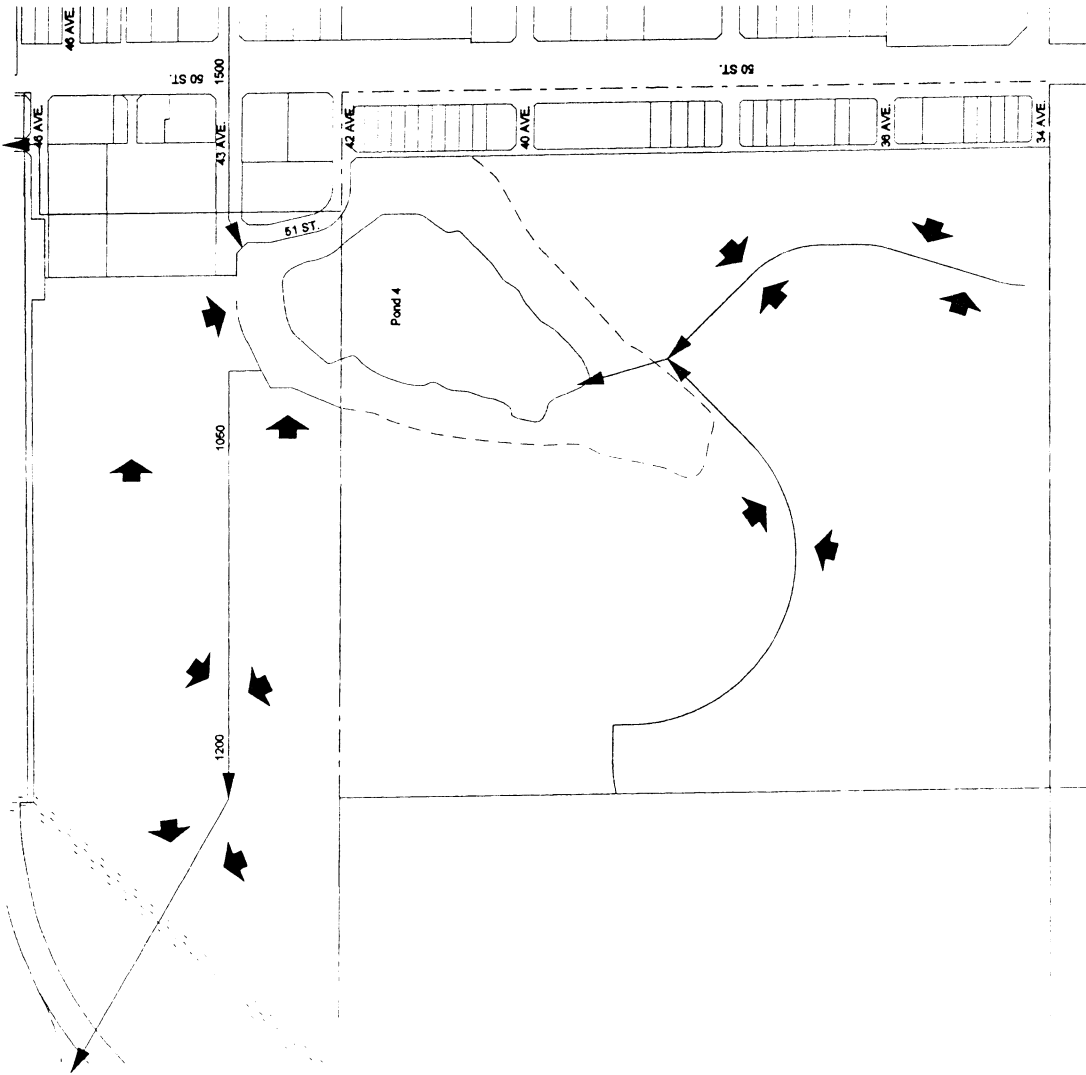
1. Service to existing north lift station but provide a sensor at downstream end of forcemain so it detects when down stream system floods and turns the pump off. Provide a berm around lift station so any potential emergency overflow is contained on site.
2. Alternatively, if there is a capacity problem with downstream system during peak periods, provide peak hour storage and pump into system only during off-peak periods.
3. Construct the future 50 Street crossing and tie to that portion of the permanent system that is already constructed, which ties to the Walmart Lift Station, which is currently not experiencing any downstream problems.

These options will be further explored for technical and cost considerations prior to future subdivision approval stages.

City of Cold Lake
Fischer Estates
Area Structure Plan

Figure 5
Stormwater Drainage

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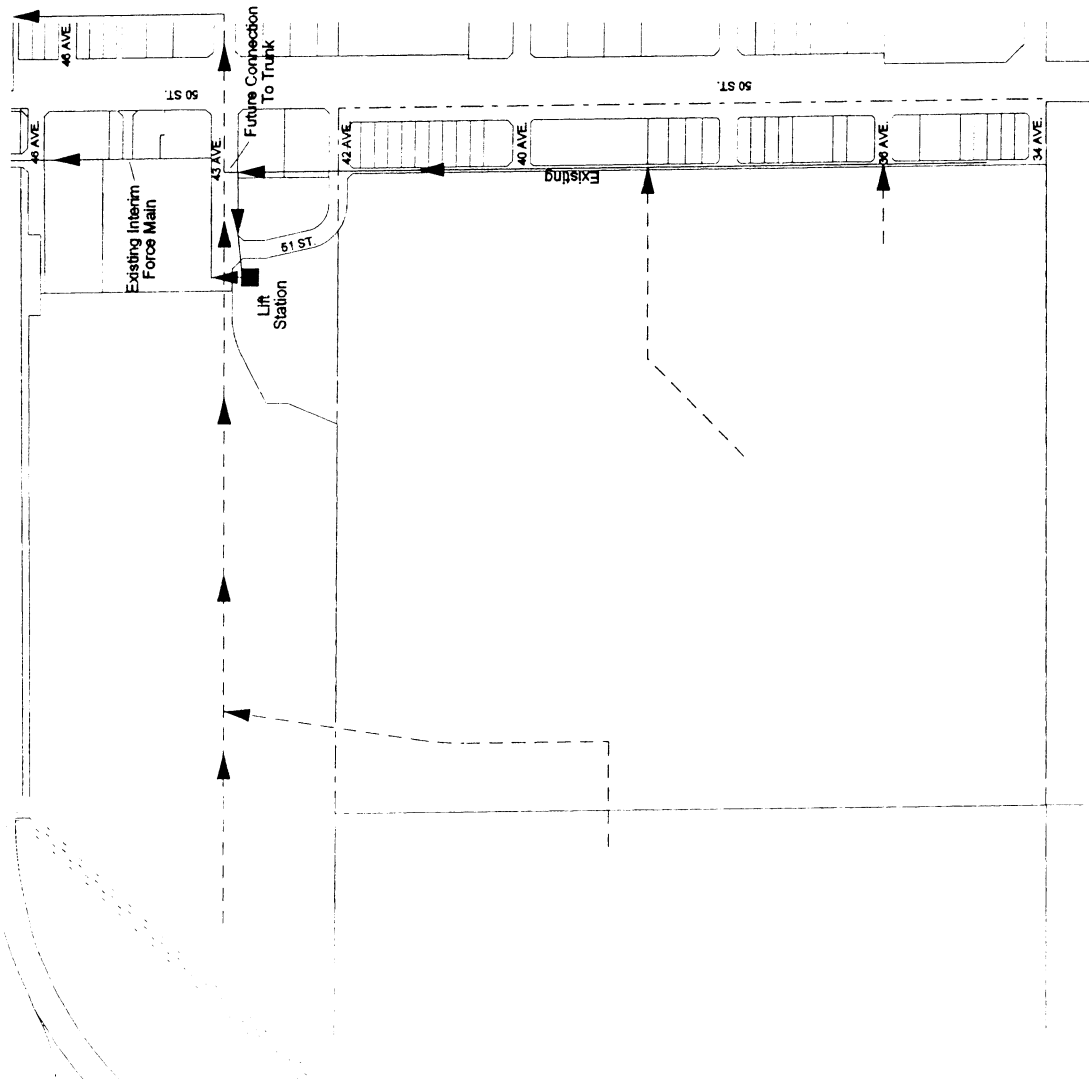


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City of Cold Lake
Fischer Estates
Area Structure Plan

Figure 6
Sanitary Drainage

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Existing ———
Future - - -



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4.3.3 Municipal Water

The proposed ultimate system is to provide a 300mm loop between the currently constructed 300mm system in 51 Street and eventually connect northward to the 400mm stub in 55 Street. Subject to further technical assessment, the loop can likely be built in stages as area develops.

4.3.4 Shallow Utilities

Natural gas, telephone, cable, and power servicing for the plan area are available within adjacent roadways, and will be extended into the proposed development.

4.4 Community Services

4.4.1 Emergency Services

Fire service for the plan area will be provided from the South Fire Station, located at 5205 – 55 Street.

Police and Bylaw Enforcement services are both readily available from 55 Street and 47 Avenue.

Ambulance service will be provided from the Cold Lake Health Centre, 314 – 25 Street.

4.4.2 Schools

Public schools for students of this area are as follows:

Grand Centre Elementary	5520 – 50 Avenue
Grand Centre Middle	5104 – 56 Street
Grand Centre High	5533 – 48 Avenue

Separate schools servicing this area are:

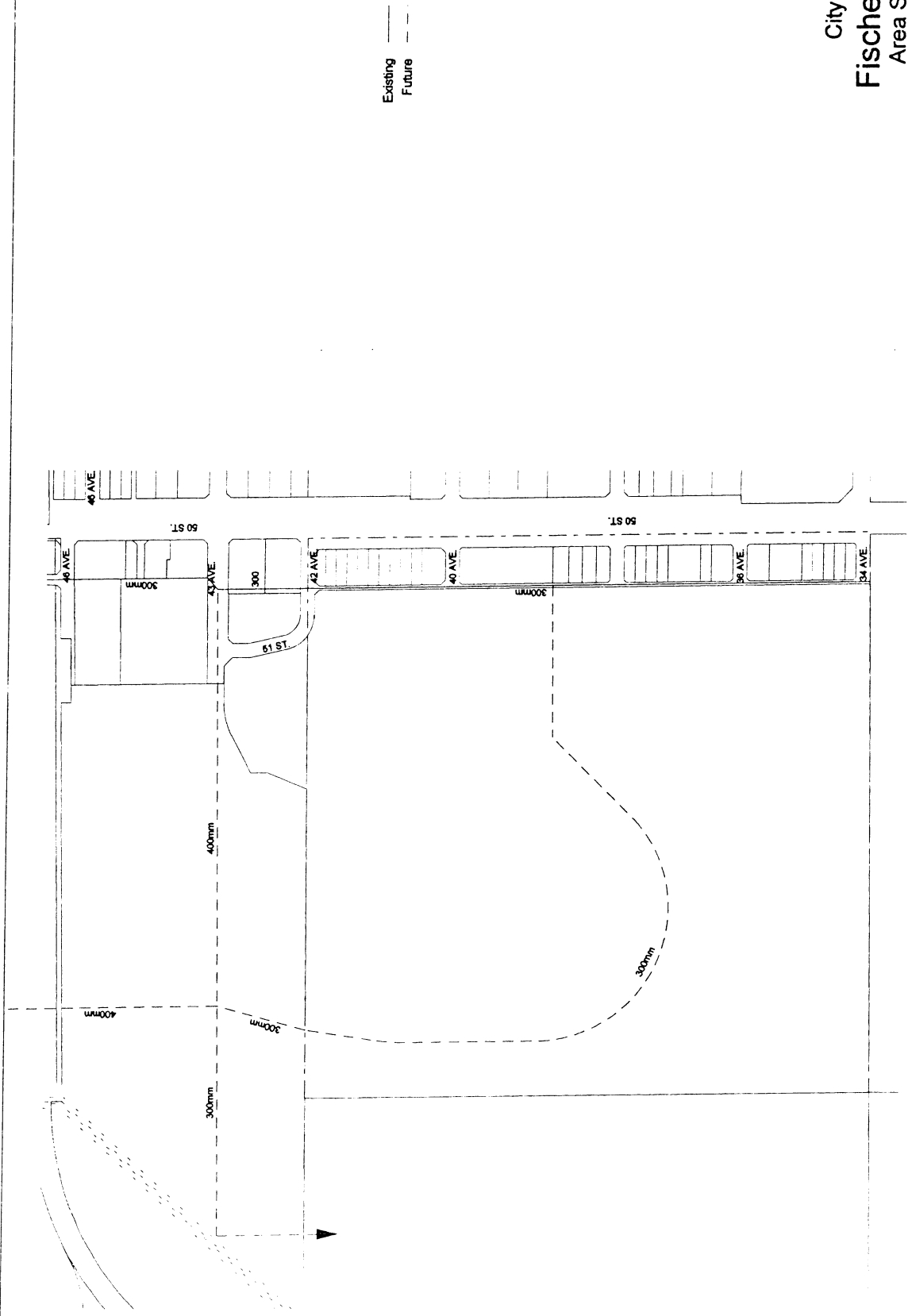
Assumption Jr. / High	5209 – 48 Avenue
McKenzie Elementary	On military base

A portion of a site has been provided for a possible Separate School. The Separate School authority has indicated that this location is a possibility for an elementary school to replace McKenzie Elementary. Development plans for the area to the north should be required to make provision for the completion of this potential school site. If, at the subdivision stage, it is apparent that the site will not be required for a school, it can be deleted and replaced with residential development without an amendment to this area structure plan.

City of Cold Lake
Fischer Estates
Area Structure Plan

Figure 7
Water

N.T.S.
January 20, 2003



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5 DEVELOPMENT SEQUENCE

Development will commence in the northeast portion of the plan area. It will be supported by the extension south of 40 Avenue, connecting to the existing water line and sanitary drainage on 51 Street, and storm as described above.

The timing of development will be dictated by market conditions and the availability of municipal servicing capacity.

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