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**THE TOWN OF BARRHEAD**

**NW 20-59-3-W5M**  
**(BEAVERBROOK ESTATES, PHASE II)**

**AREA STRUCTURE PLAN**

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**As Presented for 3<sup>rd</sup> Reading**  
**January 2003**

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## 1.0 INTRODUCTION

### 1.1 Background

The NW 20-59-3-W5M (Beaverbrook) Area Structure Plan is limited to approximately the western 79.2 acres of the quarter section of the same description. The detailed area is outlined further in Figure 1.0: Context Plan.

The Plan area has been the subject of a previous Outline Plan. The Kirstein Subdivision Outline Plan was adopted in 1991 and dealt with a larger portion of the current Plan Area. The 1991 Plan is replaced with this Outline and Area Structure Plan, which builds on the direction provided in the earlier plans and contains design changes and policies that reflect new information and initiatives in Barrhead.

The larger Beaverbrook Estates area provides a unique opportunity for the comprehensive and coordinated development of a major expansion area for Barrhead. Lands west and south of the Plan area form part of the County of Barrhead/Town of Barrhead Urban Fringe area and as such this Plan recognizes the need to provide links to this long term growth area.

### 1.2 Plan Purpose & Objectives

The Town of Barrhead Municipal Development Plan identifies the Beaverbrook Area Structure Plan lands as a future residential development. It also identifies significant reservoir expansion areas to the south end of the quarter section. The Plan recognizes the need for pathways along the reservoir lands as part of an interconnected system of walking and cycling pathways within the Beaverbrook area and throughout Barrhead.

The policies of the MDP dealing with these and other issues provide a basis for more specific policy direction contained in the Area Structure Plan. Section 633 of the Municipal Government Act, R.S.A., 2000, as amended, states that the purpose of an Area Structure Plan is to prepare "... a framework for subsequent subdivision and development of an area of land" in a municipality. The Beaverbrook Area Structure Plan accomplishes this goal by addressing the following objectives:

- Ensure that proposed development within the Plan area conforms to the policies, goals and objectives of Barrhead's Municipal Development Plan.
- Provide a framework for future development within the Plan area by describing future land use patterns, transportation networks, and public utility systems.
- Outline a phasing plan through the identification of development cells, in order to allow development to occur in stages.
- Describe the population density proposed for the Plan area.

### 1.3 Plan Implementation and Amendment

Once adopted, the area structure plan becomes a statutory planning instrument in conjunction with the Municipal Development Plan and Land Use Bylaw. All subdivision and development proposals will be required to conform with its land use designations, road system and other planning controls.

This Plan establishes a long-term development pattern for the Plan area, however, future conditions may require Council to undertake amendments. When considering any amendment, Council will review the effect of the Plan modification on this or any other adopted Statutory Plan in accordance with the Municipal Government Act.

Beaverbrook also features walkways designed from utility services. A number of other municipal facilities and rights-of-ways are also present on the quarter section, but none of these go through or impact this Plan Area. Rather, the existing development provides the boundaries to the Plan Area.

There are no natural development constraints in regards to the Plan Area. The existing water reservoir ponds constitute a minor constraint related to required setbacks. Existing Highway and arterial roadways are major considerations. Development in the vicinity of the Highway must be properly oriented, buffered and controlled to ensure capability. Upgrading of the roads and intersections to handle traffic outside the Plan area will require intermunicipal coordination.

## **2.4 Adjacent Development / Development Plans**

The land within the Plan Area is owned by the Town of Barrhead, though now bound by prior development to the east and south.

The County of Barrhead borders the quarter section to the south and west. To the south, SW 20-59-3-W5M, and to the west, SE 19-59-3-W5M, have undertaken some preliminary planning work, but no plan for either lands is officially recognized. Both parcels are encompassed within the Plan Area of the Town of Barrhead/County of Barrhead Intermunicipal Development Plan.

## **2.5 Utilities**

Sewer and water mains already exist along 60<sup>th</sup> Street and to the east through 50<sup>th</sup> Avenue. Lines have been designed in a manner that allows for additional capacity.

Some of the area's drainage is directed toward the south and some by the natural drainage course toward the east.

## **2.6 Oil and Gas Activity**

The Plan Area is unencumbered by any oil and/or gas installations.

## **2.7 Summary of Development Considerations**

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- Development will have to be contained within the central portion of the quarter section which is bound by Highway 18, existing lots and the water reservoir ponds.
- Open Space "linkages" with adjoining lands will be located along undeveloped utility corridors and a series of reserve dedications.
- Topography will partially dictate the landscaping of the "finished" properties.
- The need for collector access additionally to 53<sup>rd</sup> Avenue (Highway 18) for the larger Beaverbrook area will require that 60<sup>th</sup> Street be extended to the West Boundary Road prior to completion of this subdivision.
- There will be a need to effectively buffer the residential development in the vicinity of the Highway.
- Existing and proposed utility rights-of-way and infrastructure must be taken into account when designing subdivisions.
- Some range of density will exist within the Plan Area. Along with the conventional single detached areas, some estate residential areas and one medium-high density site will be accommodated.
- The flat topography of the site is such that it affects the design of sewage and surface drainage facilities.
- Stormwater containment will become a greater issue as the property is developed.



## 3.0 PLAN AND POLICIES

### 3.1 Concept Plan

*The Concept Plan is sensitive to the existing development of the site as well as the natural flow of drainage. The Plan expands on the residential area towards the north and the Town Water Reservoir System in the south of the quarter section.*

The development concept shows generalized land uses as well as a conceptual roadway network, including possible alignments for local roadways within the plan area.

Vacant land within the Plan Area comprises approximately 79.2 acres and an approximate breakdown of land areas for various uses is depicted below:

1.	Residential Development	29.2 ac.	37%
2.	Roadways	13.3 ac.	17%
3.	Reserve/Open Space	10.1 ac.	13%
4.	Reservoir Expansion	26.6 ac.	33%

Development phasing will essentially be sequential from east to west. Approximately 113 conventional residential lots of various sizes, 13 acreage lots, and one (1) apartment site will be brought on stream in 4 phases. The phasing is a suggestion only, and does not necessarily have to occur in this sequence. Ultimately, phasing is dictated by the limitations associated with extending roads and services as well as the market demand for residential units.

### 3.2 General Development

*This Section of the Plan sets forth general policies relating to conformity with existing statutory plans (Land Use Bylaw, Municipal Development Plan and the Intermunicipal Development Plan) and the general development concept plan set forth in this Area Structure Plan. This section also requires that any proposed development will take into consideration the development constraints associated with the subject lands.*

3.2.1 Applications for redesignation, subdivision and/or development permits which occur within the Plan area shall conform to the Town of Barrhead's Land Use Bylaw, Municipal Development Plan and the County of Barrhead/Town of Barrhead Intermunicipal Development Plan. Areas of the Plan which are not already pre-designated will require redesignation to the appropriate land use classification as stipulated in the Town of Barrhead Land Use Bylaw.

3.2.2 Proposed development shall take into consideration existing utility infrastructure. The developer shall be responsible for any costs involved with the relocation or extension of any existing utilities.

- 3.2.3 Developers will enter into a development agreement where required by the Town of Barrhead for subdivisions and development permits.
- 3.2.4 Subdivision applications and substantive amendments in the Plan area shall require referrals for comment to the County of Barrhead and Alberta Transportation.
- 3.2.5 Phasing of the subdivision of lands for residential use shall be based upon the location and cost of servicing; demand and proximity to existing roadways.

### **3.3 Residential Lands**

*Typically, the lands within the plan area shall all be developed at conventional single detached densities, consistent with recent prior phases of Beaverbrook. However, in addition to these conventional lots, the Development Concept calls for 13 larger sized residential lots and one higher density apartment site.*

- 3.3.1 Proposals for subdivision, redesignation or development permits shall conform to Figure 3.0: Development Concept.
- ✓ 3.3.2 Developers may construct a variety of housing styles and sizes, based on the architectural and lifestyle preferences of the owner or developer.
- 3.3.5 The projected number of lots within this Plan is 114. The estimated population level of the undeveloped plan area is expected to be 375 people when "built out".
- 3.3.6 The typical lot size in Beaverbrook will be approximately 700 square metres (0.173 acres). Lot sizes will vary dependent on whether the lot is located on a straight or curved road. Corner lots will be designed wider than interior lots to account for flanking yards.
- 3.3.7 Lot sizes directly adjacent to the reservoir expansion area are approximately 2000 square meters (0.5 acres) and are intended for larger single detached dwellings than in the R1 District.
- 3.3.8 The Town of Barrhead Land Use Bylaw should be amended to accommodate larger (0.5 acre) lots, through the creation of a new land use district.
- 3.3.9 The one apartment site is approximately 2.55 acres in size and is intended for the high density R4 District.



### **3.4 Open Space**

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*The Open Space system for the Plan area should consider further "linkages" of environmental/municipal reserve with the overall open space system for the Town. Storm drainage courses will be preserved to provide a continuous system throughout the Town.*

- 3.4.1. A pathway system shall be provided within the Plan area to link neighbours, reserve lands, community facilities, and provide access to adjacent areas as shown in Figure 4.0: Open Space System. Specific alignments for local pathways will be required at the subdivision stage.
- 3.4.2. Except where crossing roadways, the pathway system shall be chiefly accommodated through the use of reserves and utility rights-of-way.
- 3.4.3. Adequate identification shall be provided where a pathway crosses an arterial at mid-block. All other crossing should be at intersections.
- 3.4.4. Pathways shall meet standards consistent with Town design criteria in effect at the time of development of each phase.
- 3.4.5. Consideration should be given to providing open space (walking trails, etc.) for lands within, and adjacent to, the Plan Area to ensure future connections to the larger open space system.
- 3.4.6. The water reservoir should be fenced and landscaped in a manner that protects the opportunity to develop a walkway around its perimeter.
- 3.4.7. A neighbourhood and community park shall be provided in the north central portion of the residential area adjacent to the existing Church and Play Equipment, as indicated in the Development Concept.
- 3.4.8. The Town of Barrhead should consider planting trees along MR buffer strips to act as a wind row, as noise attenuation, and for general aesthetic appeal.

### **3.5 Transportation**

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*Transportation routes in the Plan area will reflect the residential character of the quarter section. Roads will be designed to parallel existing utility routes.*

- 3.5.1 The arterial roads and collector street alignments required to service Beaverbrook are as generally shown in Figure 5.0: Transportation System. Changes to the internal roadway configuration will not require an amendment to this Area Structure Plan. Changes to the connections to West Boundary Road and Highway 18 (53<sup>rd</sup> Ave) access and future locations will require an amendment to this Plan.

- 3.5.2 The Subdivision Authority shall refer all subdivision applications within the Plan Area to Alberta Transportation for review and comment, regardless of the nature of that application.
- 3.5.3 All roadway design and construction shall conform to the Town of Barrhead Development Standards as adopted by Council and amended from time-to-time.
- 3.5.4 Direct access shall not be permitted from lots adjacent to arterial and primary collector roads. Where access is required, the frequency of access points shall be limited.
- 3.5.5 Provision for connection of the proposed extension of 60<sup>th</sup> Street to the "West Boundary Road" (Range Road 35) shall be made when deemed necessary by the Town of Barrhead. The Town of Barrhead and/or the developer shall require approval from the County of Barrhead prior to the construction of any connection.
- 3.5.6 The transportation routes shall follow the pattern outlined in this Plan. Where utilities are not completed, the subdivision authority may request that the same are located either within roads or dedicated rights-of-way where necessary.
- 3.5.7 Improvements to roads outside the corporate boundaries of the Town of Barrhead, necessitated by development within the Plan area, shall be the responsibility of the Developer.
- 3.5.8 Noise attenuation measures along major roads may be provided in accordance with Town of Barrhead policy. A berm shall be located between Highway 18 and the residential areas of the Plan whenever possible.
- 3.5.9 At its intersection with 60<sup>th</sup> Street, an acceleration lane shall be provided onto Highway 18. The nature of the acceleration lane shall be determined by a professional engineer at such time as Alberta Transportation and the Town of Barrhead deem the lane to be necessary.
- 3.5.10 Provision shall be made for pathway crossing of arterial roads to Town standards in order to facilitate pedestrian movement.
- 3.5.11 The developer shall be free to consider traffic calming devices such as paving stones, designed medians and similar techniques in an effort to both beautify the region and keep traffic speeds reduced within the Plan area. Such devices shall be approved by the Town of Barrhead and may be modified in the interests of public safety, maintenance costs, or traffic flows.
- 3.5.12 Adequate parking should be provided on-site at all residential and other uses. Special attention should be paid to parking issues that may arise due to the existing Place of Worship. Adequate open space should be allotted to accommodate the possibility of parking expansion at this location, where deemed necessary.

### **3.6 Servicing**

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*The utility system for the area of the Plan is partially completed and is located primarily in the north and west. Utilities will be extended from existing utility areas. Engineered Drawings of Phase II of Beaverbrook Estates were prepared by DCL Siemens Engineering.*

- 3.6.1 All utilities within the Plan area are to be designed and installed in accordance with accepted engineering practices, and shall be satisfactory to the Town. Whenever possible, all services should be installed below ground.
- 3.6.2 The Town of Barrhead shall charge an off-site levy assessment in respect of land within the Plan area, which is to be developed or subdivided.
- 3.6.3 Proposed sanitary sewage collection systems shall be connected to the existing municipal system and shall be designed to meet projected flows.
- 3.6.4 Shallow utilities and streetlights are to be the responsibility of the developer. Gas service to the Plan area is provided by Alta Gas Utilities, power by Utilicorp and telephone by Telus. Cable service is provided by Shaw cable. These service providers should be contacted by the developer prior to, or during, the subdivision and development process to determine service requirements.
- 3.6.5 The proposed concept to accommodate the flows generalized by future development in NW20-59-3-W5M is to provide direct drainage of stormwater flows into the unnamed creek in the eastern portion of the quarter section. In keeping with the dual drainage concept, minor flows can be conveyed to the creek via piped storm water systems and major flows will be directed overland as identified in the *Town of Barrhead Stormwater Management Study*, prepared by DCL Siemens, in June 1996.
- 3.6.6 Utilities and drainage are further defined on Figure 6.0: Servicing.

### **3.7 Urban Fringe**

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*The Beaverbrook Area Structure Plan area forms the western edge of the Town of Barrhead. The adjacent quarter sections to the west and south lie within the jurisdictional control of the County of Barrhead. This area has been designated as Urban Fringe in the Intermunicipal Development Plan to protect the long-term growth area of Barrhead and act as a buffer between any incompatible rural uses and urban development.*

*The Urban Fringe encompasses lands that may eventually be part of the Town of Barrhead. As such, the Plan shows schematic road alignments and land uses to ensure that the Beaverbrook area and future westward expansion of Barrhead can be accommodated and that appropriate rights-of-way are obtained within Beaverbrook to provide adequate access through the area.*

*The Town of Barrhead recognizes the jurisdictional control of the County of Barrhead over the lands outside the Town as shown in Figure 1.0. The generalized roadway*

*pattern for these lands has been provided for conceptual purposes only. The future land uses, transportation systems, servicing networks and open space requirements will require detailed planning at such time as a formal plan is prepared for the area.*

*A Country Residential proposals abutting the west south of the site is located within the Urban Fringe area. The Urban Fringe policies provide for limited subdivision of parcels that meet specific criteria. Any subdivision of existing lots should consider the Urban Fringe policies and be compatible with the Beaverbrook Area Structure Plan.*

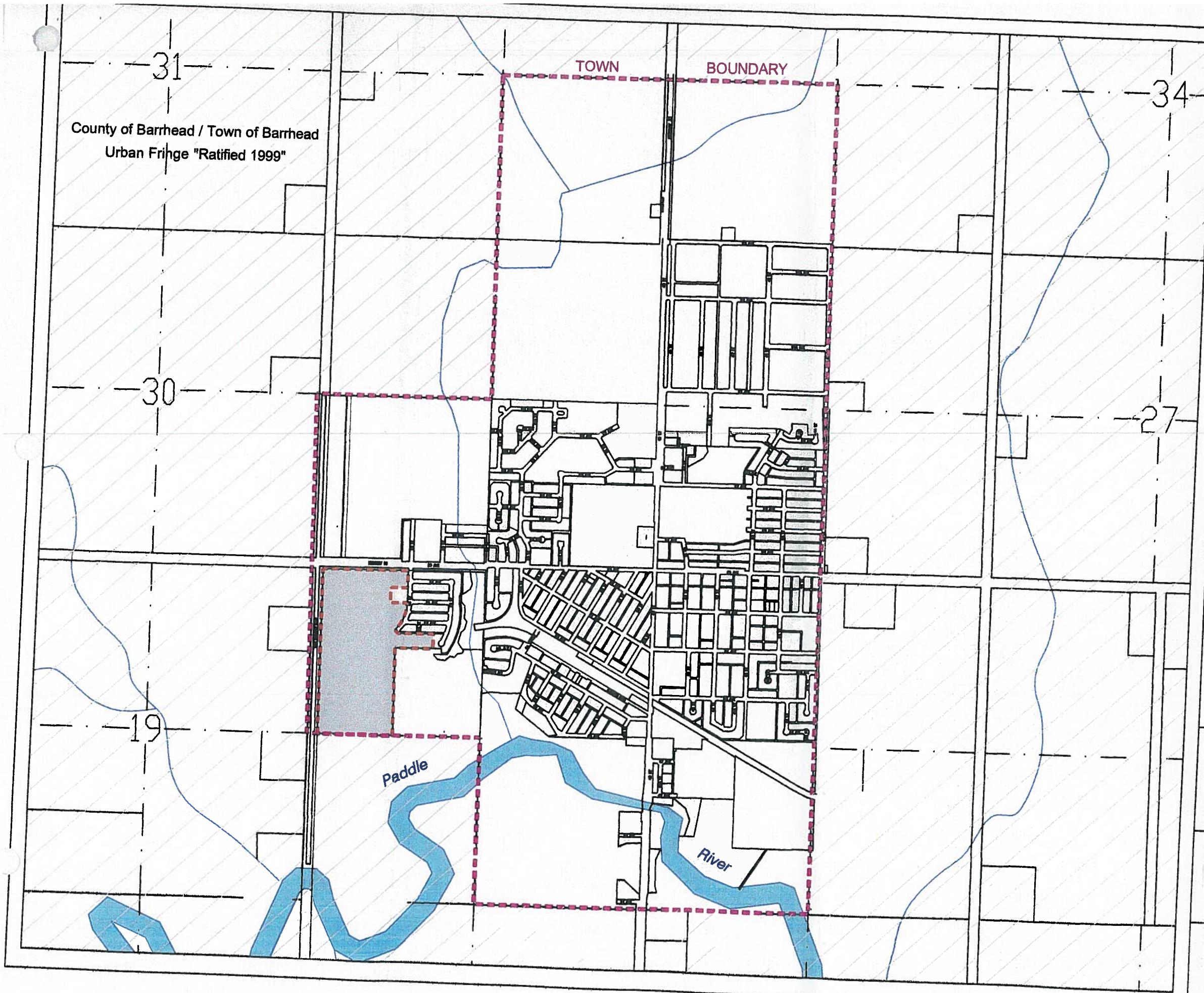
- 3.7.1 The Town of Barrhead will encourage a pattern of development in Beaverbrook Estates that considers existing adjacent land uses and provides for logical extension of the Town into the Urban Fringe.
- 3.7.2 The developer shall enter into a development agreement including among other things transportation infrastructure improvements outside the Town boundary.
- 3.7.3 The Town will monitor subdivision and development proposals in the Urban Fringe to ensure compatibility with the future growth of the Town.

### **3.8 Naming**

*Names of streets, subdivisions and other features are the result of a co-operative effort between the developer, the community and the municipality. The following policies shall apply to the naming of features.*

- 3.8.1 The larger name for the Plan Area shall be at the choice of the developer. Unless otherwise specified, the area shall continue to be known as "Beaverbrook Estates".
- 3.8.2 The numbers of roadways within the Plan area shall be consistent with the Town of Barrhead's numerical street and avenue convention.
- 3.8.3 House numbers shall be set and assigned by the Town of Barrhead.
- 3.8.4 The developer may consider the placement of neighbourhood identification signs within municipal rights-of-way where permitted by the Town of Barrhead.

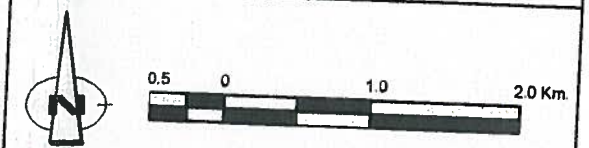


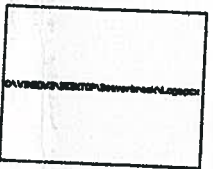


**LEGEND**

- Plan Boundary
- Plan Area
- Urban Fringe

Note: Council recognizes the jurisdictional control of the County of Barrhead has over lands outside the Town boundary and have shown lands for conceptual planning purposes only.



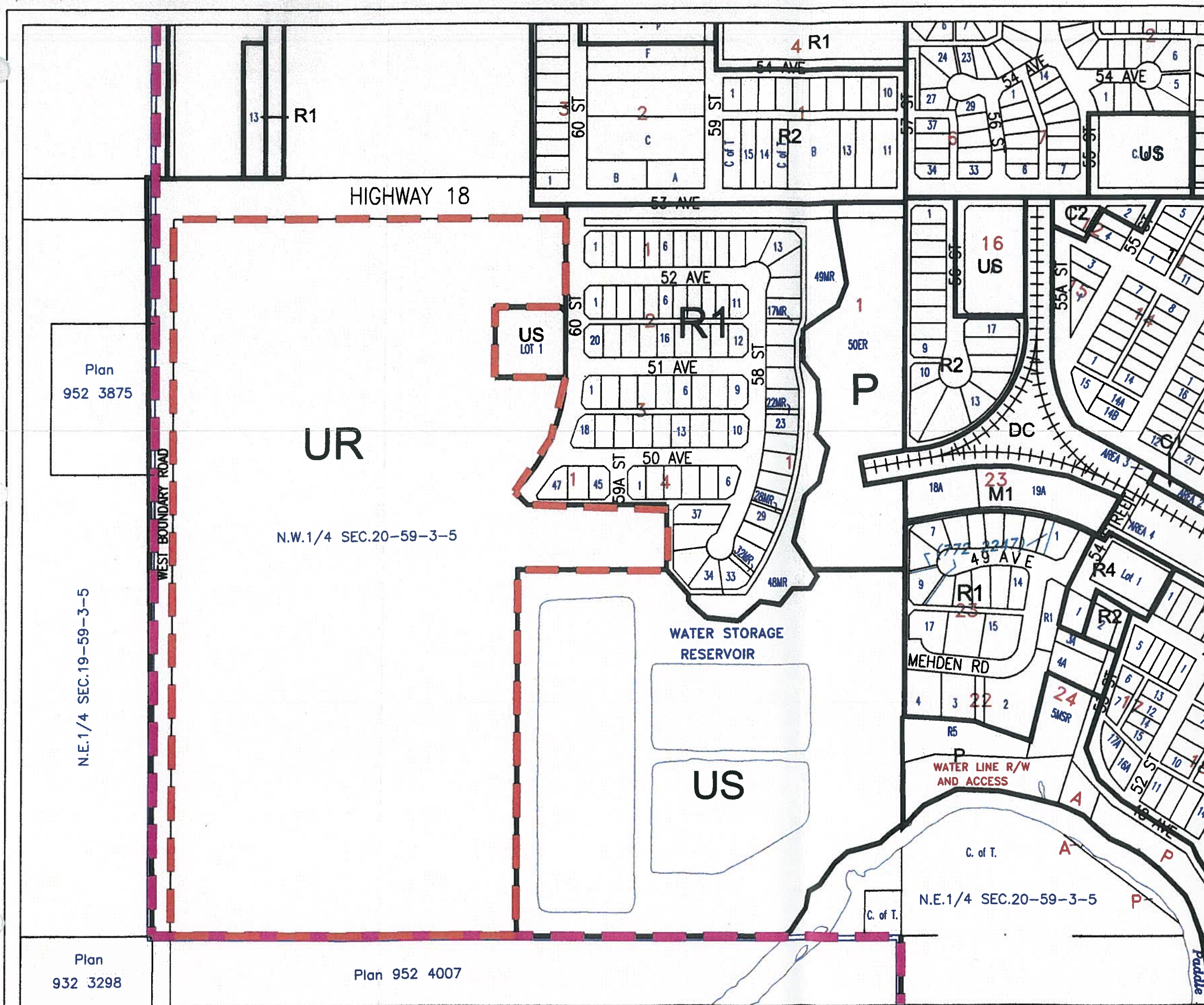
Produced For:  Prepared By: **New Era Municipal Services** 2003

**BEAVERBROOK**  
*AREA STRUCTURE PLAN*

**CONTEXT PLAN**

Figure 1.0





## LEGEND

- Plan Boundary
- Town Boundary

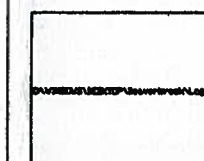
? Vegetation

? Contours



Produced For:

Prepared By:



**New Era**  
Municipal Services  
2002

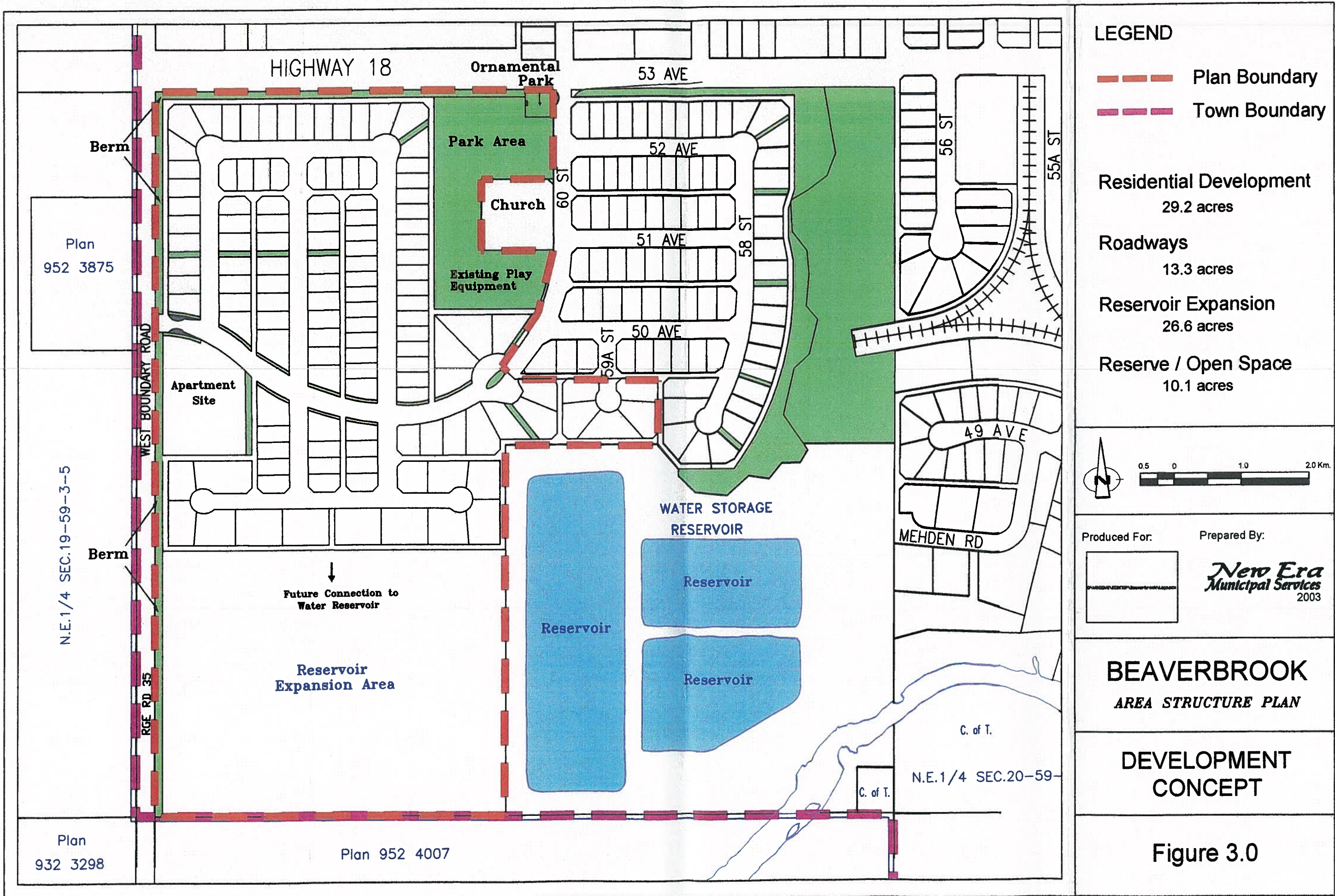
## BEAVERBROOK

AREA STRUCTURE PLAN

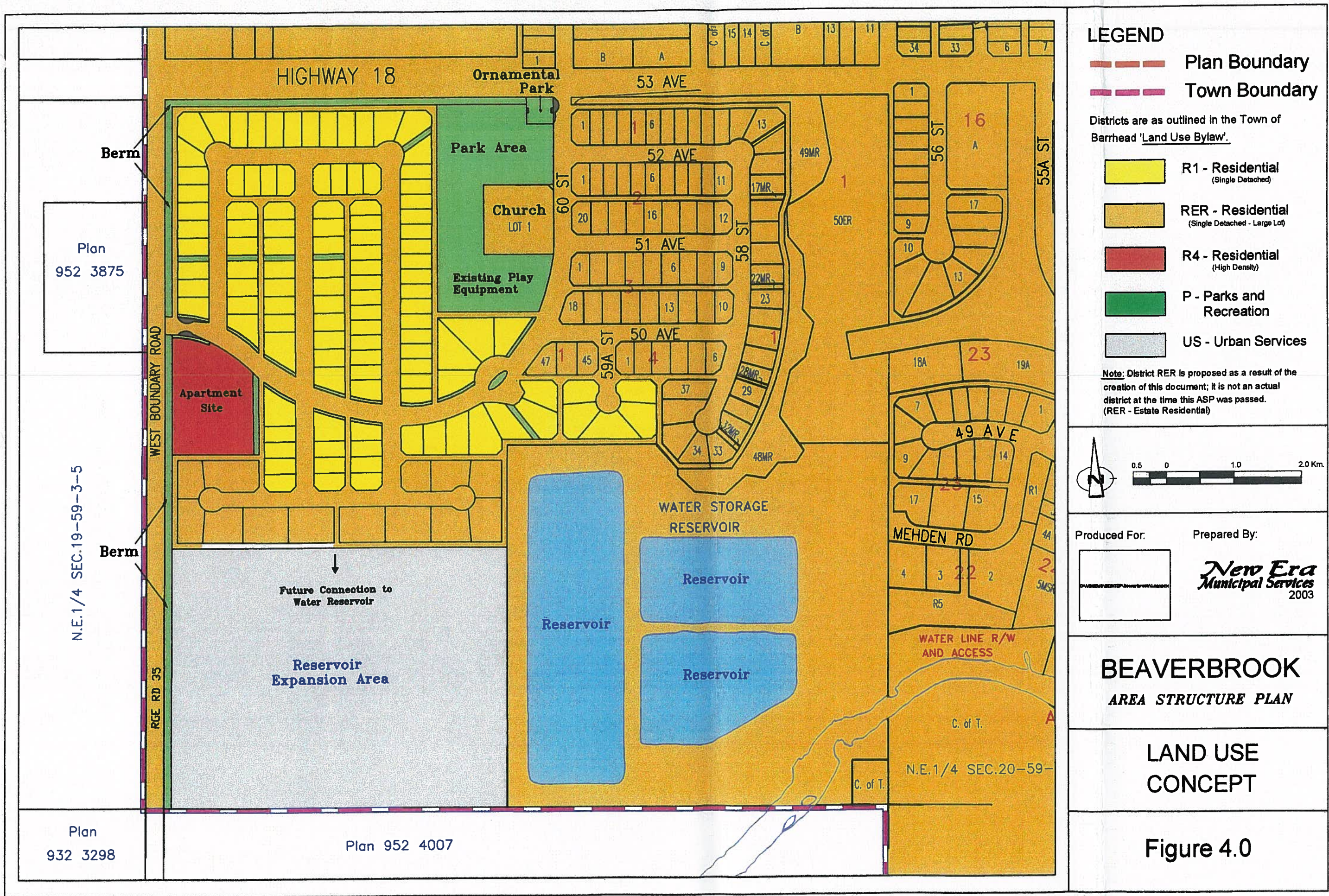
EXISTING LAND USE  
AND DEVELOPMENT  
CONSTRAINTS

Figure 2.0

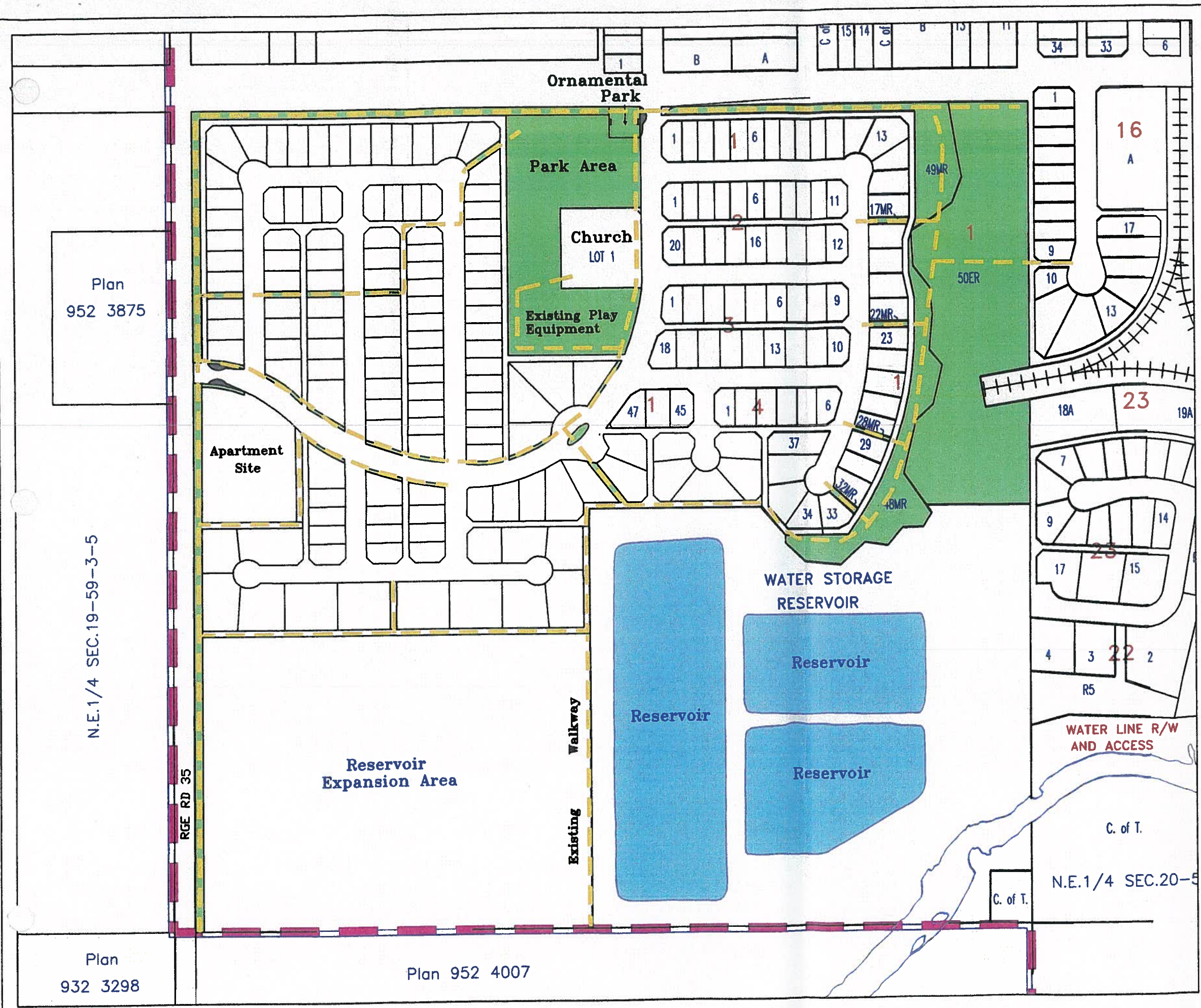










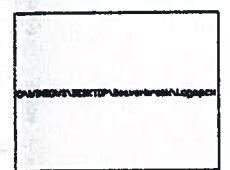




**LEGEND**

- Town Boundary
- Open Space
- Pathway

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*Municipal Services*  
2003

**BEAVERBROOK**  
*AREA STRUCTURE PLAN*

**OPEN SPACE**  
**SYSTEM**

**Figure 5.0**

Plan  
952 3875

N.E.1/4 SEC.19-59-3-5

RGE RD 35

Existing  
Walkway

Reservoir  
Expansion Area

WATER STORAGE  
RESERVOIR

Reservoir

Reservoir

WATER LINE R/W  
AND ACCESS

C. of T.

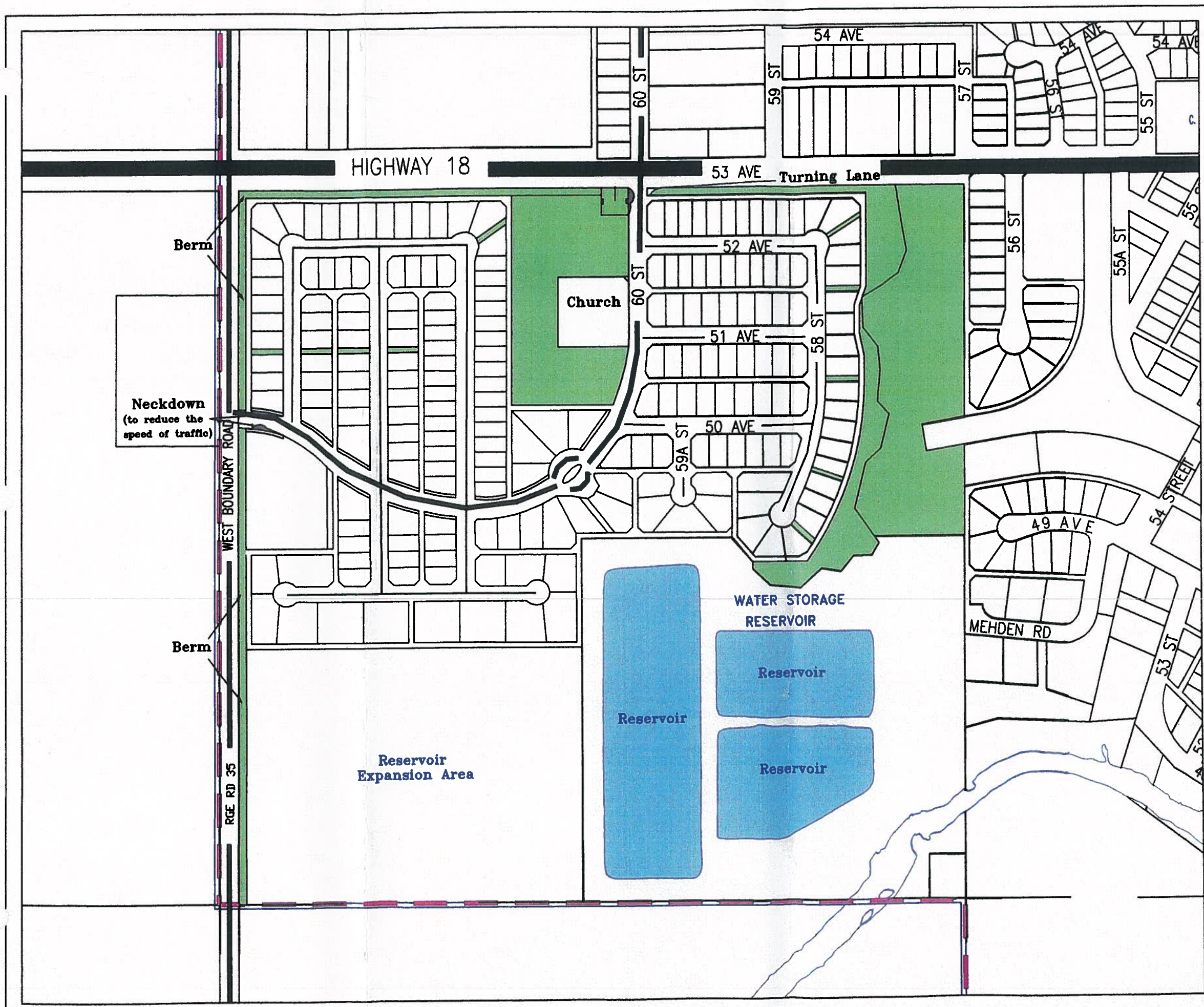
N.E.1/4 SEC.20-5

C. of T.

Plan  
932 3298

Plan 952 4007

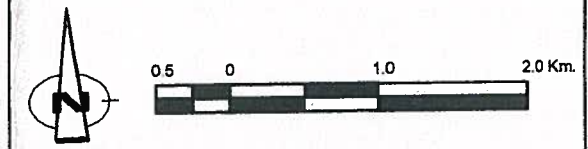




LEGEND

- Town Boundary
- Highway
- Local Arterial
- Local

Note: Council will use traffic safety devices, such as neckdowns and center island narrowings, along the local arterial to reduce traffic speeds and increase pedestrian safety.



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Municipal Services  
2003

**BEAVERBROOK**  
AREA STRUCTURE PLAN

**TRANSPORTATION**  
SYSTEM

Figure 6.0



TOTAL - 121 LOTS &  
APARTMENT SITE

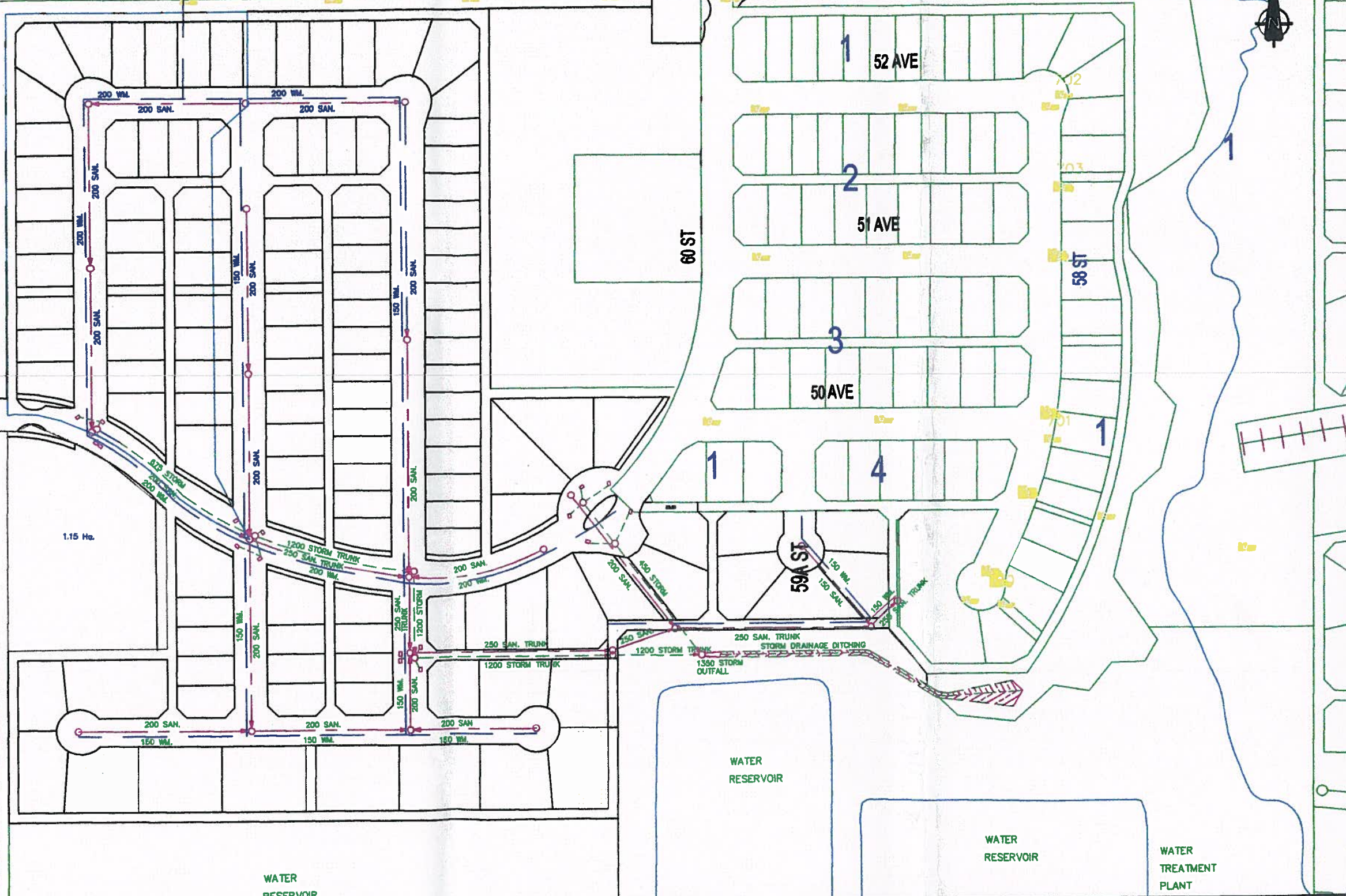
WEST BOUNDARY ROAD

53 AVE

HIGHWAY 18

53 AVE

WATER LOOPING CONNECTION



NOTES  
AMENDED BY NEW ERA MUNICIPAL SERVICES AUGUST 21, 2002

NO.	DATE	DESCRIPTION	BY	APP.
01	2000-1-01	PRELIMINARY	DFF	EDN
REVISIONS				

SCALE	1:2500	PROJECT No.	37-01-79
DESIGNED BY	TAD	DRAWN BY	DFF
CHECKED BY		DATE	APR., 2002

**DCL SIEMENS**  
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CIVIL & MUNICIPAL ENGINEERS  
DEVELOPMENT CONSULTANTS • PLANNERS

TOWN OF BARRHEAD	
BEAVERBROOK SUBDIVISION	
PHASE II	
STAGING AND SERVICING PLAN	
SHEET OF	DWG. No. P-01