



Lakeview Estates Subdivision

Area Structure Plan
Town of Bonnyville

LMS Real Estate Services Ltd.

April 2010

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1.0 INTRODUCTION

The preparation of the Lakeview Estate Subdivision Area Structure Plan has been initiated by the current owner, LMS Real Estate Services Ltd. The purpose of the Area Structure Plan (ASP) is to delineate a planning framework to create an urban residential subdivision within the legal jurisdiction of the Town of Bonnyville. The preparation and submission of the ASP is in accordance with Section 633 of the Municipal Government Act (MGA) and conforms to the general policies stated in the Town of Bonnyville Municipal Development Plan Bylaw 1261-05, the approved Outline Plan-85-OP-06 commonly referred to as the Lakeview Estates Outline Plan and Land Use Bylaw. In conformance to the MDP, the ASP describes the following:

- Definition of compliance to the municipal planning framework;
- The sequence of development proposed for the area;
- Land uses and proposed densities for the area;
- Architectural controls and design guidelines;
- Impact of adjacent land uses;
- Internal and external circulation including impact on the surrounding transportation system;
- Assessment of the land's suitability for the proposed development including consideration for environmental, historical and cultural aspects;
- Storm water management and drainage;
- Dedication of Municipal and Environmental Reserves; and
- Definition of other community services and infrastructure.

2.0 LOCATION

The subject lands are located in the Town of Bonnyville currently at the southeast section of Town defined by the following boundaries:

- The shore of Jessie Lake in the south;
- 34th Street in the east;
- Beau Vista ASP in the north;

- Existing residential in the west.

The lands are contained in the quarter legally described as S.E.¼ Section 8-61-5-W4M. The plan area includes approximately 22.14 hectares of development land. The location of the proposed area is illustrated on Figure 2-Site Location.

3.0 BACKGROUND

The current owner believes that the continued growth in the resource sectors supports the market for residential development in the Town of Bonnyville. There are numerous factors making the area attractive for residential development including location that seamlessly transitions from existing development; access to services; continued economic growth; and the aesthetic value of its proximity to the lake. The development proposes a variety of housing types to accommodate a range of market preferences and price points. Various housing options and styles will also permit the developer the flexibility to respond appropriately to fluctuations in the market and economic cycles in a timely manner.

4.0 FACTORS INFLUENCING DEVELOPMENT

4.1 Statutory Plans

4.1.1 Municipal Development Plan

The current Municipal Development Plan adopted in 2005 for the Town of Bonnyville designates the subject lands for residential use that have been identified as Residential East. In summary the Town's overall objectives as stated in the MDP are to adopt area plans that:

- address each regions unique attributes that balance small town character with growth needs;
- use existing land efficiently and creatively; and
- emphasize urban design and form.

Specific policies related to the Residential East area aim to achieve a well designed community that accommodates a mixture of dwelling types including single detached, small lot single detached, duplex and multi-family as well as institutional uses. The ASP addresses in a logical and orderly manner all aspects of development as required by section 10.4.5 of the MDP and as previously outlined in the introduction. Although the MDP requires conformity to the Millennium Area Structure Plan,



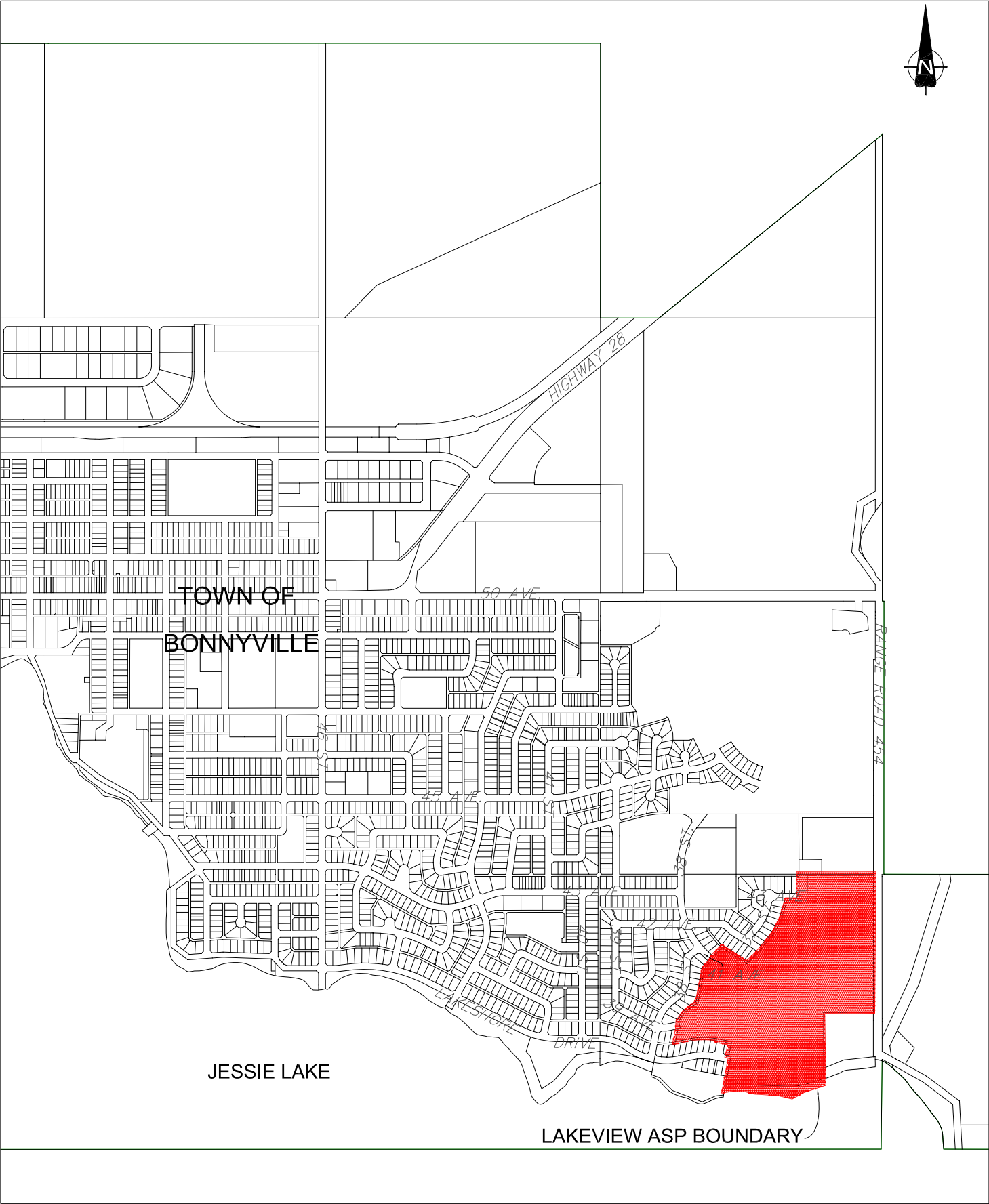


Figure 2 - Location Plan

the preparation of this plan has been affected by subsequent amendments adopted by Council to adjacent lands through the Beau Vista ASP and therefore this plan conforms to the new changes.

4.1.2 Lakeview Estates Outline Plan: 85-OP-06

The subject area already has a conceptual plan adopted by Council; however, lacks the detail necessary to facilitate orderly development that is required from an Area Structure Plan. Conceptually the prepared ASP conforms to the terms of the approved Outline plan.

4.1.3 Land Use Bylaw

The area structure plan further provides a development framework by conforming to the provisions of the current Land Use Bylaw for Single Family and Multi Family residential uses. As per MDP requirements, once planning approval has been obtained, rezoning and subdivision will be sought for the specified lands with all residential lot sizes conforming to the specified land use regulations. Approval for all subsequent development on each parcel shall be subject to the Land Use Bylaw or as required by the municipal Development Authority.

4.2 Ownership

The current owner of the subject property is LMS Realty Estate Service Ltd. This document has been prepared on the behalf of the beneficial owner.

4.3 Resource Extraction

Preliminary investigations in preparation for this plan indicate that no sour gas facilities are present in the vicinity of the proposed development. There are no resource related constraints in the area to restrict development.

4.4 Existing Land Use

The proposed area for development contains the remaining 22.47 hectares of the specified quarter that is currently undeveloped, consisting of barren land that is mostly ungraded. This would include an estimated 0.33 hectares of Environmental Reserve along the lake shore.

4.5 Adjacent Land Use

The lands surrounding the quarter section are varied and described as following:

- To the north, the lands are defined for residential development in the Beau Vista Area Structure Plan;
- To the east, the lands are also in agricultural production zoned Urban Reserve and are located within the Town of Bonnyville limits.
- To the south, Jessie Lake;
- To the west, a mature neighbourhood comprising low density residential development exists.

4.6 Natural Features and Development Suitability

Figure 3-Natural Features shows a recent air photo of the site and Figure 4-Site Photos, shows several images of the site in its present condition. The site's topography can be described as primarily flat sloping from north to south towards the lake as illustrated in Figure 5-Existing Topography. Furthermore, the site has no vegetation or tree coverage. Based on a preliminary assessment of the site, no concerns exist related to erosion, flooding and/or other soil instabilities. There are no wetlands on the site until approaching the shore line of Jessie Lake. As such there are no natural features that constrain development. As per the requirement of the MDP, the ASP proposes a minimum 15.0m Environmental Reserve buffer along the environmental significant and ecologically sensitive shoreline to contribute to the maintenance of the existing natural process and the quality of the urban environment. The extent of the environmental reserve will be determined at the time of subdivision.

A geotechnical investigation of the site was conducted to provide recommendations for residential development. Based on the investigation, it is expected that the base of excavations for residential construction will primarily be founded in clay till and would be suitable for shallow or deep footings. Site specific geotechnical assessments are recommended for larger structures such as apartment buildings or condominiums. A copy of the geotechnical investigation is included with the appending documents.



Figure 3 - Natural Features



Figure 4 - Site Photos

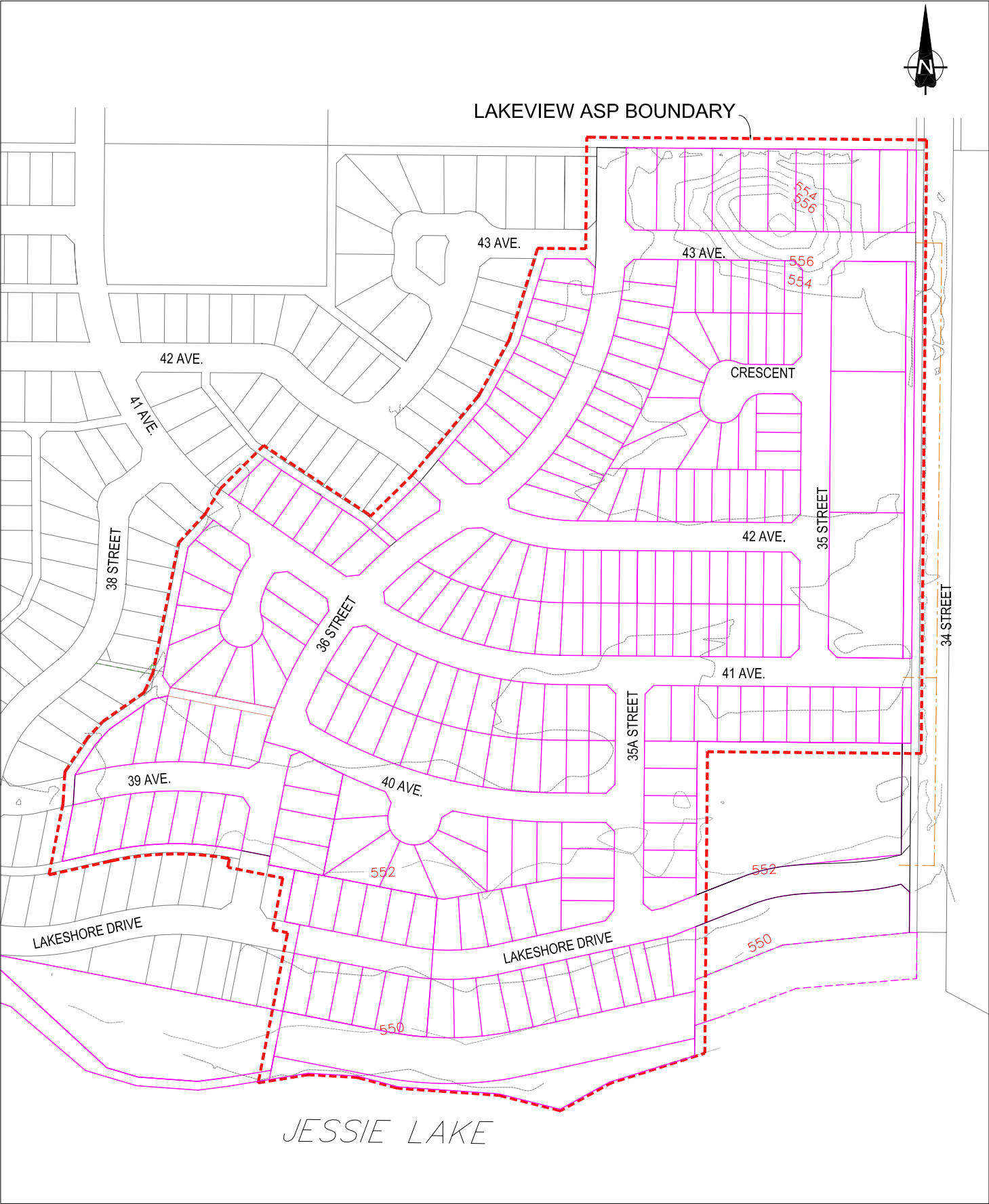


Figure 5 - Existing Topography

4.7 Historical / Cultural Resources

An historical resources impact assessment is not required based on information obtained from Alberta Culture and Community Spirit, Historical Resources Management Branch in preparation for this ASP. Please refer to Appendix II- Historical Resources Impact Assessment Referral for this confirmation.

5.0 DEVELOPMENT CONCEPT

The proposed development concept is shown in Figure 6. Table 1 demonstrates a breakdown of the proposed land uses.

Table 1
LAND USE DISTRIBUTION

	Area (ha)	% of GDA
Total Undeveloped Area	22.47	
Environmental Reserve	0.33	
Net Development Area	22.14	100
Roadways	5.66	25.56
Municipal Reserve	1.25	5.65
Low Density Residential	13.85	62.56
High Density Residential	1.38	6.23
Total Development Area	22.14	100.0 %

Table 2
DEMOGRAPHIC PROFILE

	Area	Units	%	People/Unit	Population
Single Family Residential	13.85	225	77.78	3.5	788
Multi Family Residential	1.38	90	22.22	2.5	225
Total Residential	15.23	315			1013

Density: 30.2 pp/gda

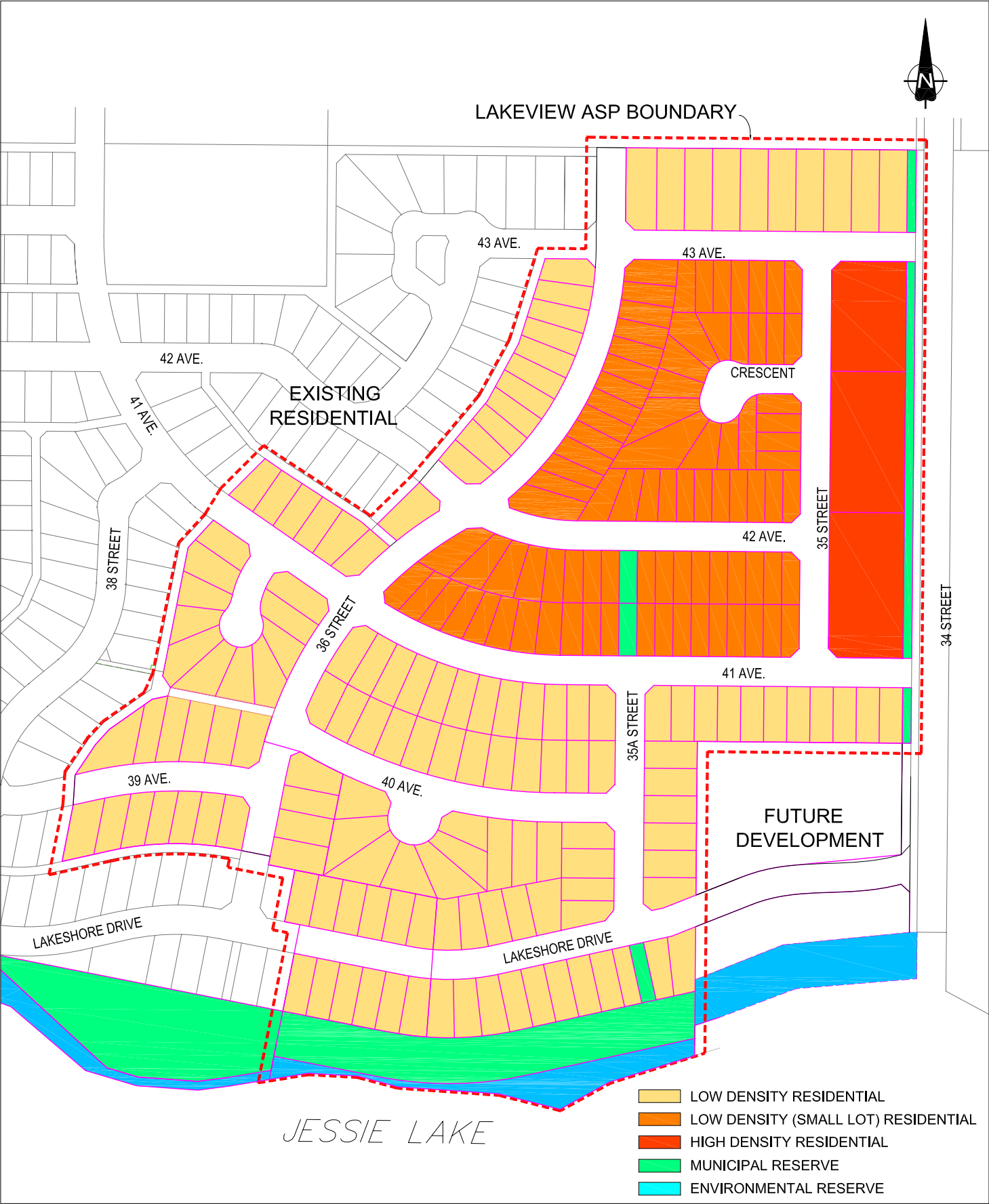


Figure 6 - Development Concept

5.1 Land Uses

5.1.1 Residential

The overall intent of the new plan is to create a seamless transition from the existing residential development that is consistent with the overall character of the Town. The current zoning in the Land Use Bylaw already establishes the area as residential with some park and open space. The proposed ASP conforms to the intent of the Bylaw and further elaborates neighbourhood planning and development policies. The policy objectives of the Lakeview ASP intend to achieve the following:

1. The concept attempts to achieve a variety of residential densities including low density, low density (small lot) and high density residential land uses to provide housing options and choices, see Figure 6-Development Concept for illustration. To further the MDP policies, the development concept generally disperses multi-family residential throughout the residential area thereby reducing concentrations within one specified district;
2. The design attempts to locate higher densities towards the periphery with lower densities located closer to the lake. The high density residential housing will be located along the north east portion of the development;
3. The lower densities will allow for more visibility of the lake, as well as reduce the intensity of development along the lake shore to minimize pressures on the landscape;
4. All multi-family residential development will be subject to design controls as outlined in Appendix 2 of the MDP, likewise Crime Prevention Through Environmental Design principles will be considered at the time of development approval to ensure that the character, layout, landscaping, and scale is complementary, sympathetic to the surrounding residential uses; and
5. To ensure that proposed densities can be appropriately serviced by water, sewer and other infrastructure.

5.1.1.1 Architectural Controls and Design

The development concept as shown on Figure 6 integrates the following design elements:

1. Curvilinear roadways combined with a number of cul de sacs to create a more interesting streetscape with a variety of lots sizes to craft a distinct neighbourhood

- which discourages through traffic in the residential area and directs major traffic thoroughfares on the periphery. The road design also allows adequate sight lines for both vehicular and pedestrian traffic. Refer to Figure 10 - Transportation Network for further illustration;
2. Approval of development applications for the area should retain the form and character established by the adjacent single dwelling residences;
 3. Connects to existing pedestrian circulation routes through sidewalks and pathways linking residential areas to schools, parks, shoreline, recreation facilities and downtown;
 4. Entry signs at specific entry points to the residential community to create a sense of identity;
 5. Multi-family residential development will be subject to design controls as outlined in Appendix 2 of the MDP to ensure it complements the character of the existing neighbourhood, site layout, and scale. Issues regarding privacy, parking, and landscaping will be addressed at the time of development approval.

5.1.2 Storm Water Management

The ASP area is an extension of existing subdivisions that have been approved via existing outline plans and development proposals.

The west half of the development area (9.16 ha) drains toward an existing 900 mm storm outlet. This outlet has been constructed utilizing a storm sceptor system to treat water quality with a rip rap outfall structure to slow the release of peak flows to a manageable velocity to minimize erosion. The outfall drains directly to Jessie Lake. The east half of the development area (13.42 ha) will drain to a proposed 900 mm outlet to Jessie Lake. This proposed outlet will require approval from both the Town of Bonnyville and Alberta Environment. A storm water management plan shall be submitted detailing the measures to be taken ensuring that environmental requirements are met through best management practices. Further elaboration about drainage is explained under Section 5.2.1-Storm Drainage. The proposed drainage system is illustrated in Figure 7- Storm Water Collection System.

5.1.3 Public Open Space (Municipal Reserves) and Environmental Reserves

Municipal Reserve (MR) dedications required for the developed and developing sections of the identified quarter amount to 4.57 hectares. During previous subdivision phases, 3.24 hectares have been allocated for public open space purposes. Accordingly, this plan area

requires a further 1.33 hectares to be dedicated toward the MR requirements. The MR proposed mainly consists of greenbelt corridors and linear pathways within the plan area. There are three linear pathways designed for the neighbourhood: a pedestrian link between 42nd and 41st Avenues; a pedestrian boulevard along the westside of 34 Street; and a linear pathway providing access to the lake from Lakeshore Drive. All linear pathways propose a 10 metre width and are subject to the municipal design standards.

The final area dedicated for public open space is proposed along the Jessie Lake shoreline running directly parallel to the Environmental Reserve(ER) to enhance the quality and aesthetic value of the proposed development and be consistent with adjacent land uses. The total area outlined for MR/public open space within the developing area comprises 1.33 hectares. The details for MR dedication will be determined at the time of subdivision and coordinated with the final Environmental Reserve(ER) amounts. The benefits gained from additional MR land adjacent to the ER provides further public access to the lake shoreline for recreational purposes and potentially reducing impacts on the environmentally sensitive lands. The MR will be left in its natural state to complement the features retained in the ER. Typically the Town requires a minimum of 15 metres setback from the lake for ER purposes; however, the final land area dedicated for ER will be determined at the time of subdivision registration. There is no indication from preliminary investigations associated with the preparation of plan that significant habitat, ecology, geotechnical instability or effects from a floodplain will result in changes to the typical shoreline requirement for ER. The development will ensure that the buffer retains all the natural features of the shoreline while, no additional native vegetation or topographical features have been identified for preservation in the remaining area. Please refer to Appendix III-Municipal Reserve Area Calculations for a detailed description of the MR dedications during previous phase of legal subdivision.

5.1.4 Transportation and Access

The purpose of the circulation design is to:

1. Ensure appropriate access is available to the new development by extending existing road patterns beginning from the west portion of the property moving eastward. The development will necessitate the extension of local roads including Lakeshore Drive, 36th Street, 40th Avenue, 41st Avenue, 42nd Avenue, and 43rd Avenue, as well as the construction of new roads;

2. The movement of traffic is facilitated by a proper system of road hierarchies which include local, minor collectors and major collectors to provide safe and efficient connections to the Town's arterial road network;
3. Conform to recent Beau Vista ASP approvals that have resulted in changes to the Master Transportation Plan. Resulting changes include a proposal to build 34th Street as the arterial road running north-south along the east boundary of the site. 36th Street will be developed as a local road providing pedestrian access to the existing school site just to the north of the developing area; and
4. All road and sidewalk construction shall be according to municipal engineering standards. Detailed designs shall be submitted at time of development approval.

Pedestrian access issues have also been elaborated under the previous section entitled Architectural Controls and Design, and further illustrated in Figure 10-Transportation Network.

5.2 Services

5.2.1 Storm Drainage

As outlined in 5.1.2 the storm drainage is proposed to be directed toward an existing 900 mm storm water outfall and an additional proposed 900 mm storm water outfall. The west half of the development area connects to the existing 900mm storm water outfall via a new piped system while the east half will drain to a future piped system and 900mm storm outlet draining into Jessie Lake. The existing storm sewer is connected to an existing storm sceptor facility that treats the storm water before draining into Jesse Lake. This existing 900mm storm outlet has a capacity of 0.99 cms and based on the preliminary engineering will be required to convey 0.86 cms upon future development. The existing outlet will be able to accommodate the increase in development flows.

The proposed storm drainage system for the east half of the development area will need to utilize best management practices at the time of development to treat the storm water to meet quality standards. Approvals for the future storm water outfall and treatment system will need to be obtained from the Town of Bonnyville and Alberta Environment prior to development. A storm management plan shall be provided at the time of development detailing measures to be taken. The layout of the proposed piped storm water drainage system is shown in Figure 7- Storm Water Collection System.

5.2.2 Sanitary Sewer

The proposed community will be serviced with municipal sanitary sewer infrastructure constructed at the time of development. The design continues to extend the sanitary sewer south toward the existing 750mm trunk main located within the south MR as in previous phases of development. The sanitary sewers will be extended within the road right-of-way in the following manner:

- 200 mm pipe connecting to the 250 mm along Lakeshore Drive; and
- 200 mm pipe for all other areas.

The existing 750mm sanitary trunk main that runs along the lakeshore drains to the Towns lift station within the SW ¼ Sec 9-61-5-4. The proposed sanitary sewer system is illustrated in Figure 8-Sanitary Sewer System.

5.2.3 Water Distribution

The water distribution system is designed to tie into six points in the existing system. The water distribution system will consist of a 250 mm trunk main that will continue along 36th Street while all other lines will be constructed from a 200 mm water main. Waterlines throughout the subdivision shall be looped and any future connections to potential developments will need to be extended to the boundaries of the property during subdivision development. Temporary water main blow offs will need to be installed on any dead end lines, caused by phased development, to ensure that the Town will be able to flush the water mains of stagnant water. The water distribution system is illustrated in Figure 9-Water Distribution System.

5.2.4 Shallow Utilities

Natural gas, telephone, cable, and power servicing for the proposed development will be installed within the proposed road rights of way and provided for during the subdivision approval process via subdivision registration and upon entrance into a development agreement with the Town of Bonnyville. The proposed shallow utilities will be extended from existing utilities adjacent to the property and accommodated for during each phase of the development through Utility Right of Way agreement. The design and construction will be done by others.

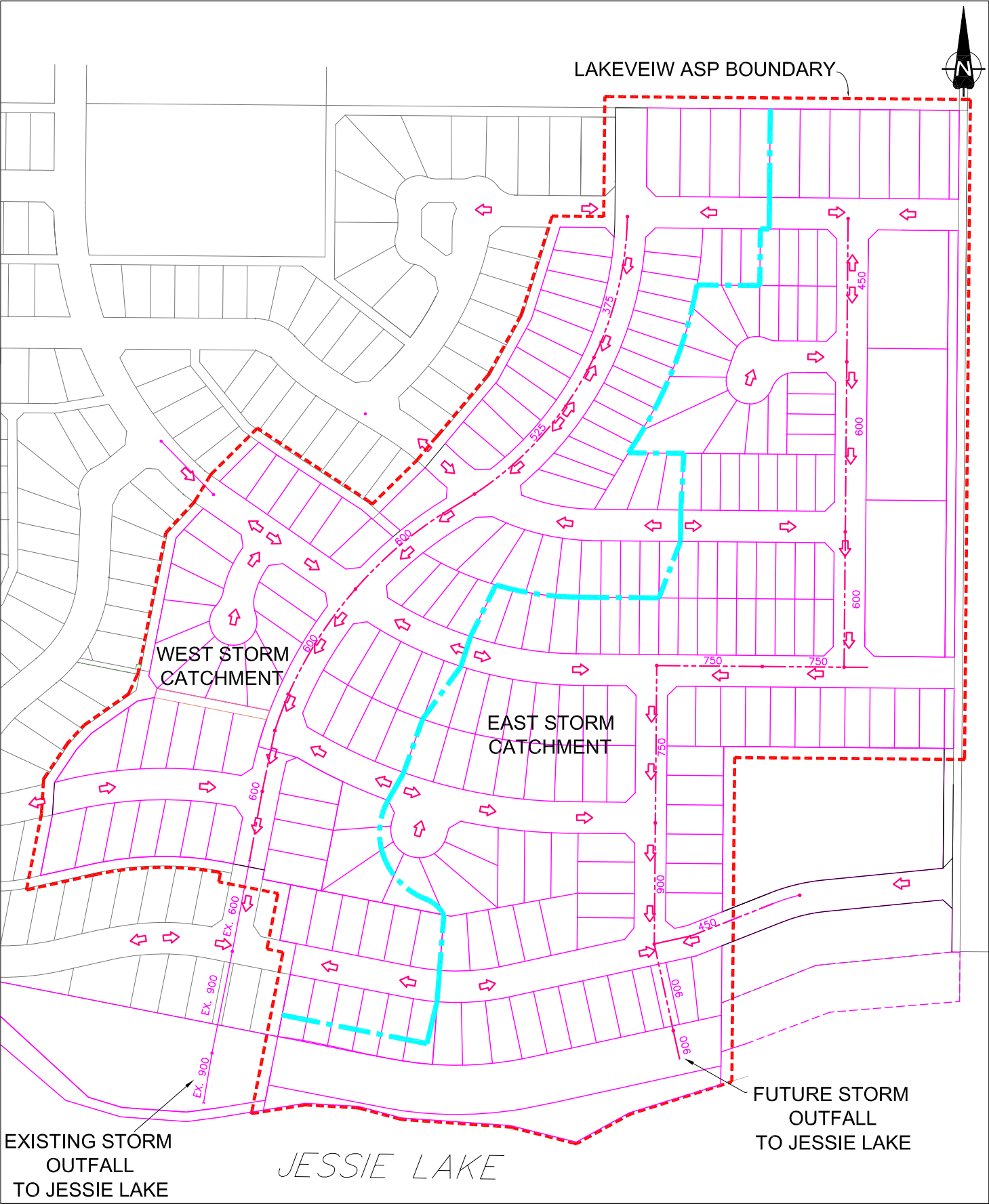


Figure 7 - Storm Drainage

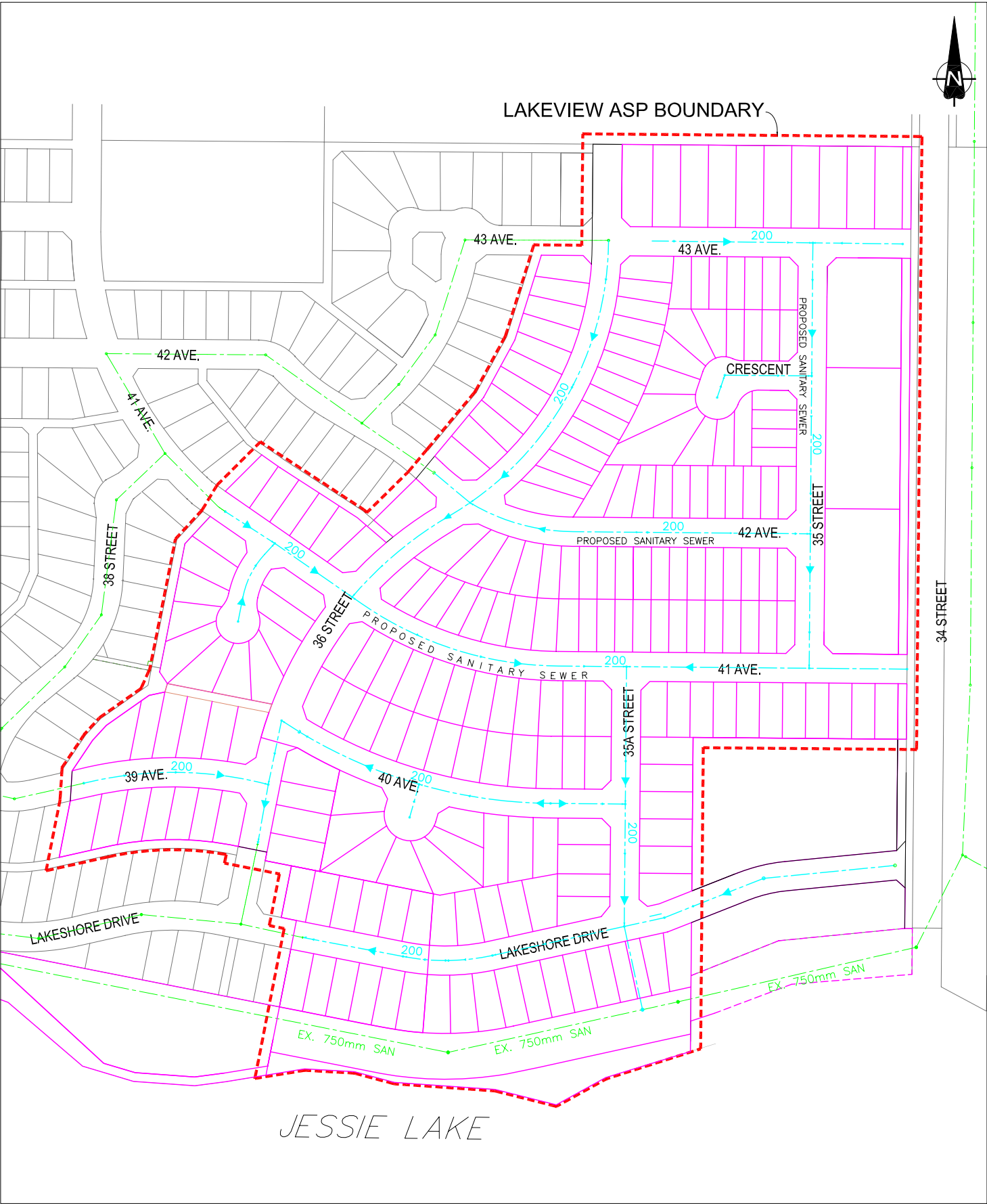


Figure 8 - Sanitary Collection System

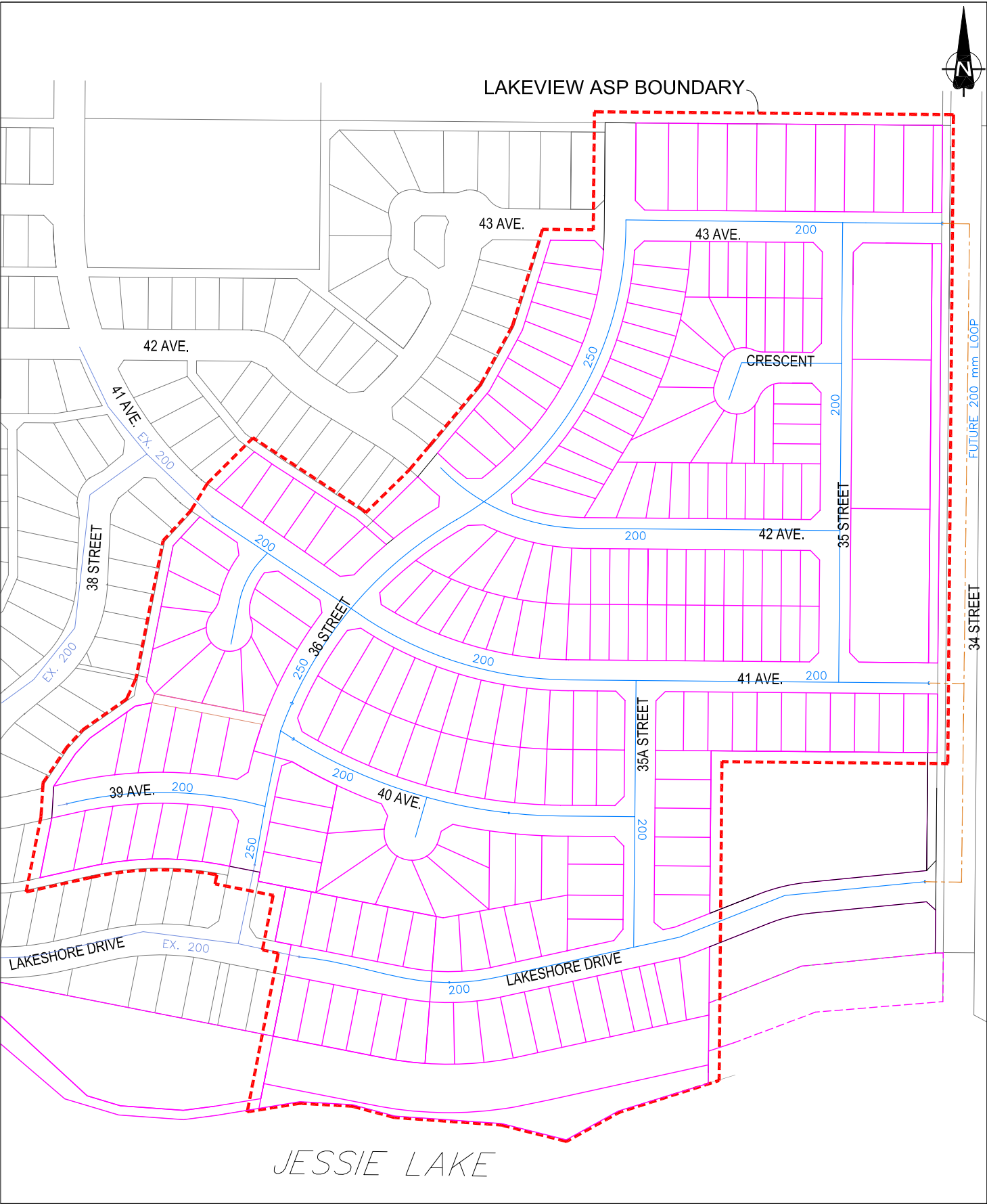


Figure 9 - Water Distribution System

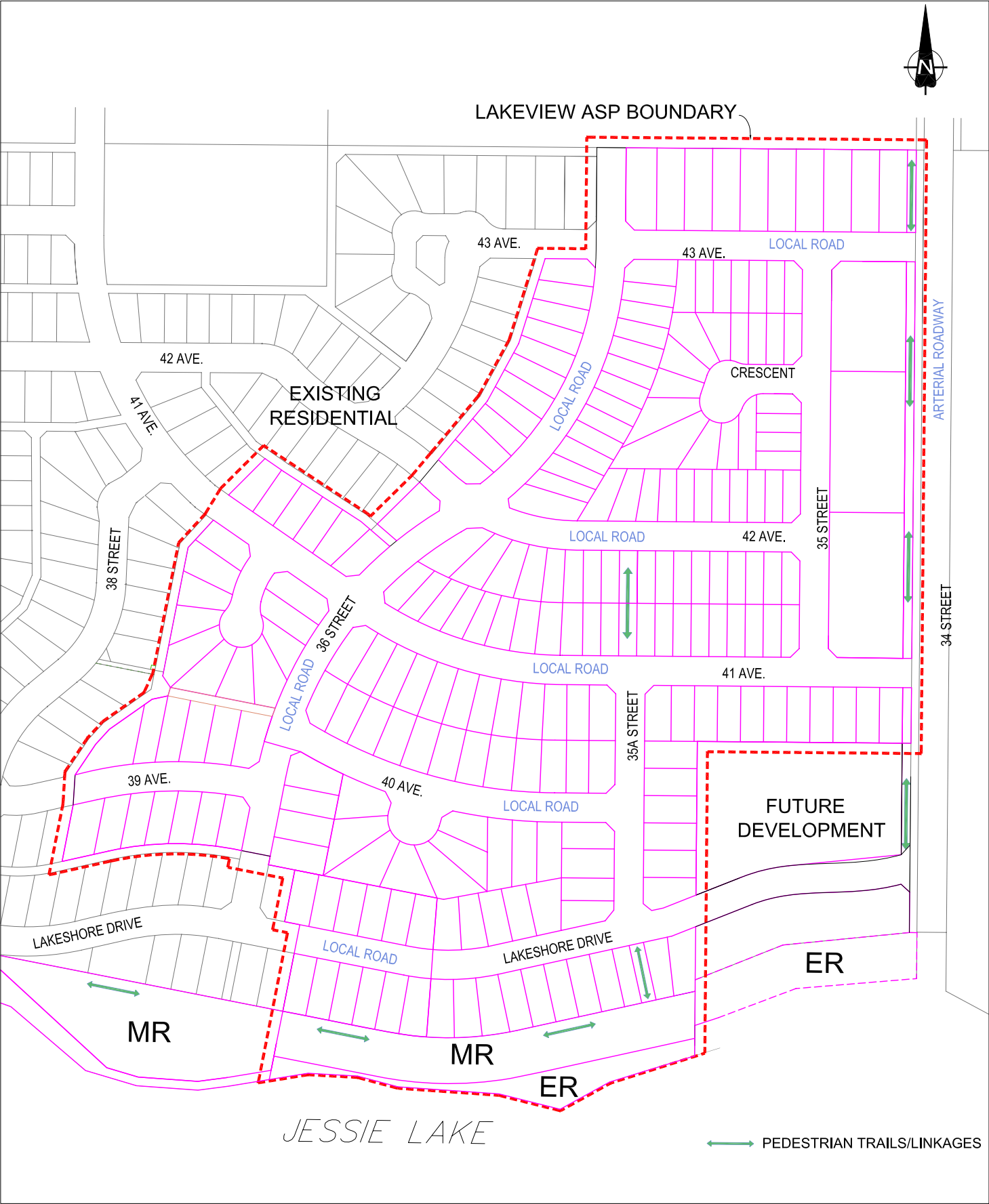


Figure 10 - Transportation Network Map

5.3 Community Services

5.3.1 Emergency Services

Fire service for the proposed development will be provided from the Bonnyville Regional Fire Authority Fire Station. Policing is also provided for by the Town. Ambulance service will be provided from the Town of Bonnyville.

5.3.2 Schools

Based on the information provided by the relevant school authorities, public schools for students of this area are as follows:

Secondary Schools

Centralized High School 4908 49 Avenue

Ecole Notre Dame High 5006 49 Avenue

Primary Schools

Duclos School 4801 52 Avenue

Ecole Dr. Bernard Brosseau School 4301 - 38 Street

H.E. Bourgoin Middle School 4313 39th Street

Notre Dame Elementary School 4711- 48th Street

Francophone schools

Ecole Des Beaux-Lacs 4312 34th Street

According to information collected from individual school authorities no school reserve dedication is necessary at this time.

6.0 DEVELOPMENT SEQUENCE

It is anticipated that the development will be divided into eleven phases, commencing with the area identified in Figure 11-Phase Development Plan as Phase IV which is directly abutting Jessie Lake on the north shore and extending along Lakeshore Drive, proceeding to the north with Phase V and Phase VI, while the remainder of the property will be further defined through phasing in response to market conditions. See Figure 11 - Phase Development Plan, for an illustration of the anticipated development staging.

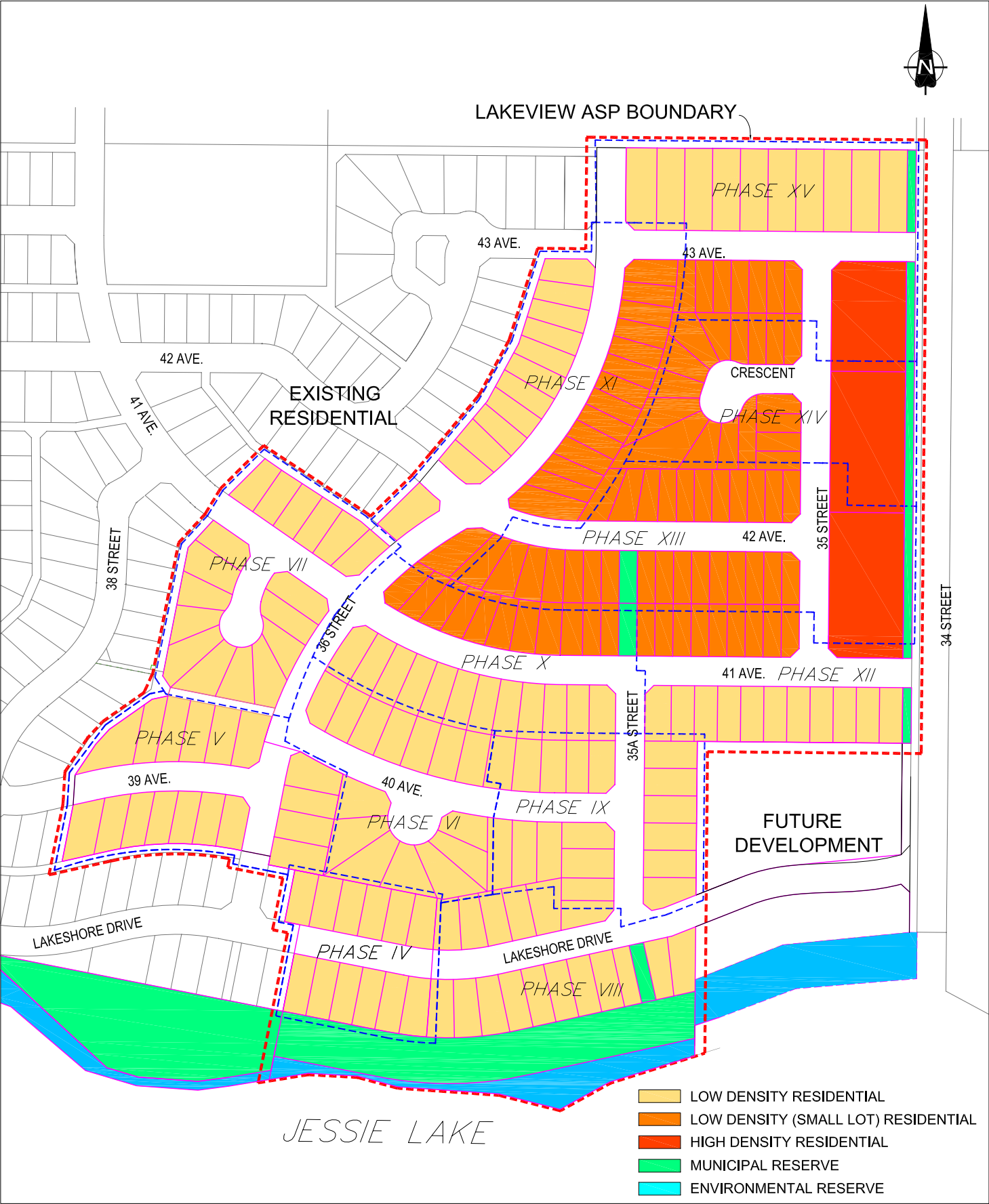


Figure 11 - Phase Development

APPENDIX

Government of Alberta
Culture and Community Spirit

Historic Resources Management
Old St. Stephen's College
8820 - 112 Street
Edmonton, Alberta T6G 2P8
Canada
Telephone: 780-431-2300
www.culture.alberta.ca/hm

March 4, 2010

Project File: 4835-10-012

Ms. Karolina Drabik
SE Design and Consulting Inc.
P.O. Box 1515
Suite 203, 4807 - 51 Street
Cold Lake, Alberta
T9M 1P4

Dear Ms. Drabik:

SUBJECT: LMS REALTY SERVICES
AREA STRUCTURE PLAN - SE 8-61-5-W4M
HISTORICAL RESOURCES ACT REQUIREMENTS

Thank you for providing Historic Resources Management Branch with information regarding the captioned project. Ministry staff have reviewed the potential for this development to impact historic resources and have concluded that an Historic Resources Impact Assessment is not required. LMS Realty Services is granted Historical Resources Act clearance to proceed with the development of this project.

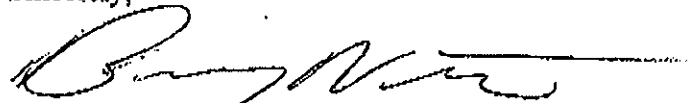
HISTORICAL RESOURCES ACT REQUIREMENTS

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

Should you require additional information or have any questions concerning the above, please contact me at 780-431-2330 or by e-mail at barry.newton@gov.ab.ca.

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

Sincerely,



Barry Newton
Land Use Planner

Alberta

Freedom To Create. Spirit To Achieve.

MUNICIPAL RESERVE AREA CALCULATIONS - SE 8-61-5-4 (BONNYVILLE, AB)

PLAN NUMBER	PLAN TYPE	YEAR REGISTERED	TOTAL AREA OF PLAN (HA)	AREA OF MR DEDICATED (HA)	AREA OF MSR DEDICATED (HA)	AREA OF ER DEDICATED (HA)
782 2374	ROAD PLAN	1978	0.222	0.000	0.000	0.000
792 0949	SUBDIVISION PLAN	1979	2.594	0.000	0.000	0.482
812 0782	RIGHT OF WAY PLAN (GAS LINE)	1981	0.000	0.000	0.000	0.000
852 2015	SUBDIVISION PLAN	1985	20.193	0.218	1.465	0.413
852 2016	RIGHT OF WAY PLAN (URW)	1985	0.000	0.000	0.000	0.000
932 1884	RIGHT OF WAY PLAN (SEWER)	1993	0.000	0.000	0.000	0.000
972 1385	DESCRIPTIVE PLAN	1997	0.000	0.000	0.000	0.000
982 1369	SUBDIVISION PLAN	1998	0.000	0.000	0.000	0.000
042 5178	SUBDIVISION PLAN	2004	0.000	0.055	0.000	0.000
072 0392	SUBDIVISION PLAN	2007	4.290	1.505	0.000	0.178
072 0393	RIGHT OF WAY PLAN	2007	0.000	0.000	0.000	0.000

Area taken out in 852 2015

Area taken out in 852 2015

Area taken out in 852 2015

Area taken out in 852 2015

Area taken out in 072 0392

TOTALS	27.299	1.778	1.465	1.073
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Original Areas of LSD 7&2

Original Areas of LSD 8&1

Road Plan 7822374

Subdivision Plan 7920949(MR still obtainable)

Environmental Reserve Dedicated

24.200 ha
~~24.900~~ ha
 49.100 ha
 -0.222 ha
 -2.594
~~-0.591~~
 45.693 ha

4.569 ha potential MR
~~3.243~~ ha already dedicated
 ha max Reserve
 available under current
 parcel size

1.326