BALZAC EAST
AREA STRUCTURE PLAN



Bylaw C-5177-2000, Adopted September 26, 2000

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44
Department of Planning and Development

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44
BYLAW C-5177-2000

A Bylaw of the Municipal District of Rocky View No. 44 to adopt an Area Structure Plan pursuant to Section 633 of the Municipal Government Act.

WHEREAS the Council of the Municipal District of Rocky View No. 44 wishes to adopt the Area Structure Plan affecting the lands described as:

Portions of Sections 3, 4, 9, 10, 15, 16, 21, 22, 27, and 28 and the west half of Sections 2, 11, 14, 23, and 26, as shown as being within the Area Structure Plan boundary in Figure 1 of Schedule A of this bylaw

herein referred to as the "Lands" and described in Schedule "A", known also as the Balzac East Area Structure Plan, attached hereto and forming part of this bylaw; and

WHEREAS a notice was published on Tuesday, March 28, 2000 and Tuesday, April 4, 2000 in the Rocky View Five Village Weekly, a newspaper circulating in the Municipal District of Rocky View No. 44, advising of the Public Hearing for April 11, 2000; and

WHEREAS Council held a Public Hearing and have given consideration to the representations made to it in accordance with Section 692 of the Municipal Government Act, being Chapter 24 of the Revised Statutes of Alberta, 1995, and all amendments thereto.

NOW THEREFORE the Council enacts the following:

1. That the Area Structure Plan be adopted to provide a framework for subsequent subdivision and development within:

   Portions of Sections 3, 4, 9, 10, 15, 16, 21, 22, 27, and 28 and the west half of Sections 2, 11, 14, 23, and 26, as shown as being within the Area Structure Plan boundary in Figure 1 of Schedule A of this bylaw.

   herein referred to as the "Lands" and described in Schedule "A", known also as the Balzac East Area Structure Plan, attached hereto and forming part of this bylaw.

2. This Bylaw may be cited as the Balzac East Area Structure Plan.

3. That this Bylaw shall come into effect upon the date of third and final reading.

File: 616-11

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, March 7, 2000 on a motion by Councillor Gough.

Second reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, May 9, 2000 on a motion by Councillor Gough.

Third reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on September 26, 2000 on a motion by Councillor Kent.

_____ _____

REEVE OR DEPUTY REEVE MUNICIPAL SECRETARY

BALZAC EAST
AREA STRUCTURE PLAN

OFFICE CONSOLIDATION
September 2008

Note: This office consolidation includes the following amending Bylaws:

Amendment	Description	Approval Date
1.	**Bylaw C 5839-2003** a. Section 3.1 h – delete and replace text b. Section 4.3.1 c – delete and replace text c. Section 4.4.3 c – amend text d. Section 4.4.3 d – delete and replace text	**November 25, 2003**
2.	**Bylaw C 6016-2004** a. Section 4.7 – add new policy 4.7.4 b. Figure 2 – delete and replace map c. Figure 3 – delete and replace map d. Figure 5 – delete and replace map e. Figure 13 – delete and replace map f. Figure 14 – add new map	**January 18, 2005**
3.	**Bylaw C 6233-2006** a. Figure 2 – amendment b. Figure 3 – amendment c. Section 4.3.2 – delete and replace text d. Section4.4.3 – add text e. Section 4.7.4 –delete and replace text f. Section 5.2 –add policy g. Section 6.2.4 –delete and replace h. Figure 5 – amendment i. Section 6.5.2 – delete and replace.	**April 25, 2006**
4.	**Bylaw C-6608-2007** a. Figure 2 – delete and replace map b. Figure 3 – delete and replace map c. Section 4.7.2 add text to first paragraph	**May 13, 2008**
5.	**Bylaw C-6655-2008** a. Section 1.1 – minor amendments to text b. Section 4.3 – delete and replace text c. Section 4.3 – add new part (i) to 4.3.1 d. Section 4.3.3 g – delete and replace new section e. Section 4.3.3 – add a section f. Section4.6 – amend text in various portions g. Section 4.7 – amend text h. Section 4.7.5 – Add a new section	**Sept 23, 2008**

i. Section 5.2 – delete and replace part e.
j. Section 6.1- add text to part a, and add part b & c.
k. Section 6.2.1 – delete and replace a.
l. Section 6.2.5 – add a new section
m. Section 6.2 – amend text.
n. Section 6.5.1 – add text
o. Section 6.5.3 – amend part c.
p. Section 6.8.3 – add text
q. Section 6.9 – add a section
r. Figure 1 -5 – delete and replace maps.

6. Bylaw C-7819-2018 Feb 12, 2019

a. Replace policy 4.7.5 (i)
b. Delete policy 4.7.5 (m)

7. Bylaw C-8173-2021 Nov 30, 2021

a. Section 1.1 – amended and added text
b. Section 4.7.6 – Added a new section

8. Bylaw C-8466-2023 Dec 5, 2023

a. a. Revise Policy 4.7.4 (j)(i)
b. b. Revise Policy 4.7.4 (m)

9. Bylaw C-8471-2023 Dec. 12, 2023

a. Revise Policy 4.7.4 (j)(i)

Note: This document is an office consolidation and amendments have been inserted for ease of reference only. The official Bylaw and all amendments thereto are available from the Administration Office of the M.D. of Rocky View No. 44 and should be consulted for all purposes of interpreting and applying this Bylaw.

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MISSION STATEMENT

The Balzac East Area Structure Plan (BEASP) is intended to provide a long-term vision and development framework serving as a guide to appropriate forms of future land use and development within the Plan Area. The BEASP will assist municipal policy makers, planners, landowners, and potential developers.

1.0 INTRODUCTION

1.1 Context

Figure 1 identifies the physical Plan Area for the Balzac East Area Structure Plan (BEASP).

The Plan Area includes 17.25 sections of land on the east side of Highway 2, north of the City of Calgary and south of the City of Airdrie in the Municipal District (M.D.) of Rocky View. The Plan Area consists of all legal subdivision plans and lands contained within the following Sections, all in Township 26 and Range 29 west of the fourth meridian including the following:

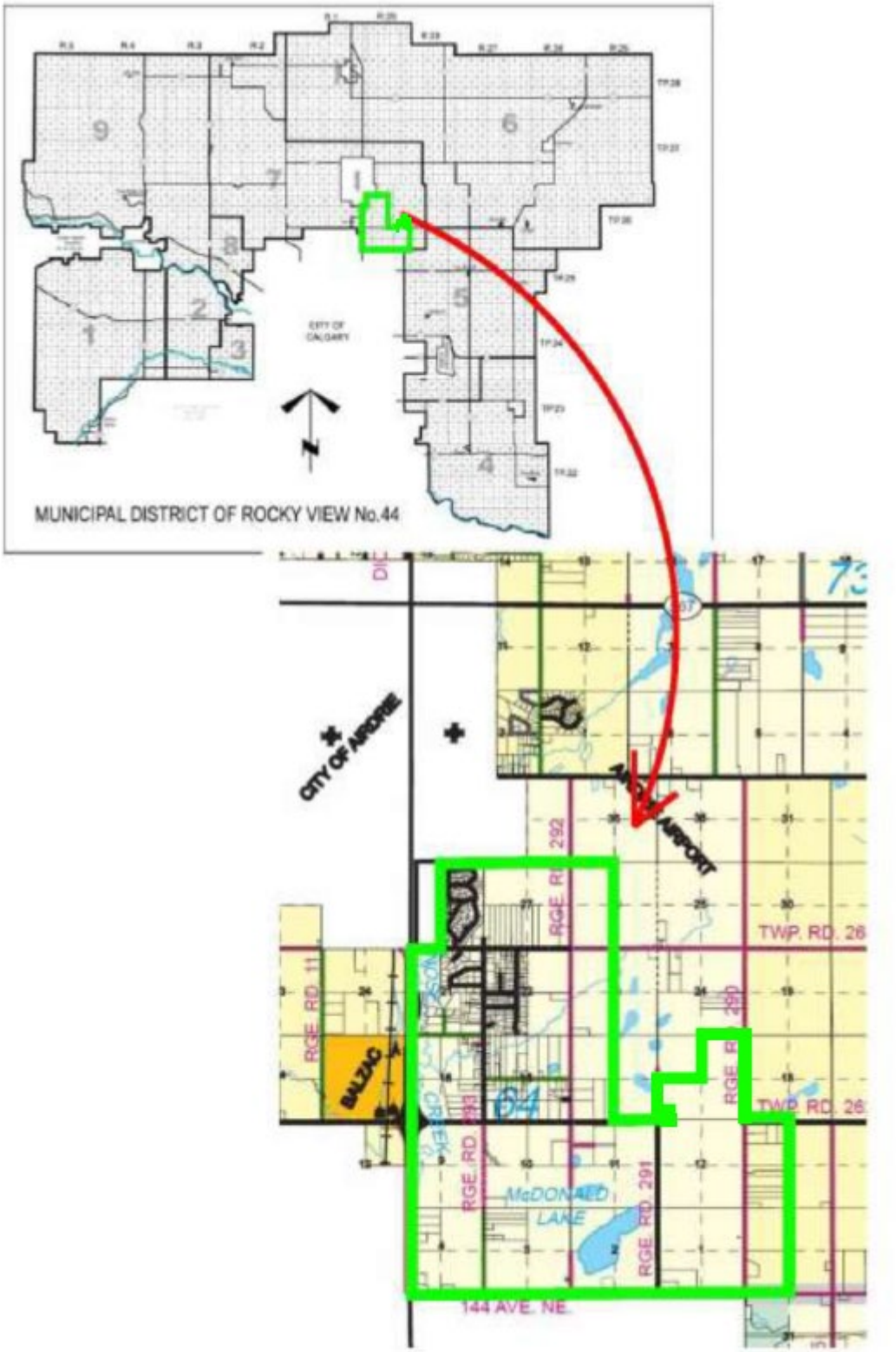
Sections 1, 2, 3, 4, 9, 10, 11, 12, 15, 16, 21, 22, 27, and 28 and the west half of Sections 14, 23, and 26. And the W ½ 6 and the W ½ 7-26-28-W4M. And the E ½ and part of SW 1/4 of Section 13-26-29-W4M.

The Plan Area originally sustained First Nations' people and, subsequently, attracted new settlers. Europeans did not settle in the Balzac area until the start of the 20th century. The early pioneer families found the eastern side of the Nose Creek Valley particularly suitable for grain growing.

A Canadian Pacific Railway engineer, fond of the French author Honoré de Balzac, named Balzac in 1891. The area's detailed history is documented in Stephen Wilk's book entitled *100 Years of Nose Creek Valley History*.

The Plan Area can be classified as a rural-urban transition zone. Historically the area was characterised by agricultural uses lying between the cities of Calgary and Airdrie along the east side of Alberta's most important highway corridor. Over time both cities have grown and there is increasing demand in the Plan Area for country residential development. As a result, the Plan Area is now divided between agriculture and small residential land holdings, many occupied by commuters to the urban centres. The transition from agricultural to residential (or other uses) continues with an increase in land values, urban growth pressures, and proximity to urban areas. The BEASP is required to establish an orderly approach to future development while, at the same time, considering differing lifestyle and livelihood aspirations of a diverse resident population.

Figure 1: Plan Area



1.2 Population Growth

Based on federal census information, the M.D. of Rocky View experienced thirty four percent (34%) population growth between 1981 and 1996, due primarily to the conversion of land to country residential uses. This growth trend can be applied to the Plan Area and will likely continue.

The population growth rate in the Plan Area will be determined by a number of factors including planning and development policies contained in the BEASP, market demand, landowner decisions, and the availability of services and infrastructure. To provide some indication of future population potential, the following scenario could be considered:

If the Plan Area was fully developed, as outlined in the BEASP, the total Plan Area population is estimated at approximately 2080 persons. This projection assumes an average household size of 2.6 persons (the average household size in the 1996 federal census) and that 75% of the available land is developable allowing for environmental considerations and road reserves.

Water supply is one of the most important short-term growth considerations. The existing Rocky View Water Co-op currently has 110 connections in the Plan Area (estimated at approximately 286 persons) with an existing capacity for some additional 240 connections (approximately 624 additional persons). Recent adoption of the provincial *Water Act (c-3.5,S.A., 1996)* will put more emphasis on surface water tie-ins for all future development.

1.3 Public Involvement

In accordance with the approved Terms of Reference adopted by Council in December of 1997, three (3) Open Houses were held at the Balzac Hall and one (1) statutory public hearing was held at the M.D. of Rocky View Council Chambers.

A statutory Public Hearing was held April 11, 2000 and was adopted by M.D. of Rocky View No. 44 Council (Bylaw # C-5177-2000) on September 26, 2000.

In addition, the Steering Committee held 13 meetings over a 26-month time frame during the BEASP preparation. The Steering Committee consisted of three (3) residents of the Balzac East Area and three (3) members of Council, assisted by Municipal Staff and consultants. The Steering Committee's mandate was to make recommendations regarding Open House content and policies contained within the BEASP.

Furthermore, a series of individual stakeholder meetings provided better understanding of specific concerns. Stakeholders included The City of Calgary, The City of Airdrie, The Calgary Airport Authority, Alberta Transportation, and a number of individual landowners in the Plan Area. Input from the public participation process are presented in Appendix A.

1.4 Opportunities and Constraints in the Plan Area

A number of issues and technical considerations were evaluated as part of the BEASP process, and the following opportunities and constraints were identified:

a. Differing lifestyle/livelihood aspirations - Agricultural landholders express difficulties in continuing their farming operations, while existing small land owners wish to retain the "country charm" of their once rural surroundings.

b. Proximity to Urban Centres - Urban growth pressures will continue and annexation of at least some parts of the Plan Area is likely in the foreseeable future.

c. Nose Creek - The creek is a major drainage component in the Plan Area. It has traditionally been utilised for storm water management and the watering of livestock, but consideration should also be given to its potential as a linear park with some recreational amenity.

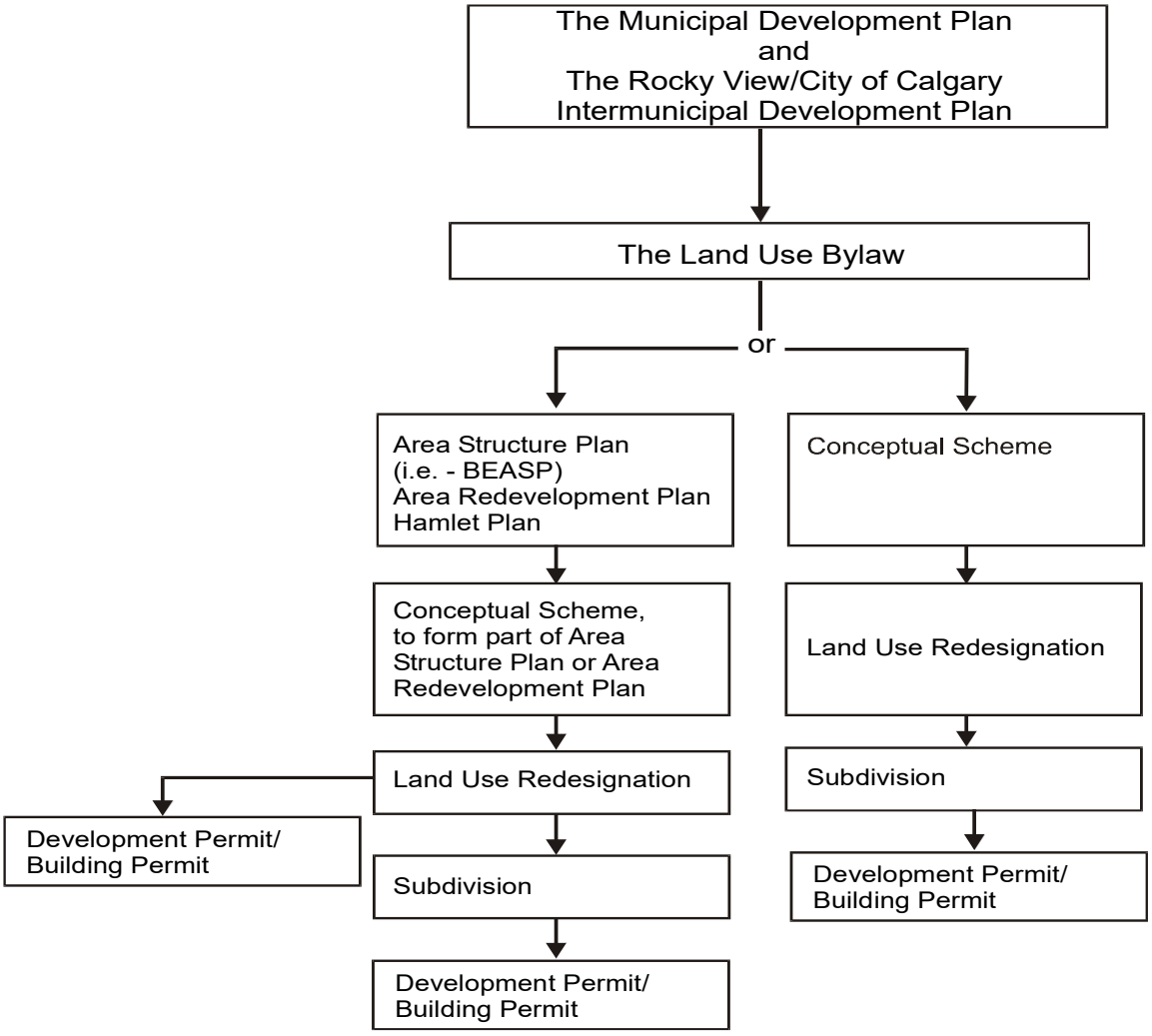
d. Proximity to the Calgary International Airport - Proximity to a major airport brings federal regulations, public safety issues, and land use limitations to the Plan Area.

e. Highway 2 - Alberta's main highway has controlled access and requires special consideration with respect to visual appearance of the highway corridor.

2.0 THE PLANNING PROCESS

2.1 Purpose of the Plan

The BEASP was prepared to address landowners concerns that allowing development without proper planning would be detrimental to the area as a whole. The Plan Area is experiencing continued residential and, more recently, business opportunity growth pressures. As a result, comprehensive planning of potential residential and business areas is increasingly important as adjacent urban centres continue to grow. The purpose of the BEASP is to define a planning and development framework to guide future growth in the Plan Area by establishing a range of appropriate and compatible land uses within a sequential development strategy. The BEASP supports the Rocky View Municipal Development Plan (MDP) by adding another layer of detail to this particular area. The BEASP takes into consideration existing land uses, surrounding developments, potential future land uses, public input, physical and environmental characteristics, infrastructure requirements, and growth trends. The BEASP outlines a number of goals. The Plan structure and the policies contained within are the means by which those goals can be achieved. The BEASP integrates into the overall planning process as illustrated below:



2.2 The Legislation

The BEASP is consistent with the Municipal vision as stated in Section 1.4 of the Rocky View MDP. Section 1.4 states:

"That the Municipality continue to be a major agricultural force in the region. And, although certain sectors of the Municipality have evolved from agriculturally-based communities to predominately country residential-based neighbourhoods, further such erosion of the agricultural land base is not desirable. The Municipal District of Rocky View seeks to be a fiscally balanced rural Municipality that also considers the importance of transportation and other infrastructure servicing, environmental, and quality of life issues in its decision-making."

The BEASP has been prepared in accordance with provincial requirements outlined in s.633 of the *Municipal Government Act* (MGA) *(Statutes of Alberta, 1994, Chapter M-26.1)*.

633 (1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may, by bylaw, adopt an area structure plan.

(2) An area structure plan

(a) must describe

(i) the sequence of development proposed for the area,

(ii) the land uses proposed for the area, either generally or with respect to specific parts of the area,

(iii) the density of population proposed for the area either generally or with respect to specific parts of the area, and

(iv) the general location of major transportation routes and public utilities,

and

(b) may contain any other matters the council considers necessary.

In addition, s.638 of the MGA requires that all statutory plans adopted by the municipality be consistent with one another. This includes consistency in content, policy implementation and method of amendment.

3.0 PLAN VISION AND GOALS

The BEASP will provide a framework for orderly economical and beneficial development of land, and patterns of human settlement. It is intended to provide a flexible long-term framework for development in the Plan Area. The BEASP should provide clear policy guidance, with appropriate flexibility, to ensure that Balzac East remains a desirable place to live and work. Based on community input, the BEASP attempts to accommodate a diverse range of interests, address lifestyle and livelihood issues, and promote economic diversity.

Stakeholders' input forms a major component of the Plan goals and policies. During the BEASP public participation process, a number of issues, concerns, and interests were noted. These are presented in Appendix A.

The BEASP envisions an orderly and sequential pattern of land use transition accommodating new residential and business opportunities while continuing to respect adjacent agricultural activities. The transition will strive to preserve and integrate natural features, open space, and visual characteristics that attract new residents, while, at the same time, provide new economic opportunities for those who have historically earned their livelihood in the area. New economic opportunities will take the form of high quality, and appropriately located business areas. All development will be supported by a well-planned and appropriate network of infrastructure and services. **Figure 2 - "Planning for Transition"** illustrates a conceptual vision of the Plan Area.

3.1 Plan Goals

The following goals provide the focus for the BEASP, build on the Plan Area vision, and collectively represent the future aspirations of the community and the Municipality:

a. Achieve an efficient, sequential pattern of development encouraging a diversity of land uses working in harmony with one another;

b. Promote intensification of existing residential development areas through infilling;

c. Recognize the potential for transition of agricultural lands to non-agricultural uses in a series of orderly, planned, properly serviced, and market – driven stages;

d. Promote appropriately located business areas to serve local and regional needs;

e. Establish high quality Performance Standards and Development Guidelines to harmonise development with the natural and built environment;

f. Provide an efficient and safe road network to address existing traffic issues and accommodate future growth;

g. Encourage the protection, preservation, conservation, and/or enhancement of significant and valued natural and/or archaeological features of the Plan Area through the development process.

h. Maintain the functional and visual integrity of significant transportation corridors.

Figure 2: Conceptual Vision

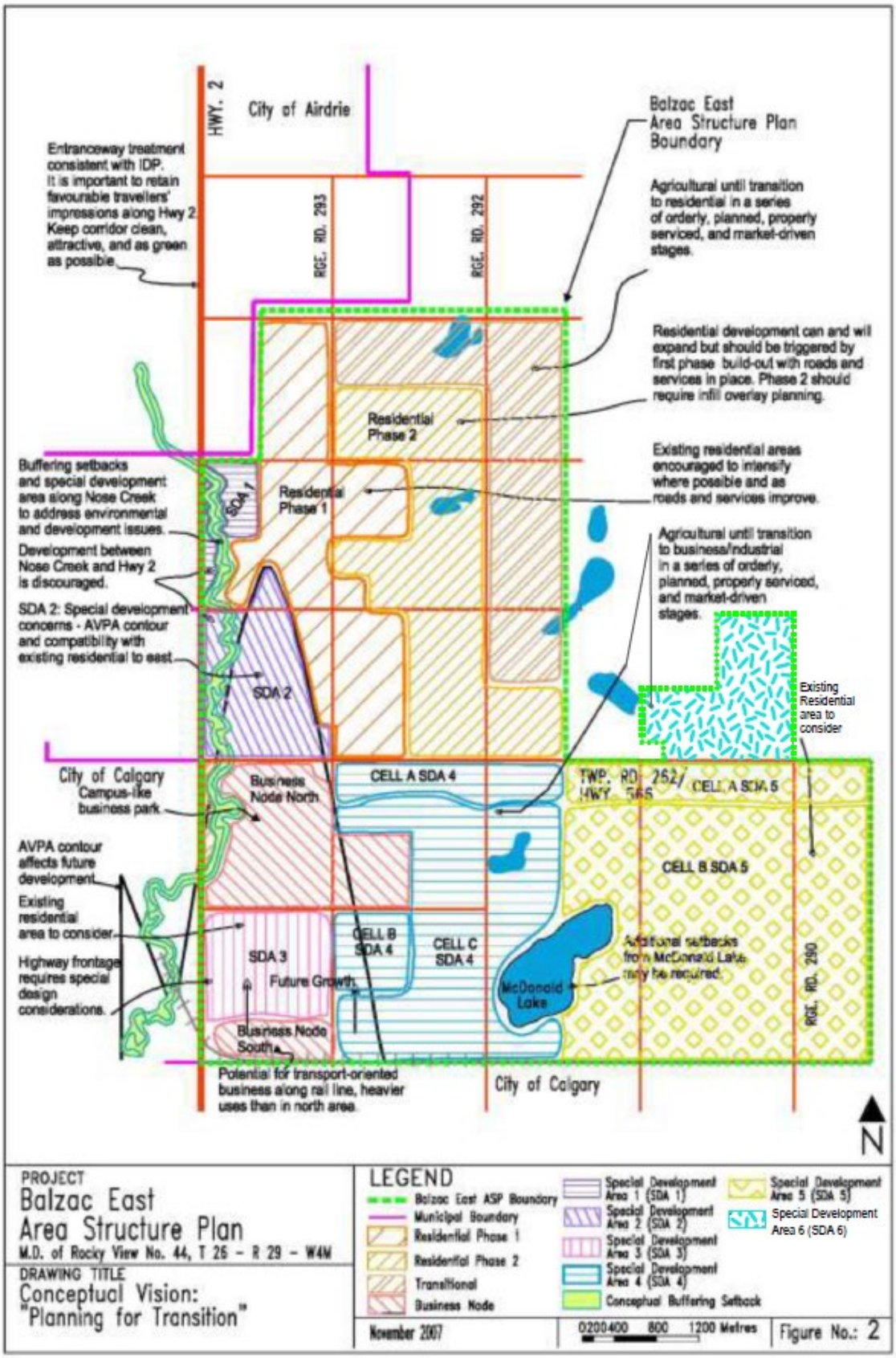
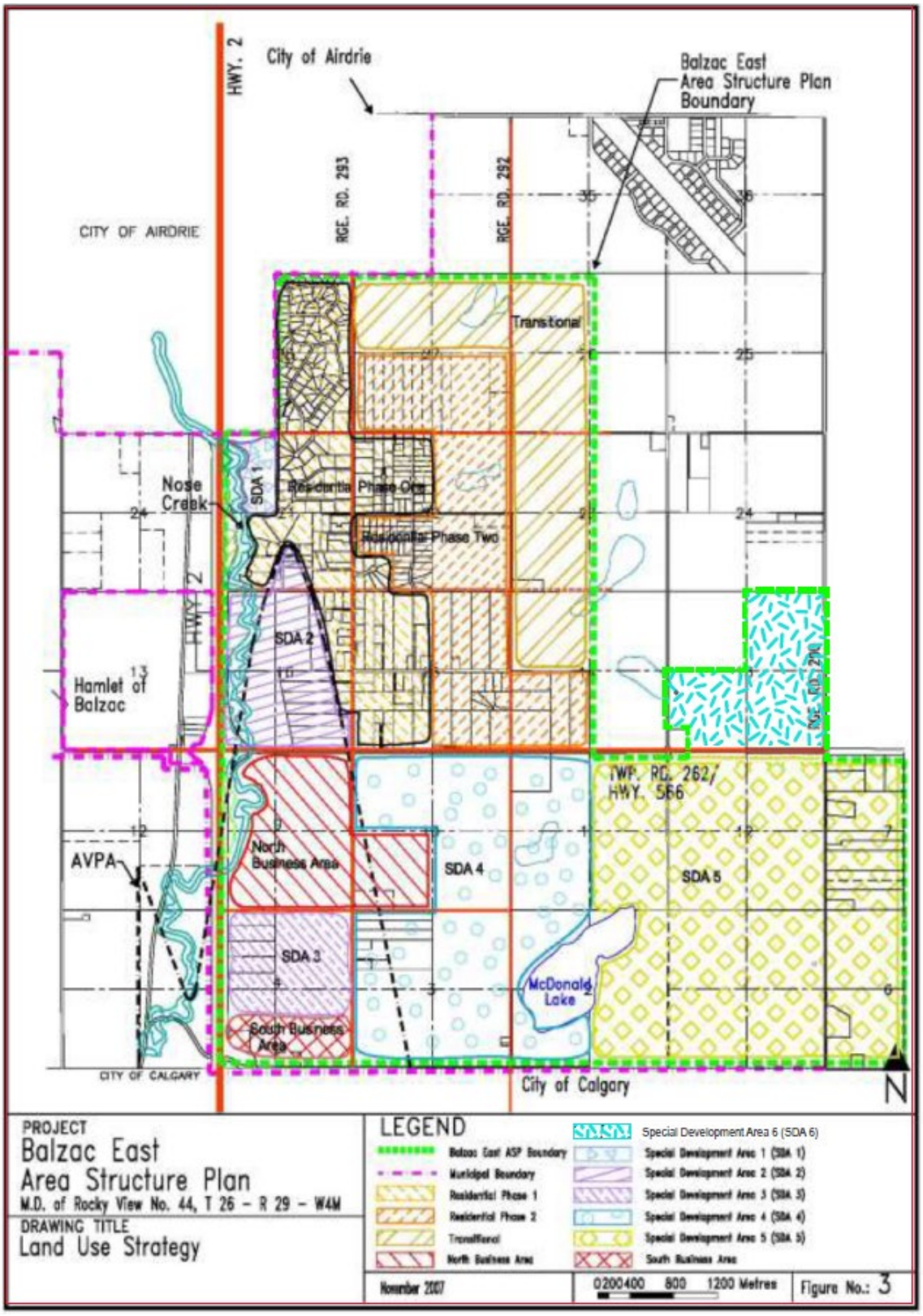


Figure 3: Land Use Strategy



4.0 LAND USE STRATEGY

Figure 3 illustrates a land use strategy to guide growth and achieve community objectives. The land use strategy acknowledges three principles of the MDP, which seeks to (a) preserve predominately unsubdivided areas with an agricultural land use designation, (b) provide potential for subdivision of isolated areas of designated and previously subdivided lands, and (c) promote in-filling of concentrated areas of residential development. However, at the same time, the BEASP recognizes growth and transition pressures specific to the Plan Area. Much of the Plan Area is currently under agricultural land use. Agricultural land uses are expected to decline and be replaced by residential and/or business uses. The BEASP supports an orderly, planned, properly serviced, and market – driven transition of agricultural lands to residential or business uses. During the transition period, continued agricultural uses are considered appropriate.

a. Applications for redesignation, subdivision or development shall conform with the land use strategy illustrated in **Figure 3** and be compatible with the policies of this Plan.

b. Any application in the Plan Area that is contrary to the land use strategy contained within the BEASP requires a formal amendment to the BEASP.

c. Applications for redesignation, subdivision, and development that may be contrary to the BEASP's sequencing objectives within the Residential and Business Areas may be considered without amendment to the Plan, provided short and long term consequences such as impact on adjacent lands, carrying capacity, and servicing are examined to the satisfaction of the Municipality.

d. "Short-term", "medium-term" and "long-term" growth projections in the Municipality of Rocky View land use strategy shall be dependent upon a number site-specific of factors including:
   i. the proximity of the area to urban services or the ability of the area to be serviced from collective sewer and water systems;
   ii. the ability of the existing transportation network to handle additional capacity proposed by a new use in the Plan Area; and
   iii. the proximity of existing uses to the proposed use and the extent of contiguous build out in the area.

4.1 Transitional Land Use

The Plan Area has historically been under extensive agricultural use. The Plan Area is subject to unique pressures including urban growth from both Calgary and Airdrie; increasing non-agricultural land values; demand for country residential development; and conflicts between residential/business and agricultural land uses. These factors all support the transition of agricultural lands to non-agricultural uses.

4.1.1 Transitional Policies

a. Prior to transition, agricultural lands identified for future non-agricultural land uses shall continue to be considered as conforming agricultural uses, until transition, in accordance with the policies of this Plan.

b. Intensive agricultural uses are discouraged on lands identified in Figure 3 for future residential land use.

c. Intensification of existing agricultural uses, prior to transition, on lands identified as future non-agricultural use in **Figure 3** shall consider the following:

i. Minimum Distance Separation (MDS);
ii. compatibility with existing and future land uses;
iii. livestock management practices;
iv. environmental impact;
v. a waste management program;
vi. a chemical management program; and
vii. any other matter the Municipality deems necessary.

d. Conceptual Plans may be required for redesignation and subdivision proposing multi-lot developments.

4.2 Residential Land Use

Orderly and sequential residential development compatible with the natural environment is encouraged beginning with the in-filling of existing residential areas.

Generally, residential development should occur in an orderly pattern, within the plan area, from west to east. Visual impacts from both the highway and within neighbourhoods shall be considered. New housing should be consistent with existing neighbouring developments and be of a form and character that leads to the development of a consistent visual landscape. Rural density developments with integration of open space and larger lot sizes are preferred over urban forms of development. Permitted levels of development will be influenced by the capacity and quality of available services and infrastructure.

Applicants for residential development in the Plan Area should consider internal road linkages with neighbouring landowners in support of a comprehensive and efficient road network. Opportunities to provide pedestrian linkages through the residential areas with possible connections to the proposed Nose Creek Open Space system should be considered.

4.2.1 General Residential Area Policies

a. The Municipality may require applications for redesignation and/or subdivision for residential development to supply the following:

i) a storm water management report (see Section 6.5.3 for detailed information);
ii) an evaluation of any on-site hydrological conditions including confirmation of sufficient water supply (see Section 6.5.1 for detailed information);
iii) an evaluation of sanitary servicing (see Section 6.5.2 for detailed information);
iv) an evaluation of on-site geotechnical, archaeological, and historical features (see Sections 5.1, 5.4, and 5.5 for detailed information);
v) a Traffic Impact Analysis (see Section 9.38 for detailed information); and/or
vi) any other matter deemed necessary by the Municipality.

b. Redesignation and subdivision applications for multi-lot developments shall demonstrate how the proposal could accommodate the future subdivision potential and/or development of a future road network on surrounding lands.

c. Panhandles are generally discouraged except where site constraints exist or where panhandles may accommodate future internal subdivision roads.

4.2.2 Phase One - Residential Intensification Area Policies

In-filling of Phase One is encouraged prior to further development of infrastructure in Phase Two. Applications for residential development out of phase may be considered if adjacent to existing development of similar density and lot size, compatible with the surrounding land use pattern.

a. Minimum parcel size shall be two (2.0) acres.

b. Proposals for redesignation, subdivision, and development within the Phase One Residential Intensification Area shall be supplied by a surface water system, with written confirmation of a sufficient water supply.

c. **Figure 4** identifies where Conceptual Schemes may be required for redesignation and subdivision applications deemed to have an impact on the long-term land use scenario, servicing requirements, future road network, or development pattern of surrounding lands.

4.2.3 Phase Two - Residential Development Area Policies

Phase Two is envisioned as a transition zone between the higher density developments in Phase One and outlying agricultural lands. Orderly, sequential and contiguous development is encouraged. Applications for residential development out of phase may be considered if adjacent to existing development of similar density and lot size, and is provided with appropriate levels of services and infrastructure consistent with overall development of the Plan Area.

a. Minimum parcel size shall not be less than four (4.0) acres.

b. Notwithstanding Policy 4.2.3.a, two (2.0) acre parcels may be permitted where the land is adjacent to existing two (2.0) acre lots, has direct access to a developed road and a surface water supply is available.

c. **Figure 4** identifies where Conceptual Schemes may be required for redesignation and subdivision applications proposing multi-lot developments deemed to have an impact on the long-term land use scenario, servicing requirements, future road network, or development pattern of surrounding lands.

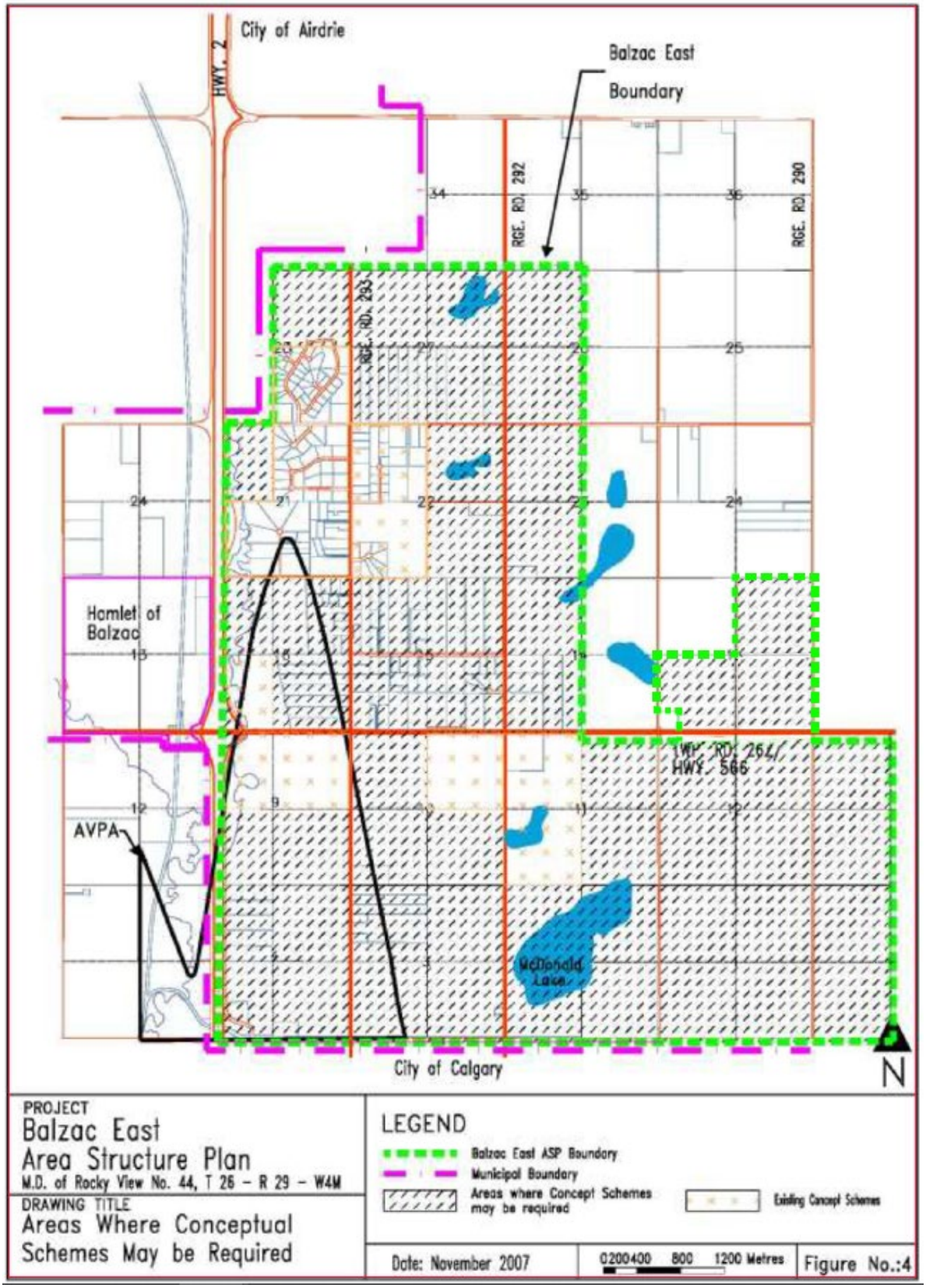
d. **Figure 2** identifies where infill overlay planning should be encouraged on Residential Phase two lands. Infill overlay principles allow already developed rural residential areas to be redeveloped to allow for higher densities in the future. Subdivision applications within areas designated for rural residential development should address the following infill overlay principles:

   (i) Subdivision design, lot configuration, roadway access and alignments should be planned in a manner that facilitates future subdivision and redevelopment of the area to accommodate higher densities;

   (ii) Future servicing and transportation right-of-way requirements should be accommodated wherever possible and practical in rural subdivision design; and

   (iii) The potential for additional rural residential subdivision, redesignations and development creating higher densities on both the balance of the parcel being subdivided and on adjacent parcels should be considered.

Figure 4: Conceptual Schemes



4.3 Business

The diversification of business within the Plan Area is encouraged. Commercial and industrial uses should be facilitated at a scale and character that integrate into the existing land use pattern.

The Plan Area identifies two business areas adjacent to the Queen Elizabeth II Highway and south of Highway 566. These business areas are confined to lands that fall within the Airport Vicinity Protection Area (AVPA) for the Calgary International Airport. The AVPA does not permit residential land uses above the 30 Noise Exposure Forecast (NEF) contour due to overriding public safety and aviation concerns.

The BEASP land use strategy focuses initial business uses to these two areas with the intent that future expansion of these areas will merge them into a single orderly, high quality, well-planned and appropriately serviced business area. Over time, the BEASP land use strategy anticipates that business uses will be developed on lands to the east of these business areas and south of Highway 566 as well as on lands north of Highway 566 and east of the Queen Elizabeth II Highway. Special Development Areas (SDA) are identified and policies are formulated for these business areas.

4.3.1 General Business Policies

a. Development within the business areas should proceed in an orderly and efficient manner.

b. Redesignation and/or subdivision and applications for business uses shall address the following:
   i) analysis of potential impact on surrounding lands;
   ii) operational characteristics (i.e. hours of operation, number of employees, any other special requirements, etc.);
   iii) screening/buffering treatment;
   iv) any other matter deemed necessary by the Municipality.

c. Applications for business uses, redesignations and subdivisions shall consider the importance of visual impacts on the landscape and the Highway 2 and Highway 566 corridors, particularly for lands adjacent to them. Integration of building design with surrounding landforms with links to potential open space systems should be considered.

d. The Municipality may require applications for redesignation and/or subdivision for business development to supply the following:
   i) a storm water management report (see Section 6.5.3 for detailed information);
   ii) an evaluation of any on-site hydrological conditions including confirmation of sufficient water supply (see Section 6.5.1 for detailed information);
   iii) an evaluation of sanitary servicing (see Section 6.5.2 for detailed information);

iv) an evaluation of on-site geotechnical, archaeological, and historical features (see Sections 5.1, 5.4, and 5.5 for detailed information);
v) a Traffic Impact Analysis (see Section 9.3.8 for detailed information); and/or
vi) any other matter deemed necessary by the Municipality.

e. Applications for redesignation and/or subdivision for business development must comply with AVPA regulations.

f. **Figure 4** identifies where Conceptual Schemes may be required for redesignation and subdivision applications proposing business uses deemed to have an impact on adjacent land use, the long-term land use scenario, servicing requirements, future road network, or development pattern of surrounding lands.

g. Applicants for business uses within the M.D. of Rocky View/City of Calgary Intermunicipal Development Plan area may be required to enter into Deferred Services Agreements.

h. Applications for redesignation, subdivision and/or development within the North Business Area must comply with the Performance Standards and Development Guidelines outlined in Section 4.4.

i. Where appropriate and feasible, the Municipality encourages construction and building best management practices, including Leadership in Energy and Environmental Design (LEED).

4.3.2 North Business Area

The North Business Area is located adjacent to the Queen Elizabeth II Highway, Highway 566 and Township Road 261. With access to these key transportation corridors as well as public water and sewer services, opportunities exist for a wide range of business opportunities. These include a wide range of retail, service, entertainment, business, hospitality, office, education, government and other uses. The North Business Area is close to the Hamlet of Balzac and has a limited interface with adjacent country residential uses.

The North Business Area will generally contain four Development Cells. These Cells are outlined generally in this Section and will be detailed further in any Direct Control Bylaw adopted for the Planning Area.

The North Business Area contains portions of Nose Creek and applications for business uses must be sensitive to this natural feature. The Area is also the gateway to the Municipality and the City of Calgary and, as such, requires special design consideration.

a. Business Parks (see definition in Section 9.6) are considered appropriate uses within the North Business Area. A wide range of uses that benefit from the

adjacent road network and the availability of public water and sanitary sewer services are considered appropriate for the area. These include but are not limited to retail, service, entertainment, distribution, hospitality, office, education and government uses.

b. The North Business Area is divided into four Development Cells:

Cell A: This Cell is located adjacent to Township Road 261 and comprises the majority of the site area. This Cell will be planned as one integrated unit and will contain a wide range of business, commercial, service, hospitality, office and entertainment uses. The Cell may be developed in phases. A Master Site Development Plan shall be prepared prior to submission of any development permit application for structures and shall address the location of all major buildings, free-standing signs, parking and loading areas, roads and access points, landscaping, entrances and entry treatments, sensitive and complementary architectural treatment and internal and regional pathways. A Manual of Physical Design, Landscaping and Architectural Standards shall form part of the Master Site Development Plan. There is existing residential development adjacent to the southeast boundary of the Cell and development must be sensitive to this interface.

Cell B: This Cell is located in the southeast portion of the North Business Area. Development in Cell B will consist of educational and institutional uses, and commercial and business uses. Access will be via an internal roadway that links with Township Road 261. Landscaped buffers along the internal roadway and Township Road 261 will be required. Lot sizes may vary in this Cell and will be determined at the time of subdivision through a Master Site Development Plan. There is existing residential development adjacent to the south boundary of the Cell and development must be sensitive to this interface.

Cell C: This Cell is located adjacent to the Queen Elizabeth II Highway and contains lands adjacent to Nose Creek. The policies of this Plan will ensure that impacts on the Creek are identified and minimized; water quality and riparian habitat must not be adversely affected. Whenever possible, reasonable efforts are encouraged to improve riparian function and/or improve water quality. Low impact development practices are encouraged. The review of development permits and construction management plans must ensure that the integrity of the Creek is not compromised.

Cell D: This Cell is located along the northern edge of the North Business Area and is adjacent to Highway 566. This Cell will be developed for business, retail, service, hospitality, office and public uses. Development shall be comprehensively planned, shall demonstrate a wide variety of building types and scale, with a comprehensive pedestrian network that encourages pedestrian movement, and usable open space is provided with high-quality landscaping. It will be accessed from the extension of the realignment of Range Road 294 and from Range Road 293. Architectural guidelines will be established and landscaped buffers and a regional

pathway(s) shall be developed, to ensure continuity with the SDA 4 Area to the east, the Hamlet of Balzac to the west, and with land uses to the north. Consideration of scale and type of development is required to mitigate any impact on residential uses to the north.

c. Uses that may create noise or air-quality concerns for area residents are discouraged. Mitigating measures must be implemented to ensure that the performance standards of this Plan are met.

d. Access to the North Business Area shall be from Township Road 261 via the interchange proposed to be developed from the Queen Elizabeth II Highway, the extension of Range Road 293 & 294, and Highway 566. A Traffic Impact Assessment (TIA) acceptable to the Municipality and Alberta Transportation shall be prepared by a qualified professional licensed to practice in Alberta. This plan must be in final form prior to subdivision or development permit approvals for structures being granted in the North Business Area.

e. Acquisition of required right-of-way on adjacent lands for requirements of the Municipal Transportation Network will be at no cost to the Municipality.

f. Applications for business and other uses adjacent to existing or proposed residential areas shall demonstrate how the proposal will mitigate any potential impacts.

g. A Stormwater Management Plan satisfactory to the Municipality shall be prepared prior to any development permit approval. The plan will be developed in consultation with the Nose Creek Partnership and will demonstrate how future development will not adversely affect Nose Creek. Low impact development practices are encouraged; and whenever possible, reasonable efforts are encouraged to improve riparian function and/or improve water quality in Nose Creek.

h. Prior to any construction in the North Business Area and as a condition of development approval, a construction management plan satisfactory to the Municipality shall be prepared. The plan will address dust control, noise, erosion, sediment control, interim emergency access and any other matter considered appropriate by the Municipality.

i. A fire protection and emergency response plan satisfactory to the Municipality shall be prepared as part of any development permit application involving new structures. The plan will address the suitability of the storm water management ponds as a supplementary source of water for regional fire-fighting purposes. Any on-site pathway system must be accessible for fire and other emergency equipment to the satisfaction of the Municipality.

j. The phasing of development in the North Business Area is intended to be flexible and will be determined by: issuance of any planning approvals, the installation and construction of the Queen Elizabeth II Highway / Township

Road 261 interchange, the extension of the realigned Range Road 294, water and sewer servicing, as well as market demand.

k. Prior to development permit approval for structures, a utility servicing strategy acceptable to the Municipality shall be prepared indicating how the Area will be connected to the water and sanitary sewer systems available in Balzac East.

l. Prior to development permit approval for structures, a comprehensive landscaping and irrigation plan shall be prepared to the satisfaction of the Municipality. This plan must illustrate the treatment along all entranceways, landscaped areas, pathways and lands adjacent to Nose Creek and major transportation corridors and parking areas, where appropriate. Buffering and screening between any Cell and adjacent residential areas where necessary must also be shown and be acceptable to the Municipality. The plan must illustrate how development will be used to enhance the gateway to the Municipality and the City of Calgary.

m. Prior to development permit approval for structures, a lighting plan shall be prepared to the satisfaction of the Municipality. The goal of this plan is to limit any off-site light pollution. Lighting must be concentrated on the buildings and parking lots, and must not interfere with adjacent highways, roadways and residential areas.

n. Prior to development permit approval for structures, a signage plan shall be prepared to the satisfaction of the Municipality. This plan must show the location and type of all freestanding signs.

o. Prior to development permit approval for structures, an architectural control plan shall be prepared to the satisfaction of the Municipality. This plan will promote a comprehensive design character and require individual buildings to use a variety of high-quality building materials, and a variety of design and architectural elements.

p. The design of development in Cells A, B and D shall consider, promote and make provisions for the use of transit. At the time of any development permit approval for structures, a Transit Service Plan must be prepared to the satisfaction of the Municipality.

q. Prior to development permit approval for structures, a Pathway and Pedestrian Circulation System Plan shall be prepared to the satisfaction of the Municipality. This plan shall address internal pedestrian circulation and linkages between the development Cells and the regional pathway system adjacent to Nose Creek and Highway 566.

r. Prior to any surface disturbance, an archaeological and historical resources study satisfactory to the Municipality and to Alberta Community Development may be required. Any recommended mitigation must be undertaken and completed to the satisfaction of the Municipality.

s. Parking and Loading requirements regarding the number of stalls required for each Cell and/or Sub-Cell shall be based on a Parking and Loading Needs assessment acceptable to the Municipality. This information will be used to produce a Parking Lot Landscaping, Design and Traffic Management Plan. This Plan is to be prepared by a team made up of a Professional Transportation Engineer and a Professional Landscape Architect, and is to be submitted to the Municipality for review along with the Development Permit application for structures associated with the principle Use for each Cell and/or Sub-Cell. This Plan is to be designed in conjunction with the Transit Service Plan.

t. Prior to development permit approval for structures an Operational Plan shall be prepared to the Satisfaction of the Municipality.

u. Developers are encouraged to cooperate with the Municipality in the preparation of a feasibility study regarding the opportunities for District Energy and Eco-Industrial reuse of water and other industrial by-products, or the production of electricity, for existing and future industries in the East Balzac Area. The feasibility study is also to provide recommendations for utility rights-of-way to be registered along with the plans of survey.

v. When considering applications for subdivision in the North Business Area, the Municipality may consider whether to consolidate reserve lands either on a specific parcel or in a specific area which has been identified as being suitable to acquire for purposes outlined under Section 671 (2) of the Municipal Government Act.

w. Development permit applications for temporary construction facilities are not subject to the requirements of this Section.

4.3.3 South Business Area

The South Business Area (adjacent to 114 Avenue/Township Road 260) has potential to use the existing rail spur line to accommodate a range of uses with more of an industrial character than those in the north. Lands abutting Highway 2 in the business area require aesthetic consideration and sensitivity to the landscape to maintain the safety and visual integrity of the highway corridor. The importance of the portion of South Business Area adjacent to Highway 2 as an intermunicipal entranceway should be reflected in proposed design and appearance of development adjacent to Highway 2.

a. South Business Area uses are encouraged to use the Rocky View Spur Line from the existing Canadian Pacific rail line for the intermodal transportation of goods and services.

b. South Business Area uses should be compatible with the objectives of the Calgary Growth Area Management Plan (GRAMP) and Intermunicipal Development Plan (IDP) policies. On-going co-ordination and dialogue with the City of Calgary should occur in order to achieve a seamless appearance of uses between municipal jurisdictions.

c. South Business Area uses may be required to enter into a Deferred Services Agreement that provides for future levels of urban servicing when available in the Plan area. Applications for redesignation, subdivision and/or development should make provisions for accommodating the Deferred Services Agreement and/or utility easements.

4.3.4 Home Based Business

The Municipality supports home based business as another method of business diversification within the M.D. of Rocky View Home based businesses provide opportunity for live-work relationships and support community based economies.

a. The Municipality encourages and supports home based businesses within the Plan Area.

b. Home based businesses in the Plan Area should cater to a wide range of lifestyle and livelihood aspirations within the community and foster more economic diversification within the Municipality.

4.4 Business Use Performance Standards and Development Guidelines

Performance Standards and Development Guidelines contained herein are intended to provide guidelines for the development of Business Land Uses and Business Parks within the Plan Area and to establish standards for the management of potential nuisances that may result from activities occurring therein.

4.4.1 General Policy

When considering applications for redesignation, subdivision and/or development approval of business uses, applications must meet or exceed the minimum performance standards and development guidelines of the BEASP. Council may, at its sole discretion, vary the performance standards and development guidelines from time to time to accommodate individual proposals.

4.4.2 Performance Standards

a. Air Contaminants, Visible and Particulate Emissions

No use or operation within a Business Land Use and/or Business Park contemplated within the Plan Area shall cause or create air contaminants, visible emissions, or particulate emissions beyond the building that contains them. Nor shall a use or operation exceed the levels contained within the Province of Alberta *Clean Air Act* and/or the Calgary International AVPA and any pursuant legislation. Airborne particulate matter originating from storage areas, yards or roads shall be minimised by landscaping, paving, or wetting of these areas or by other means considered appropriate by the Municipality as defined in a Development Permit in accordance with sound environmental practices.

b. Odour

No use or operation within a Business Land Use and/or Business Park shall cause or create the emission of odorous matter or vapour beyond the building, which contains the use or operation.

c. Noise and Vibration

No use or operation within a Business Land Use and/or Business Park shall cause or create the emission of noise or vibration beyond the building that contains the use or operation.

d. Toxic Matter

No use or operation within a Business Land Use and/or Business Park shall cause or create the emission of any toxic matter beyond the building that contains it. The handling, storage, and disposal of any toxic, hazardous materials shall be in accordance with the regulations of any government authority having jurisdiction and in accordance with any Chemical Management Plan that may be required by the Municipality.

e. Garbage Storage

Garbage and waste material within a Business Land Use and/or Business Park shall be stored in weather-proof and animal-proof containers located within buildings or adjacent to the side or rear of buildings that shall be screened from view by all adjacent properties and public thoroughfares. Mechanical waste compactors are encouraged.

f. Fire and Explosion Hazards

All uses and operations in the Plan Area that store or utilise materials or products that may be hazardous due to their flammable or explosive characteristics shall comply with the applicable fire regulations of the Municipality or the regulations of the Municipality or the regulations of any other government authority having jurisdiction and in accordance with any hazard or emergency management plan that may be required by the Municipality.

4.4.3 Development Guidelines

Development Guidelines are intended to be implemented through the development approval process.

Minimum Development Guidelines for Business Land Uses and/or Business Parks contemplated in this Plan are as follows:

a. Access Parking and Loading

i) Entrances shall be designed to accommodate the turning movements of trucks and recreational vehicles and shall be positioned to allow for safe and adequate site distances.

ii) Parking and loading facilities shall be provided in accordance with the requirements of the Municipality and/or the *Land Use Bylaw*. Loading and vehicle servicing areas should be integrated into the site and building architecture and be located to the side or rear of buildings where major developments are proposed, a study of parking and loading requirements acceptable to the Municipality may be

required. The Municipality may determine that these requirements will supersede those outlined in the Land Use Bylaw.

b. Signage

The size and placement of all signage shall be considered an integral part of site development and Signage Plan shall be submitted to the Municipality upon application for a Development Permit and be in accordance with the Land Use Bylaw or special district provisions prepared for the site. Temporary signage is not permitted with the exception of temporary signs required during development or building construction. No signage shall be placed along the Highway 2 right-of-way. All signs along the primary highway system must meet the requirements of the provincial Highway Signing Policy.

c. Lighting

All on-site lighting shall be located, oriented, and shielded to prevent adverse affects on adjacent properties and to protect the safe and efficient function of the Calgary International Airport, Highway 2 and Highway 566.

d. Landscaping

Landscaping requirements are intended to enhance the visual attractiveness of all Business developments within the Plan Area, however in particular; they are intended to assist in maintaining the visual integrity of the Highway 2 and Highway 566 corridors and their functions as a gateway to the MD and to the cities of Airdrie and Calgary. Due to proximity to these major transportation routes, lands adjacent to Highway 2 and/or Highway 566 will require additional landscaping.

Landscaping shall be provided for all Business development and/or Business Parks in accordance with a Landscape Plan to be submitted to the Municipality upon application for a Development Permit. The following standards apply to all landscaped areas:

i. For Business Parks developed in proximity to either Highway 2 or Highway 566, a minimum of 25% of the lands within the Business Park shall be landscaped in accordance with a Landscape Plan. Included within this 25%, is a requirement for a minimum of 10% of each individual lot to be landscaped.

ii. Where Business development occurs on lands in proximity to Highway 2 and/or Highway 566 but outside of the context of a Business Park, a minimum of 15% of the area of the individual lot shall be landscaped, in accordance with a Landscape Plan.

iii. All remaining areas within the Plan Area that are developed with Business uses shall require a minimum of 10% of the lot area to be landscaped, in accordance with a Landscape Plan.

iv. Landscaping treatment within the Plan Area means the modification and enhancement of the surface area of a site through the use of any or all of the following elements:

a. soft landscaping consisting of vegetation such as berms and the planting of trees, shrubs, hedges, grass and ground cover, and

b. hard landscaping consisting of non-vegetative materials such as brick, stone, concrete, tile and wood, excluding monolithic concrete and asphalt.

v. A maximum of 50% of the area required to be landscaped shall be landscaped with hard landscaping.

vi. Existing soft landscaping retained on a site may be considered in fulfillment of the total landscaping requirement.

vii. For purposes of subsections a) and b) above, landscaping shall include areas of Public Utility Lots, Municipal Reserve Lots, and stormwater management features which are enhanced with landscaping treatment.

viii. In addition to areas adjacent to Highway 2 and/or Highway 566, landscaped areas should be provided within front yard setback areas, side yards between the front and rear of the principle building when they are not proposed for vehicular movement and located within a strip adjacent to the front of the principle building. Landscaping required for screening purposes should utilize mature or large-growth varieties of trees, plants, and/or shrubs.

ix. Double-frontage parcels may exist in some locations. Landscaping should take these situations into consideration and these areas may require additional landscaping.

x. The quality and extent of landscaping established on site shall be the minimum standard to be maintained for the life of the development. Adequate means of irrigating any soft landscaping and maintaining both hard and soft landscaping shall be detailed in the Landscape Plan.

xi. All plant materials shall be of a species capable of healthy growth in the Municipality and shall conform to the standards of the Canadian Nursery Trades Association for nursery stock.

xii. Except for road right-of-ways, trees/shrubs shall be planted and maintained in the overall minimum ratio of one tree/shrub per 45 square meters (490 square feet) of the soft landscaped area identified in the Landscape Plan. Trees shall comprise at least 50% of the tree/shrub mixture used to satisfy this requirement.

xiii. Coniferous trees shall comprise a minimum portion of one-third (1/3) of all trees planted, and where feasible, trees should be planted in clusters or landscape groupings.

xiv. The minimum size for deciduous trees shall be 50 mm (2.0 inches) caliper.

xv. The minimum size for small coniferous trees shall be a height of 2 meters (6.5 feet) and for large coniferous trees, a height of 3 meters (9.8 feet).

xvi. Shrubs shall be a minimum height or spread of 600 mm at the time of planting.

xvii. Any areas subject to excavation, stripping or grading during construction phases of development that are not identified as a landscaped area in the Landscape Plan shall be seeded to grass.

e. Outside Storage

Outside storage, including the storage of trucks, trailers, recreational vehicles, and other vehicles may be permitted adjacent to the side or rear of a building provided such storage areas are not located within a required side or rear yard setback and the storage is visually screened from adjacent non-business land uses and Highway 2.

f. Outside Display Areas

Outside display areas are permitted provided they are limited to examples of equipment, products or items related to the Business Use located on the site containing the display area, are not located within any required setback, and are visually screened from Highway 2.

g. Storm Water Management and Low Impact Development

i) A Storm Water Management Plan shall be submitted to the Municipality, if required, upon application for a Conceptual Scheme and/or a Development Permit. All Storm Water Management Plans shall conform to the M.D.'s Master Drainage Plan prepared for the East Balzac area. Storm water should be retained on-site where possible and post-development flows shall be equal to or less than pre-development flows in all cases. The runoff volume control targets as outlined in the Nose Creek Watershed Water Management Plan should, wherever possible, be achieved. Water quality issues related to Nose Creek must be addressed pursuant to Sections 5.2 and 6.5.3 of this Plan.

ii) Conceptual Schemes and Master Site Development Plans shall identify those Low Impact Development principles and practices which will be applied to the site. The Municipality strongly encourages the implementation of Low Impact Development practices, including but not limited to vegetated swales, rain barrels

and cisterns, permeable pavement, rain gardens and impervious surface reduction.

iii) For business parks and business uses, potable water shall not be used for outside irrigation. Landscaping may only be irrigated with retained storm water or off-site, non- MD of Rocky View potable water. Conceptual Schemes and Master Site Development Plans will identify strategies to achieve this policy. These strategies may include but are not limited to the use of cisterns, rain barrels and stormwater, drought tolerant vegetation and the application of current technologies to conserve water used for irrigation. Notwithstanding the provisions of 4.4.3 d. above, the Approving Authority may vary or relax the landscaping standards of this Plan in order to ensure that potable water is not used for outside irrigation.

h. Fencing

In order to avoid the unnecessary use of fencing, which could lead to visually unattractive street design within the industrial areas, the use of fencing on any site should not be permitted, other than for required screening of outside storage, garbage or equipment or for security purposes, provided it is adjacent to the side or rear of buildings.

i. Construction Management

A Construction Management Plan shall be submitted to the Municipality if required upon application for a Development Permit. The Construction Management Plan shall detail the management of all construction activity on-site including, but not limited to, the management of construction debris and dust.

j. Antennas

Antennas, satellite dishes or similar equipment are not permitted on the roof of any buildings and shall be located in the rear or side yard and shall not exceed height and/or operations restriction of the Municipality and/or the Airport Vicinity Protection Area (AVPA).

k. Transitional Uses (Buffers)

In areas where Business uses are adjacent to other land uses, Residential in particular, it is recommended that the Business developments be of lower density and residential in scale. Additional landscaping may be required in such locations.

l. Building Design

The design, character, and appearance of any Business developments, accessory buildings, structures, or signs in the Plan Area must be acceptable to the Municipality having due regard to their affects on neighbouring developments and general amenities of the area. The buildings should demonstrate sensitivity to the landscape, and if located adjacent to Highway 2 and/or Nose Creek, the building design should consider the visual impact on this corridor.

m. Water Conservation Strategy

i) As part of all Conceptual Schemes and Master Site Development Plans that are prepared, applicants are required to prepare and submit a Water Conservation Strategy. This Strategy will ensure that potable water from communal systems is conserved to the maximum extent possible, to the satisfaction of the Municipality. As part of this Strategy, the installation of low flush toilets is mandatory in all new business developments. When applying for a Development Permit, all high volume water users shall be required to submit a Water Conservation Strategy. Additional water conservation measures may be outlined in a Water Conservation Bylaw that may be adopted by the Municipality in the future.

ii) Businesses that use high volumes of water are restricted in the Balzac East business area. High volume water uses are defined as those businesses which use in excess of 25 cubic metres (5,500 imperial gallons) of potable water per day for the entire business operation. Commercial, recreational and institutional uses, including hotels, motels and restaurants, are exempt from this requirement. At the discretion of the M.D., certain uses such as water parks and other high water uses will not be permitted. Wherever possible, businesses are encouraged to make use of grey water or stormwater.

4.5 Institutional Land Use

Institutional land uses (i.e. libraries, cemeteries, churches, correction facilities, historic sites and markers, long-term care facilities, places of worship, public utility buildings, etc.) in the Plan Area are difficult to phase or have appropriate long-term locations projected. The ASP attempts to identify methods of public involvement in the location of these uses and suggests that the preferred location is within SDA2 of the Plan Area. Institutional land uses should be compatible with surrounding land uses, and designed in such a manner which integrates the structures with the surrounding landscape.

Applications for redesignation, subdivision, and/or development of Institutional uses may be required to include the following to the satisfaction of the Municipality:

a. A Conceptual Scheme which, in addition, illustrates an analysis of potential impacts on adjacent lands including the proposed use of the building(s), and

integration of the building(s) design into the landscape and surrounding character of the area, and proposed access to the site;

b. A traffic impact analysis;

c. Supporting information describing availability and adequacy of on-site and off-site private and/or public utilities and servicing necessary to support the use;

d. An operational plan outlining the days and hours of operation and anticipated functions throughout the year, including discussion of potential benefits the facility provides as an amenity to the surrounding community;

e. Public consultation with area landowners;

f. A Landscape Plan describing site vegetation and screening, and

g. Any additional information to ensure conformance with municipal policy and the policies of the BEASP.

4.6 Natural Resource Extraction

Natural Resource Extraction includes facilities such as gravel pits (and associated operations), asphaultic processing, sand pits, clay or marl pits, peat extraction, stripping of topsoil, timber removal, sawmills, and related timber/wood processing. Either the Calgary International AVPA or physical lack of resources (i.e. - gravel) may restrict many of the Natural Resource Extraction and processing uses in the Plan Area.

Sour gas pipelines and processing facilities exist within or near the Plan Area. Setbacks from these facilities are determined by the product in the pipeline and setback regulations are administered by the Energy Resources Conservation Board. Consultation with the ERCB and utility companies will continue to be a priority of the Municipality. In the preparation of Conceptual Schemes, Developers will consult with the ERCB early in the process to ensure that the impacts of sour gas facilities are known.

a. Applications in support of establishing new gravel operations in the Plan Area shall be required to redesignate the land to Natural Resource Industrial District (NRI) or Direct Control (DC), and shall be subject to any other requirements/conditions deemed necessary by the Municipality.

b. Applications for redesignation, subdivision, and/or development within the Plan Area shall be required to maintain appropriate setbacks from sour gas pipelines within the Plan Area as determined by the provincial referral agency (ERCB).

c. Natural resource exploration and refining facilities in the Plan Area may be restricted by the Calgary International AVPA regulations, and are permitted at the discretion of The Energy Resources Conservation Board.

4.7 Special Development Areas

Special Development Areas (SDA) identify lands requiring special consideration due to external factors that could influence the long-term development of lands within these areas. Special considerations include residential development restrictions due to the location of the AVPA; access onto SH # 566; design consideration due to the proximity to Highway 2; enhancement and protection of Nose Creek; intermunicipal planning areas; and buffering of development from existing residential use. The SDA's include existing residential parcels and agricultural lands within the AVPA, Nose Creek, and areas where the development or improvement of infrastructure may trigger intensification and diversification of development. The SDA are intended to allow the Municipality to evaluate a proposed use and its potential impact on these special considerations. The Balzac East Plan Area includes five SDAs which are considered policy review areas and may require additional information and study at the request of the Municipality. Special Development Areas should be reviewed by the Municipality from time to time to ensure that the areas conform with the policies of the BEASP and still have special considerations that apply.

4.7.1 Special Development Area #1 (SDA1)

SDA1 is located in the northern portion of the Plan Area adjacent to Highway 2 and the City of Airdrie. Special planning considerations are required within this SDA in accordance with Provincial Legislation and with any existing Intermunicipal Development Plans and/or agreements. Determination of appropriate land uses for this area require further investigation and must give consideration to adjacent residential land uses.

a. SDA1 is considered a long-term development area. Applications for redesignation, subdivision and/or development in SDA1 should consider the required right of way land dedication, timing, and construction of the proposed Highway 2 interchanges.

b. Applications for redesignation, subdivision and/or development in areas identified for future Highway 2 interchange locations shall be referred to Alberta Transportation for identification of land required for intersection right-of-ways.

c. The adoption of an Intermunicipal Development Plan between the M.D. of Rocky View and the City of Airdrie in advance of redesignation, subdivision and/or development is preferred.

d. In anticipation of the adoption of an Intermunicipal Development Plan with the City of Airdrie, applications for redesignation, subdivision, and development within SDA1 must be referred to the City of Airdrie in accordance with existing Intermunicipal Development Plans and/or agreements.

e. **Figure 4** identifies where Conceptual Schemes may be required for redesignation and subdivision applications deemed to have an impact on the long-term land use scenario, servicing requirements, future road network, or development pattern of surrounding lands.

f. Applications for redesignation, subdivision, and development within SDA1 should provide for appropriate transitioning of land uses from one use to another. The interface between uses should be investigated and detailed within a Conceptual Scheme and give consideration for parcel sizes; site design; visual separation; sound attenuation; lighting; views and landscaping.

4.7.2 Special Development Area #2 (SDA2)

The SDA2 boundary is generally defined by the 30 NEF Contour, which restricts further residential subdivision in the area. Although unlikely, any change in the AVPA would have a significant impact on the future land use in the SDA2. Other special development considerations providing a rationale to recognize this area as SDA include:

a. impact on existing residential land use;
b. Nose Creek;
c. SH 566 access and safety concerns.

SDA2 has been an area of past contention and sensitivity. Public consultation and input on any application for redesignation or subdivision in this area is encouraged. SDA2 has the potential to support "residential friendly" business uses provided access has been resolved to the satisfaction of the Municipality and consultation with area residents has taken place in an attempt to mitigate adjacent landowner concerns. Compatibility with adjacent land uses; form and character of building design; and development with existing landforms are extremely important factors to be evaluated in SDA2.

a. Preferred uses for lands identified as SDA2 include institutional, recreational, non-intensive agricultural uses or business uses which could be considered to have a minimal adverse impact on existing residential uses. If another use is proposed in SDA2 that is consistent with permitted uses under the AVPA, but not identified above as preferred, then the following criteria should be addressed to the satisfaction of the Municipality and may require the preparation of a Direct Control Bylaw:

i) Business Area policies outlined in Section 4.3, and the Performance Standards and Development Guidelines Section 4.4, shall apply to any application in SDA2;
ii) Compatibility with adjacent residential development, building form and character, and mitigative screening measures; and

iii) Consultation with local area residents to identify issues and methods of mitigating identified community concerns.

b. Uses that include dismantling or separating of vehicles, machinery, goods and materials, processing of natural resource materials (i.e. sand, gravel, etc.), or exclusive outdoor storage or stockpiling of materials are considered inappropriate uses within SDA2.

4.7.3 Special Development Area #3 (SDA3)

SDA3 consists of land that is located primarily within the confines of the 30 NEF Contour and contains existing residential and agricultural land uses. The intent of SDA3 is to provide for the potential to accommodate an orderly and efficient expansion of the adjacent North and South Business Areas. Special development considerations include proximity to Highway 2, 30 NEF Contour restrictions, existing residential areas, Calgary's Growth Area Management Plan (GRAMP), and the existing gas plant.

Proposals for business expansion into SDA3 must provide a rationale for proceeding prior to build out of the designated business areas and consider the impact it may have on the existing residential area and provide for buffers between uses as necessary. SDA3 may be impacted by setback requirements from sour gas facilities.

a. Prior to transition, residential and agricultural uses on lands in SDA3 may continue to be considered as conforming to the Plan.

b. Applications for redesignations, subdivision and/or development in SDA3 should include the following to the satisfaction of the Municipality:

i) Rationale for business development outside designated Business Areas and out of the overall sequencing of development, and identification of potential impacts on adjacent uses, access, servicing, and phasing.
ii) Applications for business uses adjacent to existing residential areas within SDA3 shall demonstrate how the proposal can be considered compatible with adjacent uses, including screening, and buffering measures as necessary.

c. SDA3 uses should be compatible with the objectives of the GRAMP and IDP policies. On-going co-ordination and dialogue with the City of Calgary should occur in order to achieve a seamless appearance of uses between municipal jurisdictions.

4.7.4 Special Development Area #4 (SDA#4)

SDA#4 is located in the southeast portion of the Plan Area, between Highway 566 and the City of Calgary. It is located primarily within the 25 NEF Contour of the Calgary Airport and contains existing residential and agricultural uses. There have been pressures for the approval of a number of commercial and industrial businesses and this market-driven pressure is what has triggered the preparation of this ASP amendment.

Special planning considerations are required within this SDA in accordance with Provincial Legislation and with any existing Intermunicipal Development Plan and/or agreements and the Calgary Airport Restrictions. Appropriate lands uses for this area will consider compatibility with adjacent residential uses and be defined by "cells" within SDA#4. Proposals for development within SDA#4 must provide a rationale for proceeding prior to build out of the designated business areas and consider the impact it may have on the existing residential area and provide for a buffer between uses as necessary.

a) SDA#4 is considered to be a long term development area. Applications for redesignation, subdivision and/or development in SDA#4 should consider the required right-of-way dedication, timing and construction standard for Highway 566.

b) The SDA#4 area consists of lands previously included in what was known as the South Transition Lands of the East Balzac Area Structure Plan, and the lands located east of Range Road 293, within the NEF contour, previously considered to be located within the South Business Area.

c) All future road widening required for Highway 566 should be taken on the south side of the highway.

d) Prior to development, residential and agricultural uses on lands in SDA#4 may continue to be considered as conforming to the Plan.

e) Prior to any construction in SDA#4, a construction management plan shall be prepared to the satisfaction of the MD staff that will address dust control, noise, truck routes and access to the site and interference with the adjacent residential development.

f) Phasing of development in SDA#4 shall be predicated by the installation and construction of infrastructure and market demand.

g) Applications for redesignations, subdivisions and/or development in SDA#4 should include the following, to the satisfaction of the Municipality:

   i. Rationale for business development outside designated Business Areas and out of the overall sequencing of development, and identification of potential impacts on adjacent uses, access, servicing and phasing.

   ii. Applications for business uses adjacent to the existing residential area within and adjacent to SDA#4 shall demonstrate how the

proposal can be considered compatible with these residential uses, including screening and buffering measures as necessary.

h) Any new redesignation, subdivision and/or development, shall be subject of an approved conceptual scheme.

i) Access to the area will be provided by Range Road 293 on the west and Range Road 292 on the east. There will be two major east/west roads crossing the area. The northern most is a proposed "modified service road" to provide access to businesses adjacent to Highway 566 and will ensure proper connection to the N ½ of Section 9, Twp 26 Range 29, W4M to the west and to the land within SDA #4 to the east. The second major east/west road will be on the southern end of SDA#4. Specific alignments will be determined at the time a conceptual scheme is prepared.

j) SDA#4 is divided into three development cells:

i. Cell A – Located immediately adjacent to Highway 566, north of the modified service road. This cell will allow commercial, retail and other uses that may be compatible with the adjacent residential uses. There will be setbacks from the modified service road, all Highway 566 future road widening will be taken on the south side and within this Cell. Landscaped buffers will be mandatory here, sensitive signage and lighting will be mandatory, rear yards and side yards, where visible, will be treated like a front yard and require landscaping, a lighting plan will be mandatory and no outdoor storage will be allowed to occur within the area of any required yard setback. Development heights, landscaping, frontages and parking will be compatible with the residential scale of development north of Highway 566.

a. Outdoor storage will be allowed on Parcel A, Plan 4156JK, NW-11-26-29-W4M where appropriate landscaping and buffering is provided to the satisfaction of the Development Authority, and shall be predominantly located to the south of buildings. All Development Permit plans shall be in conformity with the Special Architectural and Landscape Guidelines contained in Section 6.4 of the Wagon Wheel Industrial Park Conceptual Scheme. Emphasis on design shall be placed on the northwestern façade and any direction facing a residential area.

ii. Cell B – Existing residential development will remain and development of home based businesses with limited outside storage will be permitted here. Should the landowner seek redesignation in the future, similar uses to Cell C will be allowed. Lots internal to the cell, should they convert to Cell C uses, must provide side yard buffering adjacent to Cell B lots.

iii. Cell C – This is the heart of the commercial/industrial business area. There will be berming, buffering and a landscape plan required along the range roads. Access controls will be required due

to the future anticipated traffic on Range Road 292 and Range Road 293. Lot sizes may vary in this area, but a maximum density will be determined at the conceptual scheme level. The level of intensity of industrial use will gradually increase to the southeast of the study area. Regardless of the allowance for emissions from Type III industrial uses, all emissions will be mitigated and minimized in this Area. Conceptual schemes for Cell C must provide separation and buffering between the rear of lots in Cell B, and will provide a landscape plan for the south side of the modified service road to ensure compatibility with Cell A uses.

k) The overall concept for this area is for a commercial/light industrial area that provides community amenities and breaks up the massing of structures with linear green spaces that are landscaped and maintained.

l) Notwithstanding Section 5.6.1(c) Municipal Reserve in SDA #4 primarily will be taken in the form of linear trails and buffering strips with the opportunity for centralized green space within each phase of development. Residual municipal reserves may be taken in cash-in-lieu. This will be indicated in the conceptual scheme.

m) In addition to the standard requirements of the Balzac East Area Structure Plan for the contents of a conceptual scheme, any conceptual scheme in SDA#4 must include:

- A plan to allow the development to proceed in a phased and logical manner;
- A plan that identifies the market drivers and the economic development potential for the area;
- A plan to minimize negative impact to surrounding areas;
- Demonstration of full build out density and lot sizes;
- A graduated density, where the intensity of the type of use intensifies as it gets further from existing residential development;
- An access plan that demonstrates appropriate access, including service roads if necessary, off of Highway 566;
- A traffic impact study prepared by a qualified professional licensed to practice in the Province of Alberta;
- A landscape plan that enhances the aesthetics of the area and provides buffering and screening between uses that may be considered to be incompatible and utilizes native and indigenous plant materials;
- A lighting plan that concentrates the security lighting on the buildings and away from the residential area;
- A signage plan that demonstrates tasteful and well situated signs;
- Architectural guidelines that ensures that the side of the structure visible (either front, rear or side) from Highway 566 or either Range

Road 292 or Range Road 293 are attractive, there is no outside storage within the area of any required yard setback, and any fencing is well constructed and easily maintained;

- Internal road standards that meet or exceed the MD Standards;
- Setbacks that reflect the adjacent uses;
- A storm water management plan must be prepared that incorporates innovative concepts including wet pond features, roof top catchment, irrigation or fire protection sources and other engineering solutions;
- Emissions from any Type III use including air, water, noise, solid waste or litter, will be mitigated and minimized;
- Demonstration that the orientation of the structures is sensitive to the visual access by road and neighbours;
- Roof top treatments that enclose mechanical and electrical equipment, make use of roof top gardens and/or provide a pitched roof;
- A fencing plan that demonstrates the visual screening and the long term maintenance plan for the fence;
- The Municipality must notify Nexen of all applications within the SDA #4 and ensure all approvals reflect acknowledgement by Nexen of the impacts on their emergency response plan; and demonstration that all environmental features considered to be significant or valuable, will be protected or conserved.

4.7.5 Special Development Area #5 (SDA5)

SDA #5 is located south of Highway 566 and to the east of both SDA #4 and McDonald Lake. The easterly boundary of SDA #5 is one half mile to the east of Range Road 290. Development in SDA #5 must pay particular attention to the interface with the existing and future highway corridors as well as with adjacent residential and other uses. Future business development on the east side of Range Road 290 will likely occur in the longer term.

With the proximity to existing and planned industrial and business development on lands immediately to the west, an extension of similar uses into SDA #5 is appropriate. Interest has been expressed in permitting developments requiring larger lots with a lower level of some municipal servicing. As such, SDA #5 will complement business uses planned on other lands to the west. At the present time, there is no industrial land in the Balzac East area that caters to businesses requiring larger parcels of land.

a) SDA#5 is considered to be suitable for industrial and business uses requiring larger lots and a reduced level of municipal services. However, all developments will be required to connect to Municipal Water and Sanitary Systems or enter into a Deferred Services Agreement if these are not immediately available.

b) A Conceptual Scheme shall be prepared and adopted by Council prior to further subdivision and/or development being permitted within SDA#5. A Traffic Impact Assessment and a Storm Water Management Report acceptable to the Municipality and the appropriate Provincial Departments shall also be required.

c) All future road widening for Highway 566 should be taken on the south side of the Highway.

d) All uses in SDA#5 that exist at the time of adoption of this amendment to the Balzac East Area Structure Plan are deemed to be in conformity with this Plan.

e) The phasing of development within SDA#5 shall be determined by market demand and the installation of all required infrastructure.

f) There are a range of uses that currently exist adjacent to the boundary of SDA #5. It is a priority of this Plan that adequate measures be put in place to ensure that the business and adjacent uses are compatible. In Addition to the policies in this Section, all Conceptual Schemes shall address this issue to the satisfaction of the Municipality.

g) Businesses that are considered by the Municipality to be hazardous shall not be permitted to locate in SDA#5.

h) As a condition of subdivision approval, a Construction Management Plan acceptable to the Municipality shall be prepared. This Plan will address issues related to dust, noise, truck routes, emergency vehicle access and any other issue identified by the Municipality.

i) SDA #5 is divided into two Development Cells:

1. Cell A is located along the northerly and easterly boundary of SDA#5 and along Range Road 290. Uses that are compatible with adjacent residential and other uses may be permitted in this Cell. Landscaped buffers are mandatory. Development heights, parking and landscaping will be sensitive to the adjacent residential uses. General Industry Class III uses are not permitted in Cell A. Architectural guidelines prepared for Cell A will ensure that the sides of structures facing Highway 566 and Range Road 290 are attractive. Signage and lighting must also be sensitive to the adjacent residential uses.

2. Cell B consists of the remainder of SDA#5. Lot sizes and densities will be determined when a Conceptual Scheme is prepared. A Plan showing how emissions from any General Industry Class III use are to be minimized and mitigated shall be prepared, to the satisfaction of the Municipality. All impacts on adjacent properties shall be addressed.

j) Wherever possible, municipal reserve in SDA#5 will be taken in the form of linear trails and/or buffer strips along the northerly and easterly boundaries and along the Range Roads. Additional Municipal Reserve may be taken as cash-in-lieu or otherwise at the discretion of the Municipality at the time of subdivision.

k) In addition to the requirements of this Plan, any Conceptual Scheme that is prepared in SDA#5 must also address the following to the satisfaction of the Municipality:

- The phasing and sequence of subdivision and development at full build out,
- A graduated density, where the number of lots is reduced adjacent to the highway corridors,
- Impacts on adjacent land uses and appropriate mitigating measures,
- A Landscaping Plan in conformity with the policy directions of this Plan that effectively buffers and screens uses from adjacent lands,
- A Fencing Plan that effectively screens required areas,
- Lighting and Signage Plans,
- Roof top treatments that enclose mechanical and electrical equipment,
- Lands required for any upgrading of Range Road 290,
- Architectural guidelines, especially for lands adjacent to Highway 566 and Range Road 290,
- Pedestrian and pathway connections both within SDA#5 as well as linkages to adjacent developments, and
- Internal road standards.

l) The Municipality will refer all Conceptual Schemes and subdivision and development permit applications to Nexen, to ensure that impacts on the emergency response plan are addressed.

4.7.6 Special Development Area #6 (SDA6)

Special Development Area (SDA) #6 is located north of Highway 566, to the east of Range Road 291, and to the west of Range Road 290. The northern boundary of SDA #6 abuts Township 262. Development in SDA #6 must pay particular attention to the interface with the existing and future highway corridors as well as with adjacent agricultural uses and Rocky View County Campus. Future business development on the east side of Range Road 290 is not anticipated at this time and is not included in the Plan area.

With the proximity to existing and planned industrial and business development on lands immediately to the south, SDA #6 will complement existing uses and act as a buffer between the Rocky View County Campus and higher intensity industrial uses being proposed in SDA #5. The commercial and light industrial uses on this

land will cater to businesses requiring medium to large sizes parcels in the Balzac East area.

Land use

a) SDA#6 is considered to be suitable for industrial and business uses requiring medium to large sized lots.
b) The overall concept for this area is for a commercial/light industrial area that provides community amenities and breaks up the massing of structures with linear green spaces that are landscaped and maintained.
c) All uses in SDA#6 that exist at the time of adoption of this amendment to the Balzac East Area Structure Plan are deemed to be in conformity with this Plan.

Servicing

d) All developments will be required to connect to Municipal Water and Sanitary Systems or enter into a Deferred Services Agreement if these are not immediately available.
e) All future road widening for Highway 566 shall be taken according to the Alberta Transpiration's Highway 566 Functional Planning Study widening plan regarding SDA #6.
f) Local plans in SDA#6 shall consider the accommodation of future transit services to and through the area. The County road network and cross sections within SDA#6 should be designed with consideration of a potential future transit service. Transit should have the ability to connect through the site into other portions of the County, where appropriate.

Municipal Reserve

g) Municipal Reserve in SDA #6 primarily will be taken in the form of linear trails and buffering strips with the opportunity for centralized green space within the development area. Residual municipal reserves may be taken in cash-in-lieu. This will be determined in the conceptual scheme.

h) Wherever possible, municipal reserve in SDA#6 will be taken in the form of linear trails and/or buffer strips in accordance with the Agricultural Boundary Guidelines.

Municipal Services

i) The Municipality will review all Conceptual Schemes and subdivision and development permit applications to ensure that impacts on the emergency response plan are addressed.

Implementation

j) The phasing of development within SDA#6 shall be determined by market demand and the installation of all required infrastructure.
k) As a condition of subdivision approval, a Construction Management Plan acceptable to the Municipality shall be prepared. This Plan will address issues related to dust, noise, truck routes, emergency vehicle access and any other issue identified by the Municipality.
l) In addition to the requirements of this Plan, any Conceptual Scheme that is

prepared in SDA#6 must also address the following to the satisfaction of the Municipality:

- A plan to allow the development to proceed in a phased and logical manner;
- The phasing and sequence of subdivision and development at full build out;
- Setbacks that reflect the adjacent land uses and appropriate mitigating measures;
- A Landscaping Plan in conformity with the policy directions of this Plan that effectively buffers and screens uses from adjacent lands;
- A storm water management plan must be prepared that incorporates innovative concepts including wet pond features, roof top catchment, irrigation or fire protection sources and other engineering solutions;
- Emissions from any heavy industrial use including air, water, noise, solid waste or litter, will be mitigated and minimized;
- transitions/interface and appropriate mitigation measures
- details on proposed land use districts, lot sizes and densities
- A Fencing Plan that effectively screens required areas;
- Lighting and Signage Plans;
- Roof top treatments that enclose mechanical and electrical equipment;
- Demonstration that the orientation of the structures is sensitive to the visual access by road and neighbours;
- Lands required for any widening of Range Road 290;
- Architectural guidelines that ensures that the side of the structure visible (either front, rear or side) from Highway 566 or either Range Road 291 or Range Road 290 are attractive, there is no outside storage and any fencing is well constructed and easily maintained;
- Pedestrian and pathway connections both within SDA#6 as well as linkages to adjacent developments; and
- Internal road standards.
- A Traffic Impact Assessment acceptable to the Municipality and the appropriate Provincial Departments
- Design guideline and performance standards compliant with Section 4.4 Design Guidelines and performance standards of this ASP.

5.0 NATURAL ENVIRONMENT

There are many environmental considerations in the Plan Area that are important ecologically, economically, or aesthetically to residents and visitors in support of both lifestyle and livelihood goals. These include:

- McDonald Lake: a large seasonal water body in the southeast corner of the Plan Area provides waterfowl habitat and natural storm water retention;
- numerous seasonal ponds, primarily in the east portions of the Plan Area, provide waterfowl habitats and storm water retention. In years of high precipitation these may remain all season;
- soil erosion and water course siltation caused by disturbance of creek banks and steeper topography, particularly in the Northwest portion of the Plan Area;
- Nose Creek and the Nose Creek flood limit; and
- visual characteristics of the landscape.

The biophysical characteristics and environmental significance of lands in the Plan Area should be considered in applications for development. Appendix B contains additional detailed information regarding environmental considerations in the Plan Area.

5.1 General Environmental Policy

a. The preservation of significant and/or sensitive natural environments is encouraged when considering applications for redesignation, subdivision or development.

b. A proponent, in support of a proposal for redesignation, subdivision or development, and at their sole expense, may be required to prepare and submit the following in a form and content satisfactory to the Municipality, and in accordance with all pertinent Alberta Environment guidelines or requirements of the appropriate Provincial Departments:

   i. An Environmental Impact Assessment pursuant to the provisions of the *Municipal Development Plan*;

   ii. A Geotechnical Report pursuant to the provisions of the *Municipal Development Plan*;

   iii. An Archaeological and/or Historical Resources Impact Assessment pursuant to the provisions of the *Municipal Development Plan* and to the satisfaction of Alberta Community Development; and

   iv. A storm water management analysis based on a no net increase in run-off policy.

5.2 Nose Creek Flood Limit Policies

Nose Creek is the major drainage course in the Plan Area and is of intermunicipal interest as it traverses through the three (3) municipalities of Airdrie, Rocky View and Calgary. Nose Creek has historically been a source of water for domestic livestock and has future potential as a recreational amenity. The three municipalities have committed to undertake a water quality study on Nose Creek. Nose Creek, and its potential as a linear park, it is protected by policy in both urban centres and is recommended for similar consideration in the BEASP.

A study was carried out for Alberta Environment in 1980 which identified Nose Creek's 100 year flood limit boundary (Hydrocon, 1980). This study represents the most recent information on the flooding potential within the Plan Area. The study was based upon contour information with 10-foot (3.0 meter) elevation intervals, and the authors admit the large interval makes it difficult to determine the exact extent of flooding in flatter areas. Flood limits from the 1980 report can be found in Appendix B.

An updated and more detailed Nose Creek flood study should be undertaken by Alberta Environment to permit informed decisions regarding creek protection and any proposed adjacent development.

a. The Municipality may request that the developer prepare an Environmental Assessment that describes methods to mitigate impact of the proposed development on Nose Creek. The Environmental Assessment should find conclusively that the development would not cause negative effects upon Nose Creek and its habitat.

b. Redesignation, subdivision or development proposed within the 1:100 year flood way is prohibited.

c. The Municipality may request the developer, at their sole expense, to undertake specific study on the land to be developed to delineate the extent of the 1:100 year flood way. This report shall be prepared and signed by a professional Hyrdogeological Engineer licensed to practice in the Province of Alberta.

d. Development on lands between the western edge of Nose Creek and Highway 2 is discouraged. The land should remain in its natural state as Environmental Reserve (ER) and/or Municipal Reserve (MR) to maintain the visual appearance of the Highway 2 corridor and retain the potential for a continuous linear park linking the three (3) municipalities of Airdrie, Rocky View and Calgary.

e. The Nose Creek Watershed Water Management Plan has been accepted in principle by the Municipality as a guide to development in the area. The Municipality will implement the recommendations to the best of its ability and will strive to meet the spirit and intent of the Plan.

5.3 Topography

The southern part of the Plan Area is gently undulating with several low-lying areas. The majority of this portion of the Plan Area falls to the west toward Nose Creek. The southeast portion of the Plan Area falls toward McDonald Lake, a local evaporative lake. Slopes are typically less than 1%, increasing toward Nose Creek to typically 2% to 10%.

The northwestern part of the Plan Area, north of Secondary Highway 566, is characterised by more undulating terrain with a number of intermittent streams draining the area west toward Nose Creek. Between Sections 27 and 28, including Sharp Hill, as well as in Sections 16, 21, and 28, a number of topographic highs (knolls) rise up above the general surroundings and represent visual focal points within the Plan Area and the Highway 2 corridor. In these areas, slopes may exceed 15% and shall not be developed. These visual land forms should be maintained and integrated with any proposed development adjacent to these land forms.

a. Applications for redesignation, subdivision, and/or development in areas where topography is a development constraint (i.e.- predominately the northwest portion of the Plan Area) may be required to include a geotechnical report containing all information required by the Municipality as described in MDP policy that ensures:

   i. mitigation measures to prevent soil erosion and to achieve minimal disturbance to the area;

   ii. identification of slopes and establishment of slope stability and safe setbacks distances for development;

   iii. retention of storm water on-site, with post-development and pre-development flows; and

   iv. protection of natural drainage courses.

5.4 Historic and Archaeological Features within the Plan Area

The Nose Creek Valley was important to First Nation peoples. The Blackfoot Nation tribes - the Bloods, Peigan, and Siksika - camped, hunted and travelled through the area long before European settlers arrived. Vestiges of tipi rings, a stone cairn, a bison kill site and stone tool workshops were discovered along the Nose Creek Valley.

a. Applications for redesignation, subdivision and/or development within the Plan Area may be required to submit a Historical Resources Impact Assessment that may have been identified by provincial departments (i.e. Alberta Community Development) as within the vicinity of historical and/or archaeological features.

b. Applications for redesignation, subdivision, and/or development shall identify and conserve, where appropriate, as an amenity, or for educational or tourism purposes, historic/archaeological sites of significance in the Plan Area.

5.5 Geological Features

The Nose Creek Valley contains an interesting history of geological formations (i.e. glacial erratic, sandstone cliffs, porcupine hills formation). The surficial geology of the Plan Area is characterised by glacial till (stony, silty, clay soils), with localized areas of glaciolacustrine deposits (silt and fine sandy soils). The underlying bedrock geology in the area is characterised by sandstones and limestones, overlain by sandstones, siltstones, and mudstones. Shallow bedrock is not prevalent in the Plan Area, although there is increased probability of encountering it near Nose Creek and within the shallow ravines. This geology provides additional resources such as sour gas and oil. Operations to extract these non-renewable resources exist within the Plan Area.

a. Applications for redesignation, subdivision, and/or development shall identify and conserve as an amenity for recreational, educational or tourism purposes, where appropriate, geological sites of significance in the Plan Area.

5.6 Open Space, Recreation and Public Land

Public Land consists largely of Municipal Reserve (MR) or Environmental Reserve (ER) land that has been dedicated to the Municipality upon development. The Municipality can negotiate the amount of land required and its potential public use through the planning process. A publicly maintained recreational area, Morley James Park, currently exists within the Plan Area. Future recreational areas should be conceived, developed, and maintained by the community in collaboration with the Municipality and development proponents. Residents within the Plan Area may choose to investigate Rocky View's Cash-in-lieu Grant Funding Program (submitted to local recreation boards) for recreational and building enhancements. Recreational spaces should be created to serve the residents within the Plan Area. In addition, the Plan Area has an opportunity to link a regional linear park system along Nose Creek between the City of Calgary and the City of Airdrie.

5.6.1 Municipal and Environmental Reserve

a. Through the development process, the retention and enhancement of open space and recreation facilities in the Plan Area is encouraged. Linkages between, and continuity of these spaces are also encouraged.

b. Dedication of Municipal Reserve, either by cash-in-lieu of land or by physical dedication of land or both, in the Plan Area shall be determined by the Municipality in accordance with the MDP policy and s. 666 of the *Municipal Government Act*.

c. Physical land dedication of Municipal Reserve shall consist of lands that are equivalent to the developable lands (i.e. similar in kind to the land being developed).

d. The Municipality may consider linear MR parcels dedicated adjacent to ER, in support of a linear park system along Nose Creek. In these instances parcels may be considered as equivalent to developable lands.

e. Dedication of ER in the Plan Area shall be determined by the Municipality in accordance with MDP policy and s. 664 of the *Municipal Government Act*. Environmental Reserve Easement (ERE) is another option and should be determined on a site-specific basis by the Municipality. ER or ERE may be required, at the discretion of the Municipality, including but not limited to the bed and shore of Nose Creek, steep slopes, areas adjacent to secondary drainage courses, and surrounding McDonald Lake.

5.6.2 Recreation

a. The creation of public recreation spaces in developments where large amounts of MR are owing is encouraged. The Municipality encourages pedestrian linkages from residential and business development areas to recreational sites and/or residential areas to work sites.

5.6.3 School Sites

a. Determination of School locations in the Plan Area shall be negotiated between the Rocky View School Division, and/or the Calgary Catholic School District, and the Municipality in accordance with MDP policies.

5.6.4 Trails – Regional and Local

The Highway 2 corridor, in particular that portion containing the segment of Nose Creek that passes through the Plan Area, is subject to a number of diverse and sometimes conflicting planning interests. Local residents have expressed desire for extended linear parkways and green spaces in this area which represents a logical extension of the City of Calgary and City of Airdrie Parks Master Plans. In accordance with Provincial policies, no portion of the Highway 2 right-of-way will be made available for a trail network.

a. Proposals for development within the vicinity of Nose Creek should consider developing complementary trail linkages to the City of Calgary and the City of Airdrie through the Plan Area. Trails adjacent to Nose Creek should be consistent with the policies contained within Section 3.1.g of this Plan.

b. The width and dedication of land for a continuous linear park system along Nose Creek through the Plan Area shall be at the discretion of the Municipality as a condition of subdivision and/or development.

c. Trails should be established in new residential areas or areas undergoing in-filling that promote linkages between communities and recreational areas.

d. Establishment of a linear park adjacent to Nose Creek may be considered in the future at the discretion of the Municipality in consultation with the M.D. of Rocky View Airdrie Recreation District.

6.0 INFRASTRUCTURE

Infrastructure includes the hierarchy of road networks, operation of airports and rail lines, public and private water systems, sewer systems, storm water management, solid waste management systems, and police, fire, and ambulance service.

6.1 All Infrastructure

The quality of infrastructure is a fundamental part of the well-being of a community and its ability to sustain growth over time. To improve the quality of life in the Municipality as a whole, it is important that the Municipality occasionally assess infrastructure as it relates to the planning of communities. The BEASP contains policies that recommend improvements, and triggers for assessment of infrastructure over time as the community continues to grow.

a. The Municipality has developed a set standard for roads and infrastructure servicing that follows a general hierarchy. The Municipality may require an assessment of necessary infrastructure when considering redesignation, subdivision, and/or development proposals. All Traffic Impact Assessments that are prepared on behalf of landowners shall conform to the M.D.'s Functional Planning Study of the East Balzac area, as it evolves over time through discussions with the Province and as development proposals are brought forward.

b. The Municipality may from time to time establish a policy framework whereby Developers and/or Property Owners are required to pay a proportionate cost of infrastructure that has been built or installed by others.

c. The Municipality will set standards and procedures for the operation and maintenance of all municipal infrastructure, including roads and utilities, public lands and public utility lots. It is the Municipality's intention that Lot Owners Associations should not be directly responsible for the operation and maintenance of municipal land and infrastructure. The Municipality may enter into a contract with other parties regarding the operation and/or maintenance of municipal infrastructure and these parties will be responsible directly to the Municipality.

6.2 Road Systems

Figure 5 illustrates a 30 Year Conceptual Road Network for the Plan Area. Section 7.2 and 7.3 contain intermunicipal considerations that also reflect the regional importance of the road network. Refer to Section 7.0 for intermunicipal transportation and infrastructure information.

6.2.1 Highway 2

Highway 2 is a Provincial highway administered by Alberta Transportation. It is important to ensure that future land uses within the Plan Area do not impair the function and safety of this highway. To this end Alberta Transportation has additional influence over permitted developments within 0.8 km of the right of way of Highway 2. Highway 2 is deemed to be an essential part of the NAFTA trade route by the Provincial government and, as such, requires special consideration in the planning process.

a. New or direct access onto the Queen Elizabeth II Highway or Highway 566 shall only be permitted in accordance with Alberta Transportation policies and regulations.

b. In addition to Municipal Building and Development Permits, an application within 0.8 kilometres (½ mile) of the Highway 2/SH 566 intersection and 300 metres (1000 feet) of the right of way of Highway 2 requires a Provincial Roadside Development Permit from Alberta Transportation.

c. Consideration should be given to Intermunicipal entranceways and travellers' impressions when determining appropriate land use and building design adjacent to Highway 2. Consideration may be given to noise attenuation, setbacks, berms, constructed barriers, natural land features, and/or innovative building design.

d. In light of the importance of the Highway 2 corridor and the development pressures - especially surrounding the Highway 2/SH566 interchange - the Municipality may require, at their discretion and at the sole cost of the developer, a more detailed Highway Vicinity Management Plan prepared to the satisfaction of the Municipality and Alberta Transportation.

e. Applications for redesignation, subdivision and/or development in areas identified for future Highway 2 interchange locations shall be referred to Alberta Transportation for identification of land required for intersection right-of-ways.

6.2.2 Secondary Highway 566

Secondary Highway (SH) 566 is a major east/west traffic corridor and provides the majority of direct access into the Plan Area. This 2-lane road was originally designed and constructed by the province. Residential development in the Plan Area has increased traffic to the point where there are local safety concerns regarding the highway and a number of intersections. The highway accommodates through traffic from east of the Plan Area, a growing number of local commuters, and local agricultural traffic.

a. New approaches onto SH 566 are discouraged within the Plan Area. If new approaches are proposed they should be evaluated in terms of the following criteria:

i. preparation of a traffic impact analysis;

ii. traffic mitigation measures, management tools (including a review of signage and speed limits), and intersectional upgrades have been evaluated and applied where necessary;

iii. the study has evaluated the feasibility of locating and constructing a parallel service road along a portion of SH 566 to an existing municipal road access location; and

iv. the access location meets Municipal and, where applicable, Provincial standards.

b. New development adjacent to SH 566 shall have limited access to SH566, in accordance with the above policy, and the developer may be required to construct a service road.

c. Provisions for future intersections along the length of SH566 through the Plan Area should be considered at locations identified on the 30+ year conceptual Road Network.

d. The Municipality may require road widening along the length of SH566 as it traverses the Plan Area in order to accommodate future widening or the development of a parallel service road.

6.2.3 The Existing Service Road

An existing service road, owned and maintained by the Municipality, runs parallel to Highway 2 through the full length of the Plan Area. The service road is intended to serve local traffic within the Plan Area, but is increasingly being used as an alternative to Highway 2 by commuters to and from Calgary. Portions of the parallel service road run west of Nose Creek and east of Highway 2. Access to the service road is at points north and south of the Plan Area and from SH 566. At the present time, one perpendicular road crosses Nose Creek to intersect the service road north of SH 566. Crossings of Nose Creek require provincial approval and conflict with the long-range potential to create a linear park along Nose Creek.

a. The service road should be maintained as ingress/egress to future developments both north and south of SH 566.

6.2.4 The Local Road Network

The Plan Area is based on the framework of Township and Range Road right-of-ways with a north/south road every mile and an east/west road every two miles. Not all roads in the framework have been constructed. The Plan Area contains areas where potential exists to develop internal roads and linkages to accommodate

infill development. New development should pay for, or contribute to, the upgrading of the local road network.

Residents have expressed increasing concerns with the condition and capacity of the local road network as the population grows. Of particular concern is Range Road 293 (36th Street) north of SH 566. Upgrading of the local road network, and in particular safety and capacity improvements to intersections with SH 566, should be considered to accommodate further development, new or infill, in the Plan Area.

a. Connections between existing and proposed internal subdivision roads should be made wherever possible to improve the local road network, and in accordance with Municipal Policy.

b. Applications for redesignation, subdivision and/or development in the Plan Area may, at the discretion of the Municipality, be required to provide a traffic impact assessment prepared by a qualified engineer.

c. Development of local road infrastructure shall be consistent with the 30 Year + Conceptual Road Network (**Figure 5**) and built to the Municipality's Servicing Standards for Subdivision and Road Construction.

d. Development of roads identified on Figure 5, will require that additional road widening, intersections, and limited access be considered at the time of redesignation, subdivision and/or development applications.

e. New development should contribute to the upgrading of the existing local road network, where applicable.

f. Road widening shall be provided by dedication or registration of a caveat for future purchase, at the subdivision stage.

g. The amount of road widening required shall be in accordance with the Municipality's Servicing Standards for Residential Subdivision and Road Construction for the road type.

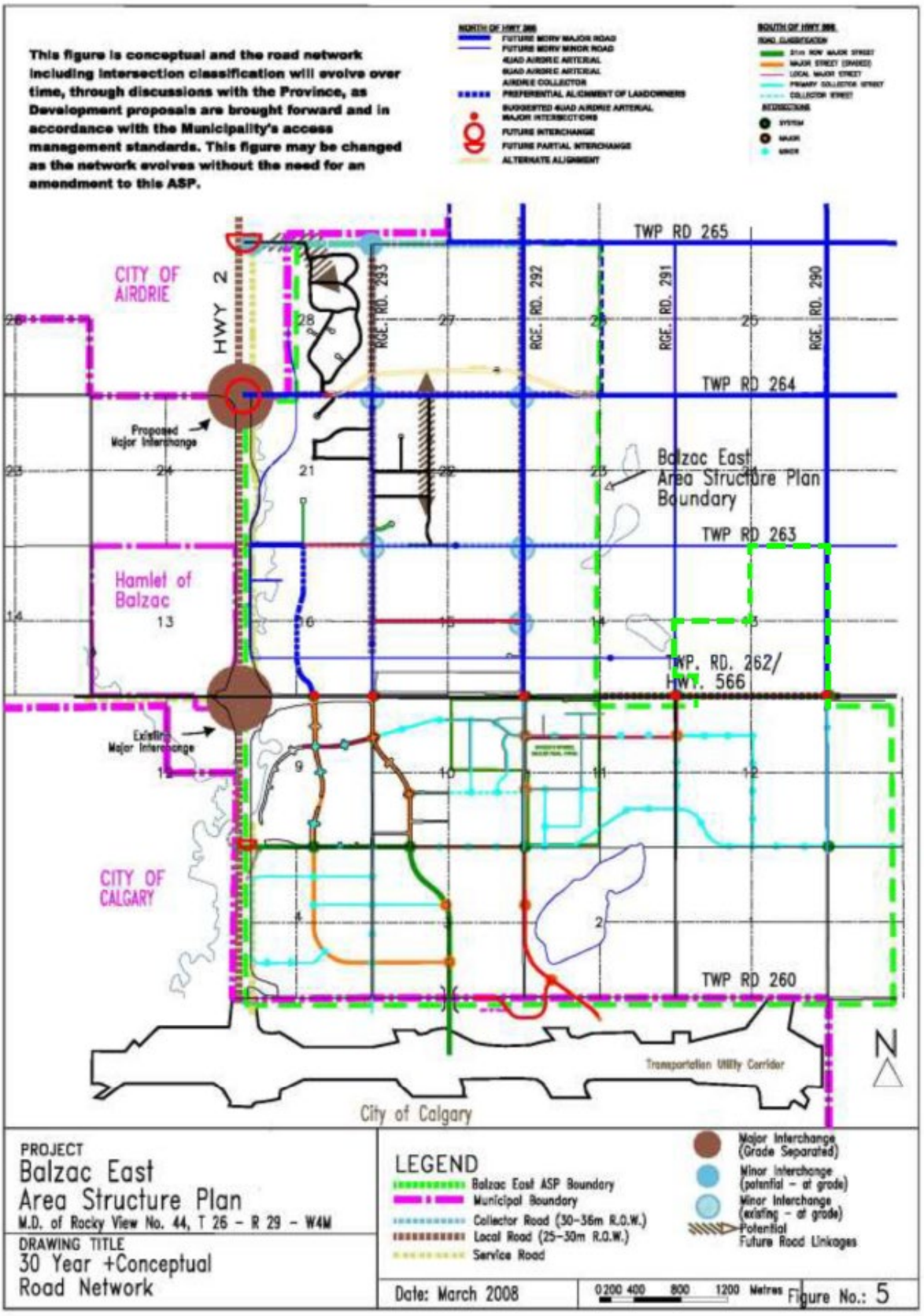
h. In addition to the proposed Local Road Network, Range Road 290 (84th Street) may also be developed as a major North-South transportation corridor that will provide alternate access to the Plan Area.

6.2.5 Public Transit

As development occurs in the Balzac East area, opportunities to provide public transit services will need to be evaluated. Comments from the public at various Open Houses underline the importance of public transit as the area grows and develops. The Municipality will take a leadership role in evaluating a range of service options.

a. As growth occurs in the Balzac East area, the Municipality will monitor and evaluate the need for public transit services. In response to demand, the Municipality will take a leadership role in evaluating possible service options.

Figure 5: Infrastructure



6.3 Airports

The southwestern portion of the Plan Area is affected by a provincially designated Airport Vicinity Protection Area (AVPA) Alberta Regulation 318/79 of the Municipal Government Act. Transport Canada's Aerodrome Standards and Recommended Practices also impacts the Plan Area. The Calgary Airport AVPA restricts new residential development below the 30 Noise Exposure Forecast Area Contour. Additionally, a larger area is regulated to ensure building form and land uses do not interfere with safe aviation operations. Controls monitor against uses that may produce smoke, excessive exterior lighting, electrical interference (navigational and airport communications), obstacle heights on runway approaches, and general hazardous and noxious uses. The AVPA noise cones have significant impact on development options, which are recognized locally as a growth constraint. An on-going dialogue should be maintained with the Calgary Airport Authority to monitor future amendments to the noise cone if and when air industry technology improvements permit. In addition, a small, privately-owned, airstrip is located outside of the Plan Area but may impact the North East corner of the Plan Area should large-scale airport development occur.

a. Uses within proximity to an airport shall be compatible with the safe and efficient operation of the airport. These uses include agricultural operations, business uses, and recreational uses.

b. The Calgary Airport AVPA restricts new residential development to lands below the 30 Noise Exposure Forecast (NEF) Area Contour. This also applies to the in-filling of existing residential areas under the AVPA in SDA2 and SDA3.

c. Business development within the NEF contours may be permitted provided the use complies with the Calgary International Airport Vicinity Protection Regulation (Table 1, Schedule C) and meets the policies of this Plan to the satisfaction of the Municipality.

d. Applications for redesignation, subdivision, and/or development in the Plan Area that are proposed within the AVPA shall be referred to the Calgary Airport Authority.

e. A privately owned airport facility located in the East ½ of Section 35 and the West ½ of Section 36, Township 26, Range 29 W4M, may have some impact on the future use and development of land in the north east corner of the Plan Area. Development of the airstrip and its impact on land within the northeast corner of the Plan Area should be carefully considered.

6.4 Railways

6.4.1 CPR Rail Line

A CPR Rail line, officially known as the "Rocky View Spur Line", crosses the south end of the Plan Area from west of Highway 2 and services the Petrogas Plant beyond the southeast corner of the Plan Area. The rail line provides both development opportunities and constraints.

a. Adequate setbacks shall be maintained from the Rocky View Spur Line in accordance with CPR regulations.

b. Potential exists to develop spur lines in proximity to this main spur rail line to assist commercial or light industrial development in the South Business Area.

c. Any crossings of this rail line require Municipal and CPR approval. Developers may be required to take additional safety factors into consideration at the discretion of the Municipality.

6.5 Water, Sewer and Storm Water Servicing

6.5.1 Water Sources and Resources

The Balzac East Area is currently serviced with water from two main sources:

- Groundwater wells
- Rocky View Water Co-op Ltd. (RVWC)

The RVWC provides service to its members in the Balzac, Simons Valley, and Bearspaw areas just north of the City of Calgary (see Appendix C for servicing details). The system has been developed on a "user-pay" basis and may require expansion due to proposed Plan Area density increases. New, and more restrictive, water policies for groundwater sources have been implemented under the Provincial Water Act. The regulations of the Water Act may result in the increased utilisation of surface water sources within the Plan Area.

Late in 2007, the Municipality obtained a water licence which will enable the construction of a communal water system and delivery of treated water to portions of the Balzac East area.

a. Surface water extension and tie-ins are encouraged wherever possible, provided there is confirmation of adequate water supply, to reduce groundwater reliance. The surface water line may provide service to any given area within relatively close proximity to the system, provided the developer pays the costs to extend service or upgrade the system, and co-op memberships are purchased.

b. Ground water may be used to supply subdivision and development on residential parcels that are a minimum of four (4.0) acres.

c. The *Water Act* applies to all subdivision applications, and approvals for groundwater sources are required from the Province.

d. Applications for two (2.0) acre parcels shall be required to tie into a surface water system and provide confirmation from the surface water source that there is sufficient capacity.

e. To maintain water quality in the aquifer(s), consideration must be given to proper disposal of sanitary and sewer waste from future developments. Municipal and Provincial standards for on-site disposal shall be the minimum required.

f. All future developments shall implement water conservation methods.

g. When required by the Municipality, Developers will connect to the East Rocky View Water Transmission Main and pay all required levies to the satisfaction of the Municipality

6.5.2 Sanitary Sources and Resources

In 2006, construction of the East Rocky View Waste Water Transmission Main is underway. This program will provide to the Plan Area over time a municipally-owned piped sewage collection and treatment system to portions of the Plan area. When and where appropriate, the M.D. will require developments to tie into this system. Sanitary effluent from residential uses is generally restricted to on-site disposal through septic tile fields as per Alberta Municipal Affairs regulations. This is typical of domestic use within the M.D. of Rocky View and may continue until such time as new development is proposed.

a. On-site sewage disposal systems shall be developed to the standards of the Municipality and Alberta Municipal Affairs.

b. The calculation of Sodium Absorption Ratio (SAR) should also be carried out on the potable water source to determine the long-term effectiveness of the disposal field.

c. Effluent Lagoons shall only be permitted to assist commercial and light industrial applications in the Plan Area. They require setbacks to roads, property lines, and adjacent residences in accordance with current regulations, and are not suited to small lot country residential applications.

d Alternate systems (i.e. slow sand "trickle" filters, modified tile field designs, and full fledged treatment systems such as rotating biological contactors (RBCs), "living systems" including constructed wetlands) may be considered at the discretion of the Municipality, Alberta Environment and/or Alberta Municipal Affairs.

6.5.3 Storm Water

Drainage of the Balzac East Plan Area is generally east to west. The entire Plan Area is part of the Nose Creek basin. Existing storm water drainage in the Plan Area is based upon roadside ditches and culverts. Presently, there are no buried storm water collection systems in the Plan Area.

The quantity of storm water increases when development occurs due to the increase in impervious area (i.e.- paved roads and roof areas) from pre-development conditions. Flows to receiving streams cannot increase. In rural areas where density is much lower than urban areas, the impact of development on storm water systems is less than in urban areas, but still significant.

a. Storm water flows resulting from new developments in the Plan Area shall not exceed pre-development flows, verified in a Storm Water Management Plan prepared by a qualified engineer. The Municipality encourages the incorporation of wetlands as storm water retention areas in the design of subdivisions.

b. Developments proposed with rural road cross-sections must include a conveyance system (i.e. swales, ditches, ponds) which shall be designed to accommodate runoff from a 100-year return period event. Snowmelt conditions with frozen ground conditions shall also be considered.

c. The entire Plan Area is within the Nose Creek basin. New developments within the Plan Area shall follow existing Municipal and Alberta Environment requirements for on and off-site storm water management. This area lies within the boundaries of the Nose Creek Basin Master Drainage Plan and a restricted discharge rate of 1.257 L/s/ha shall be in effect.

d. Developers are strongly encouraged to incorporate water quality enhancing features and protect the quality of water in Nose Creek.

6.6 Solid Waste Disposal

a. The Municipality encourages co-ordination of solid waste disposal systems with urban centres where possible.

b. Solid waste disposal in the Business Areas of the plan area shall meet the criteria established in Section 4.5 of the BEASP.

6.7 Shallow Utilities

Shallow utility services include natural gas, cable T.V., telephone, and electricity. Gas service to the area is provided by ATCO Gas. Shaw Cable provides Cable T.V. Electrical service is provided primarily by Trans Alta Utilities, with Enmax (City of Calgary Electrical Service) providing service to Sections 3 and 4. A mix of underground and overhead electrical services the area.

a. Provision of Shallow Utilities in applications for redesignation, subdivision, and/or development shall be at the sole expense of the developer.

6.8 Protective Services

The Municipality requires that proposals for redesignation, subdivision, and/or development accommodate design elements that consider safety measures and appropriate levels of servicing required for fire, police, and ambulance services. The Plan Area is serviced by 911 emergency service, with an emergency locator system set up for each individual property. Fire protection for the M.D. contracts Balzac East area to the City of Calgary Fire Department. Response is from stations in north Calgary.

6.8.1 Police Service

a. Police Service to the Plan Area shall be provided by the Royal Canadian Mounted Police and M.D. of Rocky View Special Constables.

6.8.2 Fire Service

a. New subdivisions shall meet the criteria for on-site fire fighting measures as determined by the Municipality.

b. Applications for redesignation, subdivision or development shall assure proper emergency vehicle access in accordance with Municipal Policy.

c. Applications for redesignation, subdivision or development for Business uses in the Plan Area may be required to submit Emergency Response Plans to the satisfaction of the Municipality.

6.8.3 Public Safety

a. The Municipality may, from time to time, designate certain roads as a Dangerous Goods Route and may also prohibit dangerous goods on certain roads.

b. All Conceptual Schemes that are prepared will include consultation with Nexen officials prior to submission of a Draft Plan to the Municipality. This consultation is intended to ensure that all parties are aware of

development plans and the impacts of sour gas facilities on the area proposed for development.

c. All Conceptual Schemes that are prepared will include a Risk Assessment, where the impact of local environmental factors on subdivision and development are assessed. The Risk Assessment will be prepared to the satisfaction of the Municipality and, where appropriate, will include an examination of the impacts of wells, pipelines and other natural resource facilities.

6.9 District Energy

Opportunities may exist in portions of the Plan area for eco-industrial networking, including waste heat recovery and district power generation. This should be explored as soon as possible so that opportunities can be maximized. With the size of the Plan area and the number of land owners involved, the Municipality needs to take a leadership role in this issue.

a. The Municipality will undertake a feasibility study to examine the opportunities for eco-industrial networking. This study will focus on the business area south of Highway 566 and will be undertaken in cooperation with area land owners and developers.

7.0 INTERMUNICIPAL COOPERATION

The Plan Area is in the unique position of bordering two urban municipalities. Consequently, planning for future development within the Plan Area is affected by a significant number of Intermunicipal issues. The Municipal District of Rocky View/City of Calgary Intermunicipal Development Plan and Municipal District of Rocky View/City of Airdrie Joint Planning Areas contain an additional subset of policies which need to be referred to for portions of the Balzac East Plan Area. Refer to Appendix D for Intermunicipal Areas and Section 6.2 for road systems information.

7.1 Intermunicipal Entranceways

The Plan Area contains entranceways into and out of the M.D. of Rocky View, The City of Calgary, and the City of Airdrie. The general planning objective of all three municipalities ensures entranceways are attractive, orderly, well maintained and leaves visitors with good first impressions. The BEASP supports this objective. The City of Calgary has prepared Improving Calgary's Entranceways, which suggests enhanced treatment of Intermunicipal entranceways including the Deerfoot Trail north entranceway in the SW corner of the Plan Area.

a. The entranceways along Highway 2 north are shared by three municipalities and require joint effort to plan them. Planning guidance is contained within the Intermunicipal Development Plan and/or Joint Planning Area agreements.

b. The design of buildings, landscaping, signage, and screening treatment in the Intermunicipal Entranceways' areas requires particular consideration to ensure that they support the objectives of Intermunicipal Entranceway policies. Development of uses near entranceways should generally support, complement, and enhance the area.

7.2 City of Airdrie / M.D. of Rocky View Transportation Network

Highway 2 is a significant transportation link between Airdrie and the Plan Area. A number of planned transportation developments must be taken into consideration. A joint planning effort should be required between the M.D. and Airdrie in order to co-ordinate the proper design of a new interchange proposed at the north end of the Plan Area.

a. A new grade separated interchange on Highway 2 linking south Airdrie with the north portion of the Plan Area is currently being proposed. A longer-term major intersection is planned for the Highway 2/Township Road 264 area (refer to **Figure 5**). Road network planning in this portion of the Plan Area must take new access into consideration.

7.3 City of Calgary / M.D. of Rocky View Transportation Network

Calgary's long-range development plans, combined with increased development within the Plan Area, will require improved road linkages between the two municipalities. Network improvements must also consider developments in Airdrie and will, in part, serve to reduce traffic loads on Highway 2 between Calgary and Airdrie.

a. As part of future transportation considerations, the Municipality, at its discretion, may require a developer to dedicate additional road right-of-way, which could allow for the eventual extension of roadways through the Plan Area between the City of Calgary and the City of Airdrie. The identified right-of-way shall be consistent with **Figure 5** which delineates a 30 Year + Conceptual Road Network.

7.4 City of Airdrie / City of Calgary Transmission Mains

The City of Airdrie receives treated water from the City of Calgary via a 900 mm (36 inch) transmission main which runs parallel to the west side of the CPR tracks approximately 400 meters (1/4 mile) west of the Plan Area, on the west side of Highway 2. Pressure in the main is approximately 50 to 60 psi.

a. Proposals to tie into City of Airdrie/City of Calgary water transmission lines shall require the Municipality to make formal application on behalf of the Balzac East Plan Area.

7.5 City of Calgary / City of Airdrie Sanitary Trunk

Two main sanitary trunks run from the City of Airdrie to the City of Calgary along the west side of the CPR track, on the west side of Highway 2. The trunks are 600 mm (24 inch) and 350 mm (14 inch) in diameter. The sewer lines are capable of handling up to an equivalent of 29,000 people, or approximately 20 years growth within Airdrie.

a. Applications to tie into City of Airdrie/City of Calgary sanitary transmission lines shall require the Municipality to make application on behalf of the Balzac East Plan Area for any future ties to the Calgary/Airdrie lines. Tie-in has not been permitted in the past and would only be considered in exceptional circumstances.

b. The M.D. of Rocky View/City of Calgary Intermunicipal Development Plan identifies locations where projected sanitary sewer lines may be required to locate and easements shall be required from developers of these properties.

7.6 Annexation

a. Applications for annexation from one municipal jurisdiction to another require joint negotiation, provincial approval, and should be consistent with the policies of Intermunicipal Development Plans and/or Joint Planning Agreements.

8.0 IMPLEMENTATION, REVIEW AND AMENDMENT

8.1 Plan Implementation

The BEASP falls within a hierarchy of applicable plans as illustrated in Section 2. The M.D. of Rocky View *Municipal Development Plan* (MDP) (Bylaw C-4840-97, adopted July 6, 1998) is the guiding document for all development within the municipality. The *Land Use Bylaw* (LUB) (Bylaw C-4841-97, adopted September 29, 1998 as amended) establishes the land use rules and regulations. The BEASP presents a greater level of planning detail within the specific Plan Area and must be consistent with both the MDP and LUB as required by Section 638 of the MGA.

Development in the Plan Area should be consistent with policy contained within the BEASP. The BEASP does not supersede, repeal, replace or otherwise diminish any other statutory plan in effect in the Plan Area. In addition, the *Rocky View/Calgary Intermunicipal Development Plan* and the *Airdrie/Rocky View Interim Urban Fringe Agreement* are intended, in part, to be implemented through Area Structure Plans such as this one. Furthermore, development in the Plan Area should not detract from Intermunicipal Entranceways shared by the Municipal District of Rocky View with the Cities of Calgary and Airdrie.

a. The policies contained within this document shall be reviewed and implemented by Municipal District of Rocky View Council members at their discretion.

8.2 Plan Review and Amendment

As the BEASP is a bylaw of the Municipality, a formal process as outlined in the Municipal Government Act is required to amend the Plan.

a. The future land use and development outlined in the BEASP is intended to address a long-term time horizon. Periodic review and occasional amendment of the BEASP through public hearing may be required in accordance with the *Municipal Government Act*. The BEASP is flexible enough to allow for review and amendment every five years should the Municipality deem that appropriate. In the event that variables or external policy that determines the rate or extent of development within the plan area change dramatically, then the Municipality may initiate a review of this plan earlier than five years.

9.0 INTERPRETATION OF TERMS

The interpretation of selected terms herein is provided to clarify their use in the Plan:

9.1 **Agricultural Land Use** - The use of land, buildings or structures for the raising of non-domestic animals and/or growing plants for food or other production.

9.2 **Area Structure Plan** - A statutory plan, adopted by Bylaw, that provides a policy framework for the evaluation of proposals for redesignation, subdivision and development of a specified area of land in the Municipality.

9.3 **Archaeological/Historical Impact Assessment** - An analysis of the potential impacts of development on archaeological and/or historical resources.

9.4 **Berm** - A constructed embankment used for separating potentially incompatible areas, sites and districts or for protecting an area, site or district from any intrusions generated by other activities, operations, facilities or traffic.

9.5 **Business Land Uses** - The use of land, buildings or structures in which the provision of goods and services for sale is the primary function and may include auxiliary pursuits dependent upon parcel size and proximity to other land uses.

9.6 **Business Park** - A comprehensively planned commercial development with common functional characteristics that may contain a range of business activities in a number of buildings situated within a campus-like setting.

9.7 **Collector Road** - A road in the Municipal District of Rocky View which acts as a link between primary and secondary highways and/or other collector roads. A collector road may be either a major or minor roadway depending upon design and traffic volumes.

9.8 **Conceptual Scheme** - A plan for the subdivision and development of lands including, but not limited to, generalised land uses at the ¼ section scale, rationale for the developability of the lands and internal road hierarchy. Conceptual Schemes contemplated by this Plan should be prepared in accordance with Municipal policy.

Conceptual Schemes contemplated by this Plan shall contain:

i) a description of all lands contained within the Conceptual Scheme Area;
ii) the proposed use of lands within the Conceptual Scheme Area;
iii) proposed parcel size and density for the Conceptual Scheme Area;
iv) the proposed internal road hierarchy;
v) a servicing proposal including, but not limited to, public and private utilities for the Conceptual Scheme Area;
vi) an infill overlay component to the overall design examining potential for future servicing and resubdivision of the lands;

vii) any special policies that may be required to give guidance to the preparation of tentative plans of subdivision including, but not limited to, geotechnical, hydrological, hazard and/or environmental conditions with the Conceptual Scheme Area;

viii) any other matters deemed appropriate by the municipality.

9.9 Construction Management Plan - A program of activities that details the site management of all construction activity including, but not limited tom the management of construction debris and dust.

9.10 Council - The Council of the Municipal District of Rocky View No. 44.

9.11 Deferred Services Agreement - an agreement entered into by a developer/landowner, which is registered against the title (by caveat) and obligates the developer/landowner to tie-in to surface/public utility systems when they become available and/or economically feasible.

9.12 Development Plan - A proposal for the development of lands over time that may include, but is not limited to: detailed site plan, topographic information, geophysical assessment, hydrological assessment, traffic impact assessment, environmental overview, phasing, community impact assessment, and an archaeological and historical impact assessment.

9.13 Direct Control District - A district of the *Land Use Bylaw* that is subject to regulations established by Council for control over the use and development of a defined area and pursuant to the provisions of the *Municipal Government Act*.

9.14 Environmental Audit - An evaluation of any adverse effects that may qualify the site as contaminated pursuant to the *Environmental Protection and Enhancement Act*, as amended from time to time.

9.15 Environmental Overview - Refers to an area-specific study that may include, but is not limited to:

a. the identification and analysis of natural factors for the study area;
b. an evaluation of the potential impact that a subdivision or a development proposal may have on the factors identified; and
c. a program of avoidance and/or mitigative measures.

9.16 Horticultural Development - The intensive growing of specialised crops, either enclosed or not, and without restricting the generality of the above may include:

a. greenhouses;
b. nurseries;
c. tree farms;
d. market gardens;
e. mushroom growing; and other similar uses.

9.17 **Infill Overlay** – Means subdivision design that facilitates re-subdivision of the lots in to smaller parcel sizes.

9.18 **Infrastructure** - Public and private utility systems in the Municipality that may include, but are not limited to, the transportation network, water supply, sewage disposal systems, stormwater management and other utilities.

9.19 **Intensive Agriculture** - Any use of land, buildings, shelters, corrals or other structures for the purposes of confining, rearing and/or feeding livestock at concentrated numbers on a continuous basis and/or the intensive growing of specialised horticultural crops; excepting the wintering of a breeding herd.

9.20 **Land Use Bylaw** - A bylaw of the Municipality passed by Council as a *Land Use Bylaw* pursuant to the provisions of the *Municipal Government Act* and intended to control, and/or regulate the use and development of land and buildings within the Municipality.

9.21 **Land Use District** - One or more divisions of the Land Use Bylaw establishing permitted and discretionary uses of land or buildings with attendant regulations.

9.22 **Livestock Confinement Facility** - A facility or intensive mode of operation that may include, but is not limited to, buildings, shelters, fences, corrals or other structures capable of confining, rearing or feeding a type of livestock at concentrated numbers on a continuous basis, excepting the wintering of a breeding herd.

9.23 **Minimum Distance Separation** - A setback or buffer established between an intensive livestock operation and adjacent land uses intended to minimise potential land use conflict.

9.24 **Municipal Government Act** - Refers to the *Municipal Government Act, Statutes of Alberta 1994, Chapter M-26.1* as amended from time to time.

9.25 **Municipal Development Plan** - The Municipal District of Rocky View No. 44 *Municipal Development Plan* is the principal statutory land use plan for the entire Municipality, adopted by Council, in accordance with the provisions of the *Municipal Government Act*.

9.26 **Municipality** - The Municipal District of Rocky View No. 44 and, when the context requires, means the area contained within the boundaries of the Municipality.

9.27 **Natural Features** - Includes landscapes that are found in their natural state and may be remnant, undisturbed, diverse or contain unique environmental characteristics.

9.28 **Noise Exposure Forecast (NEF) Area** - An area adjacent to an airport in which the impact of noise resulting from the operations of aircraft to the airport has been estimated.

9.29 **Operational Plan** - An outline of the operating practices proposed for a commercial proposal including, but not limited to hours and days of operation and the methods proposed for site management.

9.30 **Plan** - Refers to the Balzac East Area Structure Plan as adopted by Council and amended from time to time.

9.31 **Private Utility** - A utility service offered to the public by a private utility company or co-op including, but not limited to, the provision of gas, electricity, water or telephone services.

9.32 **Qualified Professional** - An individual with specialized knowledge recognised by the Municipality and/or licensed to practice in the Province of Alberta. Examples of qualified professionals include, but are not limited to, agrologists, engineers, geologists, hydrologists and surveyors.

9.33 **Recreation Business Land Use** - A business land use in which recreational activities or tourist related services and facilities are offered and a fee is charged for use of the services and facilities.

9.34 **Recreation Master Plan** - A non-statutory plan prepared by a Regional Recreation Board intended to provide for recreation needs within a portion of the Municipality.

9.35 **Redesignation** - Refers to the reclassification by the Municipality of a land use designation in the *Land Use Bylaw* applicable to a specific area of the Municipality.

9.36 **Residential Land Use** - A primarily residential land use in which auxiliary pursuits may be allowed dependent on the parcel size and/or proximity to other residences.

9.37 **Storm Water Management Plan** - A plan prepared to adequately address on-site storm water retention, demonstrate that post-development flows equal pre-development flows, and the method of on-site containment during a 1:100 year storm event. Recommended Best Management Practices to improve water quality as well as water quantity should be included in a stormwater management plan.

9.38 **Tentative Plan of Subdivision** - A proposal detailing a site-specific subdivision design that forms the basis for an application for subdivision approval.

9.39 **Traffic Impact Analysis** - An area-specific study that may include, but is not limited to, an analysis and evaluation of:

a. the potential impact of a proposed subdivision and/or development on the existing transportation network; and
b. a program of future expansion and/or improvement of the transportation network to accommodate the proposed growth and to preserve the function and integrity of the network.

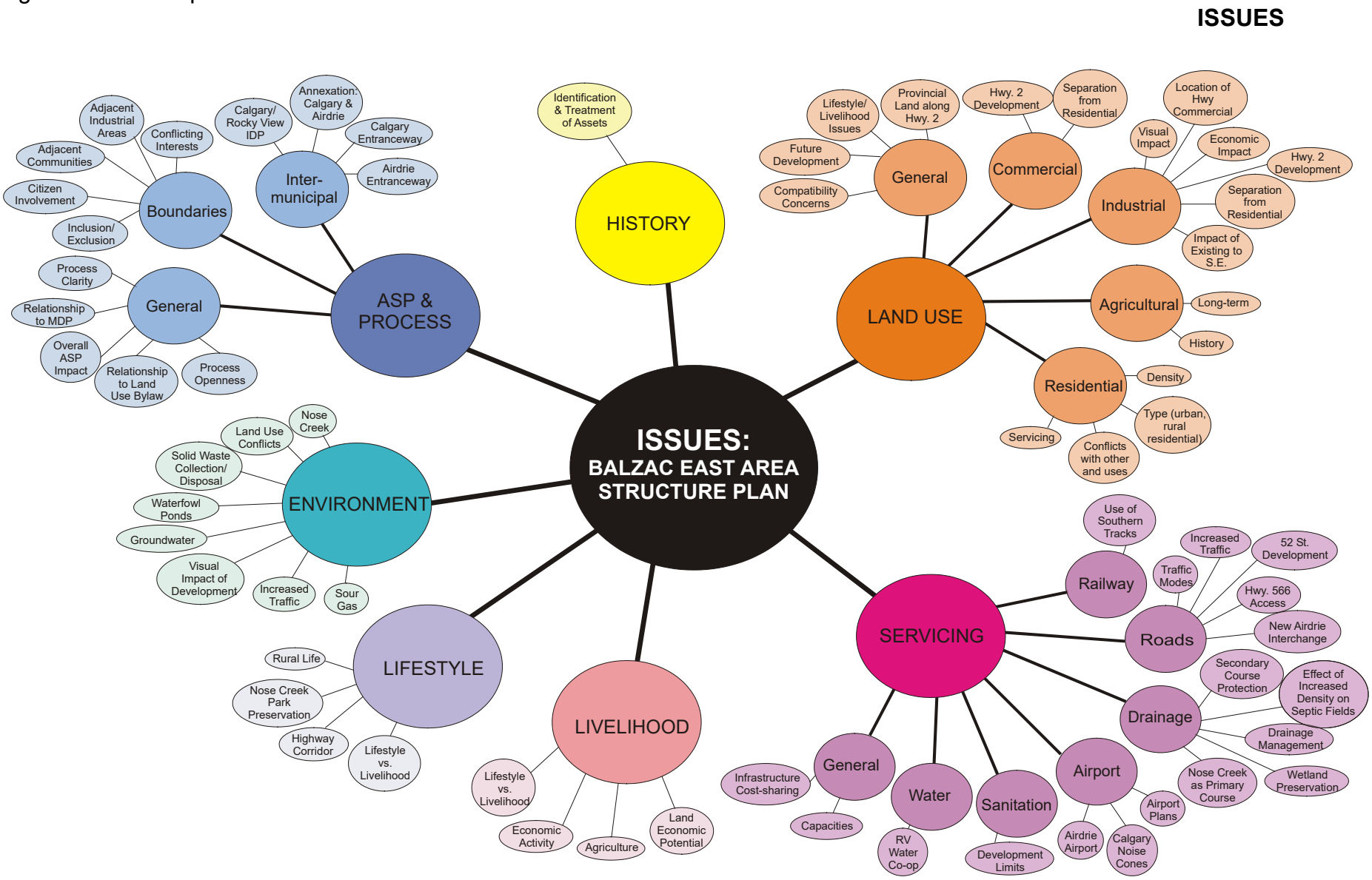
BALZAC EAST AREA STRUCTURE PLAN

APPENDIX

The appendix portion of this Area Structure Plan contains background information to support the statutory policies contained in this Plan. While these appendices provide valuable technical information relating to the Plan Area, much of this information is based on available data at the time of writing. New information, however, may become available or some factors may be subject to change overtime and therefore, the information provided within these appendices should be used as a basis for further exploration in considering applications for redesignation, subdivision, and development.

APPENDIX A: PUBLIC PARTICIPATION – ISSUES AND COMMENTS RAISED

Figure 6: Mind Map



Balzac East Area Structure Plan - List of Comments Received

Participants at the June 24 Open House submitted the following comments (verbatim):

Are there any planning issues, or past comments you have submitted, that have not been identified or properly addressed?

- "Yes - the issue of 'opting out', - which is being avoided. Of the 10 quarters east of 52nd St., only one is presently subdivided into 3-40's and 2-20's. Most of the quarter holders do not want to be included in the ASP. With regard to 'opting out', I have raised this question on 2 occasions and I have yet to have a response from anyone."
- "I was out of the country on the date of your last open house (Mar. 25)"
- "We cannot stress enough the importance to us that under no circumstances should there be any Highway Commercial or industrial zoning on the east side of Highway #2 between Highway 566 and north to Airdrie."
- "Confirmation of opting out of the plan by landowners south of 566 if final plan is unsatisfactory - or - a 2 part ASP - Part A - North Side of 566, Part B - south of 566 with separate approval of land designation by landowners in each part."

A series of Maps identifying various features in the Plan Area has been presented. Are there any aspects of this series that require clarification?

- "Possible Airdrie Annexation"
- "Airdrie Interchange"
- "Provide existing land designations - i.e. small holdings, country residential, agricultural, etc."
- "Conceptual Map: No residences are shown! To build on an existing plan you must show all existing structures and property lines in detail then work with what you have left."
- "Possibly how noise cone affects/limits what can be done on land"
- "On Conceptual Plan there is a proposed road under the big circle, will MD build this road?"
- "What kind of commercial development will take place on Highway 566 east of Highway 2?"
- "The maps do not seem to be accurate as to the size, in relation to the properties. Should be better defined for next meeting."
- "Please clarify commercial / recreational zoning to us."
- "What land use is permitted in the buffer zones? Reconfirm the Nose Creek Flood Plain - area on map seems too large."

The "Concept Plan" presents a first look at planning for the area based on existing conditions and identification of issues. I have reviewed the "Concept Plan" and have the following comments:

- "The portions of S 15 and 22 designated '2nd stage' residential break up the 'flow' of existing residential corridors and will likely impact services etc. in the near term (i.e. cost of development, control of overall density, etc.)
- "Lifestyle: We feel East Balzac S. Airdrie, North 566 East side Highway 2 should remain residential/agriculture. Commercial development - even along the highway is not compatible with residential/family lifestyles - a buffer zone is needed between residential and commercial. The highways make a natural buffer so does nose creek pathway (which is a sound environmental decision). Lifestyle/environmental/beautification entranceways all lend themselves well to developing the creek area as parkway/trail system to link Airdrie/Calgary - possibly Northern Alberta."
- "The highway on 566 is at least 20 years away. Provincial funding of infrastructure such as this is at a new low. The present (Highway 2 - Deerfoot) are adequate for at least 15 to 20 years. This is conceptualised in the far future!"
- "Several ratepayers have suggested the enlargement of the plan area to include the lands east of highway #2 which are presently semi developed with further commercial and residential development possible."
- "City people move out to acreage's and wants all the amenities of the city and who pays for it? ME the taxpayer. There should be no more parks, etc. (walkways on the Nose Creek) because this uses up good farmland (pasture land)."
- "Feel that the 2nd stage residential should be part of the existing residential and the 2nd and 3rd stages remain as you have them. *Note as indicated on previous correspondence road allowance from service road to 52nd Street NE."
- "Any land that exists bordering Highway #2 should be strongly considered for light commercial. These land owners really have no other choice agricultural? NO, Residential? NO, Recreational? sure, at whose expense?"
- "Include the provision to adjust the proposed land uses within the current noise cones when the requirements or NEF boundaries change."

I would change the following on the attached "Concept Plan" and my reasons are as follows:

- "NW 1/4 15 has a small area in '2nd stage' residential. This area is quite hilly and lends itself towards a 'country residential' classification. Co-op water is within easy access to support the higher density."
- "The ASP boundaries should include part of the West side not greater East side."
- "All unused lands along the Nose Creek should be protected green belt and used for park/rec. purposes (i.e. Golf Course)."
- "The future commercial plan for east of 36 St. on 566 on the northside is all residences and has been for some 20 years. This should remain residential. The land on the south side of 566 is nothing."
- "Future commercial on 566 is badly flawed. There are acreage's all along the north side of 566; which I am sure would not like commercial rezoning. Scrap this idea."
- "To preserve farmlands - a primary goal of the M.D. planning documents - should the agricultural areas south of SR 566 and east of highway #2 be excluded from the plan or,

at the least should they be confirmed as agricultural lands, not to be reduced in size and sold."

- "Suggest map be enlarged ie: 11x17 and re-mark areas closer to scale of what it is anticipated to look like ie: does the 'Future Airdrie Access' actually take up about 160 acres???"
- "Economics and politics will do that."
- "I would like to bring my property in the first phase of residential development. Because I am ready to go ahead with the development of my property as described on the attached sheet. I am only waiting for completion of the area structure plan. Sketch on the attached sheet is not to scale."
- "On the existing residential on the map, there is a place for future intensification. This should not be allowed to happen - only acreage's of 4 acres - not less should be allowed. The infrastructure will not handle the increase in traffic."
- "That the land in the corridor between Balzac and Airdrie on the east side of Highway #2 be zoned recreational and that no industrial or highway commercial be allowed in that zone EVER."
- Removal of the buffer zone along south railway as the area between the tracks and the utility corridor to the south should be a buffer zone. Clearer definition is required of the "Nose Creek Protected Area and Park." What exactly is planned here? Who will pay for maintenance of this area?"

Any other comments or suggestions?

- "The 'process' does not explain the 'public hearing'/by-law process of council. Also how this ASP will fit into the IDP in the event of annexation."
- "Architectural controls would be beneficial for the ASP because we do not want a slum area."
- "The Rocky View Water Co-op is important to us because it is our only source of good water. Commercial business should be required to use the Rocky View Water Co-op because the more people using it will bring our prices down.
- "We would like the roads maintained to keep up to the increase in development."
- "We do not want any plastic manufacturing or recycling business here."
- "No commercial use North of 566 or East of highway 2."
- "4 acre minimum acreage."
- "I also would like to see the service road accessed for any commercial development instead of the Balzac road or highway 566."
- "Does the East side of Balzac want to be part of Airdrie? Calgary? or Rocky View - if we are annexed what do we want our area to become; commercial/industrial trail or a continued natural rural family setting? Let's keep East Balzac residential/agricultural. Future commercial development belongs on the west side."
- "I have carefully reviewed the Bearspaw Area Structure Plan, included are '7' Notwithstanding Clauses each of which gives the M.D. Council the right to disregard the ASP. This plan didn't protect the residents of Bearspaw from the Burnco problem or the CDN 88 gas well proposal - will the Balzac ASP do any better? Notwithstanding clauses in Bearspaw ASP:

1. 7-1-2 Pg. 27
2. 8-1-5 Pg. 29
3. 8-1-10 Pg. 30
4. 8-1-17 Pg. 32
5. 8-2-5 Pg. 34
6. 8-5-11 Pg. 35
7. 8-5-11 Pg. 49"

- "The use of the term 'Concept Plan' in this document and as used in the developing Municipal Development Plan do not seem to have the same meaning - could this lead to confusion?"
- "To carry out the goal of the M.D., perhaps the plan area should be confined by highway #2 to the west, #566 to the south, the east sides of sections 15, 22, 27, and the south halves of sections 26, 27, and 28."
- "Would like to see written attachments to describe each area identified in more detail (similar to the format used in the 'Draft' MD/COFC IDP 1998 May 11)."
- "This appears to me as a make work project. Rocky View taxpayers as a whole should not be required to finance special areas that seem to think they need special attention. The East Balzac Area should pay entirely on their taxes for this exercise."
- "When an area structure plan is being developed, besides housing etc. the state of the roads and the amount of traffic should be included in the plan. Taxpayers should never have to fund the cost of new roads just because the ASP is put in place with no thought to traffic. I am SICK of paying taxes!"
- "We as residents of Balzac would support industrial and highway commercial if it was on the west side of number 2 highway as it is not built up yet. Residential on the east side of #2 highway - no commercial highway zoning from 566 north to Airdrie."
Note: this is my proposed road allowance from Service Road through to 52 Street NE."
- "Since the airport noise cone ties the hands of people in it to a greater degree, these land owners should be met with separately and given some special consideration. *Also, traffic lights on the corner of #566 and 36th Street are a must for obvious reasons."
- "Include the right to protect the value of assets of large landowners in the plan by provision of the right of final written approval of the proposed land use, for their lands."

APPENDIX B: ENVIRONMENTAL CONSIDERATIONS WITHIN THE PLAN AREA

Figure 7:Topographical contour and drainage courses

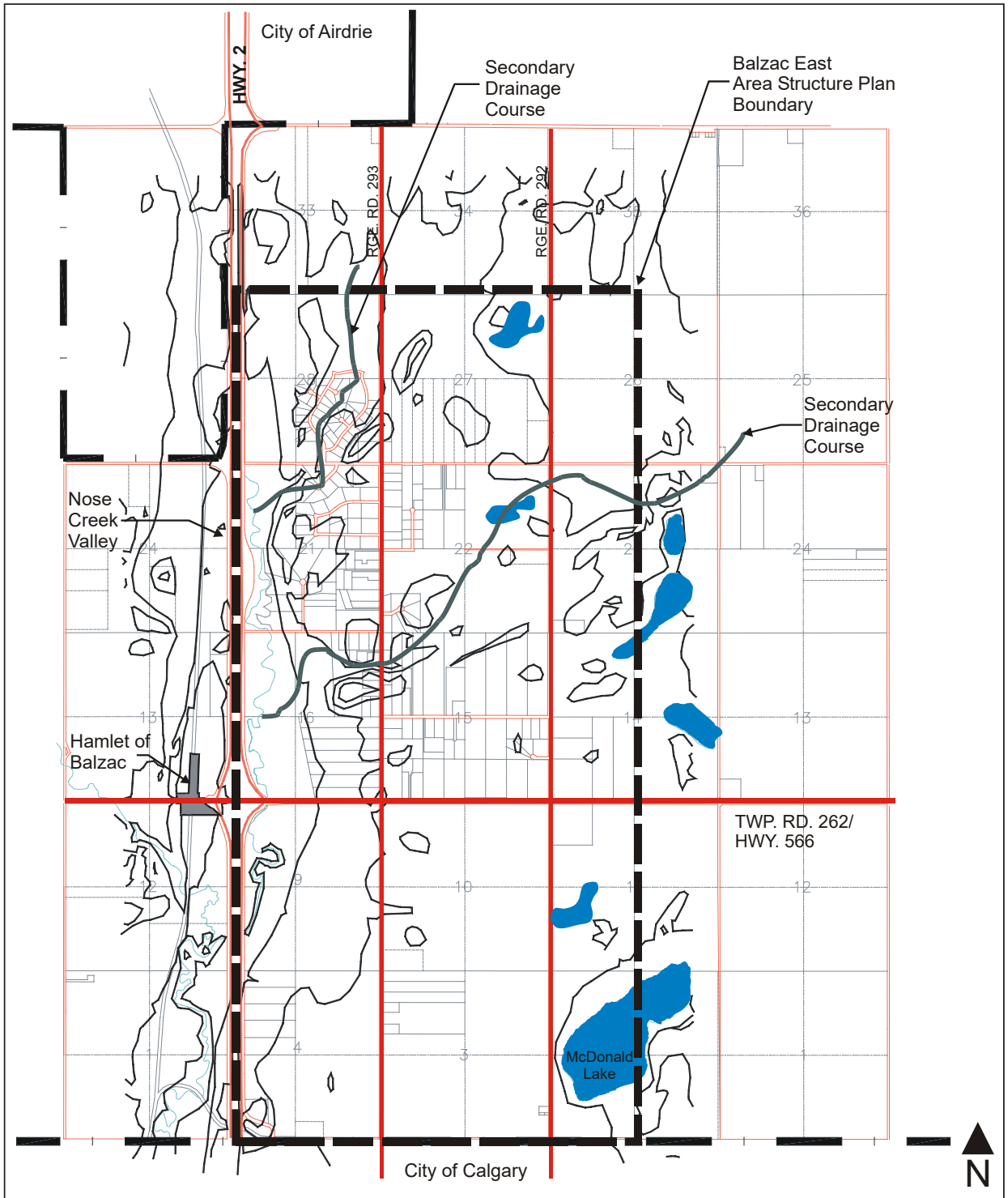
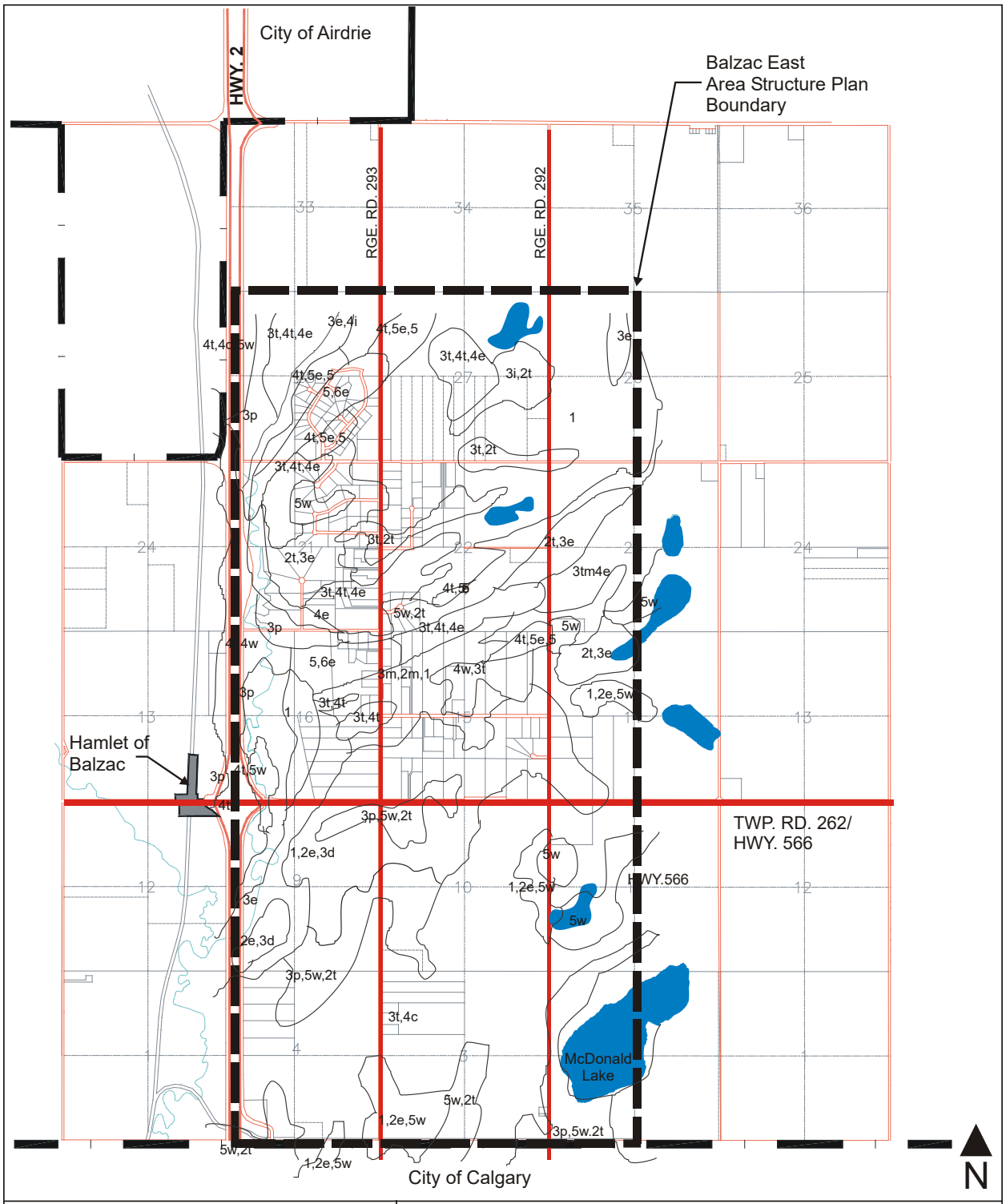


Figure 8: Soil classification



PROJECT
Balzac East Area Structure Plan
M.D. of Rocky View No. 44, T 26 - R 29 - W4M

DRAWING TITLE
Soil Classification Map

LEGEND

- Balzac East ASP Boundary
- Municipal Boundary
- 1,2e,3d Soil Classification

Date: February 2000 | 0 200 400 800 1200 Metres | Appendix B

Figure 9: Storm drainage

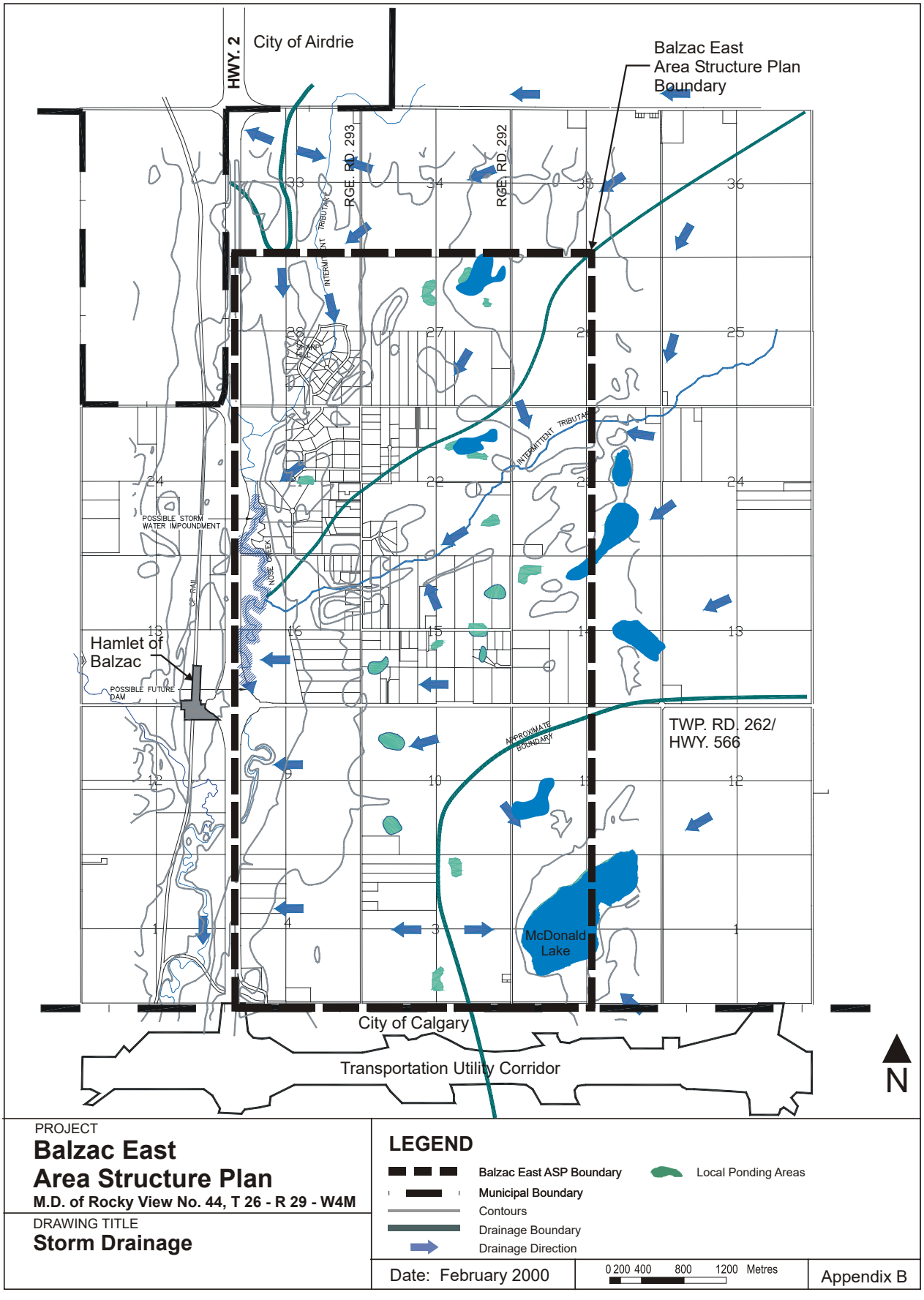
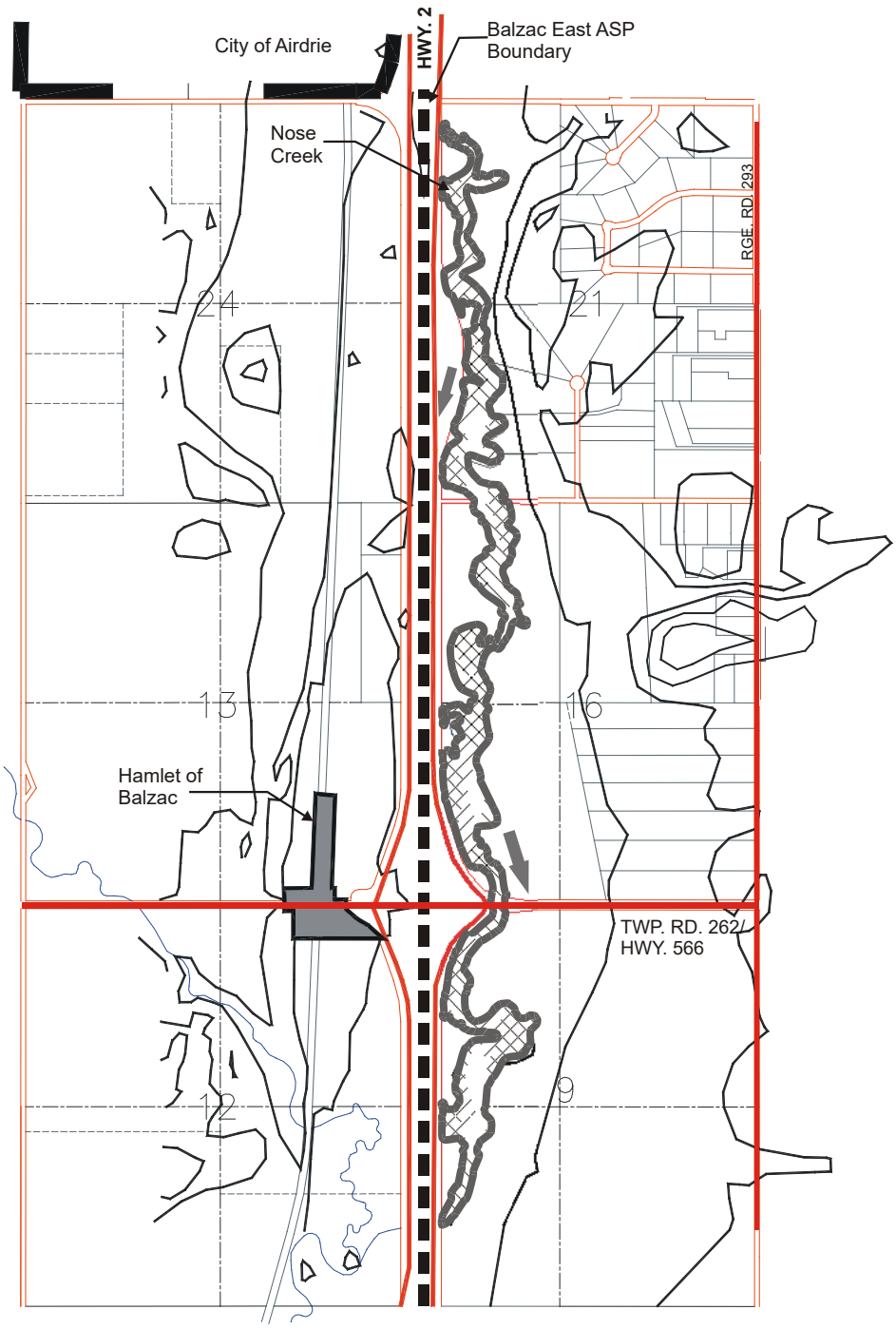


Figure 10: 1:100 Year Flood Limit



PROJECT
Balzac East Area Structure Plan
M.D. of Rocky View No. 44, T 26 - R 29 - W4M

DRAWING TITLE
1:100 Year Flood Limit
(Adapted from Alberta Environment's Flood Plain Delineation)

LEGEND

- Balzac East ASP Boundary
- Municipal Boundary
- 1:100 Year Possible Flood Limits
- 1:100 Year Flow Direction
- Contour Lines

Date: February 2000

0 200 400 800 Metres

Appendix B

APPENDIX C: INFRASTRUCTURE SERVICING

C.1 The City of Calgary / M.D. of Rocky View Transportation System

The City has developed a network of alternating freeways / expressways and major streets spaced approximately 1 mile to 1 ½ miles apart. Approximately ½ mile south of the southern boundary of the Plan Area, the Province of Alberta has a dedicated transportation and utility corridor. It will be used to develop Stoney Trail in an east / west direction and the East Freeway in a north / south direction. The East Freeway will be located ½ mile west of the City limit.

Between Deerfoot Trail (Highway 2) and the East Freeway there are proposed two other long-term north / south roadways. The 36 Street East roadway ("Road A") located 1 ½ miles east of Deerfoot Trail is planned to be an expressway / freeway which will only be accessed via grade separated interchanges. The right-of-way is planned to be approximately 60 meters. Due to the easterly shift of Deerfoot Trail near the north City limit, 36 Street East may be downgraded north of Stoney Trail to a four-lane major divided road with a right-of-way reduced to 36 meters. The right-of-way requirements have not yet been finalised by the City.

A north / south running four-lane major divided road is planned between 36 Street N.E. and the proposed East Freeway. This road will be designated within the City as 60 Street East and will be aligned with 52 Street N.E. in the Plan Area.

For planning purposes, the City has designated 144 Avenue N.E. a four-lane major divided road with a 36 metre right-of-way.

C.2 Rocky View Water Co-op Ltd.

The Rocky View Water Co-op Ltd. provides service to its members in the Balzac, Simons Valley, and Bearspaw areas just north of the City of Calgary. The system has been developed on a "user-pay" basis. Membership fees are currently $12,000 per connection. Any additional construction or related costs associated with service extension (i.e. surveys, water mains, curb stops, service lines) are borne by the applicant (or developer).

The Rocky View Water Co-op Ltd. has taken the position that they will provide service to any given area within relatively close proximity to their system, provided the applicant (or developer) pays the costs to extend service and upgrade the Co-op system.

C.2.1 Development of the Co-op

The original system was constructed in 1992, spawned by concerns among acreage owners in the Balzac area, given their poor groundwater supplies. In 1991, the Co-op made initial application to the City of Airdrie to tie into the 900 mm (36 inch) main supply line which runs from Calgary to Airdrie along the west side of the CPR railway track, west of Highway 2. The application was turned down, due to concerns from the City of Calgary about limiting development in the area.

The only viable source of water was determined to be an independent supply from the Bow River in the Bearspaw area, 12 miles west and 7 miles south of Balzac. To assist in financing the long pipeline requirements, the Co-op expanded to include service to the Simons Valley and Bearspaw areas.

In 1992 a raw water reservoir, a water treatment plant, and over 130 kilometres of distribution lines were constructed. The initial phase of the system was built to service 630 tie-ins, with oversizing of the mains assisted by a debenture from the M.D. of Rocky View. In order to service the ultimate build-out capacity, additional upgrades to the treatment plant and treated water storage capacity are required. The system does not provide fire flows, except to the Church Ranches subdivision immediately adjacent to the treatment plant.

C.2.2 Capacity

The Rocky View Water Co-op system has been designed to service up to 2,000 connections, with the approximate distribution of service as follows (based upon 1993 figures):

Service Area	Ties (build-out)
Bearspaw Area	1,540
Simons Valley Area	110
Balzac Area	350

Build-out was anticipated to occur within 10 to 20 years of construction, depending upon growth in the three service areas. Specific service area boundaries have not been established by the Rocky View Water Co-op Ltd. For information purposes only, the area within one mile of the Co-op main lines has been illustrated in Drawing 2. Service can be extended beyond this area. Based upon the topography within the Balzac East, Co-op service could be extended to any point within the Plan Area.

The Co-op system is a flow limited system which limits flow to 0.38 l/s (5 Igpm) at each connection. A flow limiter, water meter, and pressure reducing valve is installed within each house.

The Balzac area is fed via a 200 mm (8 inch) gravity main from a reservoir in Simons Valley. Static pressures within the Plan Area can vary from 105 to 155 psi. Individual pressure reducing valves in each home reduce the pressure below 75 psi.

In order to achieve the full build-out capacity required in the Balzac area, a treated water reservoir and pumping station will have to be constructed in the north east quarter of Section 16. Given the current growth in the area, this could be required within the next three years. The Co-op has yet to determine the mechanism for financing this addition. Given their current policy, the cost would likely be borne by any new developments which impact the system such that the reservoir is required. This will be reviewed by the Co-op board.

From discussions with the Co-op staff, the per capita demands of the system have been lower than originally forecast in the system design. This would allow more users to tie into the system than planned. The capacity of the 200 mm main from Simons Valley could service 50 to 100% more users than the 350 planned, but may require additional upgrades to the Co-op system upstream of Simons Valley to achieve this. The ultimate capacity to Balzac, beyond the 350 already planned, would have to be confirmed by the Co-op.

C.3 City of Airdrie Transmission Mains

The City of Airdrie receives treated water from the City of Calgary via a 900 mm (36 inch) transmission main which runs parallel to the west side of the CPR tracks approximately 400 meters (1/4 mile) west of the Plan Area, on the west side of Highway 2. Pressure in the main is approximately 50 to 60 psi.

An older secondary 350 mm (14 inch) transmission main feeds Airdrie from Calgary along 15th Street in the M.D. of Rocky View (8th Street in Airdrie) approximately one mile west of Highway 2. Pressure in this main is currently higher than the 900 mm main, but will be reduced to that of the 900 mm main in the near future. The Province installed this line, with control currently being transferred to the City of Airdrie.

The transmission mains have a capacity equivalent of 40,000 people or approximately a 25 to 30 year horizon given current growth rates.

There are few users tied to either transmission main between Calgary and Airdrie. The current agreement between Calgary and Airdrie is such that:

a) The City of Airdrie owns and operates the transmission mains,
b) Application for ties to the lines would be to the City of Airdrie,
c) The City of Airdrie would review the impact of the tie on its future capacity,
d) The City of Calgary would have to approve any request for connection to the mains.

From discussions with both the City of Airdrie and the City of Calgary staff, the current policy adopted to date regarding ties to the lines is:

a) City of Calgary Council policy has been to not supply *unincorporated* areas or users,
b) The extension of water service to a municipality is dependent upon proper handling of sanitary flows. This has typically meant water extensions from the City of Calgary must be accompanied by a similar connection of sanitary service back to the City.
c) The City of Calgary's standard acreage assessment would be charged to the municipality, less a negotiated amount for the end users provision of feeder mains, storage and pumping facilities. The current assessment for water is $3,500 per hectare. This is being reviewed and is likely to increase.
d) Negotiations would be required with the City of Airdrie to determine the water rate structure.

In the past, the City of Calgary has restricted extension of its utilities outside of its limits as a means of development control, protecting its long-term growth corridors and supporting the philosophy that intensive water users should be located in an urban area. The City's perspective is that rural residential and non-residential uses should be supported by a rural level of services.

The reasons for granting connections outside the City limits to date include:

a) to resolve servicing capacity problems within existing incorporated urban centres (i.e. Airdrie);
b) to safeguard Calgary's raw water sources (i.e. Cochrane sewer line agreement);
c) to provide for fire protection and processing need (i.e. Petrogas);
d) to improve health facilities for public functions (i.e. Spruce Meadows); and
e) to secure easements for trunk lines (i.e. Airdrie trunk line).

Although these rural connections were not supported by the City they were negotiated between the Province / City of Airdrie and affected landowners.

Historically, requests for rural residential service connections have been consistently refused. In June, 1991 the M.D. of Rocky View submitted a request to service 105 existing and 230 future rural residences in the Balzac area. The request was turned down by City of Calgary Council. The City's current policy will consider service to specific non-residential uses, where the location in a rural area is deemed to be necessary and in the City's best interest (i.e. Petrogas).

City of Calgary staff recently indicated there *may* be more flexibility with these policies in the future, especially considering the current attitudes toward self-funded utilities and the reality that development has proceeded even without City services (such as within the Balzac East area). It remains likely that the M.D. of Rocky View would again have to make application on behalf of the entire Balzac East area for any future ties to the Calgary / Airdrie lines.

Should permission be granted to tie into the Airdrie transmission main, a reservoir and pump station would likely be required, especially if fire protection is a consideration. A distribution system with bored crossings of both Highway 2 and the CPR track would also be required.

C.4 Water Conservation

Within the Plan Area, water is limiting factor to development. In order to maximise the existing water resources, consideration should be given to water conservation techniques. Alberta Environment, as well as Alberta Transporation through their grant funding program, both encourages water conservation techniques.

Such techniques can include both structural and non-structural techniques. Structural techniques include a range of physical devices such as water meters, rain barrels, flow limiting showers, water saving toilets, and grey-water recycling devices. The Rocky View Water Co-op Ltd. is a metered and flow limited system.

Non-structural techniques include broader policies adopted by both the water supplier and consumer. These can include water rate structures based upon actual consumption (versus flat rates) which promote reduced demand and education programs that aim to promote water conservation techniques. Education programs can be incorporated into schools, and can encourage simple concepts such as the planting of native prairie grasses, which are lower water users than typical lawns.

C.5 Fire Protection

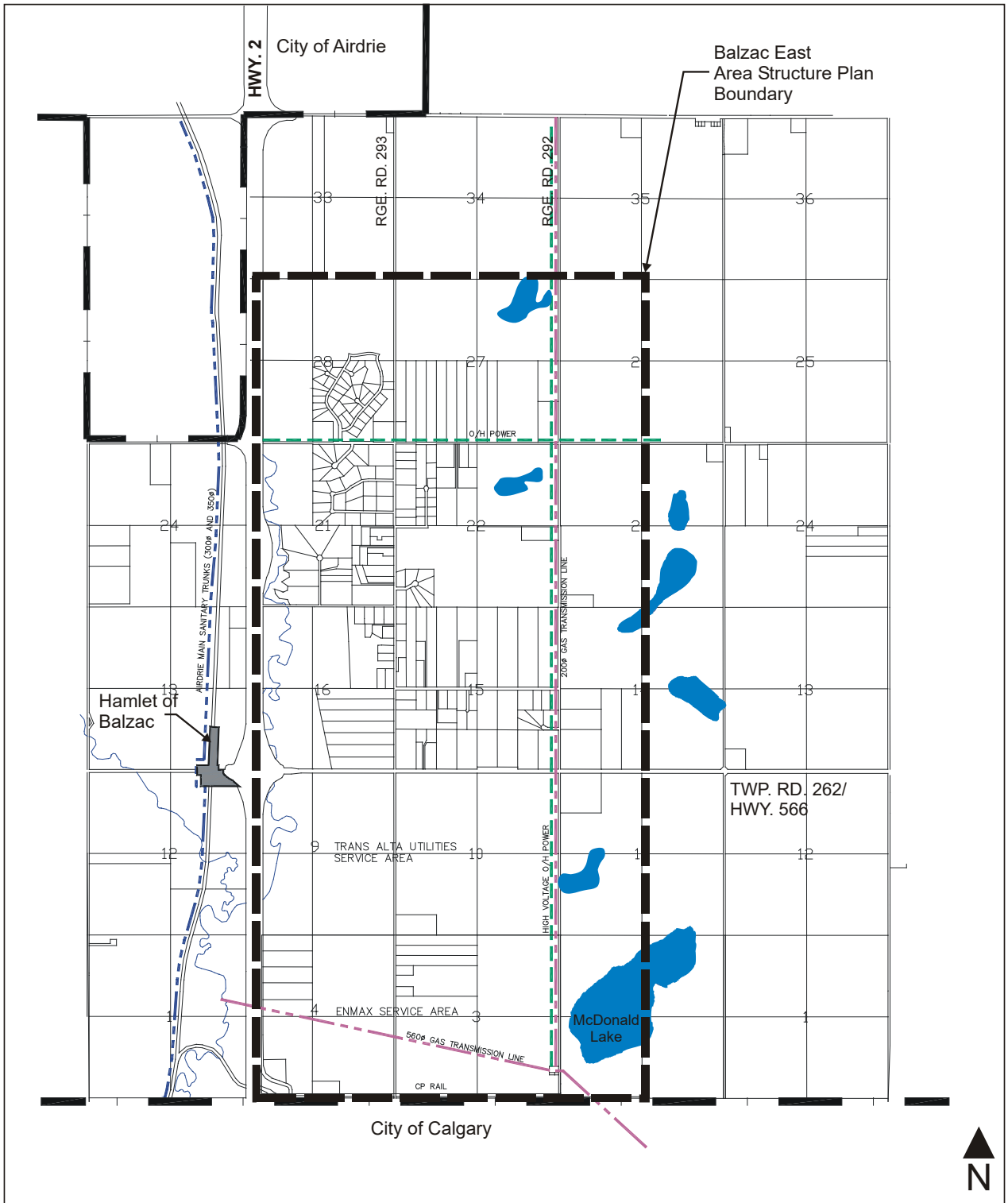
The Plan Area is serviced by 911 emergency services, with an emergency locator system set up for each individual property. Fire protection for Balzac East area is contracted by the M.D. to the City of Calgary Fire Department. Response is from stations in north Calgary.

Due to the length of the system, the Rocky View Water Co-op Ltd. cannot economically provide fire flows through hydrants to the area. As such, only pumpers with tankers can respond to a fire. The only means of adequately providing fire flows to hydrants within individual country residential lots would be to construct a reservoir with a standby fire pump within each subdivision. Depending upon the level of protection and size of subdivision, the reservoir required would be in the order of 180,000 to 550,000 litres (40,000 to 120,000 Igal). Distribution mains would be a minimum of 150 mm and more likely 200 mm given the long lengths of pipe between services. Due to the low density of country residential subdivisions, this level of service is cost prohibitive. In addition, with a large number of these private systems in place, the proper long-term operation and maintenance of the mechanical systems would be a concern.

A second means of providing fire protection within country residential subdivisions is through the use of in-house sprinkler systems. While these are more cost-effective, the impact of such systems on a domestic water system, such as the Rocky View Water Co-op system, have yet to be determined. The M.D. of Rocky View fire department is currently reviewing this option.

The current policy of assuring proper emergency vehicle access in the subdivision approval stage should be continued.

Figure 11: Utility Services



PROJECT
Balzac East Area Structure Plan
M.D. of Rocky View No. 44, T 26 - R 29 - W4M

DRAWING TITLE
Utility Services

LEGEND

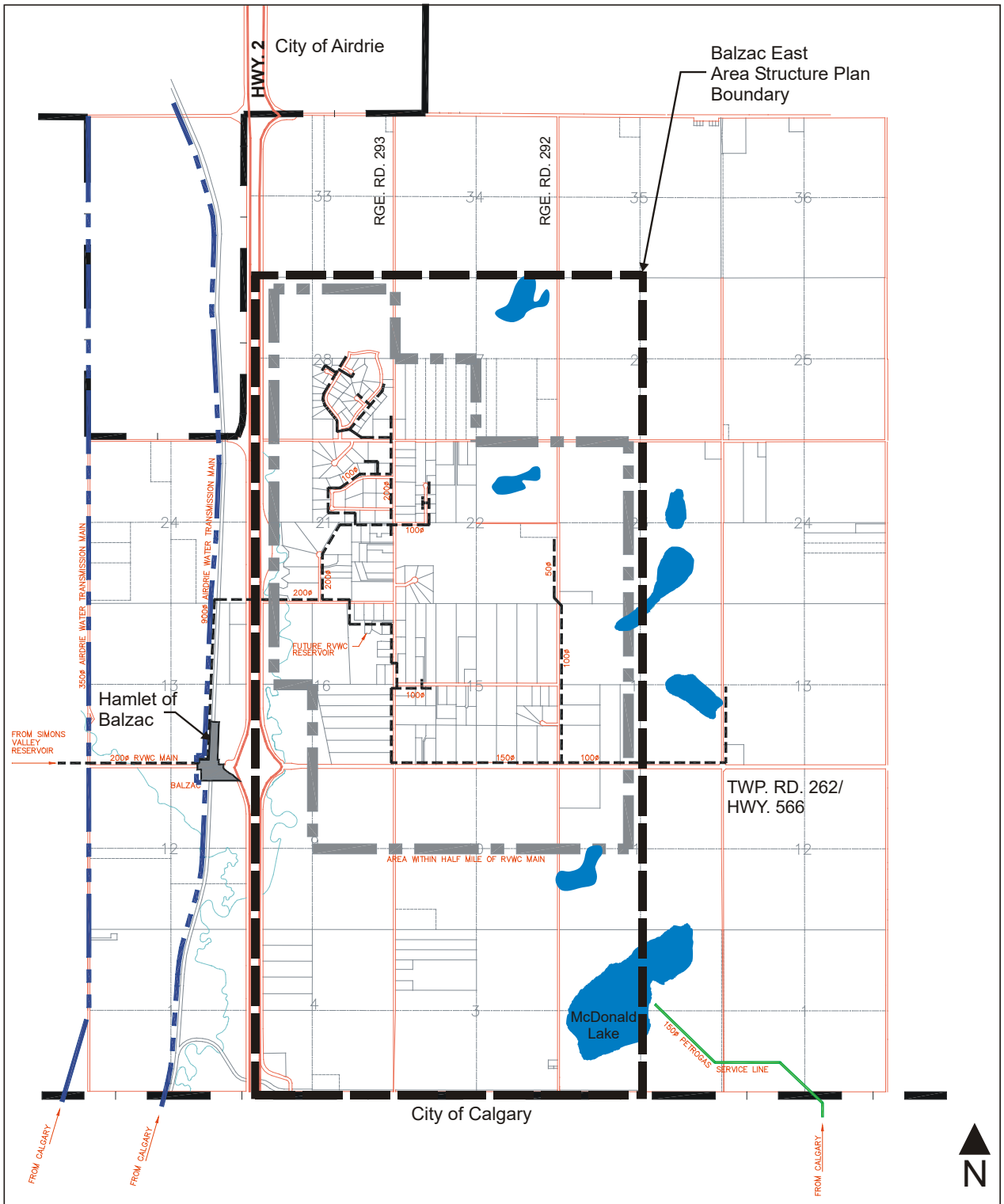
- Balzac East ASP Boundary
- Municipal Boundary
- Airdrie/Calgary Sanitary Trunk
- Trans Alta Utilities Electirc Overhead (Three Phase)
- Gas Transmission Line

Date: February 2000

0 200 400 800 1200 Metres

Appendix C

Figure 12: Service Areas and Transmission Lines



PROJECT
Balzac East Area Structure Plan
M.D. of Rocky View No. 44, T 26 - R 29 - W4M

DRAWING TITLE
Service Areas and Transmission Lines

LEGEND

- Balzac East ASP Boundary
- Municipal Boundary
- Airdrie/Calgary Water Trunk Mains
- City of Calgary Water Service Line
- Rocky View Water Co-Op Mains
- Area Within Half Mile of RVWC Main

Date: February 2000

0 200 400 800 1200 Metres

Appendix C

Figure 13: Sour Gas Pipeline Locations

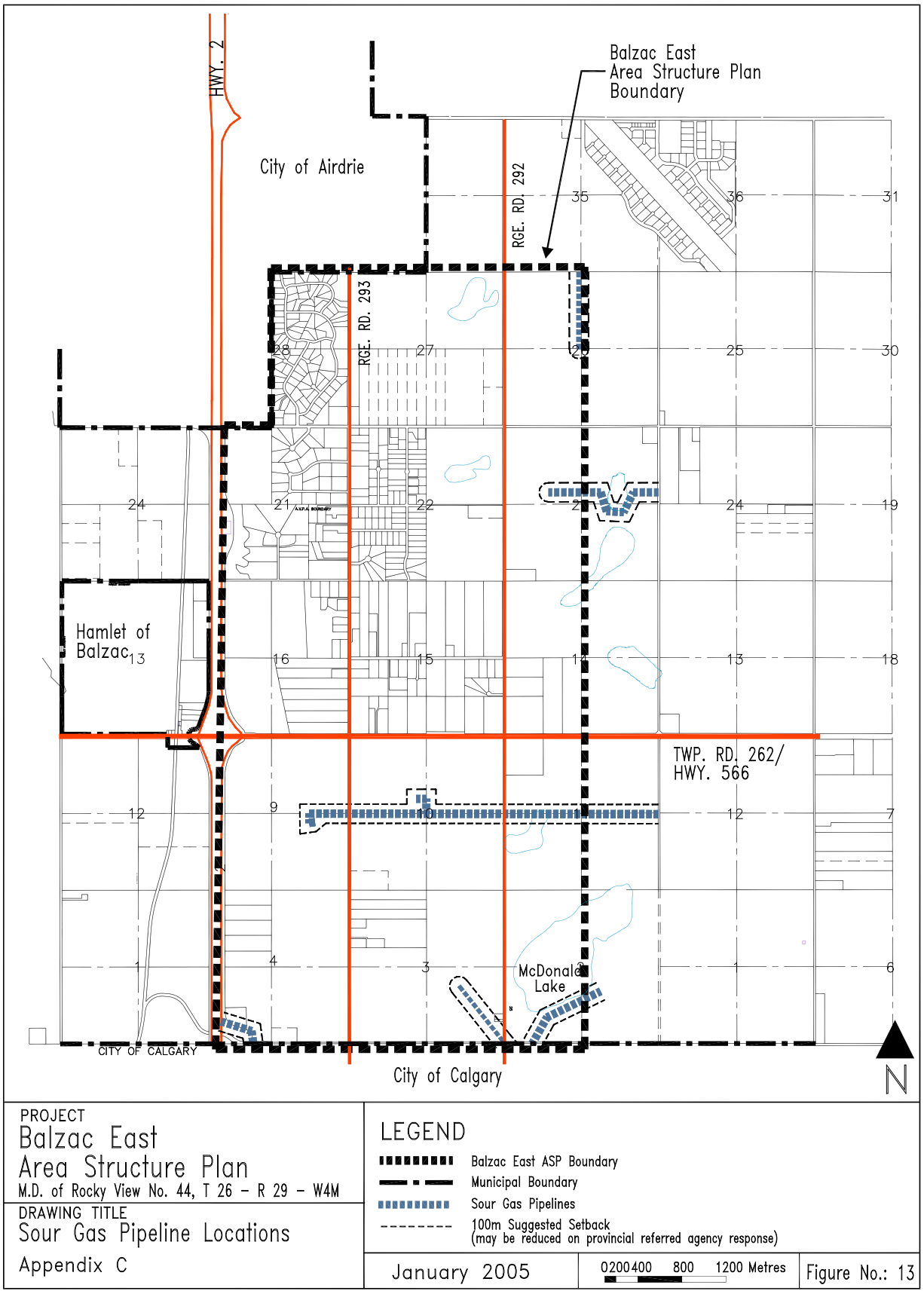
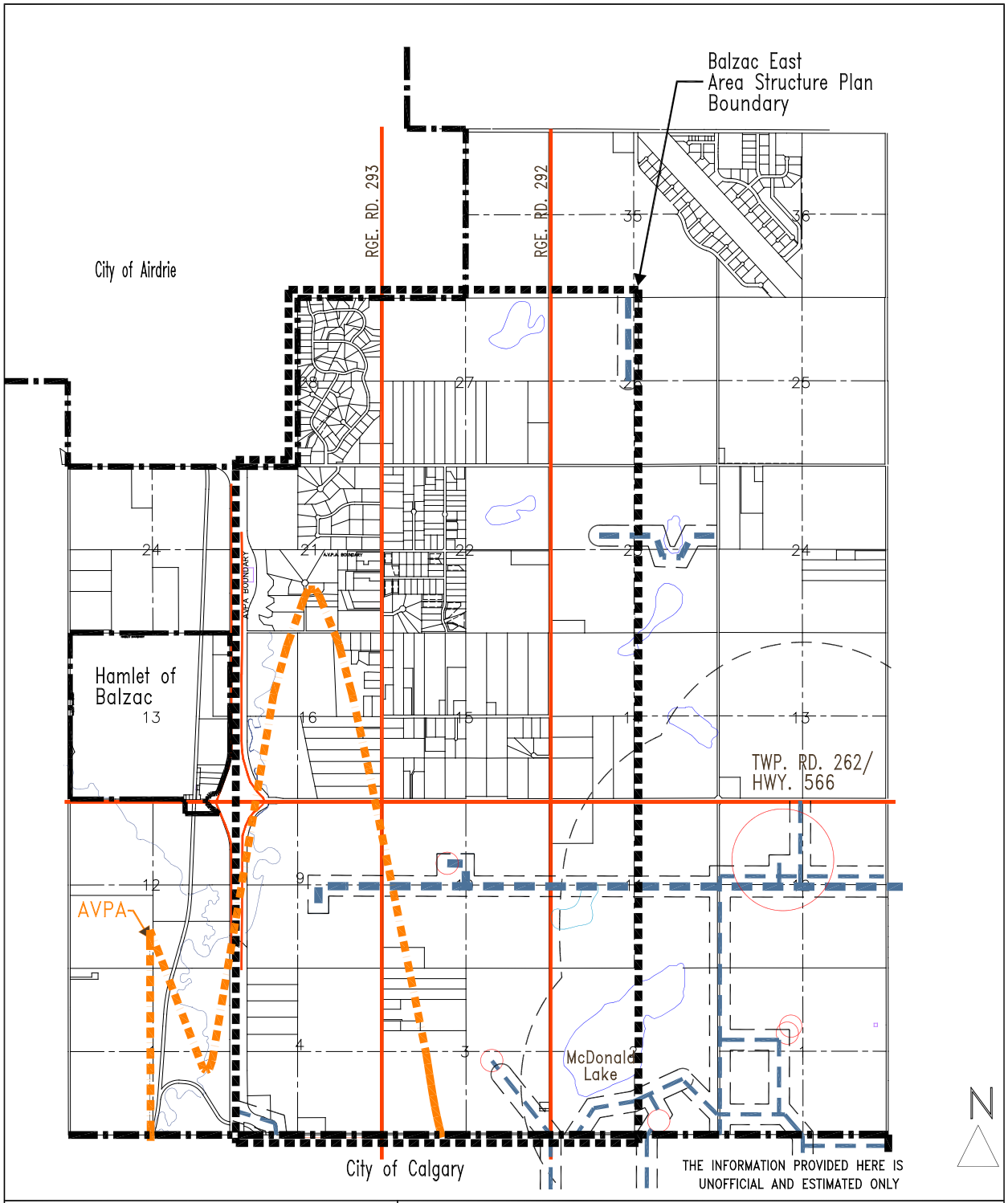


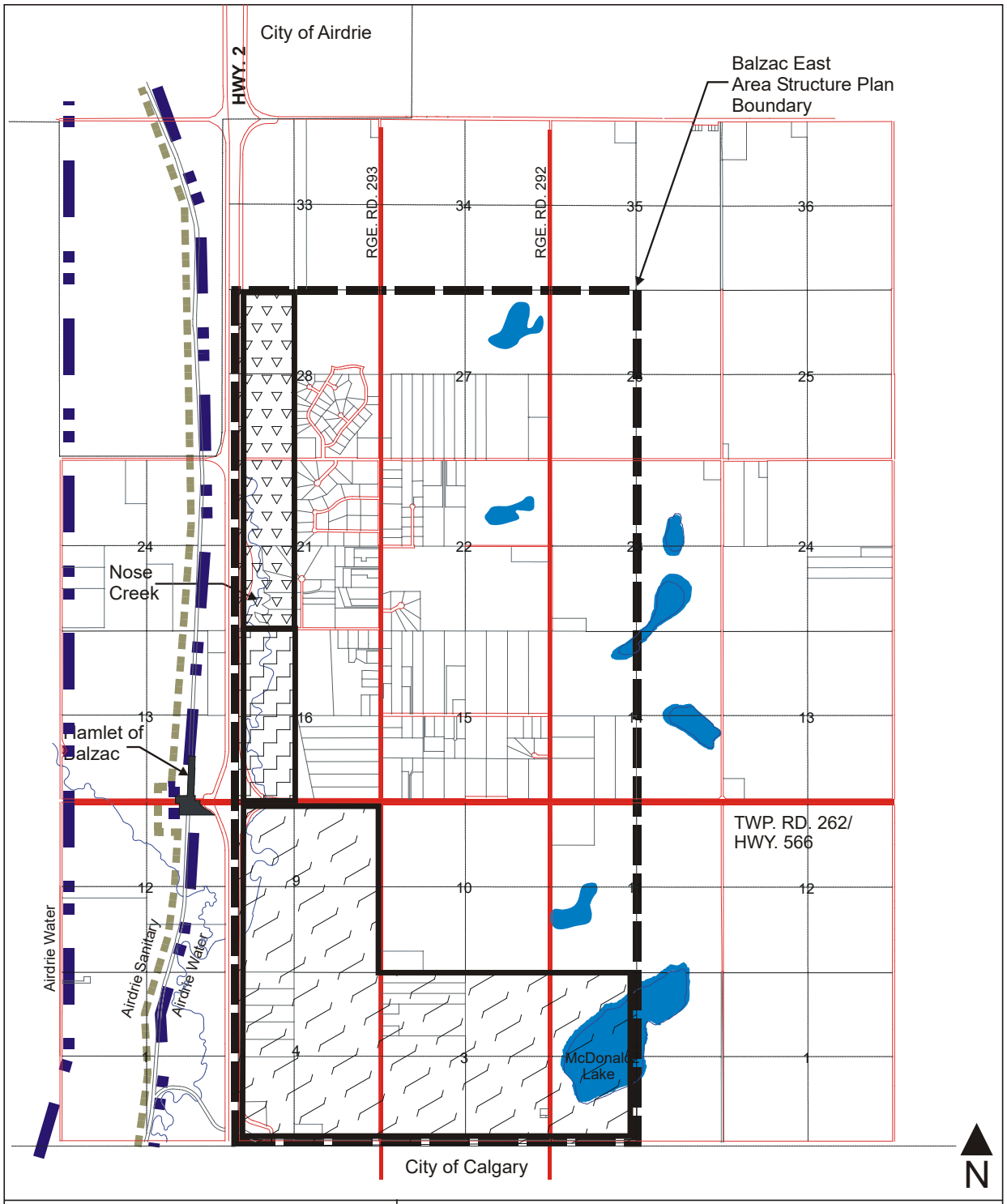
Figure 14: Constraints to Residential Development



APPENDIX D: INTERMUNICIPAL DEVELOPMENT PLAN AREAS

CITY OF CALGARY / M.D. OF ROCKY VIEW
AND
CITY OF AIRDRIE / M.D. OF ROCKY VIEW

Figure 15: Intermunicipal Planning Areas



PROJECT

Balzac East Area Structure Plan

M.D. of Rocky View No. 44, T 26 - R 29 - W4M

DRAWING TITLE

Intermunicipal/Joint Planning Areas

LEGEND

- Balzac East ASP Boundary
- Municipal Boundary
- Airdrie/Rocky View IDP Study Area
- M.D. of Rocky View Development Policy (Area A)
- Area B - Notification Zones (Beyond Area A)
- Airdrie/Calgary Water Trunks
- Airdrie Sanitary Trunk

Date: February 2000

0 200 400 800 1200 Metres

Appendix D