

BYLAW NO. 99/ 023

**BEING A BYLAW OF THE REGIONAL MUNICIPALITY OF WOOD BUFFALO TO ADOPT AN AREA STRUCTURE PLAN FOR THE REGIONAL MUNICIPALITY OF WOOD BUFFALO - FORT MCMURRAY URBAN SERVICE AREA.**

**WHEREAS** Section 633 of the Municipal Government Act, S.A., 1994, Chapter M-26.1 and amendments thereto authorizes Council to enact a bylaw adopting an Area Structure Plan.

**NOW THEREFORE**, the Municipal Council of the Regional Municipality of Wood Buffalo, in the Province of Alberta, in open meeting, hereby enacts as follows:

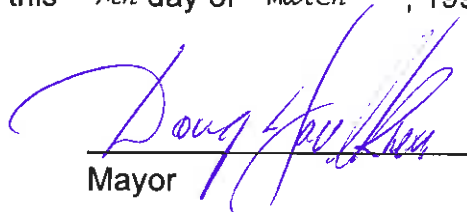
1. That a plan known as the **Wood Buffalo Estates West Area Structure Plan** is hereby adopted. This Plan shall comprise the attached Schedule "A" (subject area map) and Schedule "B" (Wood Buffalo Estates West Area Structure Plan).
2. That this Bylaw shall be passed and come into effect when it receives third reading and is signed by the Mayor and Regional Clerk.

READ a first time in Council this *23rd* day of *February*, 1999.


READ a second time in Council this *9th* day of *March*, 1999.

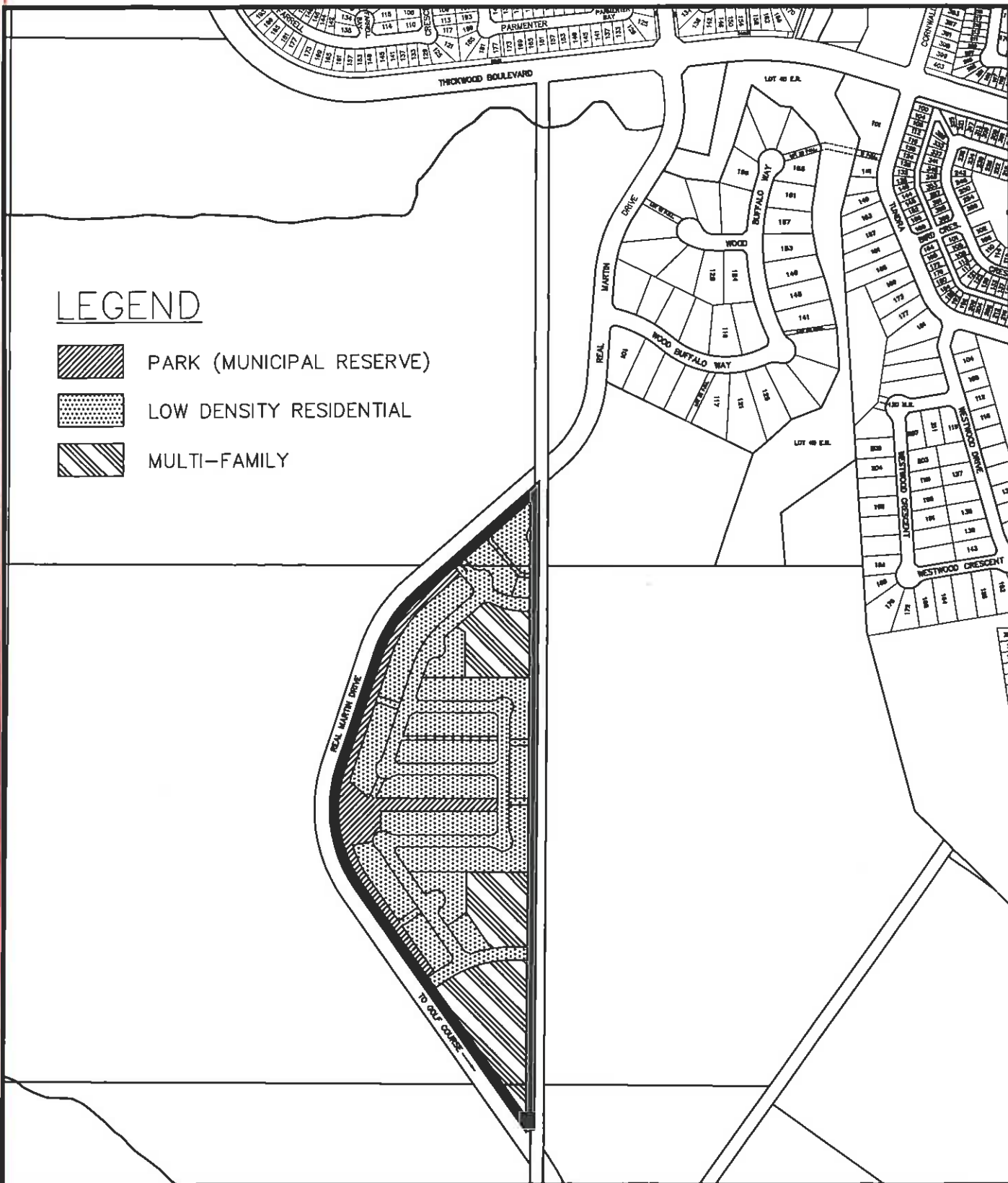
READ a third time in Council and passed this *9th* day of *March*, 1999.

CERTIFIED A TRUE COPY




  
\_\_\_\_\_  
Mayor

  
\_\_\_\_\_  
Regional Clerk

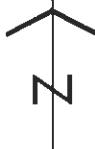
  
\_\_\_\_\_  
Regional Clerk



LEGEND

-  PARK (MUNICIPAL RESERVE)
-  LOW DENSITY RESIDENTIAL
-  MULTI-FAMILY

ADOPTION OF AREA STRUCTURE PLAN  
WOOD BUFFALO ESTATES – WEST  
(Part of NE 1/4 Sec. 14, SE 1/4 Sec. 14  
and SE 1/4 23 TWP 89 RGE 10 W4M)



**776274 Alberta Ltd.**

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**Wood Buffalo Estates West  
Area Structure Plan**

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**IBI**  
GROUP

**January 1999**

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## List of Exhibits

- 1. Location Plan**
- 2. Existing Site Features**
- 3. Land Ownership**
- 4. Development Concept**
- 5. Pedestrian Linkages**
- 6. Transportation Network**
- 7. Water Network**
- 8. Sanitary Sewer**
- 9. Storm Sewer**
- 10. Development Staging**

## Appendix "A" - Land Use Statistics

# Wood Buffalo Estates West Area Structure Plan

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## 1.0 Introduction

This document describes the Area Structure Plan for the Wood Buffalo Estates - West Lands.

The purpose of this document is to describe in detail the policies and guidelines for the development of these lands.

The lands under consideration in this Area Structure Plan application are intended for residential land uses, with an emphasis on providing affordable housing opportunities that currently do not exist in the community.

The plan has been prepared by IBI Group Architects, Engineers, Planners on behalf of 776274 Alberta Ltd.

## 2.0 Development Context

### 2.1 *Plan Area*

This site is located within a portion of NE¼ Sec. 14, SE¼ Sect. 14, and SE¼ Sect. 23, situated within Township 89, Range 10, west of the 4<sup>th</sup> Meridian. As presented in Exhibit 1, the site is encompassed by Real Martin Drive to the west and is bounded on the east by the Wood Buffalo Estates Area, a partially developed residential area, and a Government Road Allowance which is proposed to be closed. The site comprises approximately 18.36 hectares (45.4 ac.) of land.

### 2.2 *Local Setting & Access*

This site is located in the northwest sector of the Fort McMurray Urban Service Area in an area known as Thickwood Heights.

The lands are currently accessible via Real Martin Drive (Golf Course Road) south from Thickwood Boulevard. In the future, the completed area will also be accessible from the Wood Buffalo Estates Lands to the east.

### 2.3 *Site Features & Topography*

The site is undeveloped with stands of aspen/poplar, coniferous species and marsh/muskeg areas with willows and alders. A cut line/cleared area demarcates the west edge of the site (Exhibit 2).

The topography of the plan area falls from a high of 361m on the southwest edge to approximately 356m in the northwest corner of the site. The lands generally slope toward the Conn Creek tributary area.

The Conn Creek tributary corridor, located in the Wood Buffalo Estates Lands to the east, is the most prominent environmental feature of this area of Fort McMurray.

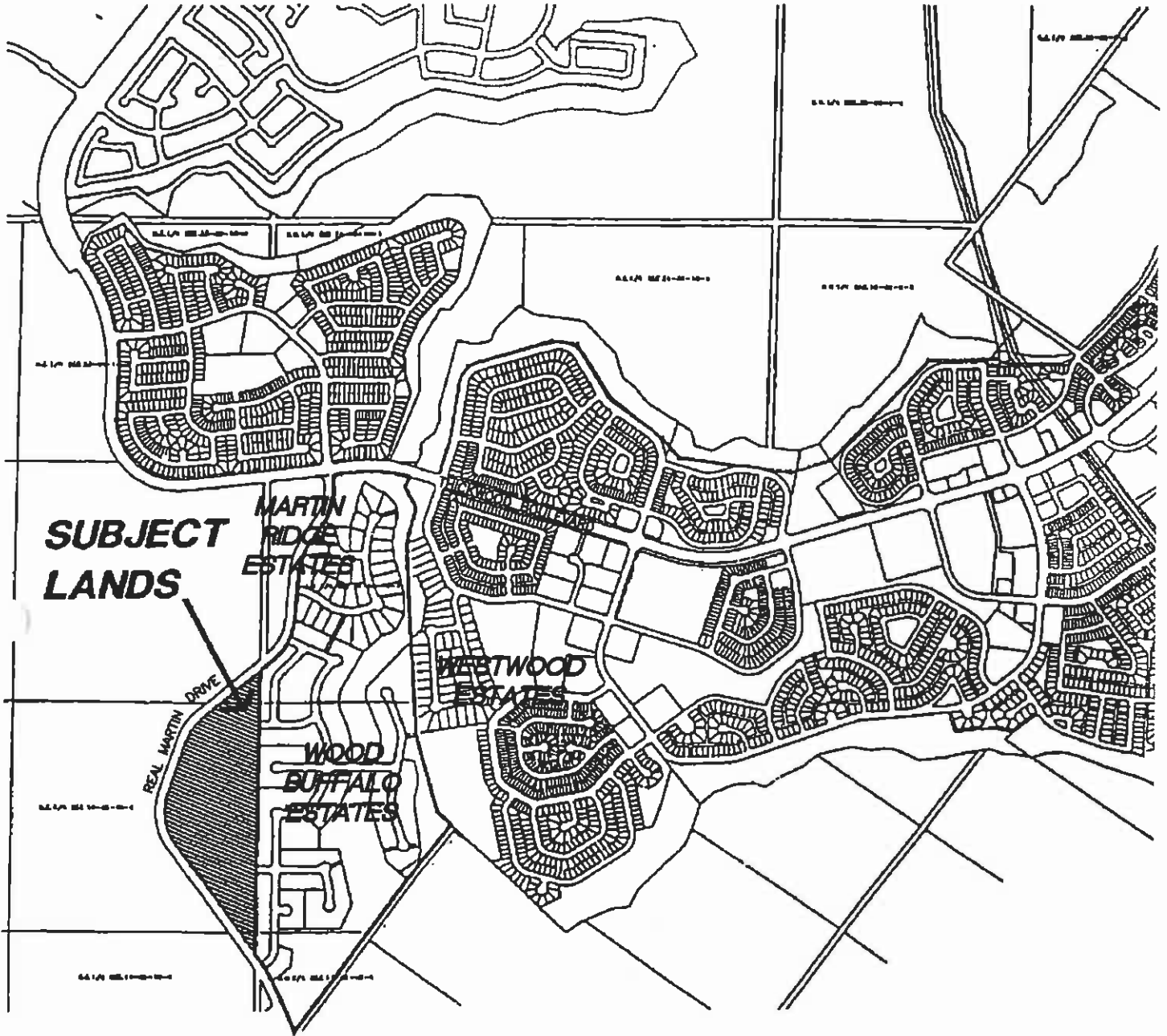
A detailed soils report, prepared by MRRT McMurray Resources Ltd. has been submitted to the Municipality under separate cover.

### 2.4 *Surrounding Land Uses*

The majority of the lands surrounding this area are undeveloped and vacant. The lands to the east (Wood Buffalo Estates) have an approved Area Structure Plan in place, with the most northerly sector currently under residential development.

### 2.5 *Land Ownership*

The lands in this plan area (18.36 hectares) are currently held by 776274 Alberta Ltd., who is currently the registered and beneficial owner (Exhibit 3).



# WOOD BUFFALO ESTATES WEST

AREA STRUCTURE PLAN

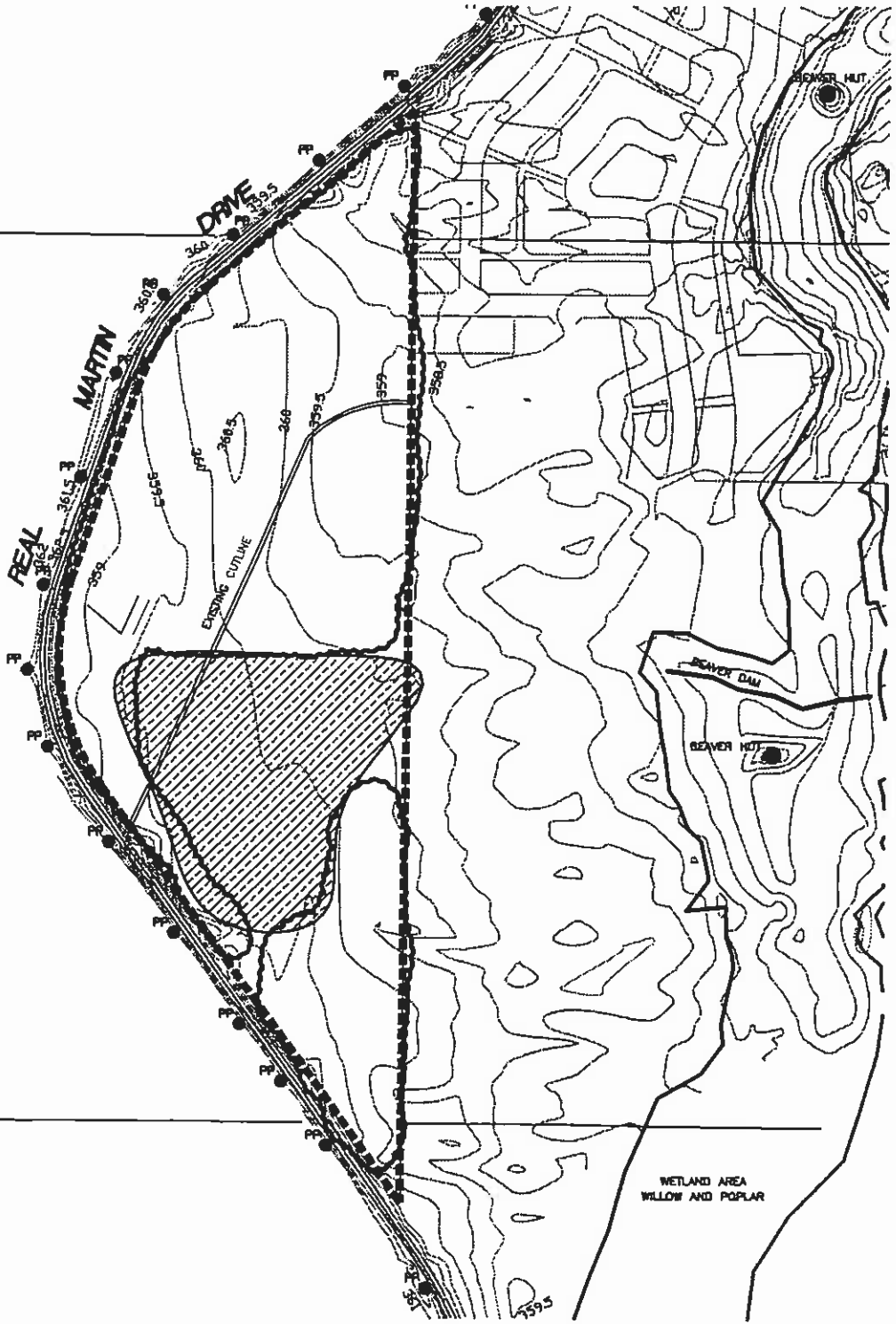
## LOCATION PLAN

EXHIBIT 1

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ENGINEERS  
PLANNERS

NOT TO SCALE - REFERENCE ONLY

JANUARY 1999

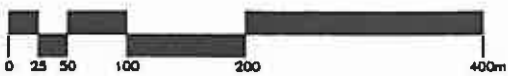


# WOOD BUFFALO ESTATES WEST

AREA STRUCTURE PLAN

## EXISTING SITE FEATURES

APPENDIX 2



### LEGEND



WILLOW / ALDER MUSKEG AREA

OVERHEAD POWERLINES

CONTOURS

(ELEVATIONS SHOWN ARE APPROXIMATE FOR REFERENCE PURPOSES ONLY)

CUTLINE

ROADWAY

ASP BOUNDARY

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S.E. 1/4 SEC. 23-89-10-4

S.W. 1/4 SEC. 24-89-10-4

N.E. 1/4 SEC. 14-89-10-4

**776274  
ALBERTA  
LTD.**

N.W. 1/4 SEC. 13-89-10-4

CONN CREEK

CORRIDOR

S.E. 1/4 SEC. 14-89-10-4

S.W. 1/4 SEC. 13-89-10-4

REAL MARTIN DRIVE

# WOOD BUFFALO ESTATES WEST

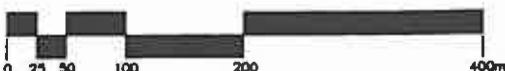
AREA STRUCTURE PLAN

## LAND OWNERSHIP

### LEGEND

----- ASP BOUNDARY

EXHIBIT 3



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### 3.0 Policy Context

This Area Structure Plan has been prepared in the context of applicable development policies and objectives governing this area. These policies are identified below:

#### 3.1 *Fort McMurray Urban Service Area Municipal Development Plan*

The Fort McMurray Urban Service Area Municipal Development Plan sets out a strategy to accommodate development of the Fort McMurray urban area. The following are strategic objectives and policies specific to development in this area.

##### **Residential Development**

*Objective - Encourage a choice of affordable and quality housing to satisfy the needs of existing and future residents of Fort McMurray.*

*Policy - To encourage a reasonable choice in terms of type, cost and location within Fort McMurray.*

*Policy - To encourage innovative land use, housing and design.*

*Objective - To promote residential development which conserves energy and is land efficient.*

*Objective - To ensure development within the community occurs with consistent standards.*

The subject lands are not currently designated in the Municipal Development Plan. These lands are proposed to be redesignated as Future Residential in the Municipal Development Plan.

#### 3.2 *Fort McMurray Land Use Bylaw*

The lands are currently designated as Direct Control (DC) in the Land Use Bylaw. These lands will be redesignated to the appropriate residential land use districts such as:

- Residential Single Detached District (R1);
- Residential Low Density District (R2);
- Residential Zero Lot District (RZL);
- Residential Low Density Multi-Family District (RM1);
- Residential Medium Density Multi-Family District (RM2).

## Wood Buffalo Estates West Area Structure Plan

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In order to allow the development of single family lots, some areas may be districted as Direct Control District with specific development guidelines oriented to this housing form. This district will be developed in consultation with the Municipality.

#### 4.0 Development Concept

##### 4.1 *Development Objectives*

The primary objective of the plan for this area is to provide a framework for the ultimate development of these lands as an attractive and efficiently designed residential community, responding to current and anticipated market conditions, and current municipal policies and guidelines.

##### 4.2 *Plan Rationale*

The intent of this Area Structure Plan is to integrate these lands with the Wood Buffalo Estates Lands to the east to maximize the efficiencies of both areas' infrastructure and facilities.

The plan will use the proposed transportation network to provide both pedestrian and vehicular linkages to the Wood Buffalo Estates development to the east.

The plan area is also proposed to be designated as Future Residential under the Municipal Development Plan, enabling the proposed Area Structure Plan and the future development of these lands.

##### 4.3 *Plan Concept*

The development concept for this Area Structure Plan is presented in Exhibit 4. Land use statistics for this plan are presented in Appendix "A".

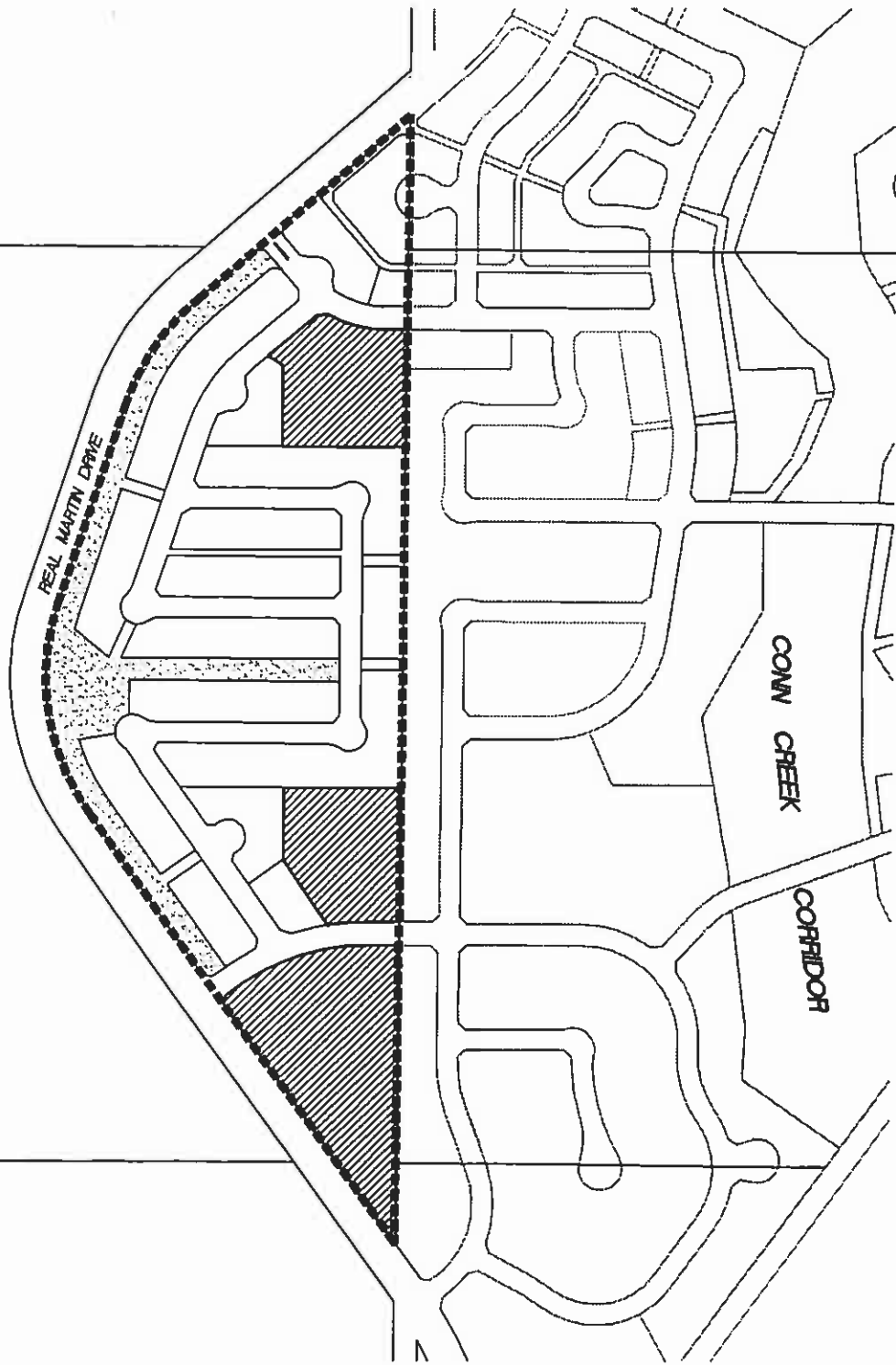
The primary use for these lands is proposed to be a combination of single family and multi-family residential. The primary market focus for this lands will be on affordable housing opportunities on smaller single family lots and multi-family sites.

The open space feature for this area is proposed to be the edges of the existing tree stand, which will form a significant physical and visual amenity.

##### 4.4 *Residential Development*

The plan allows the creation of residential enclaves, developed with their own character and image. These enclaves are defined by a combination of perimeter boundaries including Real Martin Drive, local roads, and the neighbouring Wood Buffalo Estates Area.

Single family housing forms will be developed to reflect a range of densities including a range of single family residential on a variety of lot sizes. Semi-detached residential forms will also be developed. Multi-family housing forms including row housing and walk-up apartments, are proposed in locations where good transportation access is available.







# WOOD BUFFALO ESTATES WEST

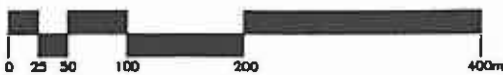
AREA STRUCTURE PLAN

**DEVELOPMENT  
CONCEPT**

EXHIBIT 4

## LEGEND

-  LOW DENSITY RESIDENTIAL
-  MULTI - FAMILY RESIDENTIAL
-  PARK (MUNICIPAL RESERVE)
-  ASP BOUNDARY



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### **Low Density Residential Development**

Low density residential development will be located with access through local roads to provide more quiet and private residential environments. This residential form will total some 8.25 hectares, generating some 190 dwelling units.

### **Multi-Family Residential Development**

Multi-family housing is proposed in three locations within the plan area. A total of 4.32 hectares of land are designated for low density multi-family and medium density multi-family residential development. A total of approximately 194 dwelling units are anticipated. These sites are oriented to both the local road system and Real Martin Drive.

It is anticipated that multi-family housing opportunities exist for specialized “niche” multi-family developments oriented to seniors or “empty nesters”.

## **4.5 Schools, Parks, Open Space & Pedestrian Circulation**

Student generation figures for the proposed Area Structure Plan are presented in Appendix “A”. Consistent with the neighbouring Wood Buffalo Estates Area Structure Plan, approximately 30% (317 persons) of the proposed population is anticipated to be of school age. Combining the student population for this plan area with that of the adjacent Wood Buffalo Estates ASP results in a total student population of some 585 students. This total student population may result in the need for an additional school site in the area or accommodation in existing schools which have capacity. Prior to the approval of the final stages of development for this area, the school needs for this area are to be determined and finalized by the Municipality.

The Conn Creek tributary corridor forms the major open space link for the neighbouring Wood Buffalo Estates Lands. Due to its location, the Conn Creek Corridor influences the entire open space system for the northeast sector of Fort McMurray and is the major open space amenity in the area.

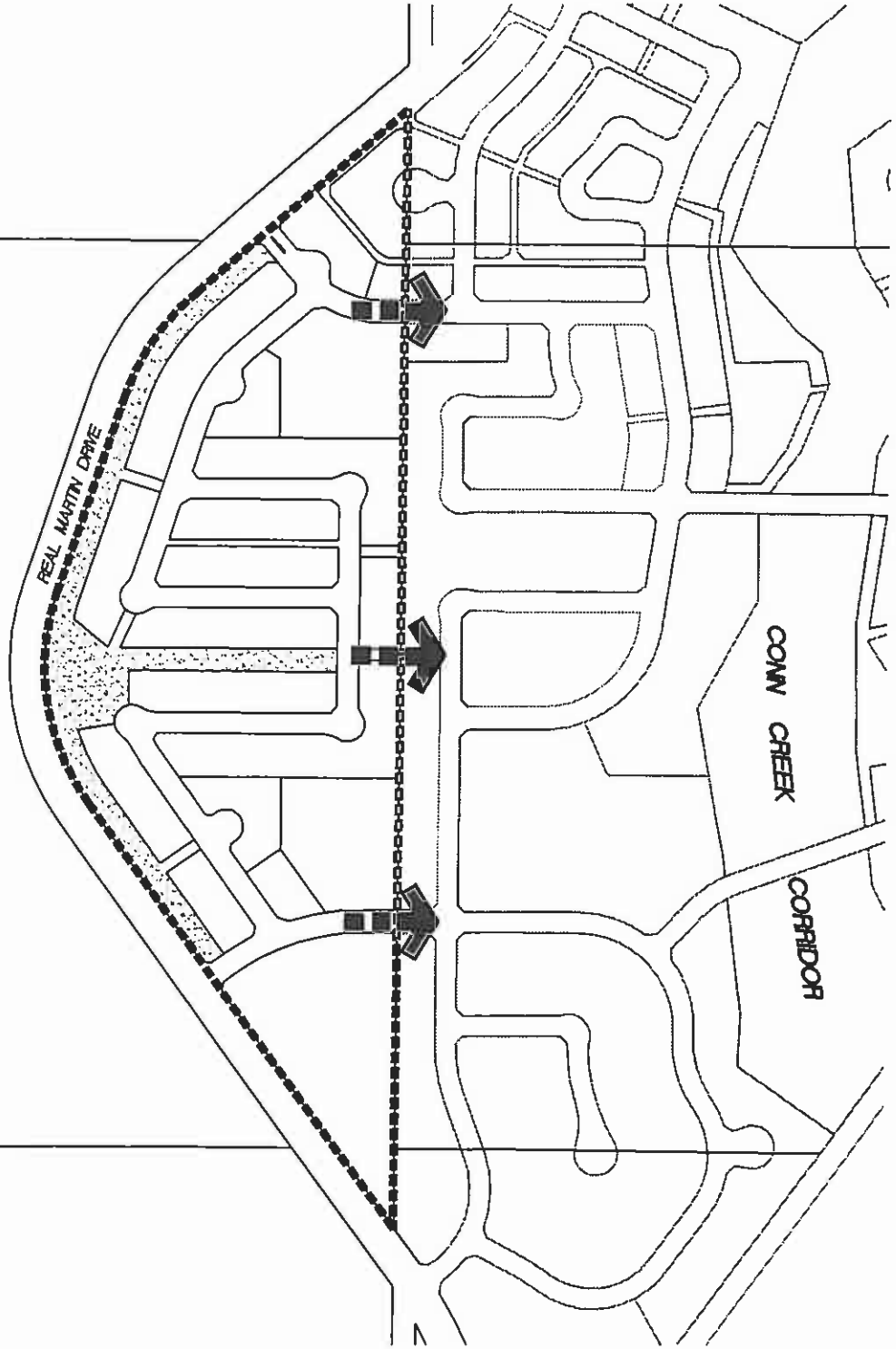
For the Wood Buffalo West Lands, the west edge of the existing tree stand is proposed to be preserved to form the natural park and visual feature for this area. A “green corridor” is also proposed through the central portion of this development, providing an opportunity for pedestrian access across the site. A centrally located playground site is proposed within this area.

## Wood Buffalo Estates West Area Structure Plan

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The Municipal Reserve component of these lands total 2.16 ha., which is 11.8% of the plan area.

Linkages via public utility lots and/or the road network are proposed to provide pedestrian access to the neighbouring Wood Buffalo Estates Lands (Exhibit 5).



# WOOD BUFFALO ESTATES WEST

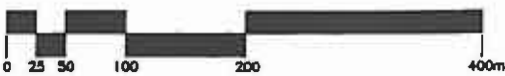
AREA STRUCTURE PLAN

## PEDESTRIAN LINKAGES

EXHIBIT 5

### LEGEND

-  MAJOR PEDESTRIAN LINKAGES
-  ASP BOUNDARY
-  PARK (MUNICIPAL RESERVE)



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## 5.0 Municipal Engineering Services

The following is a description of the servicing systems for this Area Structure Plan.

### Transportation Network

This area is bounded by Real Martin Drive to the west, which is currently developed to a 2-lane rural cross-section. The road network is comprised of two access points from Real Martin Drive, one at the most northerly area and one at the south end of the development (Exhibit 6). These access points provide linkages to the neighbouring Wood Buffalo Estates Lands, and will be developed as development progresses and traffic increases. These roads are proposed to be developed to current Municipal Standards.

### Water Supply & Distribution

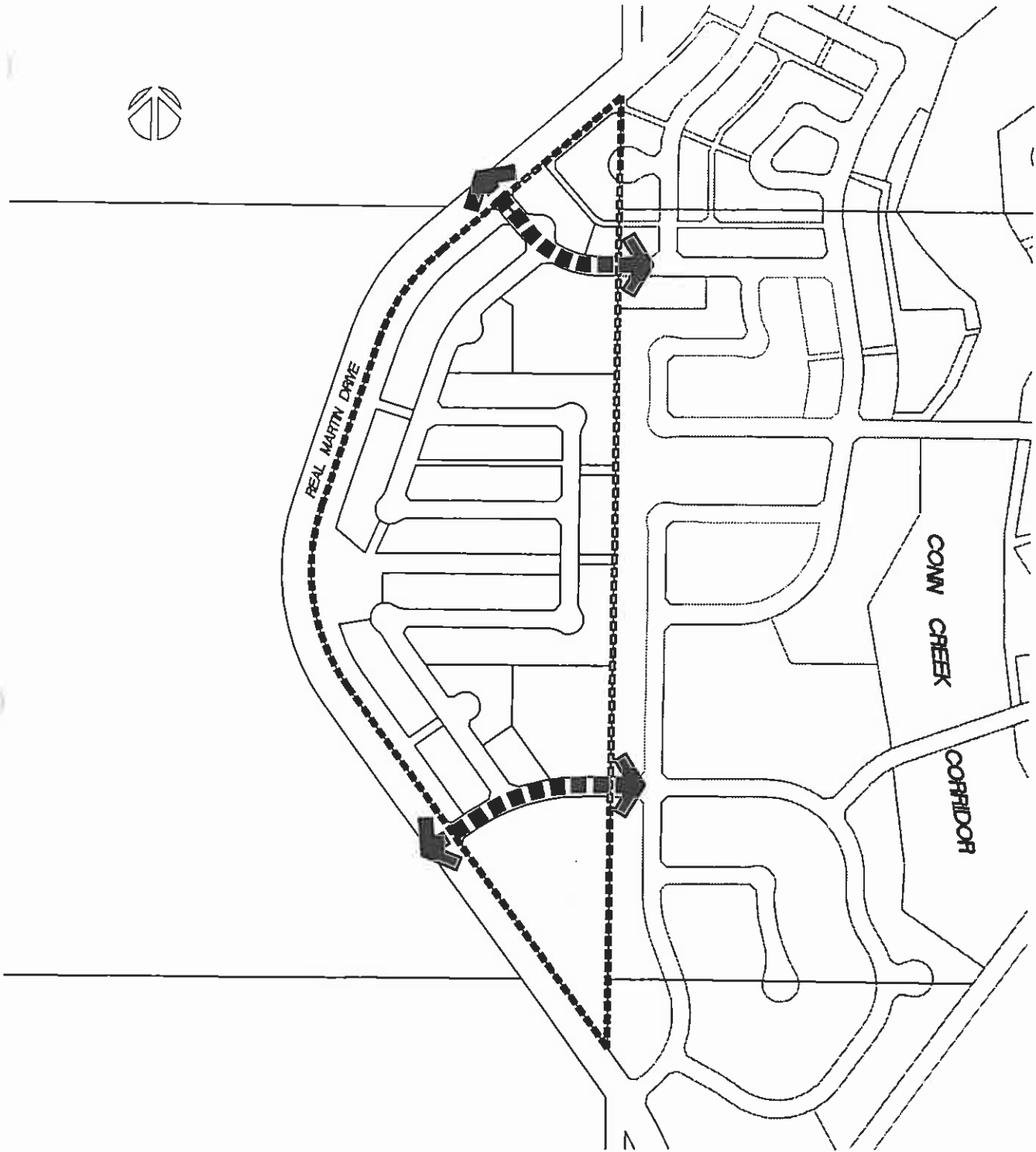
The proposed water distribution network will connect to the Wood Buffalo Estates water distribution network (Exhibit 7). The existing approved ASP for the balance of the property comprising Wood Buffalo Estates identifies looping to Wolverine Drive and Ermine Crescent in two locations.

The Regional Municipality is having a study performed to identify water supply problems related to the proposed Wood Buffalo Estates developments and existing neighbourhood developments. The study will identify solutions and alternatives for ensuring that adequate fire flows are maintained.

A detailed analysis for the proposed development will be required at the design stage to ensure that adequate flows and pressures are maintained within the subdivision boundaries.

### Sanitary Services

Sanitary services for the proposed development will connect to sanitary services provided in Wood Buffalo Estates development (Exhibit 8). Over-sizing requirements for the lift station, force main and sanitary trunk sewers have been discussed with the Regional Municipality and the developer of Wood Buffalo Estates and have been included in the detailed design for Stage II of Wood Buffalo Estates. Appropriate cost sharing and over-sizing agreements will be required at the design and development agreement stages of the developments.



# WOOD BUFFALO ESTATES WEST

AREA STRUCTURE PLAN

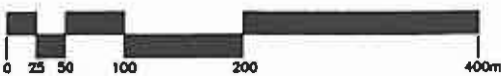
## TRANSPORTATION NETWORK

EXHIBIT 6

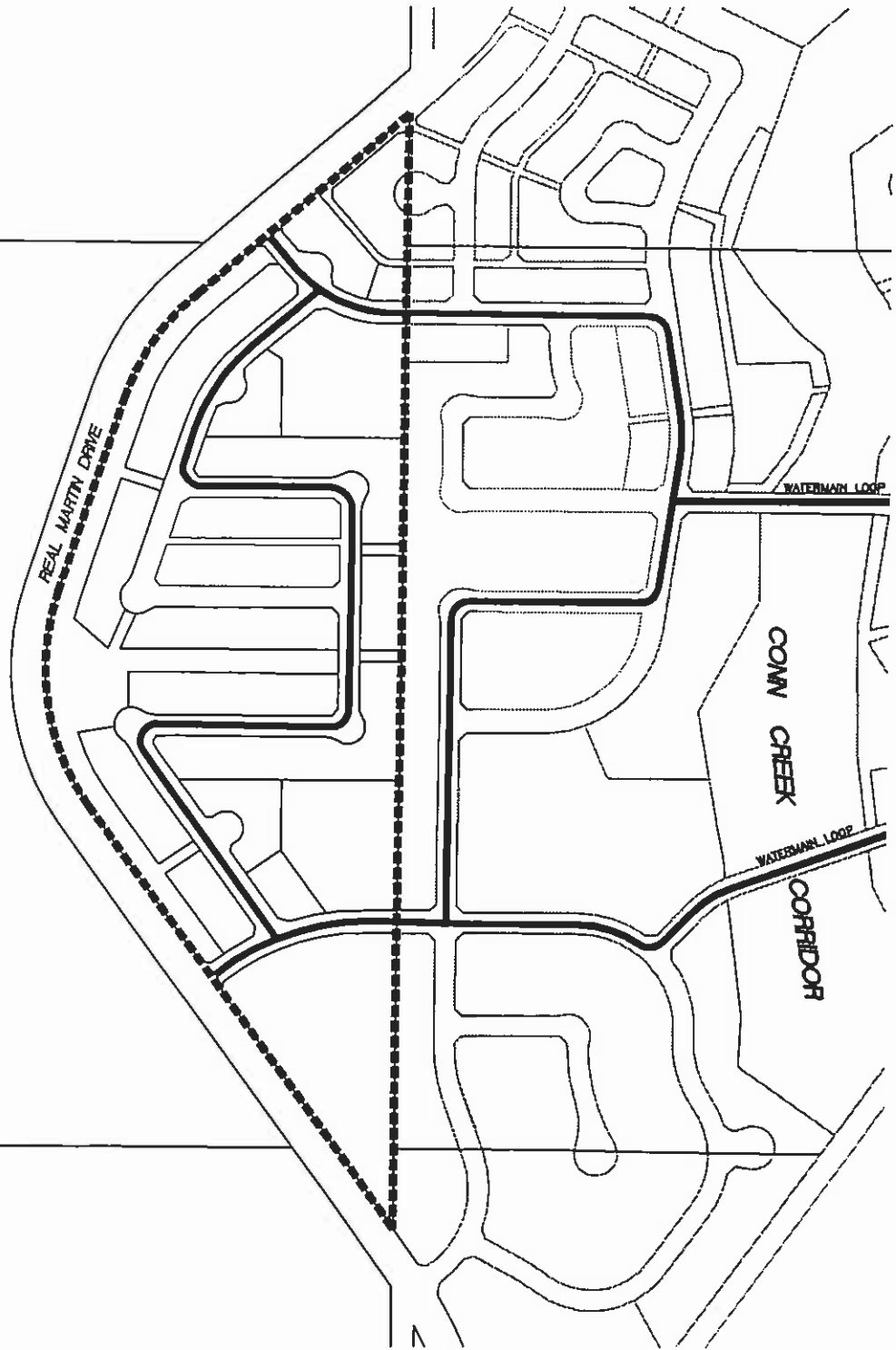
### LEGEND

- ■ ■ ■ → MAJOR CIRCULATION
- ..... ASP BOUNDARY

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# WOOD BUFFALO ESTATES WEST

AREA STRUCTURE PLAN

## WATER NETWORK

### LEGEND



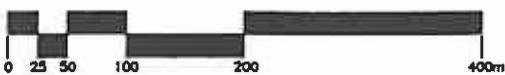
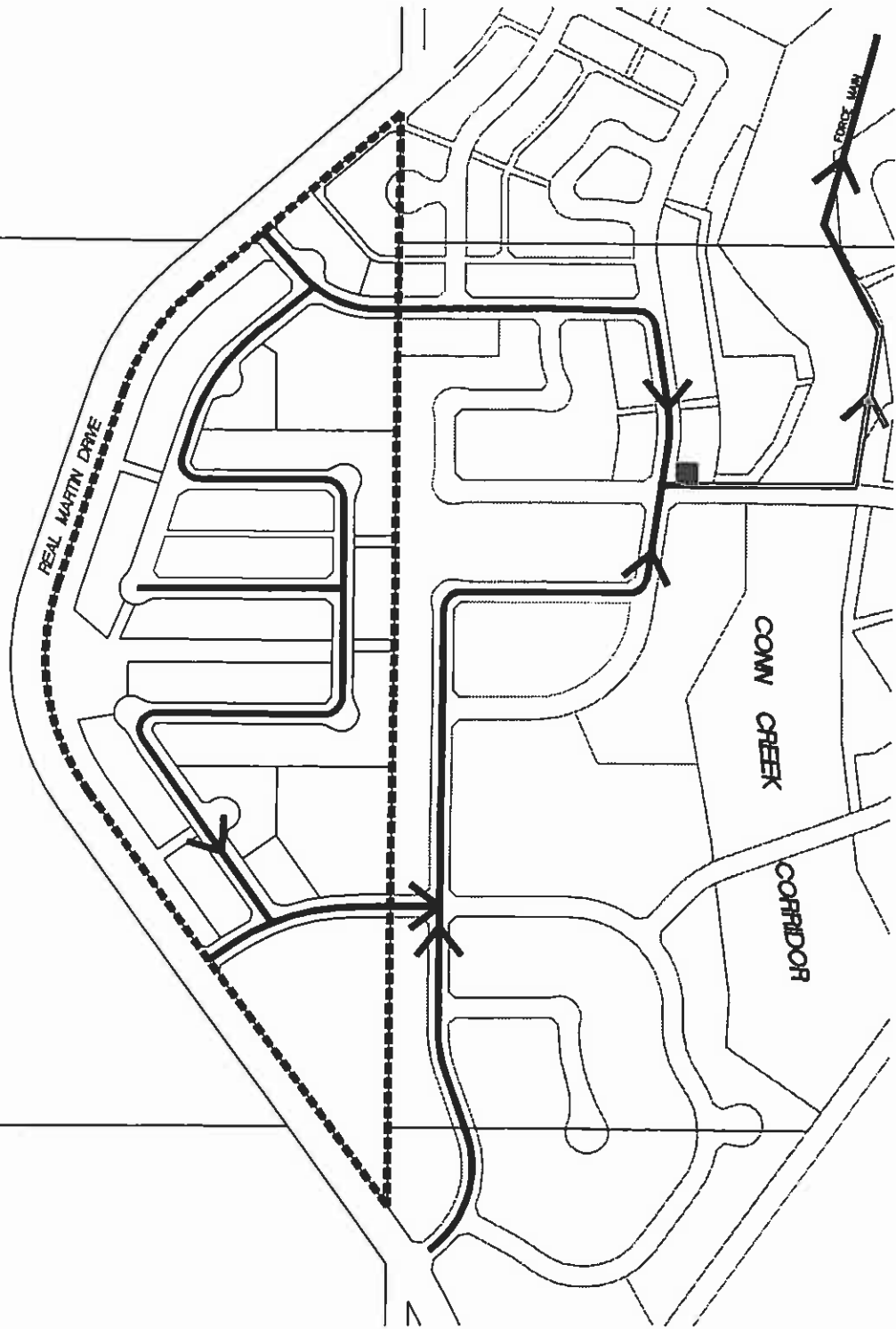
-  PROPOSED WATERMAIN
-  ASP BOUNDARY

EXHIBIT 7



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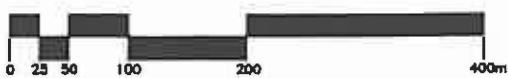


# WOOD BUFFALO ESTATES WEST




AREA STRUCTURE PLAN

## SANITARY SEWER

EXHIBIT 8



### LEGEND

-  PROPOSED LIFT STATION
-  PROPOSED SANITARY SEWER  
FLOW DIRECTION
-  ASP BOUNDARY

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## **Wood Buffalo Estates West Area Structure Plan**

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The Regional Municipality is currently reviewing the capacities available in the sanitary truck main on Tundra Drive. The allowable capacity determined from this review will determine the population densities for each new development connecting to the system.

### **Storm Services**

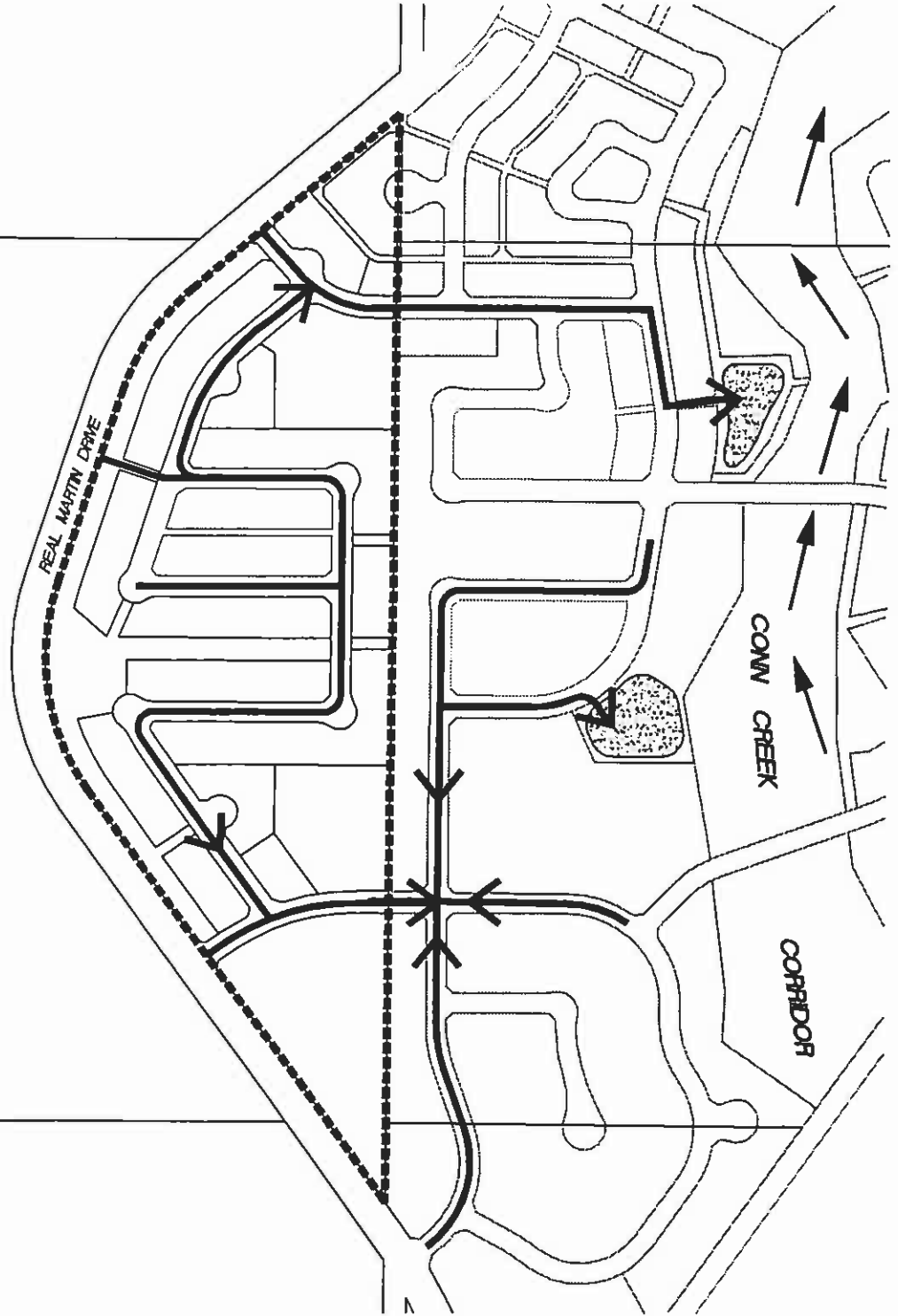
Storm sewer services for Wood Buffalo Estates West will connect to the storm sewer system for Wood Buffalo Estates (Exhibit 9). Over-sizing of storm sewer mains in the Wood Buffalo Estates developments may be required.

The storm sewer collection system and storm water management system for Wood Buffalo Estates Stage II has been designed to accommodate approximately 9.4 ha. of Wood Buffalo Estates West plus contributions from the Real Martin Drive corridor. Future stages of Wood Buffalo Estates will require additional storm water management systems which will require sizing to accommodate the balance of Wood Buffalo Estates West.

Storm water calculations for Wood Buffalo Estates Stage II have included contributing areas along Real Martin Drive. The balance of Wood Buffalo Estates West and contributing areas along Real Martin Drive will have to be included in future storm water management designs. Storm sewer elevations have been set so that the minimum cover of 2.5 metres will be attained at the extremities of Wood Buffalo Estates West. This will accommodate either a rural or urban cross-section on Real Martin Drive. Additional PUL's may be required to provide storm sewer access to Real Martin Drive.

### **Shallow Utilities**

Shallow utilities will provide service by extension of their services for Wood Buffalo Estates.

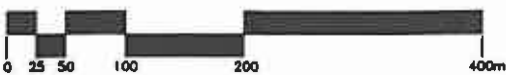


# WOOD BUFFALO ESTATES WEST





AREA STRUCTURE PLAN

## STORM SEWER

EXHIBIT 9



### LEGEND

-  PROPOSED STORM POND
-  PROPOSED STORM SEWER
-  ASP BOUNDARY
-  FLOW DIRECTION

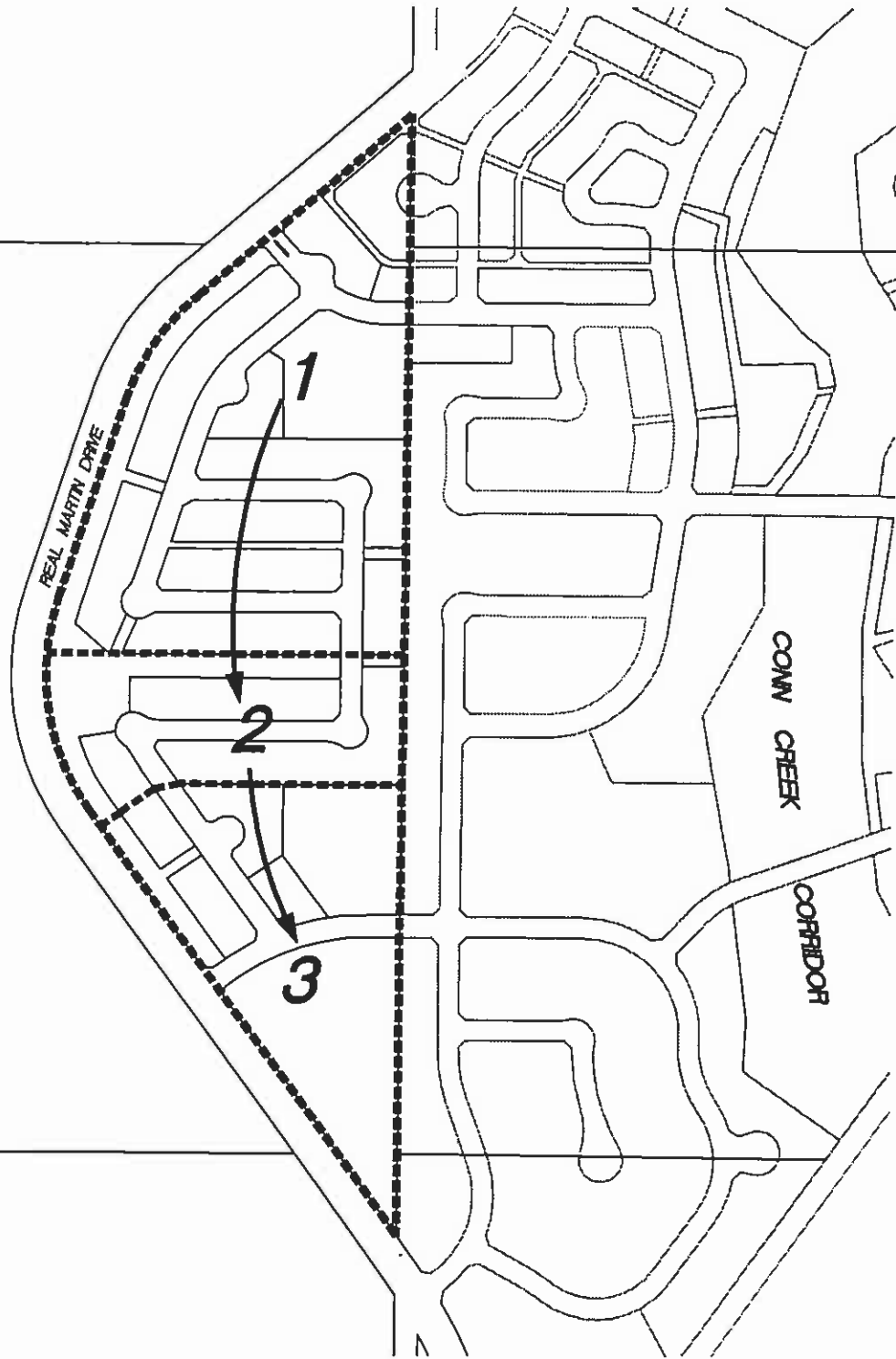
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## 6.0 Development Staging

Based on the logical location of municipal services, development will progress in a southerly direction as shown on Exhibit 10. The limit of Stage 1 is determined by the area accommodated by the Wood Buffalo Estates Stage II stormwater management system. The limit of Stage 2 is determined by the maximum sanitary capacity identified by the Municipality (653 persons).

The timing of subsequent stages of development on the remaining lands will depend on market conditions in Fort McMurray and servicing capacity expansion opportunities.



# WOOD BUFFALO ESTATES WEST

AREA STRUCTURE PLAN

**DEVELOPMENT  
TAGGING**

EXHIBIT 10

### LEGEND

- DIRECTION OF DEVELOPMENT
- ASP BOUNDARY

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**Appendix "A"**  
**Land Use Statistics**

# Wood Buffalo Estates West - Area Structure Plan

## Land Use Statistics

Jan.21.99 Revised

### Stage 1

Land Use	Area (ha)	%	Units	Population
Single Family Residential	5.34	56.8	123	369
Multi-Family Residential	1.12	12	50	125
Roads/Public Utility Lots	2.1	22.3	n/a	n/a
Municipal Reserve	0.84	8.9	n/a	n/a
<b>Stage 1 Gross Area Total</b>	<b>9.4</b>	<b>100</b>	<b>173</b>	<b>494</b>

3 persons/unit  
2.5 persons/unit

### Stage 2\*

Land Use	Area (ha)	%	Units	Population
Single Family Residential	1.86	53.4	43	129
Multi-Family Residential	0	0	0	0
Roads/Public Utility Lots	0.65	18.7	n/a	n/a
Municipal Reserve	0.97	27.9	n/a	n/a
<b>Stage 2 Gross Area Total</b>	<b>3.48</b>	<b>100</b>	<b>43</b>	<b>129</b>

3 persons/unit  
2.5 persons/unit

\*Stage 2 limited by Sanitary Capacity of 653 persons

**623**

Population total for  
Stages 1 and 2

### Stage 3

Land Use	Area (ha)	%	Units	Population
Single Family Residential	1.05	20.8	24	72
Multi-Family Residential	3.2	58.4	144	360
Roads/Public Utility Lots	0.88	16.1	n/a	n/a
Municipal Reserve	0.35	4.7	n/a	n/a
<b>Stage 3 Gross Area Total</b>	<b>5.48</b>	<b>100</b>	<b>168</b>	<b>432</b>

3 persons/unit  
2.5 persons/unit

### Cumulative Statistics

Land Use	Area (ha)	%	Units	Population
Single Family Residential	8.25	44.9	190	570
Multi Family Residential	4.32	23.5	194	485
Roads/Public Utility Lots	3.63	19.8	n/a	n/a
Municipal Reserve	2.16	11.8	n/a	n/a
<b>Gross Area Total</b>	<b>18.36</b>	<b>100</b>	<b>384</b>	<b>1055</b>

3 persons/unit  
2.5 persons/unit

### Student Generation

1055 persons x 30%= 317 Students