

THE CITY OF SPRUCE GROVE

BYLAW C-979-16

WEST AREA STRUCTURE PLAN TECHNICAL AMENDMENT

WHEREAS, pursuant to the Municipal Government Act, R.S.A. 2000, c. M-26, including amendments, a municipality may adopt and amend an area structure plan;

AND WHEREAS, the City of Spruce Grove wishes to amend Bylaw C-818-12, the West Area Structure Plan Bylaw;

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

1. Bylaw C-818-12, the West Area Structure Plan, be amended as outlined in Schedule 1 which is attached to and forms part of this Bylaw.

This bylaw shall come into force and effect when it receives third reading and is duly signed.

First Reading Carried 14 November 2016

Second Reading Carried 14 November 2016

Third Reading Carried 14 November 2016

Date Signed 16 November 2016

Mayor

City Clerk

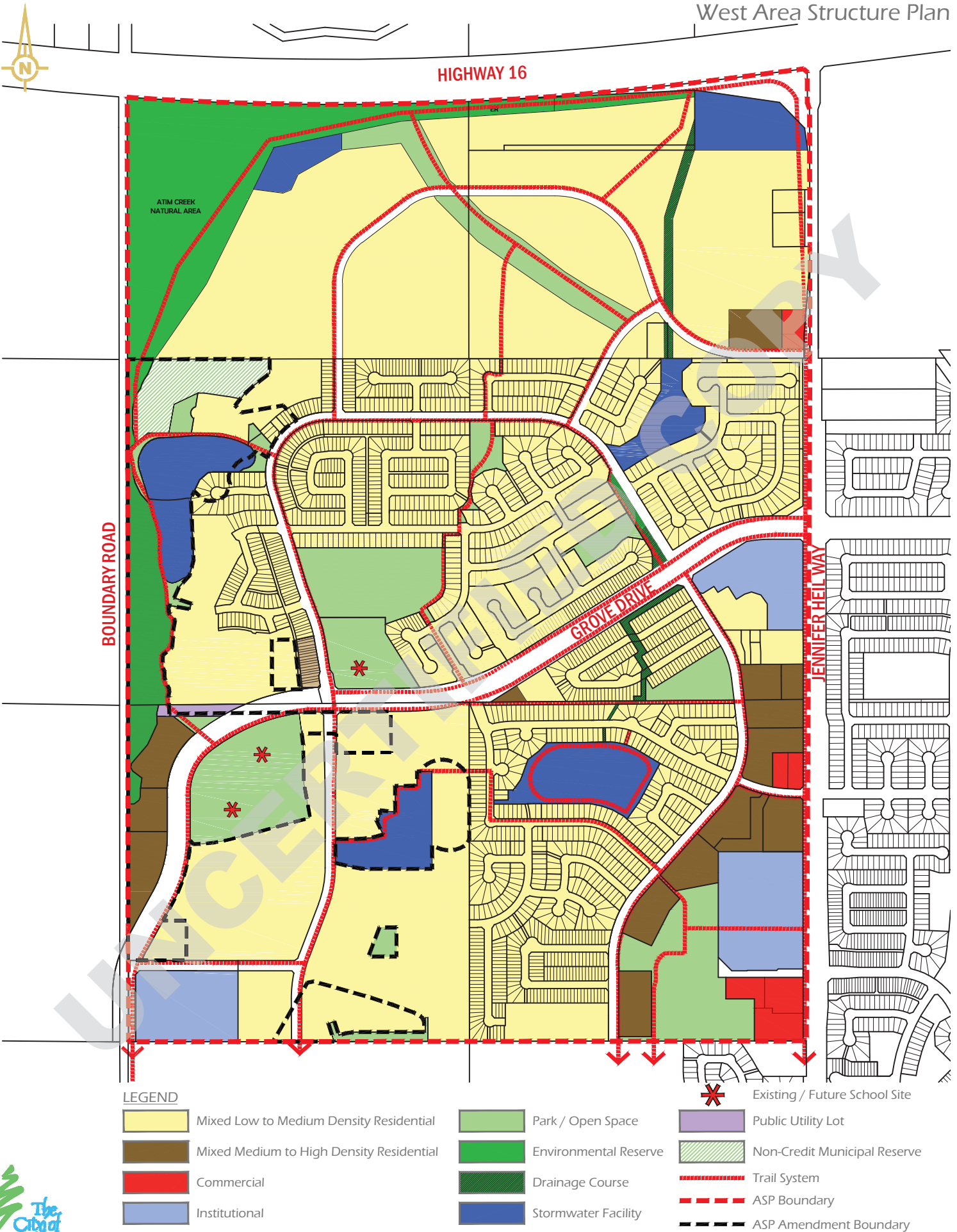


Figure 4 - Development Concept

THE CITY OF SPRUCE GROVE

BYLAW C-944-16

WEST AREA STRUCTURE PLAN AMENDMENT

WHEREAS, pursuant to the Municipal Government Act, R.S.A. 2000, c. M-26, including amendments, a municipality may adopt and amend an area structure plan;

AND WHEREAS, the City of Spruce Grove wishes to amend Bylaw C-818-12, the West Area Structure Plan Bylaw, as amended;

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

1. Bylaw C-818-12, the West Area Structure Plan, be amended as outlined in Schedule 1 which is attached to and forms part of this bylaw.

This bylaw shall come into force and effect when it receives third reading and is duly signed.

First Reading Carried 8 February 2016

Public Hearing Held 22 February 2016

Second Reading Carried 22 February 2016

Third Reading Carried 22 February 2016

Date Signed 23 February 2016

Mayor

City Clerk

WEST

AREA STRUCTURE PLAN

UNCERTIFIED COPY



Prepared for: Harvest Ridge Joint Venture Ltd.
Melcor Developments Ltd.
Presented by: Select Engineering Consultants Ltd.
Date: January 27, 2016
RPT-2-153-13005-8.5-WestASPAmdment-160121.docx

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1.0 Introduction

1.1 Background

This West Area Structure Plan (ASP) amendment was prepared on behalf of Melcor Developments Ltd. and Harvest Ridge Joint Venture Ltd.

The West ASP was originally adopted on May 28, 2012 by Bylaw C-818-12, and subsequently amended by Bylaw C-863-13 on May 26, 2014.

The lands within West ASP have been actively developed over the last 10 years, with development generally progressing westward from Jennifer Heil Way, and both north and south from Grove Drive. The lands within the plan area are approximately 50% developed for primarily residential usage.

1.2 Purpose

The proposed amendment to the West ASP is primarily to relocate the future school/park site to the new identified location. The imminent need of the school has required some re-planning in the area to bring the school site closer to the available service connections. To facilitate the new school site, and to avoid Atim Creek, the alignment of future Grove Drive has also been shifted to the south.

In addition to the school relocation, several small "housekeeping" changes to correct inconsistencies between what was actually built for the developed lands and what is identified in the West ASP are being made. These changes include the relocation of a stormwater management facility, reconfiguration of open space and identification of St. Peter the Apostle Catholic High School as a school site.

1.3 Location and Context

The West Area Structure Plan applies to the north half of Section 5-53-27-W4th Meridian and all that portion of Section 8-53-27-W4th Meridian located south of the Highway 16 right of way. The plan area is bounded by:

- Highway 16 to the north;
- Jennifer Heil Way to the east;
- A quarter section line immediately south;
- Boundary Road and the Town of Stony Plain and Parkland County to the west.

The south half of Section 5 is subject to the West Area Structure Plan.

2.0 Land Use

2.1 Rationale for Amendment

This amendment to the West Area Structure Plan is to address revisions to the stormwater management facilities, park/ open space, environmental reserve, mixed medium to high density residential, and arterial road alignments. The specific land use changes proposed are explained in the following sections.

2.2 Residential

The mixed medium to high density residential (MMHDR) use has been adjusted to reflect changes in the vicinity of the TransAlta Leisure Centre. One additional MMHDR site was added west of the new Grove Drive road alignment. In the northwest plan area adjacent to St. Peter the Apostle Catholic High School the MMHDR site has been reduced in size.

As a result of the changes to the residential land use the mixed medium to high density residential has decreased by 0.45 ha causing the low to medium density residential to increase by 0.98 ha. The overall units per net residential hectare have increased by 0.17.

2.3 Commercial

The neighbourhood commercial site, located southwest of St. Peter the Apostle Catholic High School, has been removed to allow the large park / school site to have direct access to Grove Drive. This has decreased the commercial land use by 0.70 ha.

2.4 Parks and Open Space

Municipal reserves (within Lot 4, Block1, Plan 052 2540) have been grouped together in the southwest plan area to accommodate a joint site for both the Parkland School Division No. 70 and the Evergreen Catholic School Division. The site will be approximately 6.38 ha, which is an overdedication of municipal reserve within this area. This has increased the municipal reserve by 0.57 ha.

In the northwest plan area park areas have been updated to reflect changes around the revised stormwater management facility and to identify an area of non-credited municipal reserve that is being donated by the landowner. These donated lands will be useful for parkland, but are uneconomical for urban development due to substandard soil conditions. This has increased the non-credit municipal reserve by 3.23ha.

2.5 Environmental Reserves

The environmental reserve boundary in the northwest of the plan area has been amended to match the survey that was agreed upon with the City in October of 2013. This has increased environmental reserve by 1.71 ha.

2.6 Stormwater Management Facility

A stormwater management facility in the northwest plan area has been confirmed by engineering detailed design and has been reconfigured to the appropriate size.

The stormwater management facility in the southwest plan area has been relocated and modified to accommodate appropriate storage requirements. The City will accept municipal reserve above the high water line around this stormwater management facility which will be confirmed by engineering. These changes have increased the stormwater management facility land use by 3.48 ha.

2.7 Transportation

The extension of Grove Drive west of Jennifer Heil Way provides the major east-west arterial roadway through the plan area connecting into Boundary Road to the west.

Area calculations for local roads have been revised based on recently registered information and have decreased by 8.80 ha.

The realignment of arterial and major collector roads specifically Grove Drive and Boundary Road has been confirmed to accommodate the joint school site. This has increased the arterial and major collector road by 3.52 ha.

2.8 Land Use Statistics

The changes to the development concept and land use statistics have not affected the density range of 25-30 units per net residential hectare as targeted by the Capital Region Board in Priority Growth Area 'A' that includes the City of Spruce Grove.

Table 1: Approved Land Use Statistics

Land Use	Hectares	Acres
Gross Area	355.88	879.37
Environmental Reserve (ER) (estimated)	22.08	54.56
Gross Developable Area	333.80	824.81
Other Land Uses		
Municipal Reserve (MR)		
Municipal Reserve Dedicated	33.38	82.48
Non-credited Reserve Donated	0.85	2.10
Additional (5%) Reserve (High Density Sites)	0.62	1.53
Stormwater Management Facilities (SWMF)	18.37	45.39
Arterial and Major Collector Roads	26.60	65.73
Minor Collector and Local Roads	53.43	132.02
Institutional	13.38	33.06
Commercial	3.82	9.51
Total Other Land Uses		
Residential Area		
Mixed Low to Medium Density Residential	172.37	425.93
Mixed Medium to High Density Residential	10.95	27.06
Total Residential Area	183.32	453.00

Table 2: Approved Anticipated Dwelling Units/Theoretical Population

	Low/Medium Density	Medium/High Density	Total
Area (ha)	172.37 ha	10.95 ha	
Units/ha	25	90	
Units	4,309	985	5,294
Population/unit	3.0	2.0	
Population	12,927	1,970	14,897

Table 3: Approved Theoretical Student Generation

	Elementary/Junior High	Senior High
Public	1,883	471
Separate	807	202
Total Anticipated Students	2,690	673

Table 4: Proposed Land Use Statistics

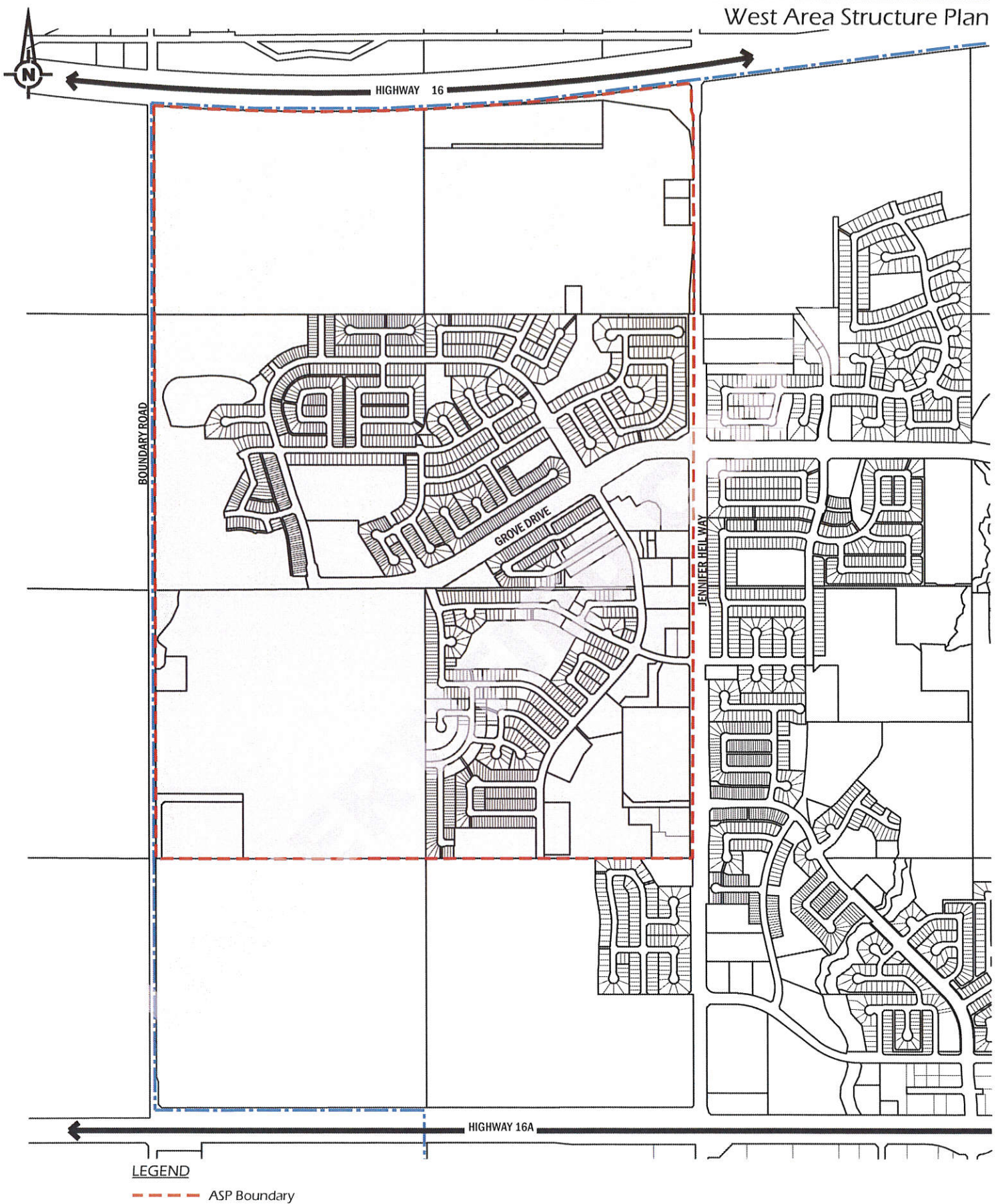
Land Use	Hectares	Acres
Gross Area	358.32	885.42
Environmental Reserve (ER) (estimated)	23.79	58.79
Gross Developable Area	334.53	826.64
Other Land Uses		
Municipal Reserve (MR)		
Municipal Reserve Dedicated	33.95	83.89
Non-credited Reserve Donated	4.08	10.08
Additional (5%) Reserve (High Density Sites)	0.62	1.53
Stormwater Management Facilities (SWMF)	21.85	53.99
Arterial and Major Collector Roads	30.12	74.43
Minor Collector and Local Roads	44.55	110.08
Institutional	13.41	33.14
Commercial	3.15	7.78
Total Other Land Uses	151.73	374.93
Residential Area		
Mixed Low to Medium Density Residential	171.39	423.51
Mixed Medium to High Density Residential	11.41	28.19
Total Residential Area	182.80	451.71

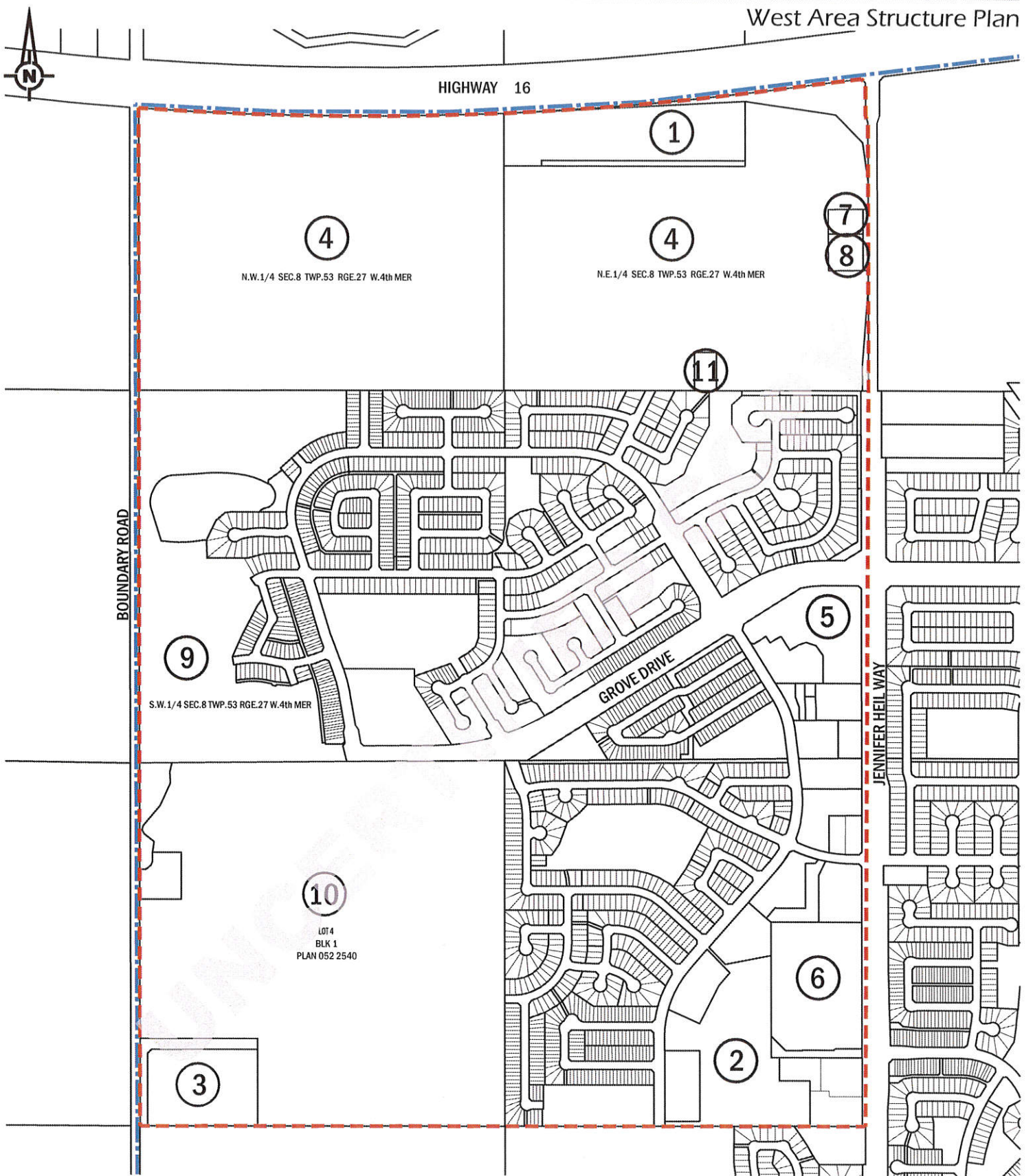
Table 5: Proposed Dwelling Units and Theoretical Population

	Low/Medium Density	Medium/High Density	Total
Area (ha)	171.39 ha	11.41 ha	
Units/ha	25	90	
Units	4,284	1,026	5,310
Population/unit	3.0	2.0	
Population	12,852	2,052	14,904

Table 6: Proposed Theoretical Student Generation

	Elementary/Junior High	Senior High
Public	1,883	471
Separate	807	202
Total Anticipated Students	2,690	673





LEGEND

--- ASP Boundary

① Crown Land

② Corporate Owners

③ Corporate Owners

④ Corporate Owners

⑤ Corporate Owners

⑥ Corporate Owners

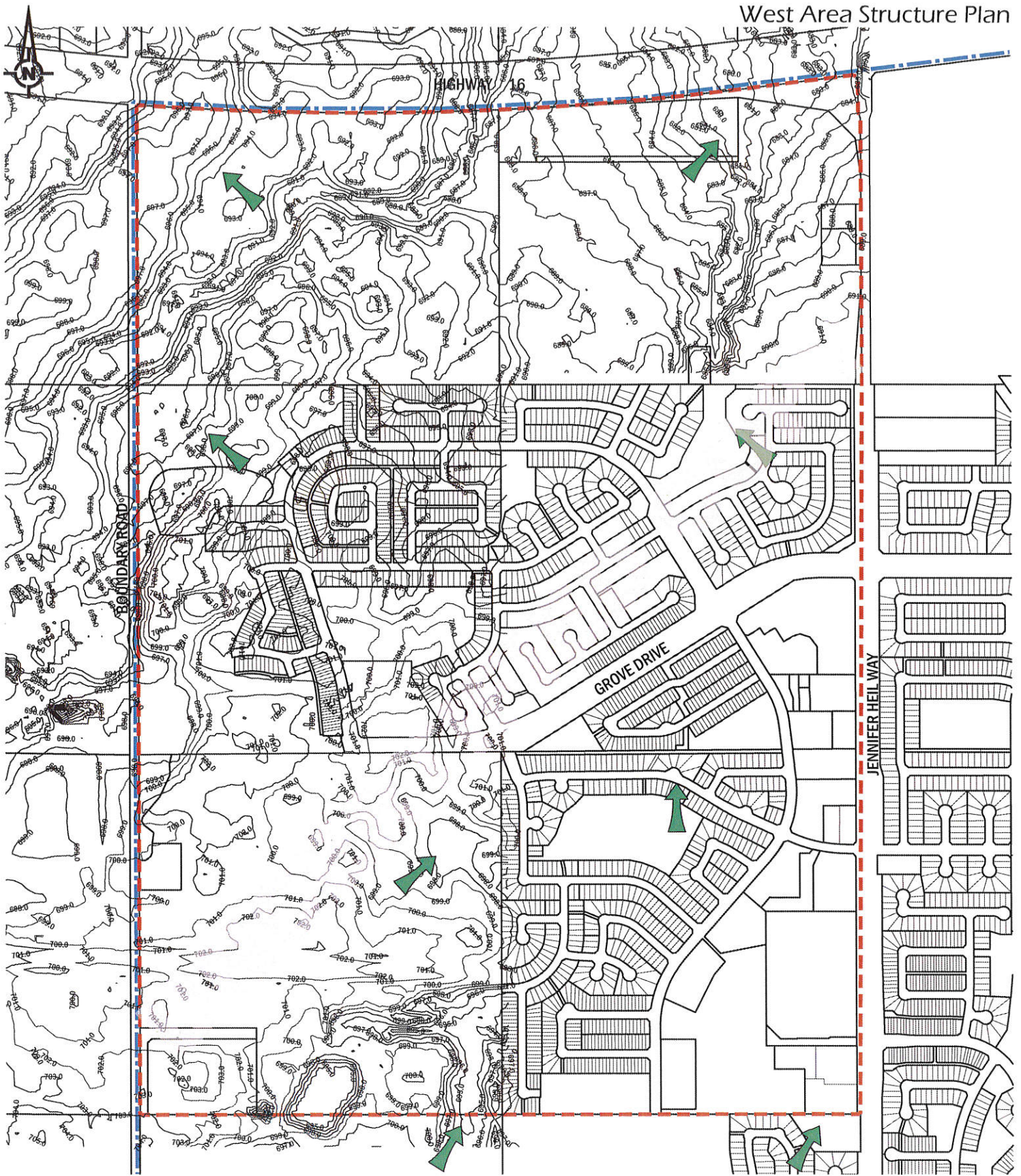
⑦ Corporate Owners

⑧ Private Owners

⑨ Corporate Owners

⑩ Corporate Owners

⑪ Private Owners



LEGEND

- ASP Boundary
- ➔ Direction of Flow

HIGHWAY 16



ATIM CREEK
NATURAL AREA

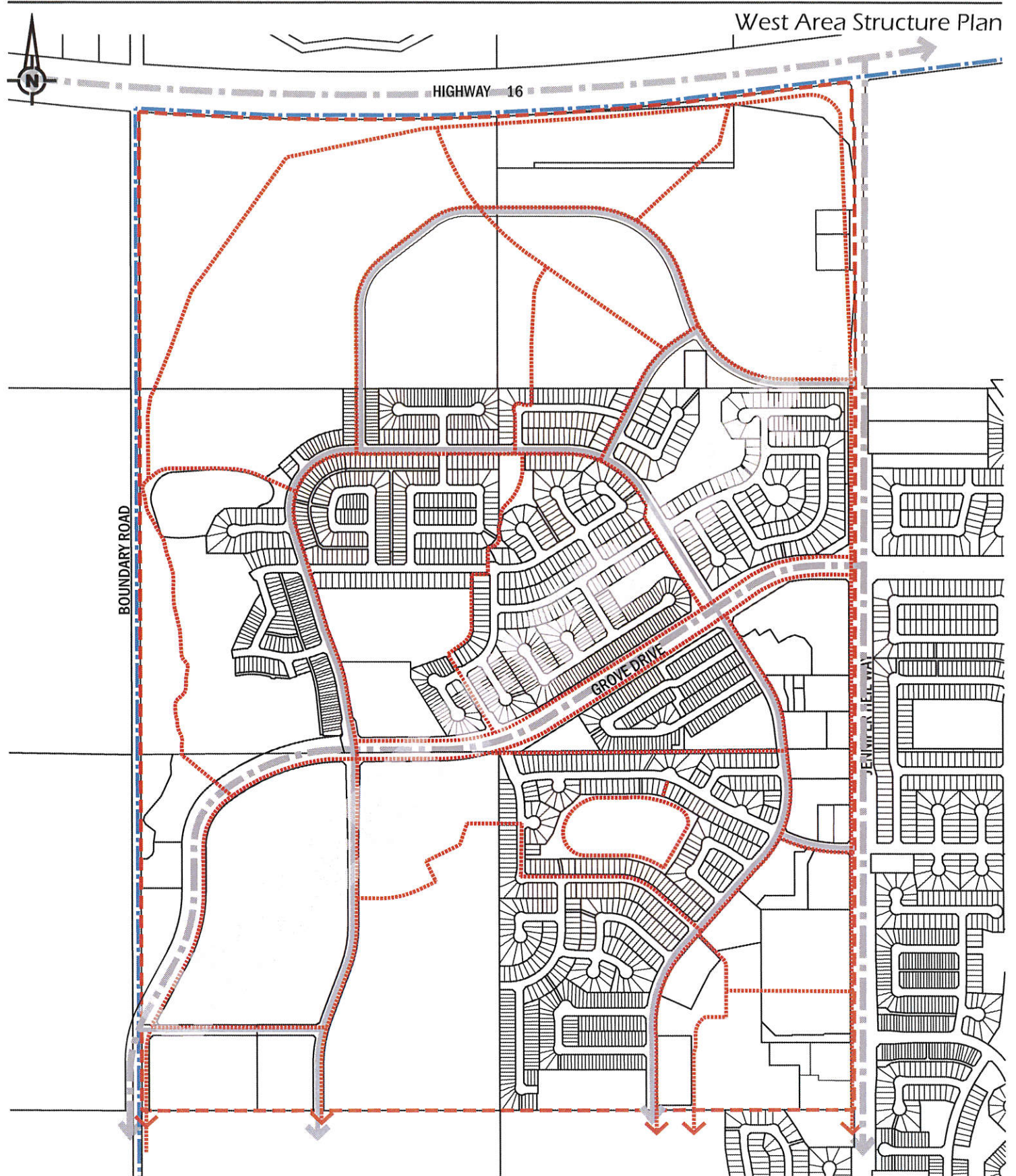
BOUNDARY ROAD

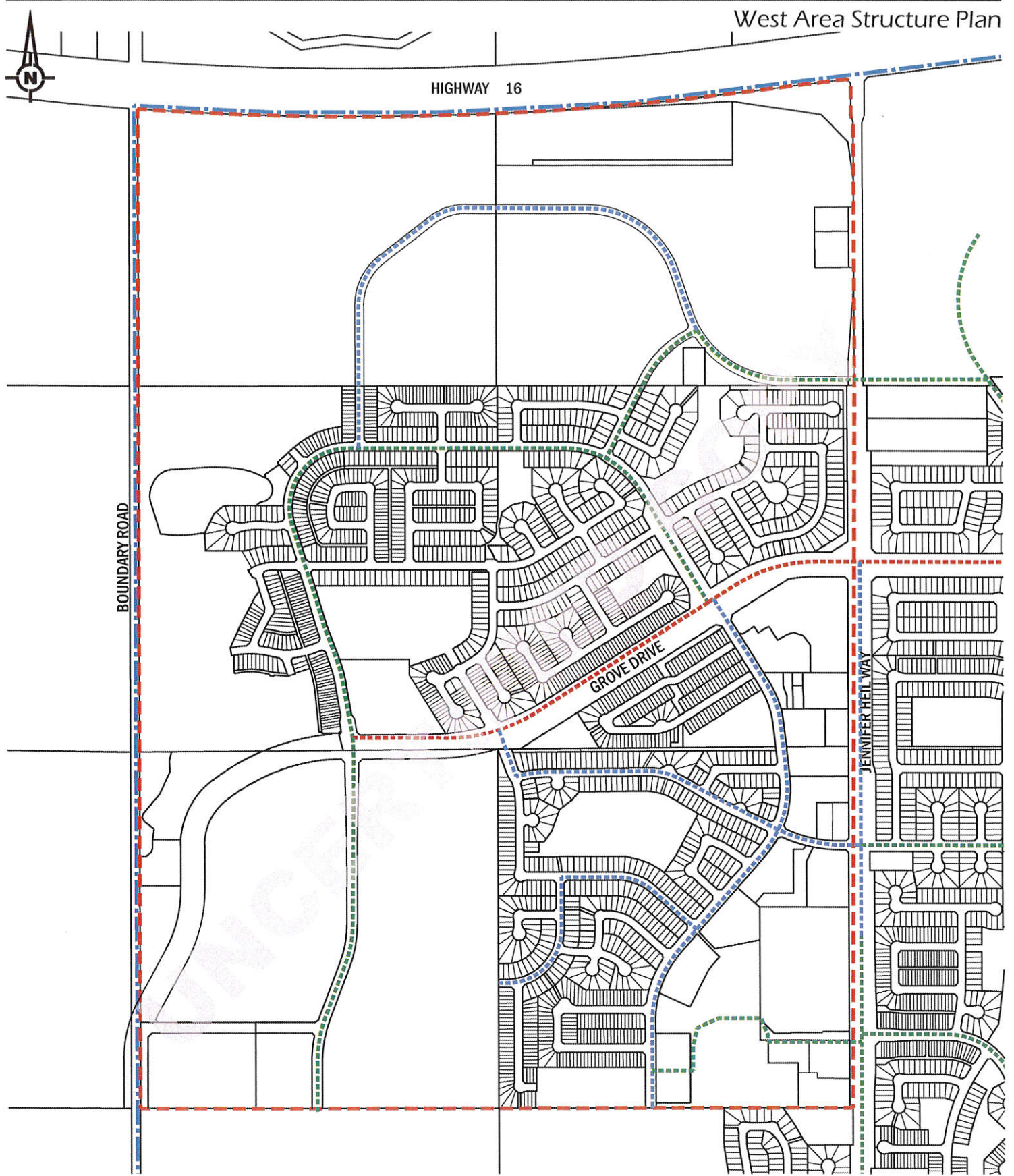
GROVE DRIVE

JENNIFER HEIL WAY

LEGEND

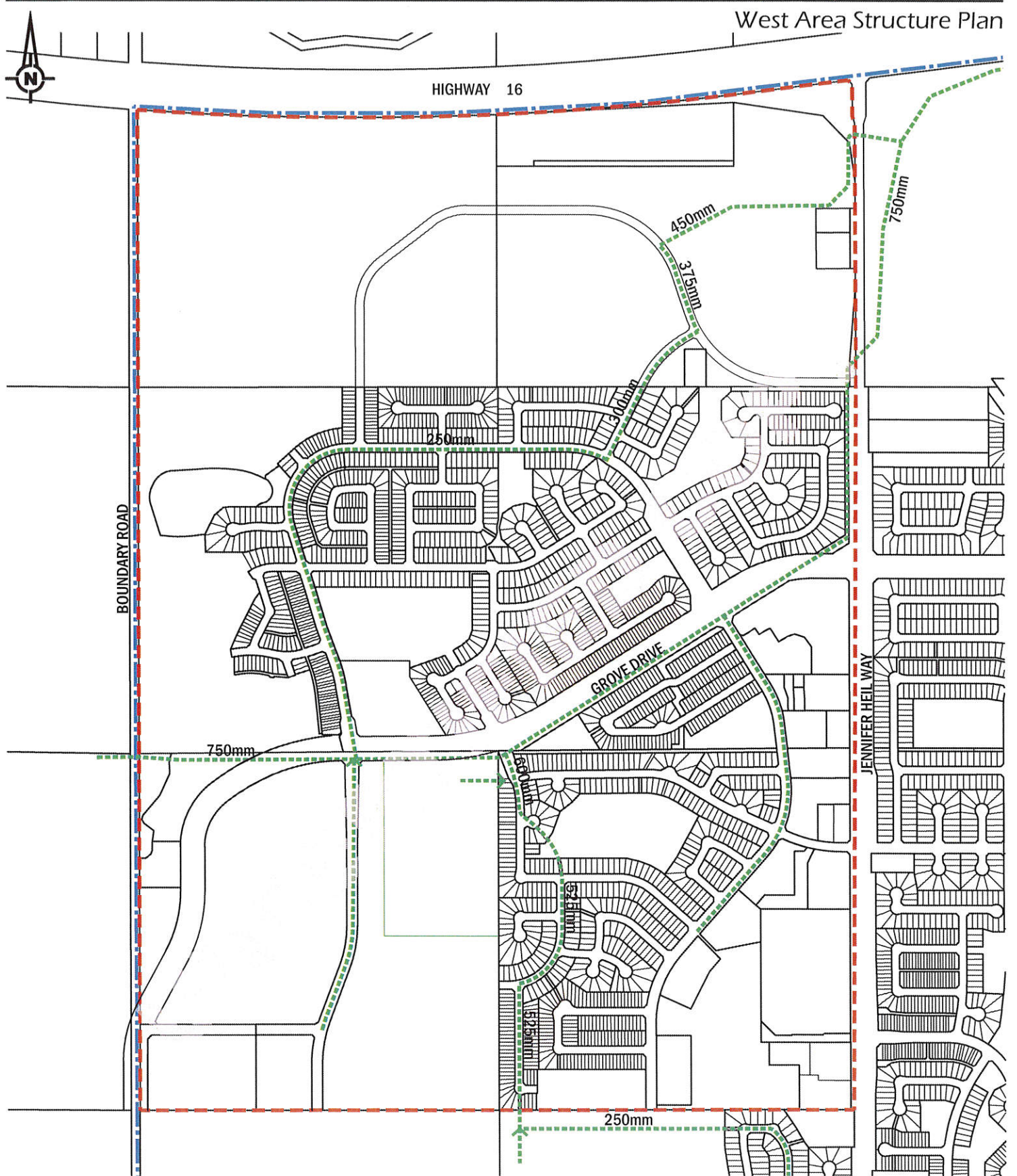
	Mixed Low to Medium Density Residential		Park / Open Space		Public Utility Lot
	Mixed Medium to High Density Residential		Environmental Reserve		Non-Credit Municipal Reserve
	Commercial		Drainage Course		Trail System
	Institutional		Stormwater Facility		ASP Boundary
					Existing / Future School Site





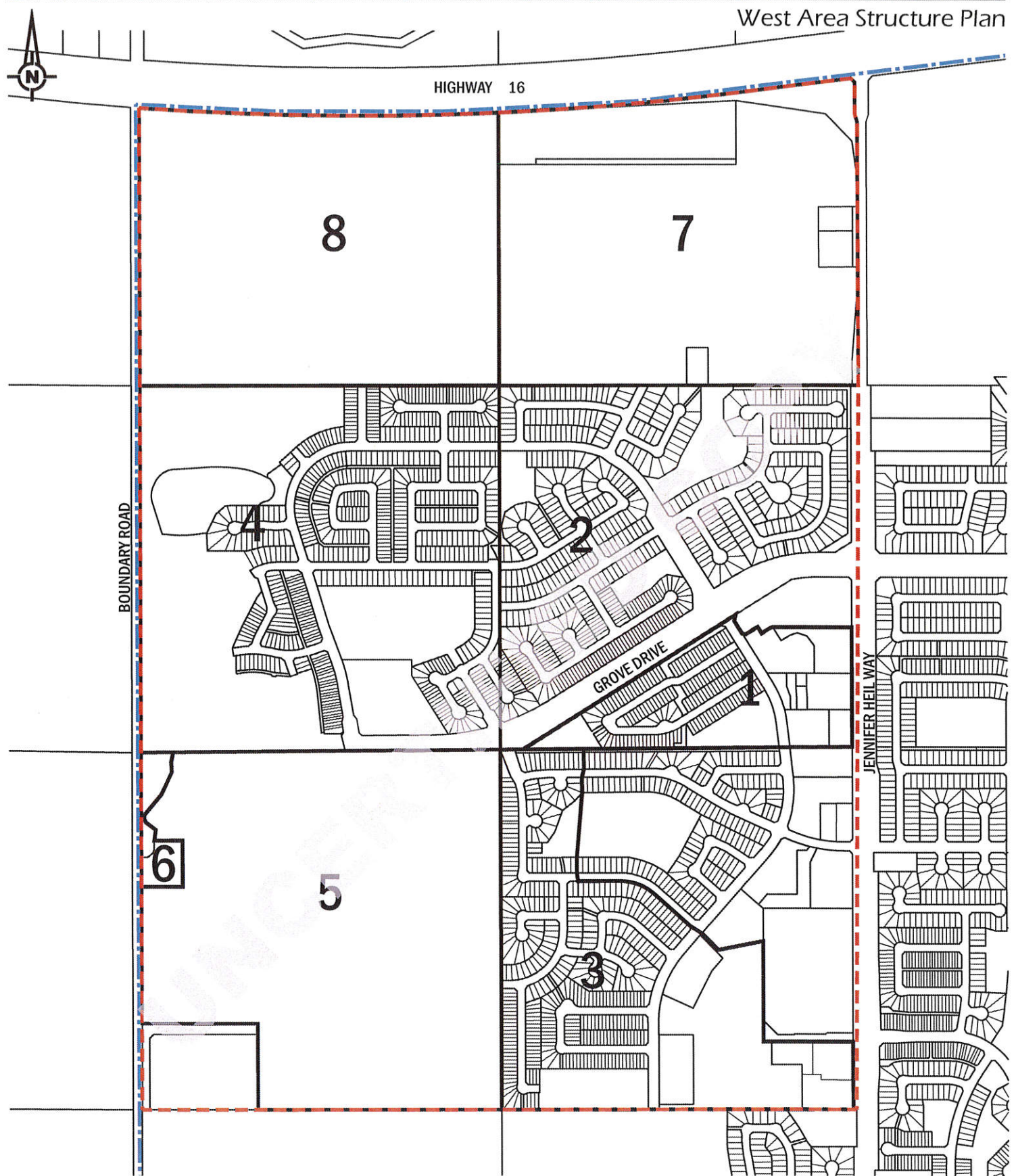
LEGEND

- ASP Boundary
- 300mm Waterline
- 250mm Waterline
- 400mm Waterline



LEGEND

- ASP Boundary
- Sanitary Sewer Line



LEGEND

- ASP Boundary
- Staging Boundary

CITY OF SPRUCE GROVE

BYLAW C-863-13

WEST AREA STRUCTURE PLAN AMENDMENT

WHEREAS, pursuant to the Municipal Government Act, R.S.A. 2000, c. M-26, including amendments, a municipality may adopt and amend an area structure plan;

AND WHEREAS, the City of Spruce Grove wishes to amend Bylaw C-818-12, the West Area Structure Plan;

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

THAT, the West Area Structure Plan be amended as outlined in Schedules 1 and 2 which are attached to and form part of this bylaw,

The proposed area structure plan amendment includes a change to the Development Concept map, redesignating a portion of Lot 7, Block 1, Plan 0522417 from Low/Medium Density Residential to Parks/Open Space; a portion of Lot 7, Block 1, Plan 0522417 from Low/Medium Density Residential to Medium/High Density Residential; and a portion of Lot 10MR, Block 1, Plan 0522417 from Parks/Open Space to Medium/High Density Residential; and an amendment to the land use statistics in Tables 1 and 2 to reflect this redesignation.

This bylaw comes into force and effect when it receives third reading and is duly signed.

First Reading Carried 9 December 2013

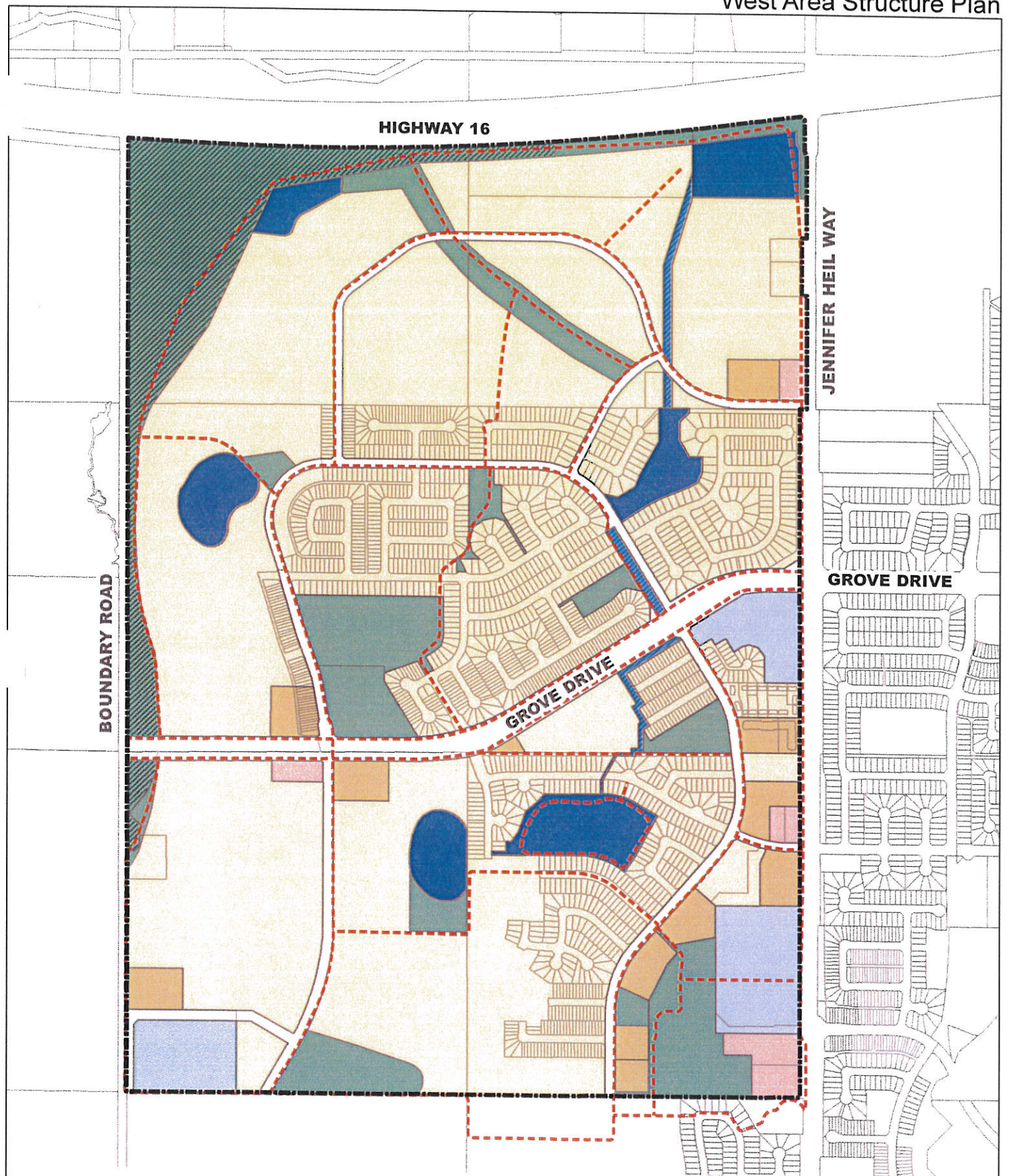
Public Hearing Held 27 January 2014

Second Reading Carried 27 January 2014

Third Reading Carried 26 May 2014

Date Signed **JUN 03 2014**

Signed by City of Spruce Grove Mayor and Council



Legend

- Low/Medium Density Residential
- Medium/High Density Residential
- Commercial
- Institutional

- Parks / Open Space / MR
- Environmental Reserve
- Drainage Corridor

- Stormwater Management
- ASP Boundaries
- Trails

Figure 4 - Development Concept

Proposed Table 1: Plan Area Breakdown (area approximations)

	Hectares	Acres
Gross Area	355.88	879.37
Environmental Reserve (ER) estimated	less 22.08	less 54.56
Approximate Gross Developable Area	333.8	824.81
Municipal Reserve (MR) (10%)	less 33.38	less 82.48
Additional Reserve	less 1.47	less 3.63
Non-credited Reserve donated	0.85	2.1
Additional (5%) Reserve (High Density sites)	0.62	1.53
Arterial and Major Collector Roads	less 26.60	less 65.73
Stormwater Management Facilities (SWMF)	less 18.37	less 45.39
Approximate Net Developable Area	251.95	622.56
Institutional	13.38	33.06
Commercial (including the 5 acre site)	3.85	9.51
Gross Residential Area	236.75	585
Minor Collector and Local Roads	53.43	132.02
Net Residential Areas	182.32	453
High/Medium Density	12.15	27.06
Low/Medium Density	171.17	422.97
Gross Area	355.88	879.37

Proposed Table 2: Anticipated Dwelling Units and Theoretical Population of Plan Area

	Low/Medium Density	Medium/High Density	Total
Area	171 ha	12 ha	
Units/ha	25	90	
Units	4,275	1,080	5,355
Population/unit	3.0	2.0	
Population	12,825	2,160	14,985

CITY OF SPRUCE GROVE

COPY

BYLAW C-818-12

WEST AREA STRUCTURE PLAN

WHEREAS, pursuant to the Municipal Government Act, R.S.A. 2000, c. M-26, including amendments, a municipality may adopt an area structure plan,

AND WHEREAS, the City of Spruce Grove wishes to adopt Bylaw C-818-12, the West Area Structure Plan,

NOW THEREFORE, the Council for the City of Spruce Grove, duly assembled, hereby enacts as follows:

THAT, the West Area Structure Plan be adopted as outlined in Schedule 1 which is attached to and forms part of this bylaw,

and

THAT, Bylaws C-182-92, C-399-00, C-472-03, C-492-03, C-623-06, C-767-10, C-737-10 and C-780-11 be repealed.

This bylaw shall come into force and effect when it receives third reading and is duly signed.

First Reading Carried 23 April 2012

Public Hearing Held 28 May 2012

Second Reading Carried 28 May 2012

Third Reading Carried 28 May 2012

Date Signed **MAY 30 2012**

Signed by City of Spruce Grove Mayor and Council

WEST AREA STRUCTURE PLAN

Bylaw C-818-12 - Schedule 1

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EXECUTIVE SUMMARY

The West Area Structure Plan (this Plan) provides strategic direction in order to achieve the following principles:

- Economical and efficient development ensuring a diversity in housing;
- Conservation and enhancement of the environment;
- Provision of parks and open space; and
- Community and neighbourhood amenity space.

The focus for this Plan is community. The West Area Structure Plan attempts to balance these community principles to guide subsequent planning and development of the area. The following Plan is intended to replace the current West Area Structure Plan, which was adopted in 2004. This replacement was required to incorporate amendments approved after 2004.

1.0 INTRODUCTION

1.1 Purpose

The West Area Structure Plan provides a framework for the detailed planning, subdivision, and subsequent development of the six quarter sections located west of Jennifer Heil Way (formerly Campsite Road), south of Highway 16 (Yellowhead Highway) in the northwest corner of Spruce Grove (Figure 1).

This Area Structure Plan is proposed to replace the existing West Area Structure Plan as amended in order to consolidate the amendments made to the ASP since its 2004 adoption. An updated Area Structure Plan will better facilitate future subdivision and development throughout the Plan area and better align with the updated Municipal Development Plan approved in 2010.

1.2 Locational Context

The West Area Structure Plan applies to the North half of Section 5-53-27-W4th Meridian and all that portion of Section 8-53-27-W4th Meridian located south of the Highway 16 right of way. Figure 1 shows the location of the Plan Area in the context of the City. The Plan Area is bounded by:

- Highway 16 to the north;
- Jennifer Heil Way to the east;
- The quarter section line to the south;
- Boundary Road; and
- The Town of Stony Plain, and Parkland County to the west.

The south half of section 5 is subject to the West Central Area Structure Plan.



West Area Structure Plan

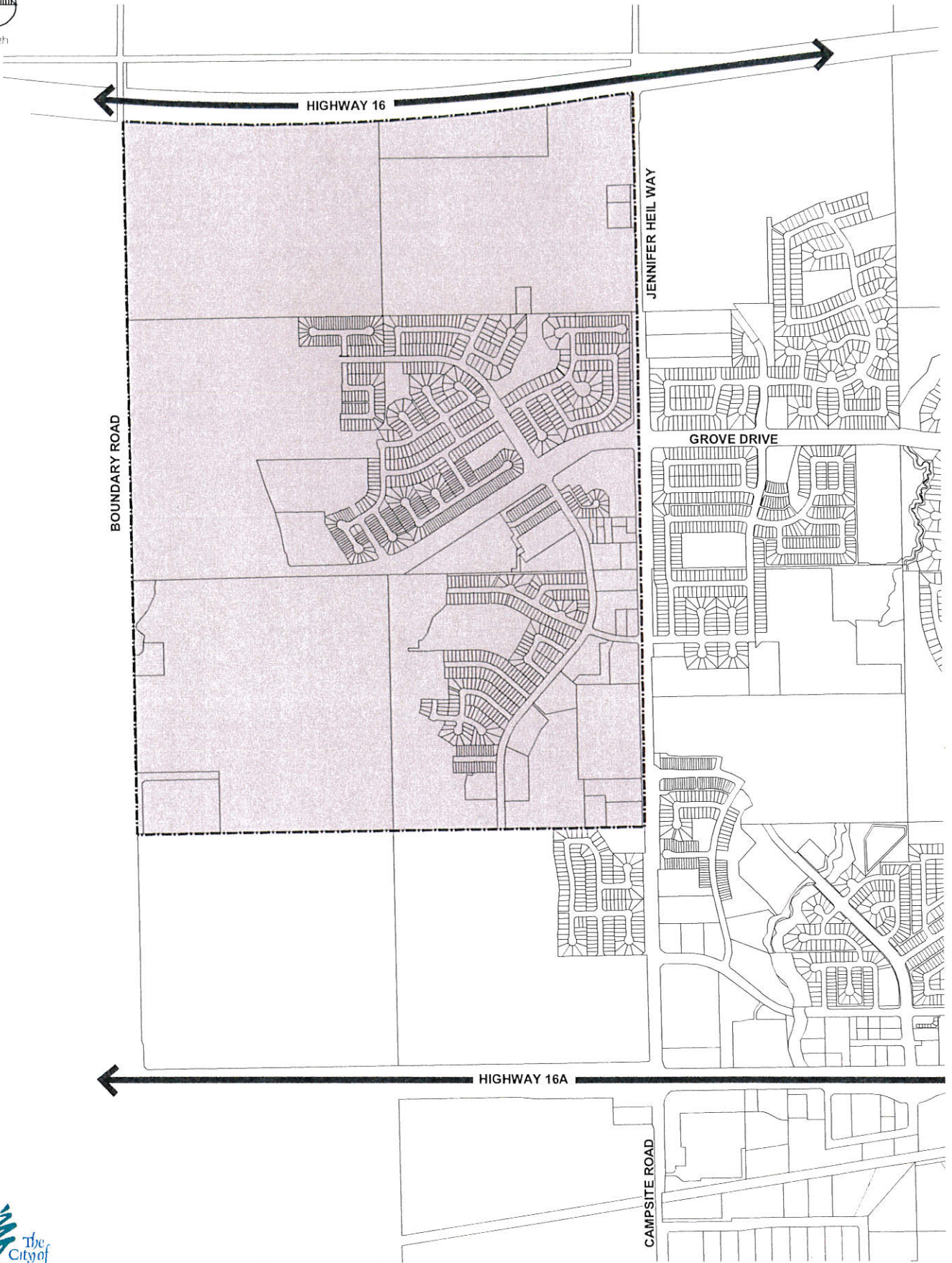


Figure 1 - Location Plan

1.3 Policy Context

This Area Structure Plan has been prepared in accordance with City of Spruce Grove Bylaws, policies and guidelines, as described below.

City of Spruce Grove Municipal Development Plan Bylaw No. C-711-09

This plan complies with the policies and provisions of the City's Municipal Development Plan, Your Bright Future, and its requirements for development of Area Structure Plans. The Municipal Development Plan designates the subject lands as primarily Residential, with a supportive system of Open Space and an Institutional space reflecting the location of the TransAlta Tri-Leisure Centre (TTLC). A Vehicle Oriented Commercial designation has also been identified near the TTLC to accommodate complimentary commercial uses in that location. The Residential designation is intended to include a variety of housing opportunities to meet the needs of a diverse population, make efficient use of land and infrastructure, and meet the intent of the Capital Region Growth Plan. In Section 5.2.2.2 (pg. 33), the Municipal Development Plan identifies that two levels of integrated densities are to be used for residential communities as a way to support housing diversity and context-sensitive density. Level 1 density accommodates low to medium density building types, and Level 2 density accommodates medium to high density building types. The West Area Structure Plan has incorporated this philosophy of density in the concept design and associated statistics to comply with the intent of the Municipal Development Plan.

Included in the Municipal Development Plan is a large Environmentally Significant Area on the west side of the Plan boundary to reflect the location of Atim Creek. An environmental assessment was provided by the owner of NW 8-53-27-W4 to address environmental issues related to that natural feature.

The City of Spruce Grove Land Use Bylaw No. C-721-09

Approximately half of the lands subject to this Area Structure Plan are districted Urban Reserve (reserved for urban development) at the present time. Use of these lands is primarily agricultural.

There are four (4) institutional/semi-public uses located within the Plan Area that have been redistricted to S-P (Semi-Public):

- One for the TTLC;
- One for a Private School at the intersection of Grove Drive West and Jennifer Heil Way;
- One for church purposes at the southwest corner of the Plan Area; and
- One for school purposes at the intersection of Grove Drive West and Harvest Ridge Road.

Redistricting of residential areas and development has already occurred within the eastern portion of the Plan Area. The low to medium density residential development has been districted R-1D, R-2MS or R-2M. There are five R-3 (High Density) sites developed east of Spruce Ridge Road and south of Grove Drive. A C-4 (Neighbourhood Commercial) site has been developed on

the northwest corner of Spruce Ridge Drive and Jennifer Heil Way. All uses are consistent with accepted growth patterns in the area.

Further redistricting and subdivision should be consistent with this Plan and should consist of residential land uses, commercial land uses, recreational and institutional uses, public and semi-public uses.

The City of Spruce Grove Parks and Open Space Master Plan

The City of Spruce Grove Parks and Open Space Master Plan was accepted by Council in 2007 and is the guiding document for the development of parks, open space and recreation facilities. In the Plan Area there is an identified concept for a large central park space, and the open space associated with Atim Creek. The parks system will be linked through an integrated trail system separate from roadways (where possible) following utility or stormwater corridors, or along road rights-of-way as 2.5 metre (oversized) sidewalks.

Servicing and Transportation Plans

Municipal servicing and transportation are generally detailed within the Municipal Development Plan and are finalized at the detailed design stage. This Plan identifies the stormwater management components as required by the City's Storm Water Management Plan, as developed by Associated Engineering.

1.4 Land Ownership

The major land ownership pattern for the West ASP area is shown on the following page in Figure 2.



West Area Structure Plan



- | | | |
|------------------------------------|----------------------------------|------------------------------------|
| ① Fuhr Farms Ltd. | ⑤ Living Waters Christian School | ⑨ 1258276 Alberta Ltd. |
| ② Crown | ⑥ TransAlta TriLeisure Centre | ⑩ Harvest Ridge Joint Venture Ltd. |
| ③ Catholic Archdiocese of Edmonton | ⑦ J.E. Unterschultz | ⑪ Fuhr Sports Park |
| ④ S & D International Group | ⑧ J. and P. Schellenberger | ⑫ T.W. Colban |

Figure 2 - Land Ownership

2.0 EXISTING CONDITIONS

The following section provides a general description of the existing conditions of the West Plan Area, and the implications of these conditions on future urban development. The existing conditions are shown on the following page in Figure 3.

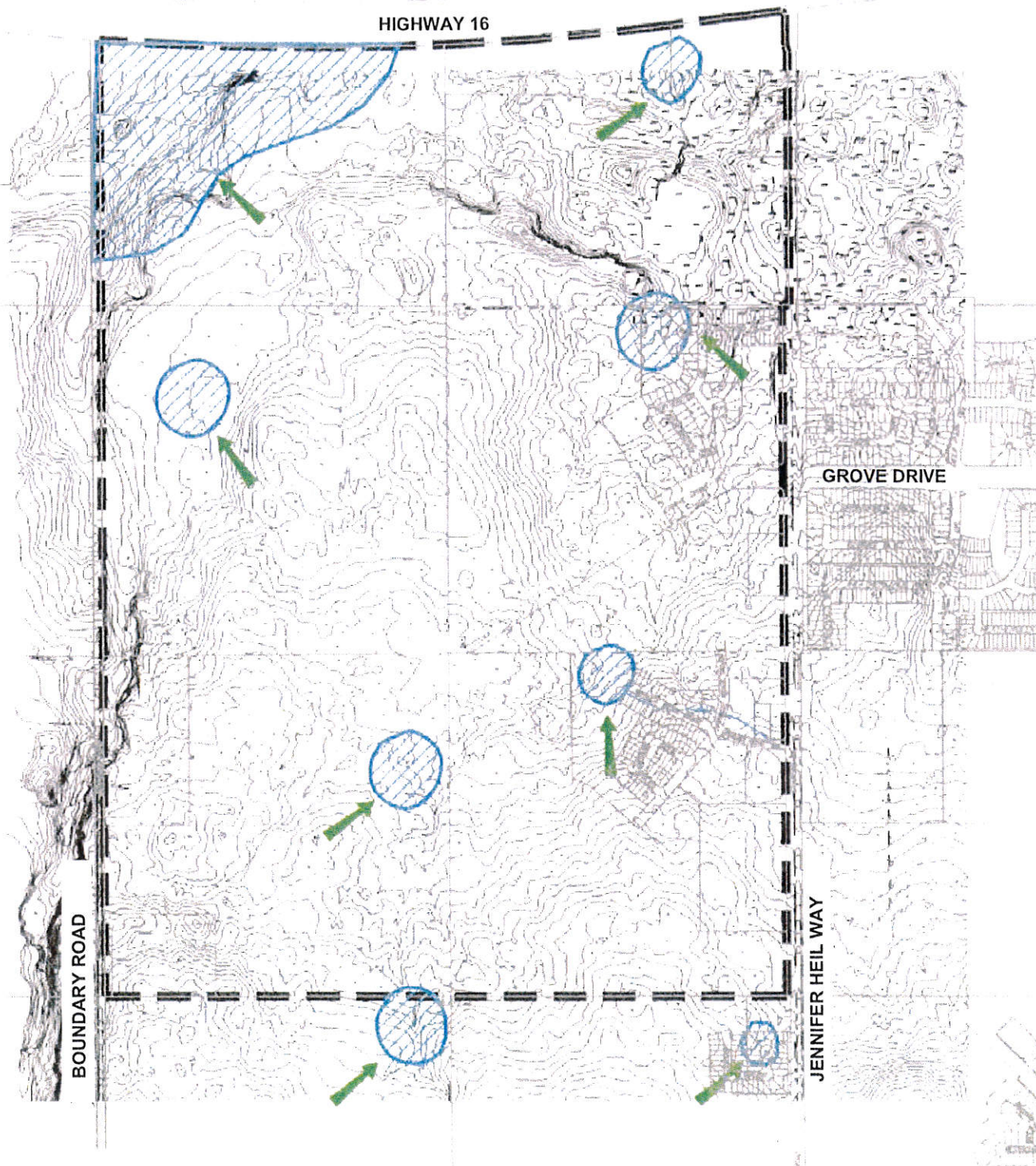


Figure 3 - Existing Conditions

2.1 Existing Land Use

Lands within the plan area are approximately 50% developed for residential neighbourhoods. The remaining lands are used for agriculture. The soils are a mix of silt and sandy loam over clay, with some concentrations of organic peat towards the northwest and Atim Creek areas.

The following are existing farmsteads and country residences associated with the current and past agricultural activities that impact the plan area:

- A residence is located on the 0.85 ha parcel in the NW of 5. Environmental Reserve was dedicated at the time of subdivision.
- Three existing agriculture/residential parcels are located on the NE of 8; these should not impede the process of subdivision and development.

All of these parcels must connect to City services when servicing becomes available. These existing developments may or may not be compatible with future growth in the area and detailed planning will be done when development is proposed for these areas.

The major existing developments are outlined below:

- The Catholic Church is located on a 4 ha site in the NW of 5 (the south west corner of the Plan Area) and is accessed via Boundary Road.
- The TransAlta TriLeisure Centre (TTLC) is located on a 5.93 ha parcel on the eastern side of the NE 5. This facility is accessed off Jennifer Heil Way.
- A mix of low, medium and high density residential land uses is located to the north and west of the TTLC, within the developing Spruce Ridge and Harvest Ridge neighbourhoods.
- The Living Waters Christian Academy, located on 3.42 ha at the SW corner of the intersection of Jennifer Heil Way and Grove Drive West, has right-in/right-out access from Grove Drive and all-directional access on Spruce Ridge Drive.

These developments are compatible with the existing Area Structure Plan, and its residential growth policies.

2.2 Topography and Natural Features

The topography of the plan area is flat to gently rolling, with a few small knolls. The land slopes from south to north, and is characterized by a change in elevation of about 10 metres. A natural, intermittent drainage course extends through the central portion of the area channeling runoff from south to north, and eventually into the Atim Creek drainage system. The northwest segment of the plan area flows in a more westerly direction, into the Atim Creek natural area. The central

swale provides an excellent opportunity for managing storm water for residential development purposes. Only a few pockets of seasonal low areas exist on cultivated lands.

Although much of the plan area was cultivated, some major natural areas exist. The most significant of these is the Atim Creek watershed area, which generally runs along the west side of the area and then curves to the east, bisecting the northwest corner. A mature forest covers much of the land along the creek and the lands in the northwest corner of the plan area. The Municipal Development Plan (MDP) identifies the Atim Creek forest as being an Environmentally Significant Area (ESA). The MDP states that this area includes the creek bottom and its bank, which are subject to flooding and erosion, as well as the adjacent treed upland, which is subject to ground water discharge and is a recharge area for the creek. Also, Atim Creek is identified as being part of the relatively large block of native vegetation, which provides natural habitat and may act as a wildlife corridor in the area. The ESA includes a linear treed ridge in the N ½ 8.

The Municipal Development Plan identifies a second Environmentally Significant Area adjacent to the Plan Area. This feature (a 5+ ha tree stand) is located south of the Plan Area (in the SW of 5), and is significant because it represents an intact upland native forest stand and is the only undisturbed example of this vegetation type (Aspen-Balsam/Saskatoon-Dogwood) within this portion of the City. Its location on the periphery of the Plan Area provides an opportunity for integration with a larger park feature as sought through the policies of the Parks and Open Space Master Plan.

2.3 Utility Rights-of-Way

Two major utility rights-of-way extend through the plan area. The first right-of-way is owned by the Capital Region Sewage Commission and contains the regional sanitary sewer line extending south-west from Highway 16, along the west side of Jennifer Heil Way, and then parallels the existing and proposed alignment of Grove Drive west crossing the plan area. The sewer line follows the south side of the section line separating sections 5 and 8. The second significant right-of-way is owned by Telus containing a fibre optics cable line, and parallels the Capital Regional Sewer Commission line. The Plan Area will be serviced through the extension of municipal water lines as required by the City's Master Water Plan (shown in Figure 6).

No other major natural resource or utility pipelines extend through the plan area. The Energy and Utilities Board has confirmed that no sour gas facilities, which may potentially restrict development, exist within a one section radius of the plan area.

2.4 Existing and Proposed Roadways

Significant roads that border and/or extend into the Plan Area include:

- Highway 16 (the Yellowhead) a major provincial and interprovincial highway borders the planning area to the north. This major roadway requires a 30 metre buffer in the Plan Area which will need noise attenuation barriers.

- Jennifer Heil Way, which has been upgraded to a paved arterial standard, is designated a dangerous goods route.
- Grove Drive West currently extends westward from Jennifer Heil Way into the plan area to provide access to the high school and Harvest Ridge. This road is designated by the Municipal Development Plan as the major east/west urban arterial through the northern residential component of Spruce Grove. Grove Drive West is proposed to extend to the City's western boundary.
- Spruce Ridge Drive is built north of the TTLC, as a collector road, extending west from Jennifer Heil Way to give access to the area, with the north/south collector also being constructed to serve the Spruce Ridge residential development.
- Boundary Road extends north of Highway 16A outside of the western edge of the plan area. This road is within the jurisdiction of the Town of Stony Plain.

2.5 Historical Resources

Given the area's long agricultural history, it is unlikely that the cultivated lands are of any recent historical or cultural significance. Should any issues arise that might elevate the historical or cultural significance of the area, a Historical Resources Impact Analysis may be required prior to development.

2.6 Implications for Future Development

The existing conditions result in the following implications for future development.

- Residential land uses, institutional and community facilities must be recognized and integrated into future land use, and circulation patterns.
- The integrity of the Environmental Areas must be protected. Additionally, tree stands that may be isolated by development should be protected.
- The natural drainage pattern and topography of the plan area provide an opportunity for effective storm water management.
- Development should be staged such that agricultural lands may remain productive for as long as possible. Development should follow natural sequences as servicing is extended.
- The integrity of the Capital Region Sewer Line and the Telus fiber optics rights-of-way must be protected. Utility rights-of-way should become open space connections where they are not part of a roadway.
- The integrity and function of the major arterial roads, including Jennifer Heil Way and Grove Drive West, must be maintained.

These implications are recognized by the development concept detailed in Section 3, and presented on the following page in Figure 4.



Figure 4 - Development Concept

3.0 DEVELOPMENT CONCEPT

3.1 Development Objectives

The development concept proposed for the West Area Structure Plan as illustrated in Figure 4 is a mix of further residential expansion, environmental protection, public space, and community function. The development concept addresses the goals and objectives of the City's Municipal Development Plan. Specific objectives follow:

Residential Neighbourhoods

- To create opportunities for sustainable residential neighbourhoods which have individual identities, but are linked to allow for community interaction.
- To provide meaningful choice of innovative and conventional housing options that cater to a range of income, age and social groups.
- To integrate residential development with significant natural and environmental features, without jeopardizing the integrity of such features.
- To minimize potential conflicts between different densities of residential development.
- To locate a variety of multiple family housing in close proximity to major roads, parks, schools and community services, particularly the TTLC.
- To recognize that multiple family housing requires additional park space, and seek the development of on-site amenity space.

Open Space and Environmental

- To preserve the Atim Creek corridor, the undevelopable portion of the Environmentally Significant Area as defined by the Municipal Development Plan (Area A), and a portion of the sensitive treed upland adjacent to these lands.
- To support the opportunity of protecting the Environmentally Significant Area identified as Area B by the Municipal Development Plan.
- To preserve tree stands and natural features through reserve dedication, acquisition or sensitive subdivision design.
- To stage development in a manner which will allow productive agricultural lands to remain in use for as long as possible.
- To recognize the principles of the City of Spruce Grove Parks and Open Space Master Plan, particularly with regard to district and neighbourhood park sizes and locations, and pedestrian trail connections linking open space, parks, natural areas and community services, including the TTLC.
- To require design and development of stormwater facilities as amenities to be integrated into neighbourhoods with linkages to the pedestrian system.
- To require the enhancement of the Plan Area as a whole by increasing urban forest where possible within the development area.

Commercial Development

- To provide for neighbourhood commercial development that meets the convenience commercial needs of the West ASP community.
- To provide for commercial development that complements and supports the TransAlta TriLeisure Centre and Fuhr Sports Park.

Institutional and Community Services

- To provide for conveniently located, long-term school requirements of the future residents of West Spruce Grove.
- To integrate the TTLC with the community by encouraging compatible land use and high quality pedestrian and vehicular linkages.
- To recognize and integrate existing and proposed community services within a functional land use, pedestrian and vehicular circulation system.

Transportation and Municipal Services

- To protect the integrity of Jennifer Heil Way as a major urban arterial road and current designation as the community's dangerous goods route by limiting the number of intersections along the road, at the same time recognizing the need for convenient access to the TTLC and the Plan Area.
- To provide for the future extension of Grove Drive West through the Plan Area as per the City's Municipal Development Plan and the Transportation Master Plan.
- To provide for functional, safe internal circulation systems based on a hierarchy of major and minor collector roads and local residential roads. The collector roads provide the potential for future public transit.
- To recognize the pedestrian/multi-use trail system is of equal importance as the vehicular road structure.
- To comply with the City's stormwater management and sanitary sewer planning.
- To cooperate with the Capital Region Sewage Commission in providing trunk sewer connections into the Plan Area.
- To encourage efficiencies in the provision of municipal services.

Table 1 (on the following page) provides a summary of the land use breakdown of the Development Concept.

Table 1. Plan Area Breakdown (area approximations)

Area	HECTARES	ACRES
Gross Area	355.88	879.37
	less	less
-Environmental Reserve (ER) (estimated)	22.08	54.56
Approximate Gross Developable Area	333.8	824.81
	less	less
Municipal Reserve (MR) (10%)	33.38	82.48
Additional Reserve	less 1.47	less 3.63
Non-credited Reserve donated	0.85	2.1
Additional (5%) Reserve (High Density sites)	0.62	1.53
	less	less
Arterial and Major Collector Roads	26.60	65.73
	less	less
Stormwater Management Facilities (SWMF)	18.37	45.39
Approximate Net Developable Area	251.95	622.56
Institutional	13.38	33.06
Commercial (including the 5 acre site)	3.85	9.51
Gross Residential Area	236.75	585
Minor Collector and Local Roads	53.43	132.02
Net Residential Area	183.32	453
High/Medium Density	10.95	27.06
Low/Medium Density	172.37	425.93
Gross Area	355.88	879.37

3.2 Highlights of the Development Concept

The primary land use proposed for West Area Structure Plan is residential. Although the area is designed to function as an integrated community, staging of development may result in smaller neighbourhood units as defined by Grove Drive West and, to some extent, the key land ownership patterns. The highlights and major elements of the development concept are outlined in the following pages.

1. Low/Medium Density Residential

Low/medium density residential is proposed for the majority of the future residential development area. Much of this development will be single detached units, characterized by a range of urban lot sizes, as defined by the Land Use Bylaw, in order to meet a diverse set of housing needs. However, medium density uses may also be developed within this area. Appropriate transition between densities must be considered as a part of zoning applications to ensure compatibility between uses. Medium density uses to be permitted as a part of the Low/Medium Density Residential area may include duplex, semi-detached, and row housing.

The density anticipated within this area is expected to be closer to 25 housing units per hectare.

2. Medium/High Density Residential

Ten medium/high density sites have been located throughout the plan area. Four are located in close proximity to the TTLC and are discussed below. The other six have been distributed through the plan area where they meet the objectives of the Municipal Development Plan. Densities will be consistent with the Land Use Bylaw, and could permit a maximum of 120 units per hectare.

3. Commercial

Three neighbourhood commercial nodes have been proposed through the plan area. These nodes are proposed at the intersection of major roadways in order to maximize their economic attraction, and minimize vehicular intrusion into proposed residential neighbourhoods.

A site immediately south of the TTLC is intended for commercial development to complement and support the adjacent recreation facilities.

4. The TransAlta TriLeisure Centre (TTLC)

The TranAlta TriLeisure Centre (TTLC) is one of the most significant features in the plan area, and substantially impacts the surrounding land use patterns. The TTLC serves as a major activity node within the context of both the City and the region, as well as within the plan area.

A second major recreation facility, Fuhr Sports Park, is located adjacent to the TTLC.

5. Environmental Areas

The Environmentally Significant Areas, which include Atim Creek, are shown in Figure 4 as part of the Atim Creek Natural Area. The city has preliminarily identified this ER through site review, aerial and topographical information and environmental assessment of these lands. An exact determination of ER dedications will be conducted at the time of subdivision of lands within this region, and shall comply with all applicable City and Provincial requirements.

Development adjacent to all sensitive areas should meet strict development standards with environmental sensitivity and sustainability at their core.

6. School Sites

The locating of school sites is a necessary theoretical exercise that is contingent on the provincial political climate, and funding. However, as referenced in the School Generation figures of this plan, potentially four schools could be required in the plan area. The Evergreen Catholic School Board has constructed a high school at the intersection of Grove Drive West and the west leg of Harvest Ridge Drive.

The Evergreen Catholic School Board has identified a need for a future K – 9 school site within the plan area. A site of 3.1 hectares (7.6 acres) for this potential school is proposed in the NW of 5, east of Holy Trinity Catholic Church.

Further Municipal Reserve dedications within the Plan Area could accommodate other school sites if required at sometime in the future.

7. Municipal Reserve

In addition to school sites, the provision of parks and recreation space is accomplished through the dedication of municipal reserve land. The Municipal Government Act (MGA) permits a local authority to claim ten percent (10%) of the total developable land area (less Environmental Reserve) for the community's open space and recreational requirements. The MGA also permits Municipal Reserve dedication of an additional three percent (3%) in the case of medium density residential development greater than 20 units per hectare, and of an additional five percent (5%) for high density residential development greater than 54 units per hectare.

A significant open space area, 6.88 ha of Municipal Reserve, is located in the NE of 5, west and south of the TTLC. The site includes Fuhr Sports Park.

In the SW of 8, Municipal Reserve has been consolidated to provide a high school site (2.83 ha) and a sports park (5.25 ha). Seven (7) additional neighbourhood parks of between 0.93 hectares (2.3 acres) and 3.64 hectares (9 acres) are proposed throughout the plan area. Much of the Municipal Reserve dedication has been focused on the assembly of larger blocks of open space as shown on the Land Use Concept (per the City's Parks and Open Space Master Plan).

Some park area has been shown adjacent to environmental reserve areas in the north of the plan area in order to preserve upland trees and maintain natural area for trail development, bird

watching and other interpretive opportunities. The northern Atim Ridge area (the linear parkway identified in the NE 8) is an esker that would serve as park and trail connection through the northern portion of the plan area.

It is the intent of this plan to show that the open space and park sites, school sites, amenities and natural areas will be linked through a comprehensive trail system. This system will be separate from the roads where possible and clearly identified on detailed plans. Trails will be designed according to the Parks and Open Space Master Plan and Development Standards.

8. Transportation

Grove Drive West is proposed to extend through the plan area, as per the draft Transportation Master Plan and the Municipal Development Plan, eventually into the Town of Stony Plain, thereby allowing for a continuous east/west linkage between the two communities. The right-of-way being contemplated for the west portion of Grove Drive is 58 metres, so that the eventual twinning of the Regional Sewer Line can be accommodated. The Capital Region Sewage Commission has indicated that it will cooperate with the City to twin the line (if necessary) at the time of road construction.

A major collector road is proposed to loop through the plan area allowing for a safe and efficient internal circulation system. The collector will intersect the future Grove Drive West in both the east and west segments of the area, and will help to define suitable locations for major community amenities.

Boundary Road is proposed to intersect with the collector road shown on the north side of the Catholic Church. The road dedication for this collector has been provided where it abuts the church site. Additional dedication will be required for the segment of roadway extending north of the church.

Boundary Road crosses Atim Creek approximately half way north of the NW 5 quarter section line. In order to avoid having Grove Drive West cross Atim Creek, the City's draft Transportation Master Plan proposes the Grove Drive alignment west of the high school site curve to the southwest before joining Boundary Road. This would prevent further disturbance of this natural area.

9. Storm Water

The development concept recognizes the natural drainage pattern of the Plan Area, and the storm water facilities as identified by the City's Master Drainage Plan. Storm discharge from the plan area into the Atim Creek basin will be controlled by Alberta Environment's requirements.

Although the size of the plan area requires that more detailed planning be provided prior to subdivision, the foregoing design elements provide a framework for such planning and will result in a high quality residential living environment, as well as a viable, active and sustainable community within the City of Spruce Grove.

Table 2. Anticipated Dwelling Units and Theoretical Population of Plan Area

	Low/Medium Density	Medium/High Density	Total
Area	172 ha	11 ha	
Units/ha	25	90	
Units	4,300	990	5,200
Population/unit	3.0	2	
Population	12,900	1,980	14,880

3.3 Population and School Generation

The projected population for the plan area is estimated at just over 14,880 persons at maximum potential "build-out". Tables 2 and 3 summarize projected population (based on number of proposed housing units) and school generation figures, respectively. Student population was based on 22.6% of total population being students. Of them, 70% are anticipated to attend public school and 30% are anticipated to attend a private school. Eighty percent (80%) of those students will be elementary/junior high, with the remaining 20% in high school. These values are based on typical student generation statistics in the Capital Region.

The resulting school generation projections of the West ASP area are over 3,363 students. This is a projection and should be monitored as development proceeds in the plan area. According to this school population review, there may be a need for two public elementary schools in the plan area plus a junior high school. There may also be a need for a separate K – 9 school.

These projections do not include a review of the students outside of the plan area, nor outside of the municipality's boundary, that may be bussed into the plan area.

Table 3. Theoretical Student Generation in the Plan Area

	Elementary/Junior High	Senior High
Public	1,883	471
Separate	807	202
Total Anticipated Students	2690	673

4.0 MUNICIPAL SERVICES

4.1 Transportation Network

The proposed transportation network is illustrated in Figure 5. As noted in the previous section, the extension of Grove Drive west of Jennifer Heil Way provides the major east-west arterial through the plan area, linking ultimately through to the Town of Stony Plain west of Boundary Road. The alignment of Grove Drive West will generally follow the Capital Region Sewage Commission's sanitary trunk sewer line right-of-way.

Internal circulation will consist of a series of collector roadways connected at controlled points to Grove Drive, Jennifer Heil Way and Boundary Road to the west. Jennifer Heil Way is designated as both a Major Arterial Roadway and a Dangerous Goods Route in the City of Spruce Grove's Transportation Study. Access to the TTLC is from Jennifer Heil Way. Access to the Catholic Church is from Boundary Road.



Legend

- Trail Linkages
- Collector Roadways

- Arterial Roadways
- ASP Boundary



Figure 5 - Transportation Network Plan

4.2 Water Distribution

The City of Spruce Grove Waterworks Master Plan identifies two pressure zones within the plan area. These pressure zones will operate independently, and will not be connected. The north pressure zone will be served by the extension of a 400 mm trunk main along Grove Drive and connections from the Heritage Estates development to the east. The south zone is served by an extension of water mains throughout the south quadrant of Heritage Estates (see Figure 6). The water network will be designed to provide an efficient system with adequate fire flows.

4.3 Sanitary Sewer

The plan area is bisected by the existing Capital Regional Sewage Commission's regional sanitary trunk line. A connection will extend south of the City's Boundary Trunk Sewer which will serve the lands south of the regional line and further to service the future development of lands south of the plan area, and south of Highway 16A. The existing and preliminary sewer servicing concepts are shown on Figure 7.

4.4 Storm Water Drainage

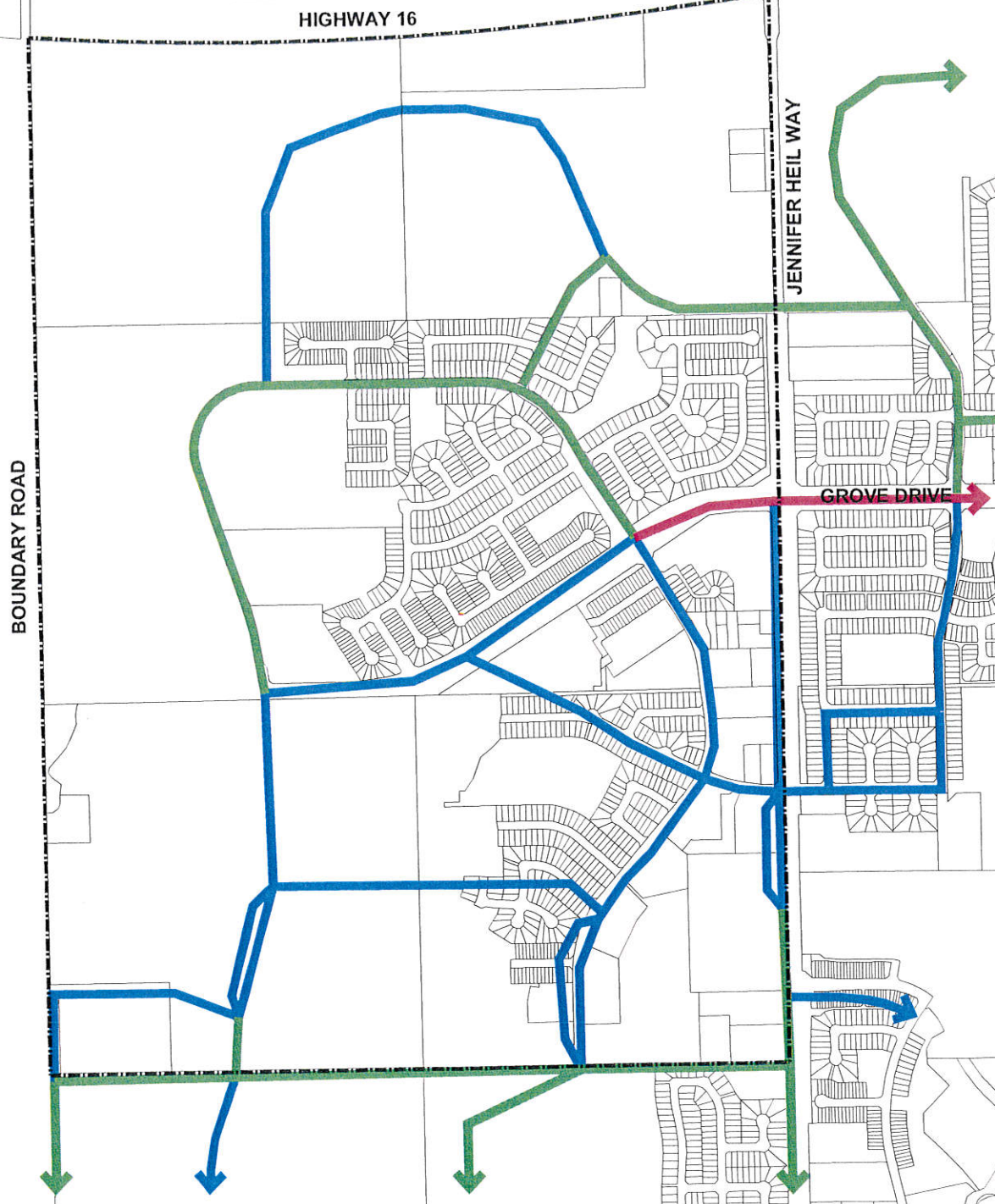
The plan area lies within the Atim Creek Drainage Basin, and in accordance with the City of Spruce Grove's Master Drainage Plan, the storm run-off from within the study lands will be controlled by a series of interlinked storm water management facilities throughout the plan area (see Figure 3 – Existing Conditions). Minor flows from developed areas will generally be directed to the storm water management facilities by underground piped systems. Major flows will be directed overland to these facilities. Ultimately stormwater run-off will discharge into Atim Creek. Discharge rates, to Atim Creek, will be in accordance with criteria established by Alberta Environment.

4.5 Franchise Utilities

Power (underground, telephone, cable TV and natural gas will be provided through the Plan Area, by the extension/upgrading of existing facilities.



West Area Structure Plan



Legend

250mm Waterline
300mm Waterline

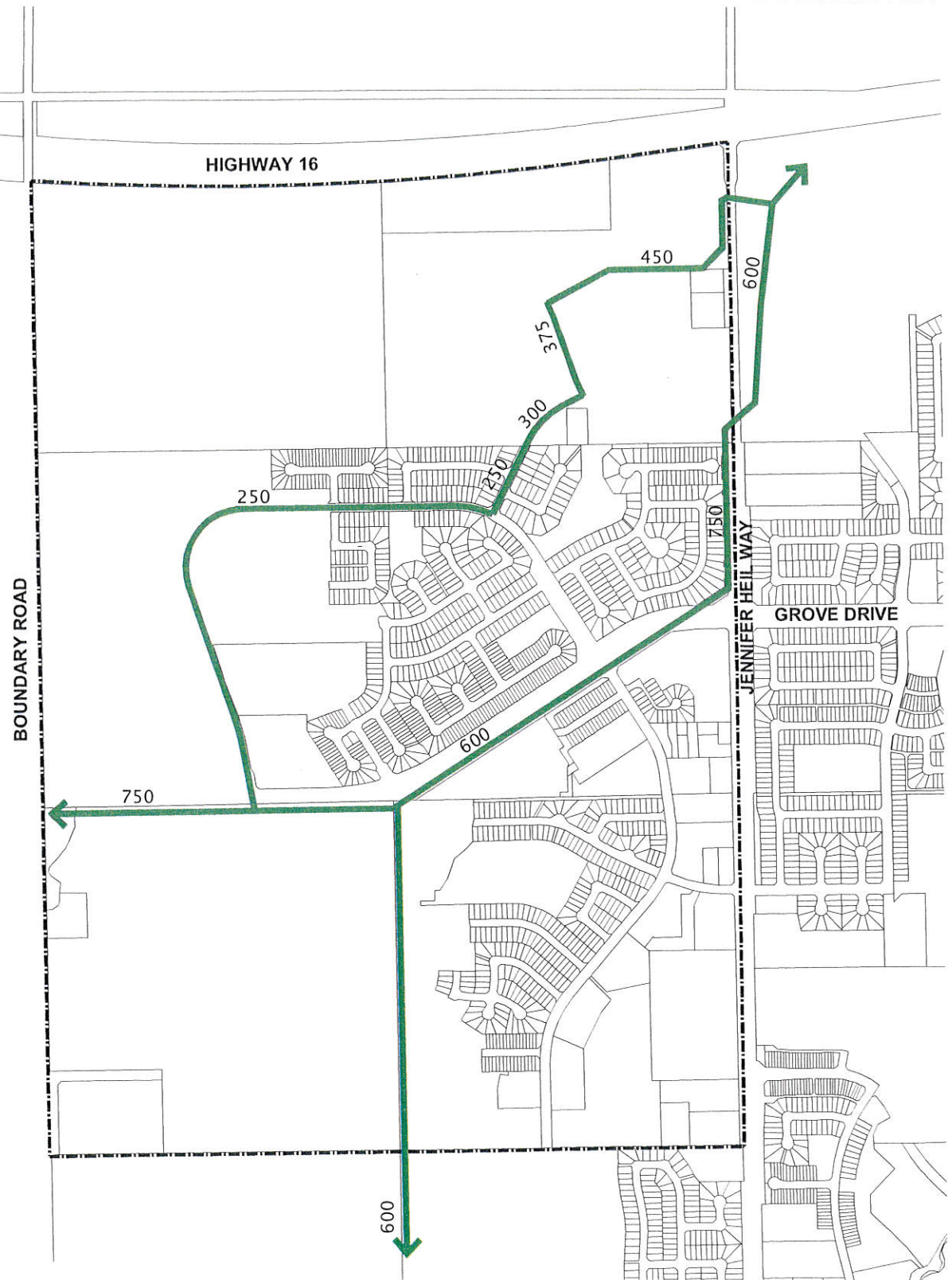
400mm Waterline
ASP Boundary



Figure 6 - Water Distribution



West Area Structure Plan



Legend

 Sanitary Sewer Line

 ASP Boundary

Figure 7 - Sanitary Sewer System

5.0 STAGING AND IMPLEMENTATION

Development of Stages 1, 2, and 3 is largely complete. Future stages may follow the phasing shown on Figure 8.

This Area Structure Plan provides a broad framework for the future subdivision and development of the west end of the City of Spruce Grove, and involves an increasing number of owners. This Plan provides an outline to subsequent development and how the principles of this planning document will be accommodated in the future development of these lands. More detailed planning will be required in advance of redistricting and subdivision in the plan area.

