

McConachie Neighbourhood Structure Plan

Office Consolidation May 2016

Prepared by:

*City Planning Branch
Sustainable Development
City of Edmonton*

Bylaw 14173 was adopted by Council in January 2006. In May 2016, this document was consolidated by virtue of the incorporation of the following bylaws:

Bylaw 14173 Approved January 24, 2006 (to adopt the McConachie Neighbourhood Structure Plan)

Bylaw 15159 Approved April 27, 2009 (to allow for Medium Density Residential uses to provide the opportunity to develop street-oriented row housing)

Bylaw 15939 Approved November 21, 2011 (to redesignate a 1.4 ha Medium Density Residential site to commercial uses)

Bylaw 16434 Approved May 21, 2013 (to add a pocket park, reconfigure the NW stormwater management pond, redistribute the low and medium density residential uses in the northern portion of the NSP area)

Bylaw 17346 Approved September 8, 2015 (to amend a Commercial site to Commercial & Retail Services use in the south central area of the plan)

Bylaw 17492 Approved January 25, 2016 (to amend the Population Statistics and Land Use Maps)

Bylaw 17614 Approved May 25, 2016 (to amend the Population Statistics and Land Use Maps)

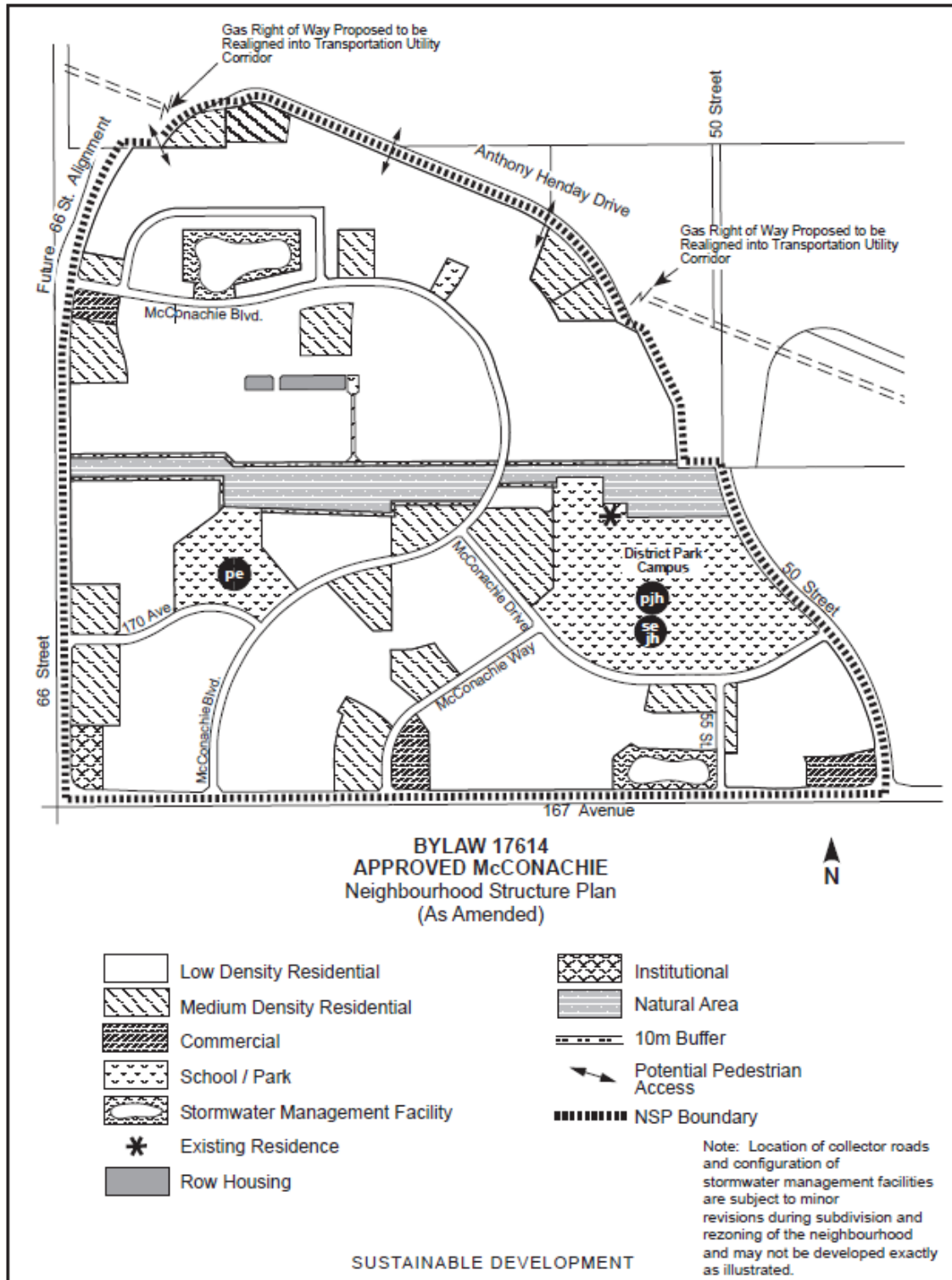
Editor's Note:

This is an office consolidation edition of the McConachie Neighbourhood Structure Plan, Bylaw, as approved by City Council on January 24, 2006. This Plan is an amendment to the Pilot Sound Area Structure Plan, Bylaw 6288 as approved by City Council on June 24, 1981. This edition contains all amendments and additions to Bylaw 14173.

For the sake of clarity, new maps and a standardized format were utilized in this Plan. Where it provides clarity, names of City departments have been standardized to reflect their present titles. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and are italicized where applicable.

This office consolidation is intended for convenience only. In case of uncertainty, the reader is advised to consult the original Bylaws, available at the office of the City Clerk.

City of Edmonton
Sustainable Development



**MCCONACHIE NEIGHBOUROOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 17614**

Approved May 25, 2016

LAND USE	Area (ha)	% of GA	
GROSS AREA	255.83	100.0%	
Arterial Road Right-of-Way	7.59		
Utility Right of Way	1.65		
	Area (ha)	% of GA	
GROSS DEVELOPABLE AREA	246.59	100.0%	
Commercial	4.94	2%	
Institutional Use			
Slovenian Canadian Community Banquet Hall	1.30	0.5%	
Parkland, Recreation, School (Municipal Reserve)	43.76	17.7%	<u>% of MR</u>
District Park	22.59		9.16%
School/Park	5.15		2.09%
Pocket Park	0.50		0.20%
Natural Area (NE8091)	12.76		5.17%
Natural Area (Buffer)	2.76		1.12%
Transportation	49.45	20.1%	
Circulation			
Infrastructure / Servicing			
Stormwater Management Facilities	6.54	2.65%	
TOTAL Non-Residential Area	105.99	42.98%	
Net Residential Area (NRA)	140.61	57.02%	

RESIDENTIAL LAND USE, UNIT AND POPULATION COUNT

Land Use	Area (ha)	Units/ha	Units	% of Total	People/Unit	Population
Single/Semi-Detached	114.17	25	2,854	55%	2.80	7,992
Row Housing	1.00	45	45	1%	2.80	126
Low-rise/Medium Density Housings	25.4	90	2,290	44%	1.80	4,122
Total	140.61		5,189	100%		12,240

SUSTAINABILITY MEASURES

Population Density (ppnha)	87.0 persons per net residential ha
Units Density	36.9 units per net residential ha
LDR/MDR Ratio	55% / 45%

STUDENT GENERATION STATISTICS

Public School Board	986
Elementary	493
Junior High	247
Senior High	247
Separate School Board	493
Elementary	247
Junior High	123
Senior High	123
Total Student Population	1,480

*The exact area and location of Municipal Reserve will be determined at the time of subdivision and in coordination with Parks Planning.

McConachie Neighbourhood Structure Plan

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1.0 Introduction

1.1 PURPOSE

The purpose of this Neighbourhood Structure Plan (NSP) is to describe the land use framework and development objectives for the McConachie Neighbourhood Structure Plan, an area consisting of approximately 256 hectares (633 ac.) within the Pilot Sound Area Structure Plan (ASP). The McConachie NSP constitutes a logical planning unit with respect to identifiable plan boundaries and servicing considerations and is consistent with the policies and objectives identified in the Pilot Sound ASP (see **Figure 1.0 - Location Plan**).

The Pilot Sound ASP consists of approximately 769 hectares of land situated immediately south and west of the Transportation and Utility Corridor (TUC), east of 66 Street and north of 153 Avenue in northeast Edmonton. McConachie is known as Neighbourhood 4 in the Pilot Sound ASP.

The purpose of this Neighbourhood Structure Plan is to describe the type, size and location of various land uses, density and pattern of development, location of transportation infrastructure, conceptual servicing schemes and sequence of development; and, have a regard for the general land use framework established in the Pilot Sound ASP Bylaw #6288 (as amended).

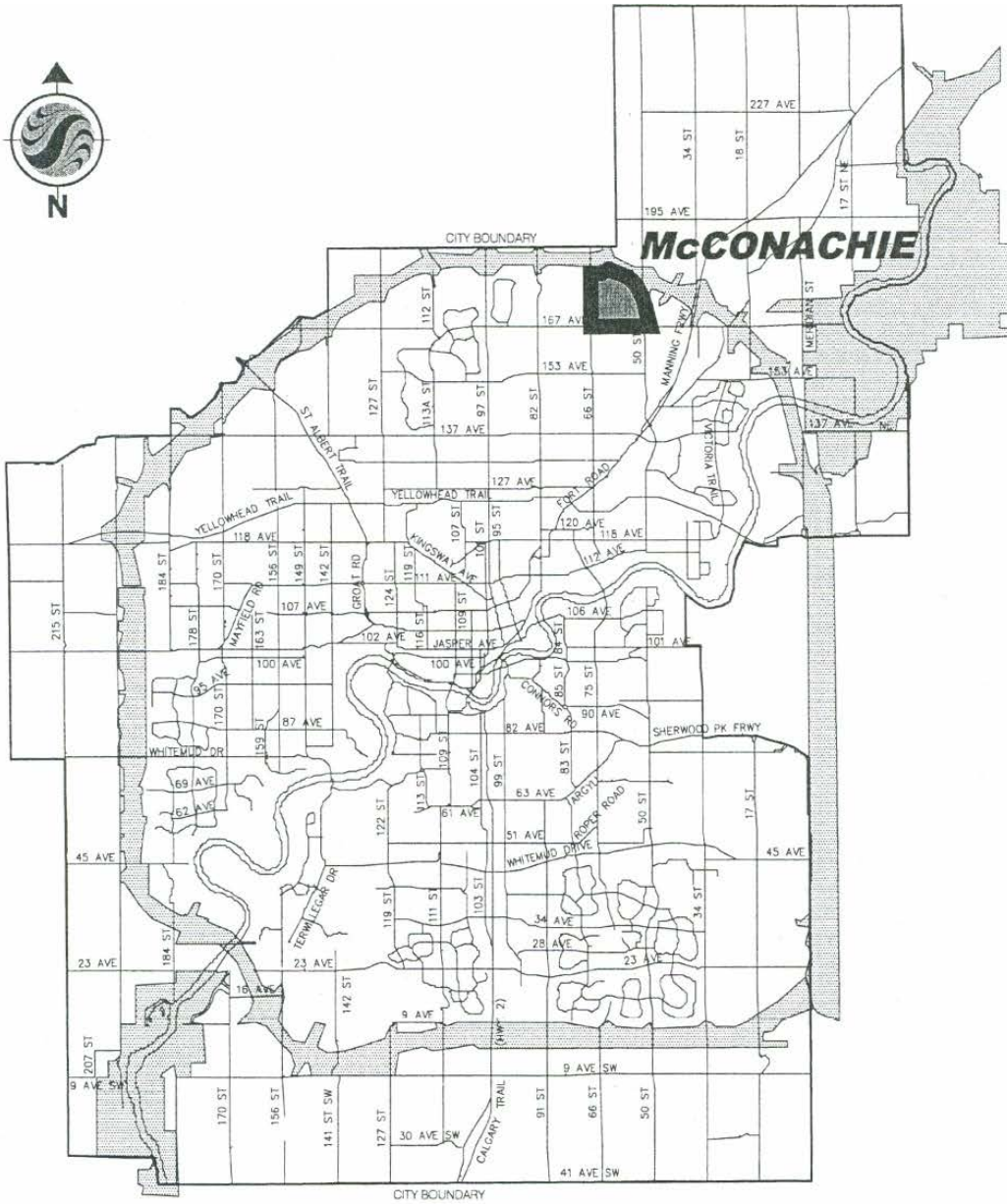
This NSP is supported by various supplementary studies including; a Traffic Impact Assessment (TIA), Neighbourhood Designs Report (NDR), Water Network Analysis (WNA), Stage 1 and Stage 2 Natural Site Assessment (NSA) and Phase 1 and Phase 2 Environmental Site Assessments (ESA).

1.2 DEFINITION OF PLAN AREA

The McConachie NSP is situated within the NW, SW and SE ¼ Sections of 2-54-24-W4M and portions of NE ¼ 2-54-24-W4M, SW ¼ 1-54-24-W4M and SW ¼ 11-54-24-W4M. As shown on **Figure 2.0 - Context Plan**, the NSP is defined by the following boundaries:

- **North Boundary** – Transportation and Utility Corridor (TUC)
- **West Boundary** – 66th Street
- **East Boundary** – 50th Street
- **South Boundary** – 167th Avenue

The McConachie NSP is located in a developing part of northeast Edmonton and represents a logical extension of urban development with respect to identifiable plan boundaries and servicing considerations.



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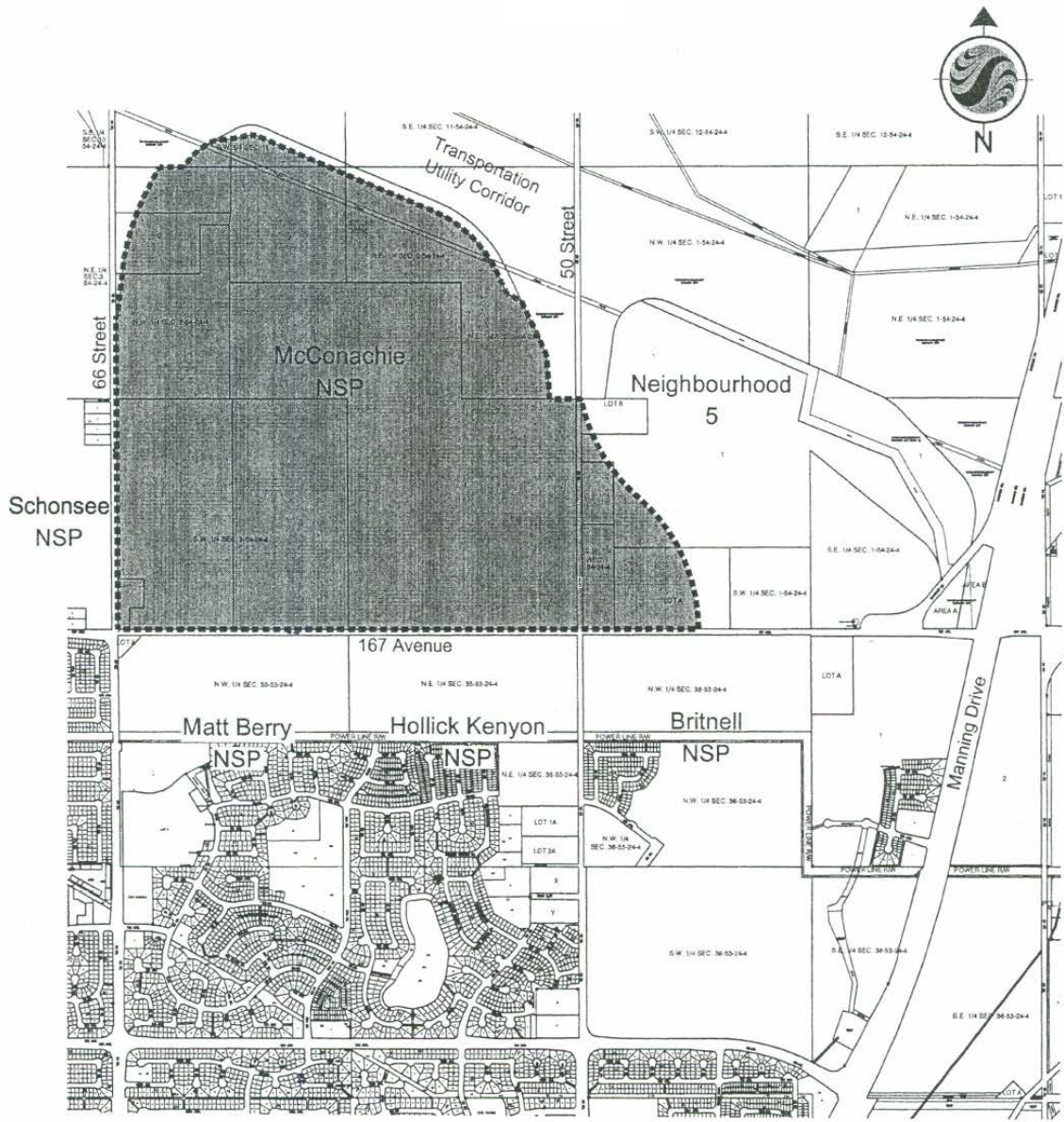
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McCONACHIE
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
1.0

Title
Location Plan

November 2005
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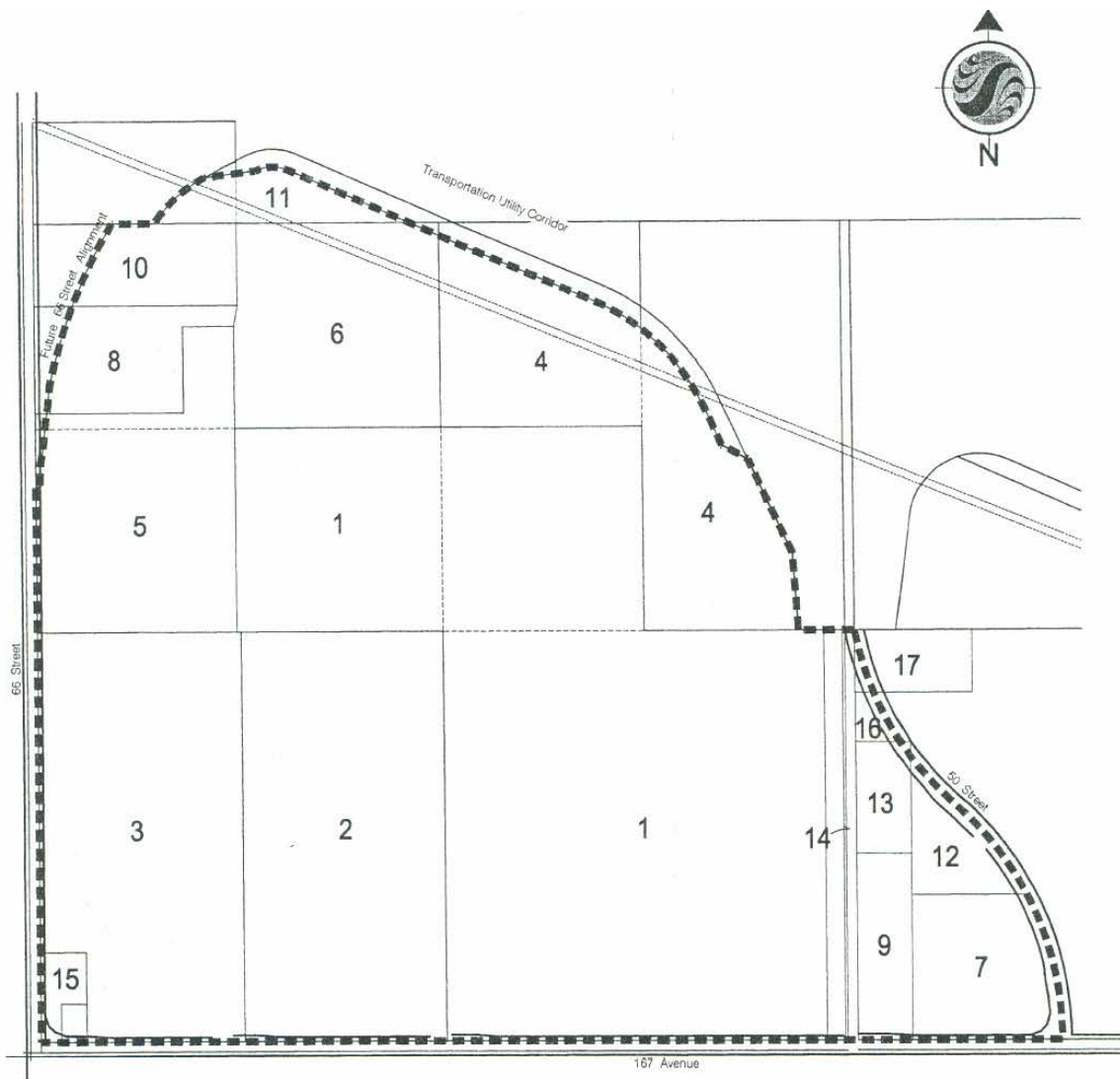
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Context Plan
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1.3 LAND OWNERSHIP

Approximately 144.48 hectares (56%) of the land within the McConachie NSP is owned by Private Corporate Owners (proponents of the plan). The remaining lands are held by various individual landowners. Current land ownership is shown on **Figure 3.0 – Ownership Plan**. A listing of the legal parcels is provided below in **Table 1 – Land Ownership**.

TABLE 1 – LAND OWNERSHIP			
McConachie Neighbourhood Structure Plan			
	Titled Owner	Legal Description	Area (ha) in NSP
1	Private Corporate Owners	Block 1, Plan 7722209	98.0
2	Private Corporate Owners	SW ¼ 2-54-24-W4M	32.40
3	Private Corporate Owners	SW ¼ 2-54-24-W4M	31.19
4	Private Corporate Owners	NE ¼ 2-54-24-W4M	*23.88
5	Private Non-Corporate Owners	NW ¼ 2-54-24-W4M	*18.64
6	Private Corporate Owners	Block 2, Plan 7722209	16.38
7	Private Non-Corporate Owners	Lot A, Plan 2759MC	*7.79
8	Private Corporate Owners	Lot 1, Block 2, Plan 9320734	*5.58
9	Private Non-Corporate Owners	SW ¼ 1-54-24-W4M	4.05
10	Private Non-Corporate Owners	Lot 1, Plan 7521811	*4.67
11	Private Corporate Owners	SW ¼ 11-54-24-W4M	*3.48
12	Private Corporate Owners	Lot 1, Block 1, Plan 0020944	*3.33
13	Private Non-Corporate Owners	SW ¼ 1-54-24-W4M	*2.40
14	Government	Government Road Allowance	2.04
15	Private Non-Corporate Owners	SW ¼ 2-54-24-W4M	1.21
16	Private Corporate Owners	Lot 1, Block 1, Plan 0020944	*0.59
17	Private Non-Corporate Owners	Lot B, Plan 7921427	*0.20
TOTAL AREA			255.83

*Note: The areas above do not reflect the total areas as registered on certificate of title.



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McCONACHIE
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.

3.0

Title

Ownership Plan

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2.0 Statutory Plan and Policy Context

2.1 POLICY AND SUPPORTING PRINCIPLES

The McConachie NSP supports a number of policies and principles identified in the Municipal Development Plan, Pilot Sound Area Structure Plan and Suburban Neighbourhood Design Principles. A brief description of the relevant documents is provided below.

Municipal Development Plan – The Municipal Development Plan (MDP) is the primary document that provides the policies and strategies to help guide growth and development in Edmonton over a 10-year horizon. The lands within McConachie NSP are designated as Suburban Area in the MDP, which permits residential development.

Pilot Sound Area Structure Plan (Bylaw #6288 as amended) – The Pilot Sound ASP provides general guidelines and policies to facilitate the orderly development of the plan area with respect to proposed land uses, density of development, location of major roads and facilities and sequence of development. The Pilot Sound ASP has been designed on the basis of a community structure that groups a number of neighbourhoods to form a community cluster that provides community and neighbourhood service to more than one or two neighbourhoods and allows for the sharing of facilities such as transit or the district park site. McConachie is Neighbourhood 4 of a total of 5 neighbourhoods within the Pilot Sound ASP.

Suburban Neighbourhood Design Principles – The City of Edmonton’s Suburban Neighbourhood Design Principles report describes a variety of design principles intended to encourage flexibility and innovation in the design and servicing of new neighbourhoods.

The following table summarizes the key objectives from the above noted policy documents applicable to the McConachie Neighbourhood Structure Plan.

Objectives	Neighbourhood Planning Principles
<p>Contiguous, compact, and cost-effective development: <i>MDP Strategy 1.3.3 – Support contiguous development that is adjacent to existing development in order to accommodate growth in an orderly and economical fashion.</i></p> <p><i>MDP Strategy 1.7.1 – Accommodate growth in an orderly, serviced and cost-effective manner.</i></p>	<ul style="list-style-type: none"> Development of the McConachie NSP represents a continuation of urban development in northeast Edmonton. Given its proximity to adjacent developing neighbourhoods (Matt Berry, Hollick Kenyon, Schonsee), infrastructure and associated services can be extended in a cost-effective and efficient manner.

Objectives	Neighbourhood Planning Principles
<p>Contiguous, compact, and cost-effective development (con't):</p> <p>Pilot Sound ASP <i>3.1 General Objectives – To ensure that development takes place in the most orderly and economic manner.</i></p> <p>SNDP 8 - Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time.</p>	<ul style="list-style-type: none"> ▪ The McConachie NSP provides opportunities to share neighbourhood facilities and infrastructure given its proximity to existing neighbourhoods. ▪ The McConachie NSP contemplates an integrated mix of residential, commercial, institutional and green space uses to be developed in an efficient land use pattern. ▪ The McConachie NSP provides opportunities for low and medium density residential development of various forms and densities. ▪ The proposed District Park site is of adequate size to accommodate schools and community recreation facility. Should the requirements of the site change over time, the parcel is of sufficient size to accommodate other land uses on all or portions of the land. Accordingly, the District Park site serves as a key focal point of the community, linked to a central School/Neighbourhood Park site and connected via walkway system to other areas of the neighbourhood in order to maximize its accessibility, use and place-making potential.
<p>Variety and choice of development form and types:</p> <p>MDP Strategy 1.1.1 – Provide for choices regarding the types of development in which people want to live and do business.</p> <p>MDP Strategy 1.7.2 – Provide for a range of housing types and densities in each residential neighbourhood.</p>	<ul style="list-style-type: none"> ▪ The NSP provides a variety of residential, commercial, educational and natural areas and recreational development opportunities. ▪ A range of low and medium density residential housing opportunities shall be provided catering to a variety of income groups and types of families (e.g. singles, families, seniors). ▪ Commercial land uses have been clustered around major transportation routes (167 Avenue, 66 Street). To take advantage of their high exposure and accessibility to pedestrian, transit and vehicular traffic.

Objectives	Neighbourhood Planning Principles
<p>Variety and choice of development form and types (con't.):</p> <p>Pilot Sound ASP 3.2 Residential Development Objectives – To create a residential district within which will be provided a broad range of housing types and forms through the utilization of innovative techniques anticipated by the Edmonton Zoning Bylaw</p> <p>SNDP 12 - Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points.</p>	<ul style="list-style-type: none"> ▪ Opportunities for innovative site design and building siting may be pursued through discussions with <i>Sustainable Development</i> at the rezoning and subdivision stage. ▪ The NSP development principles encourage the placement of Medium Density Residential parcels near or adjacent to collector/arterial roadways, school/ parks sites and other neighbourhood destination/focal points.
<p>Transportation alternatives and options:</p> <p>MDP Strategy 1.3.4 – Promote intensification of development around transit corridors and employment areas.</p> <p>MDP Strategy 4.3.1 – Develop and maintain an integrate system of roadways, public transit, pedestrian and bicycle facilities and services to support and enhance Edmonton as a growing, vibrant, and culturally diverse city in which people choose to live, work, learn and play.</p> <p>MDP Strategy 4.3.3 – Make effective and efficient use of the transportation system.</p>	<ul style="list-style-type: none"> ▪ Medium density parcels have been situated adjacent to collector/arterial roadways to encourage transit use. ▪ Walking and cycling to destination areas, including into adjacent neighbourhoods, shall be provided through the provision of pedestrian and cycling paths. Access is intended to follow the local, collector and arterial roadway network in addition to walkways and integrated open space corridors. ▪ Connections shall be designed to provide safe movement, minimize walking distances from residential areas, and to provide access to future transit stops.

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Objectives	Neighbourhood Planning Principles
<p>Transportation alternatives and options (con't):</p> <p><i>Pilot Sound ASP</i> <i>3.7 Transportation Development Objectives – To develop a system of transportation facilities within Pilot Sound to meet the requirements of all sectors of the community related to the movement of people, goods, and services and to ensure that this system is developed in a safe, efficient, economic and equitable manner and in a manner offering convenient connection to regional, provincial, and inter-provincial transportation systems.</i></p> <p><i>SNDP 5 - Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.</i></p>	<ul style="list-style-type: none"> ▪ Future transit service is appropriate along the interior collector roadway network as well as along 50 Street, 66 Street and 167 Avenue. All parts of the neighbourhood are designed to be accessible via transit within a 400m walking distance.

Objectives	Neighbourhood Planning Principles
<p>Environmental protection and conservation:</p> <p><i>MDP Strategy 1.1.13 – Plan for urban development which is environmentally friendly and fiscally sustainable in the long term, based on the City’s financing, infrastructure and environmental strategies.</i></p> <p><i>MDP Strategy 1.6.1 – Develop a comprehensive, integrated plan for the river valley, natural areas, and open space lands that encourages the conservation and integration of natural areas that are sustainable and feasible.</i></p> <p><i>SNDP 1 - Design neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods.</i></p> <p><i>SNDP 4 - Design neighbourhood streets (both neighbourhood design and cross section of roadway) with standards that cater to the main intended use of the road.</i></p>	<ul style="list-style-type: none"> ▪ Promote the preservation and integration of the Natural Area (NE 8091) with urban development as identified in the Natural Areas Management Plan. ▪ Parks and other open spaces have been linked to pedestrian corridors and walkways. This will enable greater accessibility and efficient use of open space over time while encouraging local alternative transportation options. ▪ The McConachie NSP provides for the efficient, cost effective and coordinated delivery of engineering services. Existing water services are to be extended and constructed at developer cost (pending detailed engineering). Stormwater is to be detained and discharged at controlled rates compatible with the receiving systems capacities via a series of stormwater management facilities. ▪ The McConachie NSP presents the opportunity to share both neighbourhood facilities and infrastructure given its proximity to surrounding neighbourhoods within the Pilot Sound Area Structure Plan.
<p>Urban interface and land use compatibility:</p> <p><i>MDP Strategy 1.1.2 - Address compatibility of land use in the development and review of land use plans and development proposals.</i></p>	<ul style="list-style-type: none"> ▪ The McConachie NSP proposes the development and thoughtful integration of low and medium density housing near existing urban services and developing residential communities.

Objectives	Neighbourhood Planning Principles
<p>Urban interface and land use compatibility (con't):</p> <p><i>SNDP 2 - Design and locate school and community facilities to provide inter-neighbourhood focal points.</i></p> <p><i>SNDP 7 - At the area and neighbourhood planning stage, plan the location of the school/park facilities relative to neighbourhood staging such that they can be consolidated, serviced and available early in the development of a neighbourhood or catchment area.</i></p>	<ul style="list-style-type: none"> ▪ The McConachie NSP will establish a unique character and sense of place through the application of distinctive architecture, landscaping and/or streetscaping as permitted through the <i>Zoning Bylaw</i> and other relevant City policies. ▪ The McConachie NSP proposes a large District Park Campus and school/park site. These facilities will provide educational and recreational opportunities as well as convenient access to students, residents, and neighbouring communities via arterial and collector roadways and the integrated open space system.

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2.2 AIRPORT PROTECTION OVERLAY

The McConachie NSP is situated within the boundaries of the Edmonton Garrison Heliport Zoning Regulations (“EGHZR”). These regulations place restrictions on land uses to ensure the safe ongoing movement of helicopters and associated aircraft.

The northwest stormwater management facility is permitted under the regulations (see Part 6, Division 3 of the Edmonton Garrison Heliport Zoning Regulations). The stormwater management facility in the southeast is an additional reservoir that is not recognized within the EGHZR as published, but was approved by the Department of National Defence (DND) through a letter dated June 24th, 2003 to *Sustainable Development*, associated with an amendment to the Pilot Sound Area Structure Plan (Bylaw 13492) which added the storm pond.

Amended by Editor

All stormwater management facilities are affected by these regulations, and special construction and landscaping to minimize bird hazards will be required. The special construction and landscaping to minimize bird hazards will be subject to approval by the City and the Department of National Defence, as part of the detailed design of the stormwater management facility.

Notwithstanding the above, all stormwater management facilities within the NSP shall adhere to the development standards as required under the EGHZR and are subject to review and endorsement by the Department of National Defence.

2.3 STORMWATER MANAGEMENT GUIDELINES

The location, design and construction of stormwater management facilities shall adhere to the policies outlined in the City of Edmonton's Stormwater Management Facilities Guidelines.

2.4 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

Appropriate design, organization of the physical environment and involvement of the community can help to reduce crime and improve the quality of the environment. In the development of McConachie, decisions relating to transportation design, street pattern, access, noise barriers, public open spaces, parks, the pipeline corridor, multi-use trails and walkways, and the built environment shall use CPTED principles to create a safe and secure neighbourhood. The McConachie NSP will use natural surveillance strategies to increase visibility and awareness of public and private space; natural access control techniques to guide / direct persons within natural and built environments; and, promote territorial reinforcement by increasing definition of space and local stewardship within the neighbourhood.

3.0 Site Context & Development Considerations

3.1 TOPOGRAPHY AND VEGETATION

The topography of the lands within the plan area is relatively flat with slight undulations (see **Figure 4.0 – Site Contours**). A large treed area exists across the central portion of the plan area from 66 Street to 50 Street, which form the Significant Natural Area (NE 8091), further described in 3.4.1. A number of smaller tree stands are situated throughout the plan area (see **Figure 5.0 – Site Features**).

3.2 EXISTING LAND USES

Lands within the plan area are primarily used for agriculture purposes with existing farmhouse / residential properties located throughout (see **Figure 5.0 – Site Features**). The Slovenian Canadian Association cultural and social hall is situated in the southwest corner of the plan area adjacent to 66 Street and 167 Avenue and will be integrated with future development.

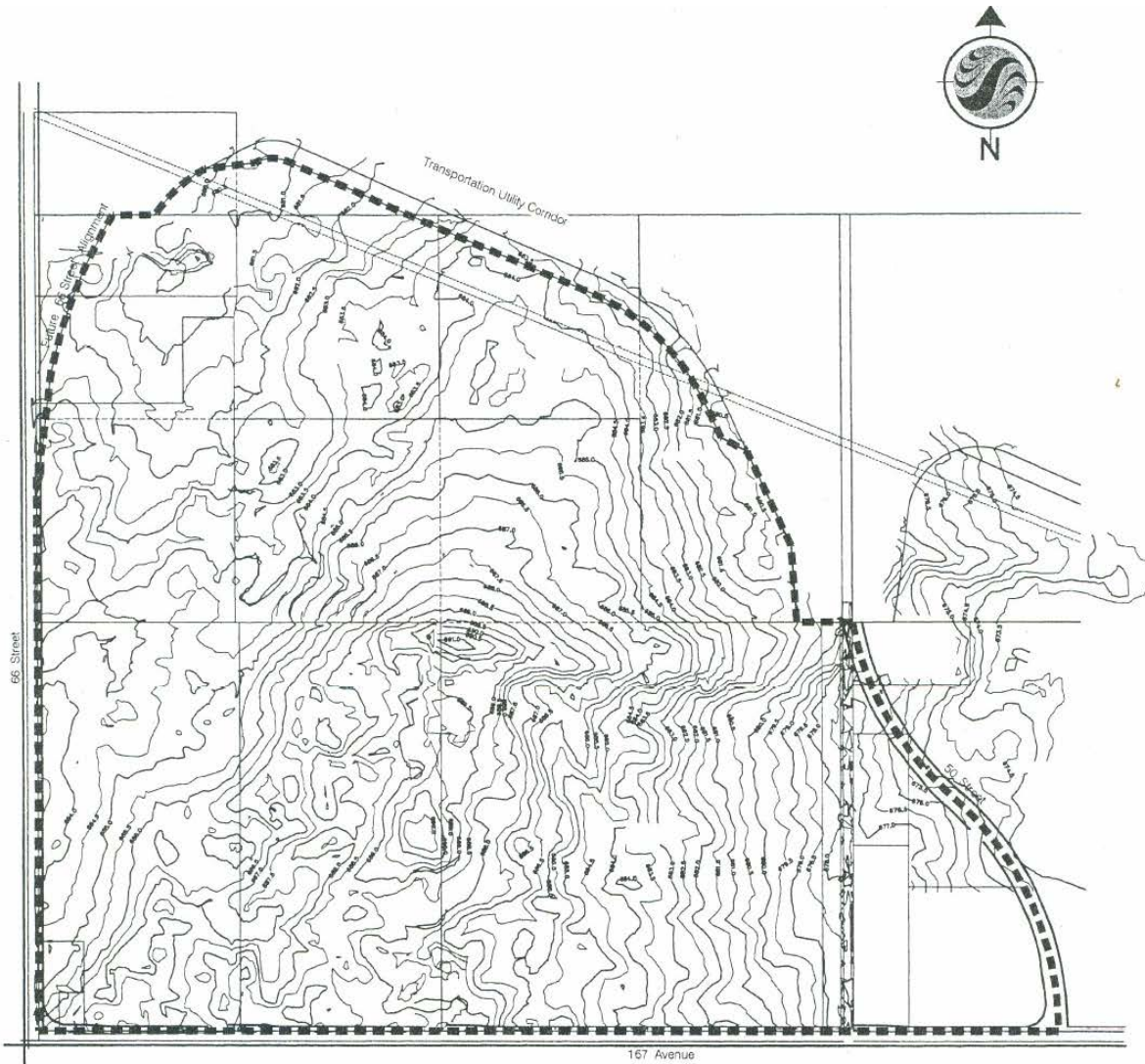
The existing uses situated within the plan do not pose a significant constraint to future urban development and will be retained where required. Future development of any or all of the properties is at the discretion of the respective property owners and applicable land use controls.

3.3 SURROUNDING LAND USES

The plan area is bounded on the north by the TUC, 167 Avenue to the south, 50 Street to the east and 66 Street to the west. The Hollick Kenyon, Matt Berry and Brintnell neighbourhoods are situated to the south of the plan area and are in various stages of development. The Schonsee neighbourhood is situated to the west, across 66 Street, with development progressing easterly from 82 Street. Pilot Sound Neighbourhood 5 is currently undeveloped, situated to the east of McConachie, across the realigned 50 Street. The lands north of the TUC are primarily used for agricultural purposes with associated farm residences.

3.4 ENVIRONMENTAL RESOURCES

The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (1993) identifies one natural area (NE 8091) within the McConachie NSP plan area. Efforts to conserve this natural area will be pursued as indicated in the Natural Area Management Plan. This feature is planned to be integrated with the surrounding development enhancing the aesthetic quality and 'green' infrastructure of the future McConachie neighbourhood. As part of the bigger picture of greening northeast Edmonton and creating ecological corridors, there is an opportunity to link the Schonsee natural area and Poplar Lake with the McConachie NSP through future linkages in Klarvatten, Crystallina Nera, Joviz, Schonsee and McConachie



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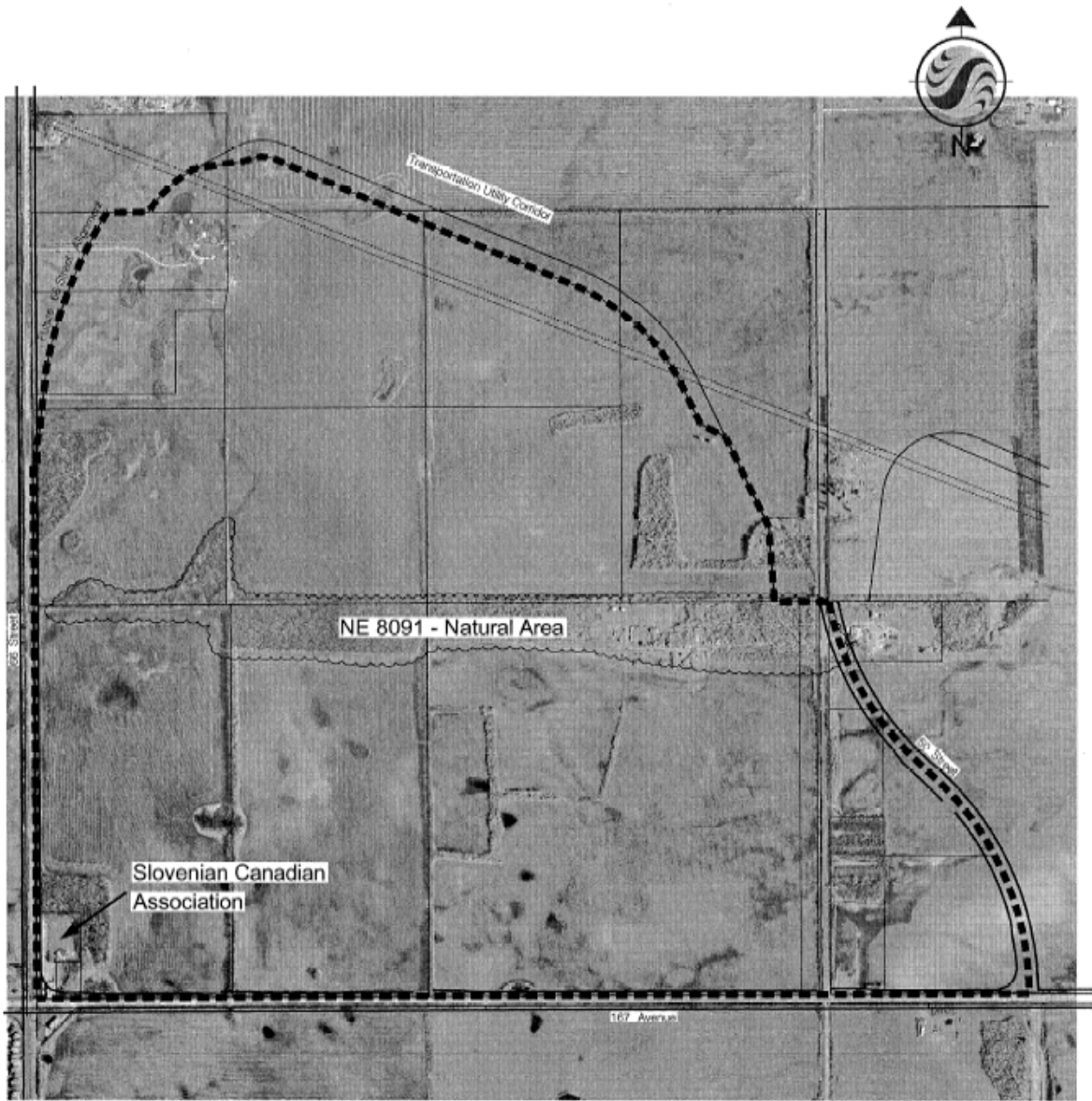
Client/Project

McCONACHIE
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
4.0

Title
Site Contours

November 2005
161 65008



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McCONACHIE
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.

5.0

Title

Site Features

November 2005
161 65008

3.4.1 NE 8091 – Significant Natural Area

The NE 8091 Significant Natural Area is located within the central portion of the plan area. The natural area provides a habitat for local wildlife and a linking function to other adjacent significant natural areas. A mix of aspen and aspen-balsam poplar communities characterizes the area.

3.4.2 Stage 1 Natural Site Assessment (NSA)

The basic objective of a Stage One Preliminary NSA is to screen the natural site to identify important environmental issues and determine the site's natural sustainability in its own right. Step One also seeks to determine whether any major changes have taken place since the 1993 Inventory, which would alter the site's significance.

The natural area was previously determined to have a moderate local environmental significance (Geowest, 1993). Current observations of the natural areas on the Subject Site show a typical remnant aspen forest upland community. The overall biological diversity is high, which is reflected in the diversity of both plants and wildlife observed on the site. No rare or threatened plant or animal species were observed during the site reconnaissance (May 2004). The isolation of this site on the agricultural and urban landscape is significant. A key value is the size of the Subject Site, which is capable of providing significant habitat for small mammals and other wildlife, and the bird habitat provided by the upland forest habitat.

The environmental elements that were highly rated in the Stage 1 assessment include:

- Flora (unique or rare) (Mod/High);
- Fauna (unique or rare) (Mod/High);
- Site Size (sustainability);
- Ecological Linkages;
- Biological Diversity;
- Significant Wildlife Population (Mod/High);
- Vegetation; and
- Bird Habitat.

3.4.3 Stage 2 Natural Site Assessment

A Stage 2 Natural Site Assessment (submitted under separate cover) was required in order to incorporate development information and design parameters for the Subject Site.

The proposed development will result in the loss of a small area of mature forest for the construction of a collector roadway and pedestrian trails. The associated loss of habitat, biodiversity and ecological sustainability can be mitigated by enhancement planting in the buffer and limiting construction disturbance.

The incorporation of the woodlot area into the new development will provide opportunities for the enhancement and retention of wildlife and plant biodiversity. Opportunities related to the development itself in retaining the site as a natural feature as part of the development, which offers an aesthetic feature for public enjoyment and education. Overall, much of the historical form and function of the forest stand can be maintained within the urban environment, while providing a variety of positive impacts to the development and the future residents.

The following mitigation measures were recommended in order to minimize negative impacts on the highly important environmental elements:

1. Retain as much of the woodlot natural vegetation and minimize construction disturbance;
2. Promote a vegetated buffer of 15-20 m surrounding the forest stand to increase habitat diversity and maintain wildlife use.
3. Limit human disturbance to the site through the use of a continuous fence and controlled access points;
4. Plant native trees and shrubs within the buffer zone to provide additional wildlife habitat and increase biodiversity, if required;
5. Ensure all pedestrian pathways are naturalized to reduce disturbance and blend them with the surrounding landscape; and,
6. Maintain surface water runoff that follows the natural drainage patterns.

3.5 PHASE I ENVIRONMENTAL SITE ASSESSMENTS

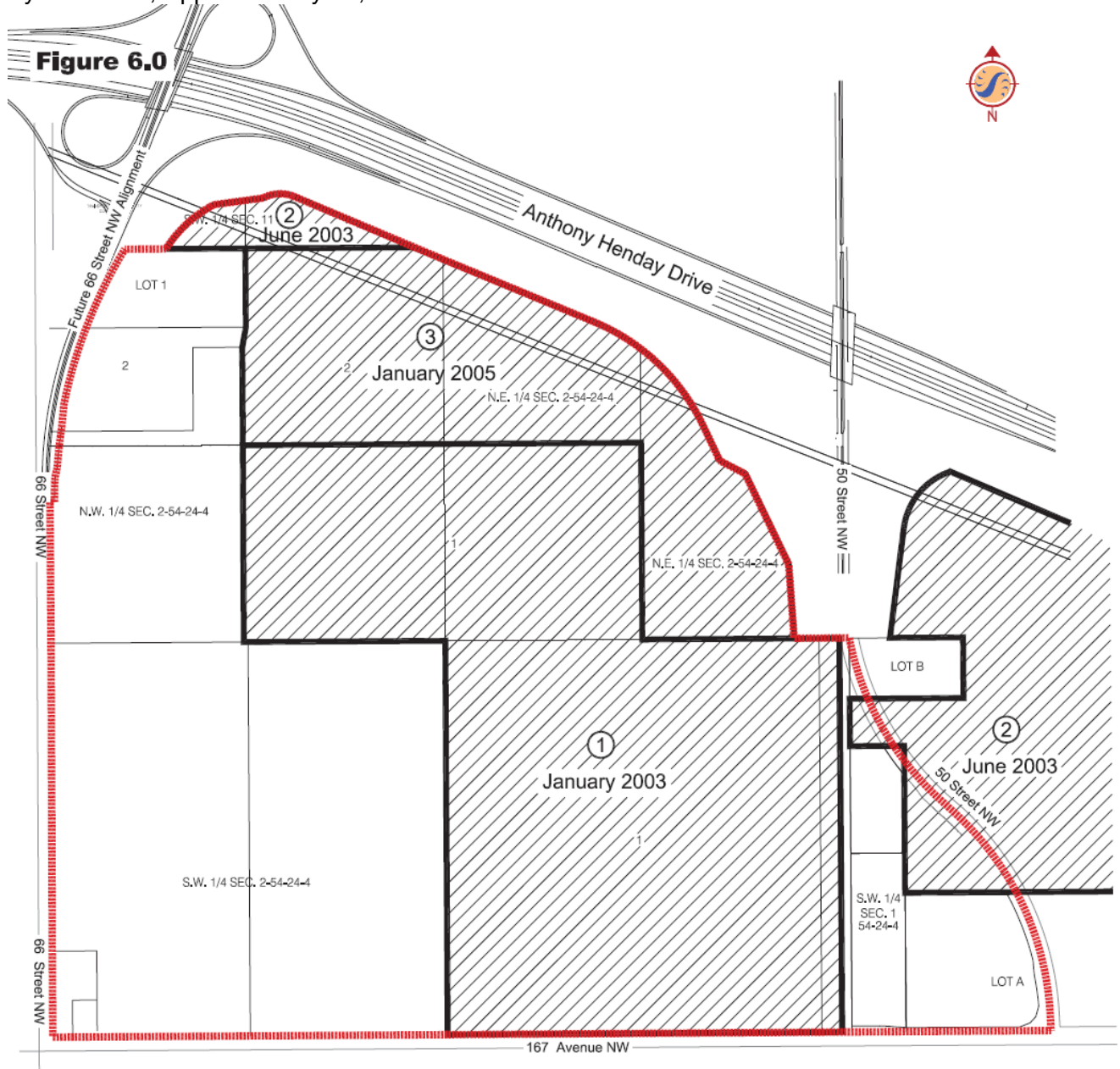
A number of Phase I Environmental Site Assessment (ESA) reports have been completed for the majority of the properties. The reports cover the lands located within the SE ¼ 2-54-24-W4M, NE ¼ 2-54-24-W4M and parts of the NW ¼ 2-54-24-W4M and SW ¼ 11-54-24-W4M

3.5.1 Results of the Phase I Environmental Site Assessments

The following table identifies each Phase I ESA that has been completed for the McConachie NSP (see **Figure 6.0 – Environmental Site Assessment Plan**).





Table 2 Phase I – Environmental Site Assessments			
Report	Land Owner	Location	Comments
1	Private Corporate Owners	NW ¼ 2-54-24-W4M	Further investigation required
2	Private Corporate Owners	Portions of SW ¼ 1-54-24-W4M and SW ¼ 11-54-24-W4M	Further investigation required
3	Private Corporate Owners	Portions of NE ¼ 2-54-24-W4M	Further investigation required

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Approved May
21, 2013



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-  Phase 1 ESA Completed
-  Phase 1 ESA Required Prior to Rezoning
-  Corresponds to Table 2
-  NSP Boundary

Client/Project

McCONACHIE
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
6.0

Title

**Environmental Site
Assessment Plan**

In May 2004, Stantec conducted a Phase I ESA Update for the farmyard area located within Plan 772209, Block 1. Numerous environmental concerns were identified associated with debris, buildings, septic tanks, burn barrels, a transformer and water wells situated in the farmyard area.

In March 2005, a follow up Phase 1 ESA Update was completed on two properties legally known as Plan 0220944, Block 1, Lot 1 and Plan 7722209, Block 1. The report did not find any areas of environmental concern.

A Phase 2 ESA is required for the farmstead (see Figure 6.0) prior to rezoning. The Phase 2 will recommend clean up and remediation measures to ensure the lands are clear of any environmental contamination.

All costs associated with remediation shall be the sole responsibility of the developer and completed to the satisfaction of the City prior to rezoning.

3.5.2 Non-Participating Land Owners

It is believed there are no other Phase I or II Environmental Site Assessments that have been undertaken on the remaining lands within the McConachie NSP. *Sustainable Development* requires that each of the landowners provide ESA's or disclosure statements prior to any rezoning of properties (see **Figure 6.0 – Environmental Site Assessment Plan**).

3.6 HISTORICAL RESOURCES

3.6.1 Historical Resource Overview

A Historical Resources Overview (HRO) was undertaken in August 2003 for the NW, NE, SW and SE ¼ 2-54-24-W4M and portions of the SW ¼ 11-54-24 W4M and SW ¼ 1-54-24-W4M.

The HRO report concluded that there are several archaeological sites located approximately 0.5 km to the west and northwest of the subject lands. Three historic sites are located in the other adjacent portions of Section 11-54-24 W4M. The results of the site observations indicated a low potential for historical resources for the majority of the cultivated lands (85% of the proposed development area) and a moderate to high potential for a portion of the higher ridge area covered by a large stand of trees.

3.6.2 Historical Resources Impact Assessment

Based on the results of the Historical Resources Overview, a Historical Resources Impact Assessment (HRIA) was required to provide further analysis for the central treed area and a southwestern oriented ridge in the north-central portion of the proposed development area.

A pedestrian survey inspection and shovel assessment program was completed for this area. Twenty-one shovel tests were excavated. No significant historical resources were identified in the completion of this study. Also, the shovel-testing program adequately completed the evaluation to appropriate depths, such that no deep testing program was considered necessary. Based on these results and observations we recommend historical resources clearance for the above proposed development lands (*Historical Resources Impact Assessment Final Report*, Stantec Consulting Ltd. November 2004).

Alberta Community Development granted clearance for the McConachie Neighbourhood on January 21, 2005.

3.7 ENERGY & NATURAL RESOURCES

3.7.1 Pipeline Rights-of-Way and Facilities

Alberta Energy and Utilities Board Pipeline License Register identifies two natural gas pipelines (License No. 2594-12 and 2594-53) running in a northwest-southeast direction in the northern portion of the plan area. Both pipelines are owned and operated by *two private corporations*. The developer shall be responsible for covering all costs associated with relocating the pipeline. Further details will be determined at the detailed engineering stage through discussion between the landowner, pipeline operator, Alberta Infrastructure and other stakeholders.

Amended by Editor

4.0 Development Objectives & Principles

4.1 DEVELOPMENT OBJECTIVES

The McConachie NSP has been prepared as a comprehensively planned suburban neighbourhood taking advantage of the natural topography, environmental features, existing and planned transportation facilities, and other surrounding attributes of the area. The main objectives of the McConachie NSP are:

- To develop a plan that conforms to the general intent and purpose of the City of Edmonton Municipal Development Plan and the Pilot Sound Area Structure Plan.
- To provide a framework to deliver a high quality, comprehensively planned residential community by defining the land use structure, linkages, servicing designs and development staging.
- To retain the significant natural area within a planned urban development through the implementation of mitigation measures including buffering.
- To address and integrate existing uses (i.e. other property and existing residences) within the plan area.
- To ensure implementation of the plan on an orderly, efficient, staged basis.

4.2 DEVELOPMENT PRINCIPLES

Development of the various land uses within the McConachie NSP are defined through the following principles:

4.2.1 Residential

- Allow for a variety of housing forms to satisfy consumer and market preferences.
- Establish sufficient residential densities to help support the efficient provision of educational facilities, recreational facilities and municipal services such as public transit in an orderly and timely fashion.
- Design residential areas that capitalize on the natural and manmade features such as mature tree stands, stormwater management facilities and parks/open space.
- Orient larger parcels of medium density residential development towards the collector/ arterial road system to provide sufficient access and, where appropriate, a transitional land use between adjacent low density residential development and major roads and commercial uses.

- Integrate smaller parcels of medium density residential development within the neighbourhood adjacent to low density residential development to provide alternative housing options within the community.
- Establish the single family to multi family dwelling unit ratio that conforms to City Council's current guidelines.

4.2.2 Commercial

- Provide commercial development opportunities to serve residents within and outside and the Northeast Edmonton market area.
- Provide neighbourhood convenience/retail opportunities to provide services to local residents.
- Locate and orient commercial sites along arterial and/or collector roadways to ensure high visibility and to provide convenient access opportunities for pedestrians, public transit and private vehicles.
- Ensure that the impact of commercial development on adjacent land uses is minimized through the orientation of land uses and the application of setbacks/buffering available through the Edmonton Zoning Bylaw.
- Ensure convenient pedestrian linkages to commercial areas and transit nodes.

4.2.3 Parks, School and Community

- Provide the appropriate sites for parks, natural areas, recreational, educational and community league facilities.
- Locate and size school sites based on the projected student populations generated within the designated catchment areas by using accepted methods established by the Public and Catholic School Boards and the City.
- Accommodate a District Park site to the standards established by the *Sustainable Development* to serve the residents of the Pilot Sound Area.
- Ensure all parks and open space areas are properly located and accessible via walkway linkages, automobiles and transit.
- Provide flexible site and facility design to accommodate a full range of life-long learning and recreational needs within the community.
- No front driveways shall be permitted across from any school site in consideration of safety.

4.2.4 Transportation

- Provide an efficient, safe and logical transportation system within the plan area to address the pedestrian, bicycle, public transit and vehicular transportation needs of residents moving to, from and within the McConachie area.
- Establish an integrated network of walkway corridors, parks and/or connections that encourage pedestrian connectivity, activity and social

interaction as well as providing convenient and safe access to transit (see Figure 8.0).

- Plan for the provision of transit service within 400 m of residential areas that include a range of housing densities, types and choices.
- Provide opportunities for pedestrian and bicycle access into adjoining neighbourhoods through walkways corridors.

4.2.5 Natural Area

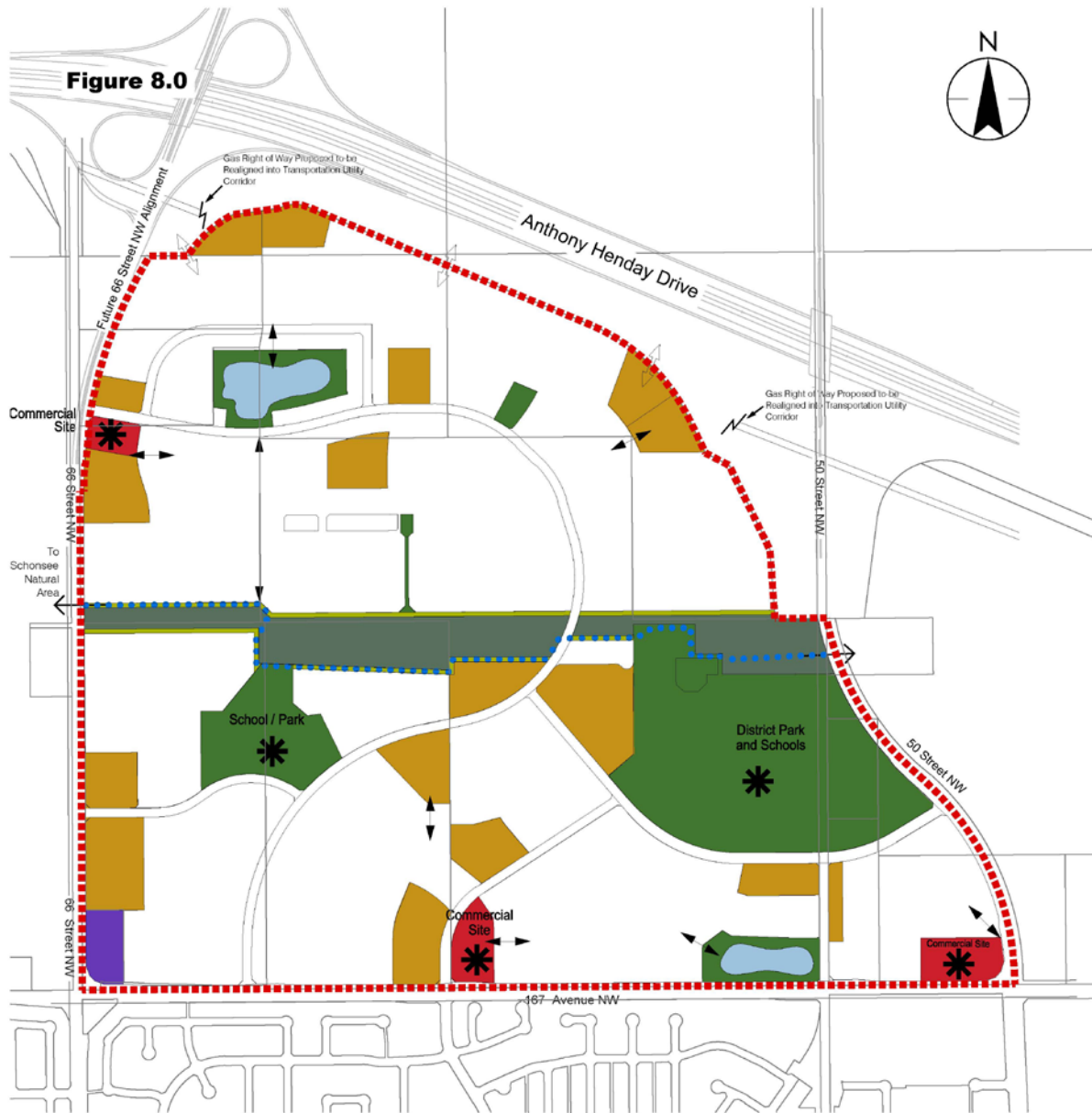
- Preserve and integrate natural areas into the plan area as identified in the Natural Area Management Plan.
- Preserve and enhance natural areas by integrating them into urban development and linking them via the walkway corridors as identified in the Natural Area Management Plan.
- Utilize the retained natural areas to serve as a community focal point and neighbourhood amenity. Retaining the natural area will also provide a variety of environmental benefits (e.g. protect habitat diversity, reduce air pollution and stormwater runoff) and serve as a potential linkage to adjacent neighbourhoods / natural areas.
- Encourage naturalized landscaping on public and private lands to minimize environmental and economic costs associated with their maintenance.
- Incorporate a buffer adjacent to the Significant Natural Area (NE 8091) to protect habitat diversity and maintain wildlife use.
- Urban development may not disturb the natural drainage patterns of the significant natural area to ensure that the woodlands are not adversely affected.
- Complete the required studies (Stage 1 and 2 Natural Site Assessment and Natural Area Management Plan) to ensure environmental resources are preserved and properly integrated with urban development.

4.2.6 Urban Services and Infrastructure

- Encourage compact land use patterns and shared infrastructure that optimize land use and services efficiency.
- Respect the natural drainage patterns, where feasible, and utilize this natural pattern to provide storm drainage service to the urban environment.

4.3 MCCONACHIE NATURAL AREA (NE 8091)

The McConachie tree stand (NE 8081) is to be integrated into the McConachie neighbourhood and managed to function in conjunction with residential activities to maintain vegetation diversity, provide habitat for avian and mammalian species



<p>Legend</p> <ul style="list-style-type: none"> ●●● Major Pedestrian Linkage ↔ Pedestrian Access ↔ Possible Pedestrian Access Point to Transportation Utility Corridor * Destination Areas --- NSP Boundary <p>Stantec 10160-112 Street Edmonton, AB T5K 2L6 www.stantec.com</p> <p><small>V:\1161103830\dwg\mxd\ref\plan\NSP_area\mxd\ref\mcc\mccnsch\mccnsch216.dwg</small></p>	<p>Client/Project McCONACHIE NEIGHBOURHOOD STRUCTURE PLAN</p> <p>Figure No. 8.0</p> <p>Title Pedestrian Linkages</p> <p>December 10, 2015 1161 103830 MR</p>
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(specifically avian passerines), reserve linkages with surrounding natural areas, support self-sustaining natural communities, and to be an attractive recreational amenity.

For the enjoyment of residents, the objective for the long-term operation and management of the tree stand is to incorporate a naturally sustainable tree stand into an urban residential development. A Natural Area Management Plan (NAMP) will be required to guide the preservation of the natural area.

5.0 Development Concept

5.1 NEIGHBOURHOOD UNIT

The following sections outline the development concept for the McConachie NSP adhering to the development objectives and principles illustrated previously in Section 4.0, and the policies outlined in Section 2.0.

The McConachie NSP is comprised of approximately 256 hectares and is located in the northeast part of Edmonton. The neighbourhood is bounded by the Transportation and Utilities Corridor (TUC) to the north, 167 Avenue to the south, 50 Street to the east and 66 Street to the west. **Figure 7.0 - Development Concept** shows the general land use and circulation patterns for the McConachie NSP.

The area, number of dwelling units and population attributed to the various land uses is illustrated in **Table 3 – Land Use and Population Statistics**.

5.2 RESIDENTIAL

The majority of lands within the McConachie NSP have been designated for residential development. A variety of low and medium density residential uses are proposed and will be developed based on market conditions and consumer preferences at the time of development. The following residential densities are proposed for the McConachie NSP:

- *25 units per net residential hectare for Low Density Residential*
- *45 units per hectare for Row Housing*
- *90 units per net residential hectare for Low-rise/Medium Density Residential*

Bylaw 15939
Approved Nov
21, 2011

This will result in approximately 49 people per gross developable hectare.

Bylaw 15939
Approved Nov
21, 2011

5.2.1 Low Density Residential (LDR)

Low density residential (LDR) areas have been located to take advantage of the natural features (mature tree stands) and man-made amenities (walkway corridors, stormwater management facilities, parks/open space). Low density residential development will be planned in clusters / cells to maximize the use of infrastructure and developable land, and to provide a greater sense of identity within the various sub-areas. Housing forms within the low density residential areas will be predominantly single and semi-detached housing catering to a variety of lot and home sizes such as the RF1 RPL, RSL, and RF4 land use zones.

The area, number of dwelling units and population attributed to LDR development is shown in the **Table 3 – Land Use and Population Statistics**

5.2.2 Medium Density Residential (MDR)

Medium density residential (MDR) consists of a variety of housing forms and densities including row housing, stacked row housing and low-rise apartment buildings. A number of medium density residential areas are shown within the McConachie NSP.

The majority of the medium density residential sites have been situated adjacent to collector and arterial roadways for convenient and safe access. Medium density residential development may also serve as a transitional land use between various land uses. The type of medium density residential pursued throughout each development stage is subject to consumer and market demands.

While parcels of MDR are likely to be developed on a self-contained basis, opportunities exist to develop street-oriented row housing designs adjacent to LDR housing through sensitive streetscape design, attention to transitioning and landscaping. These areas are intended to develop under the applicable uses and densities in the *Zoning Bylaw* such as RF5, RF6 or RA7.

Amended by Editor

5.3 COMMERCIAL

Three commercial areas are proposed for the McConachie NSP. These commercial sites will accommodate a variety of retail opportunities to serve area residents.

Bylaw 15939
Approved Nov
21, 2011

One commercial site is situated in the southcentral portion of the neighbourhood adjacent to 167 Avenue and a major neighbourhood collector roadway. This site is of adequate size to support a number of commercial/retail uses. *The commercial site, located north of 167 Avenue NW and east of McConachie Way NW, provides efficient and convenient access, and is intended to provide commercial and retail services to residents of McConachie and the surrounding neighbourhoods.*

Bylaw 17346
Approved Sept
8, 2015

The second commercial site is situated in the northwest portion of the neighbourhood. This site is located east of 66 Street and south of a collector roadway. The site is intended on providing residents with local commercial / retail services.

The third commercial site is situated in the southeast corner of the neighbourhood. This site is located at the northwest corner of the intersection of 50 Street NW and 167 Avenue NW. The site is intended to provide residents of McConachie and adjacent neighbourhoods with community-servicing commercial services, and function in conjunction with other commercial sites at this intersection as a significant commercial area.

Bylaw 15939
Approved Nov
21, 2011

The total amount of development area dedicated to commercial uses is 3.55 hectares and accounts for 1.4% of the total Gross Developable Area (GDA).

Bylaw 15939
Approved Nov
21, 2011

5.4 EDUCATIONAL FACILITIES

Two school sites are proposed for the McConachie NSP. The school sites shall be developed in coordination with and at the discretion of the respective school boards and *Sustainable Development*. In consideration of safety and security to access these educational facilities, no front driveways with access directly onto the collector roadway will be permitted opposite the District Park site or neighbourhood school/park site.

3-Phase power will be provided by the owner/developer to all future school and community league building sites.

5.4.1 District Park

A District Park site is proposed in the eastern portion of the neighbourhood. This parcel is planned to accommodate a number of schools facilities (Catholic Elementary and Junior High, Public Junior High) and associated playfields. The site is also planned to serve as a major recreational facility for both the McConachie neighbourhood and surrounding areas. The McConachie District Park site will accommodate a multi-purpose recreation facility as recommended for north Edmonton in the Recreation Facility Master Plan, approved on August 31, 2004 by City Council. The proposed site's location provides excellent vehicle and transit access in addition to further enhancing pedestrian connectivity. Transit services with appropriate transit stops and transfer points will be incorporated providing residents alternative and accessible mobility options.

The District Park Site includes a 1.33 acre existing homestead parcel which has been identified on Figure 7.0 – Development Concept. This parcel will be the remainder of the titled area once the subdivision is registered and will maintain its current (AG) Agriculture Zone. A 6 metre temporary easement will be provided along the existing dirt road from the proposed low density residential area to the west in order to provide legal and physical access to the existing homestead. A temporary easement will also be provided adjacent to the southeast corner of the existing homestead parcel in order to accommodate the existing driveway.

Bylaw 16434
Approved May
21, 2013

5.4.2 School/Park

A second school/park site is proposed in the central portion of the NSP. This site is planned to accommodate a Public Elementary school, community league and associated park space. The site's central location and proximity to two collector roadways provides suitable frontage and access for residents. A major pedestrian walkway parallels the northern portion of the site and provides a direct connection to the District Park site to the east.

5.4.3 Pocket Park

A Pocket Park will be used to serve a residential sub-area within the neighbourhood for passive and active recreation opportunities. Once park

Bylaw 16434
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21, 2013

space is proposed within the northeast portion of the neighbourhood to meet the needs of all users within this community. The NSP provides a 0.5 ha (approx.) park located within the northeast portion of the neighbourhood. The placement of the Pocket Park will ensure that all residents are within 500 metres of park space, offering convenient access to parkland for everyday activities. The park site is intended to serve as gathering place for the neighbourhood and will provide opportunities for passive recreation space for residential use at a local level.

5.5 PARKS & NATURAL AREA

5.5.1 Parks and Natural Areas

A variety of parks/open spaces are proposed for the McConachie NSP. The District Park located in the eastern part of the plan area is the primary park and open space area. The District Park is of sufficient size to accommodate a wide range of educational, recreational, sports and leisure activities (baseball diamonds, soccer fields, etc).

5.5.2 Natural Area (NE 8091)

The significant natural area (NE 8091) located in the central part of the plan area serves as a natural amenity and community focal point. In addition to providing an important ecological linkage and habitat for a variety of plant and wildlife species, the natural area adds an aesthetic value to the neighbourhood and opportunities for educational purposes, particularly for the areas adjacent to the district park and school sites. The 'outdoor classroom' concept has proved to be an asset in other communities and will have similar benefits in the McConachie neighbourhood.

As recommended in the Stage 2 Natural Site Assessment, a buffer is recommended between urban development and the natural area. The buffer surrounds the perimeter of the natural area designation as shown on **Figure 7.0 – Development Concept** and will protect the natural area from impacts due to development, proximity to residential lots and increased pollution. The width of the buffer has been determined balancing the development opportunities of the land owners, the viability of the woodlot and the financial impacts of the conservation effort. The buffer will be measured from the drip line outwards 10 metres, based on 2005 aerial photos which identify the existing boundaries of the natural area. For those areas where the District Park site and neighbourhood school/park site are adjacent to the natural area, the 10m buffer will be incorporated into the northern portions of these sites.

5.5.3 Pedestrian Corridors

Walkways and multi-use corridors connect residents and neighbouring communities to focal points (Schools/District Park sites, natural areas, stormwater management facilities) throughout the plan area (See **Figure 8.0 – Pedestrian Linkages**). These linkages provide inter-neighbourhood access to common community facilities and services enhancing community quality of life.

An east-west walkway corridor provides access through the central part of the NSP connecting the District Park, school/park sites and natural area with the neighbourhood. Access to the TUC is proposed via pedestrian corridors, which may provide connections to a future multi-use trail system under consideration by the Province. Three potential access points to the TUC are shown on Figure 8.0 at this time, and future detailed access locations will be determined at the zoning and subdivision stages of development. If a future multi-use trail is allowed within the TUC, the trail is to be built by the owner/developer with adjacent subdivisions. Additional pedestrian linkages shall be provided along the local and collector roadways and with internal pedestrian walkways to connect all areas of the plan. The exact location of walkways / pedestrian corridors and connections will be determined at the subdivision stage; however, Figure 8.0 identifies pedestrian accesses to destination points within the plan area conceptually, to guide the future incorporation of walkways at the subdivision stage of development.

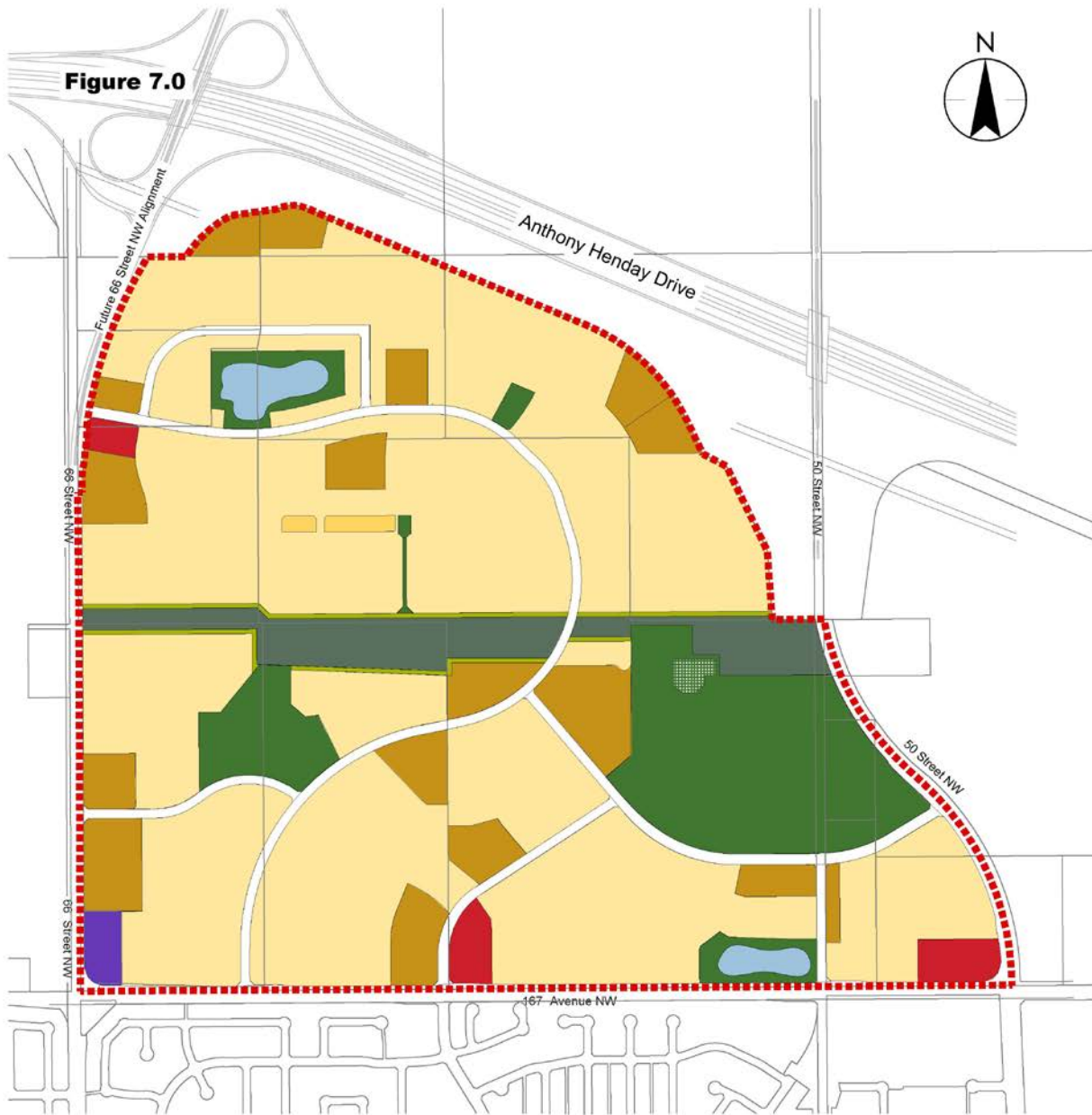
A 0.13 ha north-south linear corridor in the north-central portion of the neighbourhood will provide multi-modal connection from the school/park site and natural area into the northern portion of the neighbourhood.


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21, 2013

5.6 INSTITUTIONAL

A 1.92-hectare parcel located in the southwest portion of the NSP (adjacent to 167 Avenue and 66 Street) is designated as Institutional. The site is currently occupied by the Slovenian Canadian Association and is used as a community/banquet hall. A portion of the existing hall facility is situated within the future intersection right-of-ways of 66 Street and 167 Avenue. Discussions regarding the future status of the building and use of the land shall be determined through discussions with the land owner and *Sustainable Development*.

Figure 7.0 Development Concept (Bylaw 17614, May 25, 2016)



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5.7 TRANSPORTATION

The McConachie NSP offers a range of transportation facilities to accommodate the efficient movement of vehicles, pedestrians and public transit.

A hierarchy of roadways will provide the necessary inter-connections appropriate to efficiently accommodate traffic at the local, collector and arterial levels. Given the neighbourhood's proximity to 50 Street, 66 Street, 167 Avenue and the Transportation and Utility Corridor, the transportation network has been developed to accommodate connections to the external traffic flows heading in all directions.

The basic transportation network has been designed to meet traffic flow requirements generated by the neighbourhood in accordance with City of Edmonton guidelines and standards.

The overall transportation system for the neighbourhood is described in greater detail in Section 7.0.

6.0 Servicing

6.1 SERVICING DESIGN CONCEPTS

The following section describes the engineering service design concepts for the McConachie Neighbourhood Structure Plan.

6.2 STORMWATER DRAINAGE

A north-south ridge running through the centre of the subject lands acts as a natural drainage divide. Servicing for the eastern portion is covered under the Pilot Sound Area Master Plan (AMP) and the west area storm concept is addressed under the Lake District AMP.

The eastern half of the neighbourhood is further divided into three basins. One stormwater management facility within the study area will connect to the existing storm trunk system within the Brintnell neighbourhood. The other two basins drain to future facilities outside the study area, one to the south east (in North Brintnell) and one to the future neighbourhood to the east of the McConachie neighbourhood.

The west area is further divided into two basins. The southern basin drains into a proposed stormwater management facility west of 66 Street, and the northern basin drains into an onsite stormwater management facility.

The storm servicing plan for the southern basin (southwest portion of the McConachie NSP) is consistent with the revised Lake District Area Master Plan for construction of a stormwater management facility at the location of NE8094 (reconstructing a natural wetland).

Bylaw 16434
Approved May
21, 2013

The northern basin drains into an onsite stormwater management facility, previously proposed within the Land District Area Master Plan to connect to the stormwater management facility in the east Schonsee Special Study Area.

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21, 2013

The conceptual stormwater design for McConachie is shown in **Figure 9.0 – Stormwater Drainage**. This figure also outlines the areas in which further servicing studies are required prior to zoning.

6.3 SANITARY DRAINAGE

The lands are divided into two sanitary drainage service areas delineated by a north-south ridge through the centre of the NSP. Sanitary drainage for the eastern portions of the NSP lands will be directed into the existing Brintnell trunk sewer system. The western portion of these lands will be served through future trunk sewer along 66 Street to connect to the North Edmonton Sanitary Trunk (NEST) at 153rd Avenue.

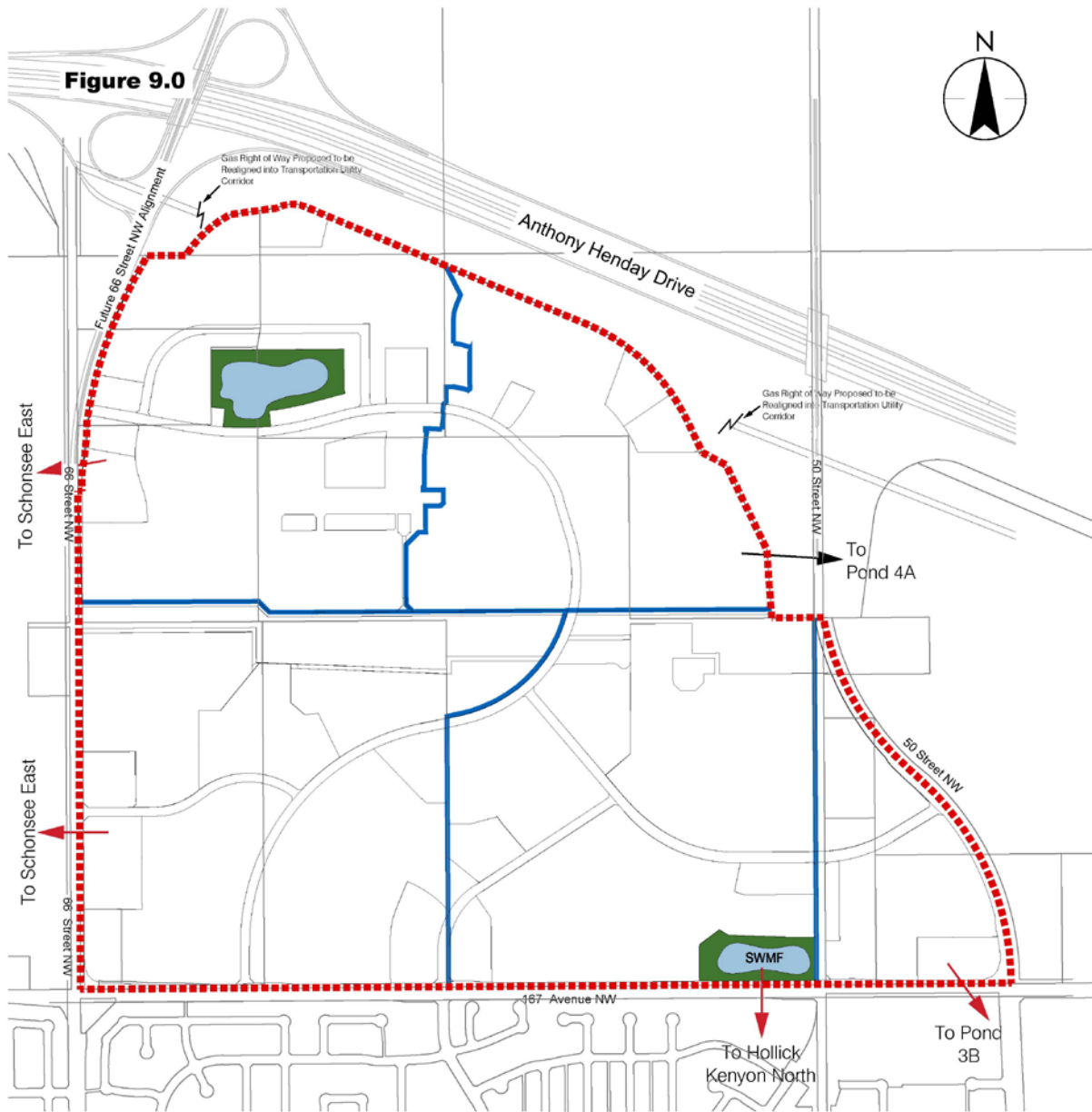
Sanitary Servicing of the western portion of the NSP area is constrained by the current unavailability of offsite systems to accommodate the development of the area. The NEST trunk has been completed and construction is currently underway with completion expected in 2013. This will remove any remaining sanitary constraints.

The conceptual sanitary design for McConachie is shown in **Figure 10.0 – Sanitary System**.

6.4 WATER DISTRIBUTION

Water servicing will be designed to provide peak hour flows and fire flows for residential and commercial uses. Water looping will be provided in accordance with the requirements of EPCOR.

The conceptual water design for McConachie is shown in **Figure 11.0 – Water Distribution**.

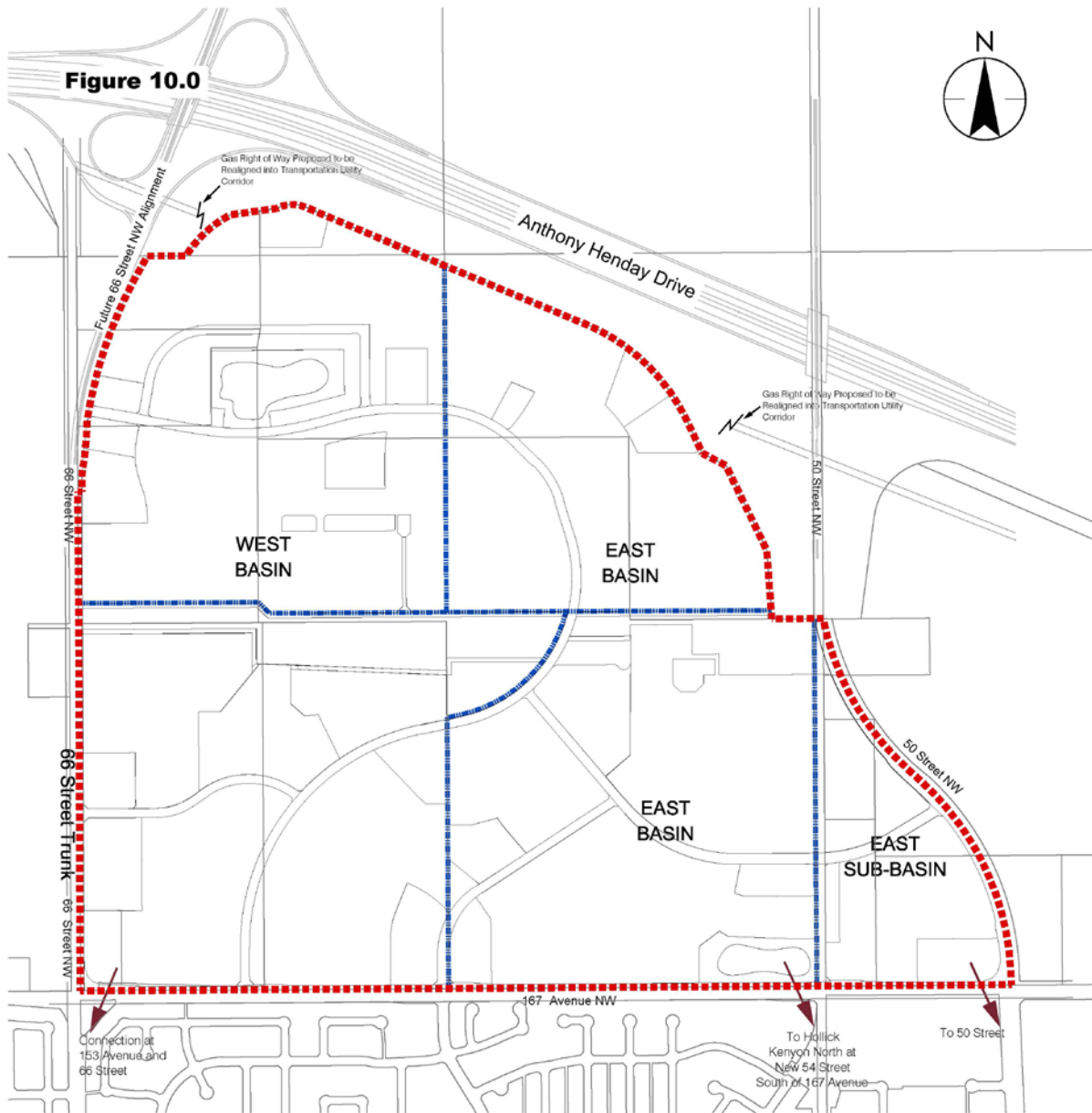


<p>Legend</p> <ul style="list-style-type: none"> Direction of Flow Drainage Basin Boundary NSP Boundary Stormwater Management Facility 	<p>Client/Project McCONACHE NEIGHBOURHOOD STRUCTURE PLAN</p> <hr/> <p>Figure No. 9.0</p> <hr/> <p>Title Stormwater Drainage</p> <hr/> <p>December 10, 2015 1161 103830 MR</p>
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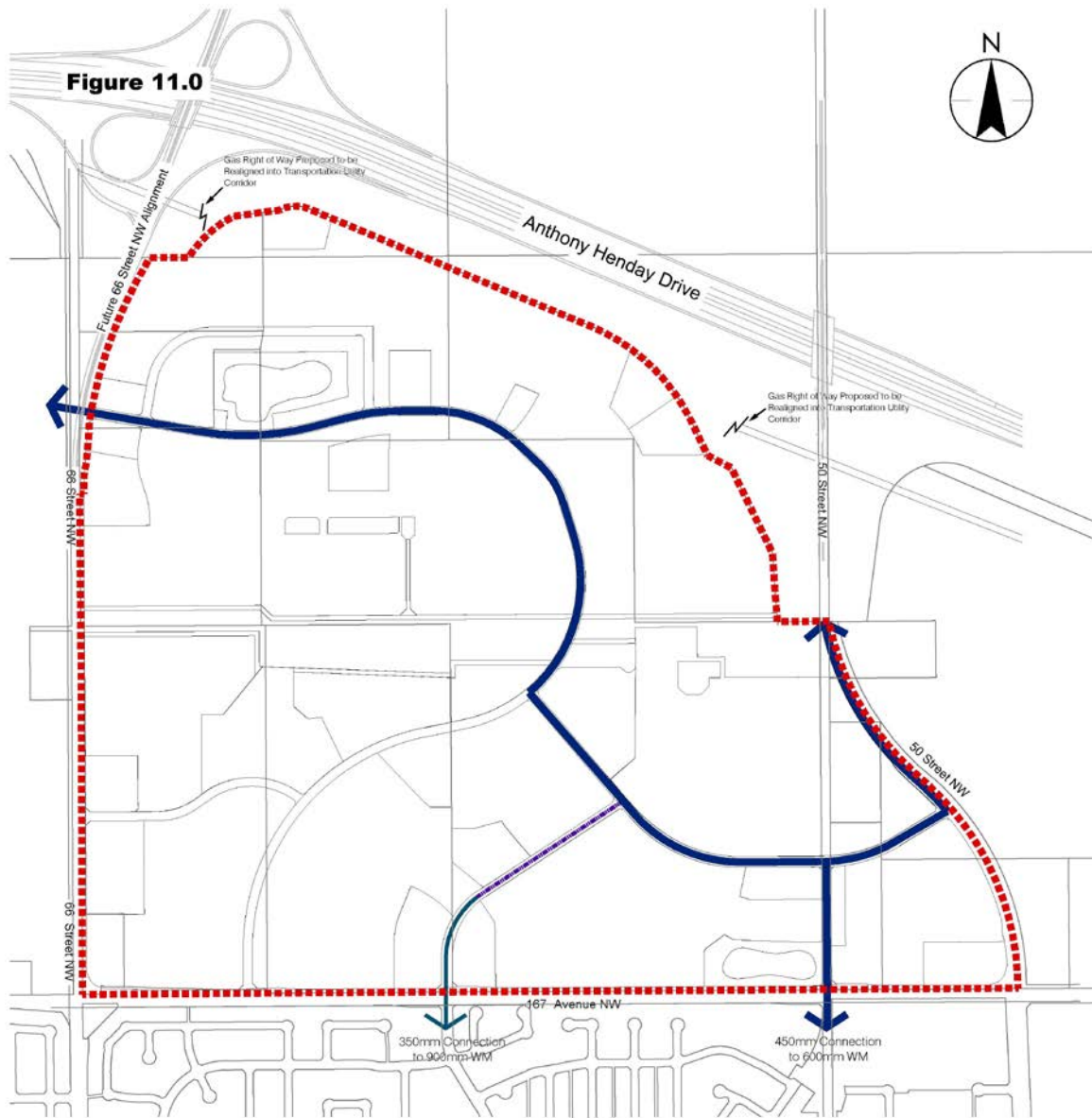
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<p>Legend</p> <ul style="list-style-type: none"> Direction of Flow Drainage Basin Boundary NSP Boundary 	<p>Client/Project</p> <p>McCONACHIE NEIGHBOURHOOD STRUCTURE PLAN</p> <hr/> <p>Figure No.</p> <p>10.0</p> <hr/> <p>Title</p> <p>Sanitary System</p> <hr/> <p>December 10, 2015 1161 103630 MR</p>
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<p>Legend</p> <ul style="list-style-type: none"> — Future Watermain - 450mm — Future Watermain - 350mm — Future Watermain - 300mm - - - - NSP Boundary 	<p>Client/Project</p> <p>McCONACHIE NEIGHBOURHOOD STRUCTURE PLAN</p> <hr/> <p>Figure No.</p> <p>11.0</p> <hr/> <p>Title</p> <p>Water Distribution</p> <hr/> <p>December 10, 2015 1161 103830 MR</p>
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6.5 SHALLOW UTILITIES

Power, gas and telecommunication services are located within proximity to the McConachie plan area and will be provided by the respective utility operators concurrently with development in the neighbourhood. 3-Phase power will be provided by the owner/developer to all future school and community league building sites.

7.0 Transportation

7.1 TRANSPORTATION

The transportation network within the McConachie NSP will consist of arterial, collector and local roadways and walkways to facilitate the movement of automobiles, public transit, pedestrians and bicycles. This system of roadways will provide the appropriate connections to safely and efficiently accommodate traffic flows. The transportation plan for McConachie is illustrated on **Figure 12.0 A – Transportation Plan (Scenario 1)** and **Figure 12.0 B – Transportation Plan (Scenario 2)** depending on the resolution of interchange locations on Anthony Henday Drive (see Section 7.2.3)

7.2 ROADWAY NETWORK

The McConachie NSP maintains a high level of accessibility to the Greater Edmonton Area by virtue of its close proximity to the following major roadways:

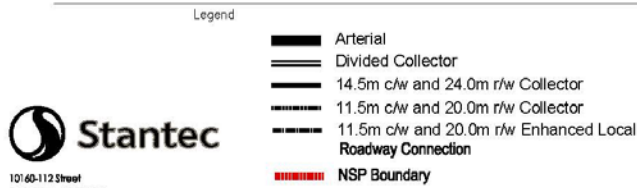
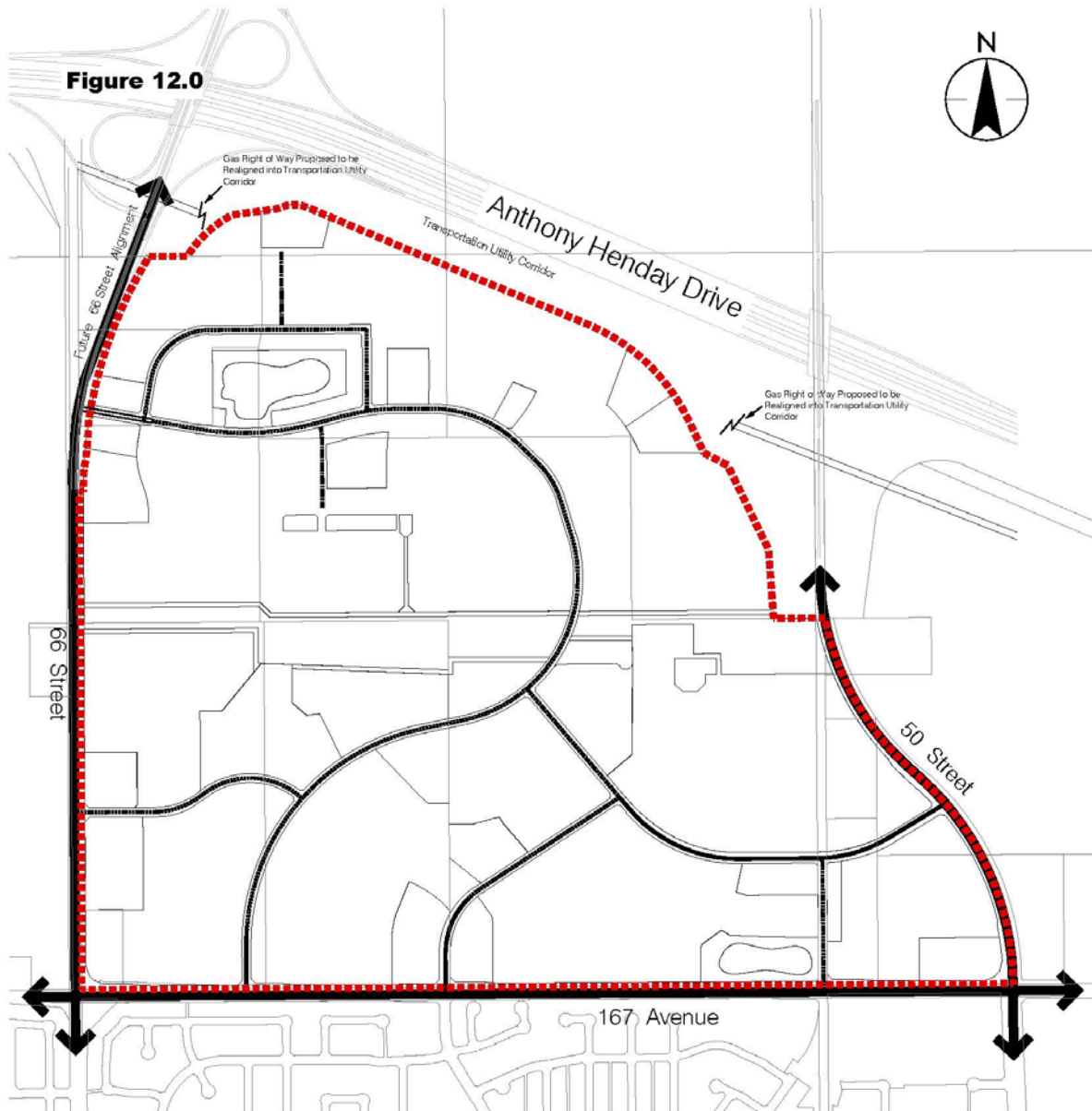
- The Transportation and Utility Corridor (future Anthony Henday Drive)
- 167 Avenue (a major east-west arterial)
- 50 Street and 66 Street (major north-south arterials)

The overall roadway system planned for the McConachie NSP remains consistent with the roadway network advanced under the Pilot Sound Area Structure Plan (as amended). The arterial roadway system generally represents extensions of arterial roadway facilities that have been identified as major elements of the overall transportation system. The location and design of arterial roadways contemplates future alignment with the developing and planned neighbourhoods peripheral to the NSP.

7.2.1 Regional Network Accessibility

The McConachie NSP will enjoy a high level of accessibility by virtue of its close proximity to the proposed Anthony Henday Drive and major arterial roadways. The plan area is well served by a hierarchy roadway system that includes;

- 167th Avenue
- 50th Street
- 66th Street
- Transportation and Utility Corridor (future Anthony Henday Drive).



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Client/Project
**McCONACHIE
NEIGHBOURHOOD STRUCTURE PLAN**

Figure No.
12.0

Title
Transportation Plan

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7.2.2 Transportation and Utility Corridor (TUC)

The Transportation and Utility Corridor is planned to be developed as a limited access highway traversing the northern portion of the City of Edmonton. Alberta Transportation is currently reviewing the location and spacing of future interchanges along this portion of the ring road (refer to Section 7.2.3 below). Details regarding the type and location of interchanges will be determined at a future date.

Future road rights-of-way, easements and intersection separation requirements will be determined through detailed engineering and on-going negotiations with Alberta Transportation and *Transportation Services*.

Amended by Editor

7.2.3 Arterial Roadways

The arterial roadway network consists of both east-west (167 Avenue) and north-south (50 Street, 66 Street) roadways. These roadways typically follow the government road allowances and 1-mile grid alignment. A brief description of the major existing and proposed roadway facilities is provided below:

- 50th Street is as an important north-south route bordering the east side of the NSP. This roadway provides a direct link to Manning Drive, Fort Road, 137 Avenue and other adjacent transportation facilities.
- 66th Street is a north-south route along the west side of the plan area. The roadway follows the 66 Street Government Road Allowance.
- 167th Avenue is proposed as a major east-west linkage along the southern boundary of the plan area. This roadway will provide an important connection to Manning Drive east of the plan area and adjacent transportation facilities.

The arterial roadways bordering the plan area are those proposed by the City of Edmonton. These facilities represent extensions of existing roadway systems that have been identified as major elements of the overall transportation system in Northeast Edmonton.

Alberta Infrastructure & Transportation is currently conducting a functional planning study for the north sector of Anthony Henday Drive (AHD). This study is re-visiting the locations along AHD where different intersection configurations (e.g. flyovers, full interchanges) will be planned. It is likely that a full interchange will be ultimately implemented at either 50 Street or 66 Street, but likely not both. The transportation analysis for the NSP reflects both possibilities, and the impacts of either scenario can be accommodated by the design of the neighbourhood as reflected in **Figure 12.0 A and Figure 12.0 B**.

All arterial roadways should be designed as controlled access facilities. The length of turnbays, required auxiliary (access, egress) lanes and requirements for appropriate intersection storage bays at key intersections shall be determined at the subdivision stage.

Pursuant to Section 3 of the City of Edmonton Land Management Strategy, a portion of the existing 50 Street Government Road Allowance (GRA) not proposed as roadway in this Plan shall be closed and purchased by the adjacent owner at market value for development. Where the 50 Street GRA traverses the District Park site, the GRA shall be closed and purchased by the adjacent owner at market value first, and then dedicated to the City as Municipal Reserve.

7.2.4 Collector Roadways

A system of collector roadways is proposed to provide efficient and effective access to all sectors of the neighbourhood and adjacent arterial roadways. A collector road provides a direct connection between 167 Avenue and 66 Street. A number of other collector roadways link the plan area to the adjacent arterial roadways.

A minimum distance separation of 200m is provided where the collector and arterial roadways intersect to help facilitate traffic progression on the arterial roadway system.

Appropriate right-of-way requirements for the collector roadway system will be based on projected traffic volumes analyzed in the Traffic Impact Assessment submitted under separate cover.

7.2.5 Local Roadways

Local roadways will be developed as required and shall provide access within the residential subareas and serve as connections to the collector roadway system.

7.3 ROADWAY STAGING

Upgrades to 50 Street, 66 Street and 167 Avenue will be warranted as traffic volumes increase and in accordance to the City's transportation policies.

7.4 TRANSIT SERVICE

The Edmonton Transit System will be extended into the development area based on the proportion of proposed trips generated by the development area and in accordance with City of Edmonton Transit System Guidelines. Public transit service will be provided along the arterial and collector roadway systems providing convenient service between neighbourhoods, adjacent commercial districts and employment areas. Transit service should be routed to ensure that walking distances are limited to within 400 m of neighbourhood residents. School/park

sites have been placed adjacent to the arterial and collector roadway systems, which will ensure convenient transit service to these sites.

7.5 TRANSIT / PEDESTRIAN NETWORKS

A combination of sidewalks and pedestrian corridors will connect the neighbourhood to the District Park, school sites, parks/open spaces, stormwater facilities, transit routes, commercial areas, and adjacent communities. Bicycle circulation is intended to follow the collector and local roadways and pedestrian walkway system within the neighbourhood area.

7.5.1 Transit Connectivity

The McConachie NSP shall promote the integration of a range of transit services. Initial transit service will be encouraged through the provision of attractive, comfortable and convenient transit waiting areas and stops. Introduction of these facilities with the neighbourhoods increases the probability of usage and provides an alternative transportation option.

7.5.2 Pedestrian Connectivity

Walkway corridors provide residents accessible mobility options (walking, running, cycling) while developing interactive community and encouraging a healthy lifestyle. A major east-west walkway corridor connects various land uses and amenity areas (District Park/ school sites, natural areas, stormwater management facilities and commercial sites) within the plan area (see **Figure 8.0 – Pedestrian Linkages**). Refer to Section 5.5.3 Pedestrian Corridors for further details.

Sidewalks shall be provided along all arterial, collector and local roadways in accordance with City policies and practices.

7.6 PARKING

Parking for vehicles will generally be provided off-street in conjunction with residential development.

7.7 TRUCK ROUTES

Truck routes will be maintained along 50 and 66 Streets. 50 Street is designated as a 24-hour truck route and 66 Street is restricted between 7:00 – 22:00 hours Monday to Saturday.

The future Anthony Henday Drive will be designated as a Dangerous Goods Truck Route and Truck Route.

7.8 TRAFFIC NOISE

The Province of Alberta will provide noise attenuation along Anthony Henday Drive in the northern portion of the McConachie NSP in accordance with the City of Edmonton's Urban Traffic Noise Policy. The City's Urban Traffic Noise Policy states: "Where a freeway or arterial is proposed to be built or upgraded through or adjacent to a residential area, the roadway is to be built to meet a noise level as low as possible below 65dBA with an objective of achieving 60 dBA". The Province of Alberta is committed to providing noise attenuation adjacent to existing developed areas along Anthony Henday Drive to satisfy the 60 dBA (24 hr) objective. Where traffic noise levels are not expected to exceed 60 dBA, or where the adjacent area is yet undeveloped, no noise attenuation is required. Should noise attenuation be required at the time of development adjacent to an existing Anthony Henday Drive, noise attenuation will be provided at the developer's expense.

Further noise level evaluations will be carried out during the design phase of the NSP to verify if these and other locations merit noise reduction measures. If during the course of these further evaluations the locations are confirmed to exceed the 60 dBA objective, noise attenuation will be provided at these locations at the expense of the developer. Should the developer be required to construct noise attenuation adjacent to Anthony Henday Drive, the province has indicated that they will generally not permit noise attenuation berming within the TUC. Should the developer be required to construct berming adjacent to Anthony Henday Drive, the land for the berms must be required within the McConachie plan area.

8.0 Implementation

8.1 DEVELOPMENT STAGING

Infrastructure to service to the initial stages of the McConachie NSP area will be extended into the neighbourhood as necessary as per detailed engineering and in accordance with City policies.

Development is anticipated to begin in the southern part of the plan area and proceed in a northerly direction (see **Figure 13.0 - Staging Concept**). Development timelines will be influenced by market demands and aspirations of the respective landowners.

The first stage of subdivision is planned to take access from the existing 50 Street alignment. It is assumed that the future relocation of 50 Street (along the east boundary of the NSP area) will take place in conjunction with significant growth in McConachie and Pilot Sound Neighbourhood 4, and/or the completion of the north portion of Anthony Henday Drive (which may be implemented in the range of 2011 to 2015 and not likely before). The existing 50 Street will require upgrading from 167 Avenue to the first stage collector access, including accommodation of trucks on 50 Street and including channelization at the collector access.

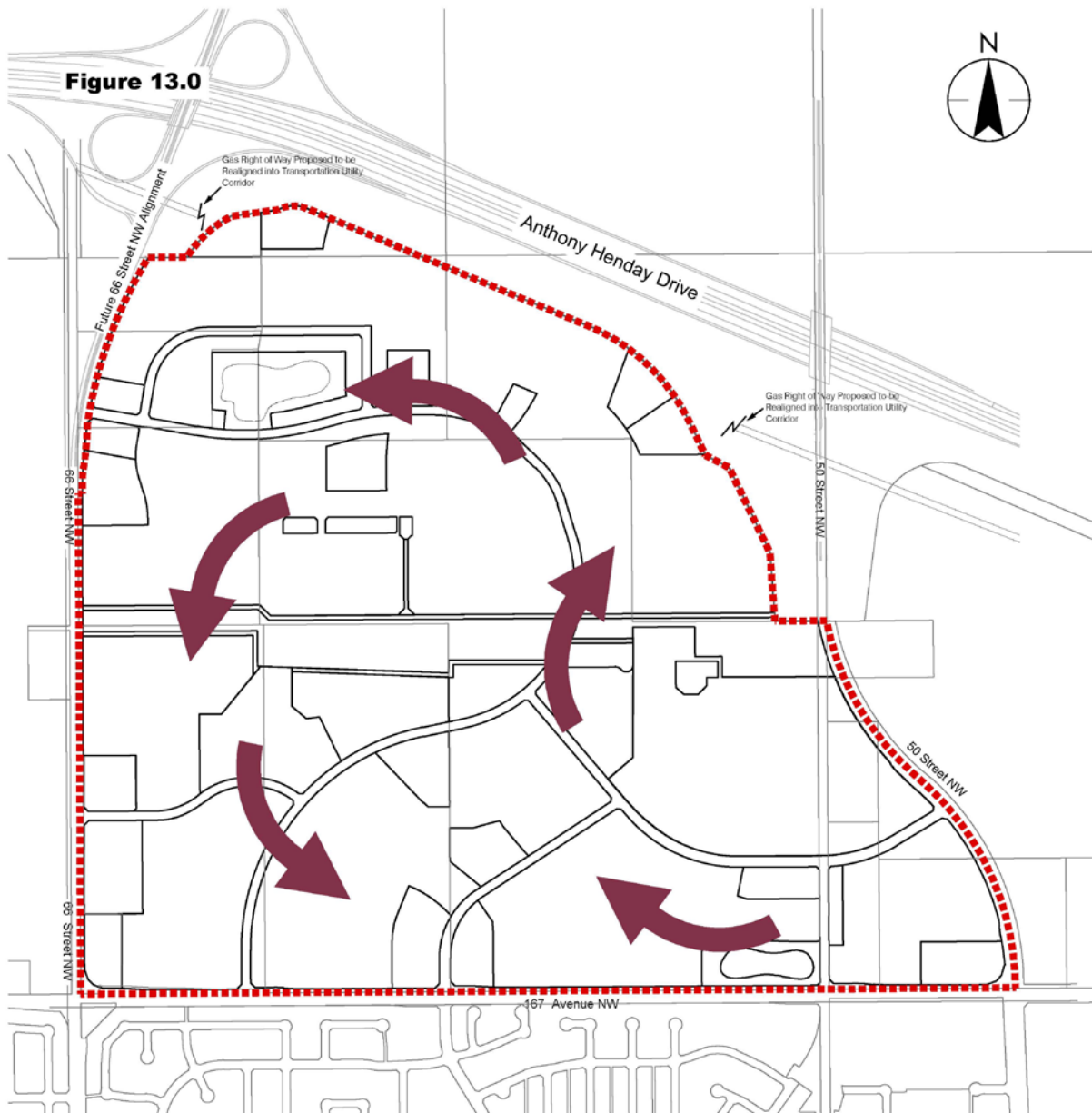
Collector roadways will be staged within the neighborhood corresponding to the incremental stages of subdivision. It is recognized that there are volume limits on collector and local roads which are typically the trigger points to require construction of additional collector connections to arterial roads. Also, it is recognized that the normal process of development results in roads within and bounding completed stages of subdivision generally being constructed in a similar timeframe as the subdivision lands themselves.

8.2 REZONING & SUBDIVISION



The rezoning and subdivision of the lands to conform to the designated land uses shown in the McConachie NSP will be undertaken as required.

8.3 ENVIRONMENTAL SITE ASSESSMENTS

As described in Section 3.5.1 Results of the Phase I Environmental Site Assessments (ESA) and in **Figure 6.0 Environmental Site Assessment Plan**, ESAs as described shall be completed prior to the rezoning stage for the identified areas. Any remediation work identified and required by ESA's for areas designated on **Figure 7.0 Development Concept** as "School/Park", "District Park", "Natural Area" or "10m Buffer" shall be completed in full, at the expense of the owner, prior to the transfer of these lands to the City.



Legend

-  Staging Direction
-  NSP Boundary

Client/Project

McCONACHIE
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.

13.0

Title

Staging Concept

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8.4 NATURAL AREA MANAGEMENT PLAN

Figure 14.0 – Natural Area Management Plan outlines a portion of the plan area adjacent to the natural area in which no zoning is permitted until completion of the McConachie Natural Area Management Plan in full, to the satisfaction of the City of Edmonton affected departments. This policy of the McConachie NSP ensures that at the time that development occurs within McConachie adjacent to the Natural Area, all the required management guidelines, policies and practices and roles and responsibilities are in place within the Management Plan so that the potential effects on the natural area resulting from future development are addressed.

8.5 ARTERIAL ROAD ASSESSMENT PROGRAM

Lands within the NSP will be subject to an Arterial Road Assessment (ARA) to cost-share the construction of arterial roadway facilities needed to service the area. In general terms, the ARA outlines the developer's responsibility for roadway construction within a catchment area and is based on the estimated costs of constructing arterial roads required for access to a catchment area. The configuration (number of lanes) and other specific criteria (e.g. channelization) required for access to the NSP are defined by the associated Transportation Impact Assessment.

8.6 COMPLETION AND ACCEPTANCE OF SERVICING STUDIES

As described in Section 6.0, further studies for storm and sanitary servicing are required to the satisfaction of affected City of Edmonton departments prior to zoning for areas identified on **Figure 9.0 Stormwater Drainage** and **Figure 10.0 Sanitary System**.

