Charter Bylaw 19338

A Bylaw to amend Bylaw 6288, as amended, being the Pilot Sound Area Structure Plan by adopting the Gorman Neighbourhood Structure Plan

WHEREAS pursuant to the authority granted to it by the <u>Planning Act</u> on June 24, 1981, the Municipal Council of the City of Edmonton passed Bylaw 6288, as amended, being the Pilot Sound Area Structure Plan; and

WHEREAS Council found it desirable from time to time to amend Bylaw 6288, as amended, being Pilot Sound Area Structure Plan by adding new neighbourhoods; and

WHEREAS Council considers it desirable to amend Bylaw 6288, as amended, the Pilot Sound Area Structure Plan.

NOW THEREFORE after due compliance with the relevant provisions of the Municipal Government Act RSA 2000, ch. M-26, as amended, the Municipal Council of the City of Edmonton duly assembled enacts as follows:

1. Bylaw 6288, as amended, the Pilot Sound Area Structure Plan, is hereby further amended by adding as Appendix "F" the Gorman Neighbourhood Structure Plan being:

- a) the map entitled "Bylaw 19338 Gorman Neighbourhood Structure Plan" attached hereto as Schedule "A";
- b) the land use and population statistics entitled "Gorman Neighbourhood Structure Plan - Land Use and Population Statistics" attached hereto as Schedule "B", and

c) the report entitled "Gorman Neighbourhood Structure Plan" attached hereto as Schedule "C".

7th

7th

16th

16th

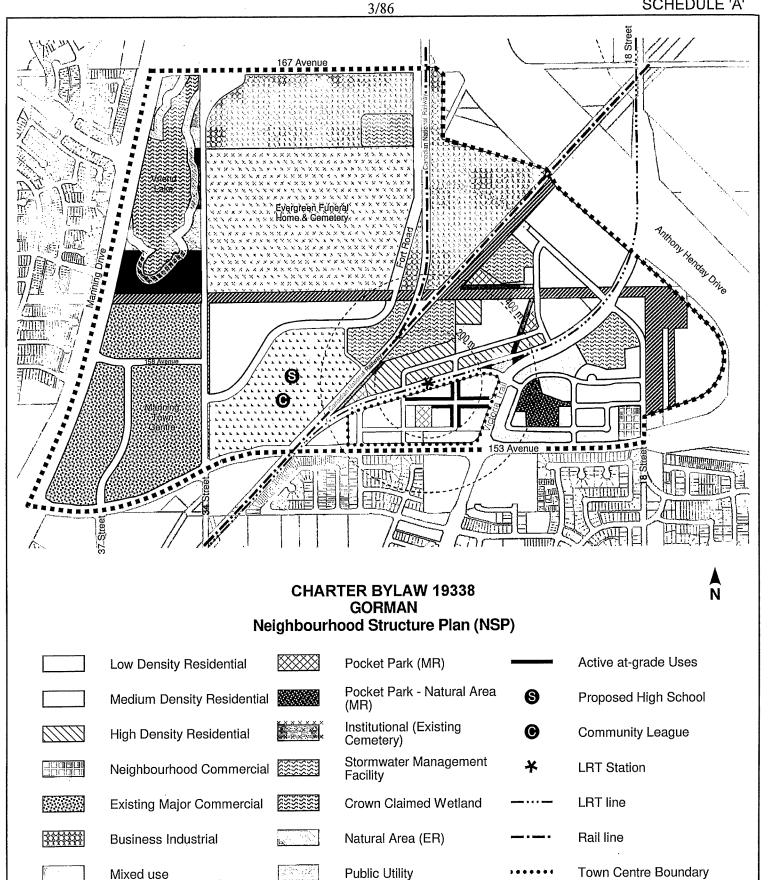
READ a first time this READ a second time this READ a third time this SIGNED and PASSED this

| day of | July | , A. D. 2020; |
|--------|----------|---------------|
| day of | July | , A. D. 2020; |
| day of | November | , A. D. 2020; |
| day of | November | , A. D. 2020. |
| | | |

THE CITY OF EDMONTON MAYOR Guob CITY CLERK

2/86

SCHEDULE 'A'



Gorman/Clareview Extension School Park Site (MR)

. . . .

Powerline/Pipeline Corridor

NSP Boundary

Note: Location of local and collector roads and configuration of stormwater management facilities are subject to minor revisions during subdivision and rezoning of the neighbourhood and may not be developed exactly as illustrated.

Table 2 Gorman Land Use Concept and Population Statistics

| | Area (ha) | % Area |
|---|-----------|-------------------------------|
| GROSS AREA | 255.0 | 100% |
| Natural Area - Crown Claimed Wetland | 9.2 | 4% |
| Natural Area - ER (around wetland) | 3.8 | 1% |
| Utility ROW (power, gas, oil) | 13.7 | 5% |
| Potential Development Area ¹ | 4.9 | 2% |
| Arterial Road ROW | 4.0 | 2% |
| Private Rall ROW | 7.0 | 3% |
| GROSS DEVELOPABLE | 212,4 | |
| Existing Land Uses ² | 69.7 | |
| Institutional (Cemetery) | 39.2 | 18% |
| Major Commercial (Manning Town Centre) | 30.5 | 14% |
| EFFECTIVE DEVELOPMENT AREA | 142.7 | |
| Employment Lands (Industrial) | 32.7 | 23% |
| Neighbourhood Commercial | 1.0 | 1% |
| Mixed Use Commercial | 0.6 | 0.4% |
| Parks | 17.9 | 13% |
| Gorman/Clareview Extension School Park Site (MR) | 14.5 | <u>, to str December 1999</u> |
| Pocket Park (MR) | 1,3 | |
| Natural Area (MR) | 1.9 | |
| Pocket Park - (Non-Credit MR) | 0.2 | |
| Public Utility | 1.4 | 1% |
| Transportation | 29.2 | 20% |
| Collector / Local Road ROW | 26.5 | |
| LRT ROW | 2.5 | |
| On-Street Transit Facility (Bus Layby Lanes) ³ | 0,1 | |
| Greenway | 0.1 | _ |
| Infrastructure Servicing | 15.2 | 11% |
| Stormwater Management Facilities | 15,2 | |
| Total Non-Residential | 98.0 | 69% |
| Net Residential Area (NRA) | 44.7 | 31% |

Notes:

¹ A portion of land has been designated as a "potential development area". If the land is deemed feasible for development, it shall be included in the effective development area for the Gorman NSP through a plan amendment. Municipal Reserves will be owing if this land is developed.

²Municipal Reserves (MR) have not been provided for the cemetery. If this use were to redevelop, MR would be calculated and provided at that stage. MR has been provided at subdivision for Manning Town Centre.

³Assumes that the road will function as a typical collector road upon completion of the LRT extension to Horse Hill.

*SWMF near Vriend Lake is an estimate and the exact size will be determined at the rezoning and subdivision stage.

*The Conseil scolaire Centre-Nord (Francophone school board) was consulted regarding school generation counts but does not employ neighbourhood level student generation calculations.

RESIDENTIAL LAND USE AREA, UNIT AND POPULATION ESTIMATES

| Land Use | Area (ha) | Units/HA | Units | PPL/Unit | Population | % NRA |
|----------------------------|-----------|----------|-------|----------|------------|-------|
| Low Density Residential | 22.3 | 25 | 558 | 2,8 | 1562 | 50% |
| Medium Density Residential | 11.6 | 90 | 1044 | 1.8 | 1879 | 26% |
| High Density Residential | 5.3 | 225 | 1193 | 1.5 | 1789 | 12% |
| Mixed Use Residential | 5.5 | 345 | 1898 | 1.5 | 2847 | 12% |
| Total Residential | 44.7 | | 4693 | | 8077 | 100% |

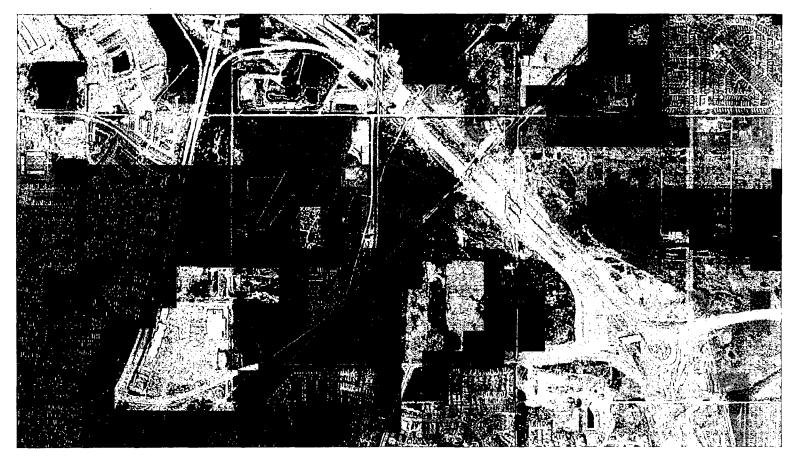
SUSTAINABILITY MEASURES

~

| Population per Net Residential Hectare (ppnrha) | 181 | | | |
|---|---------|--|--|--|
| Units per Net Residential Hectare (upnrha) | | | | |
| [Single / Semi] / [Row Housing, Low Rise / Medium Density, Medium to High Rise] Unit Ratio | 12%/88% | | | |
| Population (%) within 500m of Parkland | 100% | | | |
| Population (%) within 400m of Transit Service | 100% | | | |
| Population (%) within 600m of Commercial Service | 96% | | | |
| Presence / Loss of Natural Area Features (ha) | | | | |
| Protected Environmental Reserve | 4.2 | | | |
| Conserved as naturalized Municipal Reserve (Natural Area) | | | | |
| Protected through other means | Ó | | | |
| Potential Loss to Development (Existing Tree Stands & Wetlands - Class III/IV/V) | 22.7 | | | |
| STUDENT GENERATION COUNT ⁵ | | | | |
| Public School Board Separate School Board | | | | |
| Elementary School 285 Elementary School | 143 | | | |
| Junior / Senior High School 285 Junior / Senior High Scho | ol 143 | | | |
| Total Student Population | 856 | | | |

SCHEDULE "C"

GORMAN NEIGHBOURHOOD STRUCTURE PLAN



June 2020

DIALOG

6/86

College Woods Gorman Hopewell Residential Management LP St. Paul Junction Joint Venture Inc.

Prepared by:



INTRODUCTION

This document has been prepared by DIALOG in support of the development of the Gorman neighbourhood, located within northeast Edmonton. The Gorman Neighbourhood Structure Plan (NSP) was initiated by three majority landowners in the area (referred to as the Participating Landowners throughout the document). Together with the Participating Landowners, the NSP was prepared in cooperation with City Administration, as well as other agencies and service providers, including the Edmonton Public School Board, Edmonton Catholic School District, and the Conseil scolaire Centre-Nord.

The purpose of the Gorman NSP is to define the general pattern of development and subdivision in the new mixed use and transit oriented residential neighbourhood of Gorman. The NSP document serves to:

- Define the neighbourhood design vision,
- Designate the types and location of land uses,
- Establish the transportation network,
- Identify the pedestrian and bike network,
- Provide direction for development adjacent to LRT station,
- Identify the location, size, and configuration of schools, parks, open space systems and natural areas,
- Provide information on expected population size and densities,
- Identify the location and size of neighbourhood facilities,
- Provide general servicing schemes and staging patterns for development.

The policies of the NSP will be used by the City, land owners, and developers to guide subsequent stages of neighbourhood development such as zoning, subdivision, infrastructure design, and construction.

More information regarding the preparation of this Plan and amendment of the Pilot Sound Area Structure Plan is available through the City of Edmonton.

i



Table of Contents

.

| Introduction | i |
|--|----|
| 1 Gorman Neighbourhood Structure Plan | 1 |
| 1.1 Planning Framework and NSP Area | 1 |
| 2 Neighbourhood Development Concept | 4 |
| 2.1 General Plan Context | 4 |
| 2.2 Neighbourhood Vision and Development Concept | 13 |
| 3 Land Use | 18 |
| 3.1 Residential | 18 |
| 3.2 Mixed Use Town Centre | 21 |
| 3.3 Business Industrial and Commercial | 26 |
| 3.4 Institutional | 28 |
| 3.5 Potential Development Area | 29 |
| 4 Public Realm | 30 |
| 4.1 Streetscapes and Built Form | 30 |
| 4.2 Landscape | 31 |
| 4.3 All Weather Design | 33 |
| 5 Ecology, Parks and Amenities | 34 |
| 5.1 Natural Areas | 34 |
| 5.2 Parks and Open Space | 40 |
| 6 Transportation | 46 |
| 6.1 Active Transportation | 48 |
| 6.2 Transit | 51 |
| 6.3 Road Network | 53 |
| 6.4 Transportation and Land Use Integration | 55 |

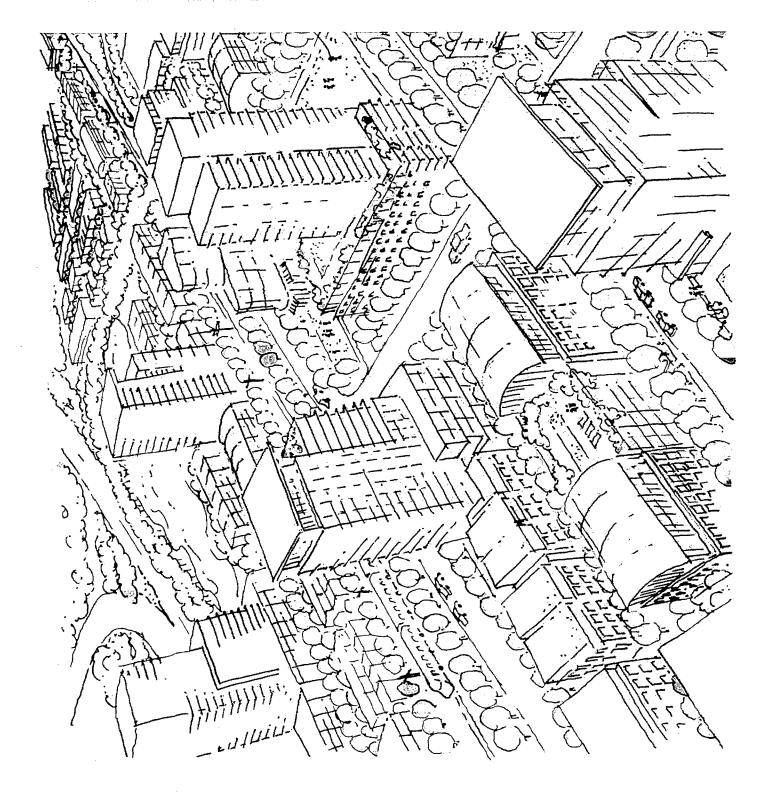
| 7 Infrastructure, Servicing and Staging | 59 |
|---|----|
| 7.1 Sanitary and Stormwater Drainage | 60 |
| 7.2 Water Distribution | 62 |
| 7.3 Shallow Utilities | 62 |
| 7.4 Development Staging | 64 |
| 7.5 Risk and Nuisance Mitigation | 65 |
| Appendix A | 66 |
| Appendix B | 67 |

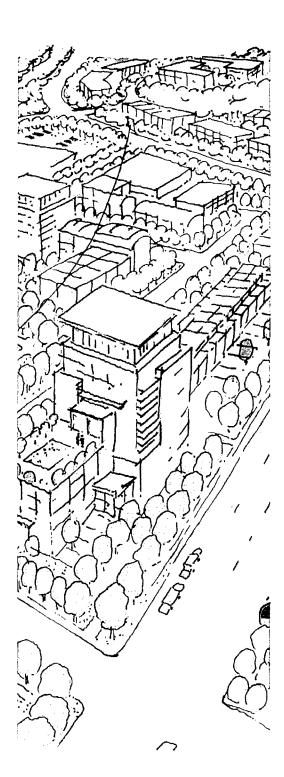
LIST OF FIGURES

.

| Figure 1 Pilot Sound ASP and Gorman NSP Location | viii |
|---|------|
| Figure 2 Gorman NSP Area and Context within the Pilot Sound ASP | 2 |
| Figure 3 NSP Process | 3 |
| Figure 4 Summary of Land Ownership | 5 |
| Table 1 Pipeline Corridors | 7 |
| Figure 5 Neighbourhood Context | 9 |
| Figure 6 EGHZR (Sheet 34 & 35) and Gorman NSP Location | 12 |
| Table 2 Gorman Land Use Concept and Population Statistics | 15 |
| Figure 7 Gorman Development Concept | 17 |
| Figure 8 Density Transect | 19 |
| Figure 9 Town Centre | 22 |
| Figure 10 Ecological Network | 36 |
| Figure 11 Parks, Open Spaces and Amenities | 38 |
| Figure 12 Gorman Town Centre Urban Plaza Conceptual Rendering | 43 |
| Figure 13 Transportation Network and Modal Priorities | 49 |
| Figure 14 Conceptual Pedestrian Oriented Street | 50 |
| Figure 15 Conceptual Pedestrian Oriented Street | 50 |
| Figure 16 Conceptual On-Street Transit Facility | 51 |
| Figure 17 Infrastructure and Servicing | 61 |
| Figure 18 Development Staging | 63 |
| Table 3 Parcel Ownership Details | 67 |
| Figure 19 Parcel Ownership Details | 68 |
| Figure 20 Pipeline Ownership Details | 70 |

· v

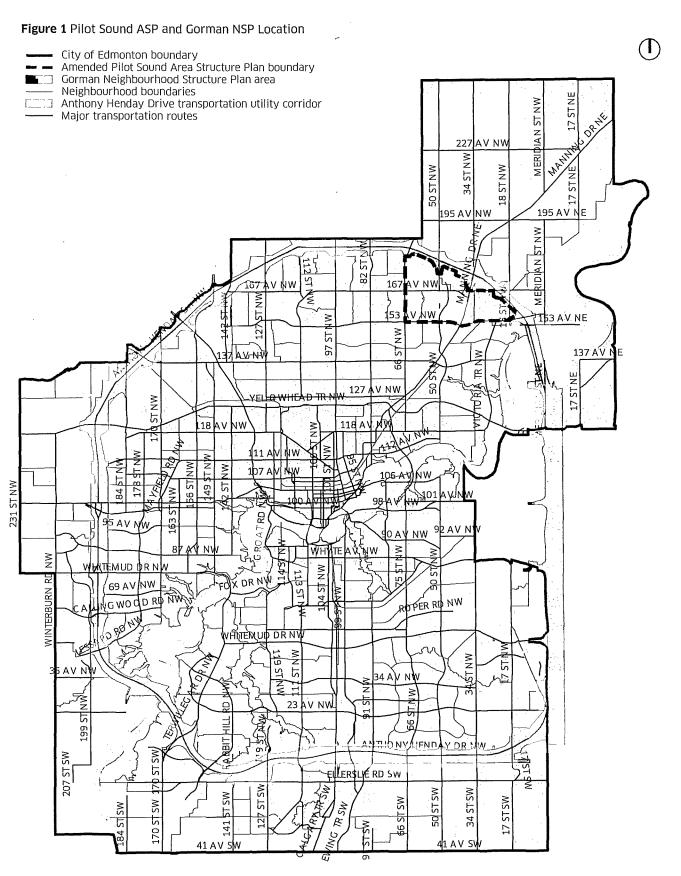




THE VISION

As a transit oriented community, the Gorman neighbourhood seeks to provide a high-quality standard of living by delivering a lifestyle where people can live, work, shop, and play within a dense and highly walkable community.

vii



1 GORMAN NEIGHBOURHOOD STRUCTURE PLAN

1.1 Planning Framework and NSP Area

The Gorman Neighbourhood Structure Plan (NSP) presents the vision, land use framework, and development guidelines for a new, Transit Oriented Development (TOD) neighbourhood in northeast Edmonton. Strategically situated around the Gorman LRT station, which is located north of 153 Avenue and west of Anthony Henday Drive, this neighbourhood will promote a holistic and comprehensive approach to community development. The NSP outlines the transformation of this land into a mixed use, TOD neighbourhood, following the principles and guidelines of the City of Edmonton's strategic planning documents including *The Way We Grow: Municipal Development Plan* (2010), *The Way We Move: Transportation Master Plan* (2012), and the other Way documents, as well as essential guiding documents such as Transit Oriented Development Guidelines (2012) and Complete Streets Design and Construction Standards Guidelines (2018).

The NSP also incorporates the outcomes and principles of Designing New Neighbourhoods: Guidelines for Future Residential Communities (2013) and aligns with the intent of the Pilot Sound Area Structure Plan (ASP) (Bylaw 16372) (**Figure 2 Gorman NSP Area and Context within the Pilot Sound ASP**).

1

Figure 2 Gorman NSP Area and Context within the Pilot Sound ASP



- City of Edmonton boundary
 Amended Pilot Sound Area Structure Plan boundary
 Gorman Neighbourhood Structure Plan area
- Neighbourhood boundary
 Anthony Henday Drive transportation utility corridor
 Major transportation routes

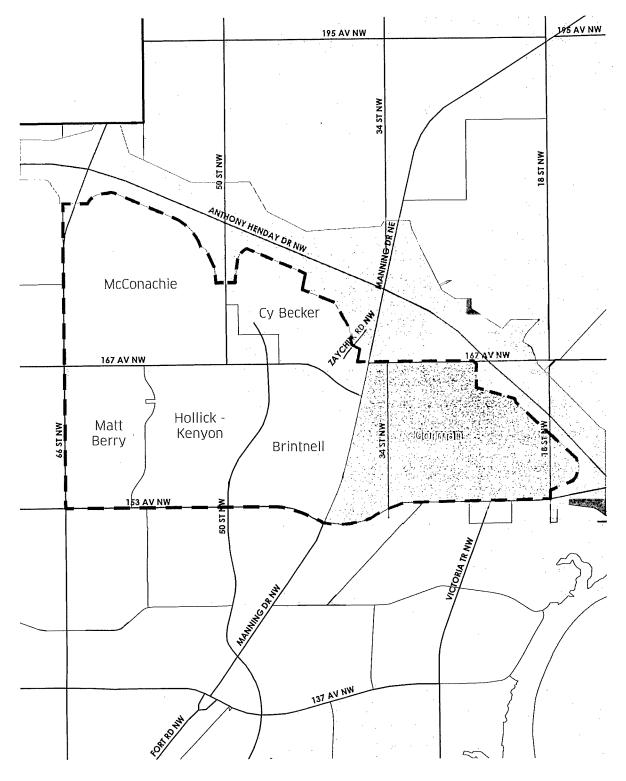


Figure 3 NSP Process

NSP INITIATION COLLABORATIVE NSP PREPARATION PRE-APPLICATION CONSULTATION* NOTIFICATION TO LAND OWNERS (COE) DESIGN CHARRETTE PUBLIC OPEN HOUSE CONCEPT OVERVIEW MEETING _ _ _ _ NSP PREPARATION TECHNICAL STUDY PREPARATION* NSP REVIEW REVIEW + CIRCULATION* INITIAL REVIEW FULL CIRCULATION PUBLIC INVOLVEMENT* PUBLIC NOTIFICATION (COE) PUBLIC INVOLVEMENT EVENTS ____ NSP REVISIONS **REVISIONS + RECIRCULATION** PLAN COMPLETION NSP FINALIZATION* COUNCIL REPORT + BYLAW PREPARATION (COE) PUBLIC HEARING (1ST, 2ND, 3RD READING) CONSOLIDATION OF NSP (COE)

The Gorman NSP will serve to refine the development framework established under the ASP. The NSP document provides direction for the following matters:

- Broad neighbourhood land uses, including organization and configuration of mixed use, residential, commercial, and parks and open space,
- The expected densities for the residential areas,
- The proposed transportation connections, including arterial and collector roads, future LRT connection, and active transportation and pedestrian connections,
- The requisite services and utilities, including stormwater management sites,
- Anticipated phasing of development and plan implementation.

*Dynamic process COE = City of Edmonton



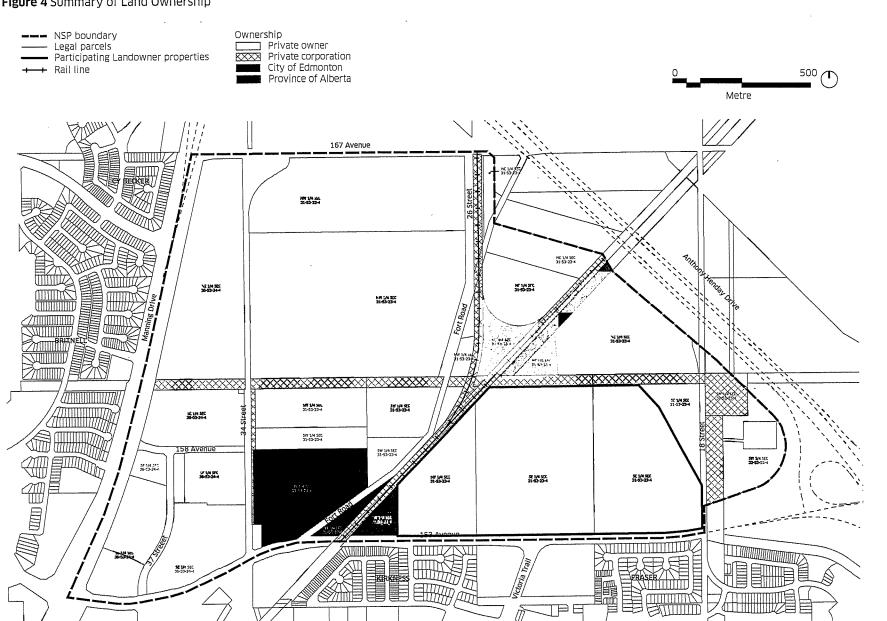
2 NEIGHBOURHOOD DEVELOPMENT CONCEPT

2.1 General Plan Context

Located in northeast Edmonton, Gorman is one of six neighbourhoods contained within the Pilot Sound Area Structure Plan (ASP). The Gorman NSP area is designated as a Developing and Planned Neighbourhood in the City of Edmonton's Municipal Development Plan, *The Way We Grow*. The City's long-term LRT Network Plan calls for the extension of the existing northeast LRT line, the Capital Line, through Gorman. The Capital Line will ultimately terminate north of Anthony Henday Drive. The future Gorman LRT station will be located within the NSP boundary, west of the planned alignment of Victoria Trail.

The Gorman NSP area is bounded by 167 Avenue to the north and the Anthony Henday Drive transportation utility corridor to the northeast. Its southern and western boundaries are, respectively, 153 Avenue NW and Manning Drive NW.

In support of this NSP, technical reports have been submitted to the City of Edmonton under separate covers, for Participating Landowner lands. These documents provide additional detail on development requirements. Submission of new or revised technical documents may be required if non-participating landowners subsequently participate, prior to rezoning and subdivision approvals of the non-participating landowner lands. Refer to **Appendix A** for a list of completed technical studies. Figure 4 Summary of Land Ownership



Gorman Neighbourhood Structure Plan 5

20/86

Land Ownership

The NSP has been prepared on behalf of three private land owners who have ownership of approximately 48.0 ha within the east portion of the NSP area (referred to as the Participating Landowners). The remaining lands within the NSP boundaries are held by the City of Edmonton, the Province of Alberta, private corporations, and non-participating private landowners. The nonparticipating landowners were notified of the intent to prepare the NSP and were invited to co-sponsor the preparation of this NSP but declined.

The land ownership of Gorman NSP is summarized in **Figure 4 Summary of Land Ownership**. Additional parcel ownership details are presented in **Appendix B**.

Existing Land Uses and Infrastructure

Currently, the Gorman NSP area consists primarily of undeveloped agricultural land. Existing developed land uses include the Evergreen Funeral Home & Cemetery in the centre of the NSP area and a large commercial development that is regulated through a site-specific zone (DC1) located in the southwest of the NSP area. Other uses include small-scale industrial and commercial uses such as storage lots and rural residences. The lands to the south and west of the NSP area have been progressively developed as residential communities. Manning Drive and 153 Avenue serve as important arterial connections to the area.

The NSP area is highly limited by physical constraints, which play a large role in the compatibility of surrounding land uses. In addition to the future LRT track and Victoria Trail alignments, the NSP area is transected by private corporation rail lines. The landscape is highly fragmented by this infrastructure, making inter-community connectivity paramount. The presence of this infrastructure also influences the development regulations of the adjacent land, as a result of associated setbacks.

Other existing infrastructure includes private corporation power transmission lines, high pressure natural gas transmission lines, a high pressure oil transmission line, and water lines.

Existing site conditions, at the time of approval, are summarized in **Figure 5 Neighbourhood Context** and under the following sections.

Topography and Soils

The topography of the land within the Gorman NSP area is relatively flat, with few significant topographic features. The overall sloping of the land is southeast to northwest. Soils within the area are of high agricultural quality, classified as Class 1 and Class 2 by the Canada Land Inventory.

Natural Areas and Ecological Resources

Natural Areas recognized by the City of Edmonton that are located in the NSP area include:

- NE 8096 (Vriend Lake), a Crown claimed Environmentally Sensitive Area, located in the northwest portion of the NSP area to the east of Manning Drive,
- NE 8123 and NE 533, which are two small unnamed areas located east of 18 Street,
- NE 8097, unnamed area located within the existing Cemetery.

Other natural areas include tree stands and several wetlands (Class III/IV/V), which are depicted on Figure 5 Neighbourhood Context.

Pipelines, Wells and Utility Corridors

A review of the available pipeline and oil well information indicates that there are no Alberta Energy Regulator (AER) records of oil/ gas wells, facilities and batteries within the NSP area. However, there are a number of operational pipelines within the NSP area or in the vicinity which are considered potential hazards. The pipeline corridors are listed in **Table 1 Pipeline Corridors**.

Table 1 Pipeline Corridors

| No. | Licensee | License No. | Contents | Pressure (kPa) | Nom. Pipe Size (in) | Corridor Location |
|-----|--------------------------------------|-------------|-------------|-------------------|---------------------------|--|
| 1 | ATCO Gas and Pipelines Ltd. | 2594-184 | Natural Gas | 3450 | 12.75 | Traversing NW and SW 31- 53-23-W4M |
| 2 | ATCO Gas and Pipelines Ltd. | 2594-90 | Natural Gas | 3450 | 16 | Traversing NW and SW 31- 53-23-W4M |
| 3 | Pembina Pipeline Corp. | 5169-1 | LVP | 7140 | 16 | Traversing SW, portion of NW 32-53- 23-W4M |

7

| No. | Licensee | License No. | Contents | Pressure (kPa) | Nom. Pipe Size (in) | Corridor Location |
|-----|------------------------------|-------------|----------|-------------------|---------------------------|--|
| 4 | Pembina Pipeline Corp. | 5169-5 | LVP | 6670 | 12.75 | Traversing SW, portion of NW 32-53- 23-W4M |

Pipeline No. 1 & 2 are in the same corridor; as are No. 3 & 4.

An assessment of the potential risks for Gorman, which was submitted under a separate cover, recommends appropriate access restrictions and setback distances from potential hazards. All development adjacent to pipelines shall ensure proper mitigation.

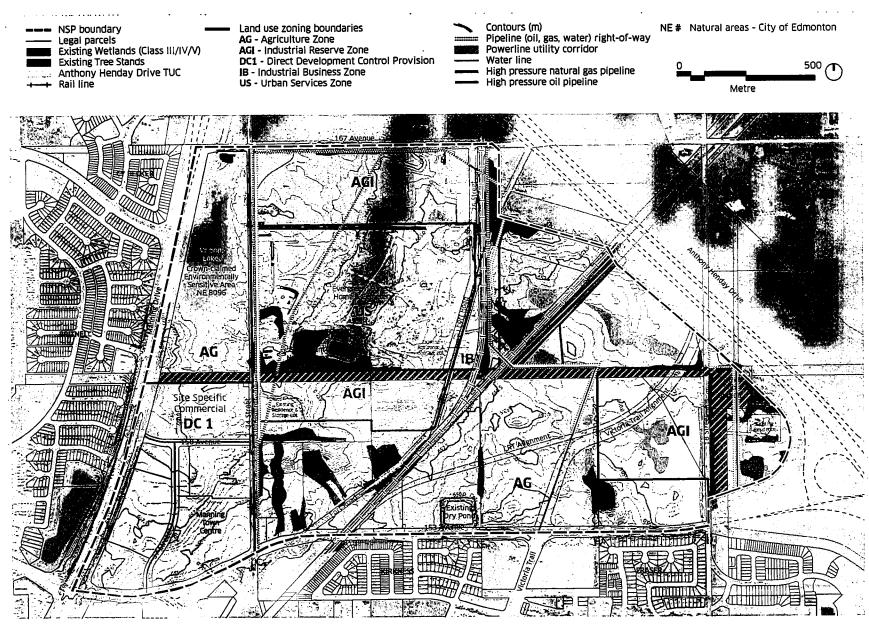
A private power line utility corridor runs north to south on the east side of 18 Street. The corridor also bisects the Gorman NSP area east to west and runs adjacent to the private corporation rail line north of the east to west corridor. This private utility corridor provides the opportunity to be part of the open space network, with the provision of shared use paths.

Private Rail Corporation

A private rail corridor (Vegreville Subdivision) bisects the NSP from approximately southwest to northeast with the CN Coronado Subdivision branching off to the north just south of Evergreen Cemetery.

An assessment of the potential risks for Gorman, which was submitted under a separate cover, recommends appropriate access restrictions and setback distances from potential hazards. All development adjacent to the rail corridor shall ensure proper mitigation.

Figure 5 Neighbourhood Context



Gorman Neighbourhood Structure Plan

9

Potential Transportation Utility Corridor (TUC) Surplus Land

Potential Transportation Utility Corridor (TUC) surplus land is located as shown on **Figure 6 Gorman Development Concept**. If surplused, a plan amendment will be required to incorporate the land into the boundaries of the Gorman NSP.

Edmonton Garrison Heliport Zoning Regulations

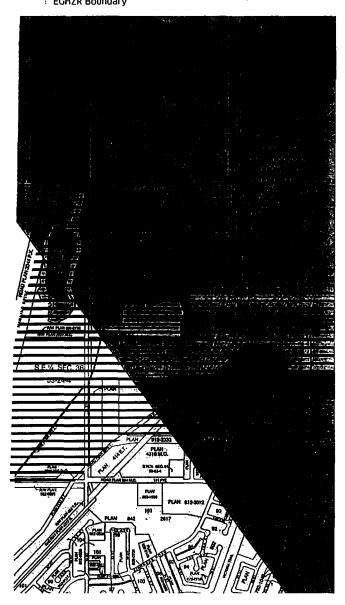
The Gorman NSP is situated approximately 7 kilometers from the Edmonton Garrison (Canadian Forces Base Edmonton). The Edmonton Garrison Heliport Zoning Regulation (EGHZR) introduces limitations on development of all lands that are adjacent to or in the vicinity of the heliport, as described in Part 4 of the schedule of the EGHZR. Land uses, particularly with respect to heights of any building, structure or object, or any addition to any existing building, structure or object, and heights of any object of natural growth, shall not exceed the allowable elevations as set out in the EGHZR, nor shall there be any use of the lands that may cause interference with aeronautical communications. Specifically related to the Approach Zones and Bird Hazard Zones identified within the EGHZR, size and type of stormwater management facilities and retention of wetlands, may be limited under these regulations and are subject to review by the Department of National Defence (DND). Any proposed rezoning application that affects lands encumbered by the Edmonton Garrison Heliport Zoning Regulation (EGHZR) shall be circulated to the DND for review, except those that the City of Edmonton has determined will not disregard or breach the restrictions contained in the EGHZR.

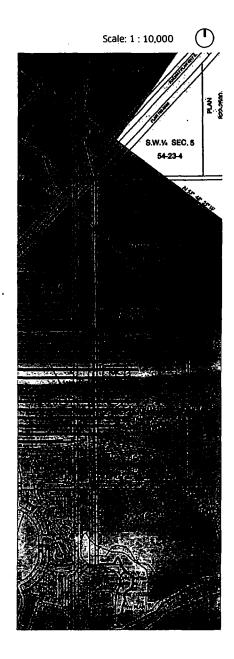
Historic and Cultural Resources

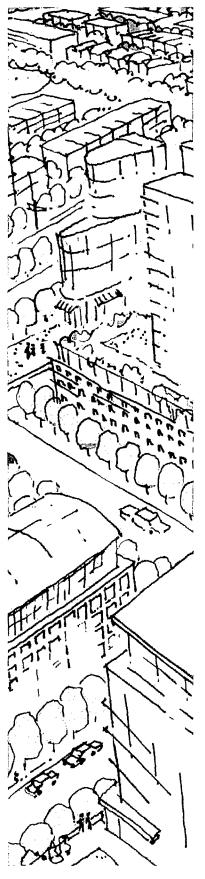
As described in the Municipal Development Plan, *The Way We Grow*, historic and cultural resources contribute to a sense of local identity. These may include structures or areas of historical, cultural, and/or architectural significance to the history of Edmonton. Conservation and preservation of identified resources serves to provide connections to the city's cultural and historical roots, defining the unique sense of place and character of an area.

A Historical Resources Overview (HRO) was conducted for the Gorman area and a Historical Resources Impact Assessment clearance letter was provided by the Province in 2010. Development proponents and/or their representatives are required to report the discovery of any archaeological, historic period, or paleontological resources, which may be encountered during construction. If identified during future stages of development, a further assessment may be required, pursuant to the Alberta Historical Resources Act. Figure 6 EGHZR (Sheet 34 & 35) and Gorman NSP Location

Gorman NSP Boundary







2.2 Neighbourhood Vision and Development Concept

Vision

28/86

As a transit oriented community, the Gorman neighbourhood seeks to provide a high-quality standard of living by delivering a lifestyle where people can live, work, shop, and play within a dense and highly walkable community.

Development Concept Overview

The Gorman development concept capitalizes on the unique opportunities made possible with convenient access to transit. Identified as an Enhanced Neighbourhood Station Area (City of Edmonton's Transit Oriented Development Guidelines, 2012), the concept encourages a transit supportive public realm, a fine grained mix of retail shops, and a range of housing options at densities that are higher than the typical greenfield development. To achieve the vision for Gorman, the development concept is founded on the following guiding principles:

- Develop a distinct neighbourhood character and pursue design excellence,
- Prioritize connectivity to transit,
- Encourage mixed use development in close proximity to the LRT station,
- Integrate the transit network into the neighbourhood,
- Maintain active streetscapes with a diverse combination of uses at-grade,
- Create a vibrant town square at the centre of the neighbourhood and encourage year-round use of public spaces,
- Support active transportation (transit, cycling, and walking),
- Establish a highly connected system of green spaces and green corridors,
- Offer a wide variety of housing forms,
- Utilize land effectively to make efficient use of infrastructure.

The Gorman neighbourhood concept features a grid-based road network. The network is uniquely designed to support a highly connected and easily accessible pedestrian and bike network that links the mixed use Town Centre and LRT station to the open space network and surrounding residential development.

The residential opportunities are diverse and correspond to their proximity to the LRT station. Closer to the LRT station, densities are typically higher and are located in conjunction with mixed use opportunities. Moving away from the LRT station, medium and low density forms become more prevalent, transitioning to the outer edges of the NSP boundary. Here the built form transitions to low density residential and is complementary to the adjacent land uses.

A range of mixed use commercial opportunities are located within the Town Centre. This main mixed use commercial area within the Town Centre is supported by surrounding residential development, functioning in conjunction with the LRT Station. The Town Centre will be highly accessible and pedestrian and cyclist connections will extend out towards other neighbourhood destinations. A second commercial area is located on the southeast corner of the neighbourhood and will be accessible from the adjacent roads and an existing major commercial area is located along Manning Drive and 153 Avenue. Business industrial areas are located north and east of an existing cemetery.

The neighbourhood is also designed to include natural areas, pocket parks, and the Gorman/Clareview extension school park site, which is a larger scale park site planned to accommodate a Separate high school and community league.

In addition to adherence to relevant policies and guiding documents the Gorman NSP has been prepared using current and future market demands, current and predicted population growth trends, input from City Administration, comments from various stakeholders, input from landowners, and feedback gathered during public engagement opportunities.

The Gorman NSP development concept is conceptually illustrated in **Figure 6 Gorman Development Concept**.

A detailed breakdown of land use and population statistics can be found in **Table 2 Gorman Land Use Concept and Population Statistics**.

Table 2 Gorman Land Use Concept and Population Statistics

| · · | Area (ha) | % Area |
|---|-----------|--------|
| GROSS AREA | 255.0 | 100% |
| Natural Area - Crown Claimed Wetland | 9.2 | 4% |
| Natural Area - ER (around wetland) | 3.8 | 1% |
| Utility ROW (power, gas, oil) | 13.7 | 5% |
| Potential Development Area ¹ | 4.9 | 2% |
| Arterial Road ROW | 4.0 | 2% |
| Private Rail ROW | 7.0 | 3% |
| GROSS DEVELOPABLE | 212.4 | |
| Existing Land Uses ² | 69.7 | |
| Institutional (Cemetery) | 39.2 | 18% |
| Major Commercial (Manning Town Centre) | 30.5 | 14% |
| EFFECTIVE DEVELOPMENT AREA | 142.7 | |
| Employment Lands (Industrial) | 32.7 | 23% |
| Neighbourhood Commercial | 1.0 | 1% |
| Mixed Use Commercial | 0.6 | 0.4% |
| Parks | 17.9 | 13% |
| Gorman/Clareview Extension School Park Site (MR) | 14.5 | |
| Pocket Park (MR) | 1.3 | |
| Natural Area (MR) | 1.9 | |
| Pocket Park - (Non-Credit MR) | 0.2 | |
| Public Utility | 1.4 | 1% |
| Transportation | 29.2 | 20% |
| Collector / Local Road ROW | 26.5 | |
| LRT ROW | 2.5 | |
| On-Street Transit Facility (Bus Layby Lanes) ³ | 0.1 | |
| Greenway | 0.1 | |
| Infrastructure Servicing | 15.2 | 11% |
| Stormwater Management Facilities ⁴ | 15.2 | |
| Total Non-Residential | 98.0 | 69% |
| Net Residential Area (NRA) | 44.7 | 31% |

Notes:

¹ A portion of land has been designated as a "potential development area". If the land is deemed feasible for development, it shall be included in the effective development area for the Gorman NSP through a plan amendment. Municipal Reserves will be owing if this land is developed.

²Municipal Reserves (MR) have not been provided for the cemetery. If this use were to redevelop, MR would be calculated and provided at that stage. MR has been provided at subdivision for Manning Town Centre.

³Assumes that the road will function as a typical collector road upon completion of the LRT extension to Horse Hill.

⁴SWMF near Vriend Lake is an estimate and the exact size will be determined at the rezoning and subdivision stage.

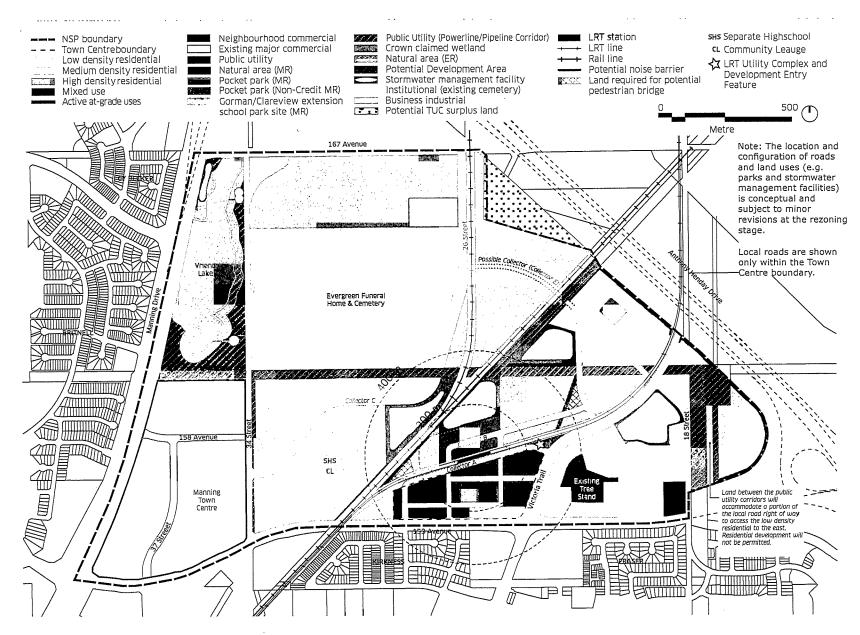
⁵The Conseil scolaire Centre-Nord (Francophone school board) was consulted regarding school generation counts but does not employ neighbourhood level student generation calculations.

RESIDENTIAL LAND USE AREA, UNIT AND POPULATION ESTIMATES

| Land Use | Area (ha) | Units/HA | Units | PPL/Unit | Population | % NRA |
|----------------------------|-----------|----------|-------|----------|------------|-------|
| Low Density Residential | 22.3 | 25 | 558 | 2.8 | 1562 | 50% |
| Medium Density Residential | 11.6 | 90 | 1044 | 1.8 | 1879 | 26% |
| High Density Residential | 5.3 | 225 | 1193 | 1.5 | 1789 | 12% |
| Mixed Use Residential | 5.5 | 345 | 1898 | 1.5 | 2847 | 12% |
| Total Residential | 44.7 | | 4693 | | 8077 | 100% |

| Population per Net Residential I | Hectare (pp | onrha) | 181 | |
|---|-------------|-------------------------------|---------|--|
| Units per Net Residential Hecta | re (upnrha) | | 105 | |
| [Single / Semi] / [Row Housing, High Rise] Unit Ratio | Low Rise / | Medium Density, Medium to | 12%/88% | |
| Population (%) within 500m of I | Parkland | | 100% | |
| Population (%) within 400m of 1 | ransit Serv | vice | 100% | |
| Population (%) within 600m of (| Commercia | l Service | 96% | |
| Presence / Loss of Natural Area | Features (| ha) | | |
| Protected Environmental Reserve | | | | |
| Conserved as naturalized Municipal Reserve (Natural Area) | | | | |
| Protected through other means | | | | |
| Potential Loss to Development (| Existing Tr | ree Stands & Wetlands - Class | 22.7 | |
| STUDENT GENERATION | | | | |
| Public School Board | | Separate School Board | | |
| Elementary School | 285 | Elementary School | 143 | |
| Junior / Senior High School | 285 | Junior / Senior High School | 143 | |
| | | | | |

Figure 7 Gorman Development Concept



Gorman Neighbourhood Structure Plan 17







3 LAND USE

The Gorman NSP has been planned as a transit oriented development centred on the Gorman LRT station. Gorman offers a variety of residential, mixed use, industrial, commercial, and institutional uses to take advantage of the surrounding arterial roads and the proximity to transit facilities. The Town Centre is the heart of the neighbourhood and will be developed in accordance with the City of Edmonton's transit oriented development policies and guidelines. The Town Centre is located between the LRT line, 153 Avenue and Victoria Trail to take advantage of vehicle traffic and pedestrian traffic in proximity to the LRT station and on-street transit facility. It will feature mixed use development to support the daily needs of local residents and attract visitors from surrounding communities. Medium and high density residential development surround the Town Centre and LRT station which further establishes a critical mass of population to support the Town Centre and utilize the transit system. Medium and high residential density transitions to low residential density towards the outer edges of the neighbourhood, as conceptually illustrated in Figure 8 Density Transect.

An existing major commercial site, Manning Town Centre is located at the intersection of Manning Drive and 153 Avenue on the west side of the plan area. A neighbourhood commercial site is located at the intersection of 153 Avenue and 18 Street and business industrial uses are located to the north and east of the existing institutional use (cemetery) to take advantage of access from 167 Avenue, and 26 Street and Fort Road.

The distribution of land uses are presented in **Table 2 Gorman** Land Use Concept and Population Statistics. Figure 7 Gorman Development Concept conceptually illustrates the location and configuration of land uses.

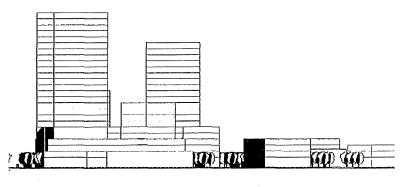
3.1 Residential

Residential uses in Gorman are comprised of a mix of housing designations to encourage demographic and architectural diversity. These include:

- **High Density Residential** high-rise apartment housing, more than six stories.
- Medium Density Residential stacked row housing, row housing, and low and medium-rise apartment housing, generally no higher than six storeys.
- Low Density Residential single /semi-detached housing, duplexes, and limited amounts of row housing

Figure 8 Density Transect

Mixed use, high and medium density residential development are located within and around the Town Centre, closest to the LRT station. Moving outwards, there is a transition from the highest densities and intensities of use to the lowest densities and intensities of use. The lowest residential densities are generally located towards the outer edges of the neighbourhood.



 Mixed Use – street-oriented medium to high-rise apartment housing, commercial buildings and mixed use buildings – Generally six or more storeys See Section 3.2 Mixed Use Town Centre

Low density residential is located east of Victoria Trail, north of the public utility cooridor (powerline/pipeline), and west of the Gorman/Clareview extension school park site to take advantage of access to parks, open spaces and amenities including the shared use path network. Medium and high density residential sites are located closest to the LRT station and Town Centre on the east side of the private corporation rail line. The residential areas are linked together by a network of streets and multi-modal connections.

Detailed planning has not been done for the non-participating land owner sites. Residential uses within these areas remain consistent with the Pilot Sound Area Structure Plan. When these areas are ready to be developed, additional opportunities to increase residential density at strategic locations should be reviewed.

Objectives

- 1. Plan for a variety of housing types to support a range of lifestyles and promote affordability.
- 2. Establish an overall residential density and built form that is compact and efficiently utilizes public infrastructure such as transit and open spaces.
- 3. Locate medium and high density residential development adjacent to neighbourhood amenities and transit facilities.

Policy

- 1. A mixture of housing types and forms shall be provided to offer housing choice and accommodate a mix of demographics and lifestyles.
- Support affordable housing options. This may include but is not limited to the provision of more intensive forms of residential development, as well as flexible housing forms such as secondary suites or garden suites.

- Medium and high density residential development shall be located adjacent to the LRT Station and transit centre to encourage transit use.
- 4. Use roads, open space or medium density development to transition between higher density and lower density residential development.
- 5. Locate residences within walking distance of parks and open spaces including shared use paths and stormwater management facilities.
- 6. High Density Residential north of the LRT station/transit centre shall provide permeability and transparency along the facade facing the LRT station/transit centre through the provision of windows and entrances. A minimum of 50% transparent glazing shall be provided.
- 7. Where applicable, cross lot easements shall be registered on sites for shared accesses to the collector roads at the time of subdivision.
- 8. LRT station design shall occur prior to or concurrent with development of the high density residential land north of the LRT Station as shown on Figure 13.

Implementation

- 1. The City of Edmonton Zoning Bylaw provides for a range of densities and housing forms that will be applied at the rezoning stage.
- 2. Figure 7 Gorman Development Concept and Table 2 Gorman Land Use Concept and Population Statistics illustrate the planned overall density and will guide the location of residential development of Gorman. The density targets meet the objectives of the Edmonton Metropolitan Region Growth Plan and the City of Edmonton Transit Oriented Development Guidelines.
- The City of Edmonton's affordable housing policies and guidelines shall be applied at the applicable zoning, subdivision or development permit stage. Flexible housing forms such as secondary suites or garden suites shall be implemented through the applicable sections of the City of Edmonton's Zoning Bylaw.



3.2 Mixed Use Town Centre

The Town Centre will be a vibrant mixed use hub consisting of a variety of mid and high rise residential/commercial developments. These developments will contribute to a high-quality and amenity-rich public realm and encourage transit use.

Designations in this area include:

- Mixed Use street-oriented medium to high-rise apartment housing, commercial buildings and mixed-use buildings. Generally six or more storeys.
- Active At-Grade Uses frontages which contain street-oriented, active commercial or institutional uses including, but limited to retail, restaurants, libraries, personal services or daycares at ground level.

Located adjacent to the Gorman LRT station, the Town Centre will be a destination with a diversity of uses and features to promote and support walkability, visibility, and convenience. Active at-grade commercial and instituional uses (such as retail, restaurants, libraries, and/or personal service uses) will be oriented towards the street along primary pedestrian routes that connect to and from the LRT station, thereby establishing a main street environment. Where residential units are located at-grade, they will be streetoriented or courtyard-facing with individual entrances that animate the public realm. A mid-sized anchor retail site will be located on the west side of Victoria Trail, across from the LRT station, which will act as a gateway to draw visitors into the Town Centre.

The boundaries of the Town Centre are defined by the collector route to the north and northwest, Victoria Trail to the east, and 153 Avenue to the south, as identified in **Figure 9 Town Centre**.

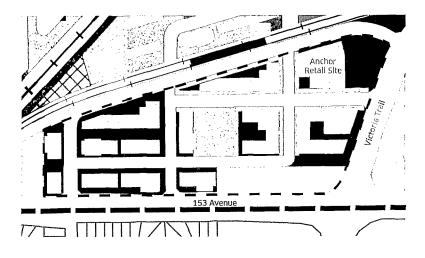
Objectives

- 1. Encourage a variety of mixed use development within the Town Centre to create a vibrant and livable community.
- 2. Establish a compact built form that fosters an active street interface, engages the public realm and caters to a human-scaled and high-quality pedestrian-oriented environment.
- 3. Manage off-street parking, loading and service access to complement the pedestrian-oriented character of the Town Centre.
- 4. Create inviting nodes within the Town Centre to provide comfort and convenience, as well as encourage social activity and community interaction.

21

Figure 9 Town Centre

– – – Town Centre boundary Active at-grade uses Conceptual building footprint Mixed use 5.7 High density residential Medium density residential Pocket park Gorman/Clareview extension school park site Stormwater management facility Public utility Gorman LRT Station Land required for potential pedestrian bridge LRT line + Rail line



Policy

General

- Mixed use development shall be located within the Town Centre, as identified in Figure 6 Gorman Development Concept. Development shall include a combination of residential and commercial uses
- Mix use development shall integrate vertically (combining different uses within the same building) or horizontally (combining complementary single-use buildings side-byside).
- Active at-grade uses shall be required at the ground floor of all development in the locations shown in Figure 9 Town Centre. Active at-grade uses are required to contain streetoriented commercial or institutional uses such as retail, personal services, restaurants, and libraries.
- 4. Encourage an anchor retail site to be located along Victoria Trail to draw people into the Town Centre.

Density

5. Development shall achieve an average density of 345 du/ha with a minimum density of 225 du/ha and a minimum Floor Area Ratio of 2.0 per site.

Building and Site Design

- 6. Locate buildings as close to the street as possible to frame the street and promote active frontages. Setbacks may be provided to allow for patios, walkways, retail displays or to achieve privacy for ground floor residential units.
- 7. Building facades shall be designed with architectural treatments that contribute to the visual interest and character of the streetscape. This may be achieved through the use of regular architectural details, entrances, and windows to create a horizontal rhythm, reduce perceived massing, and establish visual permeability with direct access to the street.

- Buildings on corner sites shall address both street frontages and are encouraged to be accentuated through the use of architectural detailing, massing, and/or prominent entries and windows.
- 9. Commercial uses shall have a minimum of 70% transparent glazing and residential uses should have a minimum of 50% transparency at ground level.
- 10. Small-scale ground level retail commercial units are encouraged in mixed use buildings, with individual store frontages to create a main street character. Larger-scale retail commercial uses should be designed to have the appearance of regularly spaced commercial store frontages.
- 11. Building design shall consider wind and solar orientation to mitigate adverse environmental impacts on the public realm and adjacent properties.

Entrances

- 12. Primary building entrances shall be oriented towards the street and designed to be clearly defined to maximize accessibility and visibility from the street.
- 13. Ground floor residential units shall have individual unit entrances fronting onto the street.
- 14. Separate at-grade entrances for commercial and residential uses shall be required in mixed use buildings.

Massing

- 15. Large scale buildings shall be sensitively integrated using techniques to vary massing such as setbacks and stepbacks.
- 16. Stepbacks shall be required for buildings over 6 storeys to limit perceived massing at street level and create a human scaled street wall.

High Rise Developments

- 17. High rise developments shall be designed with a podium and a tower component above.
- 18. Towers shall have a separation distance of at least 25 meters.

Parking and Loading/Service Access

- 19. Off-street parking shall be located in underground garages or above ground structures where possible. Above ground parking structures shall be wrapped in active uses to screen parking from the public realm.
- 20. Limited off-street surface parking shall only be allowed if it is located to the rear of buildings and not visible from a public roads, amenity, and pedestrian areas. Surface parking shall be designed for safe and orderly flow of traffic and pedestrians with landscaped islands, amenity spaces, and/ or pedestrian walkways to minimize pedestrian/vehicular conflict.
- 21. Buildings are encouraged to share vehicular access points to minimize curb cuts and other interruptions to pedestrian movement.

- 22. On-street parking along public and private streets is encouraged to support retail and buffer pedestrians from moving vehicular traffic.
- 23. Non-accessory surface parking within the Town Centre shall be prohibited.
- 24. Waste collection areas and loading/service access shall be located to the rear of buildings and not visible from a public roads, amenity and pedestrian areas. These areas are encouraged to be designed to minimize conflict with pedestrians or other vehicles.

Building Interface with Urban Plaza

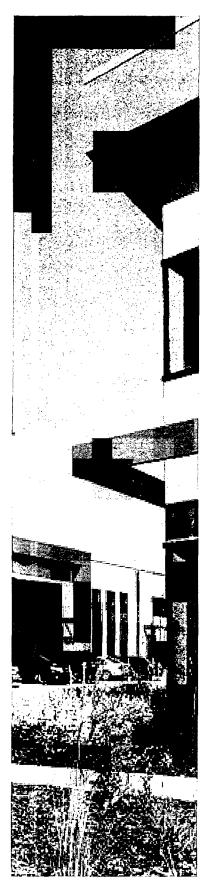
- 25. Development abutting the urban plaza shall give special consideration to the integration with the public realm and open space within the plaza. Design elements should support social interaction, with primary entrances facing the plaza. Publicly accessible walks and patios are encouraged to support activity within the plaza.
- 26. Active at-grade commercial or institutional uses shall be required to provide a primary entrance facing the plaza.
- 27. Buildings shall not use the frontage area facing the urban plaza for service access or disposal bins.
- 28. Building frontages facing the urban plaza are encouraged to incorporate creative and adequate lighting into their facades or frontage-areas to promote pedestrian interest and safety.

Building Interface with LRT Station/Transit Centre (south of the LRT station/transit centre)

- 29. Development abutting the LRT station/transit centre shall provide active at-grade uses to create a safe and attractive space for transit users. A primary entrance that faces the LRT Station/Transit must be provided. Development and subdivision are encouraged to be concurrent to LRT station design.
- Opportunities to locate facilities required for transit users and operators on the ground floor of the development are encouraged.

- 1. Standard zones should be used to implement development in the Town Centre where they meet the objectives and policies of this section. Direct Control Provisions or Special Area Zoning may be used where the mix of uses, the design of buildings, or the intent of the NSP cannot be achieved through conventional zoning.
- 2. The design of individual structures will consider the guidelines provided above, in conjunction with other considerations such as the period and sequence of development, vis a vis timing of the LRT station development, prevailing market demand, site and servicing constraints, architectural and other innovations, and the emergence of new technologies.
- 3. A public access easement on the property south of the LRT station will be required for the plaza space to provide amenity to Edmonton Transit Service users. Edmonton Transit Services and developers should work collaboratively together to confirm requirements of the easement prior to the start of development of the south parcel.
- 4. The development officer should have regard for the policies and guidelines contained in the section when assessing development applications within the Town Centre.





3.3 Business Industrial and Commercial

Industrial lands within Gorman are intended to support businessoriented industrial uses and provide employment opportunities for residents within the neighbourhood. Business industrial uses may include light industrial businesses, professional offices, business support, and other employment-intensive uses. Primary access is provided from 167 Avenue, 34 Street and Fort Road (26 Street).

Development will be of high-quality design and sites will sensitively integrate with the surrounding area to minimize negative impacts on adjacent existing uses including the cemetery. Compatible uses such as additional cemetery or religious assembly uses would be appropriate for the area directly north of the cemetery. Business Industrial uses are generally separated from residential areas to the south and east by the private corporation rail line and power line corridor.

Outside of the employment area and the mixed use Town Centre, a neighbourhood commercial site is located in the southeast portion of the Gorman neighbourhood. This use is intended to be a smallscale locally serving convenience node with direct access and high visibility from arterial roads, and will serve the adjacent low density residential area, as well as commuters along 18 Street. This area is not intended for large format commercial.

Manning Town Centre, a large and established regional commercial development, is also located within the Gorman NSP boundary. Situated in the southwest portion of the plan area, this site is regulated through a Direct Development Control Provision. The proximity of Manning Town Centre has a significant influence on the extent and type of commercial that can be accommodated within the Mixed Use Town Centre.

Surplus road right of way may be available for closure at the intersection of 167 Avenue and 34 Street. The closure area shall adopt the same land use designation as the abutting lots. A plan amendment will not be required to facilitate the road closure.

Objectives

- Plan for a variety of business industrial and commercial opportunities to provide for a diversity of commercial amenities as well as support local employment opportunities.
- 2. Locate and orient business industrial and commercial sites to provide convenient access and visibility.
- 3. Minimize the impacts of business industrial and commercial development on adjacent land uses.

Policy

- 1. A mixture of business industrial and commercial shall be provided including neighbourhood-scale convenience retail, office, light industrial, and business supportive services.
- 2. Business industrial and neighbourhood-scale commercial opportunities shall be provided outside of the Town Centre, as shown in **Figure 7 Gorman Development Concept**.
- 3. Business industrial and neighbourhood-scale commercial opportunities shall be located to provide access from arterial and collector roads, and transit routes.
- Site planning of business industrial and commercial areas shall consider the layout, location, and interface of all buildings and parking and loading facilities to minimize impacts on adjacent land uses.
- 5. Larger buildings shall be articulated and landscaped in a manner to create an inviting experience and minimize the visual impact of the building mass.

- 1. **Figure 7 Gorman Development Concept** will guide the location of business industrial and commercial development in Gorman.
- 2. Standard zones shall be used to implement the development where they meet the objectives and policies of this section.
- 3. The development officer should have regard for the policies and guidelines contained in the section when assessing development applications within the Town Centre.

3.4 Institutional

As a complete community, Gorman provides opportunities for the development of institutional uses that serve the needs of the population. A Community Knowledge Campus Needs Assessment (CKCNA) confirmed the need for a separate high school. The Gorman/Clareview extension school park site will accommodate a Seperate high school, community league and potential recreation facility. A site for a school has been located on the Gorman/ Clareview extension school park site and is identified as a joint use site that will also include a community league building and associated facility spaces. Detailed information regarding assessment of the Gorman/Clareview extension school park site is outlined in the Parkland Impact Assessment (PIA). This site will be connected to the rest of the Gorman neighbourhood area via pedestrian connections along 153 Avenue. The City of Edmonton may also design and construct a grade-separated pedestrian bridge across the private corporation rail line to further enhance connectivity to the Gorman/Clareview extension school park site as identified in Figure 13 Transportation Network and Modal Priorities. This connection provides a link to the LRT station, the Town Centre, and residential areas to the east.

An existing institutional use, the Evergreen Cemetery & Funeral Home is located in the northwest portion of Gorman. The cemetery contributes to the character and ecological function of the area, as a semi-natural space. It will remain into the foreseeable future and must be planned around accordingly to reduce potential land use conflicts with adjacent developments. Enhanced landscaping and buffering is recommended for adjacent uses to create a sensitive transition.

Other institutional uses may be permitted within the Town Centre, and the residential, commercial and business industrial areas. These uses may include neighbourhood scale libraries and religious assemblies. Opportunities for a fire rescue station and emergency medical services may also be accommodated, if a future need is determined.

Objectives

- Accommodate the future development of institutional, civic, and community service uses such as schools, libraries, religious assemblies and emergency services.
- 2. Encourage the development of institutional, civic, and community service uses that are integrated and compatible with adjacent uses.

Policy

- 1. The NSP shall allow for the development of institutional, civic, and community uses, such as schools, libraries, religious assemblies and emergency services, based on assessed requirements.
- Co-locate future Separate high school, community league and recreation facilities within the Gorman/Clareview extension school/park site.

Implementation

- The location of institutional, civic, and community service uses shall be determined through consultation with partner stakeholders including, but not limited to, Edmonton Public Libraries, Fire Rescue Services, local school boards, and community leagues.
- Co-location of uses within the Gorman/Clareview extension school/park site shall be through a Joint Use Agreement between the City of Edmonton and joint use partners (i.e. school boards and community league), in alignment with the City of Edmonton's Urban Parks Management Plan and with consideration for the appropriate risk policies.
- 3. Standard zones shall be used to implement the development where they meet the objectives and policies of this section.

3.5 Potential Development Area

As shown in **Figure 7 Gorman Development Concept**, a portion of land adjacent to Vriend Lake has been designated as a "potential development area." This land does not meet the requirements to be dedicated as Environmental Reserve and is not planned to be taken as Municipal Reserve. Additional studies to demonstrate the feasibility of developing this land are required. These studies would also help determine the appropriate land uses. A Plan amendment will be required prior to any further development.







4 PUBLIC REALM

The public realm in Gorman focuses on enhancing neighbourhood character and creating a pedestrian-oriented environment. This is heavily reliant upon the urban form, including streetscapes, buildings, urban design elements and landscape. Active and compatible uses will also shape a vibrant and inviting pedestrian realm throughout the plan area.

4.1 Streetscapes and Built Form

Streetscapes and built form in Gorman will support the creation of amenity-rich spaces and high-quality public realm. Buildings, public amenities, landscaping, and urban design features throughout the plan area will create a unique, contextually specific character to reinforce the sense of place and identity of Gorman and encourage people to linger. Gorman will have a neighbourhood-scale urban feel, in contrast to a more traditional greenfield community.

Objectives

1. Design streetscapes to be functional, safe, multi-modal and pedestrian-friendly, to support transit use, and to enhance the public realm.

Policy

- 1. Streetscapes are encouraged to incorporate:
 - Street / sidewalk furnishings, enhanced landscaping (street trees, planters, etc.), lighting and public art.
 - Cycling facilities (such as protected bike lanes, shared use lanes or shared use paths) with a high-quality of design including paved-surfaces, lane delineation, landscaping, wayfinding, and end-of-trip facilities such as bike parking.
 - Safety and traffic calming measures including reduced vehicular speed limits (i.e. from 50km/h to 40km/h in residential areas), on-street parking, enhanced pedestrian crossing with curb extensions, raised intersection, or use of special paving at key pedestrian crossing locations.
- 2. Streets shall be laid out to enhance connectivity with transit facilities and other neighbourhood destinations.

3. Incorporate strategies into the design of public and private spaces to create safe and secure spaces. Techniques may include, but are not limited to, inviting seating, effective lighting, appropriate landscaping to maintain sight lines and to encourage people to linger, as well as use of windows and balconies to create opportunities for natural surveillance or "eyes on the street", based on Crime Prevention Through Environmental Design (CPTED) principles and best practices for urban design.

Implementation

 Streetscape design, site planning and building design shall be reviewed by City Administration at the rezoning, subdivision, development, and building permit stage to ensure alignment with the Zoning Bylaw and the incorporation of design elements and safety considerations, with consideration for the City of Edmonton's Transit Oriented Development Guidelines, Complete Streets Design and Construction Standards, and the Winter City Design Guidelines.

4.2 Landscape

Landscape plans for the design of streets, parks, open spaces, and plazas will take into account species which are locally adaptive, and drought and wind resistant. A variety of vegetation that require less maintenance but that thrive in a northern Alberta climate will be chosen. Vegetation historically found in the area and region are encouraged to be planted to provide beauty, enhance horticultural success of newly landscaped areas, and create multi-seasonal spaces. Best efforts will be made to conserve existing stands of trees and integrate them as neighbourhood amenities. For example, the pocket park located to the east of Victoria Trail will retain a portion of an existing tree stand.

The addition of street trees and boulevard plantings will offer shelter from the elements and will define the neighbourhood's character. Incorporated into the urban fabric, trees will also help to strengthen the ecological function and connectivity of the area.

Objectives

1. Incorporate landscaping into the public realm to contribute to the character of the neighbourhood.

Policy

- Landscaping of streetscapes, parks and open spaces, including stormwater management facilities and utility corridors shall incorporate plantings to frame and shelter public spaces, create microclimates, provide winter interest and to increase the habitat value of the ecological network through the use of native plant species.
- 2. Where practical, existing natural features (such as tree stands) should be conserved, protected, and integrated into the design of the neighbourhood.
- 3. Plantings shall be locally-adaptive, with native tree and plant species that are low maintenance and disease, drought, and wind resistant.
- 4. Development is encouraged to consider utilizing pervious surfaces where appropriate, for trails and parking areas in public and private development.
- 5. Landscaping for private development sites is encouraged to be complementary to the design of the public realm.

- Design of the public realm shall be implemented at the subdivision and detailed design stage of development, incorporating approaches outlined in the City of Edmonton's policies and guidelines including, but not limited to the Urban Parks Management Plan, Breathe: Edmonton's Green Network Strategy, Complete Streets Design and Construction Standards, Design Guide for a Safer City, Winter City Design Guidelines, and Transit Oriented Development Guidelines where applicable.
- 2. Specific species on public properties shall be determined between the developer and relevant City departments at the time of review of landscaping plans.
- 3. Design of individual development sites shall be implemented at the zoning, subdivision and development permit approval stage, as determined by the City, with consideration for NSP policies and land use designations.

4.3 All Weather Design

Edmonton is a winter city, and Gorman will be a winter community. Promoting winter city design creates spaces that can be enjoyed year round and provides for community comfort and enhanced walkability. Small but thoughtful urban design interventions such as wind screening and microclimatic planting design will help to mitigate the impacts of cold winter winds. Positive solar orientation of buildings will increase outdoor comfort in the short shoulder seasons of spring and fall. Open spaces will provide programming opportunities for the neighbourhood throughout the year, including infrastructure such as shared use paths to support winter activities for pedestrians, cyclists and cross-country skiers.

Objectives

1. Design neighbourhood infrastructure and public spaces to embrace all seasons and encourage year-round use.

Policy

1. Incorporate winter city design strategies such as weather protection, maximizing sun exposure, and incorporating colour and lighting into the design of buildings and private and public spaces. Considerations shall include covered waiting areas at transit stops, building projections such as awnings, and use of landscaping and lighting.

Implementation

1. Winter design consideration and elements in buildings, parks and public spaces are encouraged by the City of Edmonton. Designs shall be reviewed and developed in conjunction with the responsible civic departments to ensure the incorporation of appropriate design elements using the Winter City Design Guidelines.





^{49/86} **5** ECOLOGY, PARKS AND AMENITIES

Natural areas, parks, and open space amenities within Gorman provide residents with a wide variety of destinations within the community, as well as direct and continuous connections between these spaces (**Figure 10 Ecological Network**). This includes existing named natural areas, a preserved tree stand, stormwater management facilities and other pocket parks that provide ecological and recreational value to the neighbourhood.

The following policies and implementation strategies take into consideration the acquisition, design, development, and management requirement of the parks and open spaces, based on the Natural Connections Strategic Plan, the Urban Parks Management Plan and Breathe: Edmonton's Green Network Strategy.

5.1 Natural Areas

The Gorman plan area is highly disturbed. Regardless, there is an opportunity to incorporate best practices to preserve the natural areas that remain. A Phase II Ecological Network Report (ENR II) was developed for the Participating Landowner properties within the plan area to identify natural areas, existing water bodies, and ecological connections, as well as to determine which areas were the most significant to retain.

Retained natural areas within Gorman include:

• Vriend Lake (NE 8096) and the surrounding Environmental Reserve buffer

Vriend Lake (NE 8096) is considered a "local environmentally sensitive" area and is subject to a bed and shore claim by the Province. It is approximately 9.25 ha in area and provides habitat for waterfowl. Future development or disturbances to the landscape around Vriend Lake shall limit potential negative impacts to its hydrology. Future development surrounding Vriend Lake shall incorporate the recommendations of the Natural Area Management Plan. Buffers around the wetland shall be retained and taken as Environmental Reserve, in accordance with the Municipal Government Act and waterbody buffer guidelines outlined in Policy C531.

Natural Area 8097 is located within the Evergreen Funeral Home & Cemetery and will not be retained as Environmental Reserve or Municipal Reserve, as it has been developed as an active burial site.

The removal of an existing wetland to the northeast is proposed to accommodate the alignment of the NSP area's major arterial road, Victoria Trail. Avoidance of this wetland is not possible as the arterial alignment has been predetermined by the existing connection points on the north and south boundary of the NSP area. Confirmation has been received from the Province that a bed and shore claim will not be made on the affected wetland. A stormwater management facility is proposed in the vicinity of the existing wetland, along with compensation for the removal. The new stormwater management facility will be a constructed wetland that will add natural wetland benefits back to this area. This will function together within the network of stormwater management facilities to form an integrated management system.

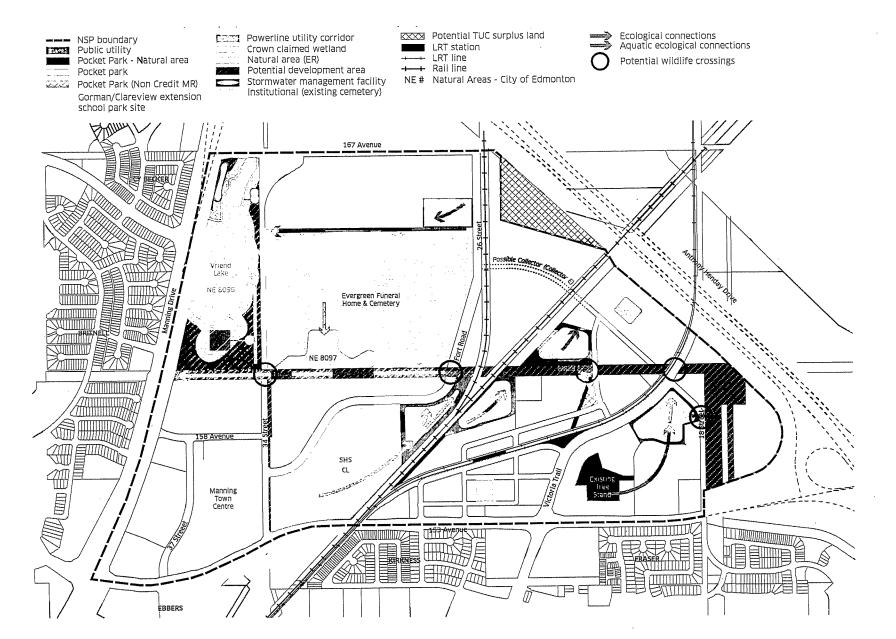
Objectives

- 1. Conserve natural areas and integrate them into the community.
- 2. Construct stormwater management facilities as naturalized areas.
- 3. Contribute to the ecological network of the area and provide for linkages between natural areas, parks and open spaces.

Policy

- 1. Conservation planning in Gorman shall adhere to City of Edmonton Policy C531 Natural Area Systems and the Municipal Government Act.
- 2. Each retained natural area shall be appropriately buffered from urban development, in accordance with the recommendations of a Natural Area Management Plan.
- Explore opportunities for conservation of natural areas through a variety of mechanisms including retention, compensation or the development of stormwater management facilities as constructed wetlands.
- 4. An ENR II and Wetland Assessment will be required for non-participating landowners at the time of rezoning of the non-participating landowner lands for remaining natural areas (wetlands and tree stands).
- 5. A site-specific Natural Area Management Plan (NAMP) shall be completed prior to the rezoning or subdivision of any land located within 250 m of a natural area to be retained.
- 6. Protect retained natural areas by providing appropriate buffers from urban development, in accordance with the recommendations of a Natural Area Management Plan.
- 7. Surface flows shall be directed to upland Natural Areas to maintain the pre-development water balance.

Figure 10 Ecological Network





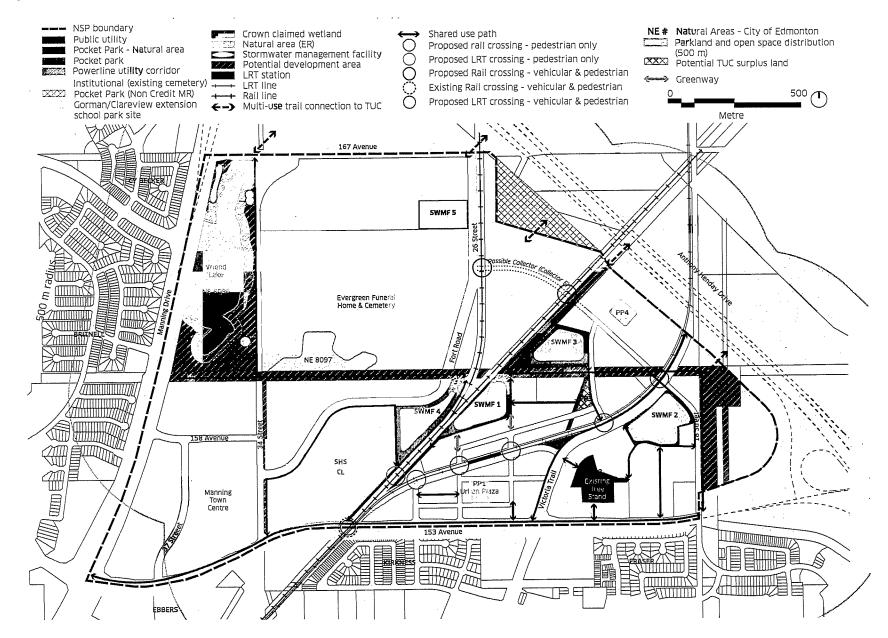


- 8. Where natural areas and buffers are to be retained, and if criteria are met, land shall be dedicated as Environmental Reserve or Municipal Reserve, in accordance with the Municipal Government Act and waterbody buffer guidelines outlined in Policy C531.
- 9. Street lighting in proximity to retained natural areas shall be designed to reduce light pollution.
- 10. Stormwater management ponds shall be constructed wetlands to imitate a class IV/V wetland.
- 11. Stormwater management facilities shall include naturalized shoreline plantings and other native vegetative species intended to provide habitat opportunities for wildlife and promote natural water treatment.
- 12. Stormwater management facilities shall maximize the use of wetland soils to the greatest extent possible, in order to accelerate the re-vegetation of native plant species.
- 13. Integrate and connect natural areas to other parks and open spaces to maintain habitat and promote ecological connectivity.
- 14. Wildlife passages shall be constructed, where practical, to assist the movement of wildlife, through potential ecological corridors.
- 15. The area designated as Potential Development Area surrounding Vriend Lake shall require additional technical study to determine appropriate land uses prior to the development of the area.

Implementation

- 1. Lands that meet the criteria for Environmental Reserve (ER), pursuant to the Municipal Government Act, shall be dedicated as Environmental Reserve to the City of Edmonton at the time of subdivision.
- 2. An Ecological Network Report (ENR) and Neighbourhood Design Report (NDR) were prepared under a separate cover in support of the NSP. The ENR identifies natural areas and provides an assessment of the existing ecological network as well as provides recommendations on how to conserve and protect natural areas. The NDR reviews and identifies the natural areas' pre-development and post-development basin hydrology.
- 3. A Wetland Assessment is required for each titled parcel area prior to rezoning or subdivision approval. Wetland Assessments will identify any potential wetlands and determine the required regulatory approvals, and potential sustainability of wetlands with future development. Local wetland compensation opportunities shall be explored at the subdivision stage, in accordance with the Alberta Wetland Policy, City of Edmonton Wetland Strategy, and City Policy C531.The Subdivision Authority in consultation with the responsible civic departments will determine the dedication of Reserves owing for the neighbourhood, to be confirmed by legal survey at the time of subdivision.

Figure 11 Parks, Open Spaces and Amenities



53/86

- 4. In compliance with Policy C531, a Natural Area Management Plan will be prepared prior to rezoning and subdivision to address issues related to phasing of construction activities, ongoing management, maintenance and sustainability of the natural areas to be retained in Gorman. The Natural Area Management Plan will be used to determine and confirm the necessary development setbacks, if it is proposed to be different than the development setbacks recommended by Policy C531. For conceptual purposes only, buffers around natural areas have been illustrated at 30 m for wetlands and 10 m for tree stands. Detailed buffer planning to occur under the approval of a Natural Area Management Plan by the City of Edmonton Ecological Planners.
- 5. Development of stormwater management facilities as constructed wetlands will depend on the necessary innovative engineering and landscape design of a facility to provide functional and low maintenance stormwater management for Gorman. Due to site constraints unique to Gorman, Stormwater Management Facility 1 (SWMF 1), as identified on Figure 11 Parks, Open Spaces and Amenities, shall be constructed as a Nautilus Pond™ to meet the City of Edmonton servicing standards, as necessary. The detailed design and configuration of the facilities will be determined prior to any rezoning and subdivision. Any innovative development techniques that do not meet current city standards must be approved by the necessary civic departments prior to or concurrently with detailed engineering review.
- 6. Figure 10 Ecological Network conceptually illustrates ecological connections and locations of potential wildlife crossings. Potential wildlife crossing locations shall be reviewed by the appropriate City departments. Crossing location and designs shall determined at the design stage, in consultation with Planning Coordination and in alignment with the City of Edmonton Wildlife Passage Engineering Design Guidelines.
- 7. **Figure 11 Parks, Open Spaces and Amenities** conceptually illustrates the location and configuration of parks and open spaces, including stormwater management facilities, retained natural areas, public utility corridors and shared use path connections.
- Additional detailed analysis of wetlands and other natural areas located on non-participating lands shall be required to support future development of the non-participating lands.



5.2 Parks and Open Space

The Gorman development concept features a Gorman/Clareview extension school park site and neighbourhood scale Pocket Parks, to be designated as Municipal Reserve or Non-Credit Municipal Reserve.

In addition to the parks, connections will be established through an extensive shared use path network. This network will effectively create a comprehensive open space system that links the residential and commercial areas of the community, and provides a continuity of the ecological network.

Stormwater management facilities, public utility lots, and publiclyaccessible public utility corridors also contribute to open space within the neighbourhood. Both the City of Edmonton Urban Parks Management Plan and Breathe: Edmonton's Green Network Strategy envision stormwater management facilities as a part of an open space network, that support wildlife and increase biodiversity while providing recreational opportunities for the residents in the neighbourhood. Both plans emphasize the importance of the creation of safe, accessible, vibrant and inclusive open spaces.

Open space distribution is established such that every resident residing within the Gorman NSP area will be located within a walkable distance from a park or open space. Parks and open spaces, in addition to providing recreational opportunities, will be utilized to buffer from the private corporation rail line, and form part of the shared use path network.

The Gorman park and open space types, location, and distribution are conceptually illustrated in **Figure 11 Parks, Open Spaces and Amenities.**



Gorman/Clareview Extension School Park Site

The City of Edmonton Urban Parks Management Plan directs the assembly of one district park within an area structure plan. The district park for the Pilot Sound ASP is located in the McConachie Neighbourhood. The Edmonton Catholic School District identified a need for an additional school park site to locate a high school that was intended to be located in the Clareview Town Centre district park site. Municipal Reserve has been allocated from neighbourhoods outside the Pilot Sound ASP to facilitate the assembly of the school site. The City has already acquired a portion of the necessary land for the school park site prior to the development of the Gorman NSP. Although the presence of public utility corridors, pipelines and rail lines are constraints, locating the Separate high school in Gorman was the option at the time. The design of the future school, recreational facilities and open space in the park will require appropriate setbacks and mitigative measures in consideration of these constraints. This Gorman/Clareview Extension School Park site is sized to accommodate both a separate high school, a future community league building, and associated sports fields.

Pocket Parks

The following Pocket Parks are planned for the Gorman neighbourhood.

Pocket Park 1 (PP1) is located in the Gorman Town Centre area, in close proximity to the LRT station site. As a focus of the Town Centre, the park will function as a central urban plaza. The urban plaza will be surrounded by active at-grade uses compatible with park uses that will facilitate year round animation of the park, and contribute to a sense of safety and vibrancy. The plaza will be a programmable, multi-use community gathering space that can serve the surrounding community as a venue for events such as farmers markets, festivals and other social and recreational activities. The plaza will accommodate all users through accessible design and will feature furnishings such as pedestrian scaled lighting, seating areas, and wayfinding. The park will have public road frontage on a minimum of two sides. Sightlines into the plaza are provided along these public road frontages. Buildings directly adjacent to the urban plaza will have active at-grade uses.

The design of the urban plaza will follow the recommendations of the City of Edmonton's transit oriented development guidelines.

Natural Area 1 (PP2) is located east of Victoria Trail. This park features an existing deciduous tree stand. The intent is to retain as much of the tree stand as possible, as a natural feature, to be incorporated into the pocket park which will be dedicated as Municipal Reserve. However, it is anticipated that some of the tree stand will be impacted as part of the adjacent road construction. The tree stand will serve the community as a natural amenity, enhancing the area's overall attractiveness and visual character. Passive recreational and unstructured active recreation activities can be located within the 10 m buffer around the treed portion. It will also contribute to the ecological value of the area by providing habitat for wildlife.

Pocket Park 3 (PP3) is situated south of the public utility corridor. The park functions a gateway to the shared use path that runs along the public utility corridor. It will serve the surrounding residential neighbourhood. Due to its configuration, this park will be taken as non-credit municipal reserve.

Pocket Park 4 (PP4) is located within the residential area north of the public utility corridor. This park is planned to serve the surrounding residential development and will support passive recreation activities. Access to the park shall be accommodated along future roads as per requirements of the Urban Parks Management Plan. The timeline for development in this portion of the neighbourhood is unknown and the road alignments depicted are considered to be conceptual and may be subject to change.



Figure 12 Gorman Town Centre Urban Plaza Conceptual Rendering

Greenways

Greenways are intended to provide a wider view corridor to SWMF 1 and provide emergency and maintenance vehicle access to the SWMF.

Greenways shall be a minimum of 10m wide, shall be dedicated as road right of way, and shall include:

- 3m wide Shared Use Path
- grassed or naturalized planting
- park furniture
- trees and shrub beds

To further facilitate emergency access, placing bollards closer to the SWMF, rather than the road, was discussed. This possibility will be pursued further at subdivision.

Other Open Spaces

Other public open space within the Gorman neighbourhood includes a public utility corridor, public utility lots, and stormwater management facilities. These spaces offer an opportunity for shared use paths that connect to the regional trail network and link with neighbourhood pedestrian routes and cycling facilities. The landscaping in the public utility corridors will be naturalized to support biodiversity in the neighbourhood. The environment surrounding the stormwater management facilities also ties into the green space network. The stormwater management facilities will maintain their functional uses while serving as a public amenity space with trails, lighting and seating. Maintaining appropriate ecological buffers will be accomplished by planting native species that assist in the functional filtration of storm pond water while also increasing the habitat value of the ecological network, providing visual interest to area residents and accommodating access for recreation and maintenance.



Additionally, the public utility lot that is located south of the LRT line provides an opportunity to support to function of the LRT station with the inclusion of bike infrastructure such as sheltered bike parking, a fixed bike repair station, and other public amenities.

Figure 11 Parks, Open Spaces and Amenities conceptually illustrates the proposed location of stormwater management facilities and the network of shared use paths and pedestrian connections linking these amenities.

Objectives

- 1. Provide for a variety of interconnected parks and open spaces that are safe and support a variety of activities and uses.
- 2. Co-locate community facilities (potential school, recreation facility, community league etc.) on park sites.
- 3. Develop stormwater management facilities and public utility corridors as public spaces.

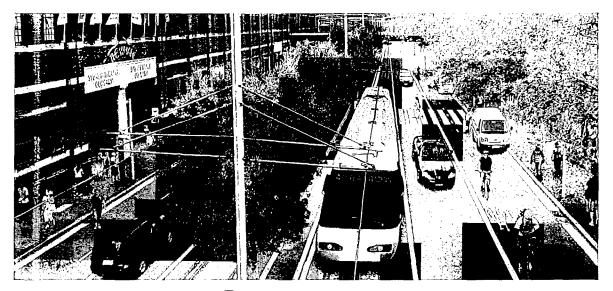
Policy

- 1. Incorporate Crime Prevention Through Environmental Design (CPTED) principles and best practices for urban design in the creation of parks and open spaces and the facilities within them, including efforts to encourage natural surveillance and sense of ownership through animation and public use.
- Design parks and open spaces to support a range of active and passive recreational opportunities that are universally accessible, serve the needs of the population and include elements such as sports fields, tot lots, hardscape plazas with seating areas, shared use paths, trails, lighting, landscaping and natural features.
- 3. Parks and open space shall be connected by a network of shared use paths and sidewalks.
- 4. Implement an ecosystem-based development approach by preserving natural features where possible and incorporating native plant species into the design of parks and open spaces. The tree stand in PP2 shall be conserved through Municipal Reserve and is identified as "Pocket Park - Natural area" on the development concept.
- Park design shall ensure appropriate fencing, noise attenuation, and setback distances from potential hazards, such as pipelines, railways and dangerous goods routes.
- 6. The Developer shall provide all required utility servicing to support park programming.
- Co-locate community facilities for efficient use of land, infrastructure, and associated on site amenities such as sports fields. City Administration will work the Community League and Separate School Board as development becomes imminent.

- 8. If a grade-separated pedestrian bridge over the private corporation rail line is provided for access between the Town Centre and Gorman/Clareview Extension School Park, the landowner will provide the required land through an easement or as road right-of-way. Detailed design of the crossing should be coordinated with the detailed design of the Gorman/Clareview extension school park site.
- 9. Stormwater management facilities shall be designed to support recreational amenity for neighbourhood residents, as well as ecological productivity through the use of native plant species.
- 10. Stormwater management facilities and public utility corridors shall provide opportunities to enhance connectivity and visibility to and through the shared use path system, adjacent public utility lots, and open space design. These public amenities will include features such as lighting, seating and landscaping.
- 11. Trails around stormwater management facilities are encouraged to be located above the high water line to promote visibility and access for trail users.
- 12. Maintenance access to stormwater management facilities shall be provided from the surrounding public utility lot and/or shared use path.

Implementation

- 1. Municipal Reserve will be dedicated as per the Municipal Government Act. Municipal Reserve shall be dedicated as land, money-in-place of land, or a combination. The Subdivision Authority, in consultation with Planning Coordination shall determine the Municipal Reserve owing for Gorman. Areas dedicated as MR shall be confirmed by legal survey at the time of subdivision.
- Figure 11 Parks, Open Spaces and Amenities conceptually illustrates the location and configuration of parks and open spaces, including stormwater management facilities, retained natural areas, public utility corridors and shared use path connections.
- 3. Design of parks and open spaces shall be implemented at the detailed design stage, in accordance with, but not limited to, the Urban Parks Management Plan, Breathe: Edmonton's Green Network Strategy, Winter City Design Guidelines, and Natural Area Management Plans (as applicable), as well as the approved risk, noise and vibration assessments and in alignment with all applicable municipal, provincial, and federal guidelines.
- Stormwater management facilities will be designed as constructed wetlands utilizing native plant species whenever possible.
- 5. Stormwater management facilities will incoporate Crime Prevention Through Environmental Design (CPTED) principles to encourage natural surveillance and public activity. Trails and lighting around the facilities will be located above the high water line to promote a sense of safety and visibility year round, and shared use paths will provide access to the facility and highlight these open spaces as neighbourhood amenities.



6 TRANSPORTATION

The presence of an LRT station will be a defining feature of Gorman. The LRT will provide residents and visitors with easy access and connections to destinations within the Town Centre and onwards to areas outside of the neighbourhood. As an integrated transportation network, a higher degree of connectivity is supported and access to transportation options are improved. This approach is achieved based on a complete streets model by providing multi-modal transportation options for safe, efficient, economic, and equitable movement for both commuter and recreational travel.

The transportation network includes the LRT line, roads, sidewalks, and shared use paths along roads, within public utility corridors, and around public amenities such as stormwater management facilities.

The LRT line through Gorman will be at-grade within the neighbourhood. LRT street crossings will be at 153 Avenue, at two locations on either side of the proposed LRT station, and along Victoria Trail. These crossings have been considered and reviewed within the Gorman NSP Transportation Impact Assessment (TIA), submitted under a separate cover. The City of Edmonton may also design and construct a grade-separated pedestrian bridge across the private corporation rail line to further enhance connectivity to the Gorman/Clareview extension school park site, as identified in **Figure 13 Transportation Network and Modal Priorities**.



The arterial roads that run within or adjacent to Gorman include 153 Avenue, Victoria Trail, Manning Drive and Anthony Henday Drive. These routes function as truck routes. Portions of this arterial road network have been incorporated into the present Arterial Roads for Development Bylaw 14380. The Bylaw provides a mechanism to cost share the development of the arterial road network needed to serve Gorman.

Concurrent to the development of this NSP, the alignment of Victoria Trail was amended by the City of Edmonton. An update to the Victoria Trail concept plan will be required to support the proposed Gorman development and will further address road alignments, intersection design and right of way requirements.

The Gorman development concept proposes several accesses to 153 Avenue which are not included in the current concept plan. These access points allow for greater connectivity and distribution of traffic into Gorman by providing for a grid-based network of roads which contributes to reduced intersection design requirements along 153 Avenue. Reducing the intersection design requirements also will support improved pedestrian safety and will offer direct connections to the LRT and surrounding residential areas.

The associated technical studies have provided a neighbourhood level review of the required transportation infrastructure for the Gorman neighbourhood. Given the transit oriented nature of the development, careful consideration is needed to ensure an optimal level of infrastructure servicing is provided: one that meets the needs of the population density expected without oversizing roads and primarily designing for private vehicle use. As standard practice, the potential to downsize road infrastructure will be reviewed in latter stages of design, as neither the City nor the developers are well serviced by over-sized capacity.

Figure 13 Transportation Network and Modal Priorities conceptually illustrates the proposed multi-modal street network.

62/86

6.1 Active Transportation

Active transportation includes any form of man-powered transportation such as walking and cycling (City of Edmonton Active Transportation Policy C544). Gorman's integrated active transportation network includes pedestrian sidewalks, shared use paths, and on-street cycling facilities. These provide residents with a variety of transportation options to destinations such as parks, open spaces, schools, the Town Centre, the LRT station, residential, and commercial areas. These dedicated routes balance pedestrian, cyclist, and vehicular use, enhance accessibility, safety, and convenience for all travelers, and encourage transit use to reduce reliance on private vehicles.

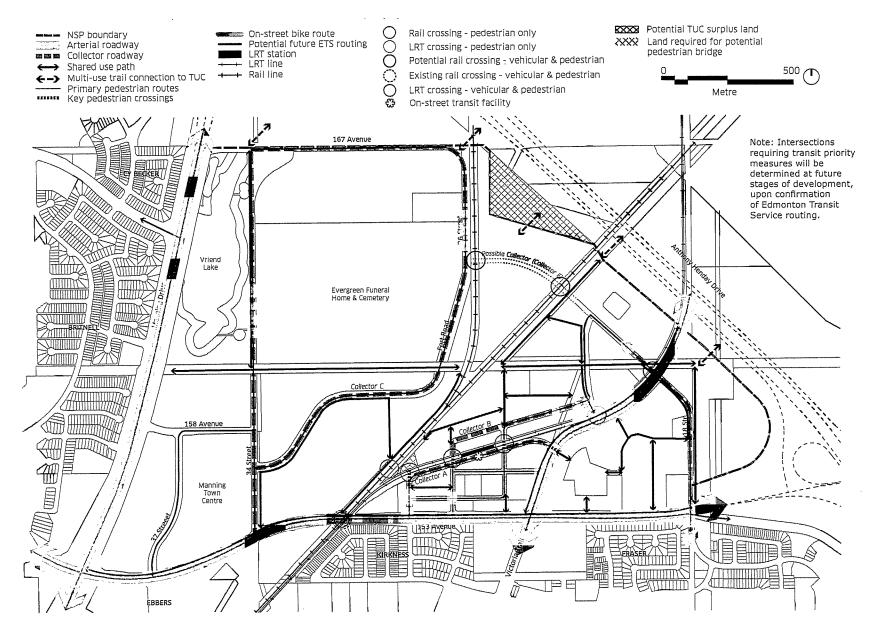
Objectives

1. Provide convenient active transportation connections toneighbourhood destinations and surrounding areas.

Policy

- 1. Provide a network of hard-surfaced pedestrian routes (i.e. sidewalks and shared use paths), off-street bike routes (i.e. shared use paths) and on-street bike routes (i.e. shared use lanes, painted bike lanes, protected bike lanes) to create
 - a complete network for pedestrians and cyclists that link to parks, open spaces, schools, the Town Centre, the LRT station, and residential and commercial areas.
- Locate shared use paths at mid-block connections, along arterial roads, along public utility corridors and around stormwater management facilities and the Gorman/ Clareview extension school park site. Shared use paths around stormwater management facilities should be no less than 50% of the perimeter of the stormwater management facilities. Connections to the transportation utility corridor (TUC) will be required.
- Design streets with sidewalks provided on both sides of the street, in all areas of Gorman, to accommodate pedestrian activity.
- Bike parking facilities should be provided adjacent to amenities such as the LRT station, and within the Town Centre, in parks and at building entrances in secure at-grade locations.
- 5. A potential grade-separated pedestrian bridge over the private corporation rail line is identified north of 153 Avenue to connect the Gorman/Clareview extension school park site to the Town Centre. Buildings, landscaping and fencing surrounding the entrance to the pedestrian rail crossing shall allow for public surveillance of the crossing by using transparent materials, providing ground floor windows and ensuring clear sightlines from the adjacent LRT line and shared use paths.

Figure 13 Transportation Network and Modal Priorities



Gorman Neighbourhood Structure Plan

- 1. **Figure 13 Transportation Network and Modal Priorities** conceptually illustrates active transportation connections in Gorman. Pedestrian and cyclist connections and crossing facilities will be reviewed at the subdivision stage. The Subdivision Authority should have regard for pedestrian and cyclist routes and access to neighbourhood amenities and transit facilities to promote active transportation.
- 2. Design of the active transportation network in Gorman shall be in accordance with, but not limited to, the Complete Streets Design and Construction Standards and Transit Oriented Design Guidelines.

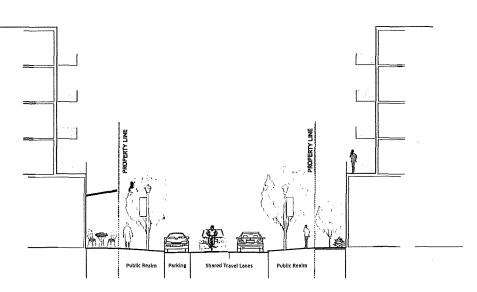


Figure 14 Conceptual Pedestrian Oriented Street - Parking on One Side (17 m ROW)

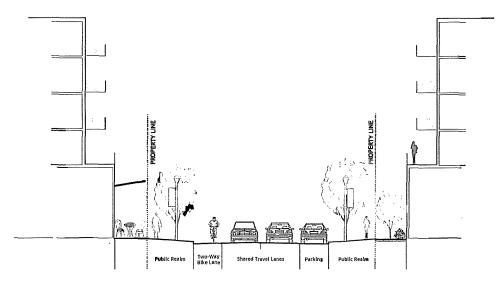


Figure 15 Conceptual Pedestrian Oriented Street - Parking on One Side with Bike Lane (20 m)

3. The location, land requirements and ultimate need for a potential grade-separated pedestrian bridge over the private corporation rail line crossing shall be reviewed at the rezoning and subdivision stage. The landowner will provide the required land for the bridge through an easement or dedication of road right-of-way. Any of the land that is not required for the crossing shall be incorporated into the adjacent residential development.

6.2 Transit

Public transit in Gorman will consist of bus and LRT service. Transit services will be extended into the NSP area in accordance with the City of Edmonton Transit Guidelines. An on-street transit facility will be located directly adjacent to the LRT station. The transit facility may be designed as a two phase approach. The road will function as a typical collector road within the community until LRT is extended from Clareview to the Gorman LRT station and again, once it is further extended to Horse Hill. If Gorman functions as an end of line station, then the City may require that the road be restricted to buses only for use as a street-oriented transit centre during that time. Additional right of way has been accommodated in the conceptual design, in case there is a requirement for widening.

The LRT alignment is curved north of 153 Avenue and right of way width varies through the entire alignment. Dedication of the right of way to accommodate the development of the LRT extension and station will be pursued by the City whereby LRT right of way will be dedicated as a condition of subdivision and area development, following current policies or procedures for cost sharing of required LRT land.

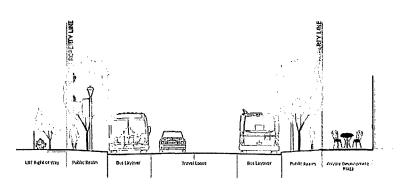


Figure 16 Conceptual On-Street Transit Facility - Bus Layby Lanes on Both Sides with One-Way Traffic in Both Directions

Objectives

1. Accommodate accessible and efficient transit service that contributes to the surrounding built environment.

Policy

- 1. The LRT station and on-street transit facility shall be designed to integrate with surrounding development and complement the adjacent Town Centre in terms of scale, materiality, and public realm design.
- 2. An on-street transit facility shall be located adjacent to the LRT station. The transit facility will provide direct bus access to the LRT station and Town Centre. Bus stops will also be located along collector and arterial roads throughout Gorman to provide connections to other areas of the neighbourhood.
- 3. Incorporate transit priority measures such as sidewalk bulbs at bus stops to facilitate easy boarding/deboarding, and traffic signal pre-emption to reduce delays at signal lights for transit routes along local and collector roads. Measures such as traffic signal pre-emption or priority, bus queue jumps at intersections, and/or bus-only lanes (or HOV lanes) could also be considered on arterial roads.
- 4. **Figure 7 Gorman Development Concept** shows the location of the LRT Utility Complex and Development Entry Feature. At the time of subdivision, land for the Utility Complex will be dedicated to the City of Edmonton. Parameters of ownership and maintenance for the Utility Complex, development entry feature(s), and associated land will also be established at this time.

- 1. **Figure 13 Transportation Network and Modal Priorities** conceptually illustrates the location of the LRT station, on-street transit facility, and potential future transit routing.
- 2. The City of Edmonton and developers are encouraged to collaboratively work together to complete an LRT Station Plan, in conjunction with an on-street transit facility plan. This should be undertaken in coordination with the development and subdivision of the parcel directly north of the LRT station (as indicated in Figure 18 Development Staging) and the Town Centre to allow for full integration of adjacent uses, and for consideration of the policies in this plan while minimizing restrictions of available options to development. The LRT station design will be completed by the City and plans will be completed to the satisfaction of Transportation Planning.

 Potential transit priority measures and locations will be determined once transit routes within Gorman are confirmed by Edmonton Transit System.

6.3 Road Network

Where possible, a grid-based road network has been established to create connections within the neighbourhood. Within the Town Centre the road network will create a flow of traffic to and from the LRT station and support transit and pedestrian/cyclist connectivity.

The road adjacent to the LRT station (Collector A) will accommodate the on-street transit facility. As described in Section 6.2, the right of way will allow for layby lanes for buses on both sides of the roadway and one lane of traffic in both directions.

Any vehicular crossings shown along the network over the rail or LRT line are conceptual and approval will need to be provided by the private rail corporation.

Figure 13 Transportation Network and Modal Priorities

conceptually illustrates the street pattern and connections within Gorman and between adjacent areas.

Objectives

1. Develop an integrated, safe and efficient network of multi-modal streets, based on the City of Edmonton's road hierarchy system of arterial, collector, and local roads.

Policy

- 1. Accommodate multi-modal transportation options (pedestrian, cycling, transit, and vehicles) throughout the community, with a priority given to routes that link active transportation with transit (i.e. LRT station, on-street transit facility, and transit stops).
- 2. Establish a grid-based network of local roads and locate crossings over the rail and LRT line to support connectivity across the plan area.
- 3. Design Collector A to accommodate vehicular movement in both directions and an on-street transit facility.
- 4. Where applicable, lands within Gorman shall be subject to an Arterial Road Assessment (ARA) to cost share the transportation facilities needed to service the area.

- 5. An update to the 153 Avenue concept plan may be required at future stages of development to further determine road alignments, intersection design, and right of way requirements.
- 6. Reduced building setbacks will be considered where the curve radius of Victoria Trail reduces adjacent parcel depths to less than 40 meters.
- Front driveways onto collector roads should be restricted to 30%.
- 8. Lands outside of the Participating Landowner properties should complement and connect to the existing network within Gorman.

- Figure 13 Transportation Network and Modal Priorities conceptually illustrates the arterial and collector roadway network in Gorman. The local roadway network is only shown within the Town Centre. Local roadway configuration, pedestrian connection and crossing facilities will be reviewed at the subdivision stage. The Subdivision Authority should have regard for the design of roads that shall be implemented at the subdivision and detailed design stage of development and will incorporate approaches outlined in the City of Edmonton Complete Streets Design and Construction Standards and Transit Oriented Development Guidelines. Road designs that do not comply with City of Edmonton standards will be submitted for review and consideration by Transportation Planning and Design.
- Local roadway configuration and pedestrian connection and crossing facilities will be reviewed at the subdivision stage. The Subdivision Authority should have regard for the dedication of walkways to promote walkability and access to neighbourhood amenities and transit facilities.
- The Subdivision Authority, in Consultation with Transportation Planning and Design, shall have regard for the number of lots having direct access to collector roads. The provision of front drive access within Gorman will be consistent with City of Edmonton policies and will be determined at the rezoning and subdivision stage.
- 4. Road right of way shall be dedicated to the City of Edmonton in accordance with the Municipal Government Act at the subdivision stage of development.

6.4 Transportation and Land Use Integration

The Gorman neighbourhood concept incorporates multi-modal infrastructure to support a compact and high-density transit oriented community. The vehicular, cycling, and pedestrian transportation network provides access to commercial and residential areas and integration with neighbourhood parks, open spaces, and the LRT station. Integration of these transportation systems, and associated uses such as parking, will minimize potential negative impacts resulting from different land use types and interactions. For example, locating surface or structured parking accesses away from public areas will reduce conflicts between vehicles and pedestrians.

While parking continues to be provided through a number of transportation demand management (TDM) strategies, the Gorman development seeks to support lifestyles of reduced car dependency. Parking requirements should, at a minimum, align with recommendations for transit oriented development as outlined in Transit Oriented Development Guidelines and Zoning Bylaw. Where it can be demonstrated that commercial or higher density residential development encourages transit use or where there are overlapping requirements such as mixed use development, further parking reductions should be considered at the rezoning and/or development permit stage.

In accordance with the City of Edmonton's Park and Ride Guidelines, a permanent park and ride facility is not required by the City in Gorman. A third-party park and ride may operate in the future development. It shall be considered as an interim use until it can be removed as development progresses with the extension of the LRT line. Any temporary facilities shall not be located within the Town Centre but could be located on the west side of the private corporation rail line, near the Gorman/Clareview extension school park site and adjacent to 153 Avenue. This will allow the area around the LRT station to be dedicated to transit oriented development and transportation demand management opportunities.

Objectives

1. Integrate transportation infrastructure with surrounding land uses and mitigate potential negative impacts.

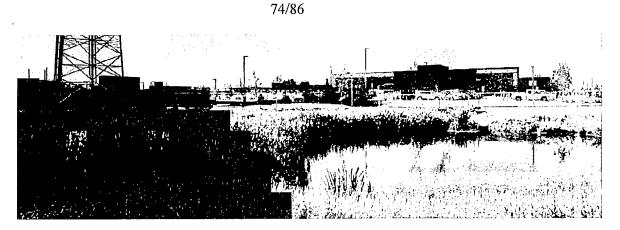
Policy

- 1. Transit routes should be located within a walkable distance from residential and commercial land uses.
- 2. Provide convenient pedestrian and cyclist connections to transit facilities within Gorman.
- 3. Encourage safety and traffic calming measures to encourage adherence to posted vehicular speed limits, improve pedestrian and cyclist safety and contribute to the streetscape with priority given to residential areas and within the Town Centre.
- 4. Consider parking relaxations for all developments within close proximity of the LRT station (i.e. 600 m). Where possible, strategies such as shared parking facilities should be considered.
- 5. Locate access to parking away from pedestrian routes. Shared access to parking areas is encouraged to minimize interruptions to the pedestrian realm.
- 6. Prioritize underground parking and discourage large format surface parking in all areas. If it is determined that a surface parking lot is the only viable option, locate the lot to the rear or side of buildings to minimize undue negative visual effect and provide safe, direct pedestrian routes to and from parking lots by breaking down surface lots into smaller cells through landscaping and sidewalks.
- Appropriate noise attenuation facilities shall be constructed by the developer entirely within private property, along the mutual property line, for residential uses adjacent to major roads and railway corridors, where required.
- 8. A permanent park and ride facility will not be permitted in Gorman. If deemed necessary, a third party park and ride may be permitted as an interim use until the extension of the LRT line. Any temporary facilities shall not be located within the Town Centre but could be located on the west side of the private corporation rail line, near the Gorman/Clareview extension school park site and adjacent to 153 Avenue.

- 1. Routing for public transit shall be determined by Edmonton Transit System.
- Figure 13 Transportation Network and Modal Priorities conceptually illustrates the location of transit facilities and pedestrian and cyclist connections.
- Safety and traffic calming measures such as reduced vehicular speed limits, on-street parking, enhanced pedestrian crossings with curb extensions, raised intersection, or use of special paving may be incorporated into the design of roads. Details will be reviewed by Transportation Planning and Design prior to development.

- 4. A Parking Impact Assessment which considers policies with respect to the City of Edmonton's Transit Oriented Development Guidelines will be required at the rezoning stage to support justification of request for parking relaxations within close proximity of the LRT station (i.e. 600 m). A Parking Impact Assessment will consider anticipated needs and zoning requirements. Opportunities to reduce parking requirements will be pursued through the zoning bylaw.
- 5. All development adjacent to potential hazards such as railways and dangerous goods routes shall adhere to recommendations of approved risk assessments and all applicable municipal, provincial and federal policies and guidelines. Mitigation measures shall be reviewed at the rezoning and/or subdivision approval stage.
- 6. **Figure 7 Gorman Development Concept** indicates where potential noise barriers may be required. Other noise attenuation strategies shall be determined at the rezoning and/or subdivision stage. In accordance with the approved Noise Attenuation Study, noise attenuation facilities may include berms, fences or a combination thereof.
- 7. If deemed necessary, the City of Edmonton may partner with a third party at the subdivision/rezoning stage to operate an interim park and ride outside of the Town Centre, with consideration of the City of Edmonton's Park & Ride Guidelines.





7 INFRASTRUCTURE, SERVICING AND STAGING

Gorman will be a fully serviced neighbourhood, designed and constructed in accordance with the City of Edmonton servicing standards or to an approved standard that is specific to the context of the neighbourhood. The sanitary, stormwater drainage, water servicing, and staging concepts are conceptually illustrated in **Figure 17 Infrastructure and Servicing** and **Figure 18 Development Staging**.

Features impacting the infrastructure and servicing scheme for Gorman include the general southeast sloping of the land towards the North Saskatchewan River, as well as roadside ditches and the private corporation rail lines that direct drainage to culverts. Additionally, the major storm runoff of 153 Avenue currently drains into the existing dry pond on the north side of the road. A drainage easement or right of way may be required at the existing dry pond located north of 153 Avenue to route the major flow off 153 Avenue to the proposed new storm system. Details regarding infrastructure, servicing, and staging are provided in the Neighbourhood Design Report (NDR) and Hydraulic Network Analysis (HNA) which have been submitted under a separate covers.

The associated technical studies have provided a neighbourhood level review of the required servicing infrastructure for the Gorman neighbourhood. Given the transit oriented nature of the development, careful consideration is needed to ensure an optimal level of infrastructure servicing is provided: one that meets the needs of the population density expected without oversizing infrastructure. As standard practice, the potential to downsize infrastructure will be reviewed in latter stages of design, as neither the City nor the developers are well serviced by over-sized capacity.

7.1 Sanitary and Stormwater Drainage

The sanitary servicing concept for Gorman generally conforms to the sewer alignments as recommended in the Pilot Sound Area Structure Plan. The Gorman sanitary drainage is proposed to be directed to the Clareview Sanitary Trunk that discharges to the Alberta Capital Region Wastewater Treatment Plant.

Gorman is divided into five stormwater drainage basins (not including Vriend Lake). Each basin will have a stormwater management facility to control or attenuate the post-development stormwater runoff. The stormwater management facilities may include innovative technology such as Nautilus Pond[™] to meet the City of Edmonton servicing standards, as necessary. The basin boundaries are based on the proposed land use layout and physical constraints such as the private corporation rail line, the LRT alignment and station, and the Victoria Trail alignment that runs along the east side of the LRT tracks.

Objectives

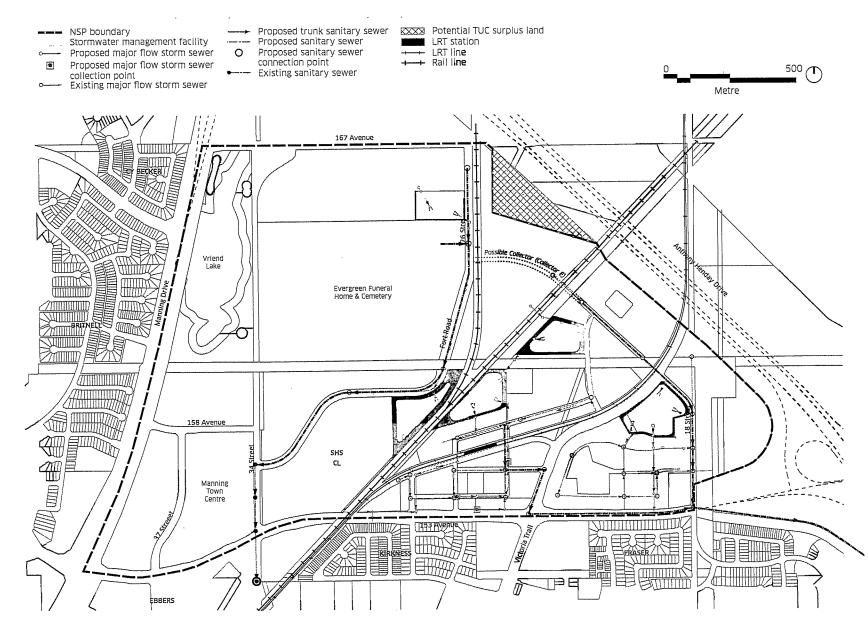
1. Provide sanitary and stormwater drainage systems servicing to a full urban standard, in an efficient and staged manner that is contiguous with existing infrastructure.

Policy

- 1. Sanitary and stormwater servicing shall be provided in accordance with the NDR.
- 2. Develop stormwater management facilities as constructed wetlands.
- 3. Utilize green infrastructure and landscaping, prioritizing native plant species, to manage stormwater, where feasible.
- Maintenance access to stormwater management facilities will be provided from the surrounding public utility lot and/or shared use path.
- If required, provide a drainage easement or right of way at the existing dry pond (located north of 153 Avenue) to route the major flow off 153 Avenue to the proposed new storm system.

Implementation

 Sanitary and stormwater drainage servicing, including the design, installation, and staging shall be completed through servicing agreements at the subdivision and approvals stage of development, in accordance with the City of Edmonton's design, servicing and construction standards and with the Neighbourhood Design Report (NDR) for Gorman, where necessary. Figure 17 Infrastructure and Servicing



Gorman Neighbourhood Structure Plan

61

- 2. Servicing will be achieved through the City of Edmonton's Permanent Area Contributions (PAC) cost sharing protocols.
- 3. Portions of the northeast stormwater management facility may be able to be located within the adjacent powerline corridor. This opportunity may be pursued further once the detailed design of the pond is determined.

7.2 Water Distribution

Water servicing for Gorman will be extended via the existing watermains located within the adjacent developed areas. Water servicing will be designed to provide peak hour flows and fire flows for high and medium density mixed uses.

Objectives

1. Provide water distribution servicing to a full urban standard, in an efficient and staged manner that is contiguous with existing infrastructure.

Policy

- 1. Water servicing shall be in accordance the approved HNA, as approved by EPCOR Water.
- 2. Water looping will be provided in accordance with the requirements of EPCOR Water.

Implementation

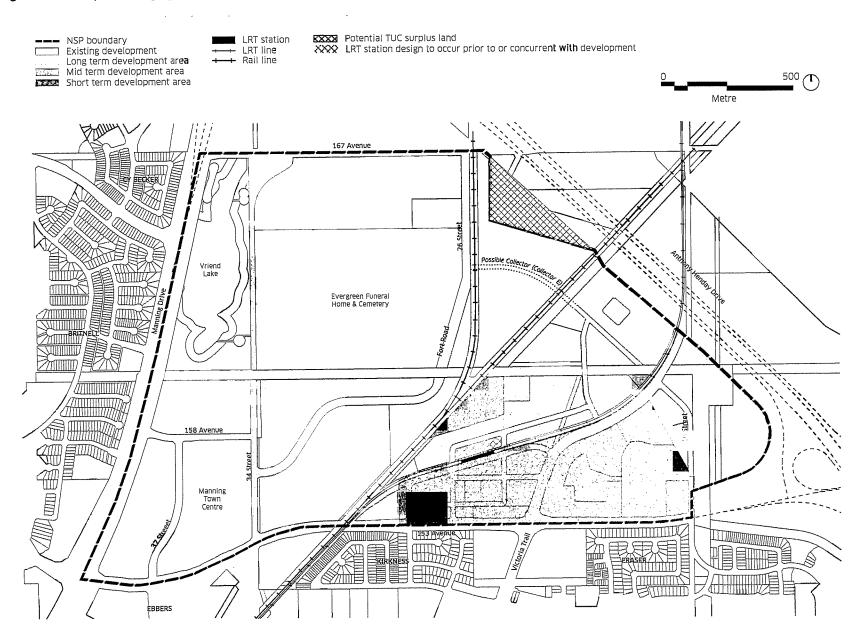
1. Water servicing, including the design, installation, and staging shall be completed through servicing agreements at the subdivision and approvals stage of development, in accordance with the City of Edmonton's design, servicing and construction standards and with the Hydraulic Network Analysis (HNA) for Gorman, where necessary.

7.3 Shallow Utilities

Power, gas, and telecommunication services are located within the surrounding developed areas and will be extended into the Gorman neighbourhood as required.

Objectives

1. Provide shallow utilities servicing to a full urban standard, in an efficient and staged manner that is contiguous with existing infrastructure. Figure 18 Development Staging



Gorman Neighbourhood Structure Plan

63

Policy

1. Shallow utilities shall be extended into the plan area as required.

Implementation

1. Shallow utility servicing, including the design, installation, and staging shall be completed through servicing agreements at the subdivision and approvals stage of development, in accordance with the City of Edmonton's design, servicing and construction standards, where necessary.

7.4 Development Staging

Development is currently expected to begin along 153 Avenue and move north towards the utility line right of way. The remaining areas of the neighbourhood are expected to be developed in the long term. It is generally anticipated that areas closer to existing services would proceed prior to areas further from services.

Objectives

1. Provide contiguous, logical, economical, and efficient development staging with regard for market conditions and environmental considerations.

Policy

1. Provide infrastructure on a phased basis to accommodate the logical extension of services

Implementation

- 1. **Figure 18 Development Staging** conceptually illustrates the development staging for Gorman.
- Utility servicing shall be provided by the developer, where required, to accommodate any and all facilities which may be developed on site.

7.5 Risk and Nuisance Mitigation

Infrastructure and land use integration is critical to the creation of a complete and efficient community while addressing potential conflict or negative impacts.

Objectives

1. Mitigate potential negative impacts of infrastructure on adjacent land uses.

Policy

- Potential hazards from pipelines shall be minimized by ensuring appropriate mitigation measures such as berms, fencing, and setbacks from development.
- Appropriate noise attenuation facilities shall be constructed by the developer entirely within private property for residential uses adjacent to arterial road and railway corridors where required
- 3. All new development adjacent to the railway corridor must include a fence along the mutual property line, to be constructed by the development entirely within private property.

Implementation

- All development adjacent to potential hazards such as pipelines, railways, and dangerous goods routes shall adhere to the recommendations of approved risk, noise, and vibration assessments, the Guidelines for New Development in Proximity to Railway Operations, and all applicable municipal, provincial, and federal policies and guidelines, Mitigation measures such as building setbacks, berms, and fencing shall be reviewed at the rezoning and / or subdivision approval stage.
- 2. City administration shall determine if a noise attenuation assessment is required for residential development adjacent to arterial road and railway corridors at the rezoning and / or subdivision approval stage. Based on the results of the assessment, noise attenuation facilities may be required (e.g. berm, fence, or combination thereof) to be incorporated into the design of the subdivision.
- 3. **Figure 7 Gorman Development Concept** indicates where noise barriers are required in accordance with the approved Noise Attenuation Study. Other noise barriers may be required in the plan area as determined by future noise attenuation assessments.

APPENDIX A

Completed Technical Studies

In support of this NSP, the following technical reports have been submitted to the City of Edmonton and technical agencies under separate covers.

The technical assessment study area includes the lands within the Gorman NSP boundary area, except for the existing commercial development located in the southwest portion of the site.

- Commercial / Retail Market Needs Assessment
- Community Knowledge Needs Assessment (CKCNA)
- Phase II Ecological Network Report (ENR)*
- Environmental Overview Report (EOR)*
- Geotechnical Report*
- Hydraulic Network Analysis (HNA)
- Neighbourhood Design Report (NDR)
- Noise Impact Assessment*
- Parkland Impact Assessment (PIA)
- Risk Assessment
- Traffic Impact Assessment (TIA)
- Waterbody Delineation and Legal Survey
- Historical Resources Overview

*Denotes studies conducted for Participating Landowner properties only.

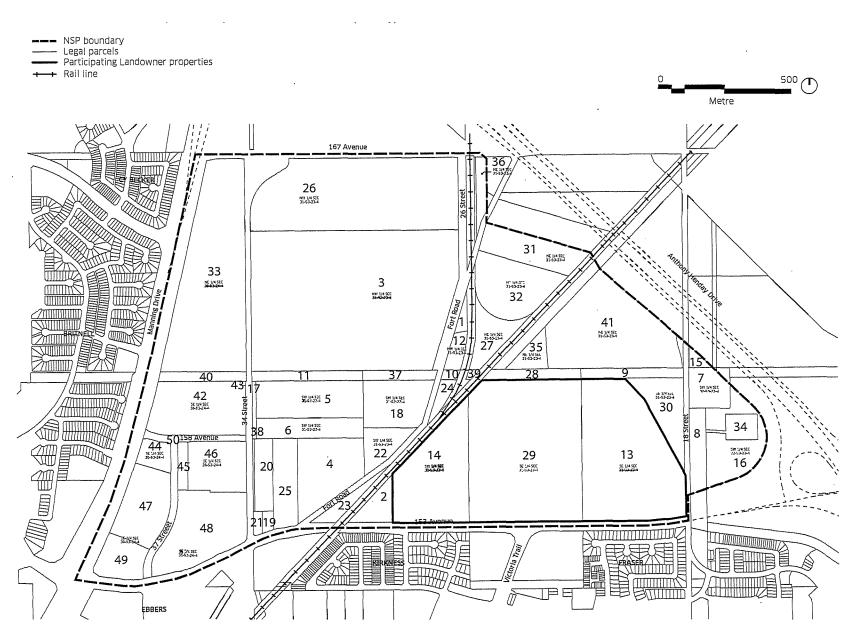
APPENDIX B

Parcel Ownership Details

Table 3 Parcel Ownership Details

| Parcel Number | Ownership | Linc Number | ATS # | Legal Address | Parcel Area within NSP Boundary (ha) |
|---------------|---------------------|--------------|---------------|--------------------|--|
| 1 | Private Owner | 0030 033 302 | 4;23;53;31;NW | 0324166;C;1 | 0,37 |
| 2 | City of Edmonton | 0031 741 937 | 4;23;53;31;SW | 0623025;2;2 | 1.52 |
| 3 | Private Owner | 0034 111 781 | 4;23;53;31;NW | 0940618;1;1 | 39.21 |
| 4 | City of Edmonton | 0034 869 164 | 4;23;53;31;SW | 1123619;1;1MR | 5.74 |
| 5 | Private Owner | 0014 600 399 | 4;23;53;31;SW | 2705NY;;A1 | 5.61 |
| 6 | Private Owner | 0013 161 294 | 4;23;53;31;SW | 2705NY;;B1 | 3.05 |
| 7 | Province of Alberta | 0033 920 852 | 4;23;52;32;SW | 3987MC;OT | 2.13 |
| 8 | Private Corporation | 0036 355 049 | 4;23;53;32;SW | 3987MC;RW;53 | 1.89 |
| 9 | Private Corporation | 0018 616 152 | 4;23;53;31;SE | 3987MC;RW;53 | 1.40 |
| 10 | Private Corporation | 0018 616 177 | 4;23;53;31;SW | 3987MC;RW;53 | 0.23 |
| 11 | Private Corporation | 0018 600 635 | 4;23;53;31;SW | 3987MC;RW;53 | 1.52 |
| 12 | Private Owner | 0030 033 294 | 4;23;53;31;NW | 4;23;53;31;NW | 0.83 |
| 13 | Private Owner | 0027 041 623 | 4;23;53;31;SE | 4;23;53;31;SE | 16.60 |
| 14 | Private Owner | 0027 064 492 | 4;23;53;31;SW | 4;23;53;31;SW | 9.22 |
| 15 | Private Owner | 0034 917 567 | 4;23;53;32;NW | 4;23;53;32;NW | 0.36 |
| 16 | Private Owner | 0021 657 374 | 4;23;53;32;NW | 4;23;53;32;SW | 4.71 |
| 17 | Private Corporation | 0015 976 376 | 4;23;53;31;SW | 414ET;A | 0.27 |
| 18 | Private Owner | 0014 600 407 | 4;23;53;31;SW | 414ET;A | 4,30 |
| 19 | City of Edmonton | 0034 585 176 | 4;23;53;31;SW | 414ET;C | 0.32 |
| 20 | City of Edmonton | 0014 316 772 | 4;23;53;31;SW | 414ET;C | 1.86 |
| 20 | Private Owner | 0034 585 093 | 4;23;53;31;SW | 414ET;C | 0.29 |
| 21 | Private Owner | 0014 600 431 | 4;23;53;31;SW | 414ET;E | 2.00 |
| 23 | City of Edmonton | 0035 475 160 | 4;23;53;31;SW | 414ET;F | 1.09 |
| 23 | Private Owner | 0016 123 250 | 4;23;53;31;SW | | 0.67 |
| 25 | City of Edmonton | 0034 585 234 | 4;23;53;31;SW | 414ET;G 414ET;H | 3.02 |
| 25 | Private Owner | 0017 206 913 | | 4344HW;B | 19.85 |
| 20 | Province of Alberta | 0017 208 913 | 4;23;53;31;NW | | 2.43 |
| | | | 4;23;53;31;NE | 4514AQ;RLY;53 | |
| 28 | Private Corporation | 0015 316 300 | 4;23;53;31;SE | 7733AM;Y | 1.28 |
| 29 | Private Owner | 0037 186 277 | 4;23;53;31;SE | 7733AM;Y | 22.22 |
| 30 | Private Owner | 0011 857 406 | 4;23;53;31;SE | 8121634;;B | 3.63 |
| 31 | Private Owner | 0014 512 257 | 4;23;53;31;NE | 8188ET;;4 | 4.08 |
| 32 | Private Owner | 0014 512 264 | 4;23;53;31;NE | 8188ET;;5 | 5.82 |
| | Private Owner | 0011 395 960 | 4;24;53;36;NE | 8222795;2 | 18.36 |
| 34 | Private Owner | 0010 963 296 | 4;23;53;32;SW | 8522359;;B | 1.21 |
| 35 | Province of Alberta | 0037 691 698 | 4;23;53;31;NE | 8920561;OT | 1.27 |
| 36 | Private Owner | 0023 221 138 | 4;23;53;31;NE | 9222338;;8 | 0.99 |
| 37 | Private Corporation | 0018 649 095 | 4;23;53;31;SW | 3987MC;RW;53 | 1.51 |
| 38 | Private Corporation | 0017 209 602 | 4;23;53;31;SW | 1654HW;B | 0.06 |
| 39 | Private Corporation | 0015 783 351 | 4;23;53;31;SE | 7733AM;25;10 | 0.11 |
| 40 | Private Corporation | 0030 795 513 | 4;24;53;33;NW | 2937MC;RW;53 | 1.19 |
| 41 | Private Owner | 0034 653 056 | 4;23;53;31;NE | 4;23;53;31;NE | 12.59 |
| 42 | Private Owner | 0037 623 105 | 4;24;53;36;SE | 1521893;1;3 | 7.01 |
| 43 | Private Owner | 0036 602 910 | 4;24;53;36;SE | 1521404;1;1 | 0.03 |
| 44 | Private Owner | 0035 454 222 | 4;24;53;36;SE | 1224580;3;7 | 1.23 |
| 45 | Private Owner | 0034 869 180 | 4;24;53;36;SE | 1123619;3;3 | 0.68 |
| 46 | Private Owner | 0034 869 198 | 4;24;53;36;SE | 1123619;3;4 | 4.05 |
| 40 | Private Owner | 0035 454 230 | 4;24;53;36;SE | 1224580;3;8 | 4.81 |
| | | | <u> </u> | | |
| 48 | Private Owner | 0035 403 088 | 4;24;53;36;SE | 1223987;3;5 | 7.76 |
| 49 | Private Owner | 0035 454 248 | 4;24;53;36;SE | 1224580;3;9 | 2.54 |
| 50 | Private Owner | 0034 869 157 | 4;24;53;36;SE | 1123619;3;1 | 2.36 |





Gorman Neighbourhood Structure Plan 68

Pipeline Ownership Details

. 1

| Company | Lic/Line | Status | H2S(mol/kmol) | Max. Operating Pressure (kPA) | Outer Diameter (mm) | Content |
|---------------------|----------|-----------|---------------|----------------------------------|------------------------|-------------|
| 31-053-23W4 | | | | | | · · |
| Private Corporation | 2594-90 | Operating | 0 | 3450 | 406 | Natural Gas |
| Private Corporation | 2594-184 | Operating | 0 | 3450 | 324 | Natural Gas |
| Private Corporation | 866-1 | Operating | 0 | 3450 | 42 | Natural Gas |
| Private Corporation | 866-7 | Operating | 0 | 3450 | 60 | Natural Gas |
| 32-053-23W4 | t | • | • | • | | |
| Private Corporation | 5169-1 | Operating | 0 | 7140 | 406 | Crude Oil |
| Private Corporation | 5169-5 | Operating | 0 | 6670 | 324 | Crude Oil |

