

Laurel Neighbourhood Structure Plan

Office Consolidation January 2015

Prepared by:

*Planning and Policy Services Branch
Planning and Development Department
City of Edmonton*

Bylaw 14622, as amended, was adopted by Council in July 2007. In March 2013, this document was consolidated by virtue of the incorporation of the following bylaws:

- Bylaw 14622* Approved July 9, 2007 (to adopt The Meadows Neighbourhood Four Neighbourhood Structure Plan)
- Bylaw 15191* Approved September 2, 2009 (to rename the plan from “The Meadows Neighbourhood Four to “Laurel”¹, decrease area designated for MDR and increase area designated for LDR, to relocate a “Potential Innovative Housing Area” and amend text pertaining to innovative and affordable housing, delete text reference to grade configuration at future school sites and identify appropriate Municipal Land as School sites)
- Bylaw 15733* Approved May 16, 2011 (to relocate and decrease land identified for medium density residential uses, with a corresponding relocation and increase in size of a small pocket park and low density residential land uses, and update the land use and population statistics to conform to the 2010 Terms of Reference for the Preparation and Amendment of Neighbourhood Structure Plans.)
- Bylaw 16345* Approved March 4, 2013 (to redesignate land from commercial to medium and low density residential, to reconfigure low and medium residential land uses, to realign a collector roadway, to reconfigure a Stormwater Management Facility (SWMF), to reconfigure a pocket park, to add a pocket park, to realign a linear park connection (from a SWMF to a pocket park in the northwest area of the plan utilizing municipal reserve credit for greenway), to delete the identification of a potential innovative housing area and allow innovative development anywhere within the plan, and to add a shared use path connection (from a SWMF to and through the eastern School site).
- Bylaw 16956* Approved October 20, 2014 (to make minor changes to park orientation, add a Shared Use Path, and change some of the pedestrian linkages.)
- Bylaw 17144* Approved June 9, 2015 (to reconfigure a stormwater management facility and low and medium density residential uses, to realign a shared use path, to add a pocket park in the southeast area of the plan, and to update associated figures and statistics accordingly.)

¹ References to “The Meadows Neighbourhood Four” was also deleted and replaced with “Laurel”.

Editor's Note:

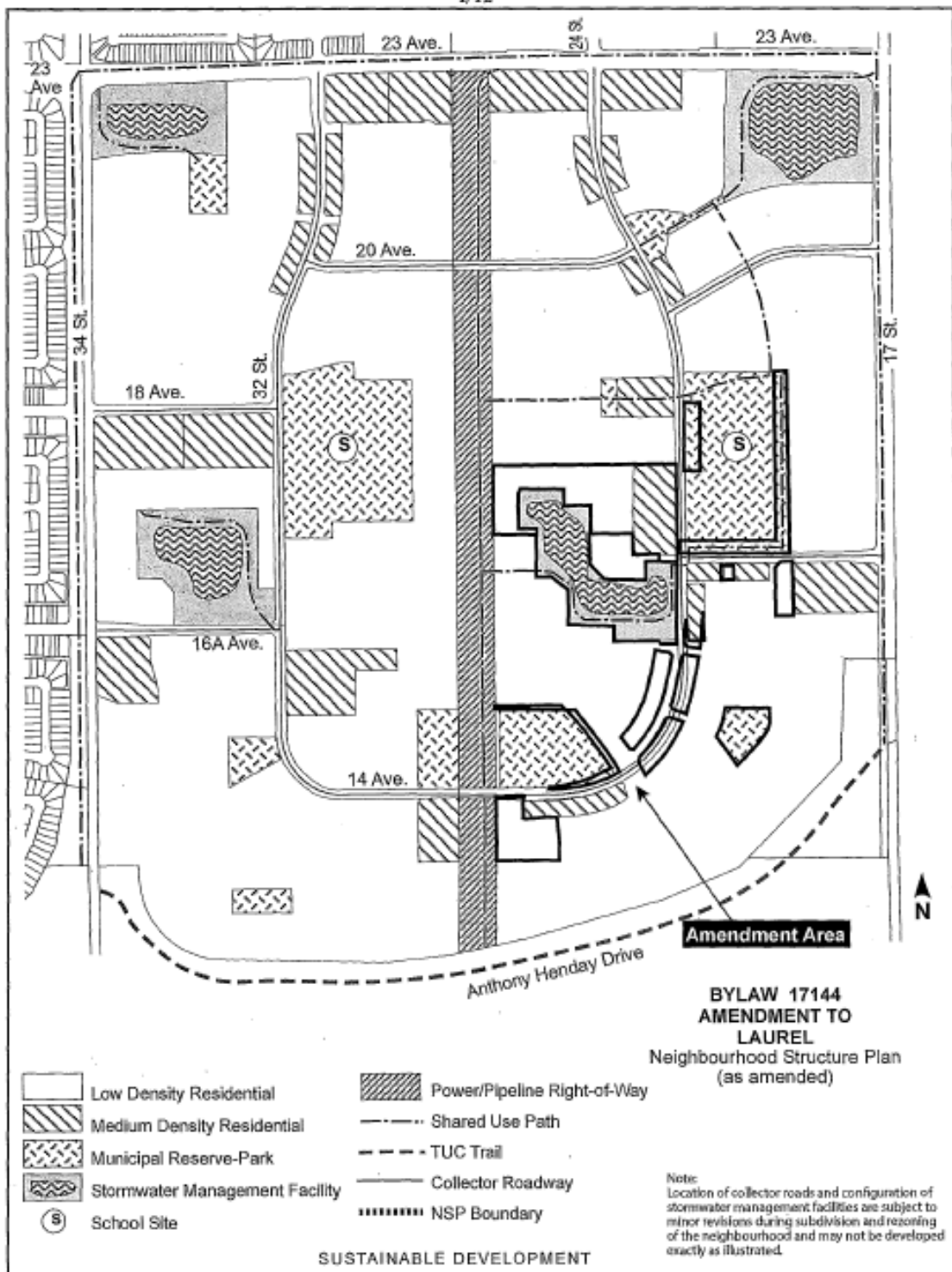
This is an office consolidation edition of Laurel Neighbourhood Structure Plan, Bylaw 14622, as approved by City Council on July 9, 2007

For the sake of clarity, new maps and a standardized format were utilized in this Plan. All names of City departments have been standardized to reflect their present titles. Private owners' names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and are italicized where applicable.

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

City of Edmonton
Planning and Development Department

Bylaw 17144, June 9, 2015



Laurel Neighbourhood Structure Plan

Table of Contents

1.0 ADMINISTRATION.....	1
1.1 PURPOSE	1
1.2 AUTHORITY	1
1.3 TIME FRAME	1
1.4 INTERPRETATION	1
1.5 MONITORING	2
1.6 AMENDMENTS	2
1.7 ORIENTATION	2
<hr/>	
2.0 NEIGHBOURHOOD CONTEXT	3
2.1 LOCATION.....	3
2.2 BACKGROUND.....	3
<hr/>	
3.0 LAND USEK, TRANSPORTATION, AND SERVICING CONCEPT	6
3.1 VISION	6
3.2 GOALS AND OBJECTIVES	6
3.3 LAND USE CONCEPT	7
3.3.1 Urban Design.....	10
3.3.2 Environment	11
3.3.3 Historical Resources.....	12
3.3.4 Residential	13
3.3.5 Parkland (Municipal Reserve).....	15
3.4 TRANSPORTATION	17
3.5 INFRASTRUCTURE SERVICING AND STAGING	26
<hr/>	
APPENDIX 1: SITE CONTEXT.....	33
<hr/>	
APPENDIX 2: PLANING POLICY CONTEXT.....	42
PLAN EDMONTON	42
THE MEADOWS AREA STRUCTURE PLAN (ASP)	43
EDMONTON SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES (SNDP).....	45
URBAN PARKS MANAGEMENT PLAN	46
CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)	47
CITY OF EDMONTON HOUSING MIX GUIDELINES	47
AFFORDABLE HOUSING	48
<hr/>	
APPENDIX 3: TECHNICAL STUDIES	49

List of Figures

1.0	LOCATION	4
2.0	CONTEXT	5
3.0	LAND USE CONCEPT	8
4.0	TRANSPORTATION NETWORK	19
5.0	TRANSIT NETWORK	21
6.0	PEDESTRIAN NETWORK	22
7.0	SANITARY SERVICING	28
8.0	STORMWATER SERVICING	29
9.0	WATER SERVICING	30
10.0	STAGING CONCEPT	32
11.0	LAND OWNERSHIP	34
12.0	SITE CONTOURS	36
13.0	SITE FEATURES	37
14.0	ENVIRONMENTAL SITE ASSESSMENT OVERVIEW	39

List of Tables

1	LAND USE AND POPULATION STATISTICS	9
2	LAND OWNERSHIP	33
3	PHASE I – ENVIRONMENTAL SITE ASSESSMENTS	38
4	HISTORICAL RESOURCES OVERVIEW	40

1.0 Administration

1.1 PURPOSE

The purpose of the *Laurel* Neighbourhood Structure Plan (NSP) is to establish a development and servicing framework for the neighbourhood. The NSP specifies the following:

- The location, configuration, and area of residential, commercial, parks and open spaces, and public utility land uses;
- The density of residential development;
- The pattern and alignment of the collector roadway and pedestrian walkway system;
- A concept to provide required utility infrastructure; and
- The implementation and phasing of development.

1.2 AUTHORITY

The *Laurel* Neighbourhood Structure Plan was adopted by Edmonton City Council in July 2007 as Bylaw 14622 in accordance with Section 633 of the Municipal Government Act.

1.3 TIMEFRAME

Development within the *Laurel* Neighbourhood Structure Plan is expected to commence in summer 2007 and is estimated to be fully complete within five years at current absorption rates.

1.4 INTERPRETATION

All symbols, locations, and boundaries shown in the NSP figures shall be interpreted as conceptual unless otherwise specified in the document, or where they coincide with clearly recognizable physical or fixed features within the plan area.

For each subsection under Land Use Concept, a description of applicable land use strategies (e.g. Urban Design) and types (e.g. Residential) is provided for the plan followed by applicable objectives, policies, implementation, rationale, and technical summary.

A policy statement(s) containing “shall” is mandatory and must be implemented. Where a policy proves impractical or impossible, an applicant may apply to amend the plan. A policy statement(s) containing “should” is an advisory statement and indicates the preferred objective, policy and/or implementation strategy. If the “should” statement is not followed because it is impractical or impossible, the intent of the policy may be met through other agreed-upon means.

1.5 MONITORING

Policies, text, and mapping information contained within this document may be amended from time to time, by Council resolution, in order to respond to, and remain current with, planning and development issues and trends affecting suburban development.

1.6 AMENDMENTS

Amendments to the *Laurel* NSP document involving policies, text or mapping shall be completed in accordance with the Municipal Government Act, The Meadows Area Structure Plan, and all other applicable bylaws, policies and procedures.

1.7 ORIENTATION

This document contains three sections and three appendices.

- Section 1 provides administrative information and an orientation to the plan.
- Section 2 describes the *Laurel* NSP location.
- Section 3 describes the land use, transportation, and servicing concepts for the Neighbourhood.
- Appendix 1 contains background information on the site such as land ownership, topography, and existing land uses.
- Appendix 2 contains information on the NSP compliance with broader policy context.
- Appendix 3 contains a listing of technical studies prepared to support and guide the preparation of the development and servicing concepts.

2.0 Neighbourhood Context

2.1 LOCATION

The *Laurel* NSP comprises the lands generally located within portions of the NW, NE, SE and SW¼ 31-51-23-W4 and NE and NW ¼ 30-51-23-W4. The total gross area of the NSP is approximately 271.67 hectares (ha) (671.29 acres) and it is defined by the following boundaries (see **Figure 1.0 – Location**):

- Northern Boundary – 23 Avenue
- Western Boundary – 34 Street
- Eastern Boundary – 17 Street
- Southern Boundary – Anthony Henday Drive (Transportation Utility Corridor)

The Neighbourhood is identified as *Laurel* in The Meadows Area Structure Plan (ASP) Bylaw 13531 (see **Figure 2.0 – Context**).

The developing neighbourhood of Silverberry is immediately north of 23 Avenue. The lands south of the plan area are currently under construction for the southeast leg of Anthony Henday drive, while land east of the plan area is designated as The Meadows Neighbourhood 5. The existing communities of Daly Grove and Crawford Plains are situated to the west of 34 Street.

2.2 BACKGROUND

The *Laurel* NSP was prepared in response to current and anticipated market demands in the Edmonton region and on behalf two Private Corporate landowners and the City of Edmonton, who combined are owners of approximately 183 hectares of land within the plan area. Further information regarding land ownership and site context is outlined in **Appendix 1** of the document (see **Table 2 – Land Ownership**, **Figure 11.0 – Land Ownership**, **Figure 12.0 – Site Contours**, **Figure 13.0 – Site Features**).

The preparation of the NSP has been guided by the existing City of Edmonton statutory plans and policies including Plan Edmonton, The Meadows Area Structure Plan (ASP), the Suburban Neighbourhood Design Principles (SNDP), and the Urban Parks Management Plan (UPMP). Conformance to these plans and policies is referenced in **Appendix 2**.

Figure 1 – Location

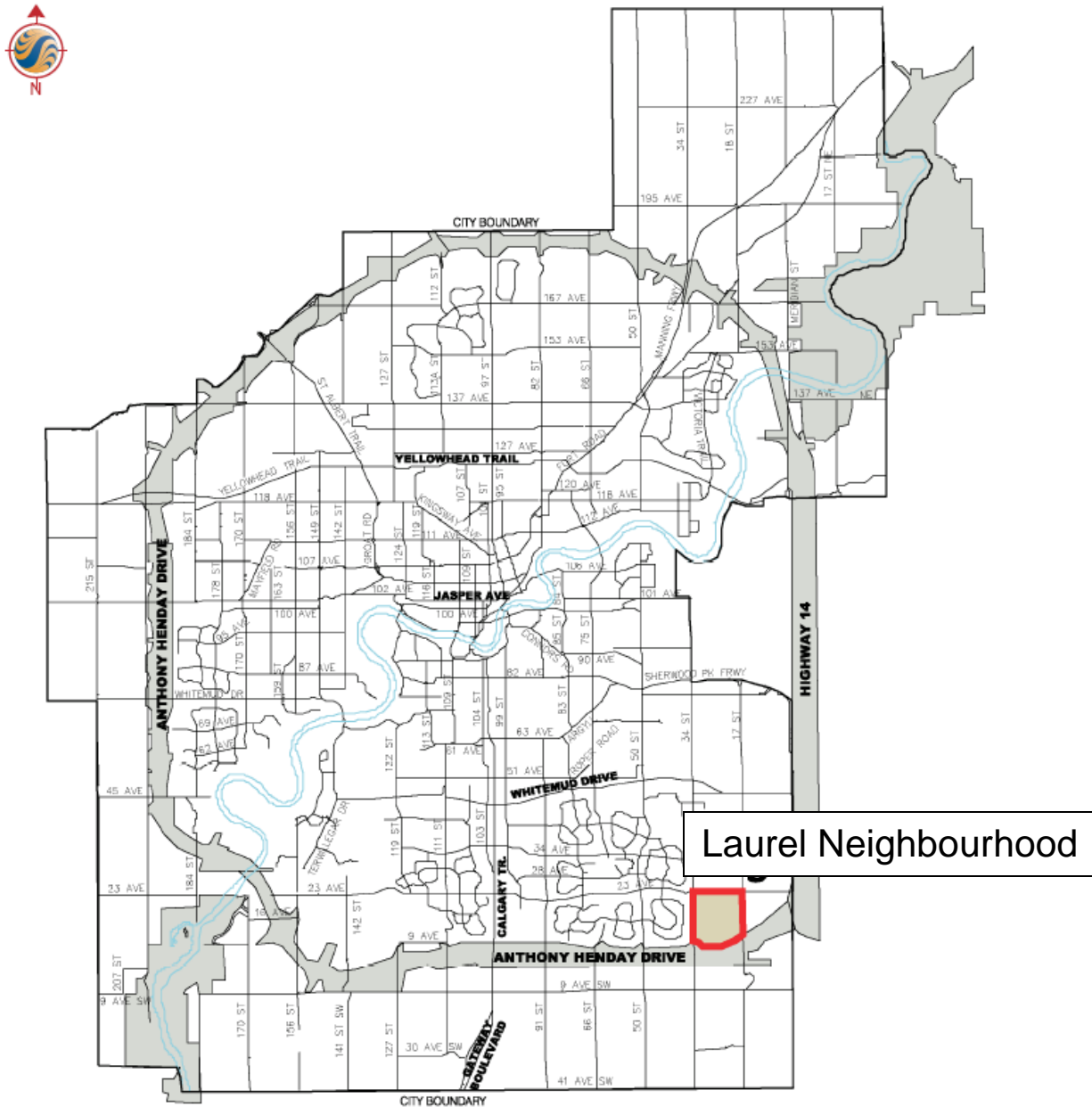
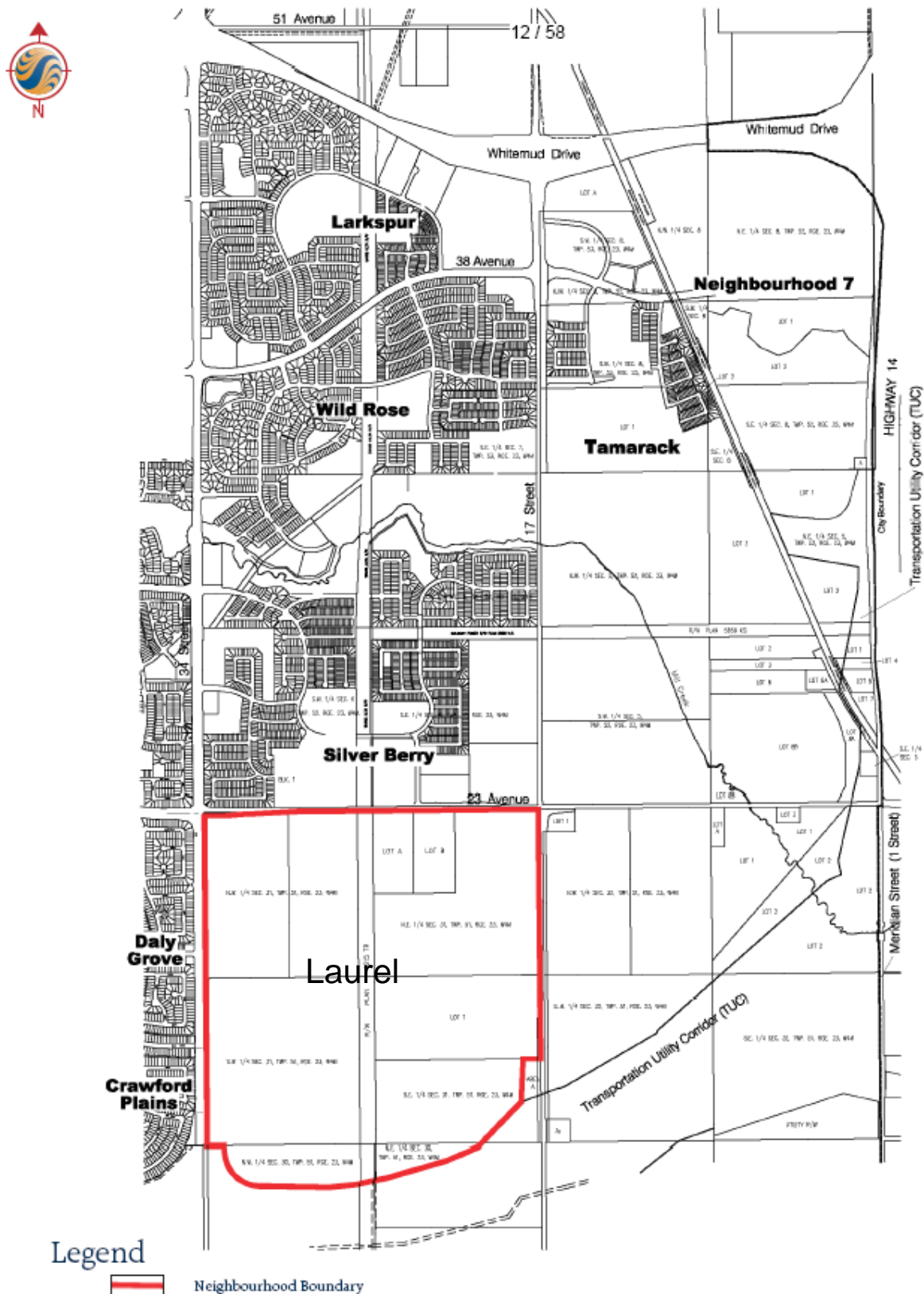


Figure 2 – Context



Land Use, Transportation, and Servicing Concept

3.1 VISION

The Laurel Neighbourhood Structure Plan is an integrated mix of land uses developing in a comprehensive and organized manner to create a diverse, sustainable and vibrant community where people choose to live, learn, work, and play.

3.2 GOALS AND OBJECTIVES

The land use concept, its goals, and objectives were established on the basis of the opportunities and constraints present in the Plan area and in conformance with applicable statutory requirements, City-level strategic policies, guidelines, and procedures. These are further outlined in *Appendix 2*, and where necessary, additional objectives, policies and (corresponding) implementation strategies are identified in the following land use sections to address specific issues and or development matters where appropriate.

Compact, Walkable Neighbourhood

- To provide a comprehensive walkway and open space system.
- To establish the spine of the central *Shared Use Path (SUP)* corridor through the use of existing utility rights-of-way.
- To locate medium density residential (MDR) development with good access to, and in support of, public transit facilities.
- To minimize walking distances within the Neighbourhood.
- To establish increased residential densities in support of Neighbourhood intensification.
- To promote pedestrian accessibility to parks, open spaces, and transit facilities.

Bylaw 16345
March 4, 2013

Attractive, Liveable Community

- To provide a transition between residential uses of significantly different densities.
- To provide a range of LDR and MDR housing opportunities, housing types and attainability for a variety of income groups (e.g. singles, families, seniors).
- To consider opportunities for innovative building siting and site design at the zoning and subdivision stages.
- To minimize the impact of commercial development on adjacent land uses.
- To develop stormwater management facilities (SWMF) that are visually appealing and physically accessible to residents.
- To establish affordable housing in the *Laurel Neighbourhood*.
- To establish a suitable land use transition between abutting, residential uses and the existing, central pipeline right-of-way.

Balanced Transportation System

- To mitigate the impact of vehicle traffic associated with MDR and commercial development on LDR areas.
- To minimize the traffic congestion on the internal collector roadway loop.
- To establish internal roadway connectivity and discourage the development of “exclusive” residential enclaves.
- To provide Public transit services within the plan area in accordance with City of Edmonton Transit System Guidelines and demands.
- To promote alternate modes of transportation—pedestrian, bicycle, rollerblade, wheelchair—within the transportation network.

Infrastructure Provision

- To ensure that the *Laurel Neighbourhood* is serviced to a full urban standard and servicing is provided in an efficient and logical manner.

Environmental Preservation and Enhancement

- To ensure that the environmental status of the lands within the *Laurel Neighbourhood* boundary is suitable for residential development.
- To ensure that Environmental Site Assessments are complete and up-to-date.
- To identify and protect items with historical significance, such as buildings and areas of cultural significance, in the *Laurel Neighbourhood*.

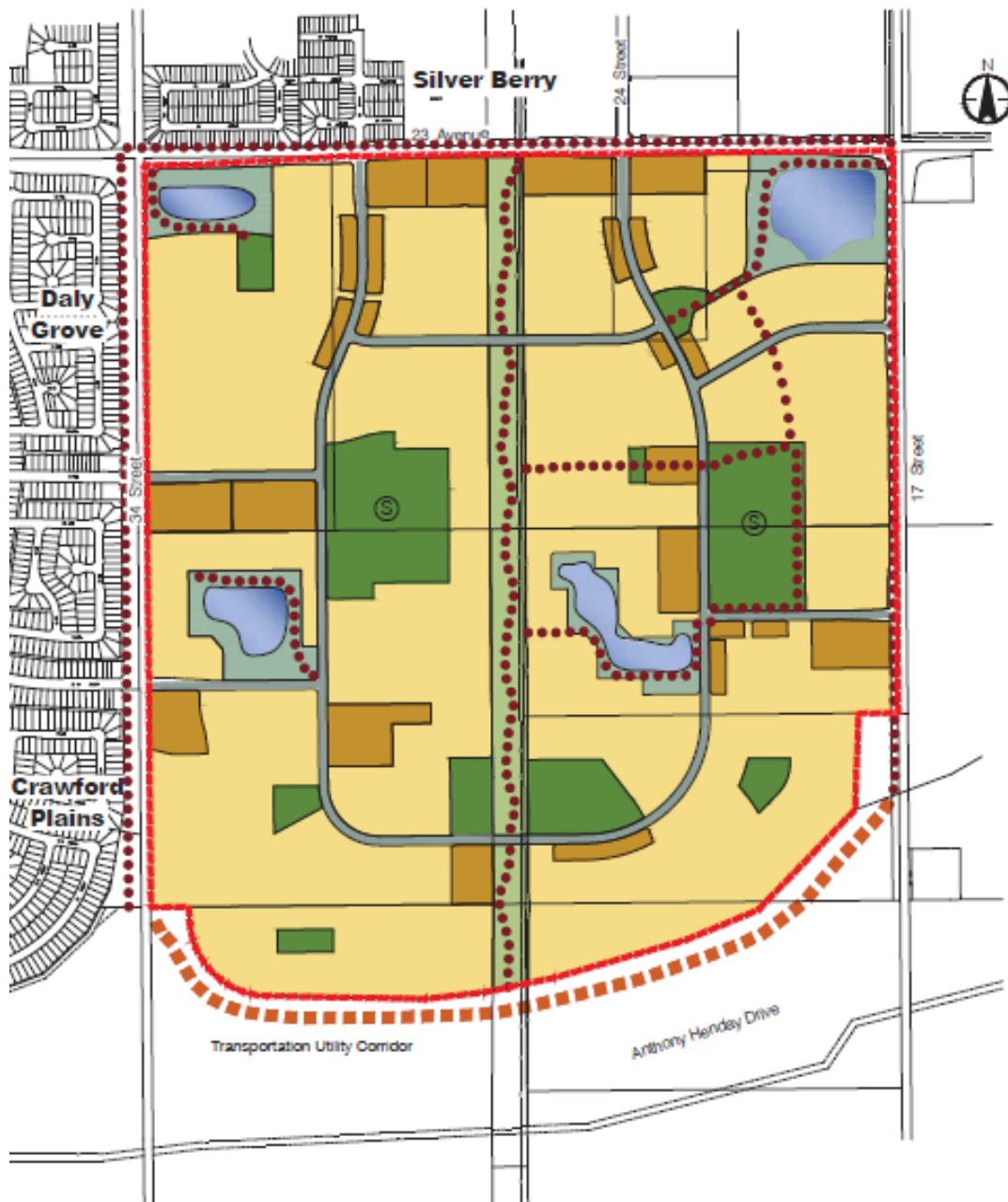
Integrated Parkland System

- To provide a variety of neighbourhood parks and open spaces to support passive and active recreation, and promote wellness.
- To preserve and integrate natural areas into the parks area where sustainable and economically viable.
- To establish dispersed park spaces within the neighbourhood to provide opportunities for passive and active recreation for residents

3.3 LAND USE CONCEPT

The *Laurel Neighbourhood Structure Plan* is intended for residential, parks and open space, and community commercial development as illustrated in **Figure 3.0 – Land Use Concept** and described in **Table 1 – Land Use and Population Statistics**.

Figure 3 – Land Use Concept (Bylaw 17144, June 9, 2015)



NOT TO SCALE

Legend			
Low Density Residential	Power/Pipeline Right of Way	NSP Boundary	
Medium Density Residential	Shared Use Path		
Municipal Reserve	TUC Trail		
Stormwater Management Facilities	Collector Roadway		

Client/Project
LAUREL
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
3.0

Title
Land Use Concept



Table 1 – Land Use & Population Statistics

**LAUREL NEIGHBOURHOOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 17144**

	Area (ha)	% of GDA
Gross Area	271.67	100.0%
Arterial Roadways	3.14	1.2%
Utility/Pipeline Corridors	13.26	4.9%
Gross Developable Area	255.27	100.00%
Parkland, Recreation, School (Municipal Reserve)	25.36	9.5%
School Sites	15.82	
Urban Village Park	4.7	
Pocket Parks	4.7	
Linear Park (MR Credit for Greenway)	0.14	
Transportation		
Circulation	38.29	15.0%
Infrastructure / Servicing		
Stormwater Management Facilities	20.36	8.2%
TOTAL Non Residential Area	84.01	32.8%
Net Residential Area (NRA)	171.26	67.2%

RESIDENTIAL LAND USE AREA, UNIT & POPULATION COUNT

Land Use	Area (ha)	Units/ha	Units	People/ Unit	Population	% of NRA
Low Density Residential (LDR)						
Single/Semi-Detached	148.41	25	3,710	2.8	10,388	86.7%
Medium Density Residential (MDR)						
Row Housing	11.59	45	522	2.8	1,462	6.7%
Low-rise/Multi-/Medium Units	11.26	90	1013	1.8	1,873	6.6%
Total Residential	171.26		5,245		13,723	100.0%

SUSTAINABILITY MEASURES

Population Per Net Hectare (ppnha)	80.1
Units Per Net Residential Hectare (upnrha)	30.6
[Single/Semi-Detached] / [Low-rise/Multi-/Medium Units] Unit Ratio	71% / 29%
Population (%) within 500m of Parkland	100.0%
Population (%) within 400m of Transit service	100.0%
Population (%) within 600m of Commercial service	27.0%

STUDENT GENERATION

	Elementary (K-6)	Junior/Senior High School (7-12)	Total
Public	511	511	1,022
Separate	205	206	411
Total	716	717	1,433

3.3.1 Urban Design

The *Laurel* Neighbourhood Structure Plan incorporates relevant principles of urban design to establish an attractive, pedestrian friendly community.

Objective	NSP Policy	Implementation
3.3.1.1 Provide a transition between residential uses of significantly different densities.	3.3.1.1 Residential uses such as semi-detached, row housing or town housing are situated between single detached residential and higher density MDR uses (apartments) to achieve a transition in height and density.	3.3.1.1 Figure 3.0 – Land Use Concept illustrates transitional land uses.
3.3.1.2 Develop SWMFs that are visually appealing and physically accessible to residents.	3.3.1.2 The SWMFs shall be designed using CPTED principles, accessible through public lands, and not land-locked by private development.	3.3.1.2 The general location and design of SWMFs is identified on Figure 3.0 – Land Use Concept and may be refined prior to rezoning.
3.3.1.3 <i>Consider opportunities for innovative building and site design.</i>	3.3.1.3 <i>(a) Innovation is encouraged and will be explored at the discretion of the developer (Deleted – Bylaw 16345) if (a) economic conditions and market/consumer preferences dictate that innovative housing is in demand (b) the innovation is in keeping with the overall intent of the plan, and (c) the development integrates with existing development.</i> <i>(b) When the City has an approved policy or guidelines related to innovative housing, it shall apply to this bylaw if (a) the area has not been rezoned for development; (b) the innovation is in keeping with the overall intent of the plan, and (c) the development integrates with existing development</i>	3.3.1.3 <i>(a) Innovation is likely to be regulated by a Direct Control Provision; however, other mechanisms may be employed and will be subject to a formal application and further review by the Planning and Development Department.</i> <i>(b) Implementation will be through individual file negotiations and/or through approved City Policies.</i>

Bylaw 15191
September 2, 2009

Rationale

Land Use Transition

Provision of LDR (e.g. semi-detached residential) and MDR (e.g. town housing/row housing) are transitional land uses which will serve to moderate the use differences between LDR (e.g. single detached) and higher density MDR uses (e.g. low rise apartments).

Stormwater Management Facility Design

The location and design of the SWMFs provides vistas into the site from the abutting roadways, and thereby heightens resident awareness of these facilities. This will promote them as walking destinations, and enhance their surveillance to prevent crime. Stormwater management facilities will be designed to serve as a destination for pedestrians and cyclists and to provide passive recreation opportunities. These facilities will be constructed as naturalized wetlands, where possible, to provide potential wildlife habitat and improve water quality via their natural filtration systems. A pocket park abutting the north-western SWMF will provide additional open space opportunity adjacent to the SWMF.

Opportunities for Innovative Residential Development, Building and Site Design

Innovative housing can address many contemporary suburban issues such as:

- *urban sprawl (by maximizing land and servicing efficiencies);*
- *diversity of housing (by providing a variety of lot sizes and housing forms);*
- *auto dependence (by improving walkability and pedestrian environments); and*
- *alternative servicing to reduce dependence on non-renewable resources (e.g. such as use of green initiatives like solar or geothermal heating).*

This plan encourages the exploration of innovation whether it is developer or city driven.

Bylaw 15191
September 2, 2009

3.3.2 Environment

The City requires that Phase I Environmental Site Assessments (ESA) are submitted, reviewed, and endorsed prior to the rezoning stage of development.

Objective	NSP Policy	Implementation
3.3.2.1 Ensure that the environmental status of the lands within the <i>Laurel Neighbourhood</i> boundary is suitable for residential development.	3.3.2.1 a) Determine the likelihood, types, and location of environmental concerns that may be present on the lands prior to rezoning.	3.3.2.1 a) ESAs and any follow-up will receive sign-off by the City administration prior to the rezoning stage of development.
	3.3.2.1 b) Where necessary, contaminated material shall be removed and disposed off in an environmentally sensitive	3.3.2.1 b) Site remediation, where necessary, shall be conducted prior to rezoning. An environmental site assessment

Objective	NSP Policy	Implementation
	manner, in accordance with Federal, Provincial, and Municipal regulations.	report verifying the remediation shall be submitted for approval by the City administration prior to the rezoning of the subject lands.
3.3.2.2 Ensure that Environmental Site Assessments are complete and up-to-date.	3.3.2.2 ESA Phase I reports older than 1 year from the date of rezoning application shall be updated, and any Phase I report older than 5 years from the date of rezoning application shall be redone.	3.3.2.2 Environmental Site Assessments will be submitted prior to rezoning.

Rationale

Lands within the Neighbourhood boundary shall be suitable for development and those lands not yet investigated will have their environmental status confirmed. Lands identified as contaminated must undergo remediation according to Federal, Provincial, and Municipal standards.

Technical Summary

Phase I ESAs were submitted and reviewed by the City of Edmonton in 2007 to confirm the Plan area will be free of contamination and therefore suitable for residential and other development (see *Appendix 2, Table 3, Figure 14.0 – Environmental Site Overview*). Various domestic debris, a building foundation and an existing soil pile of unknown origin, were identified by one ESA as items having minor environmental concern. Follow-up items identified by ESAs shall be addressed prior to the rezoning of the subject areas, as per the implementation strategy.

3.3.3 Historical Resources

Pursuant to Section 31 of the Historical Resources Act, 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.

Objective	NSP Policy	Implementation
3.3.3.1 Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Laurel Neighbourhood.	3.3.3.1 Review past and current activities within the Laurel Neighbourhood to identify items of historical significance.	3.3.4.1 A Historic Resources Overview for the Laurel Neighbourhood was conducted prior to Plan adoption.

Rationale

The south-east area of Edmonton presents a moderate potential of encountering historical resources. Preservation, conservation and integration of cultural, historical, and or archaeological resources within the *Laurel* NSP is important to retaining local history and character that may also be of regional or provincial significance.

Technical Summary

A Historical Resources Overview indicates that assessments have been completed for all properties within the *Laurel* NSP (see **Appendix 1, Table 4**). There is no undisturbed land in the plan area nor is there any real potential for undisturbed buried archaeological material. The historic period structures have been recorded and a historical title search has been conducted. None of these structures appear to have unusual or significant architecture nor do they appear to represent significant events in the history of the area.

3.3.4 Residential

The Laurel neighbourhood has been planned to accommodate a variety of low and medium density residential uses as outlined in the Land Use and Population Statistics.

Bylaw 16345
March 4, 2013

Bylaw 15733
May 10, 2011
(Deleted)
(Deleted)

Objective	NSP Policy	Implementation
3.3.4.1 Locate medium density residential development with good access to, and in support of, public transit facilities.	3.3.4.1 MDR parcels should be located abutting collector roadways and transit routes. MDR development should be located within walking distance of public transit facilities.	3.3.4.1 Figure 3.0 – Land Use Concept will guide the MDR development to be located at the edge of the neighbourhood (abutting arterial roadways), at neighbourhood entrances, and along collector and arterial roadways (along possible transit routes).
3.3.4.2 Establish affordable housing in the Meadows Neighbourhood 4.	3.3.4.2 a) When the City has an approved policy for affordable housing, it shall apply to this bylaw if the area has not been rezoned for development.	3.3.4.2 a) When adopted, City's affordable housing policy will be applied to the <i>Laurel</i> development prior to rezoning.
	3.3.4.2 b) A wide variety of residential zones may be utilized to allow variation in housing types and to aid in the opportunity for a range of affordability.	3.3.4.2 b) Figure 3.0 – Land Use Concept conceptually guides the location of different types of residential land use designations. Details respecting the specific type and location of LDR or MDR uses

Objective	NSP Policy	Implementation
		will be determined at the rezoning and subdivision application stage.
3.3.4.3 Establish increased residential densities in support of Neighbourhood intensification.	3.3.4.3 <i>The Laurel NSP will maintain a housing mix unit ratio that is in compliance with the Suburban Housing Mix ratio for new neighbourhoods.</i>	3.3.4.3 Figure 3.0 – Land Use Concept will guide Intensified suburban development.
3.3.4.4 Establish a suitable land use transition between abutting, residential uses and the existing, central utility corridor.	3.3.4.4 A minimum 7.5 m separation distance shall be maintained between abutting, residential uses and the existing, central utility corridor.	3.3.4.4 A suitable combination of side yards and/or laneways and building orientation will be established to create a minimum 7.5 m separation distance, determined prior to subdivision approval.

Bylaw 16345
March 4, 2013

Rationale

Higher Density Residential Development

Location of higher density residential development along transit routes and within walking distance of transit facilities and pedestrian corridors creates a more compact, walkable, attractive, and liveable neighbourhood.

Affordable Housing

The opportunity for affordable housing in the NSP is provided through the opportunity for secondary suites, garage suites and garden suites as either permitted or discretionary uses within the City of Edmonton's Land Use Bylaw and through the designation of medium density sites within the plan area. The plan also encourages variety in single family dwelling types. The MDR sites provide opportunities for such development as, but not limited to, multiple family or aging in place.

Bylaw 15191
September 2,
2009

As the City of Edmonton develops policies for affordable housing, applications will be reviewed at the development stage, and will consider all City of Edmonton policies and programs pertaining to affordable housing.

Suburban Housing Mix Ratio

The approved suburban housing mix ratio for new neighbourhoods in the City of Edmonton recommends the provision of 65% to 85% low density residential development and 15% to 35% medium density residential development. *The Laurel NSP maintains a housing mix unit ratio within the recommended Suburban Housing Mix*

Bylaw 16345
March 4, 2013

guidelines. For a breakdown of land use areas, please refer to Table 1 – Land Use and Population Statistics. The proposed densities follow recent Council direction to establish higher residential densities, which optimizes the use of land and results in a better use of municipal infrastructure and facilities. It also supports the use of transit, innovative design, and helps manage the constant demand for housing in the City’s growing suburban neighbourhoods.

(3.3.5 Commercial, Deleted)

Bylaw 16345
March 4, 2013

3.3.5 Parkland (Municipal Reserves)

**Bylaw 16345
March 4, 2013**

For a breakdown of land use areas, please refer to Table 1 – Land Use and Population Statistics. The NSP proposes two school and community park sites, an urban village park, and several pocket parks.

Bylaw 17144
June 9, 2015

Objective	NSP Policy	Implementation
3.3.6.1 Provide a variety of parkland and open spaces to support passive and active recreation, and promote wellness.	3.3.6.1 Municipal reserves owing for the <i>Laurel Neighbourhood</i> shall be dedicated in full as land, money-in-lieu, or an acceptable combination there of.	3.3.6.1 The parks and open spaces identified in Figure 3.0 – Land Use Concept will be dedicated to the City of Edmonton as municipal reserve at the time of subdivision.
3.3.6.2 Establish dispersed park spaces within the neighbourhood, through dedication of municipal reserves, to provide opportunities for passive and active recreation for residents.	3.3.6.2 Ensure a balanced spatial distribution of neighbourhood parks and open spaces. Every housing unit within the NSP boundary shall be within a 500 m walking distance from a park.	3.3.7.2 Figure 3.0 – Land Use Concept and Figure 3.0 – Pedestrian Network will guide future application of neighbourhood parks and open spaces.
3.3.6.3 Preserve and integrate natural areas into the plan area where sustainable and economically viable.	3.3.6.3 The existing natural low area in the northeast corner of the neighbourhood shall be integrated in the Plan area as a naturalized SWMF,	3.3.7.3 Figure 3.0 – Land Use Concept and Figure 5.0 – Pedestrian Network will guide future provision and location of neighbourhood parks and open spaces The specific location and configuration of these areas will be determined during the subdivision and rezoning stage based on geotechnical analysis.

Rationale

Provision of Community Facilities

A number of community facilities are located within the *Laurel Neighbourhood*. These include schools, parks and open space areas, which help provide significant place-making opportunities and strengthen community identity. These facilities support civic activities of the community and provide areas where residents can congregate for educational, social, and cultural activities.

Preservation and Integration of Natural Areas in Plan

Preserving and integrating natural areas into the plan area as naturalized SWMF provides additional visual amenities for local residents, and adds to the Neighbourhood's aesthetics and image as a pedestrian-oriented community.

Schools

Two large school sites of approximately 8.49 ha and 7.51 ha are located in the west central and east central portions of the *Laurel* NSP respectively. The central locations establish a focal point and provide additional public space that may be utilized for various passive and active recreational uses. The sites maintain good vehicular and pedestrian accessibility due to their adjacency to collector roadways, future transit routes and the *Shared Use Path* corridor. Each site has also been sized to accommodate additional programming space (e.g. community league facility) should it be required. These schools are to be housed in separate buildings on separate sites. Future municipal reserve parcels / schools / park sites, are to be in suitable topographic and geotechnical condition and free of nuisance material prior to rezoning and subdivision in order to facilitate the timely development and construction of school / park sites.

(Delete)

Bylaw 15191
September 2,
2009

Bylaw 16345
March 4, 2013

Parks and Open Spaces

The urban village park is located in the south central portion of the plan area. This park will accommodate sports fields, serve as a gathering place for neighbourhood residents, and provide opportunities for passive and active recreation.

The Laurel NSP includes four pocket parks and a linear park that provide opportunities for passive recreation. These parks have been distributed within reasonable walking distance of the majority of residences.

A fifth 0.26 ha pocket park has been added to the eastern portion of the NSP, located west of the eastern school site and north of the central storm pond. The park has been sized to accommodate a variety of passive recreation uses and may include a combination of hard and soft landscaping elements. The park will primarily serve the directly adjacent residential area. This park will lend itself as a complimentary amenity to the school site located to the east. Both sites will be considered during the design stage to ensure that they are properly programmed accordingly. Pedestrian connectivity to this pocket park from the school site and directly adjacent residential will be provided in the subdivision design.

Bylaw 15191
September 2,
2009

Bylaw 16345
March 4, 2013

A sixth pocket park has been located to the southeast portion of the neighbourhood. The park is embedded within the residential development to provide nearby residents with access to space for a variety of passive recreation activities.

Bylaw 17144
June 9, 2015

The Urban Parks Management Plan defines greenways as linear, public, open space features that create recognizable pathways through and/or between neighbourhoods, and include opportunities for recreation, walking and other non-vehicular transportation modes. Greenways are created from any one or combination of utility corridors, such as pipeline or power rights-of-way, non-vehicular road right-of way, or parkland.

An existing a north/south power right of way that runs through the middle of the neighbourhood and aligns with 24 Street, north of 23 Avenue in Silver Berry creates a linear, public, open space feature. This right-of-way will be developed with a 3m wide, hard-surfaced, shared use path with pedestrian linkages to abutting lands.

The Laurel NSP provides for two smaller greenways (linear, public, open space features) that provide linkages to various institutional and recreational uses located within the NE area of the plan. These greenways will be 10m – 12m wide and accommodate a 3m wide, hard-surfaced, shared use path, grass or naturalized planting, park furniture (e.g. benches, garbage receptacles), trees and shrub beds, and directional and interpretive signage.

Bylaw 16345
March 4, 2013

These two greenways (linear, public, open space feature) include:

1) A connection from the pocket park to the SWMF identified as Municipal Reserve – School/Park on Figure 3.0, Land Use Concept and as a Linear Park, municipal reserve credit, .014 ha, in the Land Use and Population Statistics.

2) A connection from the above Linear Park south to the eastern school site will be dedicated as road right-of-way at the time of subdivision.

3.4 TRANSPORTATION

The transportation network within the *Laurel NSP* is based on vehicular and pedestrian circulation.

Roadway Network: The transportation network has been designed to meet both the internal and external traffic flow requirements generated by the neighbourhood in accordance with City of Edmonton's guidelines and standards. A hierarchy of collector and local roadways are intended to facilitate the efficient movement of vehicular traffic (see **Figure 4.0 Transportation Network**). Vehicular access to the surrounding arterial roadways will be provided via six neighbourhood entrance/exits.

Arterial roadways border the neighbourhood at approximately one-mile intervals along the north (23 Avenue NW), west (34 Street NW) and east (17 Street NW). In addition, The *Laurel Neighbourhood* abuts the northern boundary of the southeast leg of the Anthony Henday Drive (scheduled for completion by fall 2007). This is a major regional facility accommodating longer distance regional and provincial trips, in addition to providing transportation benefits to the development area in the future. The proximity of the Anthony Henday to the major arterials will allow for efficient and effective access to Highway 2 (Calgary Trail) to Highway 14 (Highway 216), and to other destinations within the City and the region. The *Laurel Neighbourhood* benefits from a high level of accessibility to the greater Edmonton area and neighbouring regions.

Collector roadways, which provide internal/external accesses, are spaced at appropriate intervals to facilitate traffic progression (if traffic signals are required) and to ensure that sufficient distance is available to allow for right and left turn-bay development. The collector roadway network provides efficient and convenient access to residential areas, and prevents shortcutting of traffic in the neighbourhood, enhancing overall safety. This reinforces a local 'sense of place' among residential sub-areas by reducing internal traffic volume and speeds, and establishing a pedestrian-oriented streetscape (i.e. walkable environment).

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

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

Truck Routes: The following truck routes currently exist along the arterial roadways adjacent to the plan area:

- 17 Street, from north of 23 Avenue to Whitemud Drive (24 hr);
- 23 Avenue, between 17 Street and 34 Street (24 hr);
- 34 Street, from south of 23 Avenue to south City limits (24 hr);
- 34 Street, from north of 23 Avenue to Whitemud Drive (restricted); and
- Whitemud Drive and Highway 14/Highway 216 (24 hr and Dangerous Goods).

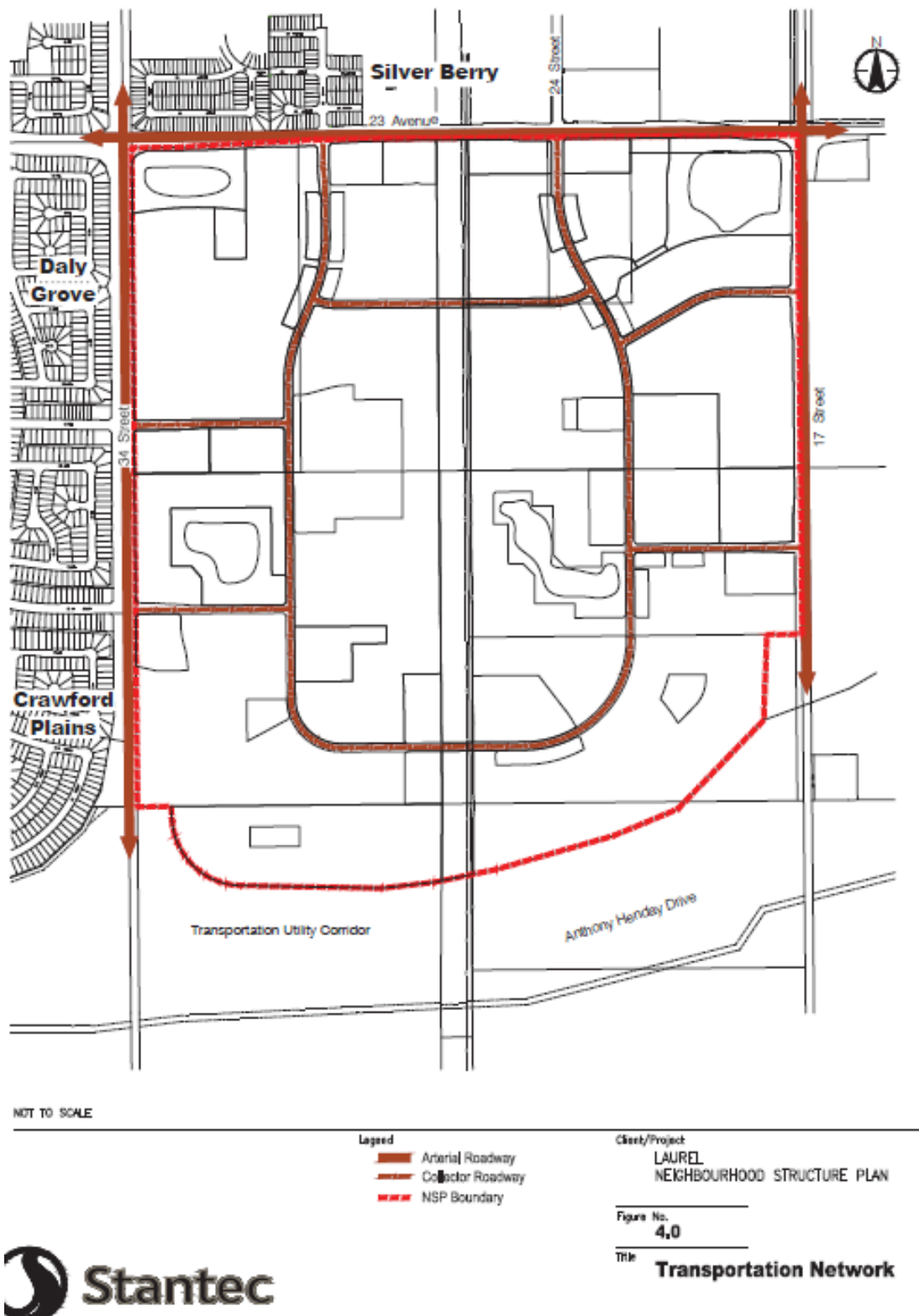
It is anticipated that once the south-east leg of Anthony Henday Drive is completed in the fall of 2007, the existing truck routes will be reconfigured. In the long term, truck routes in this area will be reconfigured, pending City Council approval, as follows:

- 17 Street, from north of Anthony Henday Drive to Whitemud Drive (24 hr);
- 50 Street, from Ellerslie Road to Anthony Henday Drive (24 Hr);
- 23 Avenue, between 17 Street and 34 Street will no longer be a truck route;
- 34 Street, between Ellerslie Road and Whitemud Drive will no longer be a truck route;
- and
- Both Whitemud Drive and Anthony Henday Drive will be truck/ dangerous goods routes.

Both 23 Avenue and 34 Street will be developed as fly-over structures at Anthony Henday Drive. The only full interchange connection in the plan area will be 17 Street. The connection at 50 Street is outside of the plan area however, is required to replace the existing 34 Street truck route.

A minimum of 1 m berm with 1.8 m noise attenuation fence shall be constructed along 17 Street, pending information provided in an associated noise study, to provide adequate separation between the future arterial roadway and residential development. Consideration of land-uses adjacent to the 24 hour truck routes will be reviewed in detail by the Transportation Department.

Figure 4 – Transportation Network (Bylaw 17144 June 9, 2015)



Public Transit: Public transit services will be extended into the *Laurel* NSP area in accordance with City of Edmonton Transit System Guidelines and demands. Transit service is currently available in the existing Neighbourhoods of Silver Berry, Daly Grove and Crawford Plains.

The Neighbourhood is designed to a human scale whereby a majority of the residential areas will be within 400 m walking distance from transit service. The Schools within the east-central and west-central portions of the NSP are designed to ensure adequate school transit service by utilizing collector roadway access (see **Figure 5.0 – Transit Network**). This transit service will be accommodated within the neighbourhood as demand warrants. Internal collector roadways will be developed to a suitable standard to accommodate transit service and provide readily accessible service to all areas of the neighbourhood. In an effort to provide transit service earlier in the development of the neighbourhood, the three participating landowners have committed to cooperatively fund transit service for the first two years of service. Following this two year period, Edmonton Transit would undertake the full responsibility of transit service.

Pedestrian Network: An efficient and continuous walkway network connecting key nodes within the NSP will provide pedestrian circulation throughout the neighbourhood (see **Figure 6.0 – Pedestrian Network**). All local and collector roadways in the *Laurel* neighbourhood will be developed with sidewalks providing a general level of pedestrian access within the NSP.

Walkways: A number of walkways are proposed in the plan area, which serve as minor pedestrian connections. These walkways will primarily consist of 1.5 m concrete sidewalks and will enhance pedestrian connectivity in the LDR areas by establishing pedestrian connections to open spaces.

Shared use Path: Shared use paths enhance the overall walkability of the neighbourhood by providing alternative transportation modes within the neighbourhood by connecting the recreational and institutional lands within the *Laurel* Neighbourhood as well as connecting residents to amenities outside the neighbourhood, including other commercial and recreational opportunities. They are planned in locations as conceptually identified on Figure 3.0 Land Use Concept and Figure 6.0 Pedestrian Network.

Bylaw 16345
March 4, 2013

A shared use path will be located within the central, north-south Altalink Utility corridor and provides a direct connection to the Silverberry neighbourhood (north of 23 Avenue) and the commercial opportunities and the District Park Site located between 24th and 17th Streets. This corridor will be developed as a paved 3.0 m wide hard-surfaced trail and will form an integral part in connecting the residents to the various amenities within and adjacent to the community.

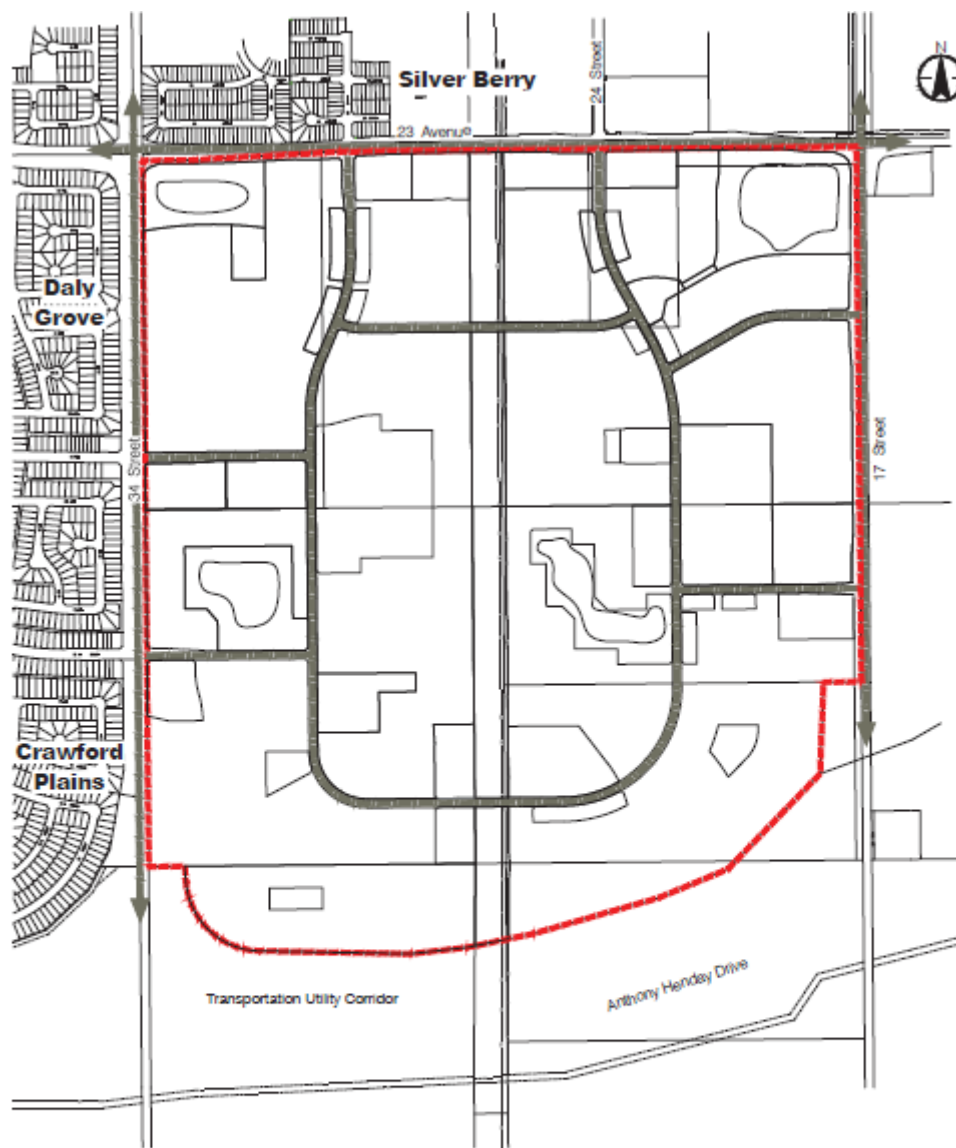
A shared use path connection is planned from the Linear Park that connects a pocket park and the stormwater management facility the NE corner of the plan, to the eastern school park site. This will be provided as road right-of-way 10-12 m in width as described in the gateway discussion.

Shared use path connections are planned through Stormwater Management Facilities and the north eastern pocket park, and the eastern school site to further enhance connectivity.

A shared use path connection from the eastern School Park Site, through a medium density residential site, a pocket park, and low density residential and connecting to the north/south shared use path through the power line right-of-way, is added for enhanced connectivity.

Bylaw 16956
Oct. 20, 2014

Figure 5 – Transit Network (Bylaw 17144 June 9, 2015)



NOT TO SCALE

Legend

- Roadways Required By ETS
- NSP Boundary

Client/Project

LAUREL
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.

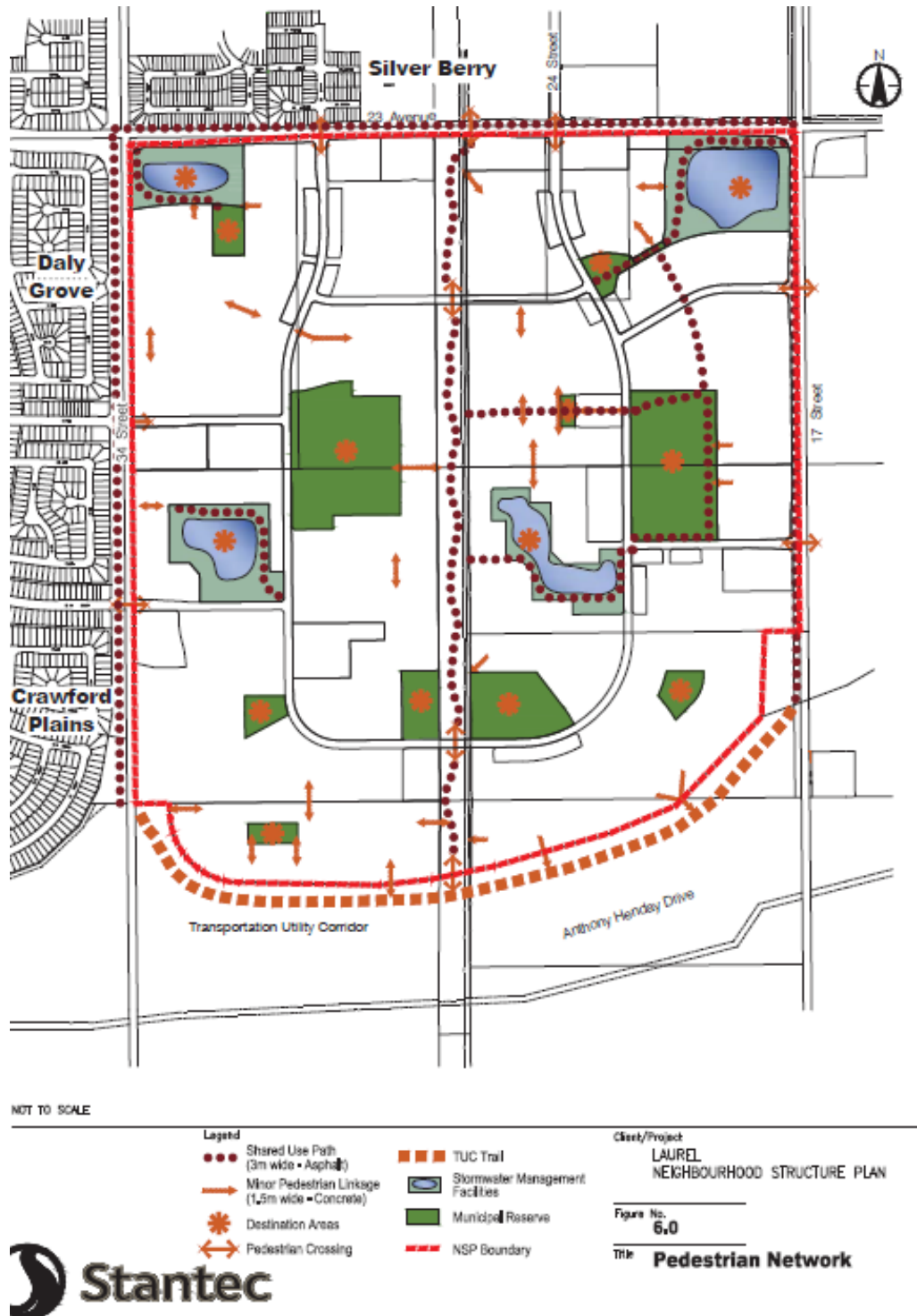
5.0

Title

Transit Network



Figure 6 – Pedestrian Network (Bylaw 17144 June 9, 2015)



Bicycle circulation: Bicycle circulation within the NSP is designed to follow collector and local roadways within the neighbourhood area. Bicycle routes will be integrated with *SUP* corridors and walkways connecting internal and adjacent residential areas and amenities.

Routes will be clearly marked using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists, and pedestrians in the neighbourhood.

Noise Attenuation: In areas where residential housing is constructed along designated truck routes, the developers are required to address noise concerns by conducting a noise attenuation needs assessment in accordance with the City of Edmonton's Urban Traffic Noise Policy. This policy requires that the noise levels in the outdoor amenity areas do not exceed 60 dBA. A requirement of the Transportation Department is to complete noise level evaluations along Arterial roadways. These will be carried out by the developers prior to subdivision applications adjacent to Arterial Roads at the design phase of the project. Based on the results of the study, noise attenuation devices may be required. At a minimum, the Transportation Department will require that a 1 m high berm and a 1.8 m high noise attenuation fence with a minimum density of 20 kg/m³ be incorporated in the design of arterial roadways bordering the neighbourhood.

The Province will provide noise attenuation along the Anthony Henday Corridor adjacent to existing development in accordance with the City of Edmonton's Urban Traffic Noise Policy, which states "Where a freeway or arterial is proposed to be built or upgraded through or adjacent to a residential area, the roadway is to be built to meet a noise level as low as possible below 65 dBA with an objective of achieving 60 dBA". Where traffic noise levels are not expected to exceed 60dBA, no noise attenuation is required according to the policy. Noise level evaluations were carried out on existing residential areas during the design phase of the southeast leg of Anthony Henday Drive project, verifying that noise reduction measures were not required at existing locations.

At such time when residential development approaches the south limits of the *Laurel Neighbourhood*, the requirement to provide noise attenuation in accordance with the City of Edmonton's Urban Traffic Noise Policy will be the responsibility of the landowner. The Province has indicated that they will generally not permit noise attenuation berming within the TUC. Should berming be required, the land for the berms will be accommodated within the plan area.

Objective	NSP Policy	Implementation
3.4.1 Mitigate the impact of vehicle traffic associated with MDR development on LDR areas.	3.4.1 MDR parcels are located to facilitate access from collector roadways and shall avoid taking access via local roadways fronted by LDR development, to the greatest extent possible.	3.4.1 The Subdivision Officer will ensure MDR developments are accessed via abutting collector roadways and avoid access via local roadway fronted by LDR development.

Objective	NSP Policy	Implementation
3.4.2 Minimize the traffic congestion and enhance safety on the internal collector roadway loop.	3.4.2 The number of residential lots fronting onto and having direct access to a collector road should be minimized, where possible.	3.4.2 The number of lots having direct access onto the collector loop will be determined at the subdivision stage.
3.4.3 Establish internal roadway connectivity and discourage the development of “exclusive” residential enclaves.	3.4.3 Ensure that internal roadways have ample vehicular and pedestrian connections and form accessible residential developments.	3.4.3 Subdivision design in residential settings will be determined prior to subdivision approval.
3.4.4 Provide public transit services within the plan area in accordance with City of Edmonton Transit System Guidelines and demands.	3.4.4 The design of the arterial and collector roadway system should provide sufficient infrastructure to support effective transit service within the neighbourhood and to external destinations.	3.4.4 Future transit routes will be established based on the proportion of trips to be generated from within the neighbourhood and adjacent areas. In an effort to provide transit service earlier in the development of the neighbourhood, the landowners will fund transit service for a short length of time. Edmonton Transit would then undertake the full responsibility of transit service.
3.4.5 Promote alternate modes of transportation—pedestrian, bicycle, rollerblade, wheelchair—within the transportation network. Minimize walking distances by creating a pedestrian oriented interconnected street network and providing walkways where roadway connection is not feasible.	3.4.5 The NSP proposes a <i>SUP</i> network comprising of the Altalink Utility corridor <i>Shared Use Path</i> and Greenway. The SWM facilities and minor pedestrian connections shall accommodate paved pedestrian trails.	3.4.5 Figure 6.0 – Pedestrian Network will guide the future application of Shared Use Pathway network.

Bylaw 16345
March 4, 2013

Objective	NSP Policy	Implementation
3.4.6 Promote pedestrian accessibility to parks, open spaces, and transit facilities.	3.4.6 Minor walkways should be provided to promote walkability and access to transit facilities.	3.4.6 The Subdivision Officer will have regard for the dedication of walkways to promote walkability and appropriate access to transit facilities.
3.4.7 Provide a comprehensive walkway and open space system.	3.4.7 Sidewalks, public utility lots and trails shall connect destinations within the Neighbourhood.	3.4.7 The Subdivision Officer will ensure the provision of sidewalks, public utility lots and trails to connect Neighbourhood destinations.
3.4.8 Establish the spine of the central <i>Shared Use Path</i> system through the use of existing utility rights of way.	3.4.8 The existing utility rights of way shall be incorporated as the spine of the central <i>Shared Use Path (SUP)</i> corridor.	3.4.8 Figure 6.0 – Pedestrian Network will guide the future application of <i>Shared Use Path</i> network
3.4.9 Minimize walking distances within the Neighbourhood.	3.4.9 Walkways, greenways, trails and linkages shall form a pedestrian network and walkways shall be provided where roadway connections are not feasible.	3.4.9 Figure 6.0 – Pedestrian Network will guide the development of the pedestrian network and the Subdivision Officer will ensure that walkways are provided at roadway connections.

Bylaw 16345
March 4, 2013

Rationale

Vehicle Circulation

The *Laurel* neighbourhood provides a balanced transportation system within the plan area that mitigates associated land use traffic, minimizes potential use conflicts and internal roadway congestion.

Connectivity

Neighbourhood connectivity contributes to the development of a compact, integrated community with a balanced transportation network. Neighbourhoods that have a high degree of connectivity encourage residents to walk to places, reduce the number of trips made by vehicles and promote health and neighbour interaction. Connectivity is characterized by a logical network for movement that links destinations, provides accesses and is integrated with its environment.

Pedestrian Circulation

The *Laurel* neighbourhood should support a walkable community. This includes provision of alternative transportation modes that support a range of users and user abilities accessing focal points, amenities and services within the neighbourhood.

Dedication of Minor Walkways

While all local and collector roadways will include a sidewalk, there may be situations where the pattern of roadways will not facilitate a direct route to an amenity space or a transit facility. In this circumstance, the NSP dedicates minor walkways (i.e. 1.5 m concrete walks) to ensure walkability and appropriate access to transit facilities.

Greenways

Greenways establish part of the larger pedestrian network in a neighbourhood, provide for a range of modes / users, and should be included in the *Laurel* NSP in support of a more walkable community.

Technical Summary

The transportation network for the NSP will be provided in accordance with the requirements of the City of Edmonton's Transportation and Streets Department. A Transportation Impact Assessment (TIA) was prepared and reviewed by the Transportation Department.

3.5 INFRASTRUCTURE SERVICING AND STAGING

The *Laurel* neighbourhood will be a fully serviced neighbourhood designed and constructed in accordance with City servicing standards.

Sanitary Servicing: The *Laurel* neighbourhood will be serviced with the extension of existing sanitary sewer trunk systems to the north (see **Figure 7.0 – Sanitary Servicing**). Sanitary capacity has been provided in the adjoining systems, while the onsite sanitary network will follow the internal roadway network and associated public utility lots and will be sized using the Rational Method.

Stormwater Servicing: The *Laurel* neighbourhood is situated within the Mill Creek watershed. A study undertaken by the City of Edmonton entitled *Watershed Drainage Planning Study, Mill Creek, Fulton Creek and Gold Bar Creek* (1982) recommended the utilization of stormwater management due to downstream constraints at both stream courses. The storm drainage system for the plan area is illustrated on **Figure 8.0 – Stormwater Servicing**.

The Mill Creek study identifies an extensive watershed within the *Laurel* neighbourhood area. A Neighbourhood Designs Report (NDR) will address the watershed and it should be noted that the watershed is required to be protected until the ponds and upstream facilities are constructed.

The proposed storm drainage system uses a combination of major and minor flow systems to direct the storm runoff to four separate stormwater management facilities (SWMF) within the Neighbourhood. This Neighbourhood will be divided into four drainage basins each contributing

to individual SWMF's. Further details regarding stormwater drainage are addressed in the NDR, which was prepared and submitted under separate cover by Stantec Consulting Ltd. Other reports such as Environmental Impact Assessment (EIA) for the stormwater outfall into Mill Creek will be submitted at the subdivision / construction stage.

Water Servicing: The proposed water distribution network for the *Laurel* NSP is illustrated on **Figure 9.0 – Water Servicing**. Water supply to the area will be available from the following existing water main stubs: A 200mm water main stub located at 18 Avenue and 34 Street, a 450mm water main stub located at 16A Avenue and 34 Street, a 300mm water main stub located at 32 Street and 23 Avenue and a 300mm water main stub located on 23 Avenue, east of 32 Street. Extensions will be constructed as required by the pace of development.

Water servicing will be designed and constructed using conventional methods for providing peak hour flows and fire flows for low and medium density residential, schools, urban services and commercial uses. Water looping will be provided in accordance with the requirements of EPCOR. EPCOR upgrades to the current system may be required to achieve adequate service pressures in the south east portion of the Neighbourhood. Cooperation between the landowners and EPCOR will be required to ensure satisfactory staging of water servicing.

Shallow Utilities Gas utility services will be extended from the existing neighbourhood developments by the respective utility company, whereas power and telephone utilities will be extended at the expense of the respective developers/landowners. The existing infrastructure for any utilities within the plan area may form part of the overall permanent servicing system for these respective utilities, should they be required.

Development Staging: The development sequence of *Laurel* is illustrated on **Figure 10.0 – Staging Concept** and represents a logical and contiguous extension of the residential land use patterns already established in Neighbourhoods One, Two and Three.

Development of the *Laurel neighbourhood* is anticipated to begin summer 2007 given the increased housing demand in southeast Edmonton, land absorption trends, and the completion of Anthony Henday Drive. It is anticipated that development will likely occur concurrently at two separate locations along the western portion of the plan area: directly south of 23 Avenue, just east of 34 Street and at approximately 800m south of 23 Avenue and directly east of 34 Street. This proposed development pattern is based on current ownership boundaries.

Figure 7 – Sanitary (Bylaw 17144 June 9, 2015)

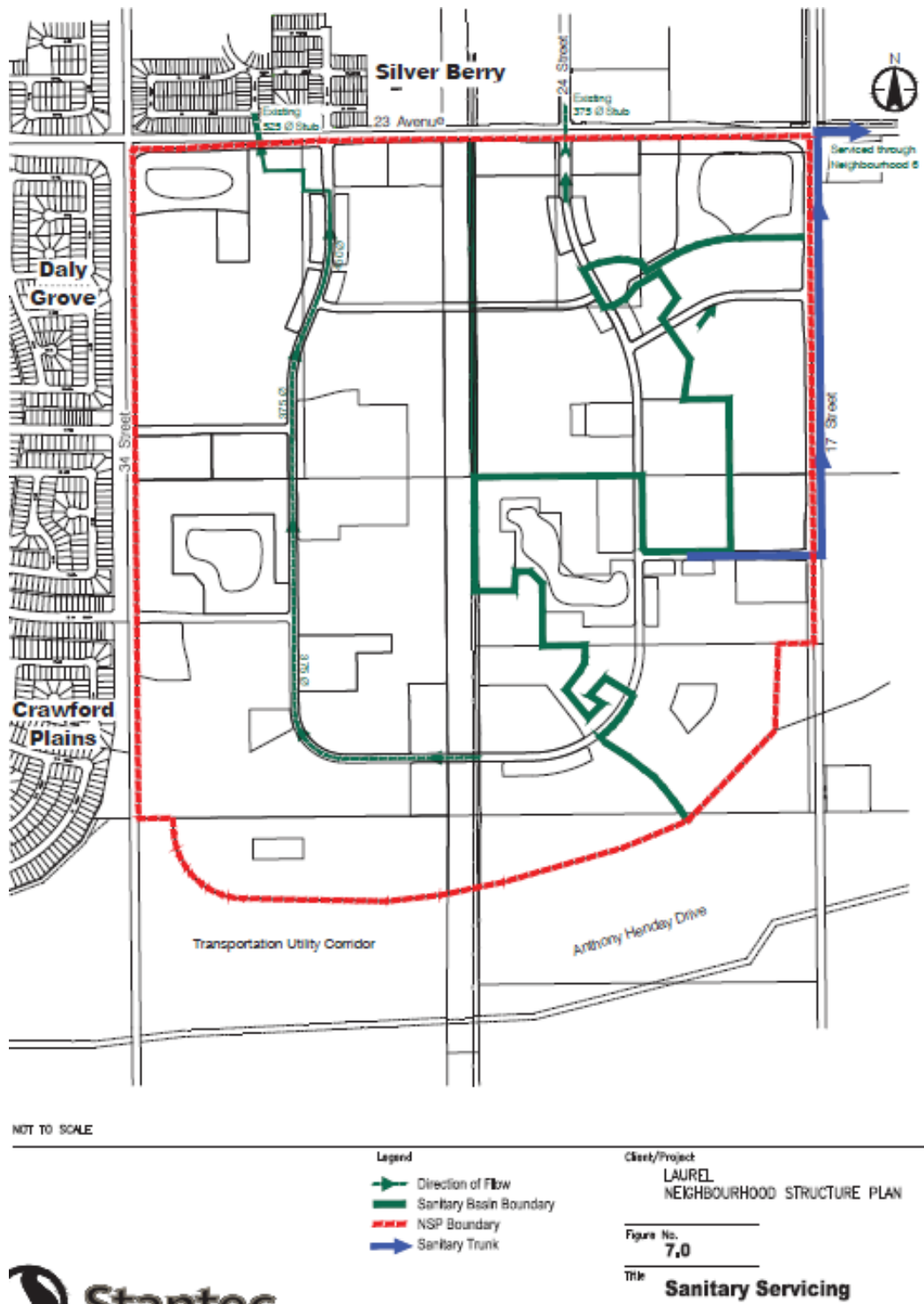
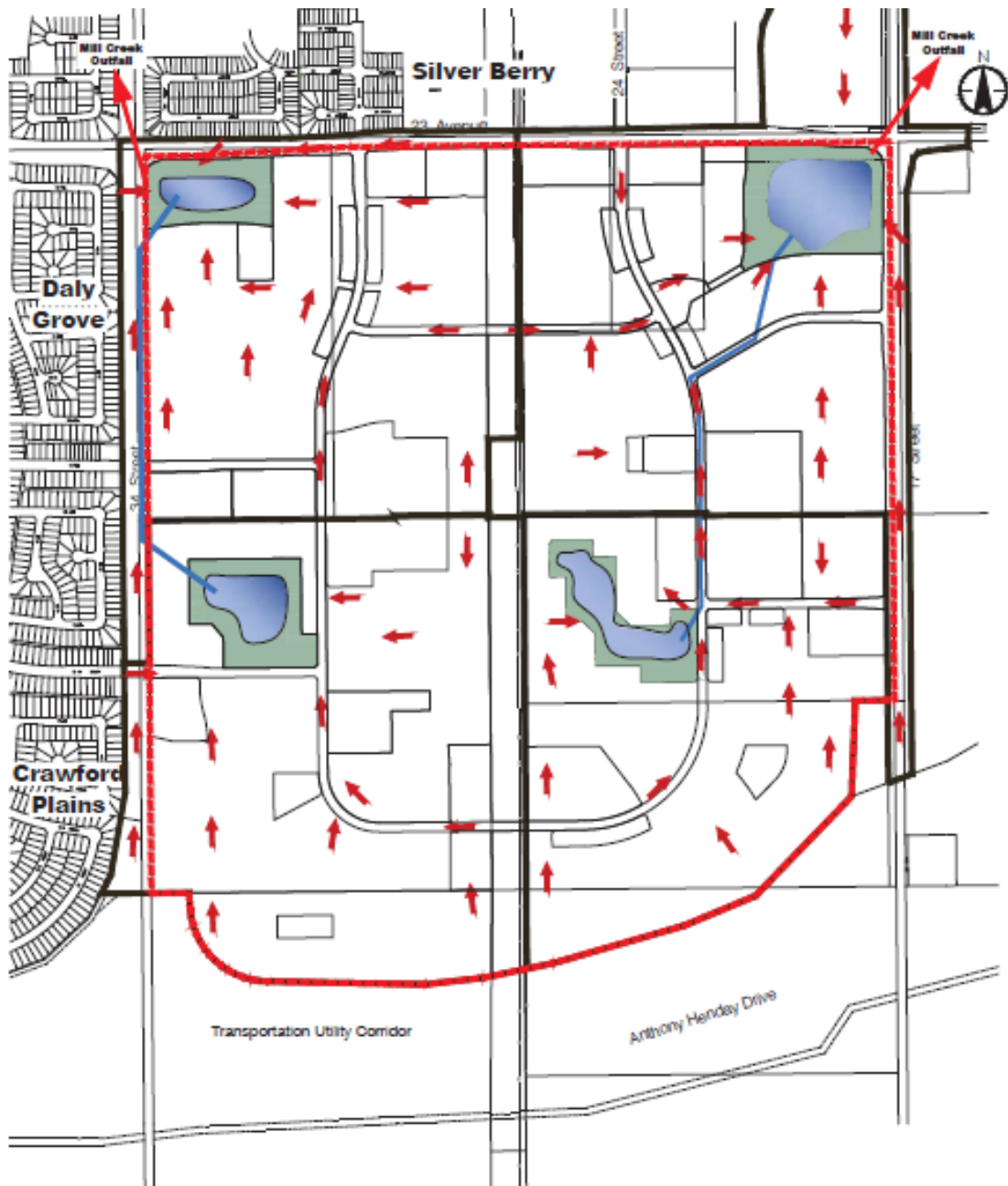


Figure 8 – Storm (Bylaw 17144 June 9, 2015)



NOT TO SCALE

Legend

- Stormwater Management Facilities
- Conceptual Direction of Flow
- Proposed Drainage Basin
- NSP Boundary
- Proposed Storm Trunk

Client/Project

LAUREL
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.

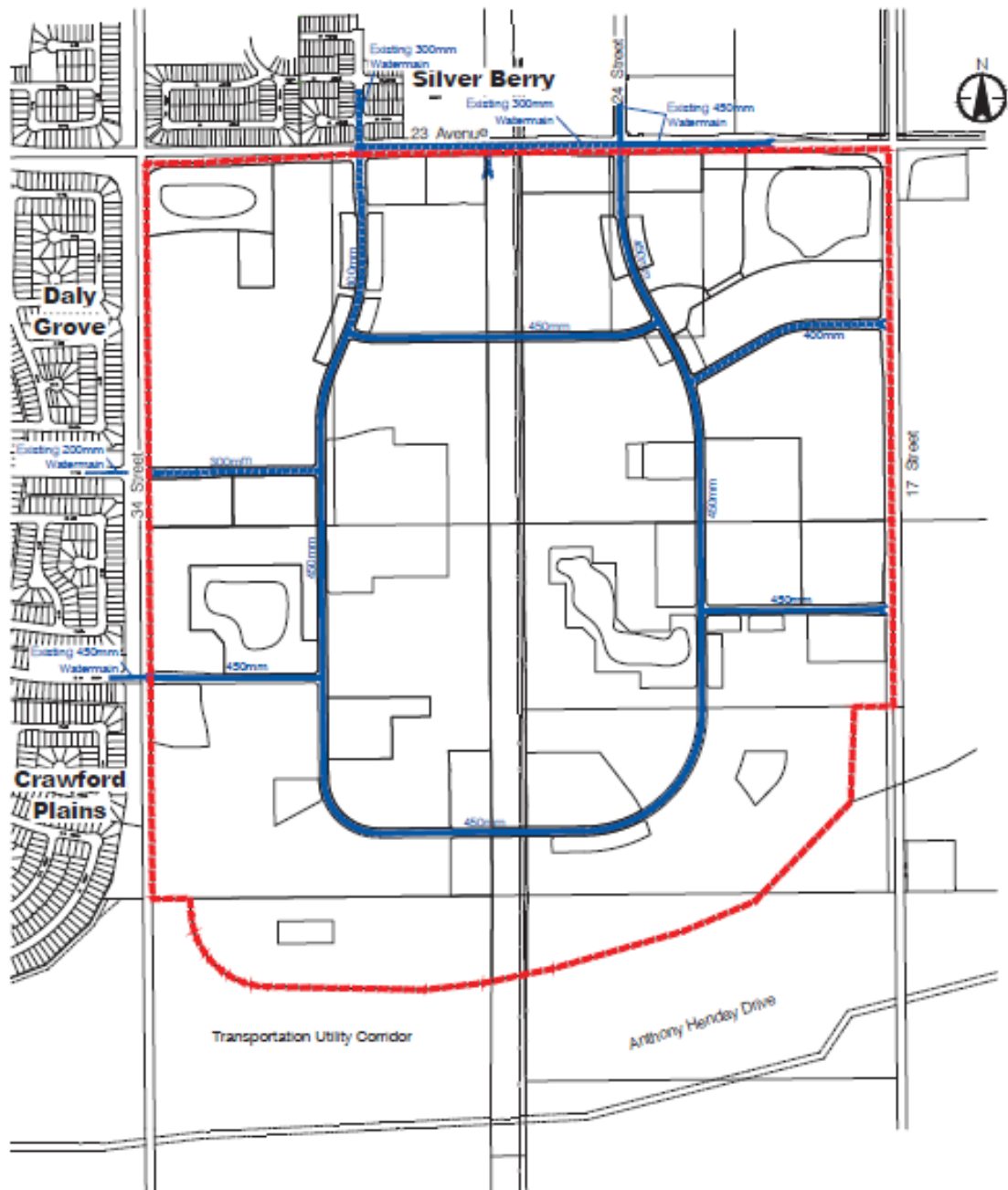
8,0

Title

Storm Servicing



Figure 9 – Water (Bylaw 17144 June 9, 2015)



NOT TO SCALE

Legend

- NSP Boundary
- Future Watermain - 200mm
- Future Watermain - 300mm
- Future Watermain - 450mm

Client/Project

LAUREL
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
9.0

Title

Water Servicing



Infrastructure to service the initial stages of the NSP will be extended south and east into the plan area from Silver Berry, Crawford Plains and along 34 Street. Urban expansion will be contiguous, logical, and economical with respect to municipal servicing. Development of individual phases may vary from the actual zoning and subdivision applications depending on contemporary market demands and aspirations of the respective landowners. Should sufficient demand warrant or engineering design be made more efficient, portions of separate phases may be developed concurrently.

Objective	NSP Policy	Implementation
3.5.1 To ensure that the <i>Laurel neighbourhood</i> is serviced to a full urban standard and servicing is provided in an efficient and logical manner.	3.5.1 Sanitary and stormwater servicing will be provided in accordance with the approved Neighbourhood Design Report (NDR) for the NSP. Water servicing to the NSP area will be provided in accordance with the approved Water Network Analysis (WNA). Shallow utilities will be extended into the plan area as required.	3.5.1 Approval of engineering drawings and servicing agreements will be required for installation of sanitary and stormwater servicing. Approval of engineering drawings and servicing agreements will be required for installation of water servicing. Installation of shallow utilities will be executed through servicing agreements.

Rationale

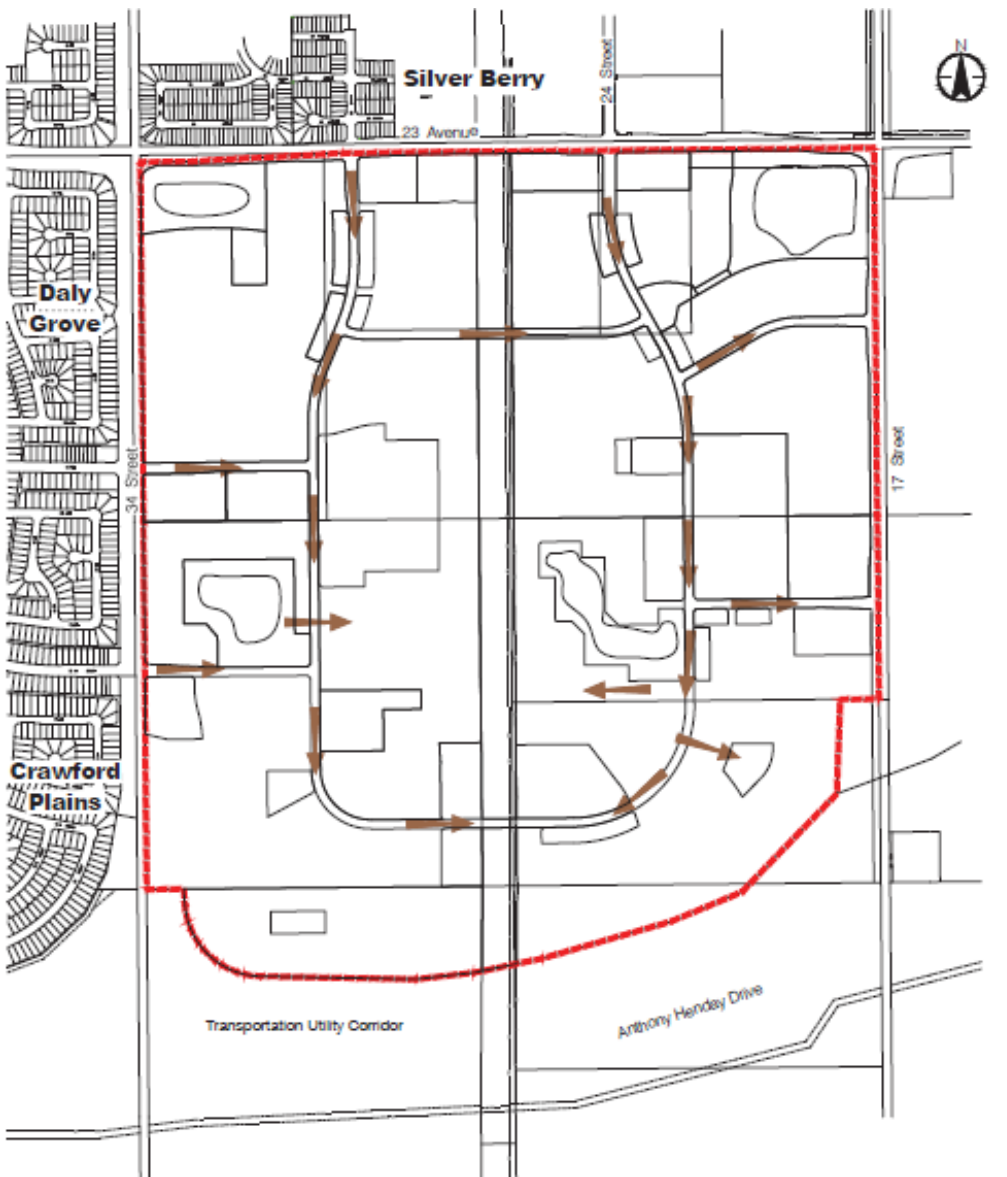
The *Laurel* NSP will be designed in accordance with City of Edmonton servicing standards. Development staging and extension of infrastructure will be contiguous, efficient, and economical while having regard for potential environmental and ecological impacts.

Technical Summary



Details regarding stormwater drainage and sanitary service schemes for the *Laurel* NSP are provided in the associated Neighbourhood Designs Report (NDR) submitted under separate cover by Stantec Consulting Ltd.

Water looping will be provided in accordance with the requirements of EPCOR Water Services Inc. A Water Network Analysis has been submitted under separate cover by Stantec Consulting Ltd. for review and approval from EPCOR.

Figure 10 – Staging Concept (Bylaw 17144 June 9, 2015)



NOT TO SCALE

Legend
 Potential Path of Development
 NSP Boundary

Client/Project
 LAUREL
 NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
 10.0

Title
 Staging Concept



Appendix 1: Site Context

Land Ownership

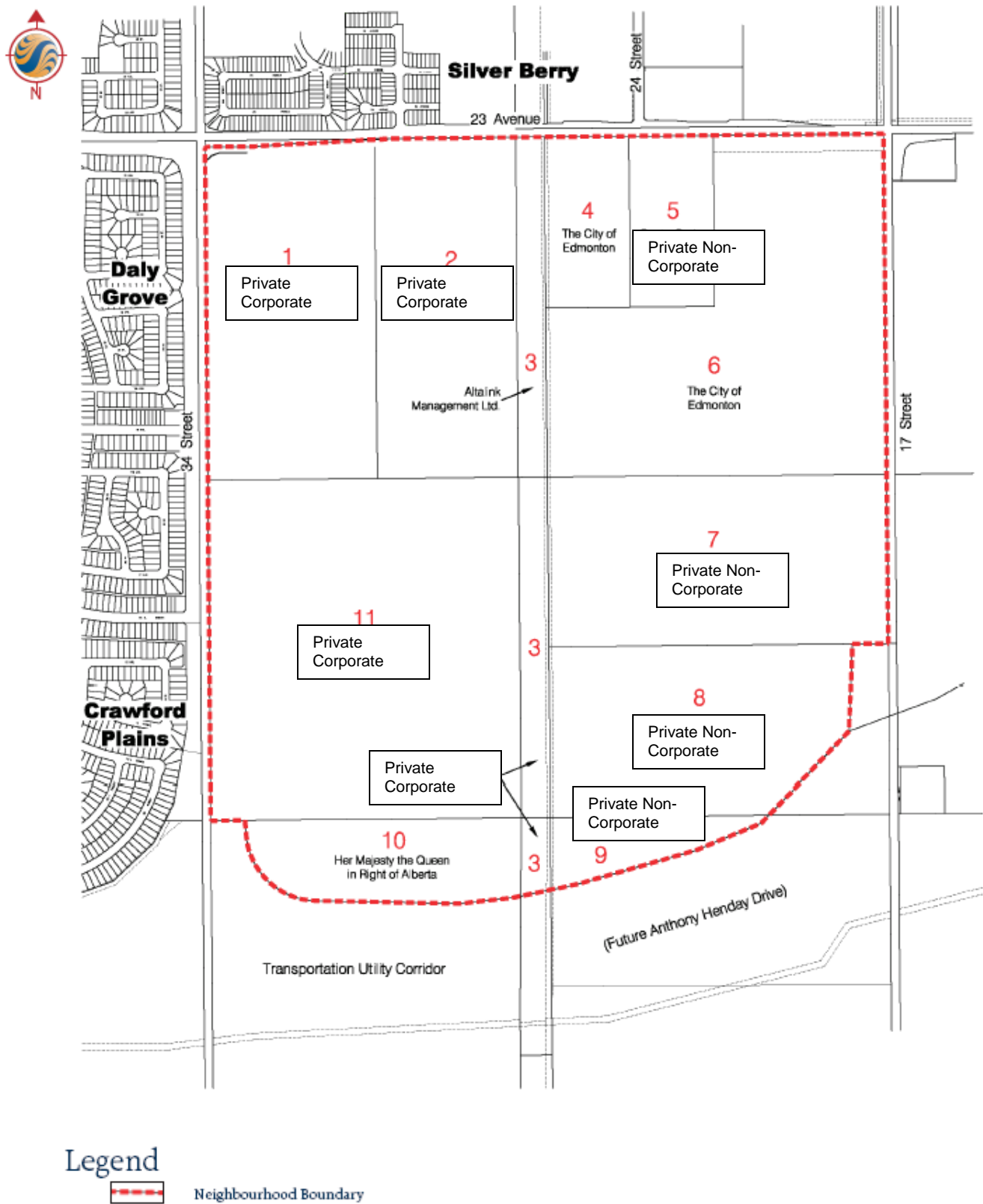
The *Laurel* NSP was prepared on behalf of two private developers and the City of Edmonton who own, manage or have under an agreement for sale, approximately 183 hectares (68%) of the land within the Plan area. The remaining lands are held by a number of other owners. Current (2007) land ownership is described in *Table 2* below and shown in *Figure 11.0 – Land Ownership*.

TABLE 2: Land Ownership (*Amended by Editor*)

	Titled Owner	Legal Description	Area (ha) in NSP
1	Private Corporate Owners	W½ of NW ¼ Sec.31-51-23-W4M	31.98
2	Private Corporate Owners	Pt of E½ of NW¼ Sec. 31-51-23-W4M	26.87
3	Private Corporate	Plan 4615 TR Utility Right of Way	12.31*
4	The City of Edmonton	Lot A, Plan 5736 RS	8.09
5	Private Non-Corporate Owners	Block B, Plan 832 0216	8.09
6	The City of Edmonton	Pt. Of NE¼ Sec. 31-51-23-W4M	48.52
7	Private Non-Corporate Owners	Lot 1, Plan 992 1891	32.50
8	Private Non-Corporate Owners	Pt. Of SE¼ Sec. 31-51-23-W4M	26.58
9	Private Non-Corporate Owners	Pt. Of NE¼ Sec. 30-51-23-W4M	4.83
10	Her Majesty the Queen in Right of Alberta	Part of NW¼ Sec. 30-51-23-W4M	12.2
11	Private Corporate	Part of SW¼ Sec. 31-51-23-W4M	59.7
TOTAL AREA			271.67

* Total areas illustrate the area of land within the NSP boundaries only.

Figure 11 – Land Ownership



Topography

The topography of the lands within the *Laurel* NSP area are described as a gently undulating plain largely the result of deposits that once formed the bed of glacial Lake Edmonton. The land slopes generally to the northwest and west, with an overall gradual decline of approximately 17 meters from the southeast sector of the area to the northwest edge of the area. The existing natural drainage courses ultimately connecting Mill Creek and Fulton Creek. There are a number of low areas within the plan area that are suited for the development of SWMF's (see **Figure 12.0 – Site Contours**). As shown on **Figure 13.0 – Site Features**, the majority of lands have been cleared of natural vegetation for agricultural purposes and contains no significant tree stands, ravines or natural areas (potential environmental reserves).

Natural Areas and Ecological Resources

The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (1993) does not identify any significant environmental feature within the *Laurel* NSP area.

Existing Land Uses

The majority of the *Laurel* NSP area is used primarily for agricultural purposes. Three abandoned farm sites are located within the plan area, with two sites along 23 Avenue and another located south on 17 Street. Numerous localized low-lying areas are scattered throughout the plan area. Existing uses may be selectively removed or retained at the current owner's discretion in their current state through careful site and subdivision planning.

Figure 12 – Contours

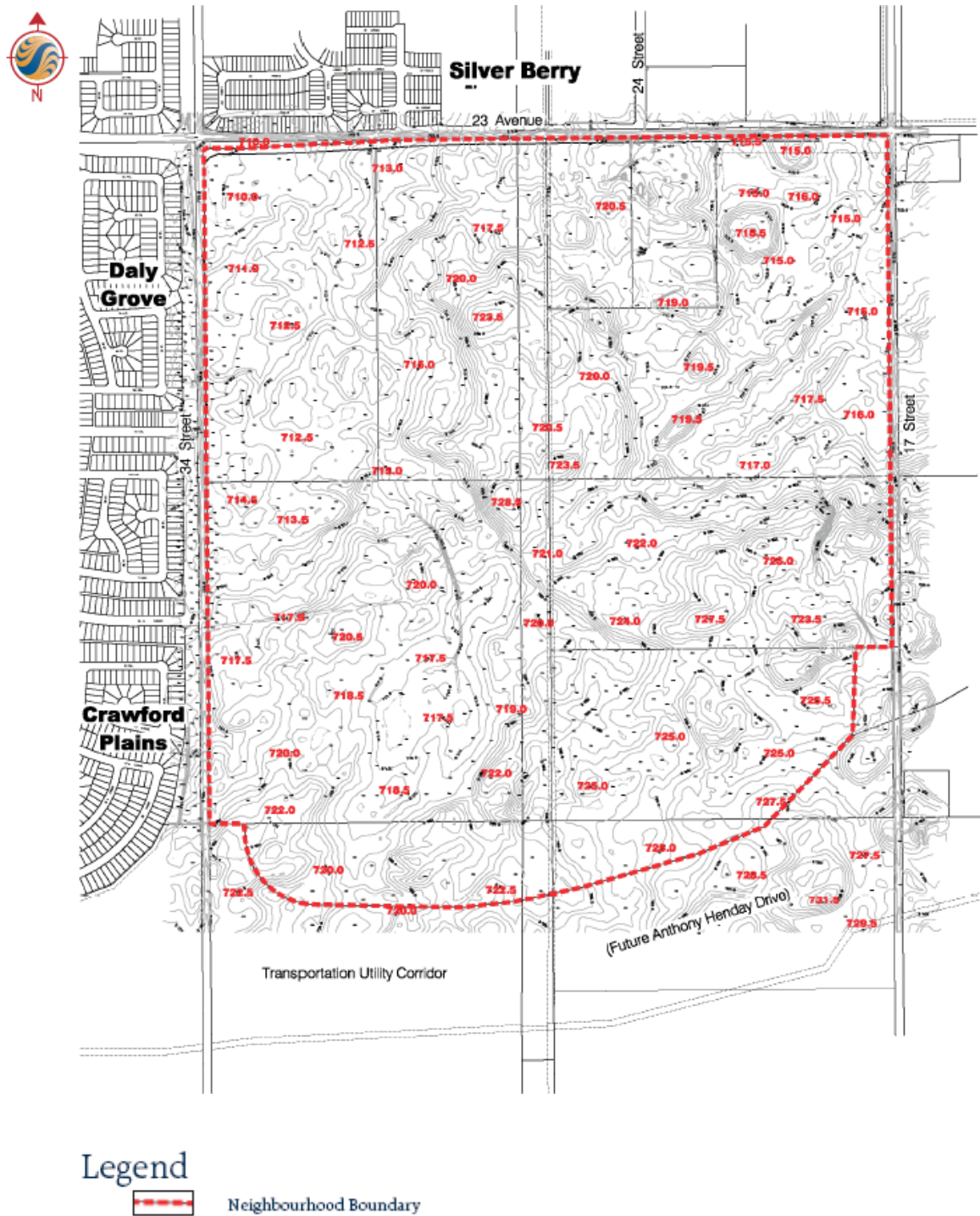


Figure 13 – Site Features (Bylaw 15733 May 16, 2011)



- Legend**
- Neighbourhood Boundary
 - Abandoned Well Site

Environmental Assessment

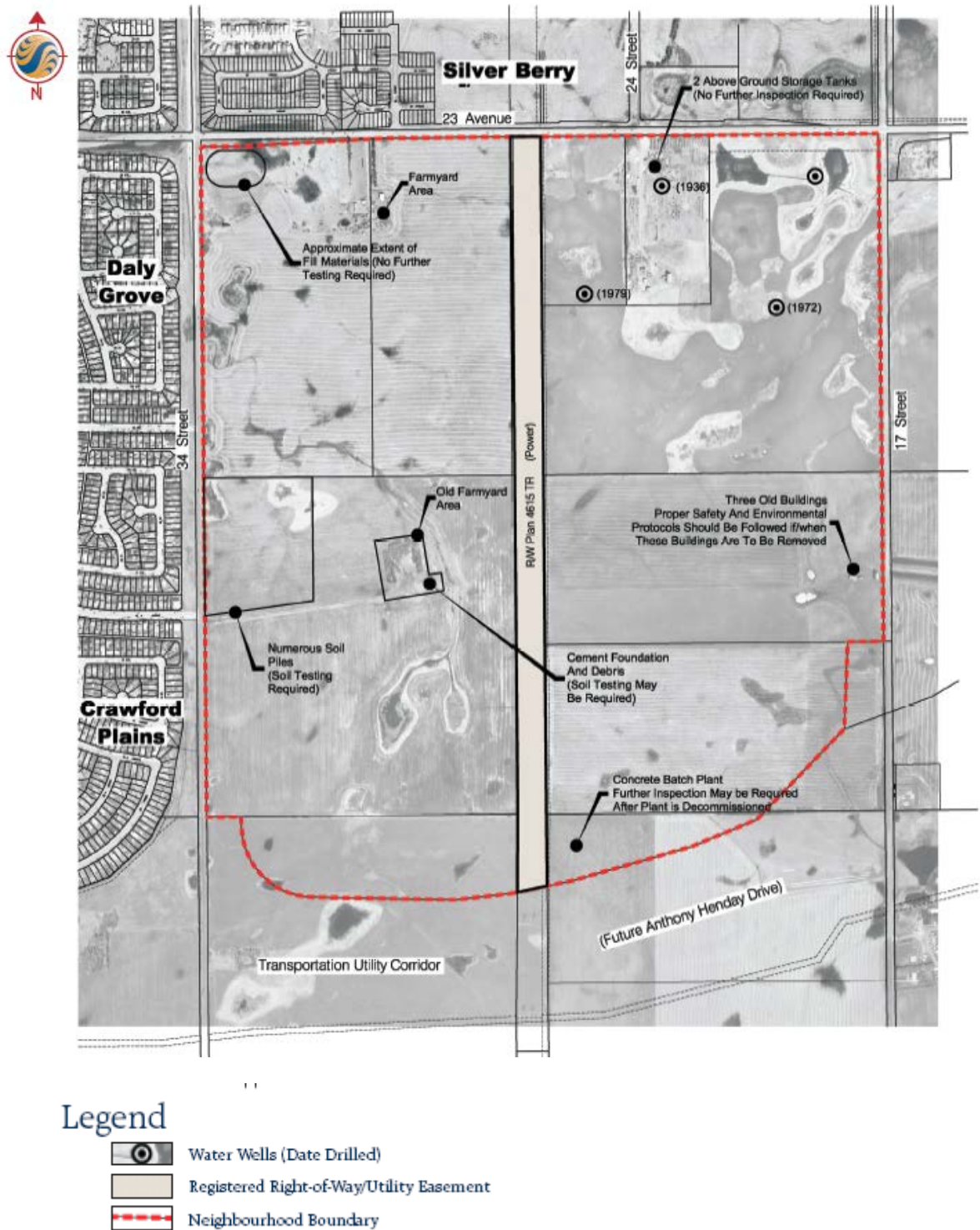
Phase I ESA's have been undertaken for the majority of parcels within the NSP area (see **Figure 14.0 – Environmental Site Assessment Overview**). **Table 3** summarizes the status of contamination and how it will be addressed.

TABLE 3: Phase I / II – Environmental Site Assessments (Amended by Editor)

Land Owner	Location	Comments
Private Corporate	N.W. ¼ Sec. 51-23-W4	No further investigation required
Private Corporate	Block B, Plan 832 0216	Phase I - Further investigation required. Phase II - No further investigation required
Private Corporate	S.W. ¼ Sec. 51-23-W4	Some debris and building foundation should be removed and soil to be visually inspected. Existing soil piles of unknown origin, it is recommended that they be tested for potential contaminants
The City of Edmonton	Part of N.E. ¼ Sec. 31-51-23-W4	No further investigation required.
The City of Edmonton	Lot A, Plan 5736RS	No further investigation required.
Private Non-Corporate	Part of S.E. ¼ Sec.31-51-23-W4	No further investigation required.

Note: Based on existing information, no other Phase I or II ESA's have been undertaken for the remaining lands within the *Laurel* NSP. It should be noted that the City of Edmonton's Planning & Development Department recommends that individual landowners provide ESA's or disclosure statements at the rezoning stage.

Figure 14 – Phase I ESA



Historical Resources

A Historical Resources Overview (HRO) was completed in support of the *Laurel* NSP. **Table 4** presents a summary of the lands that were included in the study. Based on Alberta Community Development's review of the HRO, no further investigation is required for the lands in the NSP.

TABLE 4: Historical Resources Overview (*Amended by Editor*)

Owner	Location	HRO Completed	HRIA Required
Private Corporate	N.W. ¼ Sec. 51-23-W4	Yes	No
Private Non-Corporate	Block B, Plan 832 0216	Yes	No
Private Corporate	S.W. ¼ Sec. 51-23-W4	Yes	No
The City of Edmonton	Part of N.E. ¼ Sec. 31-51-23-W4	Yes	No

Note: It is important to note that pursuant to Section 31 of the Historical Resources Act, development proponents and their representative are required to report the discovery of any archaeological, historical period or paleontological resources which may be encountered during construction.

Pipelines and Oil Well Sites

The Abacus Datagraphics Limited online website that provides up-to-date Alberta Energy and Utilities Board (AEUB) pipeline and oil well information was searched. The results indicated that there are no oil / gas wells or pipeline right of ways or facilities located within the boundaries of the NSP.

Utility Rights-of-Way and Facilities

A Calgary Power minor distribution line and an Altalink Management Ltd. utility line run north-south through the central portion of the NSP. Appropriate setbacks will be required between the transmission line and future urban development. The transmission line right-of-way provides the opportunity to be integrated as part of the Neighbourhood walkway system, as provided in the neighbourhoods of Silver Berry, Wild Rose and Larkspur to the north of the plan area.

A Calgary Power transmission line utility right of way, legally identified as Plan 33HW, traverses the NE ¼ 31-51-23-W4 in a southeast to northwest direction. The right of way was registered in 1947 for the purposes of providing for power pole transmission lines, and is no longer required for its intended use. As part of the subdivision and detailed engineering design, the right of way will be discharged from the existing titles.

Appendix 2: Planning Policy Context

Appendix 2 outlines the various statutory plans, policies, and design principles that are applicable to the *Laurel* NSP, including Plan Edmonton, the City of Edmonton's Suburban Neighbourhood Design Principles (SNDP), The Meadows Area Structure Plan (ASP), and other relevant policies. Applicants seeking amendments to the NSP or applying for rezoning, subdivisions or development permits are required to consult the actual documents for specific guidance on detailed requirements as they apply to particular properties.

PLAN EDMONTON

Plan Edmonton – the City of Edmonton's Municipal Development Plan (MDP), is a comprehensive plan that provides direction for development and implementation of more specific and detailed plans by the industry/private landowners and the City. Plan Edmonton's land development concept designates this community as 'Suburban Area' suitable for urban development. Its physical growth strategy emphasizes that new growth in the suburban areas will be accommodated in an efficient and cost-effective manner by promoting compact and contiguous pattern of development.

The *Laurel* NSP complies with the following Plan Edmonton strategies:

MDP Strategy	The <i>Laurel</i> NSP Compliance with Strategy
MDP Strategy 1.1.1 - Provide for choices regarding the types of developments in which people want to live and do business	The <i>Laurel neighbourhood</i> establishes a variety of development opportunities through the provision of three types of land components (low density residential development, medium density residential development and a community commercial site).
MDP Strategy 1.1.2 - Address compatibility of land use in the development and review of land use plans and development proposals	To address compatibility, lower density uses such as semi-detached, row housing or town housing are situated between single detached residential and higher density MDR uses (low-rise apartments) to achieve a transition in height and density.
MDP Strategy 1.3.3 – Support contiguous development that is adjacent to existing development in order to accommodate growth in an orderly and economical fashion.	The existing neighbourhoods of Crawford Plains and Daly Grove to the west were completed approximately thirty years ago. Development of the Silver Berry Neighbourhood immediately north of 23 Avenue should be completed in 2007. Development of the <i>Laurel neighbourhood</i> represents a continuation of urban development in southeast Edmonton.
MDP Strategy 1.3.4 - Promote intensification of development around transportation corridors and employment areas	Higher density land uses are planned and located adjacent to collector / arterial roadways, the commercial node and transit corridors to encourage transit use.
MDP Strategy 1.7.1 - Accommodate growth in an orderly, serviced and cost-effective manner	Given the proximity to adjacent developing neighbourhoods, infrastructure services can be extended in a cost-effective and efficient manner.
MDP Strategy 1.7.2 - Provide for a range of housing types and densities in each residential neighbourhood	The LDR and MDR sites in the <i>Laurel neighbourhood</i> provide for the development of a range of housing types and affordability for a variety of income groups (e.g. singles,

MDP Strategy	The <i>Laurel</i> NSP Compliance with Strategy
	families, seniors).
MDP Strategy 1.7.4 - Ensure availability and access to recreational opportunities and open spaces	Two school/park sites, numerous dispersed park sites, SWMFs, and <i>Shared Use Path</i> corridors provide opportunity for passive and active recreation for community residents. (<i>Bylaw 16345, March 4, 2013</i>)
MDP Strategy 1.1.12 - Place a high priority on the effective and efficient use of land	The <i>Laurel neighbourhood</i> Land Use Concept accommodates natural features and topography, ownership boundaries and other development constraints and opportunities.
MDP Strategy 1.1.13 - Plan for urban development which is environmentally friendly and fiscally sustainable in the long term, based on the City's financing, infrastructure and environmental strategies	The <i>Laurel neighbourhood</i> is designed in accordance with the City's Suburban Neighbourhood Design Principles and Smart Choice Initiatives, which establish development options and neighbourhood viability, access and vitality.
MDP Strategy 1.1.14 - Maintain the integrity of pipelines and utility corridors while planning for growth and development	The existing north-south Altalink utility corridor will be maintained and developed as an integral part of the <i>Shared Use Path</i> system connecting the <i>Laurel</i> to the remainder of southeast Edmonton. (<i>Bylaw 16345, March 4, 2013</i>)
MDP Strategy 4.3.1 – Develop and maintain an integrated system of roadways, public transit, pedestrian and bicycle facilities and services to support and enhance Edmonton as a growing, vibrant, and culturally diverse city in which people choose to live, work, learn and play.	Walking and cycling to destination areas, including into adjacent neighbourhoods, shall be provided through local, collector and arterial roadway network and through the provision of the north-south <i>Shared Use Path</i> corridor, walkways, greenways, integrated open space corridors and storm water management facilities. (<i>Bylaw 16345, March 4, 2013</i>)
MDP Strategy 4.3.3 – Make effective and efficient use of the transportation system.	<p>Future transit service is appropriate along the collector roadway network as well as along 34 Street, 17 Street and 23 Avenue. All parts of the neighbourhood are accessible via transit within a 400m walking distance.</p> <p>Connections shall be designed to provide safe movement, minimize walking distances in residential areas, and to provide access for all residents to future transit stops.</p>

THE MEADOWS AREA STRUCTURE PLAN (ASP)

The Meadows ASP provides the general policies and guidelines to facilitate the orderly development of the plan area in terms of proposed land uses, density of development, transportation facilities, infrastructure and servicing and staging of development. The relevant Community Design Principles applicable to the *Laurel* NSP are listed below:

ASP Principle	The <i>Laurel</i> NSP Compliance with Principle
4.2.2 Neighbourhoods – To develop compact, pedestrian orientated neighbourhoods that contain a complimentary mix of land uses.	Provides for a mixture of low density residential (LDR) and medium density residential (MDR) uses, developed as compact, independent nodes that are connected through a system of local roadways, pedestrian corridors and a major north-south <i>Shared Use Path</i> corridor. (<i>Bylaw 16345, March 4, 2013</i>)
4.2.3 Residential – Establish sufficient overall residential densities within The Meadows that conforms to City Council's guidelines on the mix of housing types in new	MDR land uses have been located within proximity to important transportation nodes. <i>Overall, the Laurel neighbourhood proposes a housing mix that is consistent</i>

ASP Principle	The <i>Laurel</i> NSP Compliance with Principle
neighbourhoods.	<i>with Council's direction in providing higher densities in newer suburban neighbourhoods. (Bylaw 15733 May 16, 2011), (Bylaw 17144 June 9, 2015)</i>
4.2.3 Residential - Provide for residential development within The Meadows ASP to allow for a variety of housing forms and options consistent with municipal standards and policies.	The LDR and MDR sites in the <i>Laurel neighbourhood</i> allow for a range of residential housing types (e.g. single detached, semi-detached, town/row housing and low rise apartments).
4.2.3 Residential – Orient larger parcels of medium density residential development toward the edges of the neighbourhood, adjacent to arterial and collector roadways, transit routes, and near community focal points.	The MDR sites are oriented towards the edges of the neighbourhood (abutting arterial roadways), at neighbourhood entrances, and along collector and arterial roadways (along possible transit routes) and in proximity to parks and SWMFs. No all-directional access will be permitted to the MDR sites along 17 Street, however opportunities for access to MDR sites adjacent to 23 Avenue or 34 Street may be considered at the subdivision stage and in consultation with the Transportation Department.
4.2.4 Commercial – Locate and orient commercial sites along arterial and/or collector roadways to ensure high visibility, to provide convenient access opportunities for both transit and private vehicles, and to prevent through-traffic in neighbourhoods.	A 3.4 ha Community Commercial site (CSC) located along 23 Avenue (arterial) and the north-easterly collector roadway provides visibility and access to commercial services at the periphery of the neighbourhood, minimizing traffic shortcutting through adjacent residential areas. The site's proximity to the north-south <i>Shared Use Path</i> corridor provides an enhanced pedestrian link to the remainder of the community (<i>Bylaw 16345, March 4, 2013</i>)
4.2.8 Parks and Open Space – Provide sites for open space and parks for active and passive recreation through the dedication of municipal reserves respecting the hierarchy of demands on reserve allocation.	The <i>Laurel</i> NSP proposes two school sites, one urban village park site and several pocket parks that will be assembled through municipal reserves at the subdivision stage, provided that municipal reserve dedication is available once high priority parkland is assembled. These areas provide local residents a range of open space opportunities and, in conjunction with pedestrian linkages, additional recreational options within the greater catchment area.
4.2.9 Environmental - Preserve and integrate environmentally sensitive and other natural areas into the development concept plan where sustainable and economically viable through such mechanisms as environmental reserves, municipal reserves, storm water management facilities and other public utility lots.	An existing natural low area in the northeast corner of the neighbourhood will serve a naturalized stormwater management function whereby constructed wetlands may be considered.
<p>4.2.13 Transportation – Provide a logical, safe and efficient transportation systems within the plan area to address the pedestrian, bicycle, public transit and vehicular transportation needs of residents moving to, from and within the Meadows area.</p> <p>- Integrate existing and future transportation, utility and pipeline corridors into the ASP making use of potential greenways and pedestrian linkages while having regard for the safe, ongoing operation of these transmission facilities.</p> <p>- Create an efficient and convenient interconnected</p>	<ul style="list-style-type: none"> • Proximity to Whitemud Drive and the future Anthony Henday Drive will provide efficient alternatives for accessing services and employment areas within the city and the region. • The existing Altalink power distribution right-of-way within the central portion of the <i>Laurel neighbourhood</i> has been integrated as a <i>Shared Use Path</i> corridor and will provide pedestrian linkages throughout and beyond the plan area, while respecting the continuing operation of the facility. (<i>Bylaw 16345, March 4, 2013</i>)

ASP Principle	The <i>Laurel</i> NSP Compliance with Principle
circulation and pedestrian network.	<ul style="list-style-type: none"> • Pedestrian linkages include sidewalks alongside collector and local roads, corridors between park areas, dedicated walkways and trails alongside stormwater management facilities (SWMF's), creating an interconnected system, which makes possible the efficient movement of pedestrians throughout the <i>Laurel neighbourhood</i>.

EDMONTON SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES (SNDP)

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

SND Principle	The <i>Laurel</i> NSP Compliance with Principle
Principle 1: Design neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods	Two school sites and the community commercial site act as common infrastructure for adjacent neighbourhoods. Through site orientation and location, these developments will provide options for service delivery for adjacent residents.
Principle 2: Design and locate school and community facilities to provide inter-neighbourhood focal points	<p>The Public K-9 and Separate K-8 school/park sites in the eastern and western portions of the plan area are in locations within the <i>Laurel neighbourhood</i> that represent the perceived school catchment area and will be used by existing and future neighbourhood residents and surrounding areas.</p> <p>These facilities will provide educational and recreational opportunities as well as convenient access to students, residents, and neighbouring communities via arterial and collector roadways and integrated open space system.</p>
Principle 3: Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods	The arterial roads along the periphery of the <i>Laurel neighbourhood</i> are designed in a grid pattern.
Principle 4: Design neighbourhood streets (both neighbourhood design and cross section of roadway) with standards that cater to the main intended use of the road	City standards and regulations ensure that streets are designed to accommodate pedestrians, cyclists and vehicles. Streets, sidewalks and pathways have standardized widths and materials depending on their function.
Principle 5: Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood	Pedestrian linkages include sidewalks alongside collector and local roads, corridors between park areas, dedicated walkways and trails alongside stormwater management facilities (SWMF's), creating an interconnected system, which makes possible the efficient movement of pedestrians throughout the <i>Laurel NSP</i> .
Principle 6: Provide Transit Services to the edges of new neighbourhoods using the arterial and collector roadways in conjunction with appropriately designed, strategically located and conveniently accessed transit waiting zones	Future transit service will be provided along the arterial and collector roadway network. The three participating landowners within the <i>Laurel NSP</i> will enter into an agreement with the City of Edmonton to provide funding for the initial two years of transit service in the neighbourhood.

SND Principle	The <i>Laurel</i> NSP Compliance with Principle
Principle 7: At the area and neighbourhood planning stage, plan the location of the school/park facilities relative to neighbourhood staging such that they can be consolidated, serviced, and available early in the development of a neighbourhood or catchment area	The Staging Concept for the <i>Laurel</i> NSP indicates that development will proceed from the northwest and west to the east. The western school/park site will develop in a timely fashion as a result of this staging concept. The school / park locations are comprised of multiple land ownership property boundaries, and will require consolidation in order to assemble these lands prior to development.
Principle 8: Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time	In time, the buildings developed on the school/park site that accommodates the school and the community league may be redeveloped to address the changing needs and uses of the community.
Principle 9: Explore opportunities to provide smaller, dispersed open space and parks in a neighbourhood to provide for localized needs while meeting the recreational needs of residents of the catchment area	There are four smaller, dispersed park sites located throughout the <i>Laurel</i> NSP.
Principle 10: Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and storm water management	<p>The proposed school / park sites are of sufficient size to accommodate schools and additional programming space (e.g. community league facility). Should the requirements of the sites change over time, these parcels are of sufficient size to accommodate other land uses on all or a portion of the land. Both sites are located as key central focal points within the community, linked to central open space, and connected by a pedestrian system maximizing accessibility and use potential.</p> <p>Facilities may be conceptualised as joint-use sites at the subdivision and development stage whereby land is optimally assembled for efficient, flexible, and adaptable uses over time reducing capital maintenance and expenditure.</p>
Principle 11: Create a linked open space system through open spaces created by stormwater management facilities, some utility rights-of-way, preservation of appropriate natural areas and drainage courses, and school and park open spaces	The dispersed park sites, the stormwater management facilities, the urban village park site, and the school/park site are all connected by pathways, greenway and <i>Shared Use Path</i> corridors. (<i>Bylaw 16345, March 4, 2013</i>)
Principle 12: Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points	The MDR sites have been located adjacent to collector roads within the neighbourhood and at the periphery of the neighbourhood.

URBAN PARKS MANAGEMENT PLAN

The Urban Parks Management Plan (UPMP) provides strategic direction for the acquisition, design, development, and management of Edmonton's parkland until the year 2016. This plan was adopted by City Council in August 2006.

The following principles are relevant in the context of the *Laurel* NSP:

- Provide Greenways that increase pedestrian connectivity between different parks and open spaces i.e. pocket parks, school and community parks, SWMF, river valley, and so on.
- Promote urban wellness in the community through the provision and development of parks.
- Ensure visual and physical access to parks, and public safety through application of Crime Prevention Through Environmental Design (CPTED) principles.
- Naturalize boulevards in new plan areas where appropriate.
- Utilize opportunities to enhance the community's quality of life through place making, creative urban design, and provision of diverse landscape opportunities.
- Ensure that land uses adjacent to public parks are complementary. Some examples of desirable adjacent land uses include multifamily residential, stormwater lakes, trail corridors, and so on.
- Provide opportunities for active and passive recreation experiences by the community.

As a requirement of the UPMP, a Parks Impact Assessment (PIA) for the *Laurel* NSP, which outlines various parkland parameters, has been submitted separately. The more specific aspects related to parkland design and development will be addressed during the subdivision and rezoning stages.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

Appropriate design, organization of the physical environment and involvement of the community can help to reduce crime and improve the quality of the environment. In the development of the *Laurel neighbourhood*, decisions relating to transportation design, street pattern, access, public open spaces, parks, *Shared Use Paths*, walkways and the built environment shall utilize CPTED principles to create a safe and secure neighbourhood. Principles including natural surveillance strategies to increase visibility and awareness of public and private space; natural access control techniques to guide / direct persons within natural and built environments; and promotion of territorial reinforcement by increasing definition of space and local stewardship within the neighbourhood will be encouraged.

Bylaw 16345
March 4, 2013

CITY OF EDMONTON HOUSING MIX GUIDELINES

In 1991 Council approved guidelines recommending that the ratio of dwelling types in new suburban neighbourhoods be based on a mix of 65% to 85% LDR units and 15% to 35% MDR units. These guidelines encourage a mix of housing types, a range of choice in housing, and a measure of intensification. Since these guidelines were approved, the need for multi-family housing has increased significantly. Within the MDP, Council has stated “We will optimize the use of public infrastructure by accommodating higher density land uses along transportation corridors” and “We will encourage the efficient and cost effective use of land, infrastructure and services by promoting compact and contiguous development”. Smart Choices and Suburban Neighbourhood Design Principles also encourage affordable housing choices as well as efficient use of infrastructure.

The Laurel NSP includes several MDR sites of approximately 1.0 ha or larger which may be suitable for higher density uses such as town housing, row-housing (developed as project or street oriented) or low-rise apartment buildings. The remainder of the MDR locations are intended for street-oriented development (i.e. town-houses) fronting onto the various collector roadways. The result is an overall housing mix ratio that conforms to Council's guidelines for more compact, transit-supportive developments and higher density neighbourhoods. (Bylaw 17144 June 9, 2015)

AFFORDABLE HOUSING

The *Laurel* NSP addresses housing affordability through the designation of numerous MDR sites within the plan area. In accordance with The Meadows ASP, areas of higher density are provided in the plan area near transportation / transit routes and open spaces. These sites provide opportunities for the construction of multiple family, aging in place and hospice developments.

(Deleted)

Bylaw 15191
September 2, 2009

Appendix 3: Technical Studies

The following technical studies have been completed in support of the *Laurel* Neighbourhood Structure Plan:

- Neighbourhood Designs Report (NDR)
- Water Network Analysis (WNA)
- Transportation Impact Assessment (TIA)
- Environmental Site Assessment (ESA) Phase I
- Historical Resources Overview (HRO)