

Tamarack Neighbourhood Area Structure Plan

Office Consolidation June 2013

*Prepared by:
Planning and Policy Services Branch
Planning and Development Department*

City of Edmonton

Bylaw 14112, was adopted by Council in February 2006. In June 2013, this document was consolidated by virtue of the incorporation of the following bylaws:

<i>Bylaw 14112</i>	Approved February 22, 2006 (to adopt the Tamarack Neighbourhood Area Structure Plan)
<i>Bylaw 15223</i>	Approved May 25, 2010 (to increase the area identified for commercial development in the southern portion of Tamarack, reconfigure and decrease the area identified for residential development, reconfigure the southern park site and realigns and consistently identifies collector roadways, and amends Figures 6.0 through 11.0 and the NSP statistics accordingly)
<i>Bylaw 15884</i>	Approved February 27, 2012 (to realign a collector road, reconfigure low and medium density residential and park/open space uses, and update stormwater servicing, within the southern portion of Tamarack. The Land Use Statistics has been updated to reflect the Terms of Reference for the Preparation and Amendment of Residential NSPs)
<i>Bylaw 16328</i>	Approved January 21, 2013 (to increase the area identified for commercial development in the southern portion of Tamarack, reconfigure and decrease the area identified for residential development and update the Population and Land Use Statistics to reflect the Terms of Reference for the Preparation and Amendment of Residential NSPs)
<i>Bylaw 16455</i>	Approved June 17, 2013 (to redesignate an area from business/commercial, to redesignate religious assembly and residential/commercial uses to a Transit - Mixed Use area, and to update relevant text, figures, and land use population statistics)

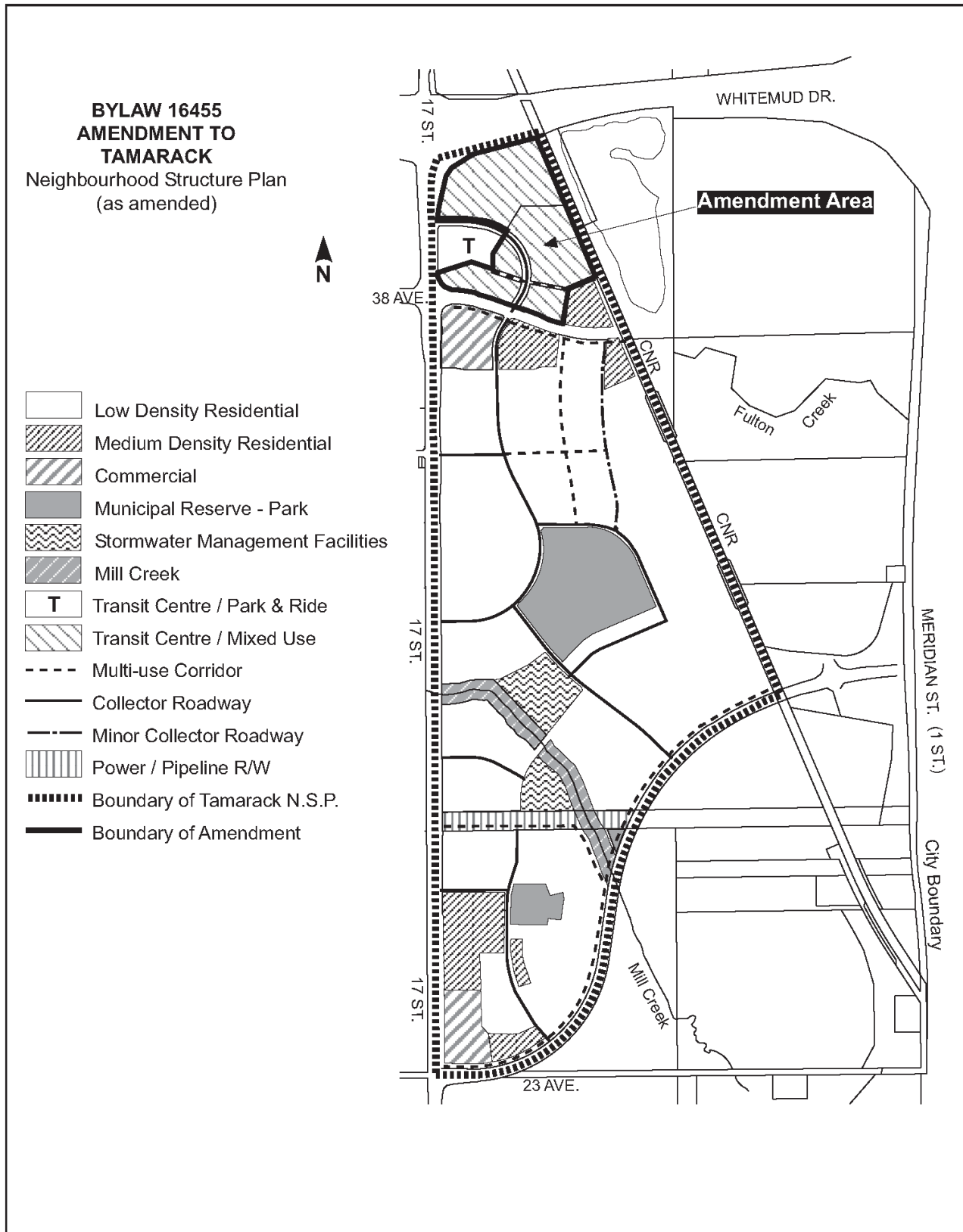
Editor's Note:

This is an office consolidation edition of the Tamarack Neighbourhood Area Structure Plan, Bylaw, as approved by City Council on February 22, 2006. This edition contains all amendments and additions to Bylaw 14112.

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



TAMARACK NEIGHBOURHOOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 16455
Amended June 17, 2013

	Area (ha)	% of GDA
Gross Area	201.07	
Creeks/Ravine Lands (ER)	6.48	
Major Arterial Road ROW	2.52	
Pipeline/Utility Corridors	3.14	
Gross Developable Area	188.93	100.0
Municipal Reserves		
School Site	12.47	6.6
Parks	2.11	1.1
Greenway	1.99	1.1
Transit Center	2.53	1.3
Commercial	7.12	3.8
Transit Centre - Mixed Use*	13.58	7.2
Stormwater Management	8.27	4.4
Circulation @ 18%	34.01	18.0
Total Non-Residential	82.08	43.44%
Net Residential Area	106.85	56.56%

	Area (ha)	Units/ ha	Units	% of Total Units	People / Unit	Population
Low Density Residential						
<i>Single/Semi-detached</i>	89.97	25	2,246	61.1	2.80	6,298
Medium Density Residential						
<i>Row Housing</i>	5.50	45	248	6.7	2.80	693
<i>Low Rise/Multi Family</i>	6.85	90	617	16.8	1.80	1,110
Transit Centre – Mixed Use (Medium / High Density Residential)	4.53	125	566	15.4	1.80	1019
Total Residential	106.85		3680	100		9120

Gross Population Density: 44.3 persons per gross developable hectare

Net Population Density: 81.0 persons per net residential hectare

Unit Density: 31.8 units per net residential hectare

LDR / MDR Ratio: 68% / 32%

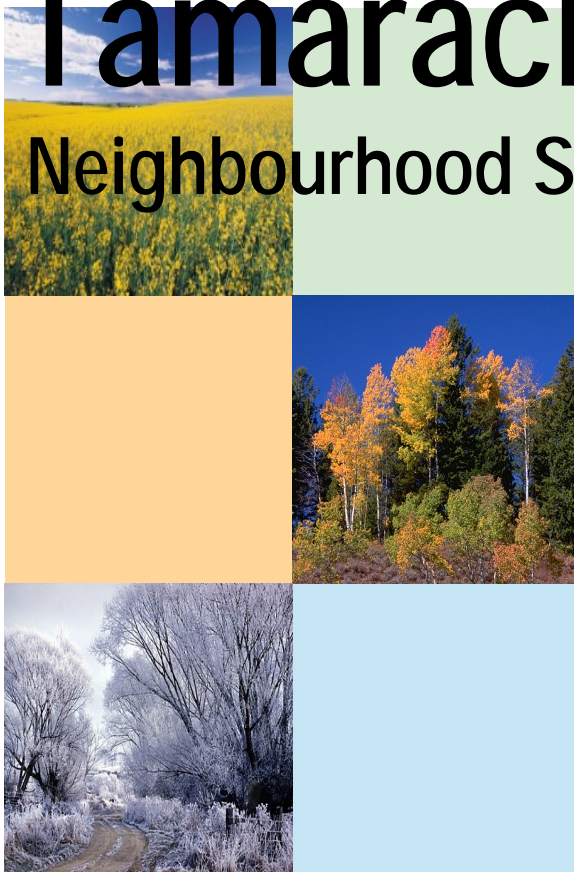
Sum of MDR units = 1065

Student Generation Statistics

Level	Public	Separate	Total
Grades K-8	504	216	720
Grades 9-12	251	108	359
Total	755	324	1,079

Tamarack

Neighbourhood Structure Plan



February 2006

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this Neighbourhood Structure Plan (“NSP”) is to describe the land use framework and development objectives for the Tamarack NSP, a neighbourhood consisting of approximately 201.07 hectares (496.84 acres) and representing one of seven neighbourhoods as identified under The Meadows Area Structure Plan (ASP) Bylaw 13531 (see **Figure 1.0 - Location Plan**).

The Tamarack NSP is located in the northern portion of the Meadows ASP, north of 23 Avenue, south of Whitemud Drive, east of 17 Street and west of a private railway corporations’ right-of-way. The plan represents a framework for decision-making that is intended to foster future development and the contiguous, orderly growth of the community.

Amended by
Editor

The NSP generally supports the land use pattern as established in The Meadows ASP Bylaw 13531 and other statutory policy plans used to guide neighbourhood growth and development by identifying the following:

- § Type, size and location of residential, commercial, school facilities, and open space land uses, including the intensity and pattern of development;
- § The transportation network as it relates to the study area and overall transportation objectives;
- § Conceptual servicing schemes and provision of utility services and infrastructure;
- § Unique environmental areas and natural features; and
- § Implementation and phasing of development.

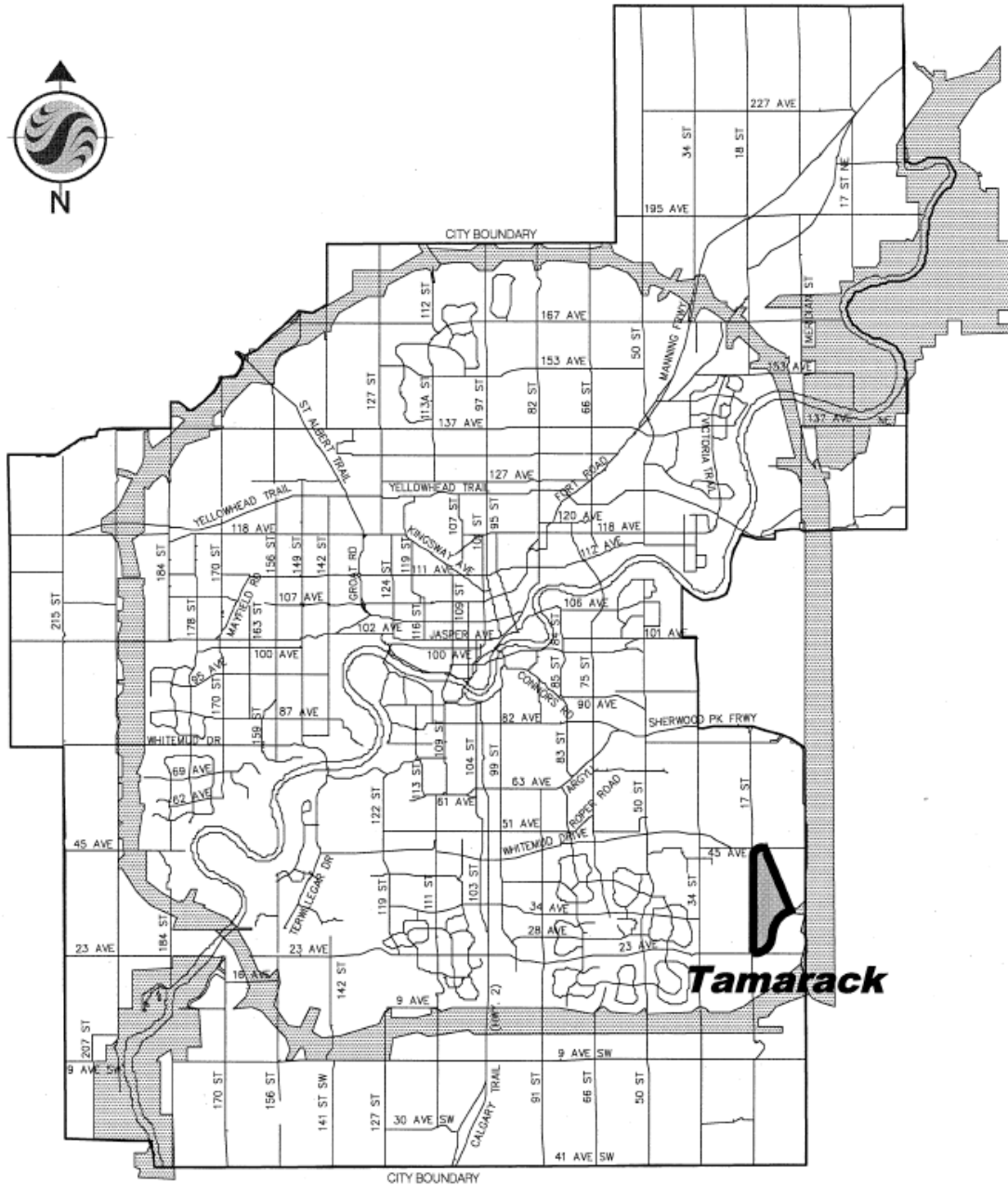
The Tamarack NSP has been prepared in conformance with the City of Edmonton Municipal Development Plan (MDP), The Meadows ASP Bylaw 13531 and with a high regard to other relevant municipal policy documents.

1.2 Definition of Plan Area

The Tamarack NSP is comprised of a number of parcels located within portions of the NW, SE and SW¼ 8-52-23-W4 and NE, NW and SW¼ 5-52-23-W4. As shown on **Figure 2.0 - Context Plan**, the NSP is defined by the following boundaries:

- § **Northern Boundary** – Whitemud Drive
- § **Western Boundary** – 17 Street
- § **Eastern Boundary** – Railway Right-of-Way
- § **Southern Boundary** – 23 Avenue

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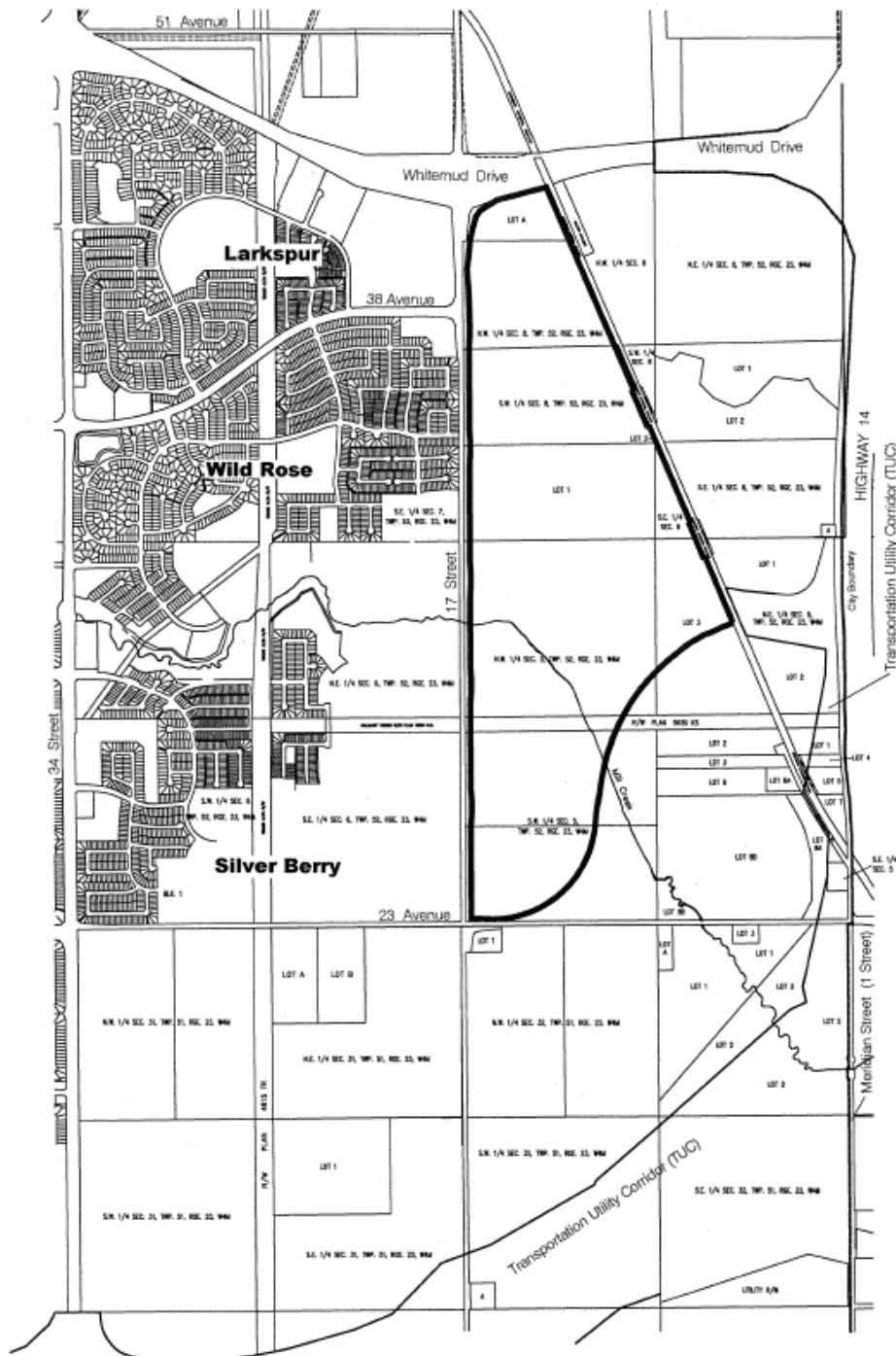
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TAMARACK
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
1.0

Title
Location Plan

November 2005
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Legend
 Neighbourhood Boundary

Client/Project

TAMARACK
 NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
2.0

Title
Context Plan

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1.3 Land Ownership

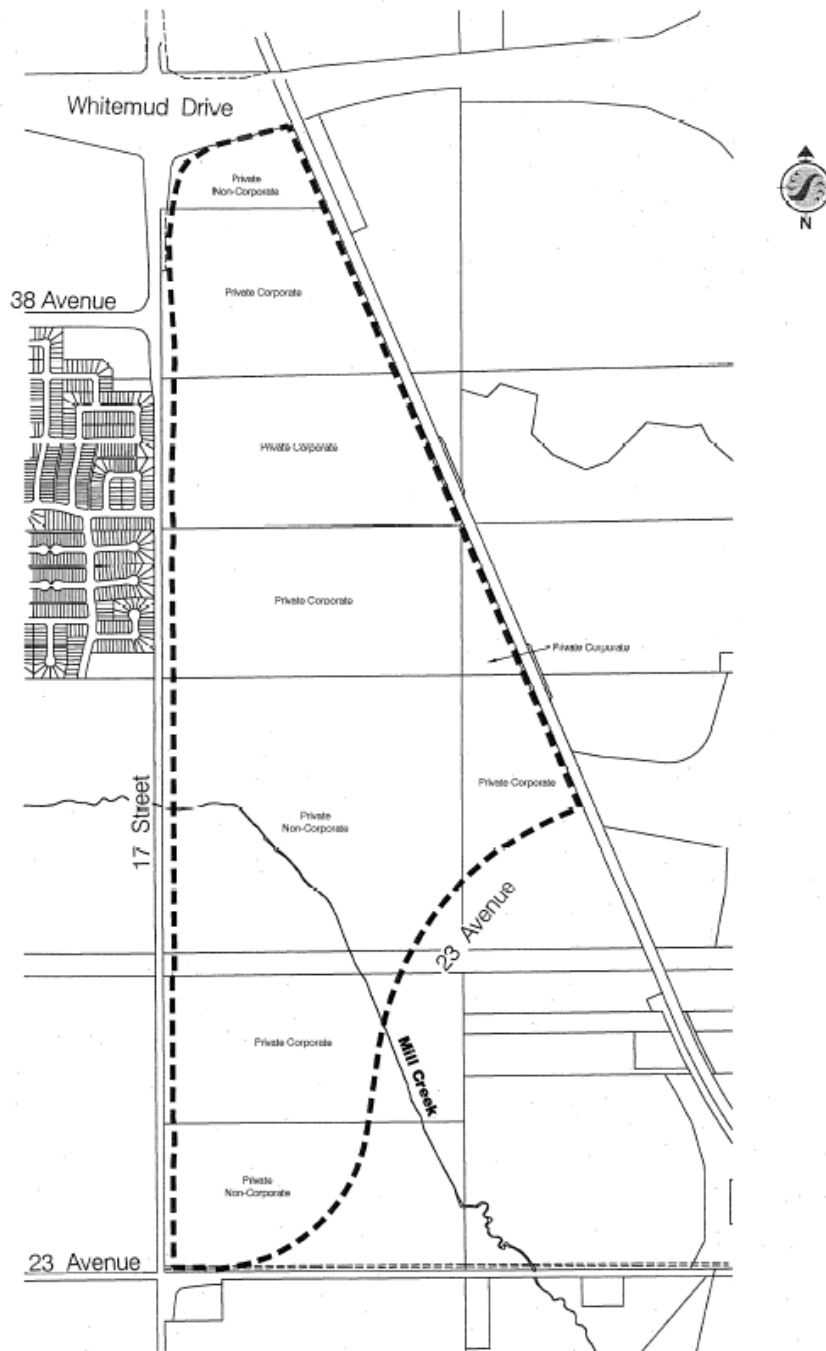
Approximately 113.61 hectares (56%) of the land within The Tamarack plan area is owned, managed or under an agreement for sale by Private Corporate Owners.

The remaining land is held by a number of non-participating landowners who are supportive of this application. It is important to advise that the non-participating landowners were offered to participate in the preparation of this NSP but declined.

Current land ownership is shown on **Figure 3.0 – Ownership Plan**. A listing of the legal parcels is provided below in Table 1 - Land Ownership.

TABLE 1 - LAND OWNERSHIP Tamarack NSP			
	Titled Owner	Legal Description	Area (ha)
1	Private Non-Corporate Owners	NW ¼ Sec. 5-52-23-W4M	*55.55
2	Private Corporate Owners	Lot 1, Plan 802 2743	*31.08
3	Private Corporate Owners	Part of SW ¼ Sec. 8-52-23-W4M	*27.94
4	Private Corporate Owners	Part of NW ¼ Sec. 8-52-23-W4M	*23.10
5	Private Corporate Owners	North½ of SW¼ Sec. 5-52-23-W4M	*22.08
6	Private Non-Corporate Owners	South½ of SW¼ Sec. 5-52-23-W4M	*16.07
7	Private Corporate Owners	Lot 3, Plan 012 1041	*11.45
8	Private Non-Corporate Owners	Part of Lot A Plan 5886 RS	*6.50
9	Private Corporate Owners	R/W Plan 5659 K.S.	*3.75
10	Private Corporate Owners	Part of SE¼ Sec. 8-52-23-W4M	*3.55
TOTAL			201.07

**Denotes area of land within NSP boundary only and does not represent amount as indicated on title*



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Client/Project

TAMARACK
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.

3.0

Title

Land Ownership Plan

November 2005
1161 09569

2.0 STATUTORY PLAN AND POLICY CONTEXT

2.1 *Statutory Plan and Policy Context*

The Tamarack NSP supports a number of policies and principles identified in the City of Edmonton Municipal Development Plan, The Meadows ASP Bylaw 13531, Suburban Neighbourhood Design Principles and other relevant policy/statutory documents.

Municipal Development Plan - The MDP is a document that provides the policies and strategies to help guide growth and development in Edmonton over a 10-year horizon. The City of Edmonton's MDP designates the land within the Tamarack plan area as Suburban Area, which permits the development of residential housing and ancillary uses.

The Meadows Area Structure Plan Bylaw 13531 (As amended) - 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.

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.

Smart Choices for Developing Our Community – Council Recommendations - The Smart Choices Recommendations were approved by City Council on March 23, 2004 to promote urban sustainability. Four of these recommendations apply to the Tamarack NSP.

The following table summarizes the key objectives from the above noted policy documents applicable to the Tamarack NSP.

Objectives	Neighbourhood Planning Principles
Comprehensive, compact and cost-effective development: <i>MDP Strategy 1.3.3 – Support contiguous development that is adjacent to existing development in order to accommodate growth in an orderly and economical fashion.</i>	Development of Larkspur and a large portion of Wild Rose immediately adjacent to 17 Street will be completed in 2005. Development of the Tamarack NSP represents a continuation of urban development in southeast Edmonton. Given the proximity to adjacent developing neighbourhoods, infrastructure services can be extended in a cost-effective and efficient manner.

<p>MDP Strategy 1.7.1 - Accommodate growth in an orderly, serviced and cost-effective manner.</p> <p>Meadows ASP 4.2.1 Neighbourhoods – To develop compact, pedestrian orientated neighbourhoods that contain a complimentary mix of land uses.</p> <p>4.2.2 Residential – Establish sufficient overall residential densities within The Meadows</p> <p>SNDP 8 - Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time</p> <p>SNDP 10 - Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and storm water management.</p> <p>SNDP 15 - Provide opportunity through the residential districts of the Land Use Bylaw for the intensification of housing forms and for alternative site design and building siting</p>	<ul style="list-style-type: none"> § Completion of servicing in Larkspur provides for efficient extension of utilities into the Tamarack NSP. § The Tamarack NSP provides opportunities to share neighbourhood facilities and infrastructure given its proximity to existing and developing neighbourhoods. § Higher density residential land uses have been strategically located within close proximity to business/commercial and transportation nodes. This also supports the Transit-Supportive Development node in the northern portion of the NSP. § Commercial and business areas have been planned adjacent to key transportation facilities (e.g. Transit Center, 17 Street, 38 Avenue, Whitemud Drive). § Major central multi-use corridor provides a direct connection from the school/park site to the Transit Centre.
Objectives	Neighbourhood Planning Principles
<p>Variety and choice of development form and types:</p> <p>MDP Strategy 1.1.1 – Provide for choices regarding the types of development in which people want to live and do business.</p> <p>MDP Strategy 1.7.2 – Provide for a range of housing types and densities in each residential neighbourhood.</p>	<ul style="list-style-type: none"> § The Tamarack NSP includes a variety of residential, commercial, institutional, educational and open space development opportunities. § A range of low and medium density residential housing opportunities are provided. This will provide for a range of housing types and affordability for a variety of income groups (e.g. students, singles, families, seniors).

<p>Meadows ASP</p> <p><i>4.2.2 Residential- Provide for residential development within The Meadows ASP to allow for a variety of housing forms and option consistent with municipal standards and policies.</i></p> <p>SNDP 12 - <i>Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points.</i></p>	<p>§ Provide mixed-use residential and business/commercial development opportunities, which will promote Transit-Supportive Development.</p> <p>§ Business and commercial land uses have been clustered around major transportation routes (Whitemud Drive, 17 Street, 38 Avenue) and facilities (transit center). These areas maintain high exposure and accessibility to pedestrian, transit and vehicular traffic.</p> <p>§ Opportunities for innovative building siting and site design and shall be pursued at the zoning and subdivision stages.</p>
<p>Transportation alternatives and options:</p> <p>MDP Strategy 1.3.4 – <i>Promote intensification of development around transit corridors and employment areas.</i></p> <p>MDP Strategy 4.3.1 – <i>Develop and maintain an integrate system of roadways, public transit, pedestrian and bicycle facilities and services to support and enhance Edmonton as a growing, vibrant, and culturally diverse city in which people choose to live, work, learn and play.</i></p> <p>MDP Strategy 4.3.3 – <i>Make effective and efficient use of the transportation system.</i></p>	<p>§ Higher density land uses shall be planned and located adjacent to collector /arterial roadways and transit centers to encourage transit use.</p> <p>§ Walking and cycling to destination areas, including into adjacent neighbourhoods, shall be provided through the provision of multi-use corridors. Access is intended to follow the local, collector and arterial roadway network in addition to walkways and integrated open space corridors.</p>

Transportation alternatives and options (cont.):

Meadows ASP

4.2.12 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.

- 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.*
- Create an efficient and convenient interconnected circulation and pedestrian network.*

SNDP 5 - *Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood.*

SNDP 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.*

- § A central multi-use corridor will provide a seamless link from the Transit Centre to the central school/park, and then to the walkways along Mill Creek.
- § A transit center is planned in the northern portion of the neighbourhood. The area around the transit center is to be developed with business/commercial and mixed residential/commercial uses. The residential components near the transit centre are of higher densities than those generally found in the plan area.
- § Future transit service is appropriate along the collector roadway network as well as along 17 Street, 23 Avenue, and 38 Avenue. Virtually all parts of the neighbourhood are accessible via transit within a 400m walking distance.

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.

Objectives	Neighbourhood Planning Principles
<p>Sustainability and preservation of the environment and open spaces:</p> <p><i>MDP Strategy 1.1.13 – Plan for urban development which is environmentally friendly and fiscally sustainable in the long term, based on the City's financing, infrastructure and environmental strategies.</i></p> <p><i>MDP Strategy 1.6.1 – Develop a comprehensive, integrated plan for the river valley, natural areas, and open space lands that encourages the conservation and integration of natural areas that are sustainable and feasible.</i></p> <p>Meadows ASP <i>4.2.7 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.</i></p> <p><i>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, stormwater management facilities and other public utility lots.</i></p>	<p>§ Promote the preservation and integration of Mill Creek and other natural areas (where feasible).</p> <p>§ Areas dedicated for schools, parks and community league facilities are considered with respect to 10% Municipal Reserves allocation set out under Section 666 of the <i>Municipal Government Act</i>.</p> <p>§ Parks and other open spaces have been linked to multi-use corridors and walkways. This will enable greater accessibility and efficient use of open space over time while encouraging local alternative transportation options. Coupled with a transit centre strategically located within the north-central portion of the plan, auto dependency and demand for roadway infrastructure may be lessened through walking, cycling, or public transit.</p>
<p>Urban interface and land use compatibility:</p> <p><i>MDP Strategy 1.1.2 - Address compatibility of land use in the development and review of land use plans and development proposals.</i></p>	<p>§ The Tamarack NSP includes the development and thoughtful integration of low and medium density housing near existing urban services and developing residential communities.</p>

<p><i>SNDP 2 - Design and locate school and community facilities to provide inter-neighbourhood focal points.</i></p> <p><i>SNDP 7 - At the area and neighbourhood planning stage, plan the location of the school/park facilities relative to neighbourhood staging such that they can be consolidated, serviced and available early in the development of a neighbourhood or catchment area.</i></p>	<p>§ The Tamarack NSP shall establish a unique character and sense of place within southeast Edmonton through the application of distinctive architecture, streetscaping and focal points based on a variety of urban spaces (e.g. neighbourhood parks, school site, Transit-Supportive Development).</p> <p>§ The Tamarack NSP designates one school site in the central portion of the plan area. This facility 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>
Recommendations	Neighbourhood Planning Principles
<p>Transit-Oriented Development (TOD):</p> <p><i>Smart Choices – Describes a TOD as “a center with a mix of high-density residential, retail, office, public and open space uses.” TOD development encourages the comprehensive planning, design and development of pedestrian friendly environments built within easy walking distance of a transit station.</i></p>	<p>§ While the plan does not qualify as TOD, it is Transit Supportive Development (TSD).</p> <p>§ Encouraging the development of Business/Commercial, Mixed-use Residential/Commercial and Medium Density Residential land uses adjacent to the Transit Centre.</p> <p>§ Encouraging a range of land uses that support a variety of housing choices, local employment opportunities, commercial/retail services and alternative transportation options that are integrated and self-supporting.</p> <p>§ Ensuring the TSD development creates a comfortable and safe pedestrian environment.</p> <p>§ Promoting the development of compact and medium-density land uses within a five to ten minute walk of the TSD area.</p>

<p>Multi-Use Trail Corridors and Mixed Use Development:</p> <p><i>Smart Choices – Promotes the integration of Multi-Use Trail Corridors with Mixed Use Development. Multi-Use Trail Corridors are described as abandoned rail corridors or utility rights-of-way that may be utilized by pedestrians and cyclists. This form of urban space offers considerable opportunity to provide a safe, convenient and attractive access within a community.</i></p> <p><i>Multi-Use Trail Corridors offer alternatives to driving, promote land use intensification, improve community connectivity, encourage healthy lifestyle and economic benefits to the local community (e.g. purchase of local products/services), safe commuting, and informal community surveillance.</i></p>	<ul style="list-style-type: none"> § Incorporating multi-use corridors throughout the plan area linking adjacent land uses and amenity areas. § Incorporating utility right-of-ways within the multi-use corridor system. § Providing linkages to future transit routes, the Transit Centre and potential employment nodes.
<p>Walkability:</p> <p><i>Smart Choices – identifies walkability as a key component in the promotion of sustainable compact development. Successful incorporation of community walkability requires, “high building and population density, mixed land use, a quality public transportation system, and high-quality public spaces.” There are a number of benefits with respect to promoting a walkable community including; alternative transportation options and pedestrian routes, improved personal health and economic cost savings, greater public transit use, cleaner environment, and enhanced service and amenity accessibility.</i></p>	<ul style="list-style-type: none"> § Establishing a comprehensive walkway and open space system that encourages pedestrian connectivity and social interaction. § A central pedestrian corridor provides unrestricted access from the northern to the south-central part of the neighbourhood. § Locating higher density development adjacent to transit services utilizing transit supportive development principles. § Ensuring adequate access to future transit services is within 400 m of residential, commercial and school/park areas. § Providing an attractive urban environment that is safe and convenient.

<p>Urban Design:</p> <p><i>Smart Choices – Promotes the development of urban design principles, guidelines and regulations through community consultation to apply to all public and private spaces and built forms associated with the land use planning for redevelopment, and new development. The intent is to create, maintain and enhance meaningful public and private places through effective place-making (i.e. consultation, communication, and implementation).</i></p>	<p>§ Promote high quality urban design in support of a vibrant and sustainable community in Tamarack that is safe, convenient and attractive.</p> <p>§ Development principles and overall concept for the NSP emphasizes urban design through appropriate land use interface, creation of vibrant focal and destination points within the community (e.g. Commercial and Business/Commercial nodes, school site, open spaces and Mill Creek), attractive streetscaping, landscaping, and pedestrian-friendly environments, a range of park / open spaces, and integration of natural landscape features.</p>
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2.2 North Saskatchewan River Valley Area Redevelopment Plan

Mill Creek crosses through the southern portion of the plan area and is part of the North Saskatchewan River Valley Area Redevelopment Plan (NSRVARP). The Tamarack NSP will ensure that the policies of the NSRVARP, particularly with respect to adjacent use, linkages, the Top-of-the-Bank Policy and the recommendations of required geotechnical assessment for the interface between the Tamarack neighbourhood and the NSRVARP area, are adhered to.

2.3 Top-of-the-Bank Policy

Developments adjacent to Mill Creek Ravine will generally be developed in accordance with the City of Edmonton's Top-of-the-Bank Policy. A Top-of-the-Bank walkway and/or trail will be built according to the recommendations and requirements of the Community Services and Transportation and Streets Departments. A Top-of-the-Bank roadway will not be provided as Mill Creek, within the plan area, is both very shallow and not wide. As such, public accessibility and the public good, is serviced more than adequately via the construction of a walkway or trail along both sides of Mill Creek.

2.4 Stormwater Management Guidelines

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

2.5 **Alberta Energy Utilities Board Policy and Guidelines**

The Tamarack neighbourhood will implement the City of Edmonton's Policy Guidelines for the Integration of Transmission Pipelines and Urban Development (1985), Planning for the Interface of Pipeline Right-of-ways and the Subdivision of Land (2003), Alberta

Energy and Utilities Board policies and any other relevant policies to be employed in consideration of urban development within and or adjacent to well sites, pipeline or facility right-of-ways.

2.6 **Private Railway Corporation Right-of-Way**

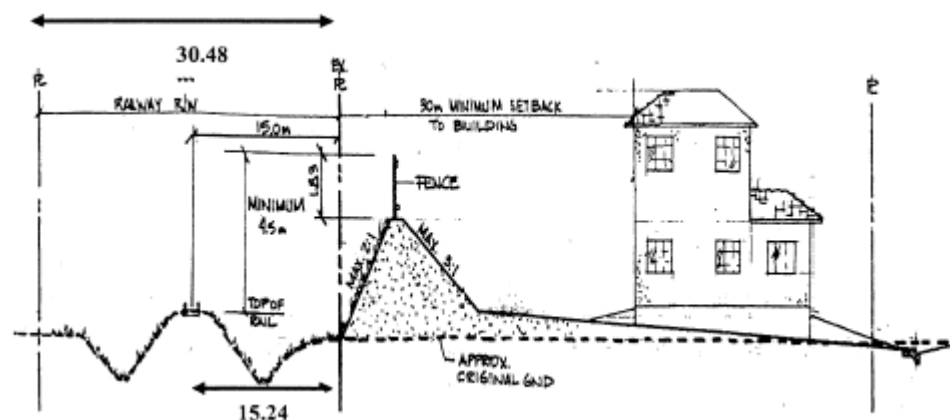
Amended by Editor

A *private railway corporation* operates a secondary line, which runs diagonally in a north-south orientation along the eastern boundary of the plan area.

A detailed Catastrophic Risk Assessment (CRA) was completed as part of The Meadows ASP, Bylaw 13531. This CRA addresses the risks associated with the location and operation of the *railway* right-of-way and has a direct influence on the Tamarack NSP.

A thirty (30) metre development setback from the *railway* right-of-way is needed in order to meet Transportation Canada guidelines. No building or structure will be built or encroach within the 30 m development setback. At the time of development, a berm and noise attenuation fence will be constructed by the developer on private property parallel to the *railway* right-of-way consistent with Transportation Canada guidelines. An illustrative rendering is shown below, which shows the setbacks, berm height and spatial relationships that are required as part of the *railway* secondary line guidelines and that of Transportation Canada. After the berm and fence are constructed by the developer, the land between the toe of the slope of the berm up to the private property line at the top of the berm will be gifted to *the Private Railway Corporation*.

Amended by Editor



3.0 SITE CONTEXT AND DEVELOPMENT CONSIDERATIONS

3.1 Topography & Vegetation

As shown on **Figure 4.0 – Site Contours Plan**, the topography of the lands within the Tamarack NSP can be 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 10 meters from the southeast sector of the area to the northwest edge of the area with the existing natural drainage courses ultimately connecting the Mill Creek and Fulton Creek. There are a number of natural low areas within the plan area that are suited for the possible development of stormwater management facilities.

Trees and associated vegetation are scattered throughout the plan area in tree stands of various sizes. The composition of these treed areas is mainly aspen/balsam poplar, some with associated sloughs. The Mill Creek transects the southern portion of the NSP. The majority of lands have been cleared of natural vegetation for agricultural purposes.

3.2 Soils

The Canada Land Inventory (CLI) soil classification for the Tamarack NSP area is Type 2 and Type 3. Soils are generally silty loam and, as such, do not pose any impediment to urban development.

The City of Edmonton's Municipal Development Plan recognizes that these lands are intended for urban development. It should be noted, however, that these agricultural lands shall typically remain in production until they are required for development. The consistent, uniform nature of these soils does not pose any constraints to urban development.

3.3 Existing Land Uses

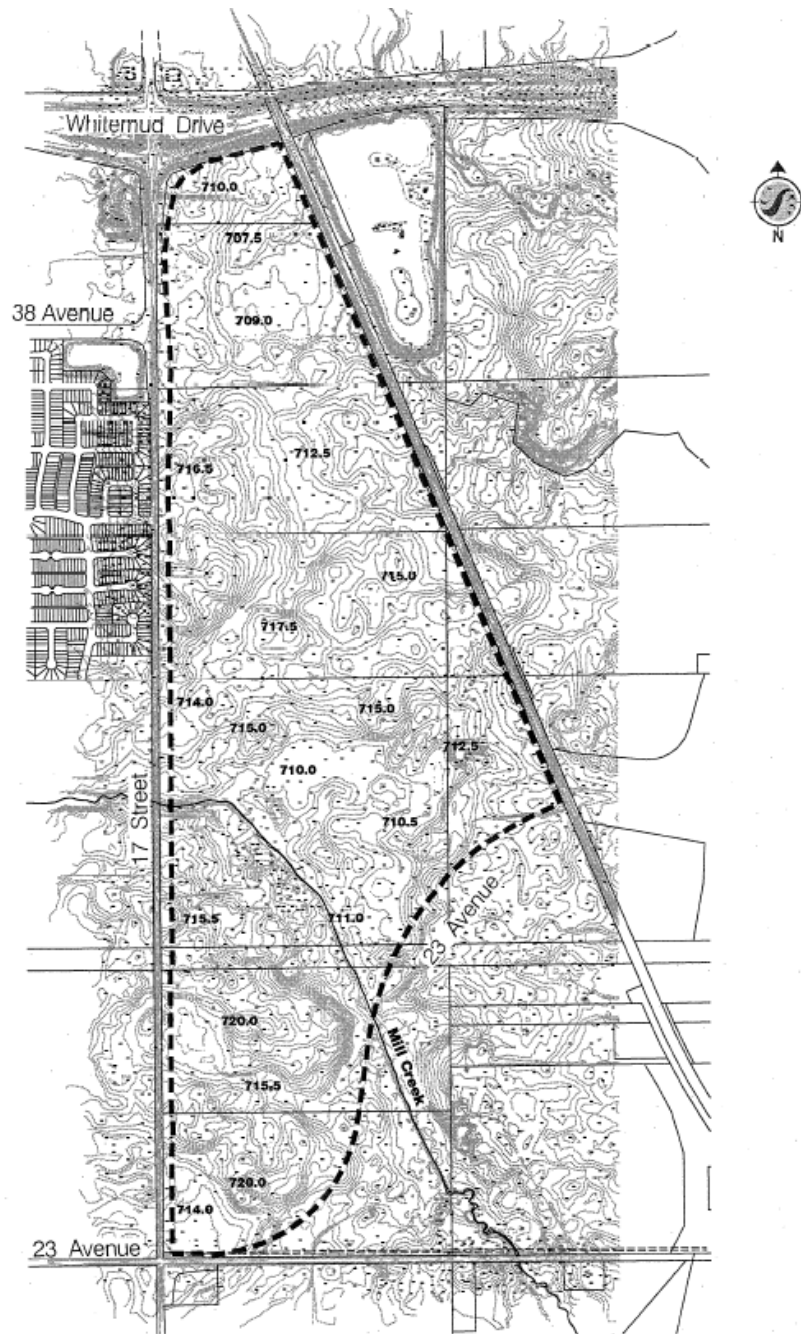


As shown on **Figure 5.0 – Site Features Plan**, Mill Creek bisects the southwestern portion of the NSP from 17 Street to 23 Avenue. A large naturalized stormwater management facility (Fulton Marsh Natural Area) is situated in the northeast portion of The Meadows ASP, east of the *Rail line*.

A large tree nursery is situated in the central portion of the plan area in addition to a number of farm sites are situated within the plan area.

The remainder of the NSP area is used primarily for agricultural purposes or has been left in a natural state. A small number of farmsteads are scattered throughout the plan area.

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Client/Project

TAMARACK
NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
4.0

Title
Site Contours Plan

November 2005
1161 09569

3.4 Surrounding Land Uses

The developing neighbourhoods of Larkspur, Wildrose, and Silverberry are situated immediately west of 17 Street. The lands south and east of the plan area are primarily used for agricultural purposes. The Southeast and Maple Ridge Industrial parks are situated to the north of Whitemud Drive.

3.5 Mill Creek

Mill Creek travels through the central portion of the NSP plan area. The creek has been significantly modified from its natural state by previous landowners. The Area Master Plan (i.e. the drainage plan for The Meadows) has stated that the Mill Creek east of 17 Street will require grading work to increase drainage capacity. Mill Creek will be graded for approximately 390m west of 17th Street to facilitate development east of 17th Street. Storm water storage adjacent to Mill Creek will be provided within the Tamarack Neighbourhood. The remaining creek area will be widened to 60.0 m with a 7.5 m upland setback on either side. The creek will also be deepened by approximately 1.5 m, however the exact depth will be determined at the detailed engineering stage of development.

3.5.1 Environmental Assessments on Mill Creek

Prior to the rezoning and subdivision of the land using the Mill Creek drainage basin, all pertinent environmental and geotechnical studies (e.g. Environmental Impact Assessment, Geotechnical Slope Stability Study, et cetera) will need to be completed. The rezoning and subdivision of land requiring stormwater outfall into Mill Creek, east of 17 Street, shall not occur until the relevant studies have been both completed and approved.

3.6 Environmental Impact Assessments

A Phase I Environmental Impact Assessment has been completed for the Tamarack NSP under the Meadows ASP Bylaw 13531. The Phase I ESA undertaken by CT & Associates provided a historical review of the land uses for the subject lands in order to verify that there is no likely contamination of the subject Neighbourhoods. The Phase I confirmed that the subject lands has historically been used as farmland. The assessments also concluded that there has been no evidence of waste management practices on the property or surrounding areas that may be of environmental concern. Further, an EIA for the use of Fulton Marsh was completed.

Currently, no other Phase I or II Environmental Site Assessments have been undertaken on the remaining lands within the plan area. It should be noted that the Environmental Planning Group of the City of Edmonton's Planning & Development Department recommends that ESA's or disclosure statements be provided by the minority land owners at the rezoning stage.

3.7 Non-Participating Land Owners

All of the landowners within the plan area were contacted and invited to participate prior to the commencement of the NSP. *Two private corporate owners and three private non-corporate owners* have committed to participating in the formation of the NSP.

As part of the NSP process, all landowners within Tamarack had the opportunity to comment on the NSP. As part of the approval process described under Section 636 of the *Municipal Government Act*, adjacent landowners received mailed notification letters for the Public Meeting held by the Planning and Development Department in April, 2005. During these consultations, landowners had the opportunity to review and comment on the NSP. Additionally, landowners are also able to contact either the applicant (i.e. Stantec Consulting Ltd.) or the Planning and Development Department to note any possible concerns.

3.8 Historical Resources

A Historical Resource Assessment has been submitted under separate cover by Historical Resource Management Limited. The report indicated no historical resources present that would impede future urban development.

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.

3.9 Energy & Natural Resources

3.9.1 Oil & Gas Well Sites

The Alberta Energy and Utility Board and the Environmental Law Centre identified three abandoned oil wells on the land legally described as Lot 3 Plan 012 1042. The Environmental Law Centre indicates that there are Reclamation Certificates available for two of the wells.

The abandoned exploration oil wells should be confirmed at the rezoning stage for development suitability with a drilling, sampling, and testing program for the land legally described as Lot 3 and Plan 012 1042.

3.9.2 Pipeline Rights-of-Way and Facilities

The City of Edmonton's *Policy Guidelines for the Integration of Transmission Pipelines and Urban Development (1985)* and *Planning for the Interface of Pipeline Right-of-ways and the Subdivision of Land (2003)*, Alberta Energy and Utilities Board policies and any other relevant Provincial legislation will be employed when considering rezoning and subdivision applications near or adjacent utility corridors.

3.9.3 Utility Rights-of-Way and Facilities

A *private corporations'* minor distribution line runs east-west through the southern 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 part of the neighbourhood walkway system.

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3.10 Catastrophic Risk Assessment

Due to the proximity of the *rail right-of-way* and planned residential development, a Catastrophic Risk Assessment ("CRA") for The Meadows ASP was completed by Doug McCutcheon and Associates. The CRA recommendations that apply to Tamarack are provided below:

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1. To follow current *rail line* requirements pertaining to buffering and land-use transitions. The CRA states that no changes to these buffering or setback requirements are required due to development within The Meadows Tamarack NSP.
2. That there be sufficient access and egress as part of the detailed development design. Design considerations ensure the roadways provide effective egress for evacuation in all directions as well as for emergency response vehicles to access the site from any direction.

The area is well within the City of Edmonton's emergency response capability area, i.e. areas further away from the City of Edmonton do not necessarily have adequate protection.

4.0 DEVELOPMENT GOALS, OBJECTIVES & PRINCIPLES

The Tamarack NSP embraces new principles that focus on the long-term balance among its economic, social and environmental resources.

4.1 Goals

The Tamarack Neighbourhood Structure Plan (NSP) includes an integrated mix of land uses to be developed in a comprehensive and organized manner with the purpose of creating a diverse, sustainable and vibrant community where people choose to live, learn, work, and play.

The Tamarack NSP seeks to achieve:

Efficient, contiguous and staged urban development;

Mixed land uses set within compact, high quality, neighbourhoods that are walkable, unique, attractive, safe and comfortable for residents;

Greater range of mobility options through integrated open space system linkages; and,

Functional and aesthetic residential housing choices to accommodate a range of income levels combined with accessible design and transportation options.

4.2 Development Objectives

The NSP has been comprehensively planned to take advantage of the plan area's natural/environmental features (Mill Creek), transportation facilities (Whitemud Drive, 23 Avenue and 17 Street) and other locational attributes, with Fulton Marsh as a natural feature being used with the north portion of the NSP area. The main development objectives of the NSP are as follows:

Develop the Plan area in a manner consistent with the direction of Plan Edmonton, the Meadows ASP and other applicable City of Edmonton policies and guidelines.

To provide a framework to deliver a high quality, comprehensively planned residential and commercial area by defining the general pattern and composition of land uses, transportation facilities, linkages, infrastructure and servicing designs, and development staging.

To address and accommodate existing uses (adjacent properties and existing residential development) within the plan.

To ensure implementation of the NSP in an orderly and staged basis.

To ensure that appropriate land use transitioning is employed between the existing *railway* right-of-way and future urban development.

A long-term commitment to the composition and integrated nature of the Tamarack NSP is necessary to ensure that the overall development concept and above noted

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objectives are met. The following development principles have been established to assist in achieving those objectives.

Establish residential dwelling and population densities reflective of a more compact city form and a range of choice in housing types.

Establish transit-supportive development to the extent possible with the planned development of a Transit Centre within the Plan area.

Establish a Community Commercial node at near the Transit Centre and at 17 Street and 38 Avenue that serves as a destination and focal point for the community and for visitors alike.

Establish an integrated and walkable suburban residential community.

4.3 Development Policies

The development principles stated below are intended to guide the NSP and amendments in order to ensure that the objectives of the Meadows ASP area are achieved.

4.3.1 Neighbourhood

Accommodate the continuing use of existing neighbouring facilities and residential development while allowing for future development of these lands if and when the owners choose to pursue that opportunity.

To develop compact, pedestrian oriented neighbourhoods that contain a complementary mix of land uses.

To design neighbourhoods that are distinct, establish a unique character and sense of place.

4.3.2 Residential

Provide for residential development within the Tamarack NSP to allow for a variety of housing forms and options consistent with consumer preferences and in conformance with municipal standards and policies.

Employ applicable design principles from the Suburban Neighbourhood Design Principles report within the plan area.

Establish sufficient overall residential densities to help support the efficient provision of neighbouring educational facilities, recreational facilities and municipal services such as public transit in a timely fashion.

Integrate smaller parcels of medium density residential development within the neighbourhood adjacent to low density residential development to provide alternative housing options within the community.

Locate residential development so as to take advantage of natural and man-made features such as storm water management facilities (SWMF's), walkways and open space.

Orient larger parcels of medium density residential development toward the collector and/or arterial road system to provide easy access and, where appropriate, to provide a transitional land use between adjacent low density residential development, commercial areas and major transportation facilities.

At the development stage, approving agencies shall review applications and consider all City of Edmonton policies and programs pertaining to affordable housing.

4.3.3 Commercial

Provide shopping centres and other major commercial development opportunities to serve residents in the Southeast Edmonton market area.

Provide neighbourhood convenience/retail opportunities to provide services to local residents.

Provide opportunity for mixed use (office and residential) development through the zoning process.

Locate and orient commercial sites along arterial and/or collector roadways to ensure high visibility and to provide convenient access opportunities for both transit and vehicles.

Promote a vibrant, walkable commercial site through attractive streetscaping and pedestrian design. Site layout and building façade treatment will avoid exposed 'dead' frontages along major circulation corridors and where buildings abut a major corridor, appropriate architectural articulation will be employed.

Ensure that the impact of commercial development on adjacent land uses is minimized through the orientation and integration of land uses, site layout and building design. This can include the appropriate application of buffering, setbacks, landscaping and façade treatments.

Arrange higher residential densities around commercial and transit service areas to provide an effective transition to less intensive uses.

Ensure convenient pedestrian linkages to commercial areas and transit nodes through the use of multi-use trails, sidewalks and walkways.

4.3.4 Transit-Supported Development

Located in the northern portion of the neighbourhood, a 2.53 ha Transit Centre / Park and Ride is located immediately east of 17 Street and south of 40 Avenue.

This facility envisions an attractive, pedestrian-oriented format that will provide a transit hub for future residents, consumers and employees within and outside Tamarack. It will be connected to the north-south central multi-use trail in the neighbourhood.

Bylaw 16455
June 17, 2013

The Transit Centre / Park and Ride is surrounded by mixed use and medium density residential land uses and is to be integrated through enhanced streetscaping along its interface. The development concept establishes a range of land uses that support local employment opportunities, commercial/retail services and amenities, and alternative transportation options that are integrated and mutually self-supporting the land uses

in the northern portion of the Tamarack neighbourhood should be supportive to transit, pedestrians and bicycle traffic.

In order to assist in making the northern portion of the Tamarack neighbourhood transit-supportive and an aesthetically pleasing urban environment, the built form should employ urban design and architectural elements that create a unique and interesting environment.

4.3.5 Transportation Network

Provide an efficient, safe and logical transportation system within the plan area to address the pedestrian, bicycle, public transit and vehicular transportation needs of residents moving to, from and within the Meadows area.

Encourage neighbourhood walkability by minimizing walking distances, providing pedestrian en-route / destination amenities, and connection of users with local services through the creation of

an interconnected street system (e.g. local roadways or 6.0 m walkways) and multi-use trail network.

Plan for the provision of transit service within 400 m of residential areas that include a range of housing densities, types and choices.

Explore opportunities to partner with the City of Edmonton on the development of transit facilities (Transit Centre, bus stops).

Employ applicable design principles from the Suburban Neighbourhood Design Principles report to the design of the transportation and circulation network.

Incorporate local road linkages at strategic locations between residential development cells that enhance neighbourhood connectivity where appropriate and feasible at the discretion of the developers.

4.3.6 School and Community

Provide the appropriate sites for educational and community league facilities through the dedication of Municipal Reserves.

Ensure that the location and size of future school sites and the designated catchment area reflects the contemporary needs and standards established by the Community Services Department.

Ensure all parks and open space areas are properly located and accessible via walkway linkages, automobiles and transit.

Provide flexible site and facility design to accommodate a full range of life-long learning and recreational needs within the community.

Ensure school sites will be accessible by future transit routes.

4.3.7 Parks & Open Space

Provide sites for open space and parks through the dedication of Municipal Reserves.

Where sufficient Municipal Reserves are available, encourage the introduction of smaller 'pocket parks' to provide residents with an alternative open space opportunities.

All pocket parks will have roadway frontage to ensure visibility into the site, and must be deemed acceptable by the Community Services Department. They will also be a minimum of 0.4 ha in size to ensure programming opportunities.

The north-south greenway will be dedicated through the development process as transportation circulation, public utility lots, walkway rights of ways or a combination thereof.

4.3.8 Private Railway Corporation Right-of-Way

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Editor

Ensure future development adheres to the guidelines established by Canadian National Railway (CNR) and Transportation Canada regarding the provision of separation spaces, fences, berms and buffers.

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Editor

The Tamarack NSP shall ensure appropriate measures are undertaken to address the transition between land uses and the *private railway corporations'* secondary line. Such measures may include the consideration of landscaping, berming, sound attenuation/screen fencing, site design and building orientation. The City of Edmonton's Urban Traffic Noise Policy will be followed and noise attenuation will be provided where required.

4.3.9 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, stormwater management facilities and public utility lots.

Incorporate a top-of-bank walkway on both sides of the Mill Creek Ravine due to its minimal width.

Ensure that all development adjacent to the top-of-the-bank is in accordance with the recommendations and requirements of Hydrogeological and Geotechnical Investigations.

Respect any applicable policies and regulations identified in the North Saskatchewan River Valley ARP and North Saskatchewan River Valley Bylaw.

4.3.10 Urban Design

The Tamarack NSP incorporates a number of key urban planning principles in the design and development of the plan area. These serve to provide a policy framework and guide for future neighbourhood development and include the following:

Promote high quality urban design that supports attractive, innovative building design and street amenities.

Contiguous, orderly, and efficient neighbourhood growth.

Community design that is pedestrian-oriented and walkable.

Commercial development that forms an attractive, vibrant destination

Provision of housing options that accommodate a range of income levels.

Provision of life long learning and employment opportunities.

Provision of alternative transportation options.

Sustainable urban infrastructure that is orderly, efficient and cost-effective.

Preservation and enhancement of natural areas and open spaces.

4.3.11 Resource Operations

Accommodate the safe and nuisance-free operation of existing utility rights-of-way corridors into the development concept as multi-use trails and open space linkages where feasible.

4.3.12 Urban Services

To integrate, within the plan area, where possible, the existing utility rights of way.

Encourage compact land use patterns and shared infrastructure that optimize land use and services efficiency.

To respect the natural drainage patterns where feasible and utilize this natural pattern to provide storm drainage service to the urban environment.

5.0 DEVELOPMENT CONCEPT

5.1 *Neighbourhood Units*

The Tamarack NSP is to be developed primarily for residential purposes (see **Figure 6.0 - Development Concept**). Tamarack encompasses approximately 201.07 gross hectares (496.8 ac.) and is bound by Whitemud Drive to the north, 23 Avenue to the south, 17 Street to the west and the *railway* right-of-way to the east.

Amended by Editor

5.2 *Residential*

The majority of land within the NSP is intended for residential development encouraging a range of housing densities, types, and choices (see **Figure 6.0 – Development Concept**). A variety of low and medium density residential dwelling units will be implemented based on market conditions and consumer preferences at the time of development.

The Tamarack NSP is forecast to have the following residential densities:

Bylaw 15884
February 27, 2012

- ***25 units per hectare for Single/Semi-Detached***
- ***45 units per hectare for Row Housing***
- ***90 units per hectare for Low Rise/Multi Family***
- ***125 units per hectare for Transit Centre – Mixed Use (Medium / High Density Residential)***

Bylaw 16455
June 17, 2013

This will result in approximately 45 persons per gross developable hectare.

Bylaw 16328
January 21, 2013

Bylaw 16455
June 17, 2013

5.2.1 Low Density Residential (LDR)

Low-density residential (LDR) areas have been planned to take advantage of the natural features (mature tree stands) where feasible and man-made amenities (walkway corridors, stormwater management facilities, parks/open spaces, etc.). Housing forms within LDR areas will be predominantly single and semi-detached residential units accommodating a variety of lot and housing sizes providing housing choice and options.



Low density residential will be developed in clusters or cells to provide a greater sense of local identity, stewardship and pedestrian safety. Appropriate vehicular and pedestrian linkages (e.g. walkways) will provide inter-connectivity within the various sub-areas as well as between some of the clusters or cells within specific sub-areas of the plan. Furthermore, the design and development of LDR will support a range of housing choices, site and building design options, and pedestrian circulation identified under Edmonton's Suburban Neighbourhood Design Principles report.

The area, number of dwelling units and population attributed to LDR development is shown in the Appendix – Land Use and Demographic Profile.

5.2.2 Medium Density Residential (MDR)

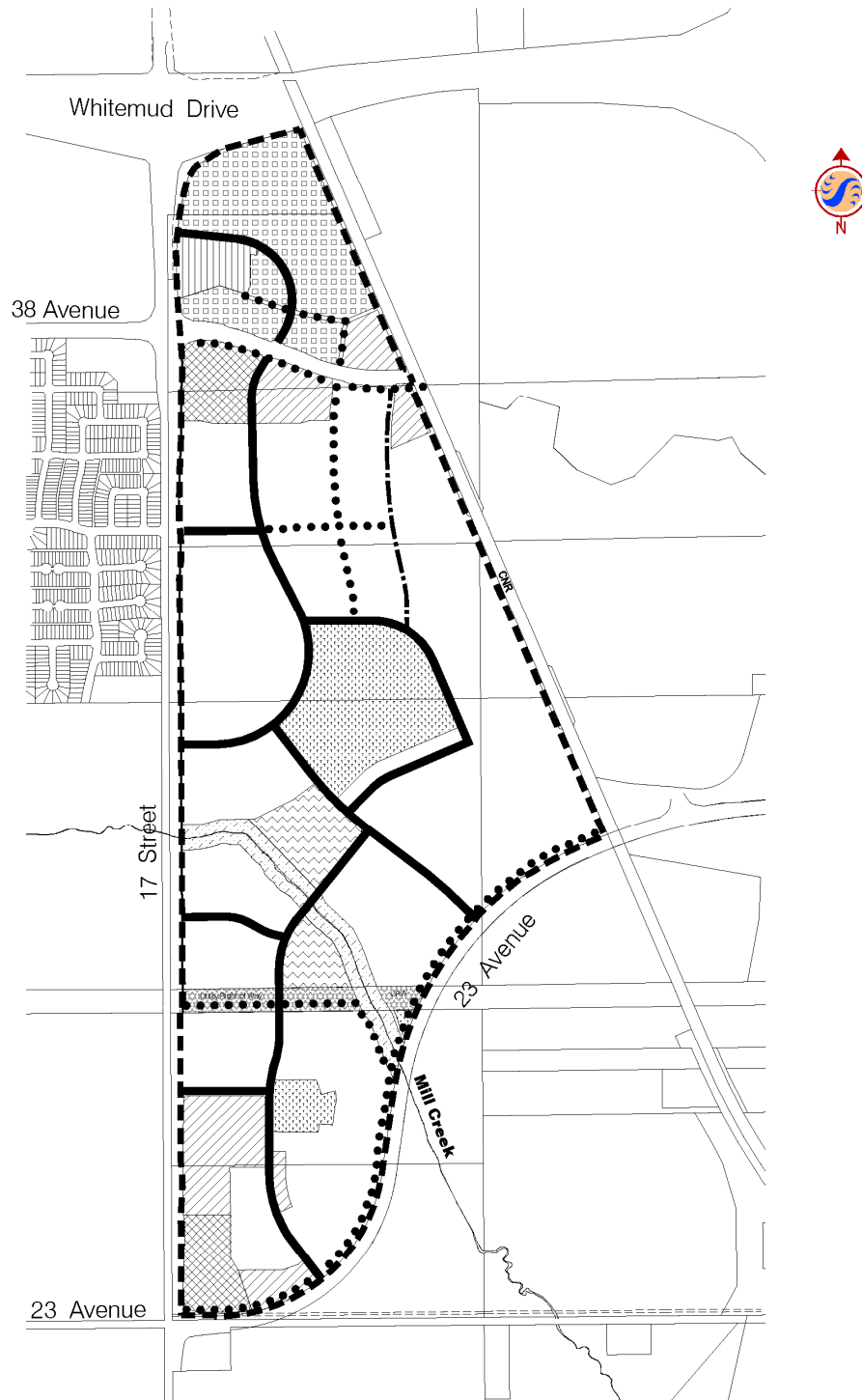
Bylaw 15223
May 25, 2010

MDR has been located in the northern and southern portions of the plan area, strategically placed near major transportation facilities (arterial/collector roads, Transit Centre), pedestrian/walkway corridors, employment/ commercial areas, and amenity areas (stormwater management facilities, schools, parks/open spaces). The location of MDR has been influenced by principles of Smart Growth (mixed land uses; housing and transportation choices, efficient use of land and infrastructure) and Smart Choices, (Transit-Supportive Development, mixed use development, walkable community). MDR housing may consist of a variety of housing forms and densities including townhomes, stacked townhomes and low-rise apartment buildings.

Bylaw 16455
June 17, 2013

The MDR in the northern portion of the plan provides additional density to support the Transit Centre / Mixed Use area. These sites maintain good accessibility from the adjacent pedestrian corridors, arterial/collector roadways and Transit Centre.

A cluster of MDR is located in the southern portion of the NSP (adjacent to 17 Street and 23 Avenue). Some of the MDR has been arranged at the entrances from 23 Avenue and 17 Street, which may form a 'gateway' into the neighbourhood. The MDR in proximity to the central park in the southern portion of the neighbourhood is close to significant amenity space for passive and active recreational opportunities and is a place where surrounding residents can gather and interact. All of the MDR sites maintain good access from adjacent arterial and collector roadways.



Stantec

Legend

	Low Density Residential		Powerline Corridor
	Medium Density Residential		Mill Creek
	Commercial		Transit Centre/Park & Ride
	Transit Centre - Mixed Used		Multi-use Corridor
	Municipal Reserve - Park		Collector Roadway
	Stormwater Management Facilities		Minor Collector Roadway
			NSP Boundary

Client/Project

DUNDEE DEVELOPMENTS
TAMARACK
NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

Figure No.

6.0

Title

Development Concept

These areas are intended to be developed under the applicable uses and densities in the Zoning Bylaw including RF5, RF6 or RA7. The type of medium density residential pursued in each development stage is subject to consumer and market demands. While parcels of MDR are likely to be developed on a self-contained basis, opportunities exist to develop street-oriented townhousing designs alongside LDR housing through sensitive streetscape design, attention to transitioning and landscaping.

*Pedestrian linkages are to be provided to the commercial site (as identified on **Figure 7-Pedestrian Linkages Map**) at the time of subdivision, and development of the commercial site should integrate these connections into the site design. The MDR sites must be designed to allow safe pedestrian flow through the sites and from the local street network to the commercial site. The Medium Density sites could utilize the required yards to create connections to abutting MDR and commercial sites and to the local street system in order to integrate these periphery components of the community with the rest of the neighbourhood. These linkages are intended to provide internal circulation to enhance the safety and experience of the pedestrian rather than forcing them to the periphery of the neighbourhood for pedestrian access.*

The area, number of dwelling units and population attributed to Medium Density Residential development is shown in the Land Use and Population Statistics.

5.3 Commercial

The commercial areas in the Tamarack NSP have been designed to support a variety of commercial, retail, employment, medical, and professional office uses to serve the needs of local and regional customers. These will help accommodate the service and retail demands of the community in addition to providing employment opportunities associated with the increasing development in southeast Edmonton.

The area of land designated for commercial development and neighbourhood commercial is available in the Appendix. Development objectives for commercial areas are guided by the Meadows ASP, Tamarack NSP and market demand for commercial in southeast Edmonton.

5.3.1 Commercial



A community commercial site is situated in the northern part of the NSP immediately southeast of 17 Street and 38 Avenue (see **Figure 6.0**). The site is of adequate size to accommodate a number of uses such as a grocery store and free-standing retail stores. The sites frontage to 17 Street and 38 Avenue provides high visibility and good access opportunities suitable for the development of commercial uses. This major commercial site is intended to serve local and regional consumer needs under the provisions of the

Shopping Centre (CSC) Zone.

Community Commercial will provide a range of services and amenities within easy walking distance of medium residential areas and transit service. Compact development around this major activity node supports contiguous growth, efficient infrastructure, and effective provision of facilities and services over the course of neighbourhood

development and lifecycle. The area attributed to the Community Commercial site is shown in the **Appendix**.

Bylaw 15223
May 25, 2010

A second Community Commercial site has been located in the southern portion of the neighbourhood, east of 17 Street and north of 23 Avenue. This site is sufficiently large enough to support a number of uses such as a grocery store, eating and drinking establishments and freestanding retail stores. The site has significant frontage along both 17 Street and 23 Avenue providing for increased access opportunities and is appropriate for commercial uses.

Bylaw 15223
May 25, 2010

*Pedestrian linkages are to be provided to the commercial site (as identified on the **Pedestrian Linkages Map Figure 7**) and development of the commercial site should integrate these connections into the site design. The Commercial and Medium Density sites could utilize the required yards to create connections to abutting sites and to the local street system in order to integrate with the rest of the neighbourhood these components that have been placed at the periphery of the neighbourhood. These linkages are intended to provide internal circulation to enhance the safety and experience of the pedestrian rather than forcing them to the periphery of the neighbourhood for pedestrian access.*

Specific details concerning access into these sites will be determined at the rezoning and subdivision stage.

5.4 Transit Centre – Mixed Use

Bylaw 16455
June 17, 2013

The intent of the Transit Centre - Mixed Use land use is to allow for the development of compatible residential (low-rise/medium density housing and medium to high rise units), retail, office and business uses within the immediate area around the Meadows Transit Centre.

Transit Centre / Mixed Use is intended to promote unique development opportunities in order to facilitate the creation of a mixed residential / commercial transit-oriented neighbourhood. This area will serve as an important neighbourhood focal point and destination for Tamarack and the surrounding communities.

The Transit Centre - Mixed Use land use will utilize a Direct Control zone and shall respect the Transit Oriented Development Guidelines Policy C-565 and Transit-Supportive Development design elements stated below.”

5.5 ***Transit-Supportive Development***



The northern portion of the NSP is anticipated to be developed using Transit-Supportive Development (TSD) principles. Transit-Supportive Development incorporates traditional neighbourhood design, integrating aspects of pedestrian access, open space and a variety of land uses in close proximity to transit. The introduction of TSD development within the NSP provides opportunity to pursue innovative facilities and services that will lead to the development of a healthy, vibrant and sustainable community.

Transit-Supportive Development shall be achieved by adopting the following elements:

- § Mixed-use development;
- § Compact and dense development form;
- § Accessible and well-served by transit;
- § Safe and efficient pedestrian connections/corridors;
- § Contain public and civic spaces adjacent to transit stations;
- § Utilize urban design and architectural elements to create a high quality pedestrian-friendly environment; and
- § Act as a community focal point.

The Transit Center, located in the central part of the TSD area, will serve as a major focal point and activity hub. Access to the center shall be provided via sidewalks and through connection to the main north-south greenway. The opportunity to incorporate pedestrian accesses within the adjacent land uses may be pursued at the rezoning and subdivision stage. The Transit Center is situated within 400m of the adjacent land uses, which ensures a comfortable walking distance.

The Business/Commercial areas are planned to accommodate a range of office and retail uses. The Business/Commercial parcel immediately south of Whitemud Drive is best suited for high quality office uses due its good accessibility and exposure. The Business/Commercial parcel east of 17 Street is in a suitable location to take advantage of retail commercial uses.

The Mixed-Use Residential/Commercial area is situated in the southeastern portion of the TSD area. The mixed-use will include medium density residential housing and the opportunity for commercial uses on the ground floor. The types of commercial/retail uses anticipated may include specialty retail services, restaurants (coffee shops, beauty salons) and small professional offices (accounting, law firms).

5.6 Educational Facilities, Parks and Open Space

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

The school/ park sites have been sized to accommodate the space requirements of the School Boards and City within the land that will be allocation as part of the 10% Municipal Reserves requirement. The sites have been located according to prudent land use planning principles and respect to current land ownership.

5.6.1 School Site

A large school site of 12.47 ha is located in the central portion of the NSP. The schools central location establishes an important focal point and provides additional public space that may be utilized for various passive and active recreational uses. The site maintains good vehicular and pedestrian accessibility due to its proximity to collector roadways, future transit routes and the multi-use corridor. This school site has been sized in order to accommodate a public elementary school and a public junior high. These schools are to be housed in separate buildings.

The Tamarack NSP encourages Joint Use Site opportunities that enhance school-community relationships, support collaborative planning of shared sites, and increase the overall efficiency and effectiveness of community resources. As such, there will be a Community League envelope of 2.63 ha which will be located on the school/park site.

5.6.2 Parks and Open Space

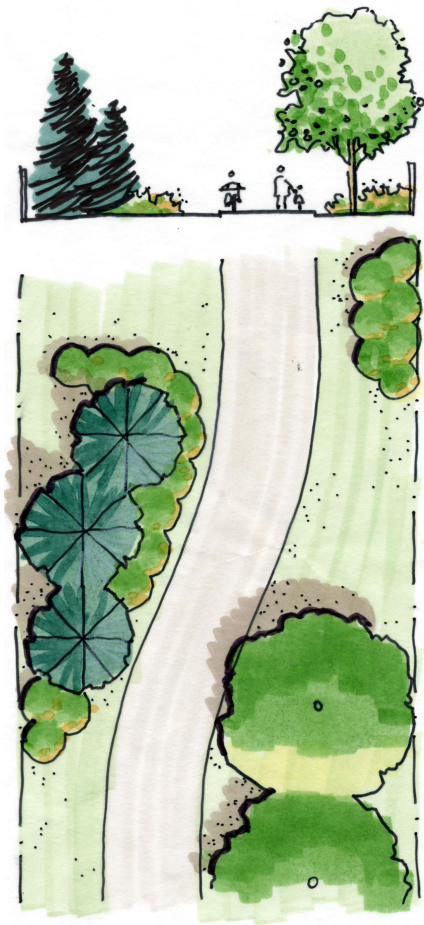


Parks and open space sites within the plan area have been strategically located to provide an amenity area for users and residents, act as neighbourhood focal points, and preserve natural areas and mature tree stands (where possible). Parks and open space areas have been located adjacent to roadway and multi-use corridors to provide adequate accessibility via pedestrian, vehicular and transit. Collectively, these park sites promote positive health and community interaction and establish a community focal/amenity area.

A central park located in the southern portion of the NSP provides additional green space for the neighbourhood. The parks central location helps to create a neighbourhood focal point and serves as a unique community amenity that is of adequate size to accommodate a variety of leisure and recreational activities. Low and Medium Density Residential uses surround the site, which provides additional surveillance and 'eyes on the street' helping to enhance public safety and comfort. *The central park has approximately 134m of collector roadway frontage on the west side, and approximately 88m of local roadway frontage on the east. Pedestrian linkages from surrounding residential development must be provided to the park site on the north and south boundaries at the time of subdivision (as identified on **the Pedestrian Linkages Map Figure 7).***

Bylaw 15884
February 27,
2012

Bylaw 15223
May 25, 2010



The *power transmission* utility corridor may be incorporated into the multi-use and open space system. The corridor provides an east-west linear linkage through the plan area from which adjacent multi-use corridors can join (see **Figure 7.0 – Pedestrian Linkages**).

Amended by Editor

5.6.3 Walkways, Greenways and Pedestrian Corridors



A comprehensive multi-use corridor system is planned for the Tamarack NSP (see **Figure 7.0 – Pedestrian Linkages**). A system of walkways will provide connections to the school/ park sites, stormwater management

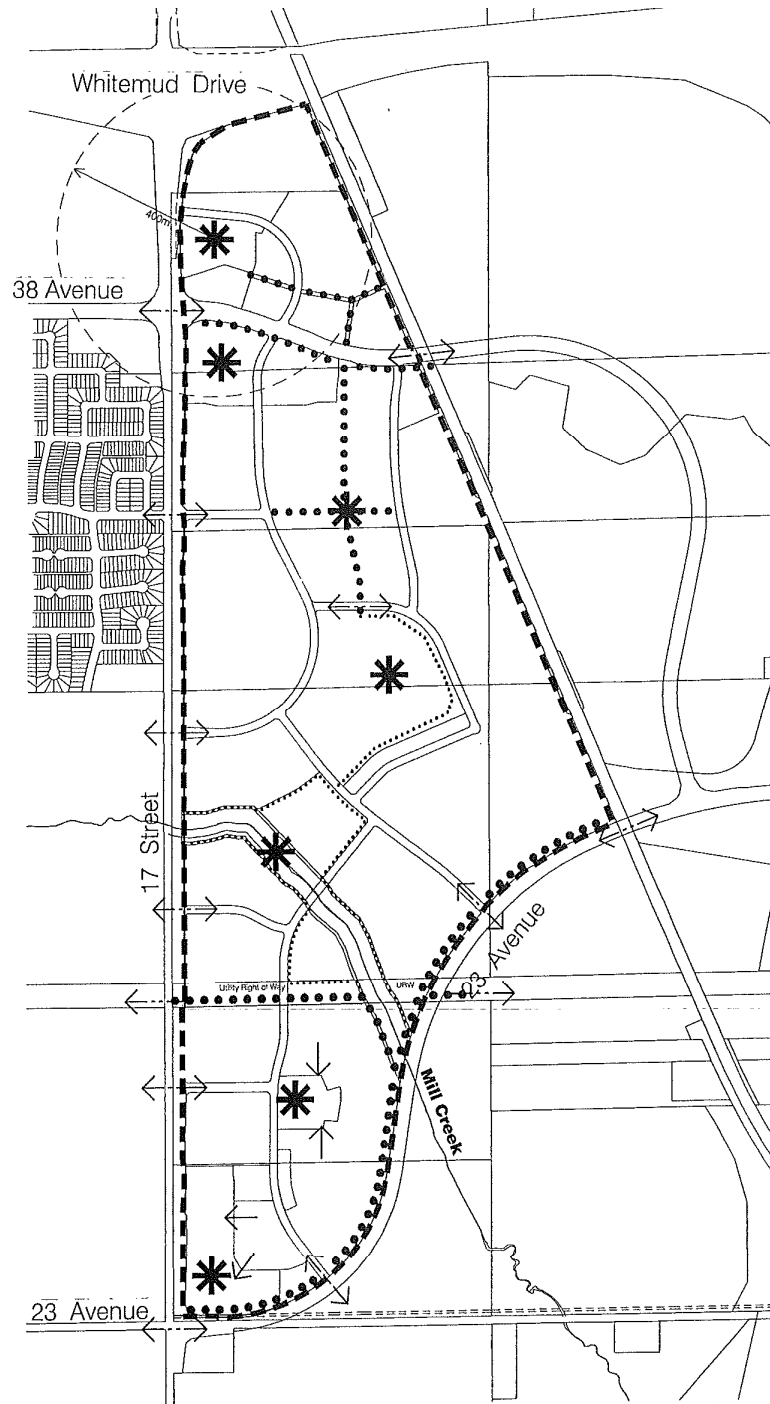
facilities, commercial areas, and various other focal points (Mill Creek). A major north-south greenway is situated in the north-central portion of the plan area providing a seamless link between the school/park site and the Transit-Supportive Development area. This greenway (see abutting concept rendering) will be 15 m wide and accommodate active transportation on a

3.0 m multi-use trail. The greenway will include the following: improved trails (asphalt); grassed or naturalized plantings adjacent to trail; park furniture (e.g. benches, garbage receptacles); trees and shrub beds (trees planted at 75 trees per landscaped ha); and directional and interpretative signage. Private properties adjacent to the greenway will be fenced by the developer, unless otherwise agreed to by Community Services. The fences will be placed on private property. The greenway will be dedicated through the development process as transportation circulation, public utility lots, walkway rights of ways or a combination thereof.

The *power transmission* corridor provides a direct east-west connection to the Mill Creek and Silverberry neighbourhood to the west, across 17 Street. These major corridors play an integral part in connecting the residents to the various amenities within and adjacent to the community.

Top-of-bank walkways shall be provided on both sides of the Mill Creek Ravine. No top-of-bank roadways are planned adjacent to the Mill Creek ravine due to its overall small the size and depth.

A number of additional walkway corridors provide access from the residential clusters to the adjacent transportation facilities, storm water facilities, school/parks sites and destination areas.



- Legend
- Multi-use Corridor
 - Minor Pedestrian Linkage
 - > Proposed Pedestrian Linkage
 - NSP Boundary
 - * Destination Areas

Client/Project
QUALICO DEVELOPMENTS
TAMARACK
NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

Figure No.
7.0

Title
Pedestrian Linkages

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June 2012
1161 100795

6.0 Engineering Services

6.1 Stormwater Drainage



The Tamarack NSP is situated within the Mill Creek and Fulton 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 – Storm Drainage**.

The Mill Creek study defines an extensive watershed within the Tamarack plan area (see **Figure 8.0**). A Neighbourhood Design Report (NDR) will address the watershed for Tamarack. It should be noted that the watershed is required to be protected until the ponds and upstream facilities are constructed.

Amended by Editor

The Tamarack Neighbourhood consists of two storm basins (see Figure 8.0). The northern portion of the neighbourhood will discharge into Fulton Marsh, via storm pipes under the *Railway line*. A sedimentation forebay will be constructed within the Fulton Marsh. This northern storm basin, 206, can be developed sooner than the southern basin, 311B, as the existing servicing connections and land ownership is conducive to facilitating immediate development. Whereas, the southern basin cannot be developed until such time that Mill Creek is expanded, services are extended and the ownership of the Mill Creek area is owned by a developer willing to develop land.

Bylaw 15884
February 27, 2012

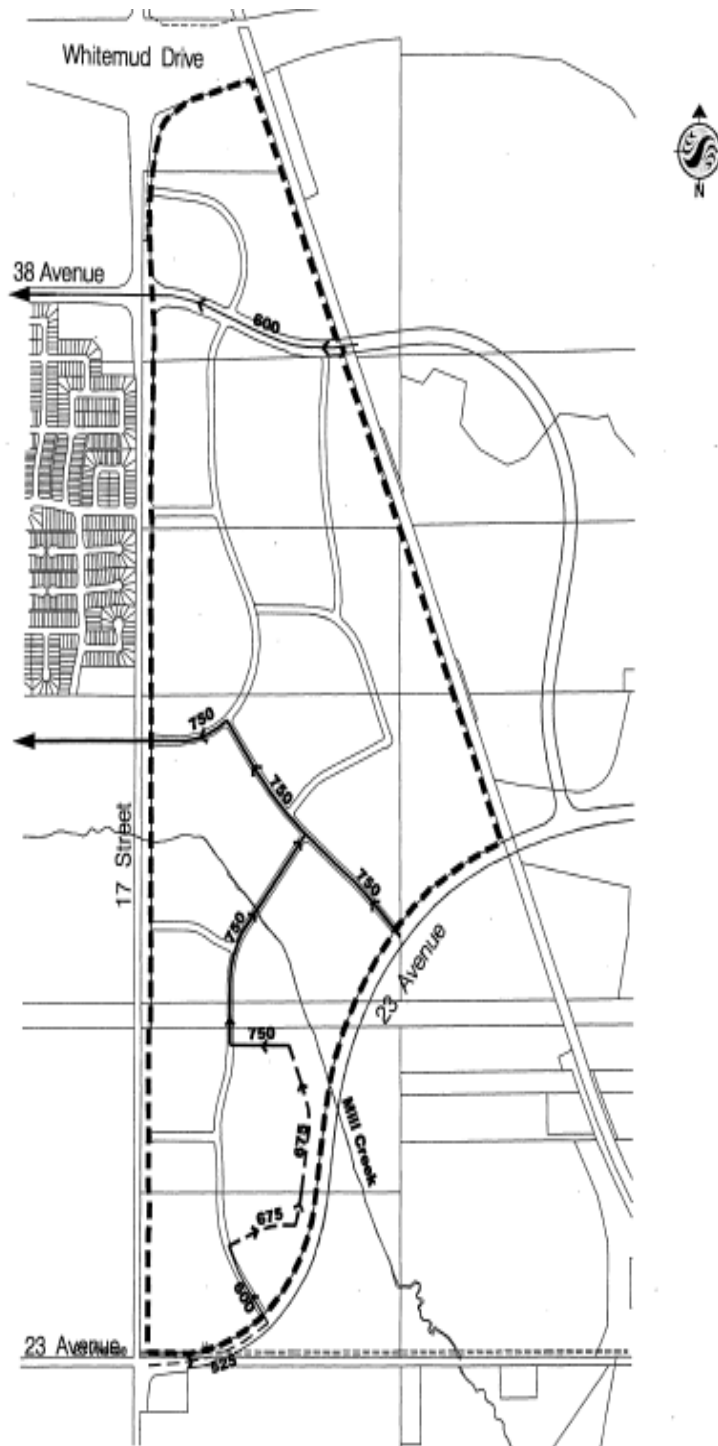
The southern portion of the Tamarack Neighbourhood will discharge into *three* separate stormwater management facilities adjacent to Mill Creek. Mill Creek will be graded for approximately 390m west of 17th Street to facilitate the development east of 17th Street. Mill Creek will be graded, to enable the storage adjacent to it. The SWMF adjacent to Mill Creek will have sedimentation forebays. The SWMF adjacent to Mill Creek will overflow into the Mill Creek, ultimately discharging via piping under 17th Street. Mill Creek will be graded to 23rd Avenue to facilitate future development to the south.

Further details regarding stormwater drainage are addressed in the NDR, which was prepared and submitted under separate cover by Stantec Consulting Ltd. An Environmental Impact Assessment for the stormwater outfall into Fulton Marsh has been completed.

An Environmental Impact Assessment for the SWMF adjacent to Mill Creek has also been completed. The subdivision and subsequent construction of land within basin 311B will not commence until such time that all applicable environmental approvals have been obtained to facilitate the expansion of Mill Creek and creation of adjacent sedimentation forebays.



Storm Drainage



Bylaw 15223
May 25, 2010



Stantec

Legend

- Direction of Flow
- - - NSP Boundary

Client/Project

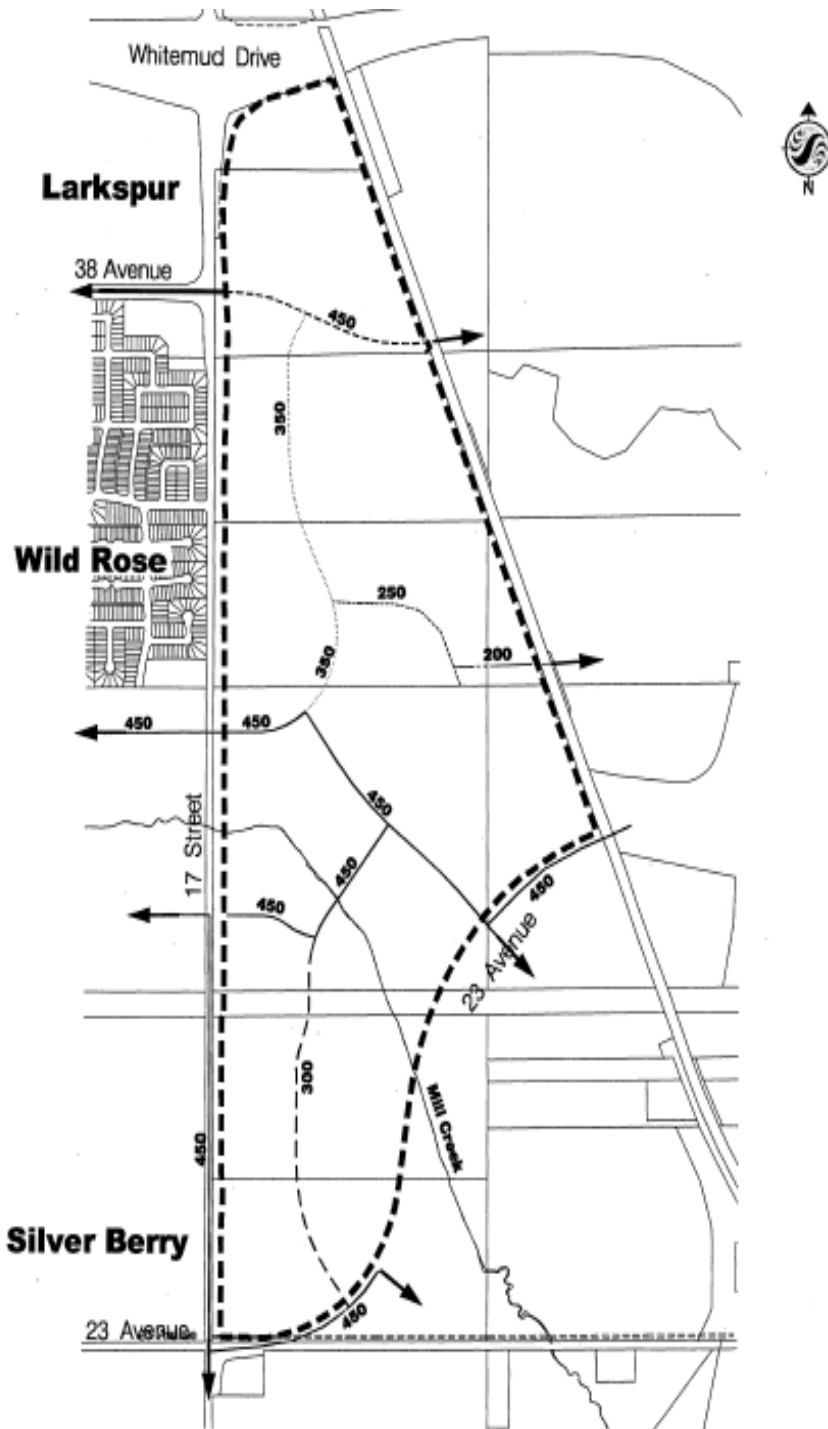
QUALICO DEVELOPMENTS WEST LTD
TAMARACK
NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

Figure No.

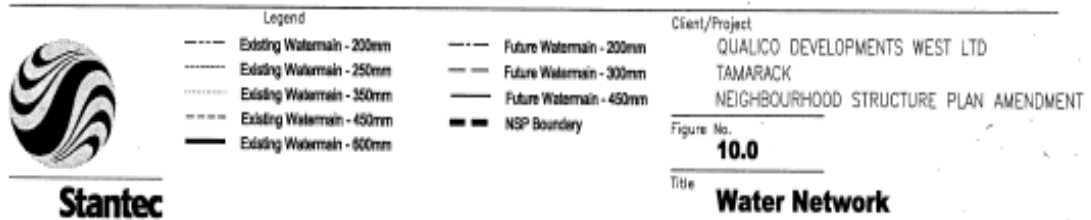
9.0

Title

Sanitary Services



Bylaw 15223
May 25, 2010



6.2 Sanitary Drainage

The Tamarack NSP can be serviced with the extension of existing sanitary sewer trunk systems to the west (see **Figure 9.0 – Sanitary Services**). Sanitary capacity has been provided in the adjoining systems. The onsite sanitary network will follow the internal roadway network and associated public utility lots.

Further details regarding the sanitary drainage schemes for the NSP are provided in the aforementioned NDR.

6.3 Water Distribution

The water distribution network for Tamarack NSP is illustrated on **Figure 10.0 - Water Network**. Water services will enter the plan area from existing and future transmission lines located on 34 Street. Extensions will be constructed as required by the pace of development.

The primary source of water for the NSP area will be provided from the Burnewood Booster station located at 50 Street and 34 Avenue. A 600mm water main travels east to 34 Street, north to 38 Avenue, then east, terminating at a stub at 22 Street. At ultimate design, the main will be looped to feed Neighbourhoods Four, Five, and Seven

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/industrial uses. Water looping will be provided in accordance with the requirements of EPCOR. A Water Network Analysis submitted under separate cover will provide more detailed information regarding water servicing for the NSP.

6.4 Shallow Utilities

Gas, power and telephone utility services will be extended from the existing neighbourhood developments by the respective utility companies. The existing infrastructure for gas and power within the plan area will form part of the overall permanent servicing system for these respective utilities.

7.0 Transportation

7.1 Transportation



The Municipal Development Plan (MDP) establishes the integrated movement of people and goods effectively, efficiently and safely throughout Edmonton and beyond as a key priority. The Tamarack Neighbourhood Structure Plan (NSP) supports this directive through the creation of an interconnected hierarchical transportation system as illustrated in **Figure 11.0 – Transportation**.

The transportation network for Tamarack consists of a full range of facilities to accommodate the movement of automobiles, pedestrians, bicycles and public transit. The following sections describe the transportation system.

7.2 Regional Network

The Tamarack NSP is served by a number of transportation facilities. These will provide access to the City and the greater metropolitan area by virtue of its close proximity to a number of existing and proposed major transportation corridors. According to the City of Edmonton Transportation Master Plan (2000), these include:

- Whitemud Drive
- 17 Street
- 23 Avenue

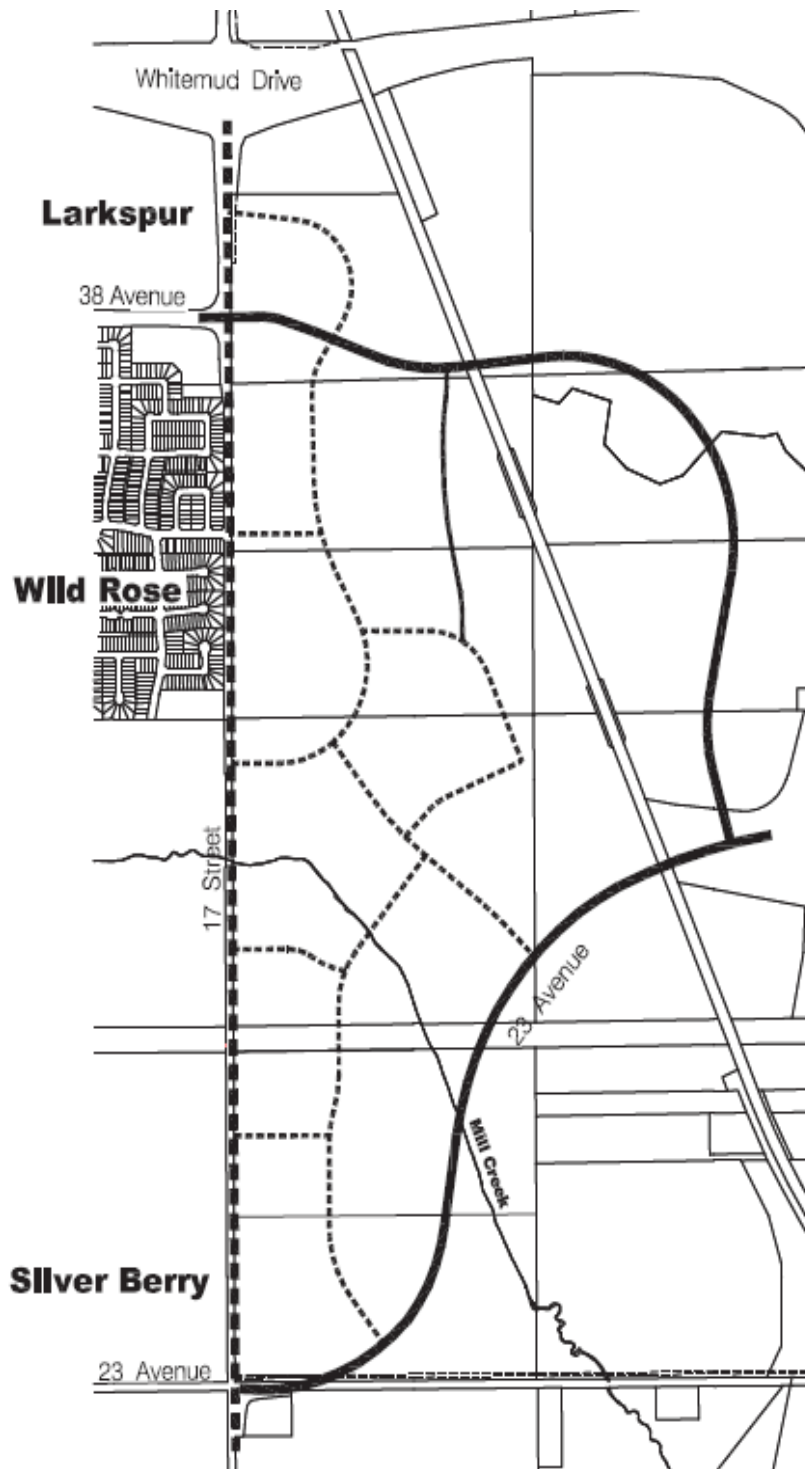
Highway 14 (Highway 216), situated east of the plan area forms the eastern leg of the Ring Road and provides an important north-south link.

The southeast leg of the Anthony Henday Drive is scheduled for completion by 2007. The neighbourhood's proximity to the future Anthony Henday Drive will provide a strong east-west corridor ultimately connecting Highway 2 (Calgary Trail) to Highway 14 (Hwy 216).

7.3 External Roadway Circulation

Amended by Editor

The Tamarack NSP is bounded by Whitemud Drive to the north, 23 Avenue to the south, 17 Street to the west and the *railway* to the east. Western access to the NSP is provided at various locations along 17 Street, 23 Avenue, 38 Avenue. Whitemud Drive will ultimately be constructed as a limited access freeway.



Bylaw 15884
February 27, 2012



Stantec

Legend

- Arterial - 6 Lane
- Arterial - 4 Lane
- Collector Roadway w/ Transit Routing
- Minor Collector Roadway

Client/Project

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TAMARACK
NEIGHBOURHOOD STRUCTURE PLAN AMENDMENT

Figure No.

11.0

Title

Transportation

7.3.1 Highways and Regional Roadways

The Tamarack NSP will enjoy a high level of accessibility to the Greater Edmonton Region by virtue of its close proximity to the following existing/planned major regional roadways:

- Whitemud Drive which borders the development to the north;
- Highway 14 (Hwy. 216) situated to the east of the plan area; and
- Anthony Henday Drive situated to the south of the plan area.

Whitemud Drive will be developed to freeway standards with the completion of interchanges at 34 Street and 17 Street. The 34 Street interchange is currently under construction and is to be completed by 2005. A major interchange currently exists at Whitemud Drive and Highway 14 (Hwy. 216). The southeast leg of the Anthony Henday Drive, a major east-west link, is to be completed by 2007.

7.3.2 Arterial Roadways

Arterial roadways accommodate the movement of inter-municipal traffic and generally maintain limited direct access to adjacent land uses. 17 Street, 23 and 38 Avenues are designated as arterial roadways within the plan area (see Figure 11.0). These arterials facilitate traffic in a north-south and east-west direction and provide access to the major transportation routes (Whitemud Drive, Highway 216, Anthony Henday Drive). Appropriate intersection spacing and access/egress requirements are respected along these arterial roadways.

7.3.3 Collector Roadways



Collector roadways serve to “collect” traffic from local roadways and facilitate it to arterial roadways and provide access to adjacent properties. Collector roadways are designed to accommodate two-lane traffic and on-street parking.

Three internal collector roadways facilitate traffic within the Tamarack plan area providing direct connections with 17 Street, 23 Avenue and 38 Avenue.

7.3.4 Local Roadways

Local roadways provide access to adjacent land uses and maintain a limited role in the overall movement of traffic within the Tamarack NSP.

7.4 Transit Service

The Tamarack NSP has been designed to accommodate future transit service along the collector and arterial roadway network. Transit service shall provide convenient service between neighbourhoods, commercial areas, and employment precincts. Transit service should be routed to ensure that walking distances are within 400m of all residents.

A Transit Centre (to be dedicated under the Arterial Roadway Assessment) with a park and ride facility is planned for the northern portion of the NSP (adjacent to 38 Avenue and 17 Street). The land uses adjacent to the Transit Center are to be developed respecting the Transit-Supportive Development principles.

The transit system shall be extended into the development area in accordance with the City of Edmonton Transit System Guidelines as demand warrants. Transit service is currently present in the existing Neighbourhoods of Larkspur, Wild Rose and Silver Berry.

7.5 Multi-Use Corridors and Bicycle Routes



A comprehensive multi-use trail system connecting the Tamarack neighbourhood to focal points (school/parks, Transit-Supportive Development, Transit Center), shopping areas and other destination areas is planned. These corridors will be clearly marked and separated from vehicular traffic to ensure pedestrian and cyclist safety. Multi-use trails will also be provided to minimize walking distances where street interconnections are not feasible.

A major north-south multi-use corridor is planned for the central portion of the NSP. This major corridor provides a seamless connection to the Transit-Supportive Development to the north and the central school/park site to the south. An east-west multi-use corridor provides a direct connection from the collector roadway to the west and the residential sub-district to the east. An open space area is planned at the intersection of these two corridors, which may serve as a focal point or gathering place for residents to interact and relax.

Amended by Editor

An additional multi-use corridor utilizing the *power transmission* utility right-of-way provides a direct east-west linkage from 17 Street to 23 Avenue.

Landscaping and ornamental street furniture may be provided within the corridors to enhance their aesthetics and to provide a higher quality pedestrian environment. Sidewalks shall be provided along all collector and arterial roadways in accordance with City policies and practices.

7.6 Parking

Parking for vehicles will generally be provided off-street in conjunction with residential and commercial development. Edmonton Zoning Bylaw parking requirements should be used as the basis for the development of appropriate off-street parking facilities.

7.7 Truck Routes

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

- 17 Street north of 23 Avenue to Whitemud Drive;
- 23 Avenue between 17 Street and 34 Street;
- 34 Street south of 23 Avenue to the City Limits, and;
- 34 Street north of 23 Avenue to Whitemud Drive is a daytime truck route.
- Both Whitemud Drive and Highway 14 (Hwy 216) are Dangerous Goods Routes

Amended by Editor

It is anticipated that the section of road along 17 Street between 23 Avenue and the Anthony Henday Drive will be designated as a 24-hour truck route. A 1.0m berm and fence shall be constructed on the east side of 17 Street to provide adequate separation between the future arterial roadway and residential development. Consideration of land-uses adjacent to these 24hr truck routes will be reviewed in detail by *Transportation Department*.

8.0 IMPLEMENTATION

The Tamarack NSP shall be developed in stages in accordance with market demands, over an approximate 5 to 10 year horizon. The following section outlines the recommended implementation sequence and rationale for neighbourhood unit development. The development sequence is illustrated on **Figure 12.0 – Staging Plan**.

8.1 *Development Staging*

Development of the Tamarack NSP represents a logical and contiguous extension of the residential land use patterns already established in Neighbourhoods One, Two and Three.

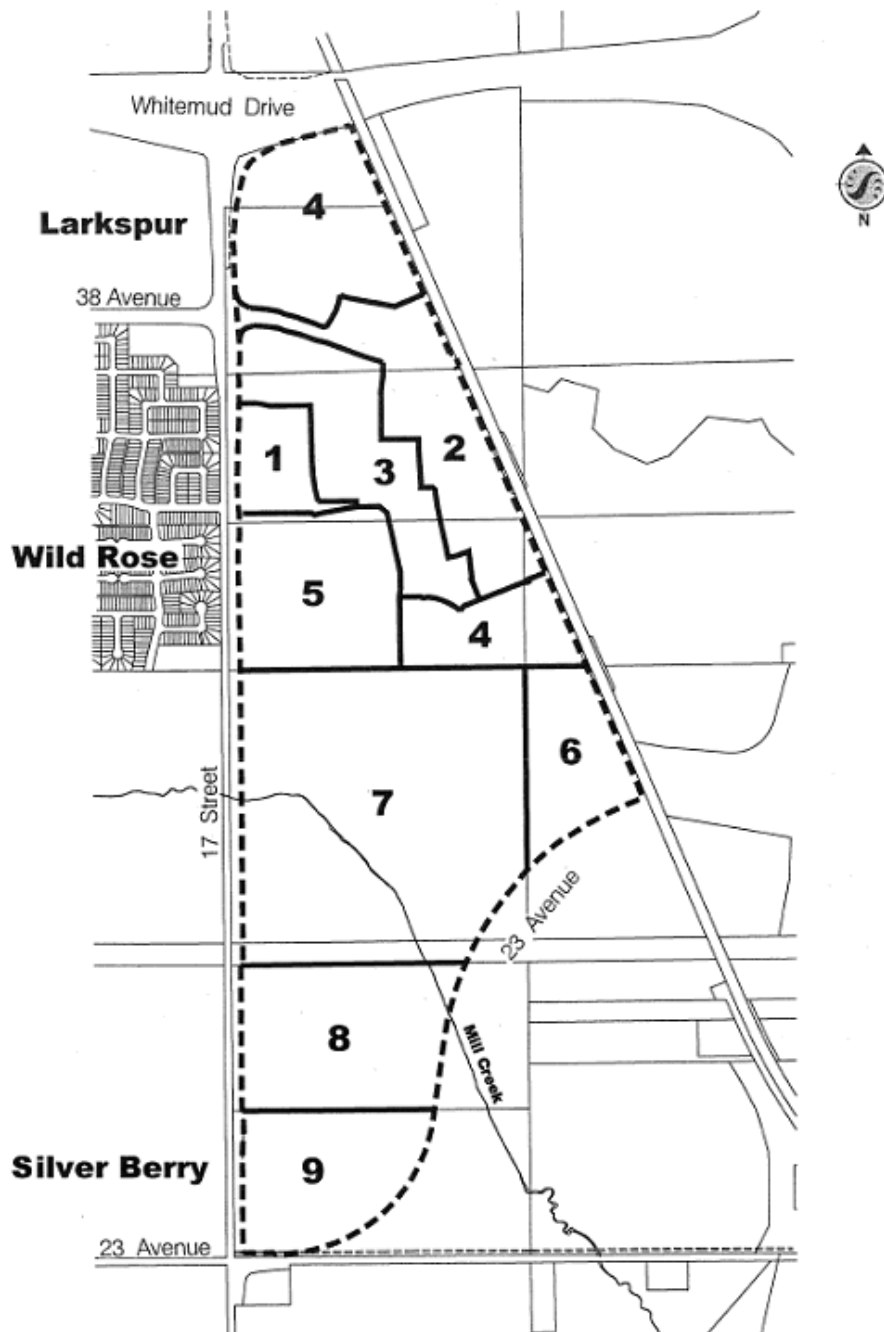
Development of Tamarack is anticipated to initiate within the next 1 to 2 years in consideration of increased housing demand in southeast Edmonton, land absorption trends, and the completion of Anthony Henday Drive.

Infrastructure to service these neighbourhoods will be extended as per detailed engineering. Particular consideration will be given to community facilities and services planned for the neighbourhood.

8.2 *Rezoning and Subdivision*

The land within The Tamarack NSP is presently zoned as Agricultural (AG) and Industrial Reserve (AGI). Rezoning and subdivision of the land will conform to the land uses as designated in the NSP.

Furthermore, prior to the rezoning and subdivision of the lands within the Mill Creek drainage basin, specific to Areas 311 B & 311 C, all pertinent environmental and geotechnical studies (e.g. Environmental Impact Assessment, Geotechnical Slope Stability Study, et cetera) will need to be completed, including permits and approvals from other agencies.



Stantec

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Legend
 — Staging Boundary
 - - NSP Boundary

Client/Project

TAMARACK
 NEIGHBOURHOOD STRUCTURE PLAN

Figure No.
12.0

Title
Staging Plan

November 2005
 1161 09569

TAMARACK NEIGHBOURHOOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 16455
Amended June 17, 2013

Amended by Editor

	Area (ha)	% of GDA
Gross Area	201.07	
Creeks/Ravine Lands (ER)	6.48	
Major Arterial Road ROW	2.52	
Pipeline/Utility Corridors	3.14	
Gross Developable Area	188.93	100.0
Municipal Reserves		
School Site	12.47	6.6
Parks	2.11	1.1
Greenway	1.99	1.1
Transit Center	2.53	1.3
Commercial	7.12	3.8
Transit Centre - Mixed Use*	13.58	7.2
Stormwater Management	8.27	4.4
Circulation @ 18%	34.01	18.0
Total Non-Residential	82.08	43.44%
Net Residential Area	106.85	56.56%

	Area (ha)	Units/ ha	Units	% of Total Units	People / Unit	Population
Low Density Residential						
<i>Single/Semi-detached</i>	89.97	25	2,246	61.1	2.80	6,298
Medium Density Residential						
<i>Row Housing</i>	5.50	45	248	6.7	2.80	693
<i>Low Rise/Multi Family</i>	6.85	90	617	16.8	1.80	1,110
Transit Centre – Mixed Use (Medium / High Density Residential)	4.53	125	566	15.4	1.80	1019
Total Residential	106.85		3680	100		9120

Gross Population Density: 44.3 persons per gross developable hectare

Net Population Density: 81.0 persons per net residential hectare

Unit Density: 31.8 units per net residential hectare

LDR / MDR Ratio: 68% / 32%

Sum of MDR units = 1065

Student Generation Statistics

Level	Public	Separate	Total
Grades K-8	504	216	720
Grades 9-12	251	108	359
Total	755	324	1,079

References

The following land use documents have been identified and their policies and guidelines used in preparation of this Neighbourhood Structure Plan.

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