

The Meadows Area Structure Plan

Office Consolidation January 2018

Prepared by:

*Planning Coordination
City Planning
Urban Form and Corporate Strategic Development
City of Edmonton*

Bylaw 13531, as amended, was adopted by Council in January 2004. In January 2018, this document was consolidated by virtue of the incorporation of the following bylaws:

- Bylaw 13531* Approved January 21, 2004 (to adopt The Meadows Area Structure Plan)
- Bylaw 14112* Approved February 22, 2006 (to amend The Meadows Area Structure Plan)
- Bylaw 14442* Approved December 12, 2006 (to accommodate row house development for the first time homebuyers on a vacant surplus school building envelope located on a school/park site)
- Bylaw 14622* Approved July 9, 2007(changes to reflect The Meadows Neighbourhood Four NSP)
- Bylaw 15395* Approved April 12, 2010 (to delete a school site, reconfigure northern park into two smaller ones, adjust neighbourhood boundary, redesignate LDR for Special Study Area, recognize major roadway through central portion of neighbourhood, and recognize the approved neighbourhood of Maple)
- Bylaw 15222* Approved May 25, 2010 (to realign north-south collector roadway and realign connecting collector from 17 Street; reconfigure and shift location of southern park site to north; reconfigure and increase the area of land intended for commercial by 2.11 ha in the southern end of Tamarack, and amend relevant figures and statistics)
- Bylaw 16327* Approved January 21, 2013 (to reconfigure and increase the area of land intended for commercial by 2.4 ha in the southern end of Tamarack, and amend relevant figures and statistics)
- Bylaw 16344* Approved March 4, 2013 (to redesignate land from commercial to residential uses, realign a collector roadway, reconfigure a Stormwater Management Facility and update all relevant text, statistics and figures accordingly)
- Bylaw 16443* Approved June 17, 2013 (to redesignate a religious assembly site to mixed use area and update all relevant text, statistics and figures)
- Bylaw 16498* Approved September 16, 2013 (to redesignate land from residential to institutional uses, and update all relevant figures and statistics)
- Bylaw 17143* Approved June 9, 2015 (to reconfigure a Stormwater Management Facility in the southeast area of the Laurel neighbourhood, and amend relevant figures and statistics)
- Bylaw 17365* Approved November 16, 2015 (changes to reflect the Aster NSP)
- Bylaw 18269* Approved January 22, 2018 (to redesignate land from park to residential uses and reconfigure the stormwater management facility in the Laurel Neighbourhood)

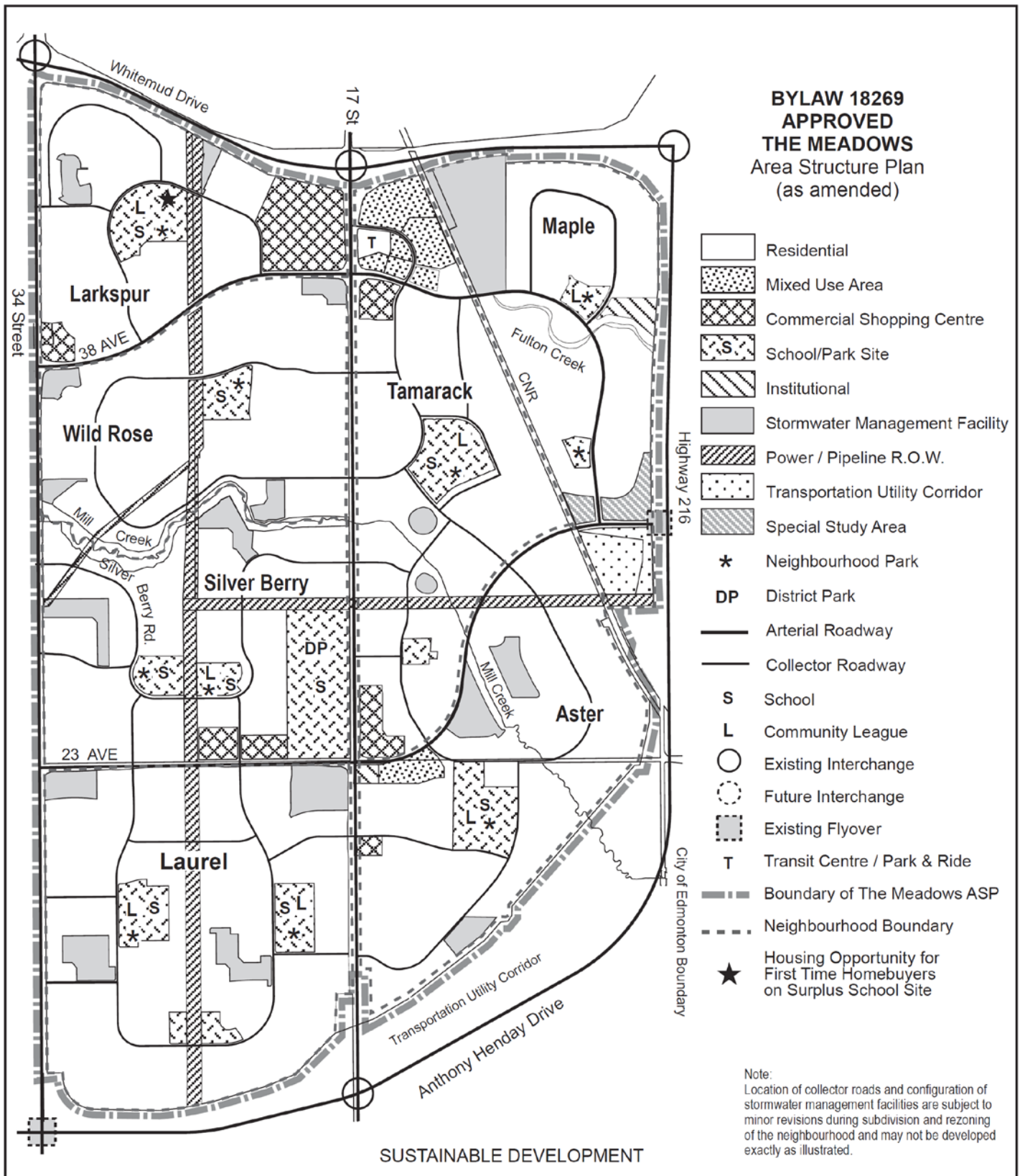
Editor's Note:

This is an office consolidation edition of The Meadows Area Structure Plan, Bylaw 13531, as approved by City Council on January 21, 2004.

For the sake of clarity, new maps and a standardised format were utilised in this Plan. Where it provides clarity, names of City departments have been standardised 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 italicised 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
Urban Form and Corporate Strategic Development



Bylaw 18269, January 22, 2018

**THE MEADOWS AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 18269**

| | Area (ha) | % of GDA |
|---|----------------|---------------|
| Gross Area | 1,369.3 | |
| Arterial Roadways | 61.3 | |
| Utility/Pipeline Corridors and Railway Facilities | 33.1 | |
| Environmental Reserve* | 11.3 | |
| Gross Developable Area | 1,263.6 | 100% |
| Parks and Schools | 146.7 | 11.6% |
| Mixed Use Areas | 25.2 | 2.0% |
| Transit Centre/Park and Ride | 2.5 | 0.2% |
| Commercial | 39.0 | 3.1% |
| Stormwater Management Facilities | 77.5 | 6.1% |
| Circulation | 234.9 | 18.6% |
| Other (e.g. Cemetery, Booster Station) | 1.7 | 0.1% |
| Institutional | 3.3 | 0.3% |
| Total | 530.8 | 42.0% |
| Net Residential Area | 732.8 | 58.0% |
| RESIDENTIAL LAND USE AND POPULATION | | |
| | Area (ha) | Population |
| Larkspur | 82.4 | 6,606 |
| Wild Rose | 107.1 | 6,770 |
| Silver Berry | 86.2 | 5,818 |
| Laurel | 172.6 | 13,815 |
| Aster | 104.9 | 8,755 |
| Tamarack | 105.5 | 9,120 |
| Maple | 74.0 | 6,494 |
| Total Residential | 732.7 | 57,378 |

Density: 45.4 persons per gross developable hectare

| STUDENT GENERATION | Elementary | Junior/Senior High | Total |
|---------------------------|-------------------|---------------------------|--------------|
| Public | 2,562 | 2,562 | 5,124 |
| Separate | 1,025 | 1,025 | 2,050 |
| Total | 3,587 | 3,587 | 7,174 |

*The total amount of Environmental Reserve lands will be more accurately determined at the Neighbourhood Structure Planning stage.



The Meadows Area Structure Plan

Stantec

Prepared for:
A Private Corporation (Amended by Editor)

Prepared by:
Stantec Consulting Ltd.

File: 161 09997

© Copyright 2003
Stantec Consulting Ltd.

Table of Contents (Amended by Editor)

Table of Contents (Amended by Editor)

| | Page |
|--|-------------|
| 1.0 INTRODUCTION | 1 |
| 1.1 PURPOSE | 1 |
| 1.2 BACKGROUND | 1 |
| 1.2.1 Planning History of The Meadows Area Structure Plan | 4 |
| 1.2.2 New Meadows Area Structure Plan – Bylaw 13531 | 6 |
| 1.2.3 Rationale for Bylaw 13531 | 7 |
| 1.3 DEFINITION OF PLAN AREA | 8 |
| 1.4 LAND OWNERSHIP | 10 |
| 2.0 STATUTORY PLAN & POLICY CONTEXT | 14 |
| 2.1 PLAN EDMONTON - EDMONTON MUNICIPAL DEVELOPMENT PLAN | 14 |
| 2.1.1 Planned Growth - Land Development Philosophy | 14 |
| 2.1.2 Planned Growth - Utilization of Existing Infrastructure | 15 |
| 2.1.3 Planned Growth - Preservation and Enhancement of the Natural Environment and Open Spaces | 16 |
| 2.1.4 Planned Growth - Managing Suburban Growth | 16 |
| 2.2 SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES | 17 |
| 2.3 NORTH SASKATCHEWAN RIVER VALLEY AREA REDEVELOPMENT PLAN | 17 |
| 2.4 THE TOP OF THE BANK POLICY | 17 |
| 2.5 STORMWATER MANAGEMENT FACILITIES GUIDELINES | 18 |
| 2.6 NATURAL AREAS POLICY (C-467) | 18 |
| 2.7 HOUSING MIX GUIDELINES | 18 |
| 3.0 SITE CONTEXT & DEVELOPMENT CONSIDERATIONS | 21 |
| 3.1 TOPOGRAPHY & VEGETATION | 21 |
| 3.2 SOILS | 21 |
| 3.3 EXISTING LAND USES | 21 |
| 3.3.1 Servicing | 23 |
| 3.3.2 <i>Private</i> Rail Line | 23 |
| 3.4 SURROUNDING LAND USES | 23 |
| 3.4.1 Transportation and Utilities Corridor (TUC) | 24 |

| | | |
|------------|---|-----------|
| 3.4.2 | Mill Woods Community | 24 |
| 3.5 | NATURAL AREAS | 24 |
| 3.5.1 | Mill Creek | 24 |
| 3.5.2 | Fulton Creek | 24 |
| 3.5.3 | Environmentally Sensitive and Significant Natural Areas | 25 |
| 3.6 | NON-PARTICIPATING LAND OWNERS | 25 |
| 3.7 | HISTORICAL RESOURCES | 25 |
| 3.8 | ENERGY & NATURAL RESOURCES | 25 |
| 3.8.1 | Utility Rights-of-Way and Facilities | 25 |
| 3.8.3 | Pipeline Rights-of-Way and Facilities | 26 |
| 3.9 | BACKGROUND AND SUPPORTING STUDIES | 28 |
| 3.9.1 | Environmental Impact Assessments | 28 |
| 3.9.2 | Residential Land Assessment | 28 |
| 3.9.3 | Industrial and Commercial Land Assessment | 29 |
| 3.9.4 | Catastrophic Risk Assessment (CRA) | 29 |
| 3.9.5 | Ground Vibration Monitoring | 30 |
| 3.9.6 | Transportation Impact Assessment | 30 |
| 4.0 | DEVELOPMENT OBJECTIVES & PRINCIPLES | 31 |
| 4.1 | DEVELOPMENT OBJECTIVES | 31 |
| 4.2 | DEVELOPMENT PRINCIPLES | 32 |
| 4.2.1 | Continuation of (Rural) Existing Uses | 32 |
| 4.2.2 | Neighbourhoods | 32 |
| 4.2.3 | Residential | 32 |
| 4.2.4 | Commercial | 32 |
| 4.2.5 | Transit Oriented / Mixed Use Development | 33 |
| 4.2.6 | Circulation | 33 |
| 4.2.7 | School and Community | 34 |
| 4.2.8 | Parks & Open Space | 34 |
| 4.2.9 | <i>Rail Line</i> Right-of-Way | 35 |
| 4.2.10 | Environmental | 35 |
| 4.2.11 | Resource Operations | 35 |
| 4.2.12 | Urban Services | 35 |
| 4.2.13 | Transportation | 36 |
| 4.3 | TRANSITIONAL LAND USE PLANNING PRINCIPLES | 36 |

| | | |
|------------|--|-----------|
| 5.0 | DEVELOPMENT CONCEPT | 37 |
| 5.1 | NEIGHBOURHOOD UNITS | 37 |
| 5.2 | RESIDENTIAL | 39 |
| 5.3 | COMMERCIAL | 39 |
| 5.4 | TRANSIT ORIENTED - MIXED USE DEVELOPMENT | 40 |
| 5.5 | SCHOOL SITES | 40 |
| | 5.5.1 Neighbourhood Parks | 40 |
| | 5.5.2 District Park Site | 41 |
| 5.6 | URBAN SERVICES | 41 |
| 5.7 | PARKS & OPEN SPACE | 41 |
| 5.8 | CIRCULATION | 41 |

| | | |
|------------|-----------------------------|-----------|
| 6.0 | ENGINEERING SERVICES | 43 |
| 6.1 | STORMWATER DRAINAGE | 43 |
| 6.2 | SANITARY DRAINAGE | 45 |
| 6.3 | WATER DISTRIBUTION | 45 |
| 6.4 | SHALLOW UTILITIES | 48 |

| | | |
|------------|----------------------------------|-----------|
| 7.0 | TRANSPORTATION | 49 |
| 7.1 | REGIONAL ROADWAY NETWORK ACCESS | 49 |
| 7.2 | EXTERNAL ARTERIAL ROADWAY ACCESS | 49 |
| 7.3 | CIRCULATION SYSTEM | 51 |
| 7.4 | INTERNAL ROADWAY NETWORK | 51 |
| 7.5 | TRANSIT SERVICE | 52 |
| 7.6 | BIKEWAYS AND WALKWAYS | 52 |
| 7.7 | PARKING | 54 |
| 7.8 | ARTERIAL ROADWAY ASSESSMENT | 54 |
| 7.9 | TRUCK ROUTES | 54 |
| 7.10 | NOISE ATTENUATION | 54 |
| 8.1 | DEVELOPMENT STAGING | 57 |

List of Figures (As Amended by Editor)

| | | Page |
|------|---|------|
| 1.0 | Location Plan | 3 |
| 2.0 | Bylaw 8730, as Amended Under Bylaw 13372 | 5 |
| 3.0 | Context Plan | 9 |
| 4.0 | Land Ownership | 11 |
| 5.0 | Site Features | 22 |
| 6.0 | Pipeline & Utility Rights-of-Way and Facilities | 27 |
| 7.0 | Development Concept | 38 |
| 8.0 | Storm Drainage | 44 |
| 9.0 | Sanitary Drainage | 46 |
| 10.0 | Water Distribution | 47 |
| 11.0 | Circulation System | 50 |
| 12.0 | Transit Circulation System | 53 |
| 13.0 | Arterial Roadway Assessment | 56 |
| 14.0 | Neighbourhoods Within The Meadows | 58 |

Notwithstanding any part or policy of this Plan, an opportunity to develop housing for first time homebuyers exists on a vacant surplus school building envelope on the school/park site as illustrated on the approved land use Plan map and as specified under the Community Services Zone. The Community Services Zone reflects the underlying pre-existing zoning and will, in addition, allow for row housing and related accessory uses. The housing opportunity will occur on an area equal to the portion of the surplus school building envelope. The precise location of this housing within the entire School Park site will be reviewed and determined by the City. The dwelling units and population generated by this development under the Community Zone are not included in the statistical summary.

1.0 Introduction

1.1 PURPOSE

The purpose of this Area Structure Plan (ASP) is to describe a land use framework and development objectives for residential development within The Meadows, a 1402.97 hectare (ha) area of land immediately south of Whitemud Drive, east of 34 Street, west of Highway 14 (Highway 216) and north of the future Transportation and Utility Corridor (TUC) (see **Figure 1.0 - Location Plan**). The Meadows ASP establishes communities in southeast Edmonton that are intended to be vibrant, healthy, and sustainable. This entails the planning of a community where people will choose to live, work, learn and play. The Meadows ASP provides such a community through the integration of the natural and built environment, patterned districts, centres of activity and services. Thus, the guiding principle of The Meadows ASP is that the area is to become an integrated mix of opportunities for residential, commercial, and business and employment development.

The Meadows ASP provides general guidelines to facilitate the orderly and efficient development of the plan area in terms of land uses, density and pattern of development, location of major roads and facilities, conceptual servicing schemes and sequence of development. Moreover, The Meadows ASP provides a framework for the subsequent preparation of detailed Neighbourhood Structure Plans (NSP) throughout the ASP.

The Meadows Area Structure Plan has been prepared on behalf of a private corporation.

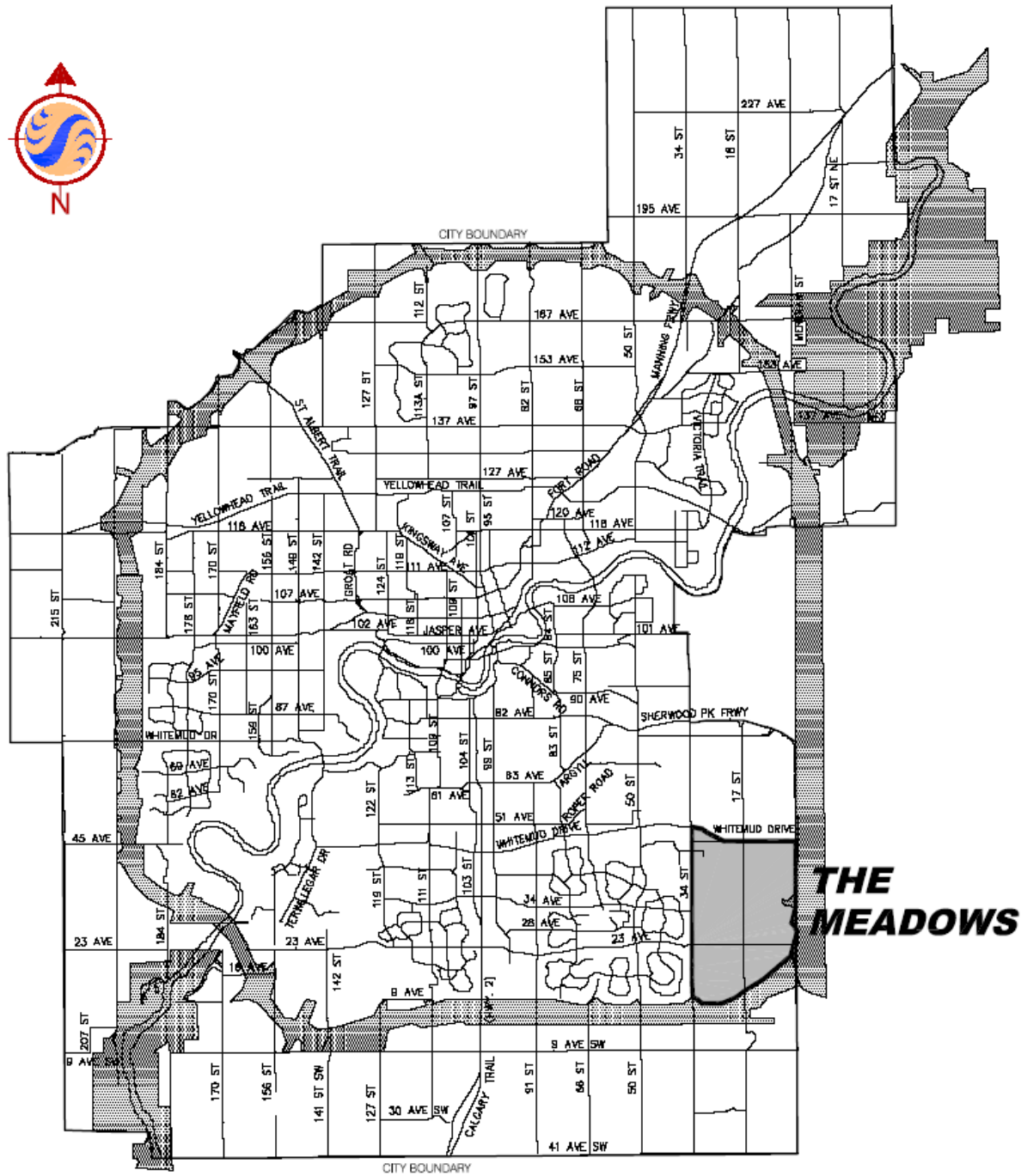
Amended by Editor

1.2 BACKGROUND

Bylaw 13531 repealed Bylaw 8730 and established a new development concept and set of servicing strategies for The Meadows area. While the new Meadows ASP includes a number of significant changes from the development concept envisioned in Bylaw 8730, it has no impact on the

existing and future pattern of development in the Larkspur, (Neighbourhood One), Wild Rose (Neighbourhood Two) and Silver Berry (Neighbourhood Three) neighbourhoods as provided for in their associated NSPs. There are no NSPs in place for Neighbourhoods Four, Five, Six and Seven.

Minor changes to land use plans, (e.g. an ASP or NSP), are often accommodated through ongoing amendments to the original land use concept/plan. However, in this instance (i.e. the repealing of Bylaw 8730), the scope of the changes are substantial and make it appropriate to repeal the existing land use plan and replace it with a new development concept/plan.



3

1.2.1 Planning History of The Meadows Area Structure Plan

The Meadows ASP Bylaw 8730 (see **Figure 2.0 – Bylaw 8730, as Amended under Bylaw 13372**) was approved by City Council on December 8, 1987, repealing a previously approved ASP Bylaw from 1982. The development concept of Bylaw 8730 focused on the creation of a balanced and attractive urban environment. It stated that the plan area was to offer a range of low to medium density housing (i.e. single family detached and semi-detached, townhouses and apartments). The residential component of the plan area comprised approximately 1,111 ha consisting of seven distinct neighbourhoods as defined by a number of major arterial roadways. An industrial precinct was located in the northeast portion of the plan area containing approximately 280 ha. Bylaw 8730 also included a 20 ha major commercial site as well as additional community commercial sites.

Detailed land use for the seven residential neighbourhoods was to be developed through separate Neighbourhood Structure Plans (NSP) for each. The ASP itself was to suffice in providing direction on the development of the industrial area. The industrial objectives of the ASP were to accommodate a mix of light and medium industrial uses being adjacent to major roadways and a railway. Thus, ready access (proximity) to transportation infrastructure was seen as being compatible/beneficial for the future development of industrial land uses in The Meadows.

On April 14, 1997, Council approved Bylaw 11422 which facilitated the realignment of Whitemud Drive and 38 Avenue and the development of a stormwater management facility.

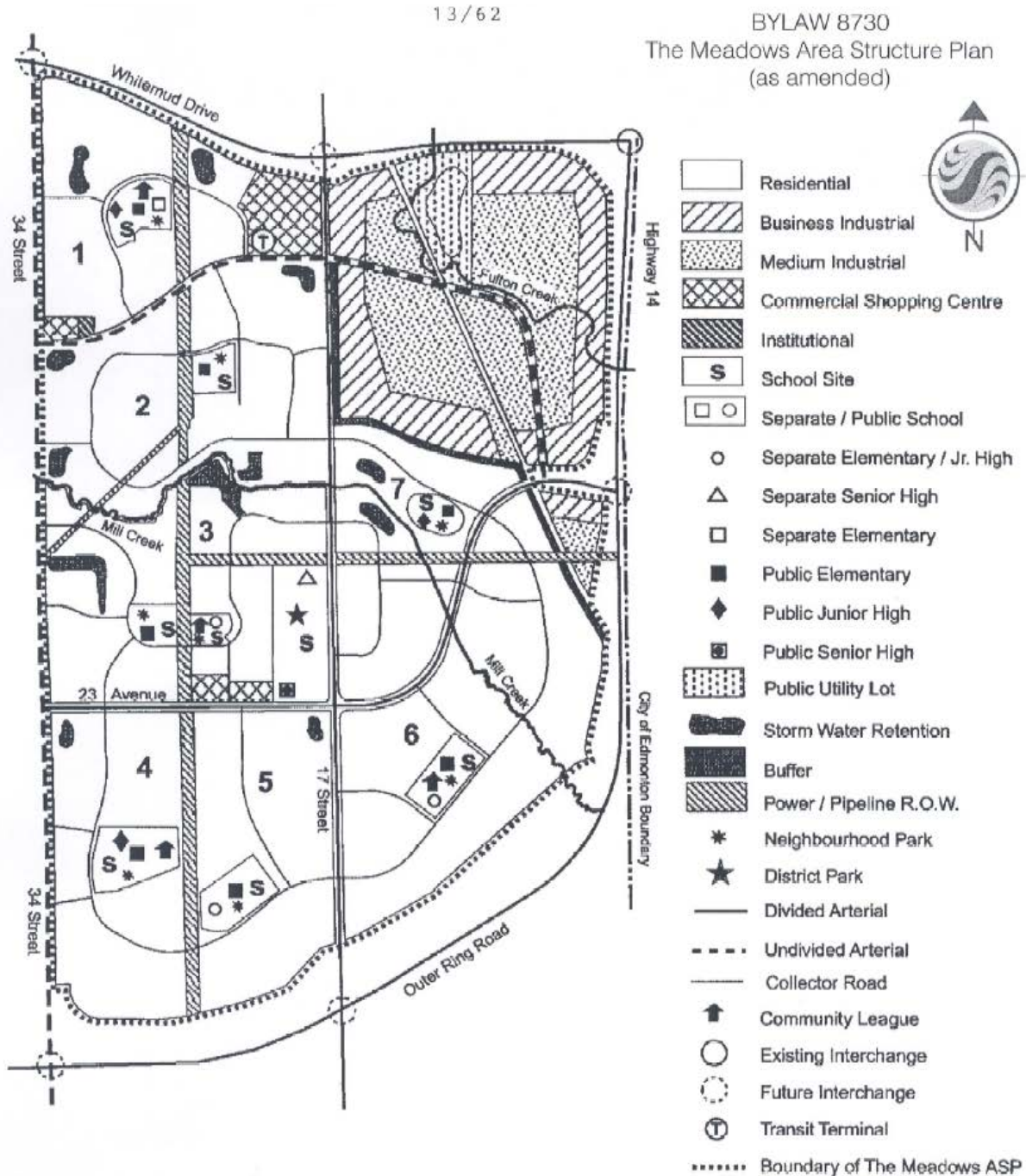
On March 21, 2000, Council approved Bylaw 12246 which accommodated the relocation of a local school/park site in Neighbourhood 3 (Silver Berry).

On March 14, 2001, Council approved Bylaw 12522 which amended the roadway system and the neighbourhood boundaries to Neighbourhoods Two, Three, Six and Seven.

On April 16th, 2002, Council approved Bylaw No. 13019. The purpose of this amendment was to reflect the changes adopted through an amendment to the Wild Rose NSP under Bylaw 13018. The NSP amendment enlarged a stormwater management facility and changed the status of a roadway from a collector road to a local road.

On May 5, 2003, Council approved Bylaw 13372 (see **Figure 2.0**). The purpose of this amendment was to reflect changes in the easterly half of

Editor's Amendment – This map establishes the historical context of The Meadows Area Structure Plan. Bylaw 8730 was repealed by Bylaw 13531; refer to page 38 for current Development Concept Map.



Private Corporation



Stantec

X:\1161\active\16109997\DRN0651\bylaw-13372.dwg

THE MEADOWS
AREA STRUCTURE PLAN

Figure No.
2.0

Title
**Bylaw 8730 as Amended
Under Bylaw 13372**

October 2003
161 00997

the Silver Berry Neighbourhood Structure Plan (NSP). The amendment relocated and reconfigured a commercial shopping centre site and realigned a portion of a collector roadway. The plan reconfigured the District Park/Campus and the Catholic Elementary School sites. The stormwater management facility located in the north central portion of the Silver Berry NSP was reduced in area, which resulted in a minor increase of residential land in the area.

1.2.2 New Meadows Area Structure Plan – Bylaw 13531

The overall land use concept outlined in Bylaw 8730, the preceding ASP, has changed significantly under Bylaw 13531 for those lands outside the Larkspur, Wild Rose and Silver Berry Neighbourhoods. The most significant of these changes are:

- the deletion of the light/medium industrial area and the incorporation of these lands as part of residential Neighbourhoods Six and Seven;
- the combination of former Neighbourhoods Four and Five into one neighbourhood (Neighbourhood Four);
- the addition of surplus Transportation and Utility Corridor lands to Neighbourhood Seven;
- the introduction of a mixed use/transit oriented development in the north-central portion of The Meadows area which is intended to be compatible with a City of Edmonton Transit Centre and a large commercial site in the Larkspur Neighbourhood; and
- the realignment of a number of major roadways to ensure that the roadway system within the ASP is logical and provides the proper hierarchical and spatial distribution of regional and local traffic in The Meadows.

Bylaw 13531 was accompanied by the adoption of Bylaw 13530, being an amendment to the Plan Edmonton. Bylaw 13530 redesignated the former industrial lands in The Meadows from “Business and Employment Area” to “Suburban Area”. This facilitated these lands being designated for residential and commercial development in the new Meadows ASP.

1.2.3 Rationale for Bylaw 13531

The sponsors of the new Meadows ASP (*a private corporation*) carefully examined the prospects of developing the northeast portion of The Meadows as provided for under Bylaw 8730 (i.e., as a business and employment area), and other scenarios (e.g., as a part of a residential neighbourhood). With the assistance of several background reports the sponsors concluded the following:

Amended by Editor

- The cost to buy and service these lands for industrial use is more than the market value of serviced industrial land in this area. In short, the acquisition, servicing and sale of these lands for industrial uses would come at a net loss to the developer. However, if these lands were developed for residential uses with their lower servicing costs and higher expected market demand, then they could provide a reasonable return on investment.
- Despite being in an area abutting Whitemud Drive and Highway 14 the lands designated for industrial development would in fact have relatively restricted access. No direct access is permitted to The Meadows from either Whitemud Drive or Highway 14. In addition, traffic on Highway 14 will not be permitted to enter/exit The Meadows via 23 Avenue as the latter is intended to 'fly over' Highway 14. The principle northerly point of access to The Meadows is 17 Street at Whitemud Drive. This restricted access was seen as having a negative impact on market demand for the lands being developed for industrial uses.
- Under Bylaw 8730 the presence of a rail line was seen as being compatible/beneficial to industrial development. However, many contemporary industrial developments no longer include or rely upon direct railway access. Semi-trailers/containers have replaced trains as the primary mode of short to medium haul movement of business and industrial goods. Consequently, the *railway* line that bisects the northeast portion of the ASP no longer has the prominence it may have once had relative to the developability of the surrounding lands for industrial uses. And on the other hand, there are a number of locations elsewhere in Edmonton where residential uses have been successfully developed in proximity to rail facilities.
- The deletion of industrial uses in The Meadows would have an acceptable impact on Edmonton's inventory of industrial lands over the short to mid term. Longer term restoration of an industrial land inventory would mean identifying and designating lands outside of The Meadows for industrial development, which could be best addressed as a City of Edmonton initiative.

Amended by Editor

- The introduction of residential uses in the northeast portion of The Meadow ASP would be compatible with the existing and planned residential development already in the plan area.

Together, these considerations convinced the sponsors to pursue a change to Bylaw 8730 to delete industrial land uses in The Meadows ASP and replace them with residential uses through the adoption of Bylaw 13531.

The combination of two neighbourhoods into one was done in order that Neighbourhoods Four, Five, Six and Seven would be of comparable size.

The surplus Transportation and Utility Corridor lands were added to The Meadows ASP in order that they be included in a plan for eventual urban development.

The introduction of the mixed use/transit oriented development node in the north central portion of the plan area was undertaken because of the following:

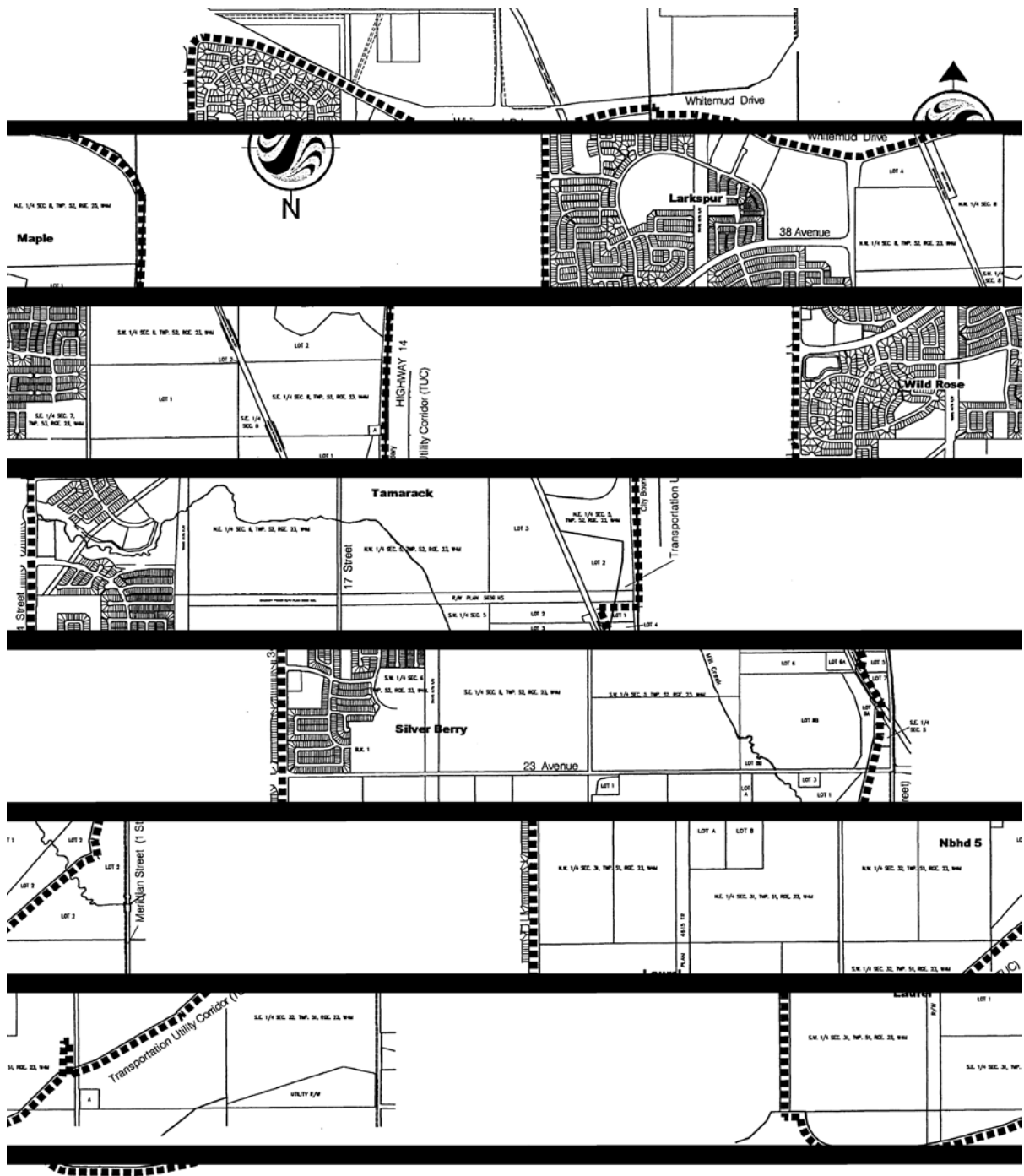
- the presence of a transit centre and a large commercial site west of 17 Street and north of 38 Avenue are seen as being complimentary and supportive to the development of medium density residential development; and
- the inclusion of business oriented development in the mixed use node is also intended to complement the presence of the transit centre and to potentially provide additional employment opportunities for local residents.

1.3 DEFINITION OF PLAN AREA

The Meadows Area Structure Plan includes all of Sections 5, 6, 7, and 8 of 52-23-4, the majority of Section 31 and approximately half of Section of 32-51-23-4.

As shown on **Figure 3.0 - Context Plan**, The Meadows ASP is bounded by the following:

- **Northern Boundary** – Whitemud Drive;
- **Western Boundary** – 34 Street;
- **Eastern Boundary** – Highway 14 (Hwy 216) and Strathcona County; and
- **Southern Boundary** – TUC (Transportation and Utility Corridor).

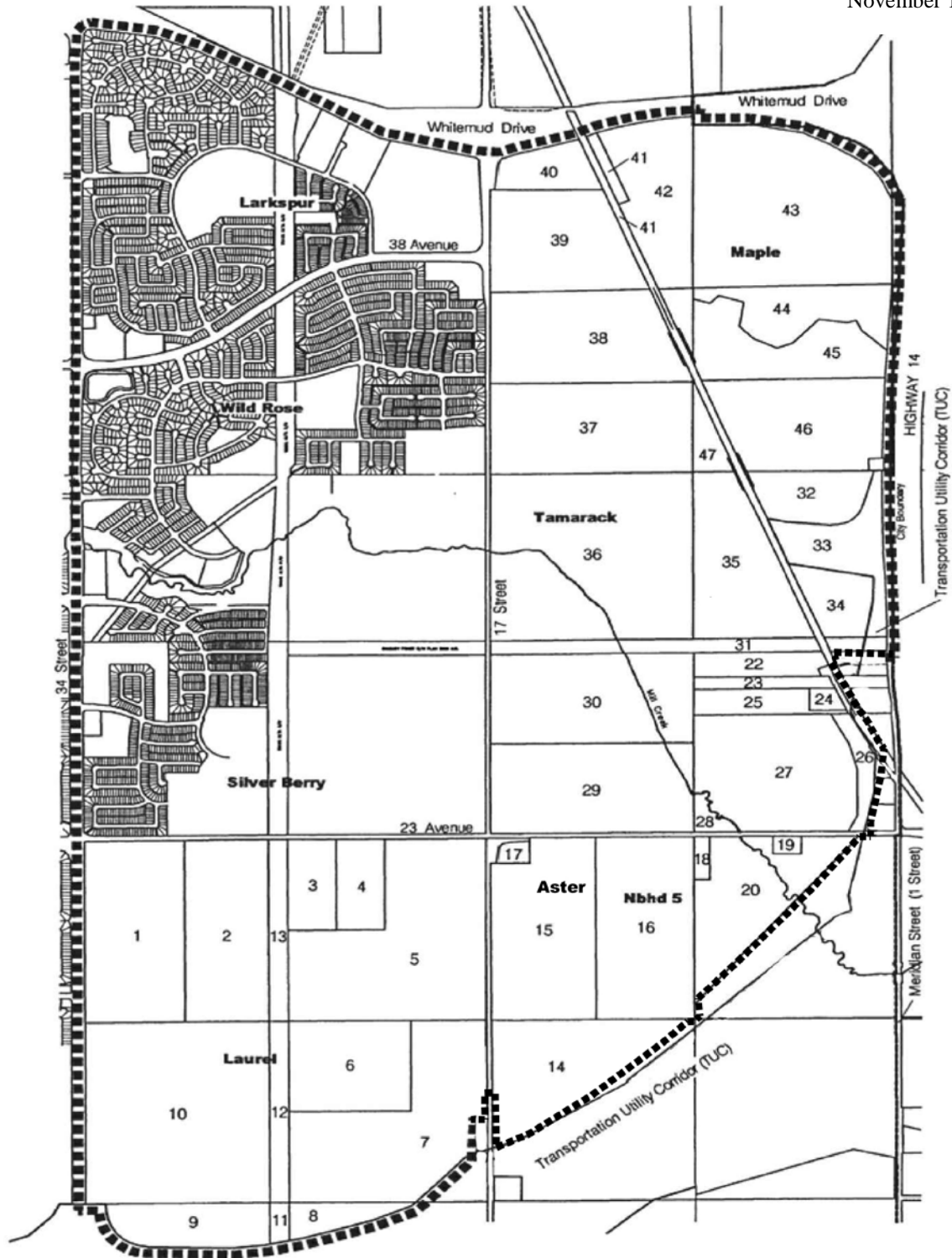


Legend

Client/Project
RUMBLE DEVELOPMENTS

1.4 LAND OWNERSHIP

The majority of the land in The Meadows ASP is held by multiple minority landowners. Land ownership within Neighbourhoods Four, Five, Six and Seven at the time of Bylaw 13531 being adopted is shown on **Figure 4.0 - Land Ownership** and listed on **Table 1 - Land Ownership**. Please note Figure 4.0 and Table 1 do not include the owners of properties within the neighbourhoods of Larkspur, Wild Rose and Silver Berry.



Legend
 ■■■■■ Area Structure Plan Boundary

Client/Project

QUALICO COMMUNITIES AND DREAM DEVELOPMENTS
 THE MEADOWS
 AREA STRUCTURE PLAN AMENDMENT

Figure No.

4.0

Title

Land Ownership

JUNE 2015



| TABLE 1 LAND OWNERSHIP (As Amended by Editor) | | | |
|--|---|---------------------------------------|------------------|
| | Titled Owner | Legal Description | Area (ha) |
| 1 | <i>Private Corporation</i> | W ½ of NW ¼ Sec.31-51-23-W4M | 32.4 |
| 2 | <i>Private Corporation</i> | Part of E ½ of NW ¼ Sec. 31-51-23-W4M | 26.87 |
| 3 | The City of Edmonton | Lot A Plan 5736 RS | 8.09 |
| 4 | <i>Private Corporation</i> | Block B Plan 832 0216 | 8.09 |
| 5 | The City of Edmonton | Part of NE ¼ Sec. 31-51-23-W4M | 48.52 |
| 6 | <i>Private Owner</i> | Lot 1 Plan 992 1891 | 32.5 |
| 7 | <i>Private Owner</i> | Part of SE ¼ Sec.31-51-23-W4M | 32.2 |
| 8 | <i>Private Owner</i> | Part of NE ¼ Sec.30-51-23-W4M | 32.4 |
| 9 | Her Majesty the Queen in Right of Alberta | Part of NW ¼ Sec.30-51-23-W4M | 12.2 |
| 10 | <i>Private Owner</i> | Part of SW ¼ Sec. 31-51-23-W4M | 59.17 |
| 11 | <i>Private Corporation</i> | R/W Plan 4615 TR | 12.65 |
| 12 | <i>Private Corporation</i> | R/W Plan 4615 TR | 5.53 |
| 13 | <i>Private Corporation</i> | R/W Plan 4615 TR | 5.53 |
| 14 | Her Majesty the Queen in Right of Alberta | Part of SW ¼ Sec. 32-51-23-W4M | 27.32 |
| 15 | <i>Private Corporation</i> | Part of NW ¼ Sec.32-51-23-W4M | 31.63 |
| 16 | <i>Private Owner</i> | Part of NW ¼ Sec.32-51-23-W4M | 31.5 |
| 17 | <i>Private Institution</i> | Lot 1 Plan 002 3756 | 1.14 |
| 18 | <i>Private Owner</i> | Lot A Plan 1038 TR | 1.22 |
| 19 | <i>Private Owner</i> | Lot 3 Plan 922 2519 | 0.893 |
| 20 | <i>Private Owner</i> | Lot 1 Plan 812 0416 | 22.207 |
| 21 | Her Majesty the Queen in Right of Alberta | Part of Lot 2 Plan 812 0416 | 11.95 |
| 22 | <i>Private Owner</i> | Part of Lot 2 Plan 5483 HW | 5.754 |
| 23 | <i>Private Corporation.</i> | Part of Lot 3 Plan 5483 HW | 2.989 |
| 24 | <i>Private Corporation</i> | Lot 6A Plan 972 3682 | 1.21 |
| 25 | <i>Private Owner</i> | Part of Lot 6 Plan 5483 HW | 5.505 |
| 26 | <i>Private Corporation.</i> | Part of Lot 8A Plan 802 2759 | 3.58 |
| 27 | <i>Private Corporation (as to an undivided 70% interest) & Private Corporation. (as to an undivided 30% interest)</i> | Part of Lot 8B Plan 802 2759 | 30.926 |
| 28 | <i>Private Corporation.</i> | Part of Lot 8B Plan 802 2759 | 1.737 |

| | | | |
|--------------------------|---|---|----------------|
| 29 | <i>Private Corporation</i> | South ½ SW ¼ Sec. 5-52-23-W4M | 32.4 |
| 30 | <i>Private Corporation</i> (Representing the interest of 160 owners of this parcel) | North ½ SW ¼ Sec. 5-52-23-W4M | 32.4 |
| 31 | <i>Private Corporation</i> | R/W Plan 5659 KS | 9.59 |
| 32 | Her Majesty the Queen in Right of Alberta | Lot 1 Descriptive Plan 012 1042 | 9.75 |
| 33 | Her Majesty the Queen in Right of Alberta | Transportation/Utility Corridor R/W Plan 892 0406 Within NE ¼ Sec. 5-52-23-W4M | 12.29 |
| 34 | Her Majesty the Queen in Right of Alberta | Lot 2 Descriptive Plan 012 1042 | 7.50 |
| 35 | Her Majesty the Queen in Right of Alberta | Lot 3 Descriptive Plan 012 1042 | 24.66 |
| 36 | <i>Private Owner</i> (as to an undivided ½ interest) & <i>Private Owner</i> (as to an undivided ½ interest) | Part of NW ¼ Sec. 5-52-23-W4M | 59.79 |
| 37 | <i>Private Owner</i> (as to an undivided ½ interest) & <i>Private Owner</i> (as to an undivided ½ interest) | Lot 1 Plan 802 2743 | 32.4 |
| 38 | <i>Private Owner</i> (as to an undivided ½ interest) & <i>Private Owner</i> (as to an undivided ½ interest) | Part of SW ¼ Sec. 8-52-23-W4M | 30.887 |
| 39 | <i>Private Corporation</i> | Part of NW ¼ Sec. 8-52-23-W4M | 24.65 |
| 40 | <i>Private Owner</i> | Part of Lot A Plan 5886 RS | 7.026 |
| 41 | <i>Private Corporation (Rail Line)</i> | R/W Plan 309 EO | 9.655 |
| 42 | The City of Edmonton | Part of NW ¼ Sec. 8-52-23-W4M | 19.84 |
| 43 | <i>Private Owner</i> | Part of NE ¼ Sec. 8-52-23-W4M | 56.36 |
| 44 | <i>Private Corporation</i> | Lot 1 Plan 812 1577 | 13.5 |
| 45 | <i>Private Corporation</i> | Lot 2 Plan 812 1577 | 18.5 |
| 46 | <i>Private Owner</i> | Part of SE ¼ Sec. 8-52-23-W4M | 25.1 |
| 57 | Her Majesty the Queen in Right of Alberta | Part of SE ¼ Sec. 8-52-23-W4M | 3.8 |
| TOTAL TITLED AREA | | | 925.809 |

2.0 Statutory Plan & Policy Context

An Area Structure Plan is one level of plan in a hierarchy of plans. As such an ASP must conform to the plan in the hierarchy above it (i.e, Plan Edmonton) and provide direction to the plans (e.g., neighbourhood structure plans) in the hierarchy below it. An ASP must also comply with other statutory plans, policies and guidelines that may apply to the affected lands. Together these elements provide input to the creation of a development concept for the ASP and ensure that its direction is generally consistent with other ASPs in Edmonton. The Meadows ASP complies with the plans, policies and guidelines noted below.

2.1 PLAN EDMONTON - EDMONTON MUNICIPAL DEVELOPMENT PLAN

Plan Edmonton was adopted by City Council in 1998 and provides an overall vision for Edmonton including future land use and development. Plan Edmonton designates the land within The Meadows ASP as being “Suburban” which accommodates its development for predominately residential uses.

Numerous strategies are cited in the MDP regarding policies that encourage the orderly and cost-effective growth; the efficient use of land and provision of services through contiguous development; the provision of varied housing types and densities; the development of functional and aesthetically pleasing living and work environments; access to recreational and open space opportunities; and the protection of the natural environment. The following sections highlight those MDP strategies of relevance to The Meadows ASP.

2.1.1 Planned Growth - Land Development Philosophy

“Develop and utilize a land development philosophy that meets the City’s long-term development needs and achieves the optimal balance between residential, industrial, commercial, institutional and recreational land use.”

Strategy 1.1.1 - *Provide for choices regarding the types of developments in which people want to live and do business.*

The Meadows ASP provides an opportunity to locate a range of low and medium density residential development, and employment generating commercial and business land uses in a highly visible, accessible and growing sector of Edmonton.

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.*

Development within The Meadows is encouraged to develop in a manner that is as environmentally responsible and fiscally sustainable as possible. Residential densities within the ASP are intended to support the efficient provision of public transit, educational and recreational facilities, and municipal services.

Parkland, natural areas, utility rights-of-way, and other open spaces, are intended to be interconnected to encourage pedestrian movement. A transit centre is to be located in proximity to higher density housing and a range of potential employment opportunities which is intended to encourage transit use. These design elements will strengthen alternative modes of transportation (i.e. walking, cycling, transit use) available to local residents, lessen auto dependency and decrease the provision and maintenance of roadway infrastructure.

As in other suburban areas, The Meadows will include stormwater management facilities which have the secondary benefits of enhancing the quality of stormwater runoff and reducing potential environmental impacts to downstream watercourses.

Strategy 1.1.14 - *Maintain the integrity of pipelines and utility corridors while planning for growth and development.*

The Meadows ASP contains a number of pipeline and utility corridors, which have been integrated into the plan and, where appropriate, are intended for use in the open space and walkway systems.

2.1.2 Planned Growth - Utilization of Existing Infrastructure

“Encourage maximum development around City infrastructure.”

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 Meadows ASP represents a logical, economical and contiguous extension of residential and commercial development in southeast Edmonton. Infrastructure and servicing capacity exists and continues to expand within The Meadows.

With the near completion of Larkspur and Wild Rose and the continuing development of Silver Berry, development in The Meadows ASP will continue in an orderly and economical fashion into the remaining planned neighbourhoods.

Completion of the adjacent Anthony Henday Drive in 2007-2008 will provide superior east-west connectivity and carrying capacity between The Meadows, southeast Edmonton and the rest of the Capital Region. This major transportation facility will significantly benefit The Meadows.

Strategy 1.3.4 – *Promote intensification of development around transportation corridors and employment areas.*

The Meadows ASP includes a mixed use development with a transit centre, higher density residential uses, and a range of commercial and business land uses located immediately south of Whitemud Drive along 17 Street .

2.1.3 Planned Growth - Preservation and Enhancement of the Natural Environment and Open Spaces

“Preserve and enhance the river valley, natural areas and open space within the urban landscape; recognise these areas as critical aspects of successful planned growth of the City; and, link them to the extent possible.”

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.*

While protection of the river valley and ravine system is addressed primarily through the North Saskatchewan River Valley Area Redevelopment Plan, the Edmonton Zoning Bylaw, and the Top-of-the-Bank Roadway Policy, the development principles of The Meadows ASP complement and enhance these statutes to conserve and integrate portions of the river valley/ravine system within the plan area.

The Meadows ASP also encourages the integration and linkage of natural and open space areas to other features within the plan area.

2.1.4 Planned Growth - Managing Suburban Growth

“Manage suburban growth in a manner that ensures adequate infrastructure and services and maintains a balance of residential, commercial, and recreational land uses.”

Strategy 1.7.1 - *Accommodate growth in an orderly, serviced and cost-effective manner.*

The Meadows ASP provides for the logical continuation of suburban development in southeast Edmonton. Services can be further extended

into Neighbourhoods Four through Seven in a cost effective manner and in accordance with City of Edmonton servicing policies.

2.2 SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES

The City of Edmonton's Suburban Neighbourhood Design Principles encourage flexibility and innovation in the design and servicing of new neighbourhoods. While these principles are generally more applicable to the level of planning undertaken through a Neighbourhood Structure Plan, Design Principles 7 and 9 have their influence in The Meadows ASP.

Design 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.*

School/park sites within The Meadows ASP have been planned in consultation with the School Boards and the Community Services Department and are located within early stages of the planned residential development.

Design 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 Meadows ASP contains a number of development principles which are intended to create linkages between planned open spaces.

2.3 NORTH SASKATCHEWAN RIVER VALLEY AREA REDEVELOPMENT PLAN

Portions of the Fulton and Mill Creeks flow through The Meadows. These creeks are part of the North Saskatchewan River Valley and ravine system and protected by the North Saskatchewan River Valley Area Redevelopment Plan (NSRVARP). The Meadows ASP recognizes the presence of these creeks.

2.4 THE TOP OF THE BANK POLICY

The purpose of the City of Edmonton's Top-of-Bank (TOB) Roadway Policy is twofold. The first is to ensure the provision of open space between river and ravine systems (i.e. North Saskatchewan River Valley System and Mill Creek Ravine) and urban development. The second is to ensure that public access to river and ravine system is provided. To achieve these two purposes, the policy specifies that a roadway be developed along the top-of-the-bank for the river valley and ravine system. In certain situations, a walkway may be developed instead of a roadway.

2.5 STORMWATER MANAGEMENT FACILITIES GUIDELINES

The Stormwater Management Facilities Guidelines specify how these facilities are to be designed, developed, operated and maintained. The Guidelines also provide direction on how stormwater management facilities are to be incorporated into the design of a neighbourhood. The Guidelines provide that these facilities be prominently located and form part of a linked open space system in the neighbourhood.

2.6 NATURAL AREAS POLICY (C-467)

The City of Edmonton's Natural Areas Policy, July 25, 1995, is intended to encourage the conservation and integration of as many environmentally sensitive and significant natural areas into Edmonton's future urban environment as are sustainable. This policy is voluntary on the part of landowners.

Inventory of Environmentally Sensitive and Significant Natural Areas (1993) identifies 15 Natural Areas within The Meadowd ASP. Eight (8) of these areas are clustered in Neighbourhood Seven with the remaining sites randomly situated throughout the southern portion of the ASP area. The Inventory describes natural areas as being defined by the presence of vegetation, water or natural features. The natural areas are not described in detail in the Inventory as they are deemed to be "non-significant". Furthermore, it is important to point out that the aforementioned report *did not* identify any significant or environmentally sensitive areas within the boundaries of The Meadows ASP.

The *Inventory of Environmentally Sensitive and Significant Natural Areas* notes that environmental studies (e.g. Environmental Site Assessment Phase I, Natural Site Assessment, et cetera) must be completed and approved prior to the adoption of a new NSP or rezoning for areas containing either identified Natural Areas or Significant Natural Areas. Therefore, future NSPs within The Meadows must complete the necessary environment reviews prior to their advancement to the Bylaw stage.

2.7 HOUSING MIX GUIDELINES

Council adopted guidelines specify that all new suburban neighbourhoods must contain a mix of dwelling types. The guidelines specify that medium density dwellings account for between 15% to 35% of the total dwelling units in a neighbourhood and that low density dwellings account for between 65% and 85% of the total dwelling units in a neighbourhood.

2.8 SMART CHOICES

At the time Bylaw 13531 was adopted, the City of Edmonton had completed a document entitled *Smart Choices for Developing Our Community*. This document is a catalogues of nine ideas for

accommodating future growth and redevelopment in Edmonton, while sustaining the quality of life Edmontonians enjoy. Three of these ideas are related and relevant to The Meadows ASP, and are integral to its associated development principles and concept.

2.8.1 Transit Oriented Development

Transit oriented development (TOD) refers to a mixed-use residential and commercial area designed to maximize use of transit and non-motorized transportation. TODs offer lifestyle choices (for accommodation, workplace and shopping), reduce reliance on auto ownership, and reduce transport costs for individuals and households. TODs also create more diverse neighbourhoods, enhance the potential for increased transit ridership, and contribute to environmental sustainability.

The Meadows ASP provides for a transit oriented/mixed use development to be located in the north central portion of the plan area.

2.8.2 Shared Use Path Development and Mixed Use Development

The Smart Choices catalogue describes a hierarchy of *shared use paths*. *Shared use paths* occupy abandoned rail corridors and utility rights-of-way that extend from one end of the city to the other. The nearest *shared use path* to The Meadows is located along 91 Street (immediately west of the Mill Woods community). *Shared use path* connections provide links between corridors and to significant activity nodes and features throughout the city. A *shared use path* connection is designated along the major power transmission corridor that bisects The Meadows plan area. Together *shared use paths* and connections intersect *shared use* river valley and ravine *paths* to create a citywide network of routes to accommodate non-motorized modes of transportation (e.g., bicycles and pedestrians).

Bylaw 16498
September 16, 2013

Mixed-use development potentially includes residential, commercial, office, civic, and transportation uses within walking distance of each other. Locating *shared use paths* and mixed use development in proximity to each other increases the range of amenities and services available to residents in an area and promotes the use of alternative methods (to motorized transport) of access to these features.

Bylaw 16498
September 16, 2013

Beyond the *shared use path* connection specified for the major power transmission corridor, The Meadows ASP provides for additional *shared use path* development throughout the plan area that will provide routes for non-motorized transportation between the designated *shared use path* connection, the transit oriented / mixed use development area and various other destinations (e.g., parks, natural areas) located in the plan area.

Bylaw 16498
September 16, 2013

2.8.3 Walkable City

Making an urban area walkable requires that walking become a practical alternative for accessing destinations such as workplaces, and shopping and community facilities. The Smart Choices catalogue identifies walkability as a key component in the promotion of sustainable compact development. The major elements of a successful walkable city are, "high building and population density, mixed /and use, a quality public transportation system, and high-quality public spaces (p. 59)." The benefits of a walkable community includes creating options for alternative transportation, reduced auto dependence, improved personal health, economic cost savings, greater public transit use, cleaner environment, and enhanced access to services and amenities.

The Meadows ASP promotes the creation of walkable communities by:

- including a mix of uses, densities and dwelling unit types In neighbourhoods;
- specifying the creation of walkable connections through open spaces, greenways, along streets and walkways to link community amenities and facilities and encourage pedestrian connectivity, activity and social contact; and
- requiring the use of urban design elements that will create pedestrian connections that are safe and located in a desirable environment.

3.0 Site Context & Development Considerations

The physical conditions present in a given area of land (e.g., topography, soils, drainage patterns, and existing land use) must be considered and potentially accommodated in the preparation of a plan for its future development. Similarly, other factors such as market trends and owner aspirations must be considered in making a plan. This Section describes the site conditions and other considerations within The Meadows and their potential influence on the development concept for the ASP.

3.1 TOPOGRAPHY & VEGETATION

The lands within The Meadows ASP are gently undulating and generally slope from the southeast to the northwest and west, with an overall change in elevation of approximately 20 meters. Overland drainage tends to flow to the Fulton and Mill Creeks with a number of naturally low lying areas which are suited to the possible development of stormwater management facilities.

Vegetation is 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. A number of natural areas have been identified by the City of Edmonton and are described in more detail in Section 3.5.

Overall, the majority of lands within the plan area have been cleared of natural vegetation for agricultural purposes.

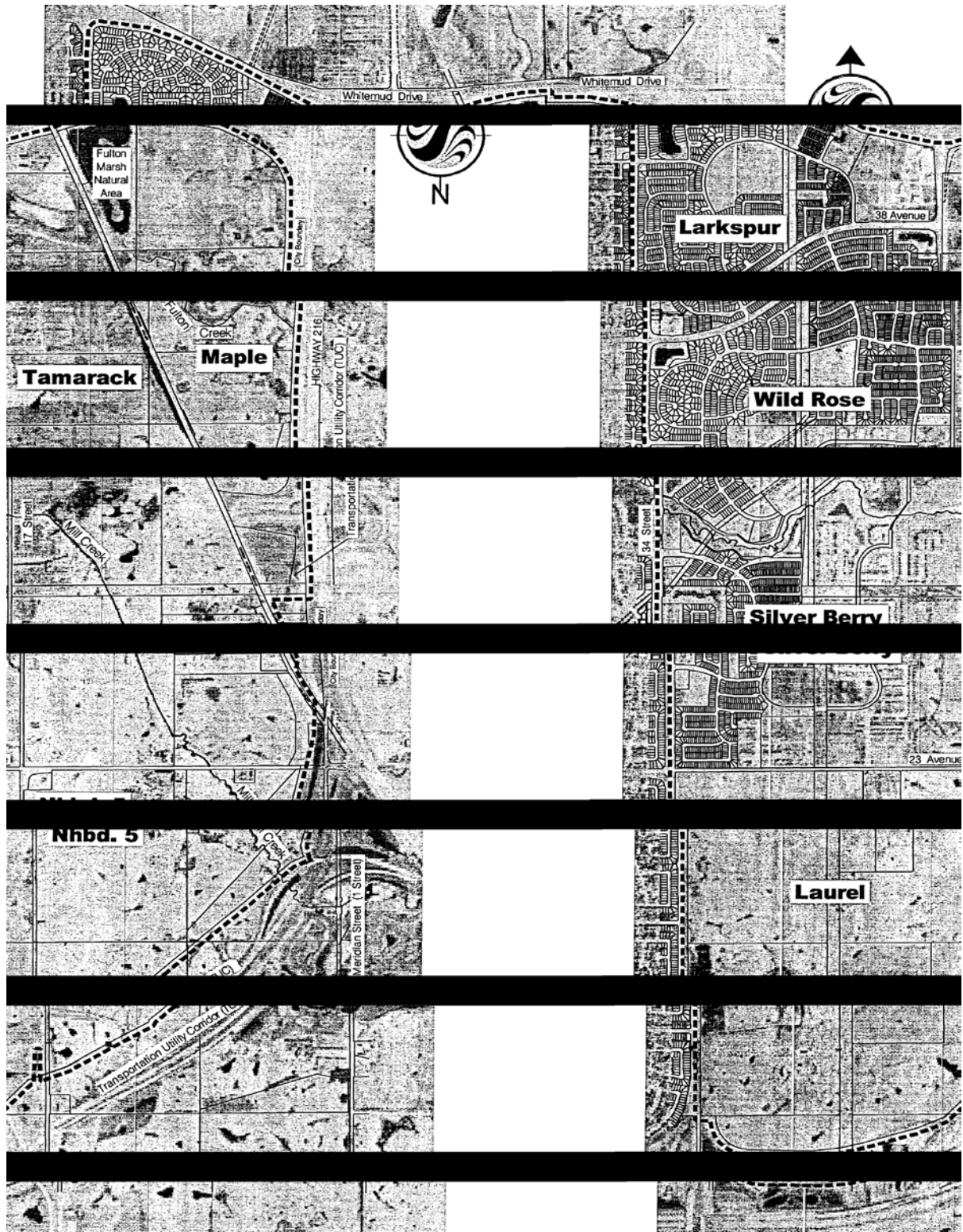
3.2 SOILS

The Canada Land Inventory (CLI) soil classification for the land in The Meadows area is Type 2 and Type 3 (with Type 1 being the best and most productive soil). Soils within The Meadows Area are generally silty loam. As such, the soil conditions do not pose any impediment to urban development and are expected to remain in agricultural use until required for urban development.

3.3 EXISTING LAND USES

Three neighbourhoods within The Meadows ASP are currently under development (see **Figure 5.0 - Site Features**).

Neighbourhood One (Larkspur) and Neighbourhood Two (Wild Rose) have had a significant portion of the residential lands developed.



The west half of Neighbourhood Three (Silver Berry) is nearing completion and the easterly half of the neighbourhood will *is currently under development*.

Bylaw 14111
Feb. 22, 2006

A large stormwater management facility (Fulton Marsh) has been constructed in the northeast portion of the ASP. The remainder of the ASP area is used primarily for agricultural purposes or has been left in a natural state. A few farmsteads are scattered throughout the plan area.

Depending on the nature and location of existing uses on the lands within Neighbourhoods Four, Five, Six and Seven, they can be either selectively removed at the time of adjacent development and the land integrated into the pattern of subdivision, or they can be retained in their current state through careful site and subdivision planning.

3.3.1 Servicing

Large portions of Neighbourhoods One (Larkspur), Two (Wild Rose) and Three (Silver Berry) are fully serviced with water (e.g. 300 mm, 450mm and 600 mm watermains), stormwater drainage, sanitary drainage (e.g. 525mm and 750mm pipes), gas, power and telephone utility services. This existing infrastructure has been adequately sized to accommodate future development within the remainder of The Meadows.

3.3.2 Private Rail Line

Amended by Editor

A *rail line* right-of-way bisects the northeast portion of The Meadows. The railway line forms a logical boundary and separates Neighbourhoods Six and Seven. The railway line is also a source of nuisance and potential risk and requires consideration for the manner in which it is incorporated into urban development – particularly as part of a residential area.

A detailed Catastrophic Risk Assessment (CRA) in support of The Meadows ASP was submitted under separate cover by Doug McCutcheon and Associates, Consulting. This CRA addresses the risks associated with the location and operation of the *railway* right-of-way within The Meadows ASP (see Section 3.11 below).

Amended by Editor

3.4 SURROUNDING LAND USES

The Meadows ASP is bound on the east by Highway 14 and Strathcona County. To the west of the plan area, across 34 Street, lies the developed residential community of Mill Woods. To the south across the Transportation and Utility Corridor (TUC, or Anthony Henday Drive) is the Rural South East area. To the north of the plan area is the Southeast and Maple Ridge Industrial parks.

3.4.1 Transportation and Utilities Corridor (TUC)

The TUC forms the southern boundary of The Meadows ASP and was established to provide a corridor for the future Outer Ring Road, power lines, energy pipelines, and other utilities. Access into The Meadows ASP through the TUC is planned at 34 Street, 17 Street and 23 Avenue.

Alberta Public Works, Supply & Services has confirmed that the presence of a major power transmission corridor immediately adjacent to the southern boundary of the ASP precludes the possibility of any significant surplus lands from the TUC being made available for addition to The Meadows ASP.

3.4.2 Mill Woods Community

The Community of Mill Woods is located directly west of The Meadows ASP. The community contains a population of roughly 84,000 residents and a range of residential, commercial, institutional, educational and recreational services.

3.5 NATURAL AREAS

3.5.1 Mill Creek

Mill Creek enters The Meadows at Meridian Street south of 23 Avenue, flows to the northwest and crosses 17 Street, and then meanders westward where it exits the plan area at 34 Street. The ravine contains a variety of vegetation communities including white spruce, mixed woods and deciduous dominated species. Fragmentation of the habitat will severely limit the value of this area for wildlife.

3.5.2 Fulton Creek

Fulton Creek enters The Meadows at Highway 14 and approximately 38 Avenue and meanders westward to the Canadian National Railway line where it enters the Fulton Creek stormwater management pond. Fulton Creek is highly sensitive and susceptible to erosion. The creek water quality is affected by adjacent industrial and agricultural land uses. In order to establish developable land, geotechnical setbacks and controlled stormwater flow into Fulton Creek must be studied and analyzed prior to future residential development in the area.

3.5.3 Environmentally Sensitive and Significant Natural Areas

The City of Edmonton's *Inventory of Environmentally Sensitive and Significant Natural Areas* (1993) identifies 15 Natural Areas within The Meadows ASP. Eight (8) of these areas are clustered in Neighbourhood Seven with the remaining sites randomly situated throughout the southern portion of the ASP area. The Inventory describes natural areas as being defined by the presence of vegetation, water or natural features. The natural areas are not described in detail in the Inventory as they are deemed to be "non-significant". The inventory does not identify any significant or environmentally sensitive areas within the boundaries of The Meadows ASP.

Amended by Editor

It may be possible to incorporate portions of some of these natural areas into the residential development. Further analysis at the NSP stage will be required as to the environmental sustainability of integrating any of these sites into future urban development.

3.6 NON-PARTICIPATING LAND OWNERS

While *one private corporation* sponsored the preparation of The Meadows ASP, all landowners noted in Table 1 were given an opportunity to provide input to this plan. Landowners received a number of mailed notification letters and were invited to public meetings in order for them to learn about and to comment on The Meadows ASP.

3.7 HISTORICAL RESOURCES

Given the plan area's long agricultural history, it is most probable that the historical or cultural value of these lands is negligible. However, it is recommended that an archival search be carried out on non-developed land as part of the NSP process. Should any issues arise that might indicate historical or cultural value a Historical Resources Impact Assessment may be required.

3.8 ENERGY & NATURAL RESOURCES

3.8.1 Utility Rights-of-Way and Facilities

Two major *powerline corridors* are present in The Meadows (see *Figure 6.0*). One corridor runs south to north and bisects the Larkspur, Wild Rose, and Silver Berry Neighbourhoods and Neighbourhood Four. The second corridor runs east to west and through the Silver Berry Neighbourhood and *Tamarack Neighbourhood*. These power corridors have already been partially incorporated into the Larkspur, Wild Rose and Silver Berry Neighbourhoods as open space elements and to accommodate pedestrian and bicycle movements. Power corridors

Amended by Editor

Bylaw 14111
Feb.22, 2006

located in the remaining neighbourhoods will provide similar opportunities.

3.8.2 Oil & Gas Well Sites

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

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

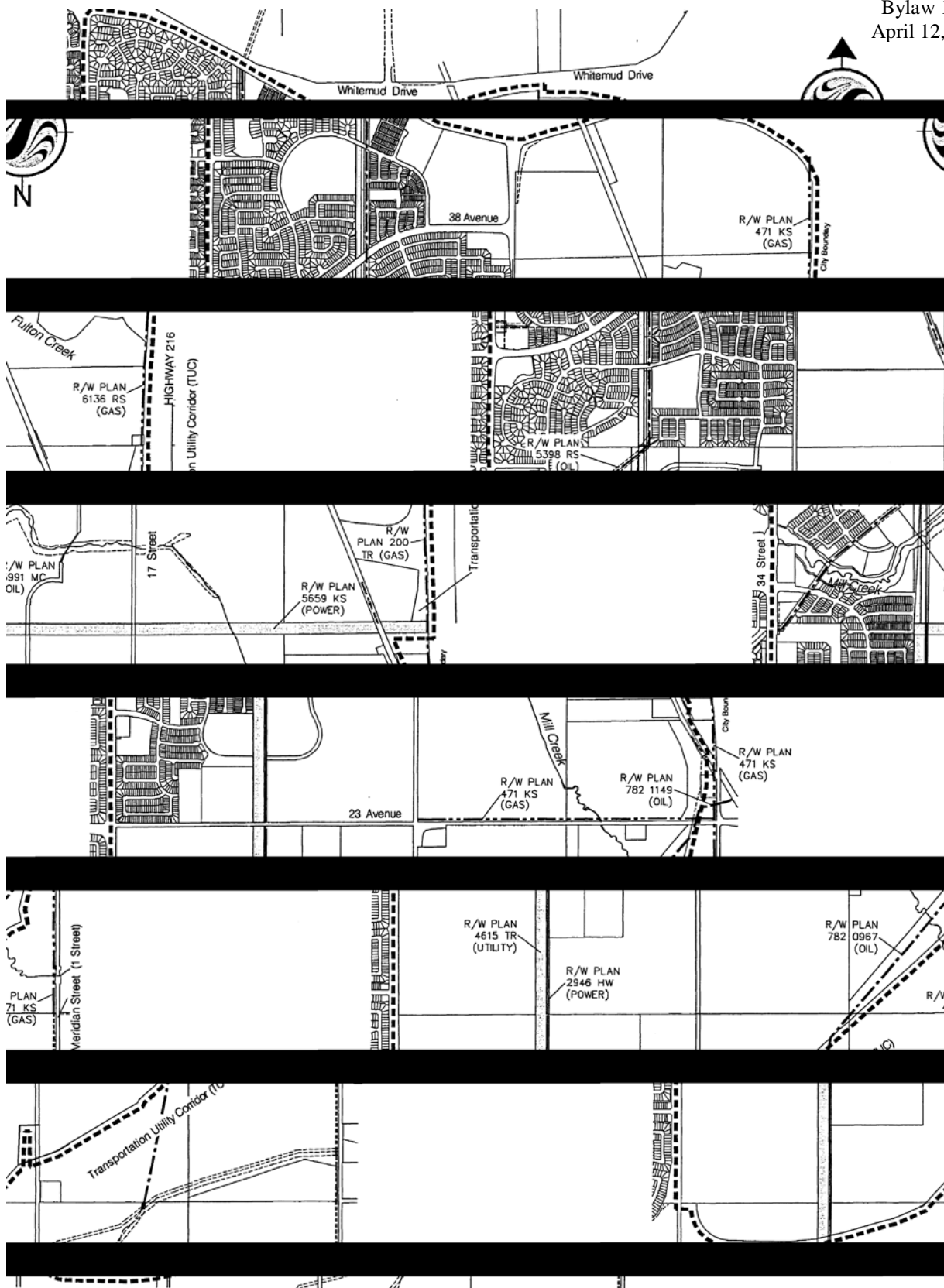
3.8.3 Pipeline Rights-of-Way and Facilities

There are four major pipelines within The Meadows (see **Figure 6.0 and Table 2**). Two Pipeline corridors have been integrated as open space, and walkways and bikeways in the Larkspur, Wild Rose, Silver Berry and Tamarack Neighbourhoods. The remaining pipeline corridors will provide similar opportunities.

Amended by Editor

Bylaw 14111
Feb.22, 2006

| TABLE 2 MEADOWS ASP - EXISTING PIPELINE TRANSMISSION FACILITIES (As Amended by Editor) | | | | | |
|--|--------------|--|--|---|--|
| Company | Substance | H ₂ S Content (mol/kmol) ¹ | Max. Operating Pressure (kPa) ² | Max. Outside Diameter (Mm) ³ | |
| Private Corporation | Natural Gas | 0.00 | 4,960 | 42.2 | |
| Private Corporation. | HVP Products | 0.00 | 9,930 | 323.9 | |
| Private Corporation. | HVP Products | 0.00 | X | 273.0 | |
| Private Corporation. | X | 0.00 | X | 219.0 | |
| ¹ sour natural gas occurs when the H ₂ S content is greater than 10.0 mol/kmol ² a high pressure line has a maximum operating pressure greater than or equal to 3,475 kPa ³ a high pressure line has an outside diameter greater than or equal to 323.9 mm X = product and pressure is variable | | | | | |



3.9 BACKGROUND AND SUPPORTING STUDIES

The sponsors of the new Meadows ASP commissioned several background studies in support of its direction to be developed as a “Suburban Area”. The purpose of two of these studies was to rationalize the deletion of the northeast light and medium industrial area approved under Bylaw 8730 and to incorporate this area as part of residential Neighbourhoods Six and Seven.

3.9.1 Environmental Impact Assessments

A Phase I Environmental Impact Assessment has been completed for Neighbourhoods Four through Seven and submitted under separate cover by Stantec Consulting Ltd. This environmental study 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 have been historically used as farmland. Moreover, there has been no evidence of waste management practices on the property or surrounding areas which may be of environmental concern, except for placement of fill materials across various portions of the subject lands.

In order to determine the types of material contained with the fill, a Phase II Environmental Site Assessment was carried out and submitted under separate cover by C.T. and Associates Engineering Inc. This Phase II sampled and tested in a laboratory the subsurface soil and groundwater conditions of the fill material. The Phase II concluded that the quality of the fill materials was within the CCME (Canadian Council of the Ministers of the Environment) residential land use criteria and Alberta Environment's most stringent criteria/guidelines.

3.9.2 Residential Land Assessment

Stantec Consulting Ltd. and Hudema Consulting Group Limited conducted a study which concluded that residential uses are better suited to the northeastern portion of the plan area on the basis of the following:

- The northeastern portion of The Meadows has restricted road access which limits the viability of industrial development, but may be beneficial to residential development in that through traffic is potentially limited.
- With a shift from rail to truck transport for short to medium hauls, the presence of a *rail line* in the northeastern portion of The Meadows is not as important as it once was in supporting the operations of industrial land uses. On the other hand, the rail line can be successfully incorporated into residential areas.

Amended by Editor

- The cost of servicing land intended for industrial uses is more than the market value of fully serviced industrial land in southeast Edmonton.

Developing the northeastern portion of The Meadows for residential uses is more compatible with existing development in the Larkspur and Wild Rose Neighbourhoods than if it were developed with industrial uses.

3.9.3 Industrial and Commercial Land Assessment

An Industrial Land Brief (i.e. market impact statement) submitted under separate cover by Hudema Consulting Group Limited in support of The Meadows ASP concluded the following:

- The deletion of 242 hectares of land intended for industrial development will reduce the current supply of business and employment (e.g., industrial) land in the southeast part of the City of Edmonton by about 14 percent.
- The City of Edmonton has a several decade supply of vacant business and employment land. The deletion of 242 hectares of business and employment land is not expected to have a negative impact upon the orderly growth of industrial land use or employment in the southeast for the short (up to 10 years) or medium terms (up to 30 years).
- In the short and medium terms, and if demand warrants it, additional business and employment lands might be added to the southeast portion of the City of Edmonton – in areas currently designated for agricultural use in Plan Edmonton.

3.9.4 Catastrophic Risk Assessment (CRA)

As mentioned in Section 3.3.1, a detailed CRA was submitted under separate cover by Doug McCutcheon and Associates Consulting in support of The Meadows ASP. The CRA made the following four key observations/recommendations regarding the presence of the *rail line* right-of-way in The Meadows.

Amended by Editor

1. The probability of catastrophic event is extremely low and the northeastern portion of The Meadows is well within the City of Edmonton's emergency response capability area.
2. The current City of Edmonton and *Private* Railway guidelines regarding buffering and land-use transitions to adjacent residential development should be implemented.

Amended by Editor

3. The design of the residential lands adjacent to the rail line must ensure that residents are provided sufficient opportunities and routes to evacuate the area and that emergency response vehicles can access the site from any direction.
4. The *rail line* should complete a risk assessment if it proposes any changes to the operation of its rail line.

Amended by Editor

3.9.5 Ground Vibration Monitoring

A ground-bourne vibration monitoring study was conducted along the *rail line* secondary main line located within the plan area by CT & Associates. The purpose of this study was to fulfill requirements of *the rail line* to determine if dwellings within 75 meters of the railway right-of-way would be impacted by vibration in excess of 0.14 mm/sec RMS (Root of mean square). It was concluded that at a distance of 52 m or more from the rail track, the velocity of the ground vibration becomes less than 0.14 mm/sec. This means that where vibration is in excess of 0.14 mm/sec., structural design must mitigate this vibration such that living areas do not exceed 0.14 mm/sec. on and above the first floor of the dwelling.

Amended by Editor

3.9.6 Transportation Impact Assessment

A Transportation Impact Assessment (TIA) in support of The Meadows ASP, prepared by Bunt & Associates Ltd. The recommendations contained in this report are reflected in the Transportation network established in Section 7.0. The report verifies that the transportation plan will provide appropriate roadway capacity and circulation for the land uses contained in the plan.

4.0 Development Objectives & Principles

While the information contained in Sections 2.0 and 3.0 serves as input to The Meadows Area Structure Plan, Section 4.0 contains the objectives and principles which acknowledge and act upon this input in order to provide direction for the creation of a development concept for the Plan. Through these objectives and principles, The Meadows ASP seeks to provide:

- Urban development that is compact in form, efficient, contiguous and logically staged;
- Residential neighbourhoods that are walkable, unique, attractive, safe and comfortable for residents;
- A range of choice in housing types;
- Transit oriented development;
- A range of employment opportunities; and
- A setting where natural areas are protected, enhanced and incorporated into the urban landscape.

4.1 DEVELOPMENT OBJECTIVES

The objectives of The Meadows ASP are as follows:

- to comply with the general intent and purpose of the City of Edmonton Municipal Development Plan and all other applicable statutes, policies and guidelines.
- to provide direction for future Neighbourhood Structure Plans by defining a basic roadway network, the general pattern and composition of land uses, a servicing concepts and development staging;
- to ensure that an appropriate interface is created between the existing *rail line* right-of-way and future suburban development;
- to protect and enhance the Mill and Fulton Creek ravines and to integrate other natural features of the area into the plan where sustainable; and
- to accommodate the continued operation of existing development within the plan area.

Amended by Editor

4.2 DEVELOPMENT PRINCIPLES

The development principles stated below are intended to guide future Neighbourhood Structure Plans (NSP) and amendments to existing NSPs in order to ensure that the objectives of The Meadows ASP area met.

4.2.1 Continuation of (Rural) Existing Uses

- Accommodate the continued operation of existing rural uses within the Plan area until such time as the owners chose to develop the affected lands in accordance with the approved development concept.

4.2.2 Neighbourhoods

- Develop compact, pedestrian oriented neighbourhoods that contain a complimentary mix of land uses.
- Design neighbourhoods that are distinct, establish a unique character and sense of place.

4.2.3 Residential

- Allow for a variety of housing forms consistent with municipal statues, policies and guidelines.
- Establish sufficient overall residential densities to support the efficient provision of public transit, educational facilities, recreational facilities and municipal services in a timely fashion.
- Establish a ratio of low and medium density housing that conforms to City Council's guidelines on the mix of housing types in new neighbourhood.
- Locate residential development so as to take advantage of features such as stormwater management (SWM) facilities, walkways and park space.
- 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.

4.2.4 Commercial

- Provide neighbourhood commercial sites so as to be convenient to local residents.

- Provide community commercial sites and other major commercial development so as adequately serve local residents and consumers from outside and The Meadows area.
- 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.
- Ensure that the impact of commercial development on adjacent land uses is minimized through the site design and the provisions of the Edmonton Zoning Bylaw.
- Provide convenient pedestrian linkages to commercial areas.

4.2.5 Transit Oriented / Mixed Use Development

- Establish a transit oriented / mixed use development site north of 38 and east of 17 Street for the inclusion of a transit centre, residential, commercial, and prestige industrial businesses uses.
- Establish sufficient (medium) residential densities to support public transit.
- Locate residential uses in proximity to the Transit Centre.
- Consider combining retail, office and residential uses in projects.
- Locate commercial and prestige business industrial uses so as to buffer residential uses from the nearby *railway* line and Whitemud Drive.
- Ensure that commercial and prestige business industrial land uses in the mixed use area are compatible with adjacent residential development.
- Create transit oriented / mixed use development that promotes walkability.
- Establish aesthetically pleasing transit oriented / mixed use development based on enhanced landscaping and streetscaping, and high quality urban design.
- Encourage connectivity and compatibility between transit oriented / mixed use development and the regional commercial center located west of 17 Street.

Amended by Editor

4.2.6 Circulation

- Provide a logical, safe and efficient hierarchy of transportation systems within the plan area to address the pedestrian, bicycle, public transit, automobile and railway transportation needs of residents and businesses moving within and through The Meadows ASP.

- Integrate pipeline and powerline corridors, stormwater management facilities, school/park sites and other open space elements into the pedestrian and bikeway system for the area having regard for the safe, ongoing operation of these facilities.
- Provide efficient, safe and aesthetically pleasing *shared use paths*, which incorporate good urban design (i.e. high quality landscape and streetscape).
- Create a pedestrian oriented public realm that emphasizes walkability.
- Encourage walkability by providing pedestrian connections to link residential areas, parks and open spaces, school sites, commercial sites, and transit-oriented mix use development.

4.2.7 School and Community

- Provide sites for educational and community league facilities within residential neighbourhoods through the dedication of municipal reserves.
- Locate a future District High School Campus site in the central portion of The Meadows.
- Ensure that the location and size of future school sites and their designated catchment areas reflect the contemporary needs and standards set by the Community Services Department.
- Locate parks and open space to provide both easy access for residents and to facilitate timely assembly and development of sites.
- Connect school and park sites through roadway, pedestrian, and greenway linkages.

4.2.8 Parks & 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.
- Retain as much as possible existing predevelopment tree stands.
- Ensure the protection and enhancement of significant environmental natural areas within The Meadows.

4.2.9 Rail Line Right-of-Way

Amended by Editor

- Implement the Canadian National Railway and Transportation Canada guidelines regarding the provision of separation spaces, fences, berms and buffers abutting the rail line.
- Where possible, locate non-residential uses, such as trail systems, stormwater management facilities, commercial and business uses, on lands abutting or adjacent to the rail line.
- Ensure safe pedestrian movement across the *rail line* Right of-Way by means of staging areas, advanced notification and signalization warning systems, and construction of level three crossings that either meet or exceed Canadian National Railway and Transportation Canada guidelines.
- Construct appropriate noise and visual attenuation between the *rail line* Right-of-Way and future development.

4.2.10 Environmental

- Protect and enhance the Mill and Fulton Creek ravines.
- Minimize roadway crossings of the Mill and Fulton Creeks.
- Implement the City of Edmonton's Top-of-Bank Roadway Policy when developing lands adjacent to the Mill and Fulton Creeks.
- Conserve and integrate environmentally sensitive and other natural areas where sustainable and economically viable.

4.2.11 Resource Operations

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

4.2.12 Urban Services

- Where possible, integrate the existing utility rights-of-way as open space.
- Ensure that the provision of services is a servicing system and phasing system based on the continued extension of City services and utilities, which is economical and efficient.
- Utilize the natural topography in the design and location of drainage services.
- Minimize grading to ensure the natural topography is maintained to the fullest extent.

4.2.13 Transportation

- Provide a logical, safe and efficient transportation system that accommodates the pedestrian, bicycle, public transit and vehicular transportation needs of residents moving within and through The Meadows area.
- Create an efficient and convenient interconnected circulation and pedestrian network.
- Utilize applicable Suburban Neighbourhood Design Principles in the design of the transportation and circulation network.

4.3 TRANSITIONAL LAND USE PLANNING PRINCIPLES

The integration of residential development along side commercial and business industrial land uses (e.g., transit oriented development/mixed use development) requires special attention be paid to the method of interface and the application of transitional land use planning principles.

Current development regulations and performance standards within the Edmonton Zoning Bylaw (EVB) generally provide the necessary tools to foster aesthetically pleasing industrial development. However, it may be necessary to utilize a site specific direct control provision to ensure that an appropriate interface between these different uses is developed.

At the Neighbourhood Structure Plan stage special attention must also be given to the transition between various land uses and major transportation infrastructure (e.g. *rail line* right-of-way, Anthony Henday Drive, Highway 14 and Whitemud Drive) through the use of, or consideration of, landscaping, berms, sound attenuation fencing, site design and building orientation. The City of Edmonton's Urban Traffic Noise Policy will be followed and noise attenuation will be provided at the expense of the developer.

Amended by Editor

Possible limits on building size, height and development setbacks may be appropriate for parcels abutting the *rail line* right-of-way.

Amended by Editor

5.0 Development Concept

The development concept provides a generalized land use framework to guide the design and evaluation of subsequent Neighbourhood Structure Plans (NSP's) and is a reflection of the development objectives and principles outlined in the previous section.

5.1 NEIGHBOURHOOD UNITS

The Meadows ASP is predominately designated for residential uses and contains a number of sites intended to accommodate commercial and business industrial uses. The Meadows ASP is composed of seven logical neighbourhoods (see **Figure 7.0 - Development Concept**). Neighbourhoods one, two and three are approved and are in various stages of development. The remaining undeveloped neighbourhoods vary in size but are planned to accommodate a population sufficient to support ten (10) school and park sites.

Neighbourhood One (Larkspur) is approximately 157 gross hectares and is bound by Whitemud Drive on the north, 38 Avenue on the south, 17 Street on the east and 34 Street on the west.

Neighbourhood Two (Wild Rose) is approximately 182 gross hectares and is bound by 38 Avenue on the north, Mill Creek on the south, 17 Street on the east and 34 Street on the west.

Neighbourhood Three (Silver Berry) is approximately 205 gross hectares and is bound by Mill Creek on the north, 23 Avenue on the south, 17 Street on the east, and 34 Street on the west.

Neighbourhood Four is approximately 274 gross hectares and is bound by 23 Avenue on the north, Transportation Utility Corridor (TUC, or Anthony Henday Drive) on the south, 17 Street on the east and 34 Street on the west.

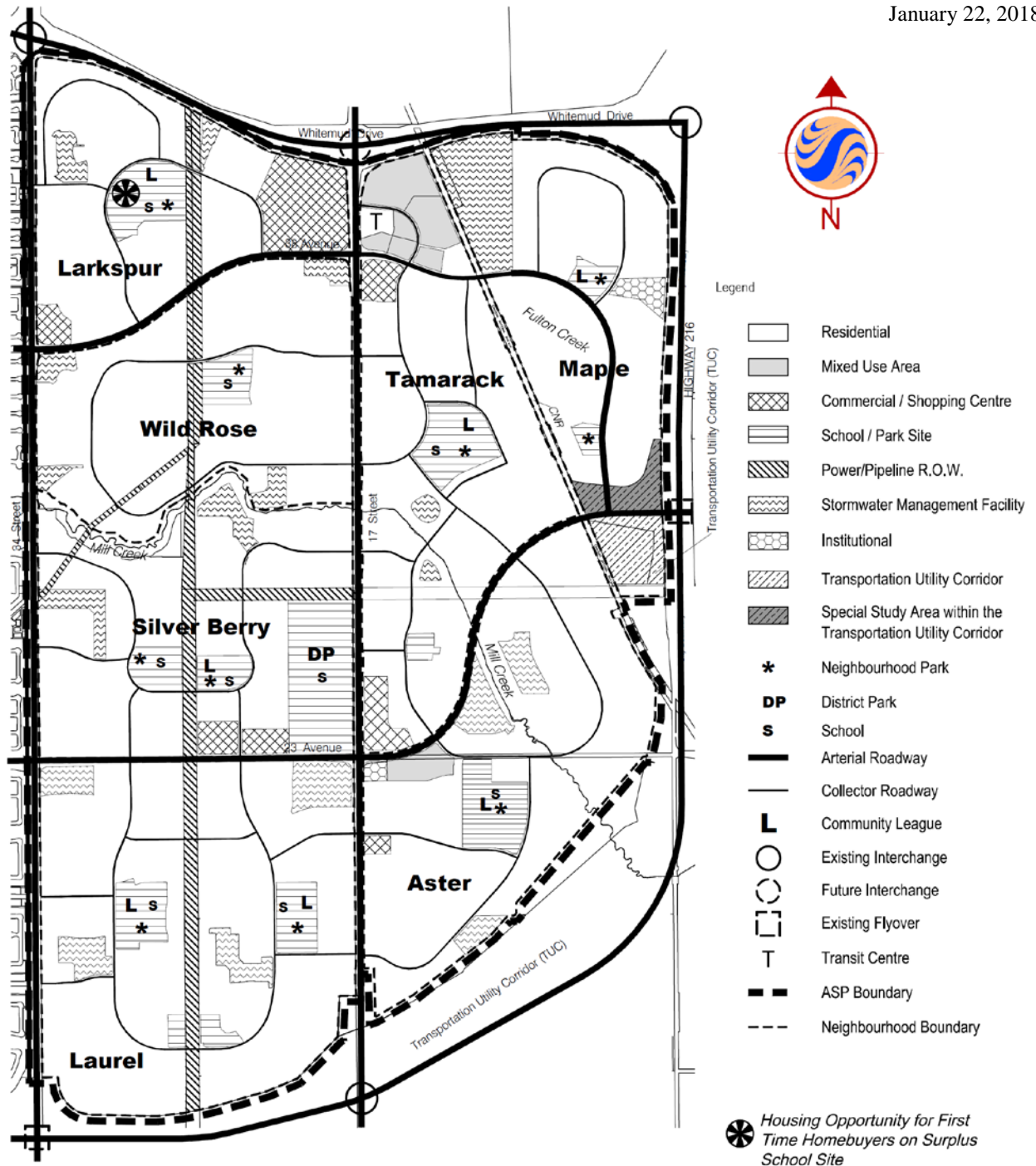
Neighbourhood Five is approximately 215 gross hectares and is bound by 23 Avenue on the north, TUC (Future Anthony Henday Drive) on the south and east, and 17 Street on the west.

Neighbourhood Six (*Tamarack*) is approximately 204 gross hectares and is bound by Whitemud Drive on the north, 23 Avenue on the south, 17 on the west and the *rail line* right-of-way on the east.

Neighbourhood Seven is approximately 167 gross hectares and is bound by Whitemud Drive on the north, the *rail line* right-of-way to the west, Highway 14 (Hwy 216) on the east.

Bylaw 14111
Feb. 22, 2006
Amended by Editor

Bylaw 14111
Feb. 22, 2006
Amended by Editor



Stantec

5.2 RESIDENTIAL

The majority of land within The Meadows ASP is intended for residential development as shown on **Figure 7.0**. Consistent with the MDP, residential development may include a range of low (e.g. single detached and semi detached) and medium (e.g. row housing and low rise apartments) density development. The location of development with different residential densities are/will be established through NSPs and will reflect the development objectives and principles in Section 4.0. General residential land use statistics for the ASP are shown in the Appendix.

Stormwater management facilities (SWMF) and school/park sites will be used as focal points in the residential areas. In general, higher density residential development will be located along collector and arterial roadways both for ease of access and in some cases to provide transitional land uses between major roads and low density development.

5.3 COMMERCIAL

The amount of commercial designated land within The Meadows ASP addresses current and anticipated demands for these uses. Commercial areas will be of sufficient size to support a wide range of commercial uses in order to serve the local and surrounding region. These areas will contribute to employment opportunities associated with growing housing demand in southeast Edmonton.

The Meadows ASP development concept provides for several large commercial sites.

A 20 hectare (ha) commercial site is situated in the northern part of the ASP west of 17 Street and south of Whitemud Drive *at the NE edge of the Larkspur neighbourhood* (see **Figure 7.0**). Commercial uses have been located at this site so as to be near a major entrance (17 Street and Whitemud Drive) to The Meadows. Situated at the perimeter of the ASP and abutting two major roadways, this site is highly visible and provides easy access to drive-by traffic.

Bylaw 15222
May 25, 2010

In addition to the above site, there are 5 (five) community commercial sites located in the plan area:

Bylaw 15222
May 25, 2010
Bylaw 16344
March 4, 2013

- *One community commercial site has been developing on the northeast corner of 38 Avenue and 34 Street located in the southwest corner of the Larkspur neighbourhood.*
- ***A 5.8 ha site is located on the north east corner of 17 Street and 23 Avenue, at the southern edge of the Tamarack neighbourhood, maximizing the available frontage along both***

Bylaw 16327
January 21, 2013

roadways, thereby allowing increased access opportunities to the commercial and retail uses.

- *An additional community commercial site is currently under development at the southeast corner of 17 Street and 39 Avenue (relocated here at the time of the NSP approval) in the Tamarack neighbourhood.*
- ***Two community commercial sites are located at the intersection of 23 Avenue and 24 Street in the Silver Berry neighbourhood in order to provide a wider range of services for residents in the southern portion of the Meadows area.***

Bylaw 16344
March 4, 2013

5.4 TRANSIT ORIENTED - MIXED USE DEVELOPMENT

As shown on **Figure 7.0**, an approximately 26 hectare transit oriented – mixed use development is located east of 17 Street and south of Whitemud Drive. This development is intended to accommodate a transit centre, complementary medium density residential development, and a range of commercial, office, and/or prestige industrial business uses intended to provide a variety of employment opportunities. Access to this site will be primarily from 38 Avenue. Access from 17 Street will be restricted and dependent upon required separation distances from the future interchange at 17 Street and Whitemud Drive. Details of access will be determined at the subdivision and development permit stage. Residential developments will be clustered near the Transit Centre with commercial and industrial business uses located toward the *rail* line and Whitemud Drive.

Amended b y Editor

5.5 SCHOOL SITES

*The Meadows contains nine school sites intended to accommodate the requirements of the public school and separate school districts. Eight of the school sites are located in the developing neighbourhoods of Larkspur, Wild Rose, Silver Berry and Tamarack (see **Figure 7.0 – Development Concept**) and one additional school site is located within Neighbourhood Five of the Asp.*

Bylaw 15395
April 12, 2010

The school sites have been sized to accommodate the space requirements of the school boards and the Community Services Department within the land to be dedicated as municipal reserve. All of the school sites will front onto collector roadways and will be accessible by pedestrians, bicycles, automobiles and public transit. The location and configuration of these sites will be further refined at the NSP stage.

5.5.1 Neighbourhood Parks

The Edmonton Public Schools has constructed Velma E Barker in Larkspur and a public school is under construction in the Tamarack

Bylaw 15395
April 12, 2010
Bylaw 14111
Feb. 22, 2006

neighbourhood. Edmonton Catholic Schools has constructed Father Michael Troy in Wild Rose.

Additional public and catholic schools will be located on reserved school sites within the area structure plan as required to provide educational programming to the student population. Typically a neighbourhood park site will accommodate schools with a range of grade configurations between Kindergarten to Grade 9. The grade configuration at the schools is determined by the Board of Trustees to meet the required educational programming.

5.5.2 District Park Site

A District Campus site has been designated within the Silver Berry Neighbourhood west of 17 Street and north of 23 Avenue. This location was selected for its access to two major arterials and its proximity to the area trail network and central location within the area structure plan. There are two schools and a recreation centre planned for this site.

Bylaw 15395
April 12, 2010

5.6 URBAN SERVICES

The location of urban service uses (e.g. cemetery, religious assemblies, police, fire and ambulance stations, libraries, etc.) may be identified at the NSP stage. These uses may be located within areas designated “Residential” or “Commercial” and should be located adjacent to collector or arterial roadways where these uses may benefit from good access.

5.7 PARKS & OPEN SPACE

The majority of public, programmable park space will be integrated with, and abutting to, the school sites within The Meadows.

Bylaw 15395
April 12, 2010

Other open space opportunities are present through stormwater management facilities, utility and pipeline corridors, and the Mill and Fulton Creek ravines. The possible retention of existing natural areas will be determined at the Neighbourhood Structure Plan stage.

5.8 CIRCULATION

The Meadows ASP is well served by a number of arterial and collector roadways as shown on **Figure 11.0 – Circulation System**. Access into The Meadows is planned from 17 Street, 34 Street, Whitemud Drive, 38 Avenue, 23 Avenue and Highway 14 (Hwy 216). The network of collector and local roadways will allow for numerous options to move to and from the plan area. This design provides a continuity of east-west and north-south linkages throughout the plan.

A more detailed description of the transportation and circulation system is provided in Section 7.0.

6.0 Engineering Services

6.1 STORMWATER DRAINAGE

The Meadows ASP is contained within the watersheds for Mill Creek and Fulton Creek. These watersheds were the subject of a study undertaken by the City of Edmonton Water and Sanitation entitled *Watershed Drainage Planning Study, Mill Creek, Fulton Creek and Gold Bar Creek*, dated November 1982. The study recommended the utilization of stormwater management facilities due to downstream constraints on both stream-courses. The storm drainage system for the plan area is illustrated on **Figure 8.0 – Storm Drainage**.

The Meadows ASP drainage system, as shown in **Figure 8.0**, is based upon the following:

Existing infrastructure in Neighbourhoods One, Two and Three;

The Area Master Plan prepared for The Meadows; and

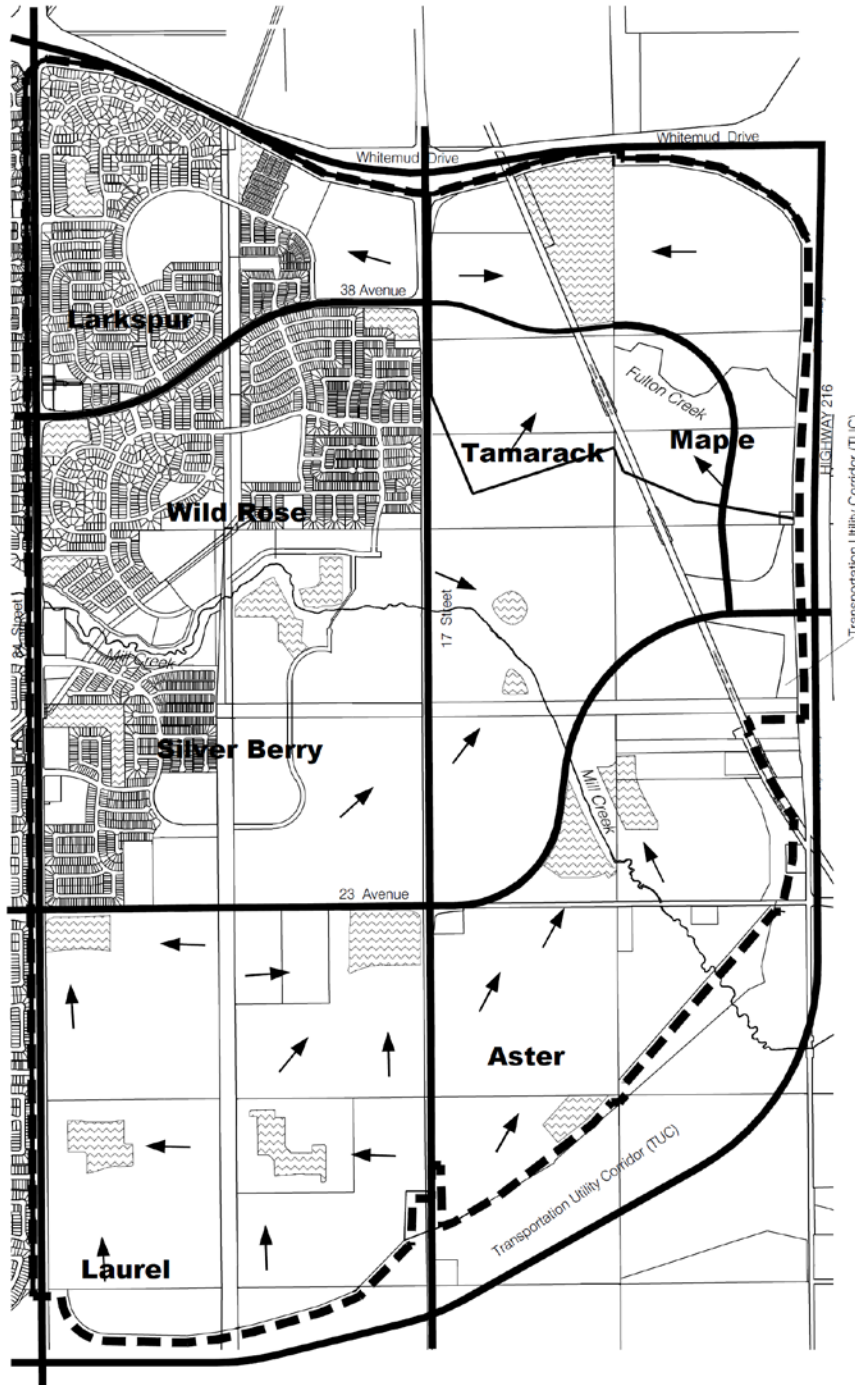
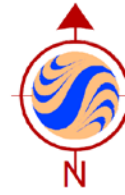
Report for the City of Edmonton entitled *Mill Creek and Fulton Creek Flood Study*, November 1999, prepared by Associated Engineering.

The *Mill Creek and Fulton Creek Flood Study* defines an extensive watershed in Neighbourhood Six, which includes the provision for two stormwater management facilities (SWMF) north of Mill Creek at the locations identified in **Figure 8.0**. A Neighbourhood Design Report (NDR) will address the watershed for Neighbourhood Six, however, conceptually the watershed could be confined to the aforementioned SWMF areas by raising the adjacent areas with excavation from the ponds. The watershed will have to be protected until the ponds and upstream facilities are constructed.

Fulton Marsh, located in the northern part of the plan, may have the capacity to accommodate all stormwater generated in Neighbourhood Seven and a significant portion from Neighbourhood Six. The City of Edmonton is currently (as of September, 2003) reviewing this. If it is determined that Fulton Marsh does not have adequate capacity, additional stormwater management facilities will be constructed as required.

The remainder of Neighbourhood Six (*Tamarack*), as well as all other undeveloped lands within the ASP are to drain into the Mill Creek Basin. Stormwater management facilities will be constructed as required.

Details will be provided by NDR submitted concurrently with Neighbourhood Structure Plans.



Stantec

- Legend
- Area Structure Plan Boundary
 - Basin Boundary
 - Direction of Flow
 - Stormwater Management Facility

Client/Project
QUALICO COMMUNITIES
THE MEADOWS
AREA STRUCTURE PLAN AMENDMENT

Figure No.
8.0

Title
**Storm
Drainage**

December 4, 2017
1161, 105795 KC

6.2 SANITARY DRAINAGE

The Meadows ASP can be serviced with the extension of existing sanitary sewer trunk systems (see **Figure 9.0 – Sanitary Drainage**). Adequate capacity has been provided in the adjoining systems.

The ASP area can be serviced with gravity sewers. Neighbourhood Seven and part of Neighbourhood Six will drain to an existing 600mm trunk located on 43A Avenue at 22 Street. The remainder of Neighbourhood Six and Neighbourhood Five will drain to a 750mm trunk that crosses 17 Street at 34 Avenue. The western half of Neighbourhood Four will drain to an existing 525mm stub on 34 Avenue at 32B Street, while the remainder will cross 34 Avenue in a future trunk at approximately 23 Street.

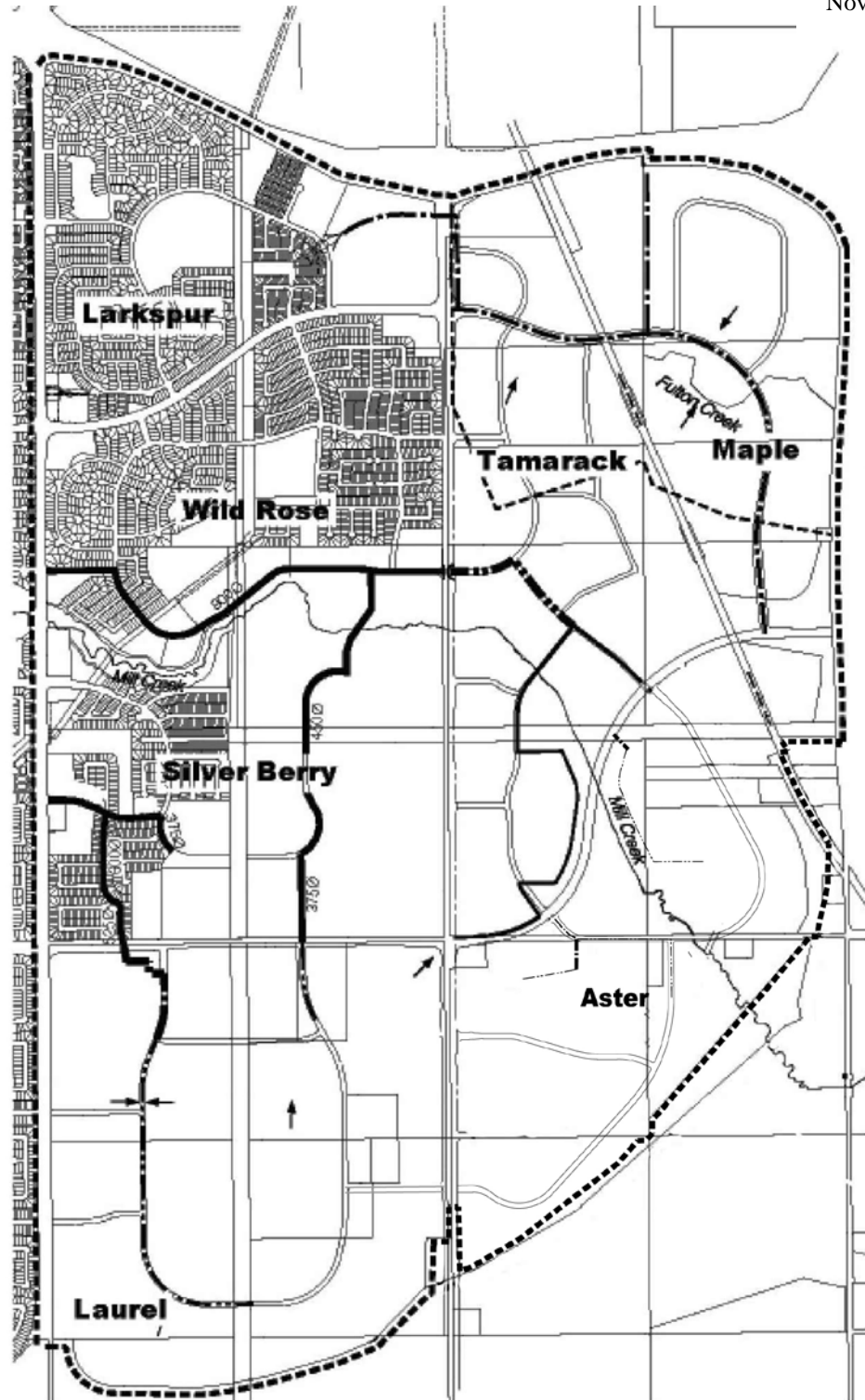
The sanitary sewerage system will be refined as planning and development progresses.

6.3 WATER DISTRIBUTION

The water distribution network for The Meadows ASP is shown on **Figure 10.0 - Water Distribution**. Water services will enter the ASP from existing transmission lines located on 34 Street. Extensions will be constructed as required by the pace of development.

The primary source of water for the ASP area is the Burnewood Booster at 50 Street and 34 Avenue. From there, a 600mm watermain travels east to 34 Street, north to 38 Avenue, then east, terminating at a stub at 22 Street. At ultimate design, this main will be looped to feed Neighbourhoods Seven, Six, Five, and Four by connecting with the 450mm stub crossing 34 Street at 16A Avenue.

A Water Network Analysis will be prepared for the entire ASP, as well as for with each future NSP. 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.



JUNE 2015



| | |
|------------------------------|-----------------------|
| Legend | |
| Area Structure Plan Boundary | Thick solid line |
| Basin Boundary | Thick dashed line |
| Direction of Flow | Arrow |
| Existing Sanitary Trunk | Solid line |
| Future Sanitary - 375 mm | Dashed line |
| Future Sanitary - 450 mm | Long dashed line |
| Future Sanitary - 600 mm | Solid line with dots |
| Future Sanitary - 750 mm | Dashed line with dots |

Client/Project

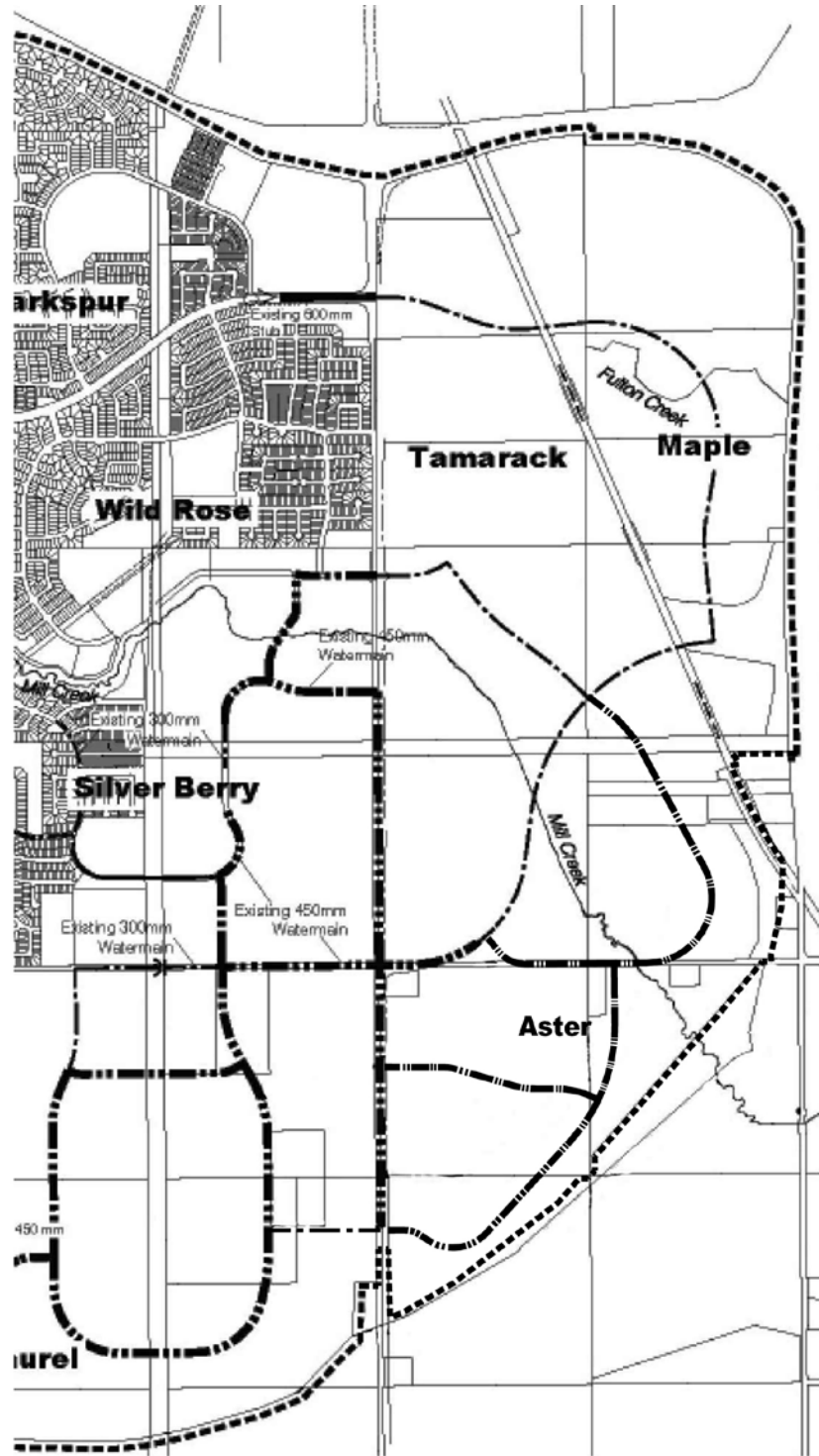
QUALICO COMMUNITIES AND DREAM DEVELOPMENTS
THE MEADOWS
AREA STRUCTURE PLAN AMENDMENT

Figure No.

9.0

Title

Sanitary Drainage



Legend
 ■■■■■ Area Structure Plan Boundary
 ——— Existing Watermain - 350 mm
 - - - Future Watermain - 300 mm
 - - - Future Watermain - 450 mm

Client/Project

QUALICO COMMUNITIES AND DREAM DEVELOPMENTS
 THE MEADOWS
 AREA STRUCTURE PLAN AMENDMENT

Figure No.

10.0

Title

Water Distribution

JUNE 2015



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. CATV facilities exist in the developing neighbourhoods of Larkspur, Wild Rose, and Silver Berry and will be utilized to provide service to the remaining neighbourhoods.

7.0 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 Meadows Area Structure Plan (ASP) supports this directive through the creation of an interconnected hierarchical transportation system as depicted in **Figure 11.0 – Circulation System**. A detailed Transportation Impact Assessment (TIA) in support of The Meadows ASP has been submitted under separate cover by Bunt & Associates Ltd.

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

7.1 REGIONAL ROADWAY NETWORK ACCESS

The Meadows ASP has superior access to the City, to the greater metropolitan area, Strathcona County and Edmonton International Airport by its proximity to Anthony Henday Drive (the southeast leg of the outer ring road), Highway 14 (the eastern leg of the outer ring road), and Whitemud Drive.

The scheduled completion of the southeast leg of the Anthony Henday Drive is 2007-2008. This roadway will provide a strong east-west corridor connecting Highway 2 (Calgary Trail) to Highway 14 (Hwy 216). Access to this portion of Anthony Henday Drive from The Meadows will be through interchanges at 17 Street. The 34 Street interchange will first be staged as a “fly-over” structure.

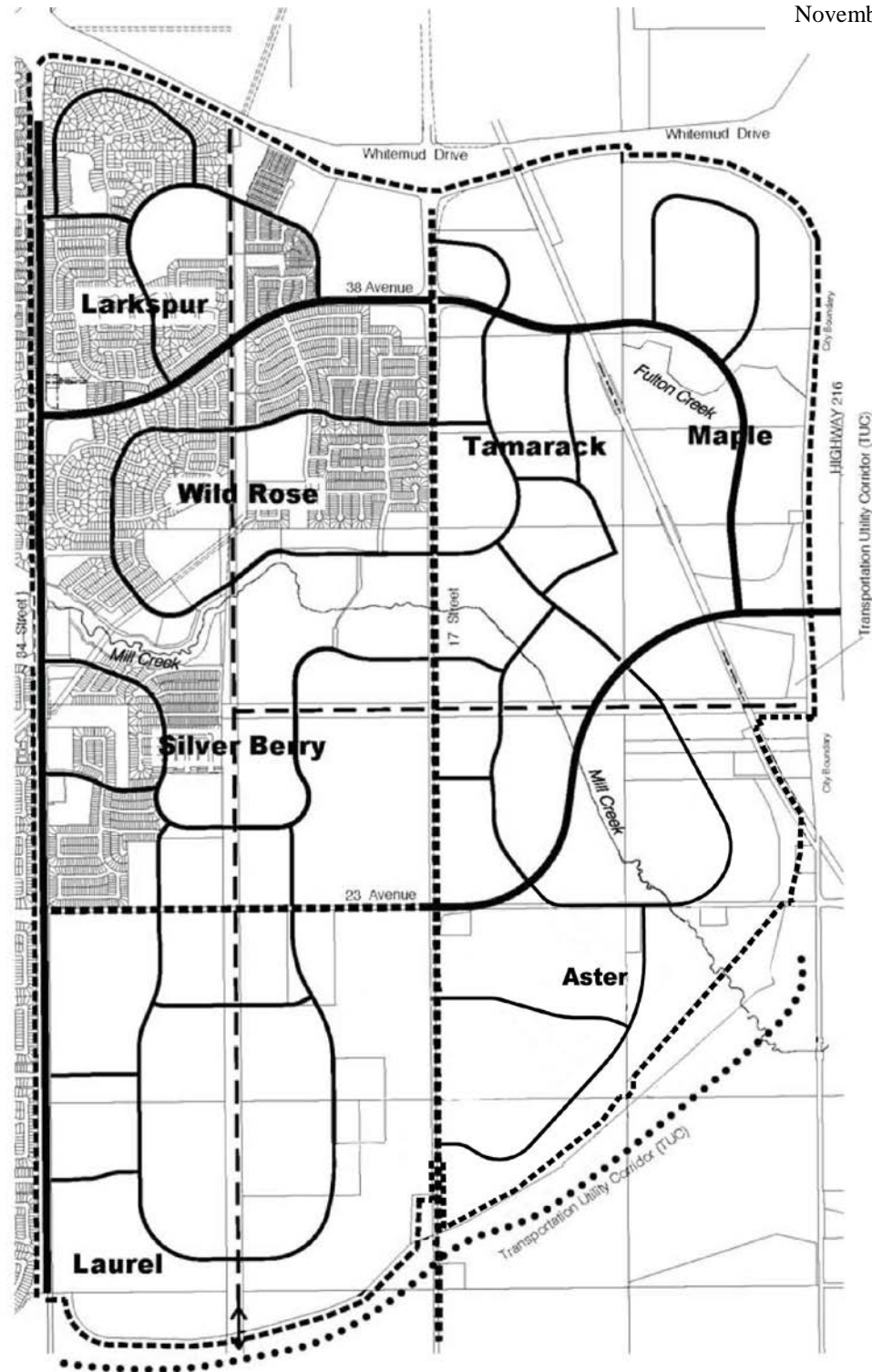
Bylaw 14111
Feb. 22, 2006

Highway 14 (Highway 216) is the eastern leg of the Outer Ring Road and provides a connection to Highway 16 (Yellowhead Highway). No direct access will be permitted to The Meadows from Highway 14 as 23 Avenue will be a “fly over” structure.

Full interchanges will be located on Whitemud Drive at 34 and 17 Streets.

7.2 EXTERNAL ARTERIAL ROADWAY ACCESS

Arterial roadway connections are planned between The Meadows ASP and the Mill Woods Community at 23 and 34 Avenues. 34 and 17 Streets are also to be constructed as arterial roadways.



JUNE 2015



Legend

- Arterial - 6 Lane
- Arterial - 4 Lane
- Collector
- Access Point
- Shared Use Path
- Pedestrian Corridor
- ASP Boundary

Client/Project

QUALICO COMMUNITIES AND DREAM DEVELOPMENTS
THE MEADOWS
AREA STRUCTURE PLAN AMENDMENT

Figure No.

11.0

Title

Circulation System

7.3 CIRCULATION SYSTEM

The transportation network shown in **Figure 11.0** has been designed to meet both the internal and external requirements of the development in accordance with City of Edmonton standards and guidelines. A hierarchy of arterial, collector and local roads will provide the road network required to efficiently and effectively accommodate traffic.

7.4 INTERNAL ROADWAY NETWORK

Major traffic flows within The Meadows will be accommodated by the development of a strong internal arterial roadway system which is comprised of east-west and north-south arterial roadways that are spaced at approximately one-mile intervals. This roadway framework continues to maintain an approximate one mile grid of arterial roadways in the City.

The arterial roadway network internal to the development area includes 17 Street, 34 Street, 23 Avenue and 38 Avenue. In general, these facilities represent extensions of existing roadway facilities, which have been identified as major elements of the overall transportation system in southeast Edmonton.

All arterial roadways should be designed as controlled access facilities. The length of turn-bays, the need for auxiliary lanes along 23 Avenue, 38 Avenue, 17 Street, and 34 Street adjacent to the commercial areas and the requirement for appropriate intersection storage bay requirements at roadway intersections will be determined at the NSP level of assessment.

Within The Meadows area road network, residential collector roadways are proposed, comprising of internal collector loop roadways that provide efficient and effective access to all sectors of the neighbourhoods. The design of the residential collector roadway system will provide convenient access to the arterial roadway system. The ultimate carriageway and right-of-way requirements for the internal collector roadway infrastructure will be based upon the projected traffic volumes to be determined through the completion of the Traffic Impact Assessment Reports at the NSP level.

Local roadways will be developed as required to provide property access and as connections to the collector roadway system.

The commercial and industrial sections of the plan area will be serviced by a system of collector roadways, which will provide convenient internal access. Details of access to the commercial industrial areas from adjacent arterial roadway system will be reviewed in detail with further planning.

Intersection spacing of the collector roadway system serving the neighbourhoods should be spaced at approximately 400 m intervals along

the arterial roadway network. This intersection spacing is recommended to facilitate traffic progression on the arterial roadway system.

7.5 TRANSIT SERVICE

The Meadows ASP will provide a range of transit services to residents, workers and visitors. This includes major and minor transit centres, waiting areas, and stops. Collector roadways will be developed to a standard that accommodates transit service and will provide readily accessible service to all neighbourhoods within The Meadows.

A major transit centre, with potential for park and ride facility, is to be located at the northeast corner of the intersection of 17 Street and 38 Avenue (see **Figure 12.0 – Transit Circulation System**). The Transit Centre is integral to an intended transit oriented development for this location.

The transit system will be extended into The Meadows in accordance with the City of Edmonton Transit System Guidelines as demand warrants. Neighbourhoods One (Larkspur) and Two (Wild Rose) are currently provided with transit service. Future transit routes should be adapted to the proportion of trips, which are expected to be generated by the development area.

Public transit service will be provided along the arterial and loop collector roadway systems, providing 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.

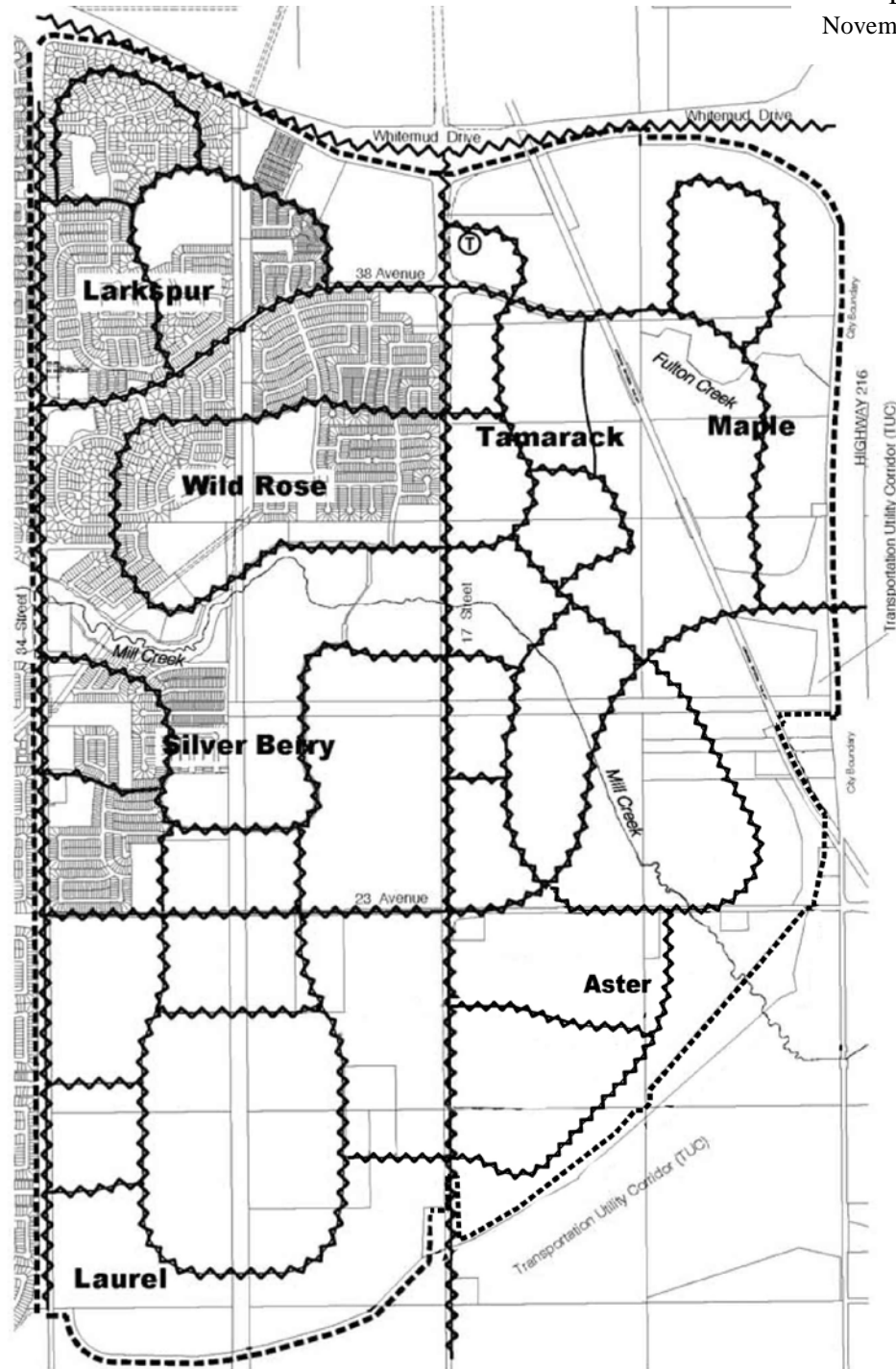
In addition to the development of the local transit system, consideration should be given to the development of a regional transit service providing quality transit service from the development area to major destinations in Edmonton and Strathcona County.

The neighbourhoods have been designed to locate the school/park sites along the collector roadway system. This will ensure that all school sites can receive adequate transit service. Yellow buses will be required by the Catholic schools because of their large catchment areas.

7.6 BIKEWAYS AND WALKWAYS

In addition to the road based systems, a network of pedestrian walkway facilities will be developed in The Meadows. These facilities will include sidewalks along local, collector and arterial roadways, and walkways and bikeways within utility and pipelines corridors, stormwater management facilities, school and park sites and to the Transportation Utility Corridor and natural areas.

The pedestrian walkway system will receive more attention during the design of the neighbourhoods at the NSP level of assessment.



Legend
 Roadways Required By ETS
 Transit Centre

Client/Project

QUALICO COMMUNITIES AND DREAM DEVELOPMENTS
THE MEADOWS
AREA STRUCTURE PLAN AMENDMENT

Figure No.

12.0

Title

Transit Circulation System

JUNE 2015



7.7 PARKING

Parking for vehicles associated with future land uses in The Meadows will be in accordance with the requirements of the Edmonton Zoning Bylaw.

7.8 ARTERIAL ROADWAY ASSESSMENT

Figure 13.0 – Arterial Roadway Assessment illustrates roadway staging to be implemented under the Arterial Roadway Assessment (ARA) plan. As shown on the figure, 23 Avenue, 38 Avenue and 17 Street are all part of the ARA program. Neighbourhoods One, Two and Three are currently involved in the ARA program. Eventually, the ARA program will apply to all Neighbourhoods within The Meadows. The ARA program will include the 38 Avenue crossing of the *rail line* right-of-way as well as upgrading 23 Avenue to the existing urban section at 38 Street.

Amended by Editor

7.9 TRUCK ROUTES

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

- 17th Street is a 24-hour truck route north of 23rd Avenue to Whitemud Drive,
- 23rd Avenue is a 24-hour truck route between 17th Street and 34th Street,
- 34th Street is a 24-hour truck route south of 23rd Avenue to the City Limits, and,
- 34th Street north of 23rd Avenue to Whitemud Drive is a daytime truck route.
- Both Whitemud Drive and Highway 14 are Dangerous Goods Routes.

It is anticipated that the southeast leg of Anthony Henday Drive is completed in fall 2007, 34 Street (between Whitemud Drive and Anthony Henday Drive) will no longer be a truck route and 23 Avenue (west of 17 Street) will no longer be 24-hour truck route.

Instead, 17 Street (between 23 Avenue and Anthony Henday Drive) will be designated as the 24-hour truck route, as there is an all-directional access from 17 Street to Anthony Henday Drive.

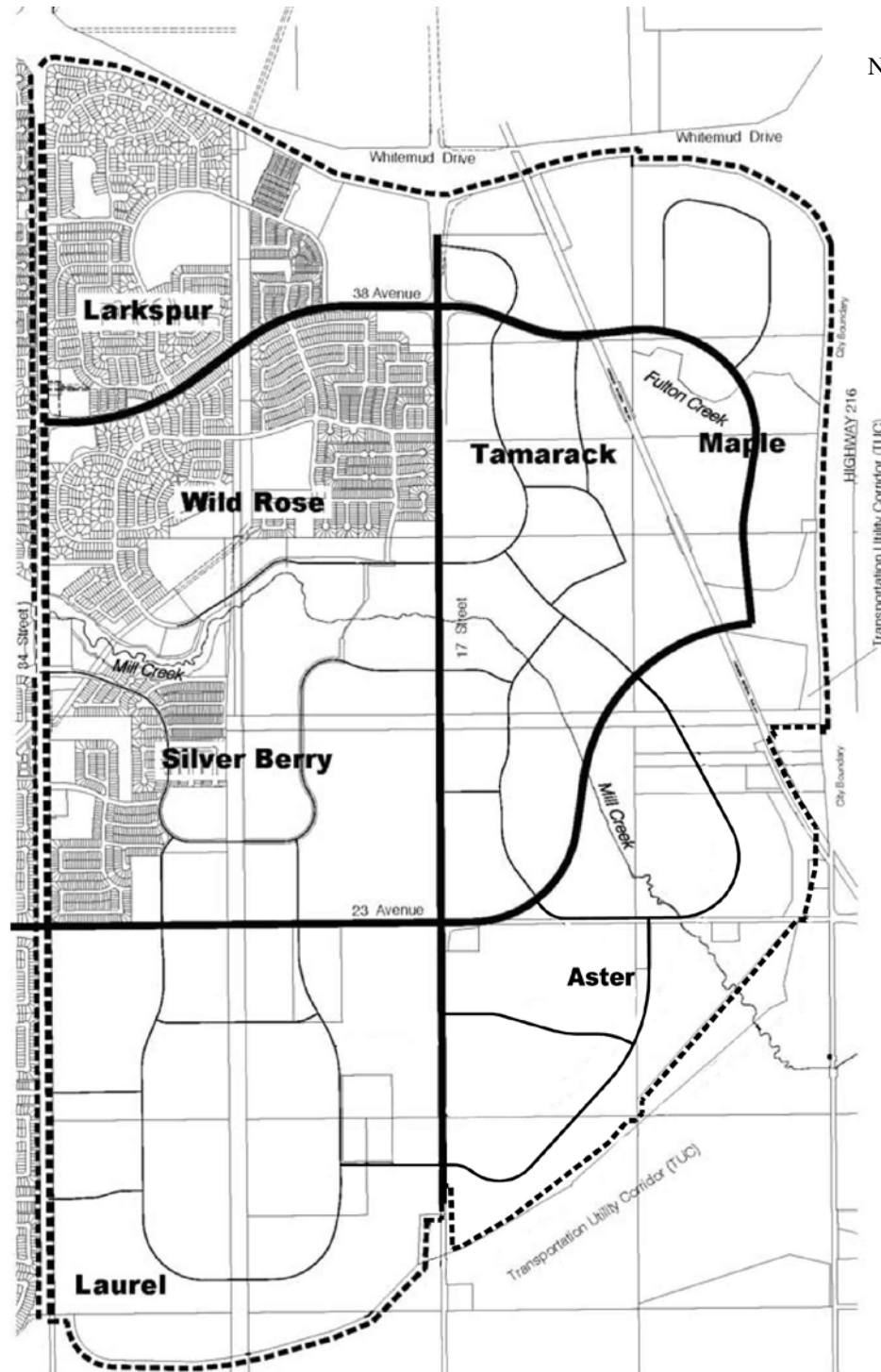
7.10 NOISE ATTENUATION

The Province of Alberta will provide noise attenuation along Anthony Henday Drive in the southern portion of The Meadows ASP in accordance with the City of Edmonton's Urban Traffic Noise Policy. The City's Urban Traffic Noise Policy states: "Where a freeway or arterial is proposed to be built or upgraded through or adjacent to a residential area, the roadway is to be built to meet a noise level as low as possible below

65 dBA with an objective of achieving 60 dBA". Where traffic noise levels are not expected to exceed 60 dBA, no noise attenuation is required according to the policy. Further noise level evaluations will be carried out during the design phase of this project to verify if these and other locations merit noise reduction measures. If during the course of these

further evaluations the locations are confirmed to exceed the 60 dBA objective, noise attenuation will be provided at these locations at the expense of the developer. The Province of Alberta is committed to providing noise attenuation wherever it is needed along Anthony Henday Drive to satisfy the 60 dBA (24 hr) objective. The Province has indicated that they will generally not permit noise attenuation berming within the TUC.

Should berming be required due to Anthony Henday Drive, Whitemud Drive or Highway 14 (Hwy. 216) the land for the berms will be accommodated within the plan area.



Legend
 — Full Assessment
 - - - Half Assessment
 - - - - ASP Boundary

Client/Project

QUALICO COMMUNITIES AND DREAM DEVELOPMENTS
 THE MEADOWS
 AREA STRUCTURE PLAN AMENDMENT

Figure No.

13.0

Title

Arterial Roadway Assessment

JULY 2015



8.0 Implementation

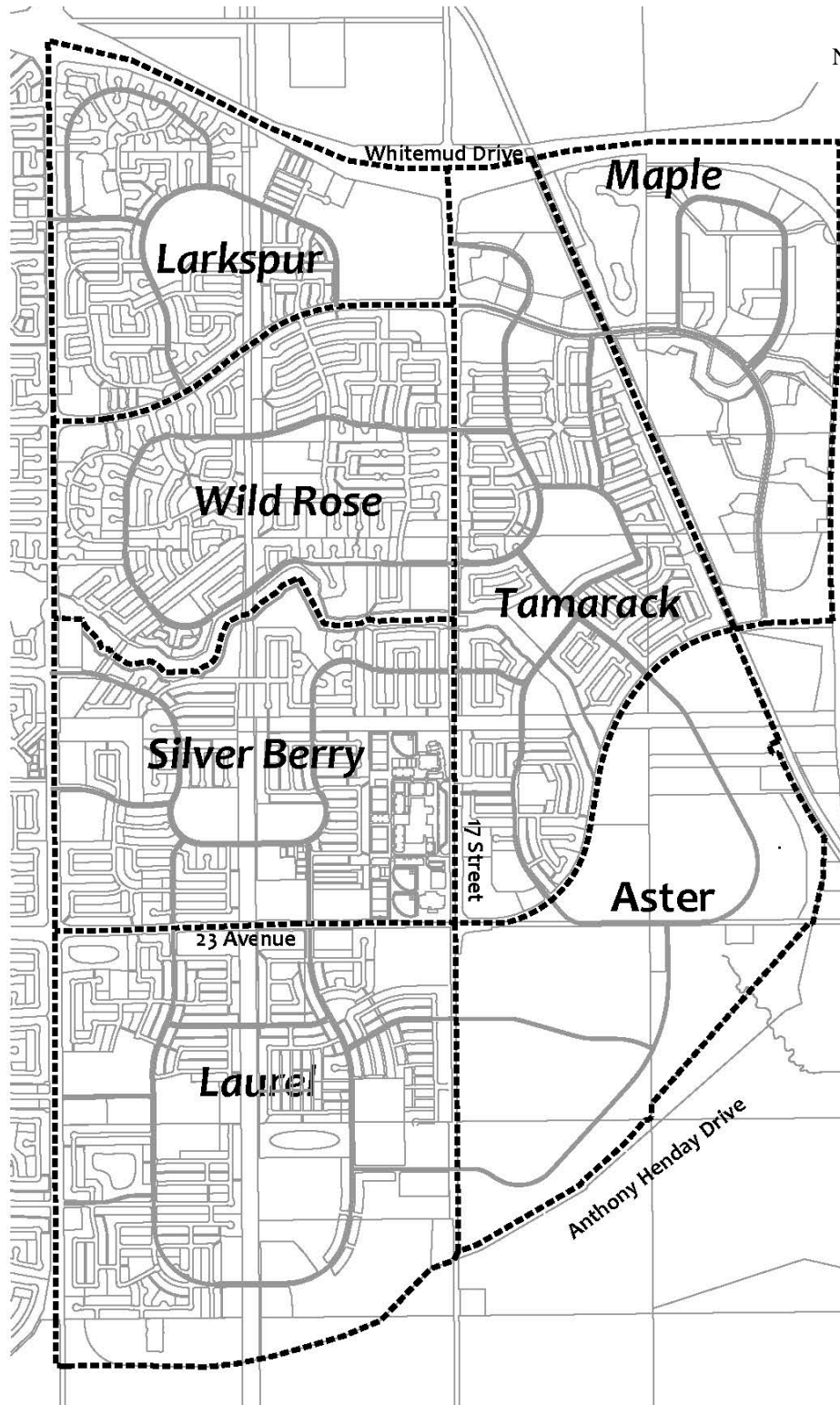
The Meadows Area Structure Plan (ASP) will be implemented in order by the following planning approvals:

- The re-adoption of Neighbourhood Structure Plans (NSP) – already in place for the Larkspur, Wild Rose and Silver Berry Neighbourhoods.
- The adoption of NSPs for Neighbourhoods Four through Seven.
- The adoption of land use zoning in compliance with the affected NSP.
- The approval of plans of subdivision in compliance with the affected NSP and the applicable land use zoning.
- The approval of development and building permits in compliance with the applicable land use zones and any conditions deemed appropriate by the Development Officer for the City of Edmonton.

8.1 DEVELOPMENT STAGING

Depending on the demands of the market and aspirations of the respective landowners, development may proceed first to either Neighbourhood Six or Four, **see Figure 7.0 – Development Concept**. Development of Neighbourhood Seven must follow the development of Neighbourhood Six. Neighbourhood Five may develop following the development of either Neighbourhood Four or Neighbourhood Six.

Infrastructure to service these neighbourhoods will be extended as per detailed engineering at the neighbourhood planning stage. Particular consideration will be given to community facilities and services conceived for these neighbourhoods at the time of development.



Legend
■■■■■ Neighbourhood Boundary

Client/Project
QUALICO COMMUNITIES AND DREAM DEVELOPMENTS
THE MEADOWS
AREA STRUCTURE PLAN AMENDMENT

Figure No.
14.0

Title
**Neighbourhoods Within
The Meadows**

JUNE 2015
MMM GROUP