

Desrochers Neighbourhood Area Structure Plan

Office Consolidation February 2014

Prepared by:

***Current Planning Branch
Sustainable Development
City of Edmonton***

Bylaw 15552 (as amended) was adopted by Council in November 2010. In February 2014, this document was consolidated by virtue of the incorporation of the following bylaws:

Bylaw 15552 Approved November 8, 2010 (to adopt the Desrochers Neighbourhood Area Structure Plan)

Bylaw 16726 Approved February 24, 2014 (to redesignate the mixed use site and the low density residential in the southwestern portion of the neighbourhood to community commercial and low rise / medium density units and redistribute the low rise / medium density units and rowhousing in the eastern portion of the neighbourhood, as well as incorporate an administrative update to reclassify single/semi-detached land uses to low density residential land uses, add reference to the Residential Mixed Dwelling Zone as a low density residential use and accurately reflect the area designated for a stormwater management facility)

Editor's Note:

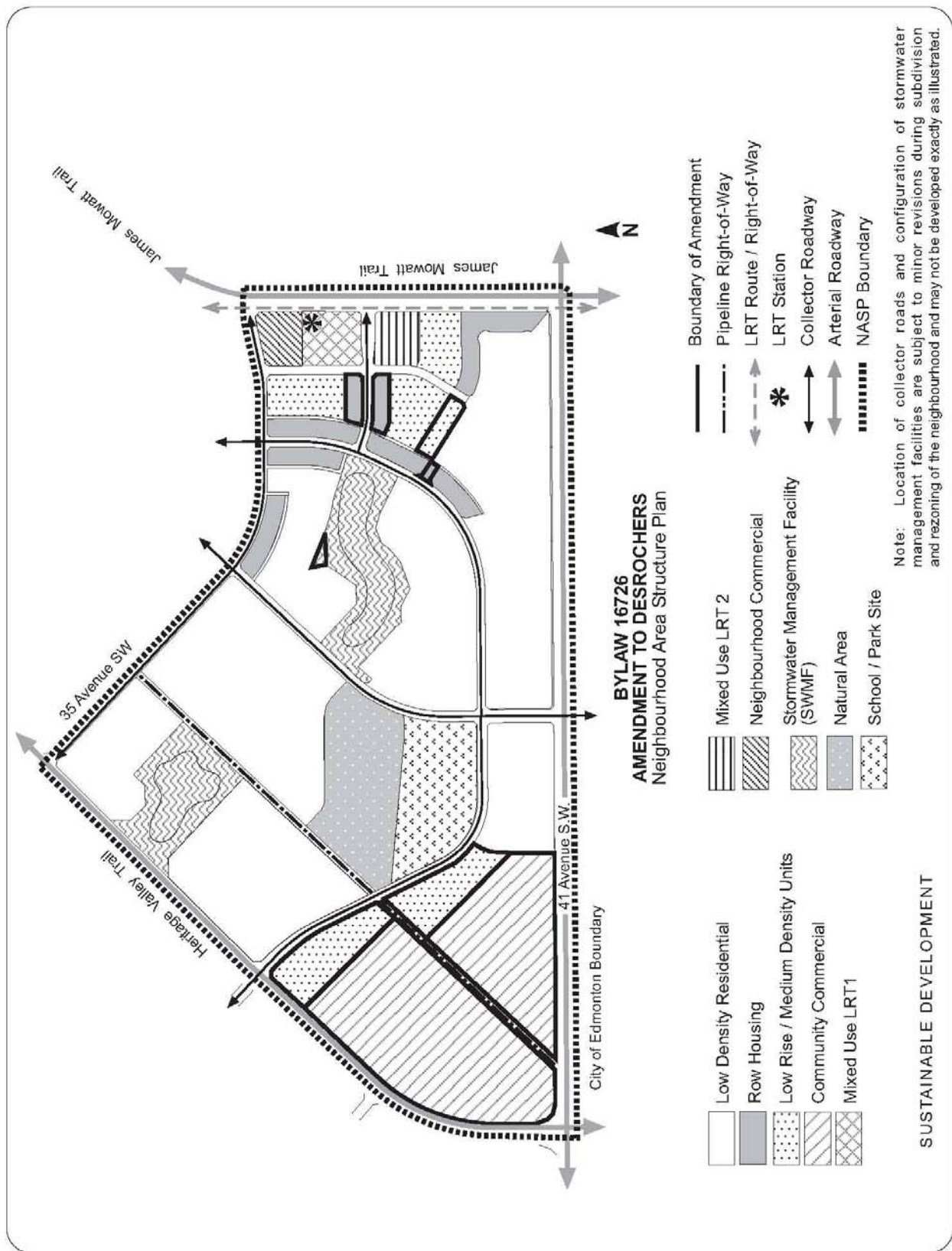
This is an office consolidation edition of the Desrochers Neighbourhood Area Structure Plan, Bylaw 15552, as approved by City Council on November 8, 2010.

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

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

City of Edmonton
Sustainable Development

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN



DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN LAND USE AND POPULATION STATISTICS BYLAW 16726

LAND USE	Area (ha)	% of GA	% of GDA
Gross Area	110.40		
Pipeline & Utility R/W	1.65	1.5%	
Arterial Road R/W	8.38	7.6%	
LRT R/W	1.20	1.1%	
Total Non-Developable Area	11.23	10.2%	
Gross Developable Area	99.17		100.0
Commercial			
Neighbourhood Convenience Commercial	0.85		0.9%
Community Commercial	15.54		15.7%
Parkland, Recreation, School (Municipal Reserve) ¹			
School/Park Site	4.00		4.0%
Natural Area	4.95		5.0%
Transportation			
Circulation	19.83		20.0%
Infrastructure / Servicing			
Stormwater Management Facilities	7.49		7.6%
Total Non-Residential Area	52.66		53.1%
Net Residential Area (NRA)	46.51		46.9%

RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units/ha	Units	% of Total	People/Unit	Population	% of NRA
Low Density Residential	31.38	25	785	38.0%	2.8	2,197	67.5%
Rowhousing	5.15	45	232	11.2%	2.8	649	11.1
Low Rise/Medium Density Housing	3.68	90	331	16.0%	1.8	596	8.0%
TOD Low Rise/Medium Density Housing	4.21	100	421	20.4%	1.8	758	9.1%
Mixed Use LRT 2	0.90	100	90	4.4%	1.8	162	2.0%
Mixed Use LRT 1	1.19	175	208	10.1%	1.5	312	2.6%
Total Residential	46.51		2,067	100.0%		4,674	100.0%

SUSTAINABILITY MEASURES

Population Per Net Residential Hectare (ppnrha)	100.5		
Units Per Net Residential Hectare (upnrha)	44.4		
Unit Density within 400m of LRT Service (upnrha)	80.2		
[Single/Semi-Detached] / [Rowhousing, Low-Rise/Medium Density Units and Medium to High Rise Units]			
Unit Ratio	38%	/	62%
Population (%) within 500 m of Parkland	97%		
Population (%) within 400 m of Transit Service	100%		
Population (%) within 600 m of Commercial Service	96%		
Presence/Loss of Natural Area Features	Land		Water
Protected as Environmental Reserve (ha)	0.00		n/a
Conserved as Naturalized Municipal Reserve (ha)	4.95		n/a
Loss to Development (ha)	0.00		n/a

STUDENT GENERATION

Public School Board		396
Elementary	198	
Junior / Senior High	198	
Separate School Board		159
Elementary	79	
Junior High	40	
Senior High	40	
Total Student Population		555

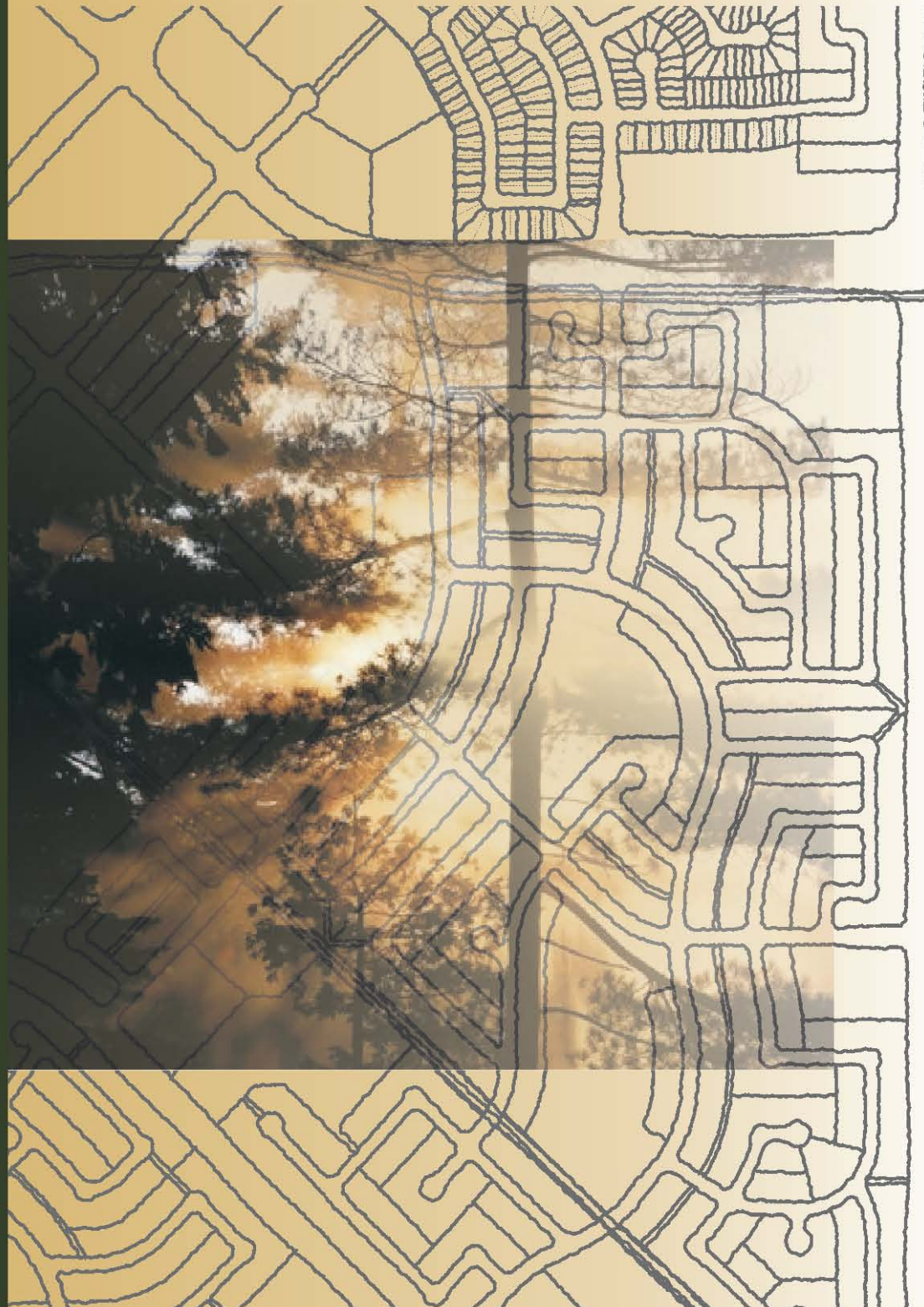
¹ Areas dedicated to Municipal Reserves to be confirmed by legal survey.

Desrochers

HERITAGE VALLEY



Stantec




NEIGHBOURHOOD AREA STRUCTURE PLAN

SEPTEMBER 2010

Table of Contents

1.0 ADMINISTRATION.....	3
1.1 PURPOSE	3
1.2 AUTHORITY.....	3
1.3 TIMEFRAME	3
1.4 INTERPRETATION	3
1.5 MONITORING	4
1.6 AMENDMENTS	4
2.0 PLAN CONTEXT.....	5
2.1 LOCATION.....	5
2.2 BACKGROUND	5
2.3 LAND OWNERSHIP	6
2.4 SITE CONTEXT.....	6
2.4.1 Existing Land Uses	6
2.4.2 Soil and Groundwater Conditions	6
2.4.3 Topography.....	7
2.4.4 Natural Areas and Ecological Resources	7
2.4.5 Environmental Assessment	7
2.4.6 Pipelines and Oil Well Sites	8
2.4.7 Whitemud Water Co-op Ltd	9
2.4.8 Historical Resources	9
2.5 PUBLIC INVOLVEMENT	10
3.0 LAND USE, TRANSPORTATION & SERVICING.....	11
3.1 LAND USE CONCEPT AND POPULATION STATISTICS.....	11
3.2 VISION	11
3.3 GOALS	12
3.4 DEVELOPMENT OBJECTIVES.....	12
3.5 POLICY AND IMPLEMENTATION.....	16
3.5.1 Green Development.....	16
3.5.2 Urban Design	17
3.5.3 Ecology	23
3.5.4 Environment.....	24
3.5.5 Historical Resources	26
3.5.6 Residential.....	27
3.5.7 Mixed Use.....	30
3.5.8 Commercial.....	33
3.5.9 Parkland, Recreational Facilities and Schools	36
3.5.10 Transportation.....	38
3.5.11 Infrastructure Servicing & Staging	45
4.0 APPENDIX A: POLICY CONTEXT	47



DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

CAPITAL REGION LAND USE PLAN	47
MUNICIPAL DEVELOPMENT PLAN – THE WAY WE GROW	49
TRANSPORTATION MASTER PLAN – THE WAY WE MOVE	52
HERITAGE VALLEY SERVICING CONCEPT DESIGN BRIEF	53
EDMONTON SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES	54
URBAN PARKS MANAGEMENT PLAN	55
CITY OF EDMONTON HOUSING MIX GUIDELINES	55
NATURAL AREA SYSTEMS (POLICY C531)	56
RESOURCE WELL SITES AND PIPELINES	56
<hr/>	
5.0 APPENDIX B: TECHNICAL STUDIES	57
6.0 APPENDIX C: FIGURES.....	58

Figures	Follows Page
1.0 LOCATION	61
2.0 CONTEXT	62
3.0 LAND OWNERSHIP	63
4.0 SITE FEATURES	64
5.0 ENVIRONMENTAL SITE ASSESSMENT OVERVIEW	65
6.0 LAND USE CONCEPT	66
7.0 PARKLAND, RECREATIONAL FACILITIES AND SCHOOLS	67
8.0 TRANSPORTATION NETWORK	68
9.0 PEDESTRIAN AND MULTI-USE TRAIL NETWORK	69
10.0 SERVICING	70
11.0 STAGING CONCEPT	71

Tables	
1 LAND OWNERSHIP	6
2 ENVIRONMENTAL SITE ASSESSMENT OVERVIEW	8
3 GAS WELL INFORMATION SUMMARY	8
4 PIPELINE INFORMATION SUMMARY	9
5 HISTORICAL RESOURCES OVERVIEW	9
6 LAND USE CONCEPT AND POPULATION STATISTICS	15

1.0 ADMINISTRATION

1.1 PURPOSE

The purpose of the Desrochers Neighbourhood Area Structure Plan (NASP) is to establish a development and servicing framework for the Desrochers neighbourhood in Heritage Valley. The NASP specifies the following:

- The location, configuration and area of residential, commercial, school, parks and open spaces, and public utility land uses;
- The density of residential development;
- The manner in which the unique natural area will be incorporated into the development concept;
- The pattern and alignment of the residential centre LRT station, collector roadway and pedestrian pathway systems;
- A conceptual servicing scheme showing utility services and infrastructure; and
- The implementation and phasing of development.

1.2 AUTHORITY

The Desrochers Neighbourhood Area Structure Plan was adopted by Edmonton City Council in November 2010 as Bylaw 15552 in accordance with Section 633 of the *Municipal Government Act*.

1.3 TIMEFRAME

Development in Desrochers is expected to begin in 2011 and is estimated to be fully complete within 10 years based on current and anticipated absorption rates.

1.4 INTERPRETATION

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

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

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

1.5 MONITORING

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

1.6 AMENDMENTS

Amendments to the Desrochers NASP document involving policies, text or mapping shall be completed in accordance with the *Municipal Government Act*, the Heritage Valley Servicing Concept Design Brief, and all other applicable bylaws, policies and procedures.

2.0 PLAN CONTEXT

2.1 LOCATION

The Desrochers NASP area is comprised of lands largely located within SE and SW 13-51-25-4. The total gross area of the NASP is approximately 110 hectares (ha) and is defined by the following boundaries (see **Figure 1.0 – Location**):

- *Northern Boundary* – 35 Avenue S.W. (southern boundary of Heritage Valley Town Centre)
- *Western Boundary* – Heritage Valley Trail S.W.
- *Eastern Boundary* – James Mowatt Trail S.W.
- *Southern Boundary* – 41 Avenue S.W. (City Boundary)

The Desrochers NASP is identified as Neighbourhood Nine in the Heritage Valley Servicing Concept Design Brief.

As shown in **Figure 2.0 – Context Plan**, the Heritage Valley Town Centre (Heritage Valley Neighbourhood 5) is located to the north, Chappelle (Heritage Valley Neighbourhood 10) to the west, and Allard (Heritage Valley Neighbourhood 8) to the east. These surrounding neighbourhoods are in the early stages of development. Immediately south of the NASP is 41 Avenue S.W., beyond which is Leduc County.

2.2 BACKGROUND

The Desrochers NASP was prepared in response to anticipated market demands in the Capital Region as well as the aspirations of the landowners in the Plan area.

The preparation of this NASP has been guided by existing City of Edmonton statutory plans and policies, including the Capital Region Growth Plan, The Way We Grow, The Way We Move, the Heritage Valley Servicing Concept Design Brief (SCDB), the Suburban Neighbourhood Design Principles (SNDP) and the Urban Parks Management Plan (UPMP). Conformance to these plans and policies is referenced in the Appendix A.

The land has been historically used for agricultural production, similar to the other lands in the area and contains older farm homes and buildings. It is designated for suburban land uses and is in proximity to developing neighbourhoods such as Chappelle, Allard, Rutherford and the Town Centre. Recent and proposed infrastructure expansion of roadways, sewers and other utility services will provide the necessary means of meeting the required municipal servicing standards for development of the neighbourhood.

2.3 LAND OWNERSHIP

The Desrochers NASP was prepared on behalf of *two private corporates.*, who together are owners of the majority of the lands contained within the NASP area. Current ownership is described below in **Table 1 - Land Ownership** and illustrated in **Figure 3 – Land Ownership**.

Table 1 - Land Ownership

Map Reference	Titled Owner	Legal Description	Area (ha)*
1	Private Corporate	SW ¼ 13-51-25-4	51.82
2	Private Corporate	NW ¼ 13-51-25-4	3.45 ^{NP}
3	City of Edmonton	Lot D Plan 1711 MC	0.53 ^{NP}
4	Private Corporate	SE ¼ 13-51-25-4	48.16
5	Private Corporate	Lot 1 Plan 9824939	4.05
	Government Road R/W		2.4
	TOTAL AREA		110.41 ha

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

^{NP} Indicates a non-participating landowner

2.4 SITE CONTEXT

2.4.1 Existing Land Uses

The majority of lands within the plan area are used for agricultural uses, and include farm houses and associated buildings. Existing land uses pose no major constraints to residential development in the NASP area.

2.4.2 Soil and Groundwater Conditions

A preliminary geo-technical investigation of the lands determined that in general, the soil conditions consist of surficial topsoil, underlain by a silty clay, overlaying a glacial till material followed by sandstone and clay shale. The groundwater table was generally moderate to low, with observed water levels between 2.6m and 7.0m below the ground surface.

Based on the preliminary investigations, the soil and groundwater conditions are feasible for development, and overall the clay soils place no major constraints on subdivision design or construction.

Each subdivision and development stage will require additional geotechnical investigation and a separate detailed report, as directed by the City of Edmonton.

2.4.3 Topography

The topography of the lands within the Desrochers NASP is relatively flat throughout, with some variation (see **Figure 4.0 – Site Features**). Elevations within the plan area vary from approximately 701.5 m in the south to approximately 697 m in the north of the plan boundary. Surface drainage throughout the plan area generally flows northeast towards Blackmud Creek.

2.4.4 Natural Areas and Ecological Resources

Lands within the plan area are predominantly agricultural, and include existing dwellings and farming type-uses. As shown on **Figure 4.0 – Site Features**, little non-agricultural vegetation exists in this agriculturally dominant landscape, apart from one stand of trees. The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (Geowest, 1993) identifies one Natural Area within the Desrochers NASP boundaries. The Natural Area, referred to as SW7, is located approximately 325m north of 41st Avenue S.W. and 500m east of Heritage Valley Trail, within the NASP boundary. The SW7 Natural Area is not defined as a significant natural area or a local environmentally sensitive area in the City's inventory; however it is shown on the map as a natural area. This area consists of a mixed stand of trees which includes willow, spruce and poplar. The natural area has been conserved and incorporated into the plan as municipal reserve.

A Stage 1 Natural Site Assessment prepared by Bruce Thompson & Associates Inc was submitted to the City in support of the Desrochers NASP. The assessment concluded that the *"SW7 Natural Area be considered for retention as a forest stand within the context of the neighbourhood plan being developed. The stand consists of diverse vegetative material (shrubs/young understory with large mature over story trees) that are of significant value for both avian and smaller wildlife species"*. The report adds that any *"further reduction in size, or fragmentation of the stand in the Natural Area should be avoided, as it is marginally sustainable at its present size and further loss of core habitat area would threaten this sustainability. The larger the forested patch retained, the larger will be the interior core habitat areas for various species of birds, mammals and other wildlife and thus greater biodiversity. To that effect, any walking trails should be routed around the periphery of the stand, or at one end of it, rather than through its core"*.

2.4.5 Environmental Assessment

The following information presented in **Table 2 - Environmental Site Assessment Overview** and illustrated on **Figure 5.0 - Environmental Site Assessment Overview** are based on Phase I Environmental Site Assessments conducted for the landowner of the property contained within the plan area – listed as SW & SE 13-51-25-4 (excepting Plan 982 4939) and for Lot 1, Plan 982 4939. A Phase I ESA was completed for NW ¼ 13-51-25-W4 with the preparation of the Chappelle Neighbourhood Area Structure Plan. Similarly, a Phase I ESA was completed for Lot D Plan 1711 MC with the preparation of the Heritage Valley Town Centre NASP. The City of Edmonton's Sustainable Development recommends that individual landowners provide ESAs or disclosure statements prior to the rezoning stage.

The Phase I ESA is meant to evaluate the types and location of surface and/or subsurface impacts that may be present on the subject site and adjacent areas. Specific incidences of contamination or potential contamination are listed along with how each will be addressed. No environmental concerns were noted with respect to adjacent properties based on visual examination.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Table 2 - Environmental Site Assessment Overview

Map Reference	Location	Landowner	Phase I ESA	Notes	Phase II ESA
1	SE ¼ 13-51-25-4	Private Corporate	Completed	- Further investigation of well sites required.	Required prior to rezoning
2	SW ¼ 13-51-25-4	Private Corporate	Completed	- Sampling for potential contaminants required in barn.	Required prior to rezoning
3	Lot 1 Plan 982 4939	Private Corporate	Completed	- Surficial staining on floor of Quonset and Garage; - Age of buildings requires care and due diligence when decommissioning occurs; - Ground should be inspected once RV's are removed; - Soil surrounding fire pit, burn barrels and west side of Quonset should be inspected for contamination;	Further investigation is required prior to rezoning.
4	NW ¼ 13-51-25-4	Private Corporate	Completed	Completed with the HV 10 NASP	n/a
5	Lot D Plan 1711MC	City of Edmonton	Completed	Completed with the HV5 NASP	n/a

2.4.6 Pipelines and Oil Well Sites

A search of Alberta Energy and Utilities Board (AEUB) information identified two gas well sites in the northeast corner of the development area and three pipelines (see *Table 3 - Gas Well Information Summary* and *Table 4 - Pipeline Information Summary*). Both gas well sites are abandoned, with the well owned by Harvest Operations Corp recently cut and capped in April 2008. The well operator has fully reclaimed the site and intends on submitting for certification. Three pipelines - two carrying natural gas and one carrying crude oil - traverse the plan area. The locations of the well sites and pipelines are illustrated on *Figure 4.0 – Site Features*.

Future development surrounding well sites and pipelines will adhere to the policies and requirements established by the Alberta Energy Resources Conservation Board and the City of Edmonton.

Table 3 - Gas Well Information Summary

Well Name / (Licence No.)	Company	Status	Note
RAIDER ET AL WHITEMUD 7-13-51-25 (61278)	Private Corporate	Abandoned (cut and capped April/08)	Located in the northeast portion of the NASP area. Will be fully reclaimed and certified by Harvest Energy.
UCANA-WHITEMUD NO. 1 (1597)	Private Corporate	Abandoned	Located in the northeast portion of the NASP area

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Table 4 - Pipeline Information Summary

License / Line No.	Company	Substance	Note
102 - 21	Private Corporate	Natural Gas (No H ₂ S)	Runs northeast – southwest. To be accommodated by PUL corridor
315 - 2	Private Corporate	Crude Oil	Runs northeast – southwest. To be accommodated by PUL corridor
7231 - 7	Private Corporate	Natural Gas (No H ₂ S)	Runs parallel to 41 Avenue S.W. To be relocated.

2.4.7 Whitemud Water Co-op Ltd

An existing low-pressure water line operated by the Whitemud Water Co-op currently traverses the subject land, in the approximate location illustrated on **Figure 4.0 – Site Features**. This existing water line will remain operational until the City's water servicing system is extended into the neighbourhood.

2.4.8 Historical Resources

A Historical Resources Overview (HRO) was completed in support of the Desrochers NASP. **Table 5 – Historical Resources Overview** presents a summary of the participating lands that were included in the study. Alberta Culture and Community Services has reviewed the HRO and concluded that Historic Resources Impact Assessments are not required. However the historic period buildings identified on **Figure 5.0 – Environmental Site Assessment Overview** must be documented according to the Heritage Resources Act requirements.

Table 5 - Historical Resources Overview

Map Reference	Location	Landowner	HRO Completed	HRIA Required
1 & 2	SW 13-51-25-4 & SE 13-51-25-4	Private Corporate	Completed	Photo documentation of historic period structures completed.
3	Lot 1 Plan 982 4939	Private Corporate	Completed	Not required
4	NW ¼ 13-51-25-4	Private Corporate	Completed	Not required
5	Lot D Plan 1711MC	City of Edmonton	Completed	Not required

Pursuant to Section 31 of the Historical Resources Act, development proponents and/or their representatives are required to report the discovery of any archaeological, historic period or paleontological resources, which may be encountered during construction.

Preservation, conservation and integration of cultural, historical, and or archaeological resources within the Desrochers NASP area is important to retaining local history and character that may also be of regional or provincial significance.

2.5 PUBLIC INVOLVEMENT

Consistent with Policy C513 – City of Edmonton Public Involvement Policy, advance notification was sent to surrounding property owners and affected Community Leagues on May 19, 2009 advising them of the application and encouraging them to contact either the Planning and Development Department or the applicant (Stantec Consulting Ltd.) to communicate any possible concerns.

As part of the planning process, a public meeting was held by the City of Edmonton's Planning and Development Department on May 13, 2010 at the Ellerslie Rugby Park. Mailed notification letters were sent to landowners and affected Community Leagues in proximity to the NASP area advising of this meeting. Notice of the meeting was also advertised in the Edmonton Journal on May 6, 2010. At the meeting residents had an opportunity to review and comment on the NASP.

Landowners have also been notified of the Public Hearing and requested to provide either written or verbal comments to Council.

3.0 LAND USE, TRANSPORTATION & SERVICING

3.1 LAND USE CONCEPT AND POPULATION STATISTICS

The following sections outline the land use concept, plan goals, and objectives for the Desrochers NASP which were established on the basis of the opportunities and constraints present in the Plan area and in conformance with applicable statutory requirements, City-level strategic policies, guidelines, and procedures.

The plan promotes a primarily residential neighbourhood, with neighbourhood commercial, mixed uses, natural area, school and park space, stormwater management facilities, and Residential Centre LRT station. It emphasises a diversity of housing types and increased densities in support of a future LRT station adjacent to James Mowatt Trail; pedestrian connectivity and proximity to major municipal and regional transportation corridors; and access to the Heritage Valley Town Centre and the District Campus.

See *Figure 6.0 – Land Use Concept* and *Table 6 - Land Use & Population Statistics*.

3.2 VISION

The Desrochers neighbourhood is a compact and walkable community, emphasizing connectivity, housing choice, and a high quality of life. The mature tree stand is conserved and well integrated with surrounding land uses, creating a unique amenity space and focal point in the heart of the community. Residents benefit from the well connected transportation network that includes the Residential Centre LRT station at James Mowatt Trail, the linear pipeline right-of-way which serves as a central pedestrian corridor, and several major roadways which offer excellent access to local and regional destinations. Desrochers is a diverse and vibrant neighbourhood with a mix of uses including opportunities for integrated commercial, office, and residential uses.

3.3 GOALS

The Desrochers NASP was prepared in accordance with the policies and principles identified in The Way We Grow, the Heritage Valley Servicing Concept Design Brief (SCDB) and other relevant municipal policy and statutory documents. The overall goals of the plan are to establish a neighbourhood that:

1. Provides a unique neighbourhood identity with focal points centred on the SW7 Natural Area, central school/park site, two stormwater management facilities and a residential LRT station;
2. Integrates the land use pattern with the Residential Centre LRT station by ensuring roadway configurations provide good connectivity, allowing appropriate residential densities and mixture of uses, and encouraging good urban design;
3. Establishes a variety of housing forms and residential densities that meet consumer needs, encourage diversity and support public transit ridership;
4. Provides a walkable, attractive, safe and comfortable community for residents, with easily accessible recreation and natural area amenities, commercial developments, and LRT/transit services;
5. Preserves and integrates the SW7 Natural Area into the community;
6. Establishes strong connections with neighbouring communities to support area educational, recreational, municipal and commercial facilities;
7. Provides a balanced transportation system which maximizes access to public transit and connects major inter- and intra-neighbourhood focal points; and
8. Provides efficient, contiguous and staged urban and infrastructure development.

3.4 DEVELOPMENT OBJECTIVES


The following Plan Objectives were developed to assist in achieving the above noted goals:

Green Development

1. Ensure a compact urban form that uses the land resources responsibly and efficiently;
2. Encourage naturalized landscaping on public and private lands to maximize environmental benefits and minimize costs associated with development and maintenance; and
3. Consider sustainable, alternative development standards in the design of the neighbourhood.

Urban Design

4. Design residential streets which are pedestrian friendly, safe and form an integral and attractive component of the public realm within the neighbourhood;
5. Develop low-rise/medium density and medium to high rise residential sites to a higher urban design standard;
6. Incorporate transit oriented development principles in the design of Desrochers, recognizing the residential nature of the LRT station;
7. Ensure careful integration between LRT (corridor and station) and the built environment;



DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

8. Emphasize the Natural Area, school/park site, stormwater management facilities and the entrance to the LRT station area as key focal points within the neighbourhood;
9. Optimize view/vista potential of the SW7 Natural Area and school/park site and develop stormwater management facilities which are visually and physically accessible and aesthetically pleasing;
10. Manage off-street parking for commercial, low rise/medium density and medium to high rise residential uses; and
11. Provide signage complementary to the theme of the neighbourhood.

Ecology

12. Conserve the existing SW7 Natural Area and maintain surface water run-off in order to retain historic hydrology patterns; and
13. Strengthen Edmonton's ecological network.

Environment

14. Ensure the environmental status of lands in the Desrochers NASP are suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning;
15. Ensure urban development around abandoned well-sites adheres to the requirements of the ERCB and City of Edmonton Policy C515 – Oil and Gas Facilities, Abandoned Well Sites and minimizes potential environmental hazards and disruption of future residential areas through careful neighbourhood design; and
16. Ensure the ongoing operation and integrity of existing pipeline infrastructure.

Historical Resources

17. Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Desrochers NASP.

Residential

18. Plan for a variety of housing types in different built forms, for a range of household types, income levels and ages;
19. Establish an overall residential density that meets or exceeds the Suburban Housing Mix Guidelines and the density targets set out by the Capital Region Growth Plan;
20. Develop increased residential densities within 400m of the LRT station;
21. Establish affordable housing in the Desrochers NASP;
22. Provide a transition between residential uses of significantly different densities;
23. Establish appropriate horizontal separation distance between residential uses and the pipeline corridor; and
24. Locate low rise/medium density and medium to high rise unit residential developments to facilitate access to arterial and/or collector roadways, commercial uses and LRT/transit service.


Mixed Use

25. Promote transit oriented mixed use development in proximity to the LRT station and corridor.

Deleted

Commercial

Bylaw 16726
February 24, 2014



DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

26. Encourage neighbourhood commercial opportunities in proximity to increased residential densities, the LRT, and collector roadways.
27. Provide convenient pedestrian access to commercial development so that residents have opportunity to walk to commercial services; and
28. Minimize the impact of commercial development on adjacent land uses.

Parkland, Recreational Facilities and Schools

29. Accommodate the requirements of the City for the dedication of the school/park site and Natural Area within the neighbourhood; and
30. Provide a school/park site which is accessible via walkway linkages, automobiles and transit.

Transportation

31. Provide a collector roadway system which moves vehicular traffic efficiently through the neighbourhood and minimizes internal roadway congestion;
32. Mitigate the impact of automobile traffic associated with commercial, Mixed Use areas, and low-rise/medium density residential areas on surrounding single/semi-detached residential areas;
33. Design a logical local street system which provides numerous connection points throughout the neighbourhood and which maximizes convenient access to LRT/transit;
34. Provide strong connections with surrounding communities;
35. Integrate land use and circulation patterns considering safety of pedestrians and cyclists;
36. Provide public transit services within the plan area in accordance with City of Edmonton Transit System Guidelines and demands, and ensure access to future transit routes and facilities;
37. Design an alternative circulation system which promotes pedestrian, bicycle, rollerblade and wheelchair accessible travel, and which is linked to key focal points within and outside the neighbourhood; and
38. Provide buffering (i.e. noise or vibration attenuation) where residential development backs onto major transportation infrastructure (i.e. LRT corridor, 41 Avenue S.W.).

Infrastructure, Servicing and Staging

39. Ensure that the neighbourhood is serviced to a full urban standard, in an efficient, contiguous and staged manner; and
40. Ensure that infrastructure requirements support the preservation of the SW7 Natural Area.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Table 6 - Land Use & Population Statistics (as amended by Bylaw 16726, February 24, 2014)

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN								
LAND USE AND POPULATION STATISTICS								
	Area (ha)	% of GA	% of GDA					
Gross Area	110.40	100%						
Pipeline & Utility Right-of-Way	1.65	1.5%						
Arterial Road Right-of-Way	8.38	7.6%						
LRT R/W	1.20	1.1%						
Gross Developable Area	99.17		100%					
Commercial								
Neighbourhood Convenience Commercial	0.85		0.9%					
Community Commercial	15.54		15.7%					
Parkland, Recreation, School (Municipal Reserve) ¹								
School/ Park Site	4.00		4.0%	}	9.0%			
Natural Area	4.95		5.0%					
Transportation								
Circulation	19.83		20.0%					
Infrastructure & Servicing								
Stormwater Management Facilities	7.49		7.6%					
Total Non-Residential Area	52.66		53.1%					
Net Residential Area (NRA)	46.51		46.9%					
RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION								
Land Use	Area (ha)	Units/ha	Units	People/ Unit	Population	% of NRA		
Low Density Residential	31.38	25	785	2.8	2,197	67%		
Rowhousing	5.15	45	232	2.8	649	11%		
Low Rise/Medium Density Housing	3.68	90	331	1.8	596	8%		
TOD Low-Rise/Medium Density Housing	4.21	100	421	1.8	758	9%		
Mixed Use LRT 2	0.90	100	90	1.8	162	2%		
Mixed Use LRT 1	1.19	175	208	1.5	312	3%		
Total	46.51		2,067		4,674	100%		
SUSTAINABILITY MEASURES								
Population Per Net Residential Hectare (p/nha)						100.5		
Dwelling Units Per Net Residential Hectare (du/nrha)						44.4		
Unit Density within 400m of LRT Service (du/nr ha)						80.2		
[Single/Semi-detached] / [Row Housing; Low-rise/Medium Density; Medium to High Rise] Unit Ratio					38% / 62%			
Population (%) within 500m of Parkland						97%		
Population (%) within 400m of Transit Service						100%		
Population (%) within 600m of Commercial Service						96%		
Presence/Loss of Natural Areas			Land	Water				
Protected as Environmental Reserve			0.00	n/a				
Conserved as Naturalized Municipal Reserve (ha)			4.95	n/a				
Protected though other means (ha)			0.00	n/a				
Lost to Development (ha)			0.00	n/a				
STUDENT GENERATION STATISTICS								
Public School Board		396	¹ Areas dedicated to Municipal Reserve to be confirmed by legal survey.					
Elementary	198							
Junior /Senior High	198							
Separate School Board		159						
Elementary	79							
Junior High	40							
Senior High	40							
Total Student Population		555						

¹ Areas dedicated to Municipal Reserve to be confirmed by legal survey.

3.5 POLICY AND IMPLEMENTATION

3.5.1 Green Development

The three foundations of sustainability – economy, society and ecology – should be considered in decision making regarding land use and building form.

Objective (1) Ensure a compact urban form that uses the land resources responsibly and efficiently.	
NSP Policy	Implementation
The neighbourhood shall support increased densities to make more efficient use of land.	<i>Figure 6.0 – Land Use Concept</i> and <i>Table 6 - Land Use Concept & Population Statistics</i> illustrate the increased densities in the NASP exceed the Council-approved Suburban Housing Mix Guidelines and is consistent with City policy on the integration of transit and land use .
Rationale: Increasing residential densities, in general, and more specifically in proximity to the LRT station, results in a more efficient use of land, municipal infrastructure and facilities. Locating commercial and recreation amenities within walking distance of compact residential development encourages residents to walk, cycle or rollerblade to a destination point, reducing the use of automobiles for daily tasks.	

Objective (2) Encourage naturalized landscaping on public and private lands to maximize environmental benefits and minimize costs associated with development and maintenance.	
NSP Policy	Implementation
Landscaping of the park and open space network should include predominately native plant material.	Develop open space areas using native plant species. Specific species for landscaping will be determined between the developer and City at the time of review of landscaping drawings as part of the engineering drawing review.
Rationale: Using native plant materials promotes a healthier natural ecosystem that over time will integrate with the surrounding landscape and seamlessly connect with the existing ecology of the area.	

Objective (3) Consider sustainable, alternative development standards in the design of the neighbourhood.	
NSP Policy	Implementation
<p>(a) Implement site planning and building construction methods that utilize a low impact design philosophy, reducing the use of materials and energy, and reducing waste wherever possible. This could include but is not limited to: energy efficient lighting, building techniques and technologies, and alternative road construction standards.</p> <p>(b) Integrate urban agriculture as an amenity and sustainable element to the neighbourhood.</p>	<p>All alternative development standards shall be reviewed and potentially approved by the City of Edmonton.</p> <p>(a) All building forms should consider the equivalent of green standards under certification programs such as LEED NC, Built Green R-2000 or other applicable programs and technologies available at time of construction. Other energy reducing initiatives, such as solar-ready, xeriscaping, green roofs, and rainwater harvesting shall be encouraged.</p> <p>(b) As the City-Wide Food and Agriculture Strategy evolves, the developer shall collaborate with the City, communities and other organizations to identify potential areas to</p>

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

	develop and integrate temporary or permanent agriculture activities, which may include but not be limited to demonstration gardens, community and allotment gardens and edible landscaping techniques.
<p>Rationale: Many aspects of sustainability can be addressed with the design of the neighbourhood and at the site specific building level. This plan encourages consultations with the City and affected agencies to explore the use of alternative development standards (i.e. consideration of servicing techniques or infrastructure provision that differs from current City standards) as one way of achieving sustainability. Allowing for flexibility between developers, homebuilders and the City in regulating the introduction and implementation of alternative designs, techniques and technologies that support ecological processes, cost effectiveness and environmental stewardship in the development of the neighbourhood will contribute to green development.</p>	

Technical Summary

No specific technical requirements were further identified.

3.5.2 Urban Design

The following objectives and policies are established to assist in fulfilling the plan goals of creating a neighbourhood that is walkable, attractive, and safe and on features and focal points such as the LRT station, SW7 Natural Area, stormwater management facilities (SWMFs), and school/park.

Objective (4) Design residential streets which are pedestrian friendly, safe, and form an integral and attractive component of the public realm within the neighbourhood.	
NSP Policy	Implementation
<p>(a) Streetscape design should consider symmetry, variety, massing and opportunities for innovative building and site design.</p> <p>(b) Streets that are part of the major pedestrian linkage system (e.g. arterial or collector roads) should have treed boulevards and sidewalks that are not interrupted by front drive access</p>	<p>(a) Details regarding the specific type and location of residential uses will be determined at the rezoning and subdivision application stage where consideration for these elements will be given.</p> <p>Symmetry can be achieved by creating a compatible housing form and zoning designation on either side of a street.</p> <p>(b) The design of arterial and collector roadways and the provision of sidewalks shall be implemented at the detailed design stage of development, to the satisfaction of Transportation Services.</p>
<p>Rationale: Designing attractive residential streetscapes by using similar or compatible housing forms and zoning designations provides a comfortable physical environment and creates a consistent mass and scale. Orientation of buildings towards public areas (i.e. streets, parks and SWMFs) also plays an important part of creating interesting and varied streetscapes and increases a sense of resident awareness of neighbourhood activities and safety ("eyes on the street").</p> <p>Street-oriented housing will be developed primarily along collector roadways or as a transition from low-rise/multi-/medium units to single/semi-detached uses and will provide active and inviting streetscapes with buildings typically featuring doorways, porches and windows at ground level and smaller front yard setbacks to engage the pedestrian and support natural surveillance of the street. Standard zones within the Zoning Bylaw will be applied to facilitate the developments. Providing a range of housing forms discourages monotonous streetscapes by allowing mixing of compatible housing forms (single detached/1 unit; semi-detached/2 units; or rowhouse/3+ units)</p>	

to create interest, variety and market appeal. Vehicular access to all street-oriented uses should be from an alley to minimize vehicular conflicts along busier roadways. Densities will vary dependant on the housing form, but should generally not exceed 45 units per hectare.

At the detailed design stage the function of the roadway will dictate the appropriate cross-sections to be implemented (i.e. arterial or collector). To ensure pedestrian connectivity and safety is maintained along all primary pedestrian linkages, sidewalks should be separated from the main vehicular route by a treed boulevard, and where possible front drive access should be minimized to reduce vehicular and pedestrian conflict.

Objective (5) Develop low-rise/medium density and mixed use sites to a higher urban design standard.

NSP Policy	Implementation
Low-rise/medium density and mixed use sites shall be designed to have a strong street presence, with parking areas located underground or away from the street.	<i>Figure 6.0 – Land Use Concept</i> illustrates the location of low-rise/medium density and mixed use sites. The development officer should have regard for site design, parking areas and building articulation. Parking considerations shall be addressed for the Mixed Uses sites at time of rezoning through the use of a Direct Control provision.

Rationale: While parcels of low-rise/ medium density and mixed use sites are likely to be developed on a self-contained basis, opportunity exists to develop street-oriented rowhouses alongside single/semi-detached housing through sensitive urban streetscape design, attention to transitioning and landscaping.

Objective (6) Incorporate Transit Oriented Development principles in the design of Desrochers, recognizing the residential nature of the LRT station.

NSP Policy	Implementation
<p>(a) Land uses within 400m of the station shall provide a net density at a minimum of 80 units/net residential hectare.</p> <p>(b) Land uses within 400 metres of the LRT station shall be primarily residential with opportunity for employment/commercial uses.</p> <p>(c) Building heights should transition highest near the LRT station to lowest at the periphery of the 400 metre radius.</p>	<p>(a) <i>Figure 6.0 – Land Use Concept</i> and <i>Table 6.0 – Land Use & Population Statistics</i> illustrate the intended land use and densities within 400 metres of the LRT station, consistent with the draft October 2009 <i>Integrated Transit and Land Use Framework</i>.</p> <p>Rezoning and development permit applications shall ensure minimum densities are achieved.</p> <p>(b)(c) <i>Figure 6.0 – Land Use Concept</i> illustrates the intended land use.</p>

Rationale: The LRT corridor and station area, located at the north-east corner of Desrochers, will be highly visible, easily accessible and attractively designed to ensure an appropriate interface with surrounding land uses.

Residential Uses

Focusing higher density residential around LRT stations supports City investment in transportation infrastructure. *Figure 6.0 – Land Use Concept* illustrates the location of higher densities within the plan area. Land uses within 400m of the station shall provide a minimum net density of 80 units/net residential hectare.

Employment/Commercial Uses

Encouraging a mix of land uses at LRT stations and transit centres creates activity nodes within the neighbourhood and reduces residents' reliance on single occupancy vehicles. The plan proposes a neighbourhood convenience commercial site approximately 0.9 ha in area, in proximity to the station platform, as well as opportunity for mixed uses.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Transitions

To ensure appropriate building height compatibility and transition, the plan provides for street-oriented rowhousing as a transition between low-rise/ medium density residential development (e.g. 4 storeys) and single/semi-detached residential (e.g. 2½ storeys), thus protecting the character of single/semi-detached residential development.

Objective (7) Ensure careful integration between LRT (corridor and station) and the built environment.

NSP Policy	Implementation
<p>(a) The LRT station area shall be designed to integrate with surrounding development and complement the character of Desrochers as a residential neighbourhood.</p> <p>(b) Where required, fences within the LRT corridor or station shall be decorative and transparent to ensure appropriate interface with adjacent land uses.</p> <p>(c) Ground floor retail uses directly adjacent to the LRT station and corridor should be oriented towards the collector roadway approach to the LRT.</p> <p>(d) Safe, direct and attractive pedestrian/bicycle connections shall be provided to the LRT station from the surrounding area.</p>	<p>(a) Buildings within 400m of the station shall be oriented toward the abutting street, provide direct sidewalk entries and have facades with a high degree of transparency.</p> <p>(b) Required fencing shall be decorative and transparent.</p> <p>(c) Ground floor retail uses located along the central east-west collector roadway shall be developed under a Direct Control Provision.</p> <p>(d) Figure 9.0 - Pedestrian Network illustrates connections to the LRT station.</p>

Rationale: The City of Edmonton's draft October 2009 *Integrated Transit and Land Use Framework* has been used to guide the incorporation of transit oriented design (TOD) principles within 400 metres of the LRT station. Some of the key components of the draft framework which have been included are:

Direct Platform Access:

The NASP has been designed to provide both parallel and perpendicular access (pedestrian and bicycle) to the LRT platform. Access will be from the north and south, along sidewalks on the abutting collector roadways (35 Avenue S.W. and the short collector link to James Mowatt Trail), as illustrated on **Figure 9.0 - Pedestrian Network**. A multi-use trail along James Mowatt Trail will facilitate parallel access for pedestrian and bicycles from adjacent areas. These linkages promote transit use, providing options for multiple walkable and bikable connections between the station and other areas within 400m.

Block Dimensions:

The LRT station location is anticipated at the approximate mid-point between 35 Avenue SW and the southerly collector; therefore, the block face fronting the LRT station cannot be interrupted with a break. As James Mowatt Trail is an urban arterial roadway, the station platform will only be accessed from these two collectors.

The northerly and southerly facing block frontages will require a north/south local roadway approximately 130m west of James Mowatt Trail. In order to provide the appropriate traffic channelization along the collectors for turning movements at the intersections with James Mowatt Trail a minimum distance of 130m is warranted before a break in the block face. This road would provide vehicular, bicycle and pedestrian access to the higher density residential development and the neighbourhood commercial site.

This north/south roadway is intended to have several points of access along the length to accommodate access to parking as well as to provide a variety of options for service delivery, such as garbage collection, delivery vehicles, loading zones, etc. Lower volumes of traffic are anticipated as well as reduced vehicle speeds as a result of the number of connection and access points. Pedestrian connections will be required on one or both sides of the street, depending on the length and available options, and will include appropriate levels of lighting. Design features such as rolled-face curbs and commercial crossings may be considered as well as narrower

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

carriageways. In all cases, the need for emergency access will be considered a priority and while narrower carriageways may be accepted, consideration will be given to on-street parking availability, turning radii and sightlines at access points. Further details will be provided at time of subdivision and all roadway designs will be reviewed and approved by the Transportation Department.

Active Edge Treatment

Buildings within 400m of the station shall be oriented toward the abutting street, provide direct sidewalk entries and have facades with a high degree of transparency.

Build-To Line

Unless otherwise dictated by the Edmonton Zoning Bylaw, all buildings located within 400m of the station platform should not be setback more than 3m from the public right-of-way.

Public Boulevard Width

The minimum public boulevard width shall be 4m (from face of curb to property line) within 400m of the station.

Bicycle Facilities

The City will determine the location and type of bicycle facilities required in the station area prior to development.

Objective (8) Emphasize the Natural Area, school/park site, stormwater management facilities and the entrance to the LRT station area as key focal points within the neighbourhood.

NSP Policy	Implementation
<p>(a) Focal points in Desrochers shall function as an amenity space for residents and should be comprised of one or a combination of the following elements: public art, seating area, plaza, street furniture, fountain/water feature or other architectural elements.</p> <p>(b) Pedestrian connections from the neighbourhood into and through open spaces / focal points shall be provided.</p> <p>(c) Buildings fronting onto a focal point shall be designed and finished to create an active building frontage. Active building frontages are characterized by entrance features/doorways, wall niches, porches, windows or features that lend visual interest and create a human scale.</p>	<p>(a) <i>Figure 6.0 – Land Use Concept</i> illustrates the location of key focal points.</p> <p>(b) <i>Figure 9.0 - Pedestrian Network</i> conceptually illustrates pedestrian connections, which shall be determined at the subdivision approval stage.</p> <p>(c) Focal points within the Desrochers NASP include the approach to the LRT station area, stormwater management facilities, school/park site, and the Natural Area. A variety of housing forms shall be developed at locations fronting onto focal points.</p>

Rationale: Neighbourhood focal points create community destinations within the neighbourhood. Neighbourhood focal points within Desrochers are the SW7 Natural Area, school/park site, stormwater management facilities (SWMFs) and the approach along the collector roadway to the LRT station area.

Focal Points & Pedestrian Connections

Through careful design and site planning, the development of these focal points creates active neighbourhood places which are alive and utilized and promote community interaction. Further, they provide key amenity spaces for local residents and add to the neighbourhood's attractiveness, character, and function as a pedestrian-oriented community. Areas are linked within the pedestrian network and provide areas for passive or active recreation.


Active Building Frontages

Developing active building frontages for those buildings fronting onto a focal point creates visually pleasant and interesting surroundings at key activity centres. It further contributes to passive surveillance as clear sight lines into the open spaces are better achieved.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Objective (9) Optimize view/vista potential of the SW7 Natural Area and school/park site and develop stormwater management facilities which are visually and physically accessible and aesthetically pleasing.	
NSP Policy	Implementation
<p>(a) Street frontage along abutting roadways should consider opportunities for maximizing views of the SW7 Natural Area, school/park and stormwater management facilities (SWMFs).</p> <p>(b) Parks and SWMFs shall be designed using crime prevention through environmental design (CPTED) principles, accessible through public lands and not land-locked by private development.</p> <p>(c) SWMFs should include naturalized shoreline plantings intended to provide habitat opportunities for wildlife and improve water quality.</p> <p>(d) Emergency access to SWMFs shall be provided from abutting roadways.</p>	<p>(a) The Subdivision Authority shall have regard for the provision of adequate street frontage abutting parks and SWMFs to maintain and enhance view opportunities.</p> <p>(b) The location and configuration of SWMFs and parks are conceptually illustrated in <i>Figure 6.0 – Land Use Concept</i> and may be refined prior to rezoning and/or subdivision.</p> <p>(c) SWMF landscaping shall be determined between the developer and City Administration at the time of review of landscaping plans and as part of engineering drawing review.</p> <p>(d) The location of boat launches or other emergency access requirements within SWMFs shall be determined at time of detailed design stage of development.</p>
<p>Rationale: The location and configuration of SWMFs and parks integrate these uses into the pedestrian network and provides vistas from abutting roadways, thereby heightening resident awareness of these facilities. This in turn will promote them as walking destinations, and provide passive recreation opportunities while enhancing their surveillance to prevent crime.</p>	

Objective (10) Manage off-street parking for commercial and low rise/medium density and medium to high rise residential uses.	
NSP Policy	Implementation
<p>(a) Large parking areas shall be “broken-up” by means of on-site private roads, landscaped islands, amenity spaces, and/or pedestrian walkway.</p> <p>(b) Parking areas shall be designed for a safe and orderly flow of vehicular and pedestrian traffic to minimize pedestrian/vehicular conflict.</p> <p>(c) Bicycle parking should be located near amenities or building entrances in secure at-grade locations.</p> <p>(d) Parking, loading and passenger drop-off areas should be easily accessible and designed to minimize pedestrian-vehicle conflicts.</p> <p>(e) Garbage collection for all buildings shall be located within a structure or enclosure that is architecturally compatible with the project design and screened from street view of any residential site.</p> <p>(f) Loading dock areas shall be screened from abutting public roadways and uses, and designed to ensure that vehicles do not encroach onto public or private road right-of-way.</p>	<p>(a) to (f) The Development Officer shall ensure that off-street parking is in compliance with Policies (a) through (f) of Objective 10.</p>
<p>Rationale: Purposefully managing off-street parking and related activities aids to mitigate their visual impact as well as improve the urban design and pedestrian realm of the surrounding area.</p>	



DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Objective (11) Provide signage complementary to the theme of the neighbourhood.	
NSP Policy	Implementation
<p>(a) Wayfinding signage shall be provided along pedestrian and cycling routes to encourage safe and efficient movement.</p> <p>(b) Signs should be designed in an aesthetically pleasing manner and in harmony with the architecture theme of the respective building.</p> <p>(c) Directional signage is encouraged to provide information at critical locations relating to primary tenants, parking lots, loading zones and pick up areas, entrances, exits and amenity areas.</p>	<p>(a)(b)(c) The Development Officer shall ensure that the Development Permit application is in conformance with the Sign Regulations of the Edmonton Zoning Bylaw.</p>
<p>Rationale: Signage plays an important role in way-finding and creating an identity within a neighbourhood. Ensuring signage is complementary to the theme of the neighbourhood will complement the overall design of the neighbourhood while aiding residents. When appropriately designed and located, signage can improve the navigability of the neighbourhood without creating visual clutter.</p>	

Technical Summary

No specific technical requirements were further identified.

3.5.3 Ecology

The majority of the land within the Desrochers NASP plan area is farmland with the exception of a significant tree stand in the centre of the neighbourhood. This tree stand and surrounding buffer area—approximately 4.9 ha in size—is identified as the SW7 Natural Area in the City's Inventory of Environmentally Sensitive and Significant Natural Areas. The following objectives support the plan goals of preserving the integrity of the natural area whilst accommodating opportunities for public/school access to the area. This in turn helps create the unique identity of the neighbourhood with the focal point centred on the Natural Area. The preservation and integration of the Natural Area, in conjunction with the stormwater management facilities (SWMFs) and pipeline corridor will also facilitate wildlife movement to neighbouring natural areas located outside the plan boundary.

Objective (12) Conserve the existing SW7 Natural Area and maintain surface water run-off in order to retain historic hydrology patterns.	
NSP Policy	Implementation
<p>(a) SW7 Natural Area shall be conserved as per the recommendations of the Natural Site Assessments.</p> <p>(b) A Natural Area Management Plan (NAMP) shall be completed for SW7 Natural Area.</p>	<p><i>Figure 6.0 Land Use Concept</i> identifies the location of the SW7 Natural Area.</p> <p>(a) Natural Site Assessments (Stage 1 and 2) provide recommendations and technical information regarding the significance and viability of the natural area.</p> <p>(b) A Natural Areas Management Plan (NAMP) shall be approved prior to rezoning approval. The NAMP will provide direction for the maintenance of the natural area.</p>
<p>Rationale: The SW7 Natural Area is an important ecological resource for the neighbourhood. It will be conserved as per the recommendations of the Natural Site Assessments (NSA), Natural Area Management Plan (NAMP) and City's strategic policies and guidelines. Conserved natural areas add to the diversity and vitality of urban areas and help create a sense of place. While recreation will be accommodated to a limited degree, the conservation of the natural area will take precedence.</p> <p>In consultation with the City and based on the recommendations of the NSA, it was determined that the natural area should be protected and conserved. Should development of surrounding residential lands occur prior to the City's acquisition of the natural area, the recommendations of the NAMP should be followed to ensure the trees are protected during construction. For example, the site should be fenced, appropriate construction Best Management Practises should be followed to avoid damaging tree roots and ensuring that hydrologic conditions post development remain similar to predevelopment conditions.</p>	

Objective (13) Strengthen Edmonton's ecological network.	
NSP Policy	Implementation
<p>(a) Integrate and link land use components (e.g. SW7 Natural Area, stormwater management facilities, parks) to provide habitat and encourage ecological connectivity.</p> <p>(b) Plantings of native species should be utilized to add to the habitat value of the green network within the neighbourhood.</p>	<p>(a) <i>Figure 6.0 - Land Use Concept</i> guides the development of the NASP.</p> <p>(b) Relevant City of Edmonton conservation planning and policy shall be adhered to (i.e. policy C531). The recommendations and regulations of the City and Provincial environmental agencies shall be followed.</p>

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Rationale: The incorporation of the SW7 Natural Area into the Desrochers NASP will provide opportunities for surface water quality enhancement and retention of wildlife and plant biodiversity, as well as providing a natural feature as a neighbourhood focal point for public enjoyment and education.

The pipeline right of way will continue to serve as a corridor for movement of small mammals and birds between the Natural Area and other treed areas to the south. Connectivity will be enhanced through the construction of two stormwater management facilities in proximity to the Natural Area, increasing habitat, breeding and foraging opportunities for many wildlife species.

Technical Summary

Stage 1 and 2 Natural Site Assessments conducted by Stantec Consulting Ltd. have concluded that the retention of the natural area, along with providing a 10 m buffer with enhancement plantings, will mitigate the loss of habitat, biodiversity and ecological sustainability incurred by development of the neighbourhood and that the natural area is anticipated to remain sustainable on the landscape if care is taken to minimize both construction and long term impacts. The integration of the natural area provides a natural feature as part of the community and an aesthetic feature for public enjoyment and education.

3.5.4 Environment

In order to ensure that the lands within the NASP area are suitable for development, the environmental status of the land was evaluated. The City requires that Phase I Environmental Site Assessments (ESA) be submitted, reviewed, and endorsed prior to the rezoning stage of development. The following objectives are established to contribute to the plan goal of providing a safe environment for residents and to achieve the goals of higher order City policies.

Objective (14) Ensure the environmental status of lands in the Desrochers NASP are suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.

NSP Policy	Implementation
<p>(a) Determine the likelihood, types, and location of environmental concerns which may be present on the lands prior to rezoning.</p> <p>(b) Phase I ESA reports older than 1 year from the date of rezoning application shall be updated, and any Phase I report older than 5 years from the date of rezoning application shall be redone.</p> <p>(c) Where necessary, contaminated material shall be removed and disposed of in an environmentally sensitive manner, in accordance with Federal, Provincial, and Municipal regulations.</p>	<p>(a)(b) Environmental Site Assessments shall be submitted and any follow-up shall receive sign-off by the City administration prior to the rezoning stage of development.</p> <p>(c) Site remediation, where necessary, shall be conducted prior to rezoning. An environmental site assessment report verifying the remediation shall be submitted for approval by the City administration prior to the rezoning of the subject lands.</p>

Rationale: Lands within the Desrochers NASP boundary will be suitable for development and their environmental status confirmed prior to rezoning. Those lands identified as contaminated must undergo remediation according to Federal, Provincial, and Municipal standards.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Objective (15) Ensure urban development around abandoned well-sites adheres to the requirements of the ERCB and City of Edmonton Policy C515 – Oil and Gas Facilities, Abandoned Well Sites and minimizes potential environmental hazards and disruption of future residential areas through careful neighbourhood design.	
NSP Policy	Implementation
<p>(a) Where development is proposed around an abandoned well site, adherence to the requirements of the ERCB and City Policy C515 shall occur.</p> <p>(b) Abandoned well areas should only assume land uses that will allow for immediate maintenance should the well ever require servicing.</p> <p>(c) A temporary identification marker should be placed as precisely as possible on the abandoned well site to prevent damage both to the well site and to the construction or excavation equipment.</p>	<p>(a) Setback requirements will be confirmed at time of subdivision approval.</p> <p>(b) Figure 4.0 – Site Features illustrates the location of abandoned well sites. Figure 6.0 – Land Use Concept illustrates land designations. Consideration for appropriate land uses shall be determined at time of rezoning.</p> <p>(c) Appropriate temporary identification markers shall be placed on site prior to rezoning approval.</p>
<p>Rationale: Policies relating to existing and abandoned oil and gas uses will ensure conscientious residential development around oil and gas well sites and pipelines at all stages of the plan implementation and construction process while minimizing potential disturbances to the area's future residents. Urban development in the vicinity of all resource well sites will be planned in accordance with the City policy document entitled "Policy Guidelines for the Integration of Resource Operations and Urban Development" (1985) and Policy C515 "Oil and Gas Facilities" (2007) and other relevant City procedures. Development of lands involving abandoned wells shall comply with ERCB guidelines for development around abandoned wells. An assessment of risk and nuisance will be conducted on operating or suspended oil and gas wells, as directed by existing or future City policy for the integration of oil prior to any rezoning of the parcel where the facility is located.</p>	

Objective (16) Ensure the ongoing operation and integrity of existing pipeline infrastructure.	
NSP Policy	Implementation
<p>(a) Integrate the existing south to north pipeline corridor into the NASP to make use of potential multi-use corridors and pedestrian linkages while having regard for the safe, ongoing operation of these facilities.</p> <p>(b) Relocate or abandon the existing east-west natural gas pipeline.</p>	<p>Figure 4.0 - Site Features illustrates the location of three pipelines.</p> <p>(a) Exact locations of pedestrian linkages will be determined at subdivision and development. Development abutting the south to north pipeline corridor shall be implemented according to the Edmonton Zoning Bylaw with respect to setbacks from development to ensure the safe and ongoing operations of these facilities.</p> <p>(b) The east-west pipeline will be relocated or abandoned during the subdivision and development stage and its right-of-way incorporated for urban development.</p>
<p>Rationale: Figure 4.0 - Site Features illustrates the location of existing right-of-ways. A multi-use trail shall be provided along the existing pipeline south to north right-of-way to facilitate multi-modal circulation opportunities.</p>	

Technical Summary

Phase I ESA's have concluded that further investigation is required in the SE ¼ 13-51-25-W4 to ensure there are no environmental impacts associated with the former well-sites. Further investigation (soil sampling) is required for the existing barn in the SW ¼ 13-51-25-W4 to ensure there are no potential contaminants. Within Lot 1, Plan 982 4939 further investigation is required once the existing buildings and RV's stored on site are removed, and soil sampling is needed in proximity to the burn barrels and fire pits prior to rezoning.

3.5.5 Historical Resources

Historical resources investigations involved the evaluation and reporting of existing information collected through a record review of provincially designated historic buildings, archaeological sites and paleontological sites. Additional review involved the evaluation of the Desrochers NASP for historical resource potential.

Objective (17) Identify and protect items with historical significance, such as buildings and areas of cultural significance, in the Desrochers NASP.	
NSP Policy	Implementation
Past and current activities within the Desrochers NASP shall be reviewed to identify items of historical significance.	As outlined in <i>Table 5 – Historical Resources Overview</i> , Historical Resources Overviews (HRO) for the entire plan area has been approved by Alberta Culture and Community Spirit (ACCS). A Historical Resource Impact Assessment is not required; however photo documentation of structures older than 40 years shall be undertaken as directed by ACCS.
Rationale: Historical Resources Overviews (HRO) were completed in support of the Desrochers NASP, and approved by Alberta Culture and Community Services, concluding that a Historic Resources Impact Assessment was not required. However the historic period structures identified have been documented according to the Heritage Resources Act requirements.	

Technical Summary

Historical Resource Overviews have been approved by ACCS for all parcels within the plan area. While a Historical Resources Impact Assessment was not required, photo documentation of historic period structures (constructed prior to 1960 and located in the S.W. ¼ Sec 13-51-25-W4) was directed. A report was submitted by Stantec Consulting Ltd. and approved by ACCS in March 2010. Therefore the landowner may proceed with development of the area occupied by the historic period structures with Historical Resources Act clearance.

3.5.6 Residential

Approximately 46.5 hectares (ha) of the plan area are designated for residential land uses.

Bylaw 16726
February 24, 2014

Approximately 31.4 ha are designated as low density residential at densities of up to 25 units per hectare. Residential uses anticipated would be consistent with the RSL, RPL, RF4 or RMD zoning designations under the Zoning Bylaw. With the use of the RMD zoning designation, which allows for single detached, semi-detached and limited rowhousing, densities may reach up to 40 units per hectare.

Approximately 5.2 ha are designated as rowhousing, at a maximum height of 2 ½ storeys and densities of up to 45 units per hectare. When developed along a collector roadway, alley access shall be provided. Residential uses anticipated would be consistent with the RF5, RF6 or UCRH zoning designations under the Zoning Bylaw.

Approximately 4.2 ha within 400 m of the LRT station are designated as Transit Oriented Development (TOD) low-rise/medium density housing. Through the application of the RA7 zone in the Zoning Bylaw this designation is intended to allow a range of residential uses consistent with that zone, with densities up to 125 units per ha. It is anticipated that build-out density will average in the range of 100 units per hectare.

Approximately 3.7 ha are designated low-rise/medium density housing, north of the commercial sites, south of a collector road and east of Heritage Valley Trail. It is anticipated that this designation would be consistent with the RA7 Zone, under the Zoning Bylaw, with densities up to 125 units per hectare. It is anticipated that build-out density will average 90 units per hectare.

Objective (18) Plan for a variety of housing types in different built forms for a range of household types, income levels and ages.	
NSP Policy	Implementation
A mixture of residential dwelling types shall be provided including: single/semi-detached, rowhouses, low-rise/medium density and medium to high rise units.	<i>Figure 6.0 – Land Use Concept</i> illustrates the general location of all residential uses. The City of Edmonton Zoning Bylaw provides for a range of densities and housing forms that will be applied at the rezoning stage.
Rationale: Providing a variety of housing types promotes the creation of a well-balanced neighbourhood, one which can accommodate a range of income groups and market segments, various types and sizes of families and also allows families to remain within the same community throughout their lifecycle. <i>Designated residential areas are identified on Figure 6.0 – Land Use Concept as low density residential, rowhousing, and (TOD) low-rise/medium density units.</i>	

Bylaw 16726
February 24, 2014

Objective (19) Establish an overall residential density that meets or exceeds the Suburban Housing Mix Guidelines and the density targets set out by the Capital Region Growth Plan.	
NSP Policy	Implementation
(a) The Desrochers NASP shall meet or exceed the approved Suburban Housing Mix Ratio for new neighbourhoods.	(a) <i>Figure 6.0 – Land Use Concept</i> and <i>Table 6.0 – Land Use Concept and Population Statistics</i> - will guide intensified suburban development which shall be implemented through Sections 100 and 200 of the

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

(b) The Desrochers NASP shall meet or exceed the approved density target as set out by the Capital Region Growth Plan.	Edmonton Zoning Bylaw. (b) <i>Table 6 – Land Use and Population Statistics – The Desrochers NASP neighbourhood density exceeds the minimum residential density target set out by the Capital Region Growth Plan.</i>
<p>Rationale: Council approved (1991) guidelines recommend that the ratio of dwelling types in new suburban neighbourhoods be based on a mix of 65% to 85% low density residential and 15% to 35% medium density residential units.</p> <p><i>The Desrochers NASP exceeds this ratio in support of suburban intensification strategies.</i> In keeping with more recent policy, this plan seeks to provide a choice of housing forms within the neighbourhood, and to generally make more efficient use of new suburban land. These densities will support public transit, use infrastructure more effectively, provide a user base for community facilities, and encourage greater social mix.</p> <p>The Desrochers neighbourhood is located in the Capital Region Growth Plans Priority Growth Area “Cw” which sets a minimum density target of 30 units per net residential hectare. The Desrochers NASP exceeds this target.</p>	

Bylaw 16726
February 24, 2014

Bylaw 16726
February 24, 2014

Objective (20) Develop increased residential densities within 400m of the LRT station.	
NSP Policy	Implementation
The NASP shall incorporate low-rise/medium density and rowhousing designations to provide increased residential densities within walking distance of the LRT.	<i>Figure 6.0 – Land Use Concept</i> will guide development of intensified residential development which shall be implemented through Sections 100 and 200 of the Edmonton Zoning Bylaw and shall be consistent with Transit Oriented Design principles.
<p>Rationale: Provision of increased residential densities within a 400 m (approximately 5 minute walk) radius of transit (LRT and buses) supports transit ridership and aides in creating a more compact, walkable, attractive, and liveable neighbourhood. The Desrochers NASP achieves a net residential density greater than 80 dwelling units per net residential hectare within the 400 m radius of the LRT station.</p>	

Objective (21) Establish affordable housing in the Desrochers NASP.	
NSP Policy	Implementation
<p>(a) Developments shall comply with the City of Edmonton's affordable housing policies and guidelines.</p> <p>(b) The NASP shall allow for a wide variety of housing types, with a wide range of price points, to create a more inclusive neighbourhood.</p> <p>(c) Opportunities such as secondary suites, garage suites or garden suites should be encouraged among builders.</p>	<p>(a) City of Edmonton's affordable housing policies and guidelines shall be applied prior to rezoning.</p> <p>(b) <i>Figure 6.0 – Land Use Concept</i> indicates the location of various residential land uses.</p> <p>(c) Secondary suites, garage suites or garden suites shall be implemented through Section 100 and 200 of the Edmonton Zoning Bylaw.</p>
<p>Rationale: Desrochers strives to address housing affordability through provision of a more intensive form of residential housing which:</p> <ul style="list-style-type: none"> • maximizes land and servicing efficiencies thereby reducing cost; • allows for a variety of lot sizes and housing forms providing the consumer the option to choose the housing form best suited to their situation; 	

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

- improves walkability of the community thus reducing reliance on private automobiles; and
- may reduce dependence on non-renewable resources through alternative servicing (e.g. such as use of green initiatives like solar or geothermal heating), reducing long term costs.

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

Secondary suites can provide an important potential source of affordable housing for singles and other small households, and create mortgage helpers for the owner of the principal dwelling.

Objective (22) Provide a transition between residential uses of significantly different densities.

NSP Policy	Implementation
Transition from low-rise/medium density units in proximity to the LRT station down to rowhousing to single/semi-detached shall be provided.	<i>Figure 6.0 – Land Use Concept</i> illustrates the general location of land uses.
Rationale: Providing a transition between the higher density uses and single/semi-detached residential dwellings protects the character of residential neighbourhoods. Transition also aids to mitigate sun-shadow impact on surrounding lower density housing forms. Provision of semi-detached or rowhouses units as a transitional land use will serve to moderate the use differences between single detached and low rise/medium density unit apartments.	

Objective (23) Establish appropriate horizontal separation distance between residential uses and the pipeline corridor.

NSP Policy	Implementation
Residential uses shall comply with the City's policies regarding development adjacent to pipeline corridors.	The Subdivision Authority shall have regard for lot and site design ensuring the appropriate setback distance between the pipeline corridor and residential uses.
Rationale: Development abutting the pipeline corridor shall be implemented according to the Edmonton Zoning Bylaw with respect to setbacks from development to ensure the safe and ongoing operations of these facilities.	

Objective (24) Locate low rise/medium density residential developments to facilitate access to arterial and/or collector roadways, commercial uses and LRT/transit service.

NSP Policy	Implementation
Low rise/medium density residential developments shall be located in proximity to or abutting collector or arterial roadways, and within walking distance of LRT/transit routes.	<i>Figure 6.0 – Land Use Concept</i> conceptually illustrates the location of low rise/medium density residential uses abutting arterial or collector roadways (to maximize access to LRT/transit), near commercial uses and school/park sites.
Rationale: Location of low rise/medium density residential development along LRT/transit routes and within walking distance of commercial uses, near community focal points and open spaces creates a more compact, walkable, attractive, and liveable neighbourhood.	

Technical Summary

No specific technical requirements were further identified.

3.5.7 Mixed Use

The NASP provides two types of Mixed Uses within the neighbourhood boundary, which are Transit Oriented in nature and located in close proximity to the LRT station.

Bylaw 16726
February 24, 2014

Mixed Use - Transit Oriented Development

The purpose of the Transit Oriented Mixed Use designations is to allow for the development of compatible residential (low-rise/medium density housing and medium to high rise units), retail, office and business uses along the collector roadway leading from Desrochers to the LRT station and corridor. The Transit Oriented Mixed Use designations will "frame" the entrance into Desrochers with low rise/medium density housing on the south side and medium to high rise units to the north and will incorporate a transitional profile in terms of density and built form, with the highest intensity uses placed directly abutting the LRT station and lower intensity uses south and west of the station. The Transit Oriented Mixed Use is intended to promote unique development opportunities in order to facilitate creation of a residential transit oriented neighbourhood. These areas will function primarily as residential areas with opportunity for retail/office uses on the ground floor, establishing a pedestrian friendly corridor leading toward the LRT station and an important neighbourhood focal point that serves as the destination for the southern Heritage Valley residents.

These uses have been located on the approach to James Mowatt Trail to take advantage of pedestrian traffic travelling to and from the LRT station, promoting multimodal access and providing pedestrians and transit users with convenient shopping opportunities.

Mixed Use TOD Medium to High Rise Units (MU-LRT 1)

The MU-LRT1 designation is intended to achieve transit oriented and pedestrian friendly development by incorporating higher intensity residential, and retail/office uses directly adjacent to the LRT Station, north of the collector roadway. The MU-LRT 1 is intended to be developed to a maximum of seven storey apartment housing with opportunities for ground floor retail/office uses to create a "living above the shop" type of development.

Approximately 1.2 ha of the plan area is designated as MU- LRT1. The following table outlines the potential uses and basic land use parameters for the development of MU- LRT1.

Uses	Potential Building Types	Average Density	Height
<ul style="list-style-type: none"> - Residential - Live/Work units - Office uses - Convenience and General Retail 	<ul style="list-style-type: none"> - Apartment housing integrated with ground floor retail/ office uses 	175 units/ha <i>Density Range:</i> 126 units/ha to 224 units/ha	Maximum 7 storeys

Mixed Use TOD Low-Rise/Medium Density Housing (MU-LRT 2)

The purpose of the MU-LRT 2 designation is to allow for transit supportive and pedestrian friendly development in proximity to the LRT station, south of the collector roadway, but at a lower residential density and height than the MU-LRT 1, in order to provide for a transition in form and scale. The MU-LRT 2 is intended to be developed generally as four to five storey apartment housing with opportunities for ground floor retail/office uses.

Approximately 0.9 ha of the plan area is designated as MU-LRT 2, with potential uses and basic land use parameters for the development of MU as follows.

Uses	Potential Building Types	Average Density	Height
<ul style="list-style-type: none"> - Residential - Live/Work units - Office uses - Convenience Retail 	<ul style="list-style-type: none"> - Apartment housing integrated with ground floor retail/ office uses 	100 units/ha <i>Density Range:</i> 80 units/ha to 125 units/ha	Maximum 5 storeys

Objective (25) <i>Promote transit oriented mixed use development in proximity to the LRT station and corridor.</i>	
NSP Policy	Implementation
<p>(a) MU-LRT 1 uses shall be located immediately adjacent to the LRT station and corridor.</p> <p>(b) MU-LRT 2 uses shall be located directly south of the MU-LRT 1 uses, in proximity to the LRT station and corridor.</p> <p>(c) MU-LRT 1 and MU-LRT2 designations shall permit a vertical mix of residential, office and retail uses.</p>	<p>(a)(b) Figure 6.0 – Land Use Concept illustrates the location of the MU-LRT 1 and MU-LRT 2 Mixed Uses areas.</p> <p>(c) Implementation of the Mixed Use policies shall be achieved through a Direct Control Provision of the Edmonton Zoning Bylaw.</p>
<p>Rationale: Provision of a mix of uses such as stores, offices, residences, within walking distance of the LRT station and corridor encourages walkability, supports transit ridership, and increases the viability and vibrancy of Desrochers during the day and the evening. The allowable uses under the Mixed Use designation are compatible with a residential neighbourhood, providing flexibility and the opportunity for innovative development.</p> <p>The NASP proposes the use of a Direct Control Provision for the development of these sites, generally based upon the RA8 (MU-LRT 1 designation) and RA7 (MU-LRT 2 designation). Direct Control Provisions will ensure that the development is transit-supportive, provides guidance on a compatible mix of uses and site planning, and creates a distinct character and built form on the basis of good urban design principles and high quality architecture.</p> <p>Mixed Use Site Development Objectives</p> <p>Mixed Use development should consider elements such as, but not limited to, the following:</p> <p>Site Planning and Design</p> <ol style="list-style-type: none"> 1. The site shall provide opportunities to live, work, and shop. 2. Mixed use should contain vertically mixed areas. 3. Incorporate "Winter City" design principles into the overall site development. 4. Retail/office uses shall be placed at street level, with residential uses placed in the upper storeys. 	

Bylaw 16726
February 24, 2014
Amended by Editor

5. *The street should be lively, providing active streetscaping, active storefronts and multiple doorways and windows.*
6. *Residential building entrances should reinforce a privacy zone at the front entrance and be distinguished from ground floor retail/office uses.*

Built Form

7. *Larger buildings should be broken down in scale using proportioned articulation.*
8. *Perceived height and massing should be minimized through building setback variations at the upper levels, building orientation, roof treatment and by adding interest through the choice of exterior materials and colours.*

Pedestrian Circulation

9. *Safe and attractive pedestrian linkages should be provided into the neighbourhood and to transit facilities.*
10. *The internal circulation linkages should foster connectivity from various parts of the site and surrounding area.*
11. *Pedestrian routes should be direct and should minimize potential conflicts with vehicles.*
12. *To aid pedestrian navigation and comfort, consideration should be given to the following elements:*
 - *Landscaping, such as rows of trees and shrubs, flower beds, and planters*
 - *Pedestrian scaled lighting, such as lighted bollards*
 - *Small, colour-coded way-finding signs, or a directory*
 - *Vertical architectural elements, such as markers or arches*
 - *Seating and resting spots*

Parking & Transit

13. *Locate buildings close to the street, with off-street parking provided behind, beside and/or under buildings where possible and appropriate.*
14. *Consider the feasibility of providing underground or structured parking rather than surface parking to conserve land and minimize impacts on the environment.*
15. *Surface, structured and underground parking should be located behind buildings or in the interior of a block whenever feasible.*
16. *Shared parking is encouraged between mixed uses whose peak demand is off-set from each other (e.g. offices and housing).*
17. *Any large surface parking areas should be visually and functionally segmented to reduce the visual mass of parking areas.*

Landscaping

18. *Decorative lighting should be provided as a means of providing a safe and visible pedestrian realm as well as establishing a theme or character.*
19. *A lighting program should consider street lighting, pedestrian lighting at intersections and key nodes, and internal illumination from the storefronts.*
20. *The corners of street intersections, particularly gateways and site entries (entries from street, sidewalk and LRT station) should be distinguished by special landscape treatments: flower displays, trees and shrubs, accent rocks, low walls, signage, decorative lighting, sculpture, architectural elements, and/or special paving.*
21. *Fences should be of complimentary design, materials and construction to the architectural theme of the development. Fences should supplement the existing and/or required plantings.*
22. *Property owners are encouraged to provide outdoor public art within open space and or gathering areas*

- to enrich the pedestrian experience and create a stronger sense of place.*
23. *Encourage naturalized landscaping and stormwater management principles, where appropriate.*

Bylaw 16726
February 24, 2014

Deleted

3.5.8 Commercial

Approximately 15.54 ha of land in the south-west corner of the Desrochers neighbourhood are identified for community commercial uses, located along two arterial roadways – 41 Avenue SW and Heritage Valley Trail. Two all-directional accesses to the community commercial sites will be provided from 41 Avenue SW and Heritage Valley Trail. Access from Heritage Valley Trail will align with the collector roadway within the Chappelle NASP. Community commercial is intended to offer a mix of retail service, office and business employment opportunities for local residents, adjacent communities, and the travelling public.

Bylaw 16726
February 24, 2014

Approximately 0.85 ha (2.1 ac) of land in the north-east corner of Desrochers is identified for neighbourhood commercial uses, in proximity to higher residential densities and arterial/collector roadways. *Deleted*

Bylaw 16726
February 24, 2014

Objective (26) *Provide opportunity for Community Commercial development with small to large format retail, service, civic, office and commercial uses.*

Bylaw 16726
February 24, 2014

NSP Policy	Implementation
<p>(a) <i>Provide business and shopping centre commercial development to serve the needs of residents located within the Heritage Valley area and adjacent communities.</i></p> <p>(b) <i>Locate and orient large format business and commercial sites along arterial and / or collector roadways to ensure high visibility and to provide convenient access opportunities for both transit and vehicles.</i></p> <p>(c) <i>Provide convenient pedestrian linkages to business employment and commercial areas and transit nodes.</i></p> <p>(d) <i>Ensure that the impact of business and commercial development on adjacent land uses is minimized through the use of transitional land uses, orientation of development and the application of setbacks/buffering available through the Edmonton Zoning Bylaw.</i></p>	<p>Figure 6.0 – Land Use Concept <i>illustrates the location of the Community Commercial area. Implementation of the Community Commercial designation and policies shall be achieved through the (CSC) Shopping Centre Commercial Zone.</i></p>
<p>Rationale: <i>The Desrochers NASP identifies two Community Commercial sites, which create a highly visible and accessible shopping centre commercial area. These sites take advantage of high traffic volumes along 41 Avenue and Heritage Valley Trail, establishing a major neighbourhood focal point that is vehicle and transit accessible. The design of access points into the sites will need to acknowledge the appropriate traffic patterns and volumes along these two major traffic corridors.</i></p>	

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Objective (26) Provide opportunity for Community Commercial development with small to large format retail, service, civic, office and commercial uses.

Recognizing the proximity and prominence of the Neighbourhood Commercial and Mixed-Use LRT sites adjacent to the future LRT corridor and station (along James Mowatt Trail), the Community Commercial areas offer a mix of small, medium and large format commercial development, fulfilling a wide range of retail, entertainment, service, and employment uses to meet the needs of the local residents of the Heritage Valley area and adjacent communities.

Objective (27) Encourage neighbourhood commercial opportunities in proximity to increased residential densities, the LRT, and collector roadways.

NSP Policy	Implementation
<p>(a) Neighbourhood Commercial shall be located in proximity to increased residential densities, the LRT station and collector roadways.</p> <p>(b) Building(s) should be oriented to align with the abutting street to create a pedestrian friendly streetscape.</p>	<p>(a) Figure 6.0 – Land Use Concept illustrates the location and general configuration of the neighbourhood commercial area, which will be implemented through Section 300 of the Edmonton Zoning Bylaw.</p> <p>(b) The Development Officer should have regard for building placement, pedestrian accessibility and activity areas in assessing and conditioning development applications for commercial development under the applicable zone.</p>

Rationale: The Desrochers NASP identifies one neighbourhood convenience commercial site within the north-east corner of the neighbourhood, adjacent to the James Mowatt Trail and 35 Avenue S.W. intersection, and the LRT corridor.

Proximity to increased residential densities

Locating commercial uses in proximity to increased residential densities results in a mutually beneficial arrangement between local residents who are able to access daily commercial services within walking distance, business owners who have an increased market share, and the larger community through reduced vehicular dependency.

Proximity to LRT station

Locating commercial uses abutting the LRT station, encourages a compact neighbourhood which is walkable and pedestrian friendly as well as creates an activity node within the neighbourhood. Residents benefit from the convenience of being able to stop before or after their commute on the LRT.

Proximity to collector roadways

Vehicular access to the neighbourhood commercial site shall not be from James Mowatt Trail, but shall be along 35 Avenue S.W., at a location acceptable to the Transportation Department so as not to impede traffic movement. Prominent frontage from the collector and arterial roadways are important components influencing the location of commercial sites as well as awareness of the commercial development for residents from surrounding communities.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Objective (28) Provide convenient pedestrian access to commercial development so that residents have opportunity to walk to commercial services.	
NSP Policy	Implementation
<p>(a) Safe, attractive, and direct pedestrian connections shall be provided to commercial uses from the surrounding area.</p> <p>(b) All primary entrances of commercial developments shall be oriented toward the street.</p>	<p>(a) Details regarding the placement of pedestrian connections will be determined at the subdivision approval stage.</p> <p>(b) The Development Officer should have regard for building placement, pedestrian accessibility and activity areas in assessing and conditioning development applications for commercial development under the applicable zone.</p>
<p>Rationale: Safe and attractive pedestrian linkages should be provided into the neighbourhood and to nearby public transit routing. The pedestrian linkages should foster connectivity from the surrounding area and should be direct and minimize potential conflicts with vehicles. Orientation of the commercial building(s) towards the abutting street and locating parking areas away from the street further improves the pedestrian friendly character and aesthetic appeal of the development for patrons. Opportunities for improved on-site landscaping are also achieved with this type of site configuration.</p>	

Objective (29) Minimize the impact of commercial development on adjacent land uses.	
NSP Policy	Implementation
<p>(a) Activity areas (e.g., primary entrances) associated with commercial development should be oriented towards the abutting arterial/collector roadways.</p> <p>(b) Consideration should be given for transition between residential development and abutting commercial development.</p>	<p>(a) The Development Officer should have regard for building placement and activity areas in assessing and conditioning development applications for commercial development under the applicable zone.</p> <p>(b) The Subdivision Authority should ensure that appropriate transitional elements (i.e. landscaping, setbacks, lot orientation etc) are implemented between residential uses and the commercial development while maintaining pedestrian connectivity.</p>
<p>Rationale: Impacts associated with commercial development should be minimized and carefully integrated with surrounding residential development through attention to site design (building placement, access locations), pedestrian connectivity, and appropriate transitioning.</p>	

Technical Summary

No specific technical requirements were further identified.

3.5.9 Parkland, Recreational Facilities and Schools

Parkland in the Desrochers NASP consists of one natural area and one school/park site, for a total of approximately 8.95 ha, or 9.0% of the gross developable area of the NASP, as illustrated on **Figure 7 – Parkland, Recreational Facilities and Schools**. Stormwater management facilities are also connected to the overall pedestrian network system in order to maximize the availability of open space. Desrochers also benefits from its proximity to the district campus park in Heritage Valley Town Centre, which provides additional active recreation options for residents and visitors, along with future High Schools for both the Public and Separate School Boards.

Objective (30) Accommodate the requirements of the City for the dedication of the school/park site and Natural Area within the neighbourhood.	
NSP Policy	Implementation
<p>(a) The NASP shall follow the guidelines for the hierarchy and distribution of school/park space and the Natural Area as prescribed within the Urban Parks Management Plan (UPMP).</p> <p>(b) The Desrochers NASP shall provide Municipal Reserve as a combination of land, cash-in-lieu of land or a combination thereof, up to 10% of the gross developable area.</p> <p>(c) All school and/or park sites are to be fully serviced (water, storm sewer, sanitary sewer, gas, 3 phase power, telephone etc.) along the entire roadway frontage. Pocket parks of 0.5 ha or less in size may not require full servicing and will be dealt with on an individual basis. Specific requirements will be outlined and addressed at the subdivision and engineering stages to the satisfaction of the Urban Planning and Environment Branch of Sustainable Development.</p>	<p>(a) Figure 6.0 – Land Use Concept illustrates the location of the school/park and the Natural Area within the neighbourhood.</p> <p>The school/park shall be dedicated to the City of Edmonton through Municipal Reserve (MR) at the time of subdivision.</p> <p>The appropriate mechanism for dedication of the Natural Area shall be determined at time of rezoning and/or subdivision.</p> <p>(b) The Subdivision Authority shall determine the Municipal Reserve owing for the Desrochers NASP, which shall be dedicated in full as land, money-in-lieu, or an acceptable combination thereof, at the time of subdivision.</p> <p>(c) The Urban Parks Management Plan shall guide the future acquisition, design, construction and maintenance of City parks and Natural Areas.</p>
<p>Rationale: The Desrochers NASP provides a centrally located and well connected school/park site and a Natural Area, ensuring accessibility to all residents to meet their passive and active recreational needs.</p> <p><i>School/Park</i></p> <p>The school/park site in the south-central portion of the NASP has been sized to accommodate the space requirements of a K-9 school, and is approximately 4.0 ha in area. The site has been located adjacent to the Natural Area (to provide potential nature educational opportunities) and at the intersection of two collector roadways. This will provide sufficient frontage to ensure flexibility in facility design, on-street bus lay-by and/or on-site drop off areas, and ensures sufficient access by pedestrians, cyclists, transit users and automobiles. The school/park is also easily accessible by multi-use trails (along the pipeline corridor), pedestrian linkages (through the SWMF and Natural Area) and to the sidewalk network along abutting roadways.</p> <p><i>Natural Area</i></p> <p>Natural areas are important to Edmonton's ecological network and should be conserved. The Natural Area</p>	

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

(approximately 4.95 ha) is located in the centre of the neighbourhood, adjacent to the school/park site (which will provide potential nature educational opportunities) and contains a sizeable stand of willow, poplar and spruce trees. Acceptance of these lands into City inventory will ensure that they are protected and conserved for years to come.

Objective (31) Provide a school/park site which is accessible via walkway linkages, automobiles and transit.	
NSP Policy	Implementation
<p>(a) The school/park site shall have frontage along public roadways to accommodate flexible building design, parking access, drop-off/pick-up areas and school bus zones as well as to ensure sightlines, natural surveillance, adequate lighting and connectivity to pedestrian routes and transit service.</p> <p>(b) The school building envelope shall be a minimum 200m from the pipelines, or as stated in approved applicable regulations and policies.</p> <p>(c) Design of the collector roadways abutting the school/park site shall include sidewalks on both sides.</p> <p>(d) Residential uses which front the school/park site shall be designed with rear lane access.</p>	<p>(a) <i>Figure 6.0 – Land Use Concept</i> and <i>Figure 9.0 – Pedestrian Network</i> illustrate the location of the school/park site adjacent to collector roadways, pedestrian links, and multi-use trails.</p> <p>(b) The design layout of the school developed by the Urban Planning and Environment Branch of Sustainable Development.</p> <p>(c)(d) The Subdivision Authority shall have regard for the provision of sidewalks on roadways and the orientation of residential uses adjacent to the school.</p>
<p>Rationale: The school/park is adjacent to two collector roadways, and is well-connected through a network of multi-use trails, walkways and sidewalks to ensure that it is accessible to all residents in the plan area.</p>	

Technical Summary

A Parkland Impact Assessment (PIA) was completed confirming that 97% of Desrochers residents are within 500m (approximately 6 minute walk) of the neighbourhood school/park and Natural Area or to neighbouring parks and open spaces in Allard, Chappelle, and/or Heritage Valley Town Centre.

3.5.10 Transportation

The Desrochers NASP aims to achieve several transportation-related goals, including establishing a neighbourhood that is walkable, well connected, and easily accessible for all residents. These goals are conceptually illustrated in *Figure 8.0 – Transportation Network* and *Figure 9.0 – Pedestrian Network* which identify the roadway network and alternative circulation system that accommodates the movement of automobiles, transit, bicycles, and pedestrians within the neighbourhood and to adjacent communities.

Objective (32) Provide a collector roadway system which moves vehicular traffic efficiently through the neighbourhood and minimizes internal roadway congestion.	
NSP Policy	Implementation
<p>a) Front drive access shall not be permitted to residential uses along 35 Avenue S.W. or directly across from the Natural Area and the school/park site.</p> <p>b) The number of residential lots fronting onto and having direct access to a collector road should be minimized.</p> <p>c) Access to low-rise/medium density units and Mixed Use areas shall be reviewed on a site by site basis.</p>	<p><i>Figure 8.0 – Transportation Network</i> illustrates the alignment of arterial and collector roadways.</p> <p>(a) Zoning and subdivision approval shall ensure residential uses do not have front drive access directly to 35 Avenue S.W. or directly across from the school/park and the Natural Area.</p> <p>(b) The Subdivision Authority will have regard for the number of lots having direct access onto collector roadways at the subdivision stage and according to current policy and directives.</p> <p>(c) The Development Officer shall have regard for access locations to low-rise/medium density units and Mixed Use areas. Access will be reviewed and approved by Transportation Services.</p>
<p>Rationale:</p> <p>The roadway network has been designed to meet both the internal and external traffic generated by the neighbourhood in accordance with City of Edmonton's guidelines and standards. A hierarchy of arterial, collector and local roadways are intended to facilitate the efficient movement of vehicular traffic (see <i>Figure 8.0 – Transportation Network</i>). Vehicular access to the surrounding arterial roadways will be provided via five neighbourhood entrance/exits.</p> <p><i>Arterial Roadways</i></p> <p>Arterial roadways border the neighbourhood at approximately one-mile intervals along the west and northwest (Heritage Valley Trail), east (James Mowatt Trail) and south (41 Avenue S/W.). Consequently, the neighbourhood will benefit from a high level of accessibility to the greater Edmonton area, the City of Edmonton, and Leduc County.</p> <ul style="list-style-type: none"> • 41 Avenue SW is expected to be a six lane divided arterial, with limited access, west of James Mowatt Trail and will serve as a major east-west corridor. This facility will accommodate longer distance regional and provincial trips, in addition to providing transportation benefits to the development area in the future. • James Mowatt Trail is expected to be a four lane divided arterial roadway. • Heritage Valley Trail is expected to be a four lane divided arterial roadway, ultimately connecting to a new interchange at Anthony Henday Drive to the north. 	

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Roadway Staging

A roadway staging plan will be prepared as part of the review and approval process to service lands in this area of southwest Edmonton. Until the completion of the majority of roadways to serve the neighbourhood, access to any existing residences shall be maintained at all times.

Arterial Roadway Assessments

Lands within the NASP will be subject to Arterial Roadway Assessments (ARA) pursuant to the Arterial Roads for Development Bylaw 14380, or to the policies and bylaws regarding arterial roadways in place at the time of development to cost-share the construction of arterial roadway facilities needed to service the area. In general terms, the ARA outlines the developer's responsibility for arterial roadway construction within the catchment area and is based on the estimated and actual costs of constructing arterial roads required for access to a catchment area.

Collector Roadways

Collector roadways provide internal circulation and connect to the surrounding arterial roads. Accesses are spaced at appropriate intervals to facilitate traffic progression, are designed to accommodate two-lane traffic and on-street parking. The collector roadway network provides efficient and convenient access to residential areas, prevents cut-through traffic in the neighbourhood, and enhances overall safety. This serves to further reinforce a local 'sense of place' among residential sub-areas and reduce traffic volume and speeds.

Vehicular Circulation

Where single/semi-detached or rowhousing fronts onto a collector roadway, front drive access will be discouraged; however on-street parking will be permitted. Alongside the school/park site and Natural Area, access to residential housing shall be from an alley to reduce traffic congestion and conflicts with the future drop-off/pick-up area(s) for the school.

Objective (33) *Mitigate the impact of automobile traffic associated with commercial, mixed use areas, and low-rise/medium density residential areas on surrounding low density residential areas.*

Bylaw 16726
February 24, 2014

NSP Policy	Implementation
Locate commercial, mixed use areas and low-rise/medium density residential development in proximity to LRT and arterial or collector roadways, to the greatest extent possible without compromising pedestrian connectivity from these sites to the surrounding community.	<p>Figure 6.0 – Land Use Concept illustrates the location of land uses within the NSP.</p> <p><i>The Subdivision Authority shall ensure commercial, mixed use areas and low-rise/medium density residential developments are primarily accessed from abutting collector and arterial roadways and minimize access via local roadway fronted by single/semi-detached residential development, to the greatest extent possible. Additional pedestrian connections may be required to achieve this objective.</i></p>

Bylaw 16726
February 24, 2014

Rationale: *Commercial, mixed use areas and low-rise/medium density residential developments shall be primarily located in proximity to the LRT station to reduce the number of single-occupancy vehicular trips. Consideration should also be given to locate these land uses with good access to arterial or collector roadways. Locating nodes of activity which generate higher vehicular traffic adjacent to roadways with higher capacities reduces potential conflicts between local residential traffic and traffic generated by these higher intensity uses.*

Bylaw 16726
February 24, 2014

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Objective (34) Design a logical local street system which provides numerous connection points throughout the neighbourhood and which maximizes convenient access to LRT/ transit.	
NSP Policy	Implementation
<p>(a) Local road linkages and walkways shall be incorporated at appropriate locations to improve neighbourhood connectivity.</p> <p>(b) The collector roadway network shall be designed with sidewalks on both sides to facilitate pedestrian access to the Desrochers LRT platform station.</p> <p>(c) Ensure that the maximum length of cul-de-sacs in residential settings does not compromise City emergency response plans or operation of maintenance equipment.</p>	<p>(a) The Subdivision Authority shall have regard for subdivision design to maximize pedestrian and vehicular connections.</p> <p>(b) <i>Figure 8.0 – Transportation Network</i> and <i>Figure 9.0 – Pedestrian Network</i> illustrate the conceptual location of the LRT platform and pedestrian network.</p> <p>(c) The Subdivision Authority shall have regard for subdivision design in residential settings to ensure the provision of adequate emergency services access.</p>
<p>Rationale:</p> <p><i>Road linkages</i></p> <p>Designing local road linkages in a manner which improves neighbourhood connectivity creates a pedestrian network within existing infrastructure, reducing the need for additional walkways. Where roadway design that facilitates a direct route to amenity areas or transit is constrained due to land use limitations, minor walkways shall be provided to ensure walkability and accessibility to neighbourhood destinations and transit.</p> <p><i>Sidewalks</i></p> <p>All roadways in Desrochers shall be developed with sidewalks in order to facilitate safe and efficient movement of pedestrians. Sidewalks on both sides of the collector roadways shall be provided. These sidewalks will encourage residents to walk to open spaces, commercial developments and transit, overall reducing the number of vehicle trips and promoting health and social interaction.</p> <p><i>Length of cul-de-sacs</i></p> <p>Subdivision design should ensure, where practical, that cul-de-sac length does not exceed 120 m. Where this cannot be achieved, the provision of an emergency access to an adjacent cell of development shall be required.</p>	

Objective (35) Provide strong connections with surrounding communities.	
NSP Policy	Implementation
<p>(a) The NASP shall establish strong connections with the adjacent neighbourhoods through the use of arterial and collector roadways, sidewalks, and multi-use trails.</p> <p>(b) Multi-use trails shall be provided along the arterial roadways of Heritage Valley Trail, 41 Avenue S.W., James Mowatt Trail as well as the pipeline corridor.</p>	<p>(a) <i>Figure 6.0 - Land Use Concept</i>, <i>Figure 8.0 – Transportation Network</i> and <i>Figure 9.0 – Pedestrian Network</i> illustrate the major street pattern and connections with surrounding neighbourhoods.</p> <p>(b) The location and design of multi-use trails along arterial roadways shall be reviewed by Transportation Services at the roadway design stage.</p>

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

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

Objective (36) Integrate land use and circulation patterns, considering safety of pedestrians and cyclists.

NSP Policy	Implementation
Ensure pedestrian crossings are safe, convenient and developed at visible locations.	<i>Figure 9.0 – Pedestrian Network</i> illustrates the location of three important pedestrian crossings. The location and design of pedestrian crossings shall be identified at the subdivision approval stage and confirmed by the Transportation Department at the roadway design stage.
<p>Rationale: The land uses within Desrochers NASP have been configured in such a manner as to facilitate pedestrian connectivity between the east and west limits of the neighbourhood and into adjacent communities. Three pedestrian crossing locations are proposed to ensure the safety of pedestrians and cyclists. The first occurs at 119 Street S.W., between the Natural Area and the west side of the central stormwater management facility (SWMF). The second crossing occurs at the east side of the central SWMF and the easternmost collector. These are anticipated to be significant pedestrian crossing locations, carrying pedestrian and bicycle traffic to the neighbourhood commercial, LRT, SWMFs, the Natural Area and the school/park. A third crossing occurs along 35 Avenue SW, completing the pedestrian connectivity between the pipeline right-of-way in Desrochers and into Heritage Valley Town Centre. All pedestrian crossings should be given extra attention at the subdivision, development and/or roadway design stage. Through the use of design features such as pavement markings, changing surface materials, or curb extensions, additional focus at these key crossing locations can be achieved.</p>	

Objective (37) Provide public transit services within the plan area in accordance with City of Edmonton Transit System Guidelines and demands, and ensure access to future transit routes and facilities.

NSP Policy	Implementation
<p>(a) The alignment and design of the internal collector roadway system shall maximize access to public transit for the greatest number of residents.</p> <p>(b) Subdivision design shall maximize access and connectivity to transit</p> <p>(c) Provide transit at an early stage of the neighbourhood development.</p>	<p>(a) Edmonton Transit Systems will determine the routing for public transit along the arterial and collector roadways which have been identified as future transit routes.</p> <p>(b) The Subdivision Authority will have regard for sidewalk, multi-use trail, and walkway placement to minimize walking distances to transit (within 400 m). Local roadways and walkways shall be designed to minimize the walking distance to transit to the greatest extent possible.</p> <p>(c) Participating landowners will cooperatively fund transit service for the first two years of service.</p>
<p>Rationale: Providing transit service contributes to the health and sustainability of a neighbourhood. As such, the Desrochers neighbourhood has been designed to ensure all residents are within 400 m (approximately 5 minute walk) of transit service (either LRT or bus routing).</p>	

LRT Right-of-Way

The LRT route adjacent to Desrochers (see *Figure 8.0 - Transportation Concept*) is consistent with the Transportation Master Plan. The LRT right-of-way will be at-grade and is expected to be 19.5 m wide (approximately). There are two locations within the neighbourhood where at-grade LRT street crossings will occur, which have been considered and reviewed with the associated Transportation Impact Assessment. It is anticipated that the various options available, along with the distributed street network, will allow for all intersections to function well at-grade.

Dedication of the right-of-way to accommodate the LRT development will be pursued by Transportation Services by means of subdivision and area development. Of note is that Transportation Services is currently reviewing policies and procedures to develop measures for cost-sharing of the required LRT land, similar to how dedication is managed for Arterial roadways. At the time this plan was prepared, there were no current policies or procedures for cost sharing lands dedicated for LRT right-of-way alignments.

LRT Station

The proposed LRT station has been located at the north-eastern periphery of the Desrochers area, on the west side of James Mowatt Trail. Surrounding land uses are primarily residential with a small scale commercial site, typical of a residential centre station.

The LRT station itself will integrate with the neighbourhood. At this time, no specific design has been created for this station, but two possible design options may include: 1) a central platform, similar to the existing stations to the north, or 2) a central track configuration with exterior platforms. Exterior platforms would allow for direct interface with the adjacent land uses but do come with operational considerations and challenges in addition to higher initial construction costs. During development of a conceptual design for the LRT right-of-way, decisions related to the LRT station design will be pursued. This design exercise should be completed prior to development and subdivision of the area to eliminate restrictions on design options as well as to allow full integration of adjacent land uses. However, timing of the LRT station plan shall not impede development within these parcels.

Primary consideration shall be given to providing premium Transit service to the Town Centre LRT station area. Providing any amount of improved service, earlier than a full LRT extension, may generate earlier growth of Desrochers and may also contribute to higher densities being developed at the initial stages of development.

Transit Buses

A bus network, for both internal and external neighbourhood circulation as well as support service for the planned LRT station, will be routed using collector and arterial roadways. Public transit service will be extended into the NASP area in accordance with the City of Edmonton Transit System Guidelines and demands. The street network will provide sufficient infrastructure to support effective transit service within the neighbourhood and to external destinations along a variety of routes.

In an effort to provide transit service earlier in the development of the neighbourhood, the participating landowners will fund transit service for the first two years of service. Following this two year period, Edmonton Transit shall undertake the full responsibility of transit service. Collector roadways will be developed to a suitable standard to accommodate transit and will provide a readily accessible service to all areas of the neighbourhood. Many bus routes within the greater Heritage Valley area will take advantage of the transit facilities (i.e. transit centre, park and ride and LRT station) at Ellerslie Road, north of the plan area.

Route planning will continue to be adjusted in order to determine the number and frequency of service options required to serve the remaining neighbourhood areas being planned.

Objective (38) Design an alternative circulation system which promotes pedestrian, bicycle, inline skating, and wheelchair accessible travel and which is linked to key focal points within and outside the neighbourhood.	
NSP Policy	Implementation
<p>(a) A network of hard-surfaced sidewalks, walkways, and multi-use trails shall be provided to promote walkability and access to the focal areas, commercial developments, transit routes and LRT.</p> <p>(b) Traffic calming may be employed to reduce automobile speeds, increase pedestrian safety, and improve the streetscape.</p>	<p>(a) Figure 9.0 – Pedestrian Network outlines the network, which includes sidewalks alongside roadways and hard surface multi-use trails.</p> <p>Multi-use trails will be wider walkways suitable for all modes of alternative circulation (pedestrian, cyclist, etc). They shall be located along the entire length of the pipeline corridor, along James Mowatt Trail, Heritage Valley Trail and 41 Avenue S.W., and within or adjacent to both stormwater management facilities.</p> <p>An asphalt multi-use trail is intended for pedestrian circulation adjacent to the north edge of SW7 Natural Area, within the buffer area.</p> <p>Minor pedestrian linkages illustrate the approximate location of minor walkways intended to connect residential cells to adjacent residential cells, the pipeline corridor, Mixed Use area, or James Mowatt Trail.</p> <p>Major pedestrian linkages illustrate a key north-south connection that shall facilitate access to the LRT station and neighbourhood commercial.</p> <p>In all instances, the Subdivision Authority shall have regard for the dedication of pedestrian links to promote walkability and appropriate access to transit facilities. Details regarding location will be determined at the subdivision approval stage.</p> <p>(b) Traffic calming measures such as roundabouts, raised intersections or curb extensions may be incorporated along roadways. Details will be reviewed and approved by Transportation Services prior to development.</p>
<p>Rationale:</p> <p>The plan provides a well-connected and integrated network which accommodates multiple modes of transportation, with a focus on pedestrians, bicycles and public transit usage. Figure 9.0 - Pedestrian Network highlights this network of multi-use trails and walkways, which are intended to provide a high degree of connectivity within and outside the neighbourhood.</p> <p>All local and collector roadways in Desrochers will be developed with sidewalks providing a general level of pedestrian access within the NASP. Pedestrian traffic is emphasized and numerous access and egress points are also provided at neighbourhood boundaries (See Figure 9.0 – Pedestrian Network). Specifically, all collector roadways have been identified as “Pedestrian Sidewalk along Roadway (both sides)” to illustrate the importance of these roadways in carrying pedestrian traffic.</p> <p><i>Alternative Circulation System</i></p> <p>In addition to the collector and local roadways, an efficient and continuous pedestrian network connecting key nodes (i.e. school/park, stormwater management facilities (SWMFs), natural area, commercial areas, and LRT station platform) within the NASP will accommodate multi-mode (e.g., pedestrian, bicycle, rollerblade, wheelchair) circulation throughout the neighbourhood.</p> <p>A hard-surface multi-use trail is proposed within the pipeline R-O-W that runs through the neighbourhood, extending from 41 Avenue S.W. to 35 Avenue S.W., where it continues on into the Town Centre. <i>The Community Commercial area, the natural area, a SWMF, and residential areas abutting the multi-use trail will benefit from improved access and pedestrian traffic.</i></p> <p>Bicycle circulation within the NASP is designed to follow collector and local roadways within the neighbourhood</p>	

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

area. Bicycle routes will be integrated with MUT corridors and connect internal and adjacent residential areas and amenities. Routes will be clearly marked using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists, and pedestrians in the neighbourhood.

Within the Natural Area it is proposed that an asphalt multi-use trail be provided in order to enhance connectivity from the pipeline corridor to the SWMF. Specific details will be confirmed at time of development.

Traffic Calming

Traffic calming such as roundabouts, raised intersections or curb extensions at significant roadway intersections are beneficial as they reduce vehicular speeds and enhance pedestrian safety. Roundabouts for instance provide for the continuous movement of vehicles and can beautify the streetscape with trees and plantings or include public art and become neighbourhood focal points. Raised intersections reduce vehicle speeds, improve driver's awareness of crossings and visually turn intersections into pedestrian-oriented zones. Curb extensions enhance pedestrian safety by reducing crossing distances, relieve sidewalk crowding and provide space for functional elements such as seating, plantings, and furniture. Provision of traffic calming measures will be reviewed and approved by Transportation Services.

Objective (39) Provide buffering (i.e. noise or vibration attenuation) where residential development backs onto major transportation infrastructure (i.e. LRT corridor, 41 Avenue S.W.).

NSP Policy	Implementation
Appropriate attenuation study(s) may be required for residential development adjacent to the LRT corridor and 41 Avenue S.W.	Transportation Services shall determine if a noise study and/or vibration study is required for residential development at the subdivision approval stage.

Rationale:

In areas where low density residential is constructed along designated truck routes or the LRT corridor, the City of Edmonton requires the developers to address noise concerns. Therefore, a Noise Attenuation Needs Assessment shall be carried out in accordance with City of Edmonton's Urban Traffic Noise Policy. This policy requires that the noise levels in the outdoor amenity areas do not exceed 60 dBA. If required by Transportation Services, noise level evaluations will be carried out by the developers prior to subdivision application at the design phase of the project. Based on the results of the study, noise attenuation may be required. At minimum Transportation Services will require a 1 m high berm and a 1.8 m double board no gap fence with a minimum density of 20 kg/m³ be incorporated in to the design of arterial roadways and subdivisions adjacent to arterials designated as truck routes. Transportation Services will require that all other arterial roadways be constructed with a 1.8 m double board no gap fence with a minimum density of 20 kg/m³.

Noise attenuation impacts adjacent to 41 Avenue S.W. and along the LRT corridor will need to be determined at the subdivision stage. If required, a development setback adjacent to the LRT line may be required to address risk and vibration concerns and to allow additional space for the development of noise attenuation measures.

Bylaw 16726
February 24, 2014


Technical Summary

The transportation network for the NASP will be provided in accordance with the requirements of the City of Edmonton's Transportation Services. A Traffic Impact Assessment (TIA) was prepared by the Consultant (March 2010) to confirm the appropriateness of the planned transportation network for Desrochers.

3.5.11 Infrastructure Servicing & Staging

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

Objective (40) Ensure that the neighbourhood is serviced to a full urban standard, in an efficient, contiguous and staged manner.	
NSP Policy	Implementation
<p>(a) Sanitary and stormwater servicing shall be provided in accordance with the approved Neighbourhood Design Report (NDR) for the Desrochers NASP.</p> <p>(b) Water servicing to the NASP area shall be provided in accordance with the approved Hydraulic Network Analysis (HNA).</p> <p>(c) Shallow utilities shall be extended into the plan area as required.</p>	<p>(a)(b) Approval of engineering drawings and servicing agreements shall be required for installation of sanitary and stormwater servicing.</p> <p>(c) Installation of shallow utilities will be executed through servicing agreements.</p>
<p>Rationale: The Desrochers NASP will be designed in accordance with City of Edmonton servicing standards. Development staging and extension of infrastructure will be contiguous, efficient, and economical while having regard for potential environmental and ecological impacts.</p> <p><i>Sanitary Servicing</i></p> <p>The neighbourhood will be serviced by a sanitary trunk along the central east-west collector and enter the trunk system in the Chappelle neighbourhood at the intersection of Heritage Valley Trail. The drainage will then flow north through Chappelle along 141 Street S.W. and tie into the proposed South Edmonton Sanitary Sewer (SESS) sanitary trunk system located at 141 Street and Ellerslie Road. The sanitary system is conceptually illustrated in Figure 10.0 – Servicing Concept. Sanitary servicing will be developed utilizing conventional gravity systems.</p> <p><i>Stormwater Servicing</i></p> <p>Two stormwater management facilities are located in the plan area, as conceptually shown in Figure 10.0 – Servicing Concept. These facilities have been located on the basis of natural drainage patterns and pre-development sub-basin drainage boundaries in southwest Heritage Valley. Storm servicing involves development of minor and major storm drainage systems. The major storm drainage system includes the two stormwater management ponds to provide adequate storage volumes under the critical rainfall event. The major flow will be discharged through a series of interconnecting pipes and ponds and conveyed to Blackmud Creek through an existing outfall system in the Callaghan neighbourhood. Alternative stormwater management techniques may be considered, such as constructed wetlands, where appropriate. Further details regarding the stormwater drainage schemes for the Desrochers NASP are provided in the associated Neighbourhood Design Report.</p> <p><i>Water Servicing</i></p> <p>Water servicing for the NASP will be extended from transmission mains along James Mowatt Trail and Heritage Valley Trail. Future extensions will be required as illustrated in Figure 10.0 – Servicing Concept. Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for various forms of residential development. Water looping shall be provided in accordance with the requirements of the <i>utility company</i>. Any existing water lines operated by the Whitemud Water Co-op will remain operational until the City's water servicing system is extended into the neighbourhood. Servicing of the neighbourhood to a full urban standard will require the Whitemud Water Co-op lines to be phased out in a collaborative manner acceptable to the <i>utility company</i>, Whitemud Co-op and the developers.</p>	



DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Shallow Utilities

Power, gas, and telecommunication services are all located within close proximity to the NASP and shall be extended into the plan area as required

Development Staging

Development is expected to proceed initially from the west, as servicing and infrastructure are extended (see **Figure 11.0 – Development Staging**). Development of individual phases may vary from the actual zoning and subdivision applications depending on contemporary market demands and aspirations of the respective landowners. Should sufficient demand warrant or engineering design be made more efficient, portions of separate phases may be developed concurrently.

Objective (41) Ensure that infrastructure requirements support the preservation of the SW7 Natural Area.	
The ecological objectives of the plan shall be adhered to in the preparation of more detailed technical reports such as the Neighbourhood Design Report (NDR).	A Natural Area Management Plan (NAMP) shall be required prior to rezoning and will be reviewed in conjunction with the NDR.
Rationale: Preservation of the SW7 Natural Area can be significantly enhanced through careful attention to infrastructure design. For example, preparation of a NAMP can ensure the neighbourhood design recognizes the hydrological requirements of the treed area.	

Technical Summary

Further details regarding the sanitary drainage schemes for the Desrochers NASP are provided in the associated Neighbourhood Design Report. Water looping will be provided in accordance with the requirements of the *utility company*. A neighbourhood level Hydraulic Network Analysis has been approved.

4.0 APPENDIX A: POLICY CONTEXT

This section outlines the various statutory plans, policies, and design principles which are applicable to the Desrochers NASP including "The Capital Region Land Use Plan", "The Way We Grow", "The Way We Move", the "City of Edmonton's Suburban Neighbourhood Design Principles" (SNDP), "Heritage Valley Servicing Concept Design Brief", and other relevant policies. Applicants seeking amendments to the NASP or applying for rezoning, subdivisions or development permits are required to consult the actual documents for specific guidance on detailed requirements as they apply to particular properties.

CAPITAL REGION LAND USE PLAN

The Desrochers NASP complies with the following Capital Region Land Use Plan principles and policies:

Capital Region Land Use Policy	Desrochers NASP Compliance with Capital Region Land Use Policy
II. MINIMIZE REGIONAL FOOTPRINT:	
A. Identify, Protect and Prioritize Lands for Regional Infrastructure	
<p>Policy (i) Ensure that lands identified for regional infrastructure such as energy transmission, highways, municipal infrastructure, transit and related facilities are protected from incompatible development.</p> <p>Policy (ii) The Province and the municipalities shall continue to identify lands that will be used for regional infrastructure. Once identified, these lands shall be protected for the designated use in applicable plans.</p> <p>Policy (v) Encourage and support sustainable development within the region.</p>	<p>The Desrochers NASP identifies land for the future extension of the LRT system adjacent to James Mowatt Trail and provides for a future LRT station to encourage higher density development.</p> <p>41 Avenue S.W. has been identified as a regionally significant roadway and the appropriate amount of land will be provided as development warrants.</p>
B. Concentrate New Growth Within Priority Growth Areas	
<p>Policy (i) Most new growth shall occur within priority growth areas.</p> <p>Policy (ii) Priority shall be given to accommodating growth in major employment areas and in locations that meet at least three of the following four criteria:</p> <ul style="list-style-type: none"> a) Existing and proposed multi-movement corridors, including transit nodes; b) Adjacent to existing and proposed major employment areas; c) Redevelopment and intensification opportunities within existing urban areas; and d) Locations that utilize existing infrastructure and servicing capacity or logically and efficiently extend that infrastructure. <p>Policy (v) Priority growth areas shall incorporate intensive forms of development that significantly exceed existing development patterns.</p> <p>Policy (vi) Transit corridors and nodes within the priority growth areas shall be identified. Growth within nodes and along these corridors shall be intensified. Encourage and support multi-use and multi-storey development at nodes within the priority growth areas.</p>	<p>The Desrochers neighbourhood is located in Priority Growth Area "Cw" which sets a minimum density target of 30 units per net residential hectare in order to facilitate development which existing development patterns. The Desrochers NASP exceeds the density target.</p> <p>The neighbourhood abuts an identified LRT line and is adjacent to a proposed employment area in the Town Centre and can be logically and efficiently serviced.</p>
D. Support Expansion of Medium and Higher Density Residential Housing Forms	
<p>Policy (i) New residential development shall provide a greater proportion of higher density residential units.</p> <p>Policy (iii) Greenfield developments shall make provision for a mixture of</p>	<p>The Desrochers NASP provides approximately 55% of the overall number of residential units as higher density residential units, in highly accessible locations adjacent to LRT, transit service and in proximity to commercial</p>

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Capital Region Land Use Policy	Desrochers NASP Compliance with Capital Region Land Use Policy
uses including a diversity of housing forms, community services, local retail and employment opportunities. Policy (iv) Transit accessibility must be included in the design of all new developments.	land uses.
III. STRENGTHEN COMMUNITIES:	
B. Support Healthy Communities	
Policy (i) Support the implementation of present and future initiatives to create and enhance parks, trails and natural areas for public use. Policy (ii) Improve accessibility to community services by providing sidewalks, bicycle trails to encourage walking and cycling and locate these services within proximity to transit, where possible.	The Desrochers NASP preserves the SW7 Natural Area and provides a well connected and integrated open space system which allows residents the opportunity to choose alternative modes of transportation other than the single occupancy vehicle.
C. Support Public Transit	
Policy (i) Provide a mix of higher intensity land uses along transit corridors, at nodes, and employment centres. Policy (iii) New developments shall be designed for connectivity and accessibility to transit facilities.	Higher residential densities and an inter-connected street pattern promote LRT, transit usage and walkability.
D. Support Innovative and Affordable Housing Options	
Policy (ii) All residential developments shall provide a greater variety of housing types.	The Desrochers NASP allows for the development of a range of residential housing types based on single/semi-detached, rowhousing, low-rise/medium density units and Mixed Use areas.
IV. INCREASE TRANSPORTATION CHOICE:	
A. Integrate Transportation Systems with Land Use	
Policy (iii) Design transportation infrastructure to support multiple modes of transport. Policy (iv) Support development of inclusive communities to reduce the need for travel.	A network of arterial, collector and local roadways along with sidewalks, walkways and multi-use trails will provide residents with the ability to drive, walk, cycle, rollerblade or other through the neighbourhood or into the surrounding region.
B. Support the Expansion of Transit Service in Various Forms	
Policy (i) Expand and extend the level, quality and range of public transportation options available to serve the Region. Policy (iv) Support multi-modal transportation options by providing multi-use streets sufficient to accommodate bicyclists, motorists and pedestrians. Policy (v) Support public transportation options that are environmentally friendly and safe.	The Desrochers NASP has been designed to support a high degree of public transportation ridership through the Residential Centre LRT and by providing higher densities and numerous transportation options.
V. ENSURE EFFICIENT PROVISION OF SERVICES:	
A. Design Integrated Physical Infrastructure within the Region	
Policy (ii) Identify and protect corridors for transportation, transit and infrastructure requirements.	41 Avenue S.W. and the LRT corridor have been designated within the plan area for major transportation and transit purposes.
VI. SUPPORT REGIONAL ECONOMIC DEVELOPMENT:	
A. Ensure a Supply of Land to Sustain a Variety of Economic Development Activities	
Policy (i) Ensure an adequate supply of land is available for future development of the Region's industries and support further diversification of the regional economy.	The Desrochers NASP provides regional commercial opportunities through designation of a mixed use commercial/residential site at the corner of 41 Avenue S.W. and Heritage Valley Trail.

MUNICIPAL DEVELOPMENT PLAN – THE WAY WE GROW

The Way We Grow – the City of Edmonton’s Municipal Development Plan (MDP), is a comprehensive plan which provides direction for development and implementation of more specific and detailed plans by the industry / private landowners and the City. The Way We Grow “*Land Development Concept*” map designates this community as “Developing, Planned and Future Neighbourhoods” suitable for urban development. The growth coordination strategy emphasizes completion of developing neighbourhoods and a focus of land development activity and infrastructure provision and expansion to approved neighbourhood plans to fulfill the City’s commitment to residents and make efficient use of infrastructure investments.

The Desrochers NASP complies with the following The Way We Grow policies:

MDP Policy	Desrochers NASP Compliance with MDP Policy
MDP Policy 3.1.1.1 – Integrate higher density development with Light Rail Transit (LRT) stations and transit centres (see Map 5: Potential LRT Expansion: 2040).	Higher density residential developments are positioned in proximity to the Residential Centre LRT station.
MDP Policy 3.2.1.1 - Ensure a combination of single family and multi-family housing development potential is available for the next 30 years.	The NASP will provide single family and multi-family housing for approximately 10 to 15 years at current absorption and development rates in southwest Edmonton.
MDP Policy 3.2.1.3 - Achieve a balance between residential, industrial, commercial, institutional, natural and recreational land uses in the city through land development policies and decisions.	The Desrochers NASP establishes a variety of development opportunities through the provision of several types of land components (single/semi-detached residential, rowhousing, low rise/medium density units, and Mixed Use areas).
MDP Policy 3.2.2.3 - Ensure City departments and agencies collaborate to identify all municipal land needs within an Area Structure Plan, Neighbourhood Structure Plan or Area Redevelopment Plan boundary prior to plan approval.	The City has identified the need for a school/park site within the NASP boundary for municipal purposes.
MDP Policy 3.3.1.1 - Promote medium and higher density residential and employment growth around LRT stations and transit centres (see Map 5: Potential LRT Expansion: 2040) to support and ensure the viability of transit service.	The NASP provides for higher residential densities around the Residential Centre LRT station which will support the provision of transit service to Desrochers.
MDP Policy 3.3.1.4 – Encourage commercial, entertainment, institutional and employment uses to locate at LRT stations.	The NASP designates neighbourhood commercial and Mixed Use sites adjacent to the Residential Centre LRT station.
MDP Policy 3.3.1.5 – Prepare transit oriented development (TOD) plans around existing LRT nodes, and in association with expansion of the LRT system.	The NASP has been designed to align with the principles of TOD.
MDP Policy 3.6.1.6 - Support contiguous development and infrastructure in order to accommodate growth in an orderly and economical fashion.	The Desrochers NASP represents contiguous growth in southwest Edmonton, as the surrounding neighbourhoods are developing concurrently.
MDP Policy 4.3.1.1 - The City of Edmonton will take municipal reserve, school reserve or municipal and school reserve in accordance with the Municipal Government Act	The Desrochers NASP provides municipal reserve as a combination of land and cash in lieu.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

MDP Policy	Desrochers NASP Compliance with MDP Policy
and will use the land or money for the purposes as defined by the Municipal Government Act.	
MDP Policy 4.3.1.11 - Use the Community Knowledge Campus program in new neighbourhoods as a means of creating a focal point, improving educational related partnership opportunities at school sites and encouraging lifelong learning facilities.	The central location of the school/park site endows the residents with excellent access to the open space and educational opportunities and has been designed with input from the Edmonton Separate School Board.
MDP Policy 4.4.1.1 - Provide a broad and varied housing choice, incorporating housing for various demographic and income groups in all neighbourhoods.	The NASP allows for the development of a range of residential housing types based on single/semi-detached, rowhousing, low-rise/medium density units and Mixed Use areas.
MDP Policy 4.4.1.4 – Develop higher density housing and a mix of uses in proximity to LRT stations and transit centres (see Map 5: Potential LRT Expansion: 2040).	The NASP provides for higher residential densities around the Residential Centre LRT station which will support the provision of transit service to Desrochers.
MDP Policy 4.4.1.5 – Preference for multiple unit density will be given to neighbourhoods with LRT stations and transit centres.	
MDP Policy 4.6.1.3 – Support the design of accessible and safe active transportation networks in accordance with best practises in universal design.	The network of sidewalks, walkways and multi-use trails will be designed according to best practises in universal design and will provide residents with the ability to walk, cycle, rollerblade or other through the neighbourhood.
MDP Policy 5.6.1.1 – Encourage new building adjacent to pedestrian streets to support pedestrian activity by providing visual interest, transparent storefront displays, pedestrian amenities and connections to interior space.	The NASP promotes pedestrian friendly building orientation, streetscapes and the provision of safe, attractive and direct pedestrian connections.
MDP Policy 5.6.1.4 – Design density, land uses and buildings to benefit from local transit service by minimizing walking distances to transit service and by providing safe and comfortable pedestrian streetscapes and high quality transit amenities.	Higher residential densities and amenity areas have been located adjacent to the Residential Centre LRT station, collector or arterial roadways to promote walkability and transit usage.
MDP Policy 5.7.1.1 – Design streets, sidewalks and boulevards to provide safe, accessible, attractive, interesting and comfortable spaces for pedestrians, cyclists, automobiles and transit and to accommodate utilities, landscaping and access requirements for emergency response services.	The NASP supports the use of enhanced pedestrian crossings and traffic calming measures such as roundabouts as a means of providing pedestrian safety and attractive street designs.
MDP Policy 6.2.1.4 – Plan for retail centres that meet the daily needs of residents in area and Neighbourhood Structure Plans.	A neighbourhood commercial site and a mixed use residential/commercial site provide retail opportunities to satisfy the daily needs of residents.
MDP Policy 7.1.1.4 – Determine appropriate buffer areas around the periphery of natural areas identified for protection.	The SW7 Natural Area is to be conserved and integrated into the NASP. Use of this land is to be limited to mainly passive recreation opportunities in order to better conserve it. A Natural Area Management Plan (NAMP) will be required prior to rezoning to provide direction for the maintenance of the natural area.
MDP Policy 7.1.1.7 – Public projects, new neighbourhoods and developments will protect and integrate ecological networks, as identified in the Natural Connections Strategic Plan, by adopting an ecological network approach to land use	

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

MDP Policy	Desrochers NASP Compliance with MDP Policy
<p>planning and design.</p> <p>MDP Policy 7.1.1.11 – Require new developments adjacent to natural areas to demonstrate that they have incorporated ecological design best-practises to mitigate negative consequences.</p>	
<p>MDP Policy 7.4.1.1 – Link parks and open spaces with natural systems through development and design to strengthen the connectivity of Edmonton's ecological network, where feasible.</p>	<p>The school/park, stormwater management facilities and the SW7 Natural Area have been located and inter-connected to promote them as walking destinations and to serve as destination for pedestrians and cyclists and to provide passive recreation opportunities.</p> <p>Where feasible, facilities will be constructed as naturalized ponds to provide possible wildlife habitat and improve water quality via their natural filtration systems.</p>
<p>MDP Policy 8.1.3.1 – Plan for residential and economic development within the City which supports the Capital Region Growth Plan.</p> <p>MDP Policy 8.1.7.3 – Upon provincial approval of the Capital Region Plan Addendum, Edmonton's new Area Structure and Neighbourhood Structure Plans in the Capital Region Plan's priority growth area B, F, C_w or C_e will be required to meet or exceed the Capital Region's minimum density targets.</p>	<p>The Desrochers neighbourhood is located in the Capital Region Growth Plans Priority Growth Area "C_w" which sets a minimum density target of 30 units per net residential hectare. The Desrochers NASP exceeds this target.</p>
<p>MDP Policy 9.2.1.1 – Apply City of Edmonton Policy C515 Oil and Gas Facilities regarding setbacks, risk management and urban development.</p> <p>MDP Policy 9.2.1.4 – Collaborate with the ERCB, Government of Alberta, industry operators and the development industry to plan for compatibility with adjacent land uses so that negative impacts from oil and gas activities are minimized.</p> <p>MDP Policy 9.3.1.4 - In consultation with the Energy and Resources Conservation Board (ERCB), ensure development setbacks from oil and gas pipelines are achieved through the subdivision approval process.</p>	<p>Urban development in the vicinity of all resource well sites will be planned in accordance with the City policy document entitled "Policy Guidelines for the Integration of Resource Operations and Urban Development" (1985) and Policy C515 "Oil and Gas Facilities" (2007) and other relevant City procedures.</p> <p>Development of lands involving abandoned wells will comply with ERCB guidelines for development around abandoned wells. An assessment of risk and nuisance will be conducted on operating or suspended oil and gas wells, as directed by existing or future City policy for the integration of oil prior to any rezoning of the parcel where the facility is located.</p>

TRANSPORTATION MASTER PLAN – THE WAY WE MOVE

The Way We Move – the City of Edmonton's Transportation Master Plan (TMP), establishes a framework for how the City will address its future transportation needs. The TMP identifies seven strategic transportation goals related to Transportation and Land Use Integration, Access and Mobility, Transportation Mode Shift, Sustainability, Health and Safety, Well-Maintained Infrastructure, and Economic Vitality. The TMP in conjunction with the MDP will guide and shape the transportation system and land use patterns to achieve a sustainable and livable city. The TMP Concept – 2040 designates the 170 Street S.W. corridor as a Highway Connector which will facilitate regional traffic and accommodate the movement of people and goods.

The Desrochers NASP complies with the following Transportation Master Plan strategic goals:

TMP Strategic Goal	Desrochers NASP Compliance with TMP Strategic Goal
4.0 TRANSPORTATION AND LAND USE INTEGRATION Strategic Objective 4.1 – The City will integrate land use planning and transportation decisions to create an accessible, efficient and compact urban form.	
4.1(b) Encouraging land uses that are compatible and complementary to the surrounding transportation network. 4.1(c) Designing the transportation network to ensure it is compatible and complementary to the surrounding land uses.	The Desrochers NASP provides an integrated mix of land uses and transportation opportunities which are based on the integrated transit and land use framework.
5.0 PUBLIC TRANSPORTATION Strategic Objective 5.1 – The City will pursue expansion of the LRT to all sectors of the city with a goal to increase transit ridership and transit mode split and spur development of compact, urban communities.	
5.1(a) Developing the LRT as shown on Figure 5.1, in consideration of balancing objectives such as service, cost and redevelopment opportunities.	The NASP has been designed to facilitate the development of a Residential Centre LRT station as per Figure 6.0
6.0 ACTIVE TRANSPORTATION Strategic Objective 6.1 – The City will create a walkable environment.	
6.1(d) Designing all pedestrian facilities to support safe, direct, and convenient routes for people of varying abilities using barrier-free, age-friendly and Crime Prevention Through Environmental Design principles. 6.1(e) Providing well-integrated transitions between sidewalks, the multi-use trail corridor network and other pedestrian networks, transit facilities, parkland, the river valley and ravine systems.	The network of sidewalks, walkways and multi-use trails will be designed according to best practices in universal design and will provide residents with the ability to walk, cycle, rollerblade or other through the neighbourhood. The NASP has a well connected and integrated open space system which allows residents the opportunity to choose alternative modes of transportation other than the single occupancy vehicle.
7.0 ROADS Strategic Objective 7.6 – The City will appropriately mitigate the impacts of the transportation network on existing and future residential communities.	
7.6(f) Maintaining an Urban Traffic Noise Policy to mitigate the negative impacts of traffic noise in existing residential areas and to ensure that land is developed to minimize the effects of noise on new residential areas.	Noise attenuation impacts adjacent to 41 Avenue S.W. and along the LRT corridor will need to be determined at the subdivision stage.

HERITAGE VALLEY SERVICING CONCEPT DESIGN BRIEF

The Heritage Valley SCDB establishes a general framework for land use planning, and infrastructure and service provision within the Heritage Valley area. It provides policy and design directions for urban development with an emphasis on servicing. The Heritage Valley SCDB is not a statutory plan; however, it has been adopted by City Council by 'Resolution' to make it an effective planning instrument. This has enabled the SCDB to serve as a policy context for subsequent NASPs in the Heritage Valley area. The relevant Community Design Principles applicable to the Desrochers NASP are listed below:

SCDB Principles	NASP Compliance with Principles
3.1 (1) – Promote sustainable community design	The Desrochers NASP establishes higher residential densities, which optimize the land consumed for suburban development. It also supports the Residential Centre LRT station by clustering higher densities around amenities, stations and the edges of the neighbourhood.
3.1 (3) – Create a compact, pedestrian-oriented community	The pedestrian network is at the heart of the plan, ensuring connectivity and a human-scale development. Higher residential densities, mixed development and a variety of lot sizes enable compact, efficient development.
3.2 (4) – Establish a linked system of public open spaces	The school/park site, the stormwater management facilities, and the neighbouring district park site in the Heritage Valley Town Centre are all connected by pathways and multi-use corridors and are accessible to adjacent roadways.
3.2 (5) – Provide a diversity of housing types in each neighbourhood	Single/Semi-Detached, rowhousing, low-rise/medium density residential, and Mixed Use developments allow for diverse housing types.
3.2 (6) – Support housing at increased densities in support of the City's intensification strategies and to encourage the use of transit	<i>The Desrochers NASP exceeds the suburban housing mix guidelines.</i>
3.3 (2) – Ensure that each neighbourhood is designed with a focal point	The LRT station area, stormwater facilities, mixed uses area, school/park, as well as the natural area act as community focal points.
3.4 (2) – Locate employment areas at the periphery of the community	The Mixed Use sites are located at the edge of the neighbourhood, and a small neighbourhood convenience commercial use is located at the northeast edge.
3.5 (1) – Provide a balanced network for movement	The NASP provides opportunities for movement by car, public transit, bicycle, walking, etc. via collector and internal roadways, sidewalks, multi-use trail corridors and transit routes.
3.5 (2) – Provide a transportation system that reflects the character of the intended development and meets the unique demand of each neighbourhood, as well as the City's wider transportation objectives.	The looping collector roadway system corresponds to the unique shape of Desrochers and ensures that all parts of the Neighbourhood are accessible via transit within a 400 m walking distance.
3.5 (3) – Improve connectivity	Pathways, multi-use trail corridors, and roadways, and collector and internal roadway patterns provide linkages and improve connectivity to community focal points, commercial services, transit routes, the

Bylaw 16726
February 24, 2014

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

SCDB Principles	NASP Compliance with Principles
	Residential Centre LRT station and adjacent neighbourhoods.
3.5 (5) – Streets, pedestrian paths and bike paths should contribute to a system of fully connected and interesting routes to all destinations	Streets, sidewalks and pathways are provided by the NASP and connect the community to focal points and destinations.
3.7 (2) – Protect and enhance the natural features of the community when designing and planning neighbourhoods, facilities and services	One remaining stand of trees (Natural Area SW 7) is retained and integrated into the NASP.

EDMONTON SUBURBAN NEIGHBOURHOOD DESIGN PRINCIPLES

The purpose of these design principles is to encourage flexibility and innovation in the design and servicing of new neighbourhoods. The applicable principles are listed below:

SND Strategy	NASP Compliance with Principle
Principle 1: Design neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods	Desrochers is designed to be highly permeable to pedestrian traffic and any park or trail facility in the plan area will be available to nearby residents. The NASP also takes advantage of the nearby district park (located in the Town Centre).
Principle 3: Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods	The arterial roads that border the plan area are designed as a grid.
Principle 4: Design neighbourhood streets (both neighbourhood design and cross section of roadway) with standards that cater to the main intended use of the road	City standards and regulations ensure that streets are designed to accommodate pedestrians, cyclists and vehicles. Streets, sidewalks and pathways have standardized widths and materials depending on their function. Streets types are organized in a hierarchical fashion, depending on their use.
Principle 5: Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood	A pedestrian and bicycle network that links points within and outside the neighbourhood is provided. Access points ensure that streets and loops are accessible to pedestrians and offer a variety of routes.
Principle 6: Provide Transit Services to the edges of new neighbourhoods using the arterial and collector roadways in conjunction with appropriately designed, strategically located and conveniently accessed transit waiting zones	Roadways have been designed with Transit service in mind, using both arterial and internal collector roads. Transit service will be accessible to all neighbourhood residents.
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 facilities follow the pattern of development and with planned servicing should be made available early in the development stage.
Principle 8: Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of	The school/park site is located and will be designed in such a way that it will be adaptable to other uses should the need arise.

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

SND Strategy	NASP Compliance with Principle
education over time	
Principle 10: Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and stormwater management	The use of district school and recreation sites allows for land use efficiencies, and for a greater diversity of neighbourhood amenities (i.e. natural areas).
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	Stormwater management facilities, school/park, utility rights-of-way and natural areas are linked by walkways and trails.
Principle 12: Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points	All of the low-rise/medium density residential and Mixed Use areas are located toward the edge of the development, along collector and arterial roads, and near neighbourhood and regional focal points.
Principle 13: Use stormwater management techniques which provide an alternative(s) to the man made lakes and dry ponds typical to Edmonton	Alternative stormwater management techniques may be considered, such as constructed wetlands, where appropriate, and will be pursued at the subdivision stage to the satisfaction of the Drainage Branch.

URBAN PARKS MANAGEMENT PLAN

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

- Parklands will be made accessible to all members of the general public, both visually and physically
- Efforts to expand natural area acquisition through identification, and incorporation into the plan
- Promote urban wellness in the community through the provision and development of parks.
- Ensure visual and physical access to parks, and public safety through application of Crime Prevention Through Environmental Design (CPTED) principles.
- Naturalize boulevards in new plan areas where appropriate.
- Utilize opportunities to enhance the community's quality of life through place making, creative urban design, and provision of diverse landscape opportunities.
- Ensure that land uses adjacent to public parks are complementary. Some examples of desirable adjacent land uses include multifamily residential, stormwater lakes, trail corridors, and so on.
- Provide opportunities for active and passive recreation experiences by the community.

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

CITY OF EDMONTON HOUSING MIX GUIDELINES

Council approved (1991) guidelines recommend that the ratio of dwelling types in new suburban neighbourhoods be based on a mix of 65% to 85% low density residential (LDR) units and 15% to 35% medium density residential (MDR) units.

The Desrochers NASP exceeds this ratio (see Table 6 – Land Use and Population Statistics) and proposes a complimentary mix of Low Density Residential and MDR (Rowhousing and Low- to High-Rise Apartments). In keeping with more recent policy, this plan seeks to achieve a degree of intensification, to provide a choice of housing forms within the neighbourhood, and to generally make more efficient use of new suburban land. This density should support public transit, use infrastructure more effectively, provide a user base for community facilities, and encourage greater social mix.

NATURAL AREA SYSTEMS (POLICY C531)

Natural area systems provide essential habitat for plants and animals, support biodiversity, and maintain a high quality of life for current and future citizens by supplying critical ecological services, as well as opportunities for education, research, appreciative forms of recreation, and aesthetic and spiritual inspiration. The City of Edmonton will balance ecological and environmental considerations with economic and social considerations in its decision making and demonstrate that it has done so.

The conservation of the SW7 Natural Area in Desrochers conforms to the following policy principles:

- Enhances and sustains the quality of life for Edmontonians.
- Provides ecological information to support planning and development applications;
- Conserves and protects natural area systems through the physical planning and development process, according to the provisions of municipal, provincial and federal policy and legislation;
- Promotes the awareness and participation of landowners, the general public and non-government organizations in conserving, preserving, and restoring natural sites.

RESOURCE WELL SITES AND PIPELINES

Development of lands within Desrochers will be in accordance with policies from the City: *“Policy Guidelines for the Integration of Resource Operations and Urban Developments”* and *“Policy C515: Oil and Gas Facilities”*, and the Energy Resources Conservation Board (ERCB). Development will comply with any future updates or revisions to City policy or ERCB requirements regarding integration of resource operation. These guidelines focus on:

- resource consolidation by the operators;
- development setbacks;
- urban design;
- surface improvements for resource leases and flow-line right-of-way; and
- operating guidelines.

The ERCB is the agency with jurisdiction on matters related to oil and gas resource activities. It has rules, regulations and guidelines for these activities in their predevelopment, operating and post-operating (abandoned) stages.

The NASP will follow the ERCB guidelines governing development around operating facilities.

The ERCB has well-established procedures for well site abandonment and guidelines for development around abandoned facilities.

Abandoned wells will be planned in roadways, open space/park areas, walkways, public utility lots or other easily accessible public areas. These guidelines are followed throughout the Province and will be followed in Desrochers.

5.0 APPENDIX B: TECHNICAL STUDIES

The following technical studies have been completed in support of the Desrochers NASP:

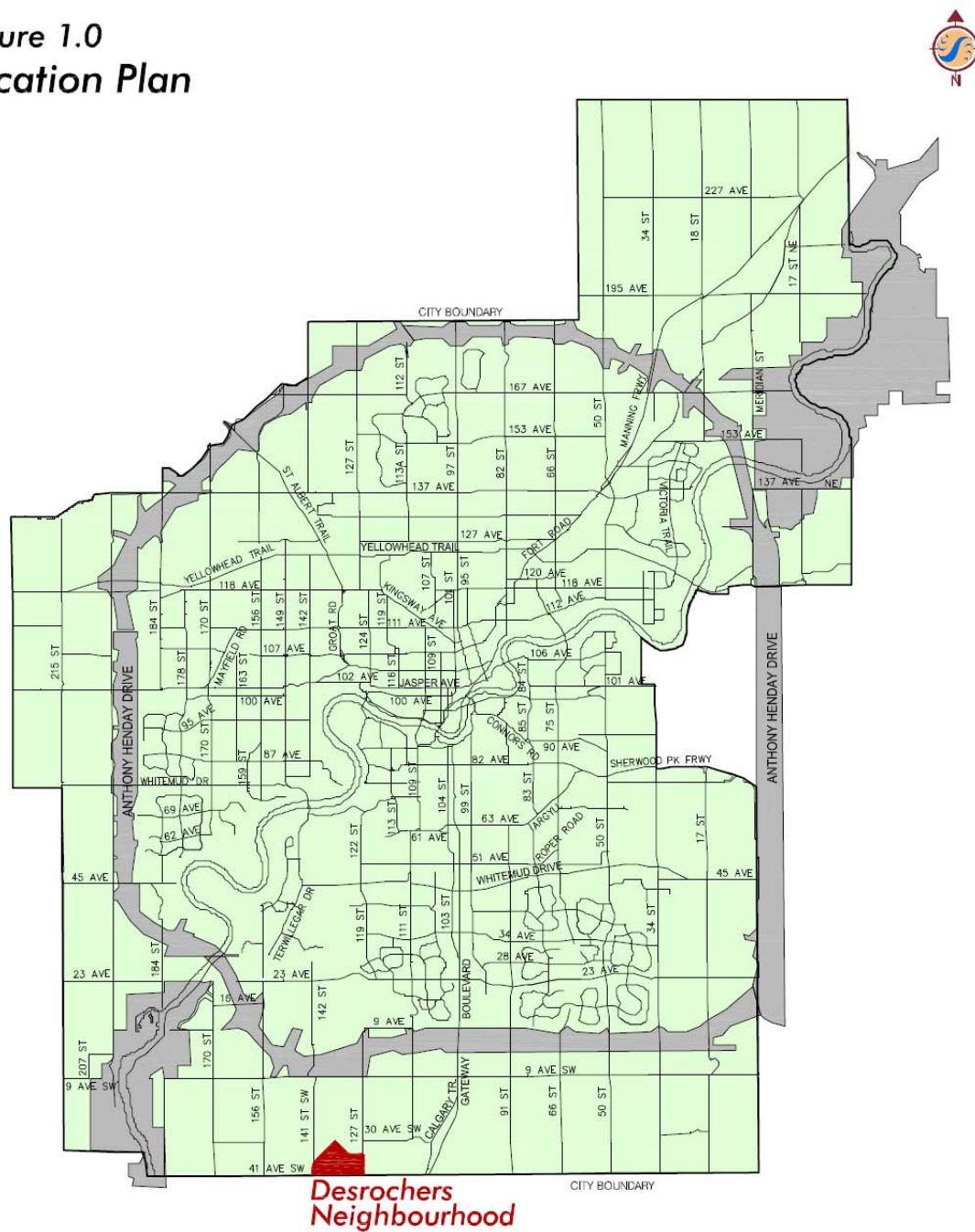
- Neighbourhood Designs Report (NDR)
- Hydraulic Network Analysis (HNA)
- Transportation Impact Assessment (TIA)
- Phase I Environmental Site Assessment (ESA)
- Historical Resources Overview (HRO)
- Preliminary Geotechnical Report
- Natural Site Assessment (Stage 1)
- Natural Site Assessment (Stage 2)
- Parkland Impact Assessment (PIA)

6.0 APPENDIX C: FIGURES

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 1.0 – Location Plan

Figure 1.0
Location Plan



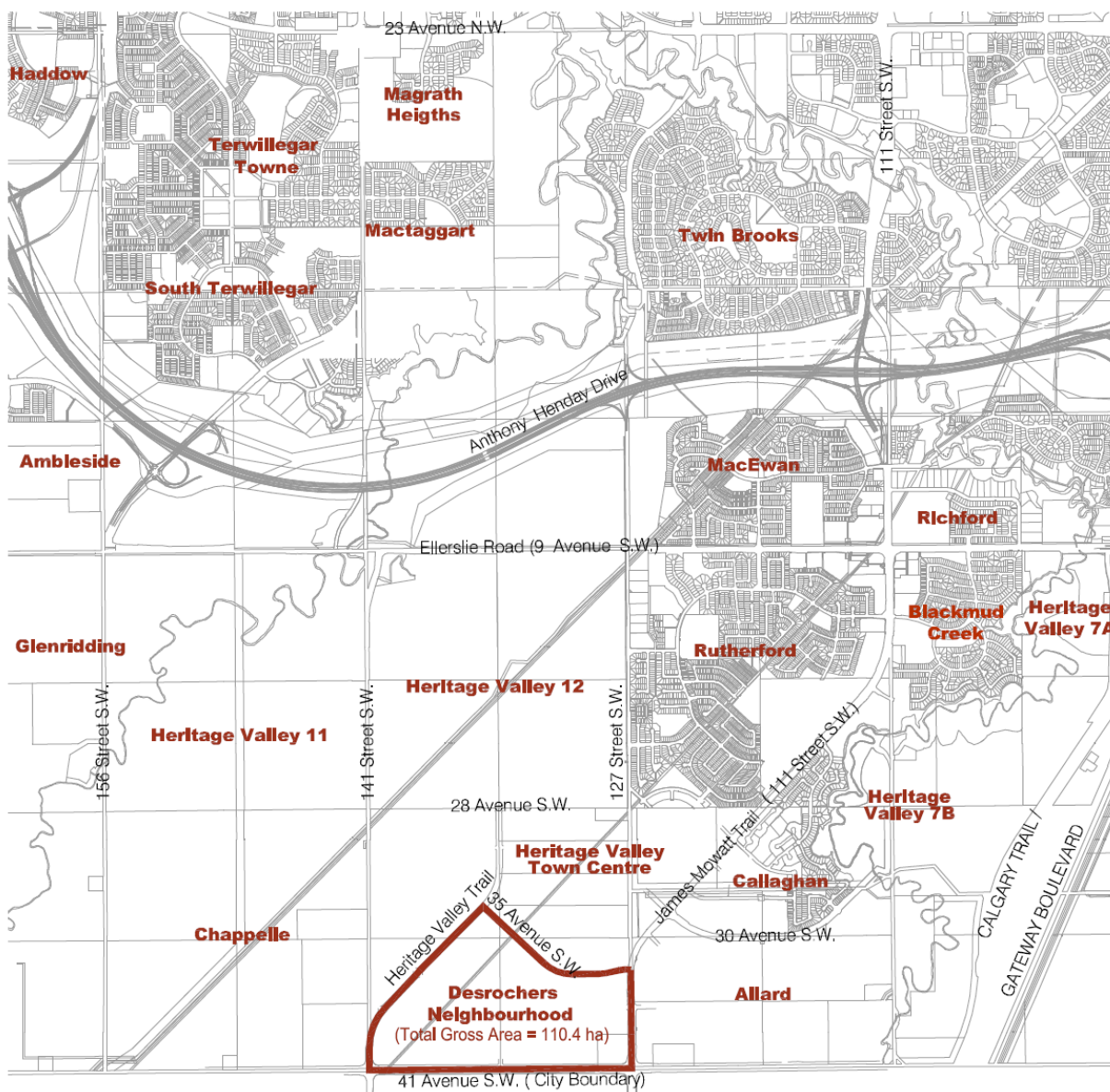
Desrochers Neighbourhood Neighbourhood Area Structure Plan

September 2010 - 116162005

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 2.0 – Context Plan

Figure 2.0 Context Plan



Desrochers Neighbourhood

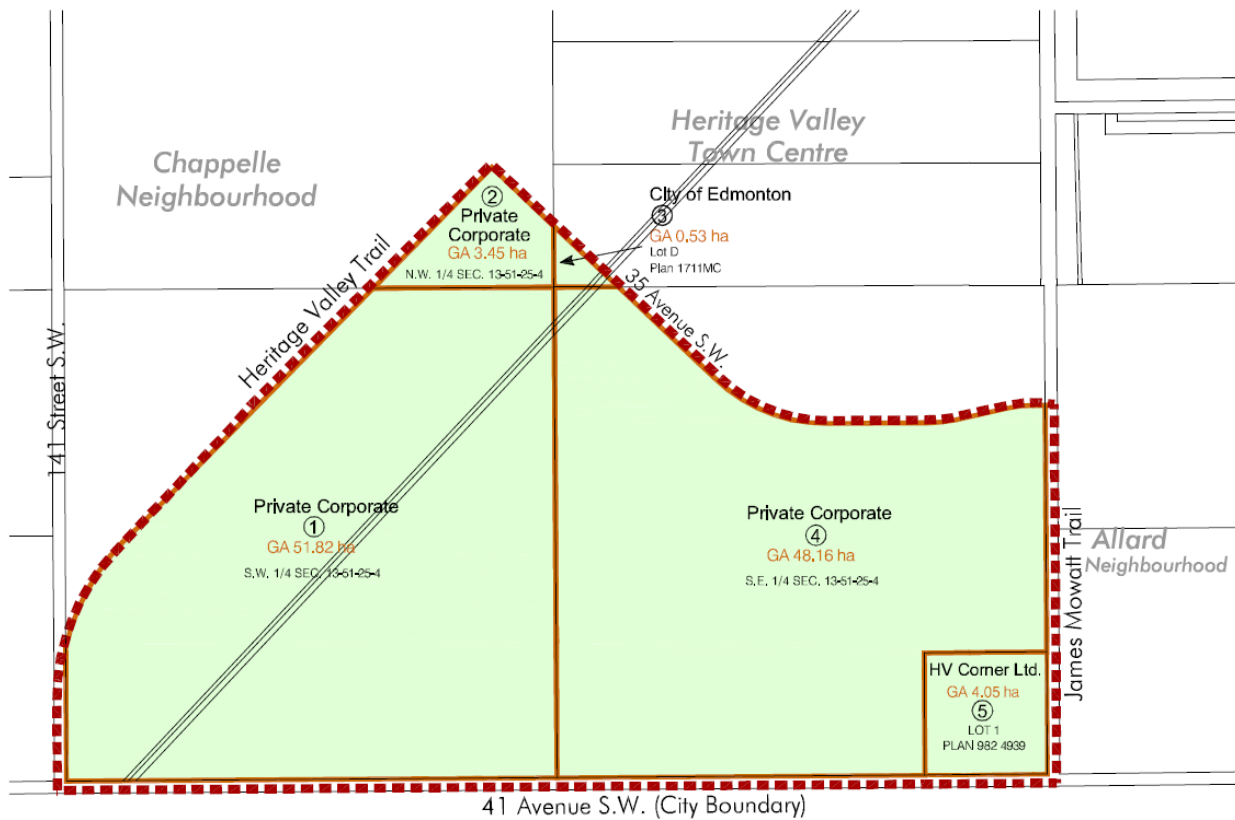
Neighbourhood Area Structure Plan

September 2010 -116162005

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 3.0 – Land Ownership

Figure 3.0
Land Ownership



Legend

- Ownership Boundary
- ① Map Reference Number
- NASP Boundary



Desrochers Neighbourhood

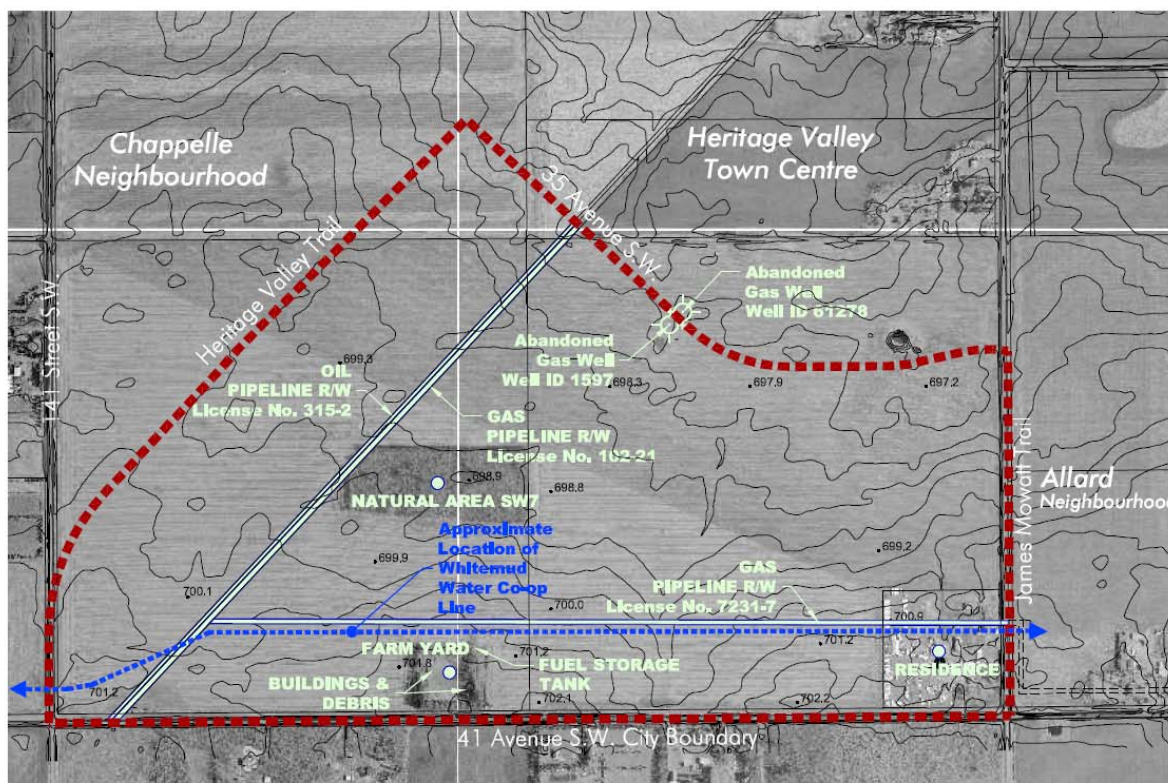
Neighbourhood Area Structure Plan

September 2010- 116162005

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 4.0 – Site Features

Figure 4.0
Site Features



Legend

■■■■ NASP Boundary



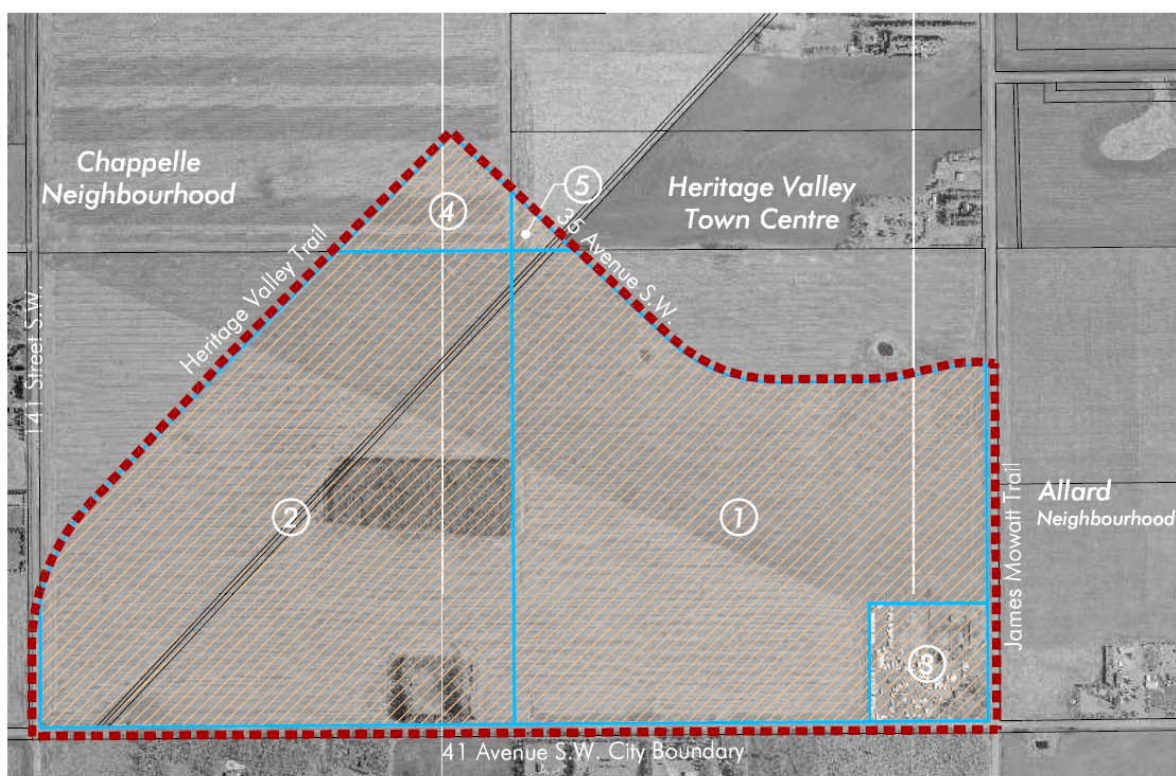
Desrochers Neighbourhood

Neighbourhood Area Structure Plan




September 2010 - 116162005

Figure 5.0 – Environmental Site Assessment Overview

Figure 5.0
Environmental Site Assessment Overview



Legend

-  Environmental Site Assessment Completed
-  Map Reference Number
-  NASP Boundary



Desrochers Neighbourhood

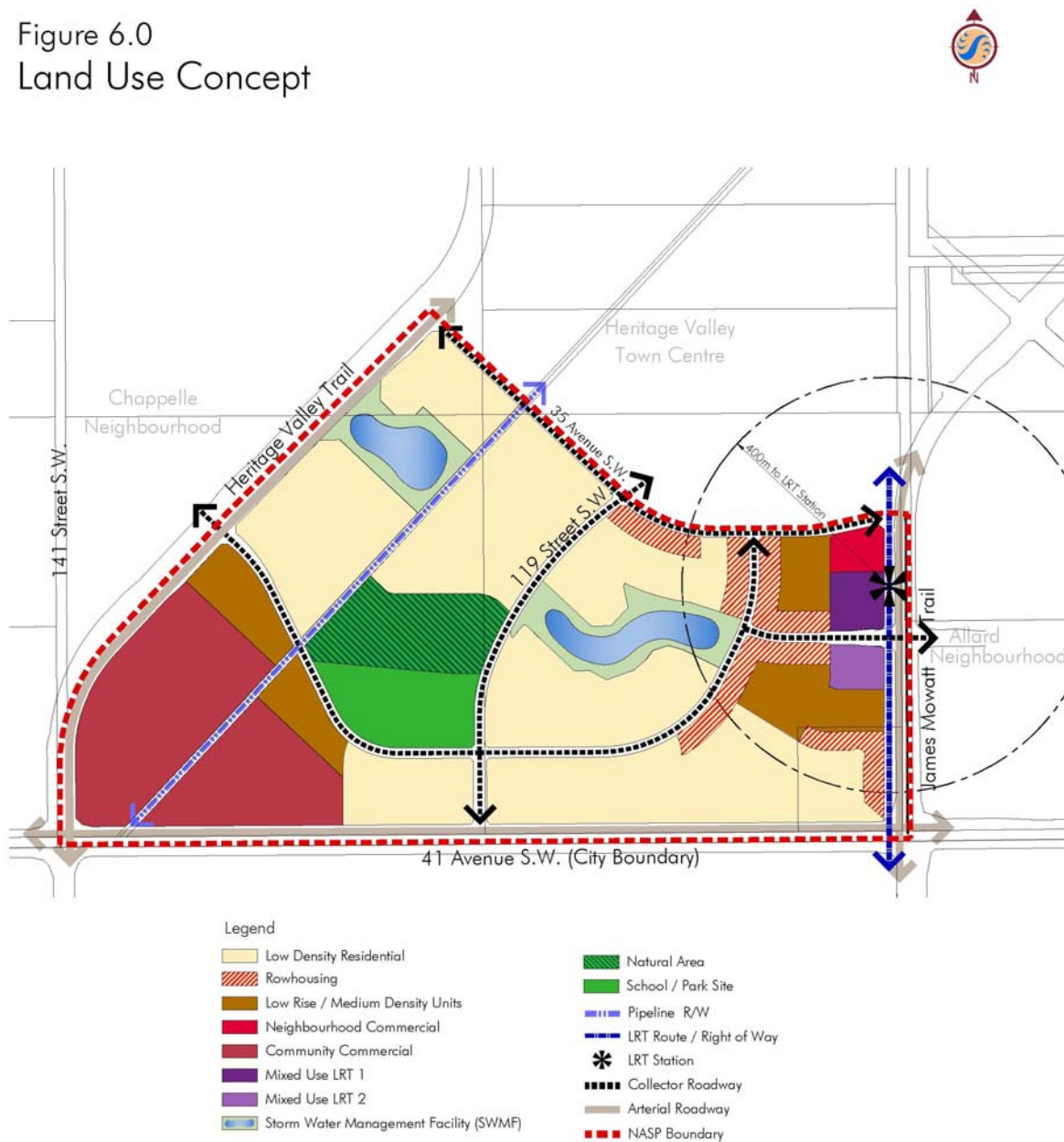
Neighbourhood Area Structure Plan

September 2010 116162005

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 6.0 – Land Use Concept (as amended by Bylaw 16726, February 24, 2014)

Figure 6.0
Land Use Concept



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Desrochers Neighbourhood Neighbourhood Area Structure Plan

January 2014 -1161 101790

Figure 7.0 – Parkland, Recreational Facilities and Schools (as amended by Bylaw 16726, February 24, 2014)

Figure 7.0
Parkland, Recreational Facilities and Schools



Legend

-  Natural Area
-  School / Park Site
-  Storm Water Management Facility (SWMF)
-  NASP Boundary

Note:

This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined at zoning and subdivision stage.



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Desrochers Neighbourhood

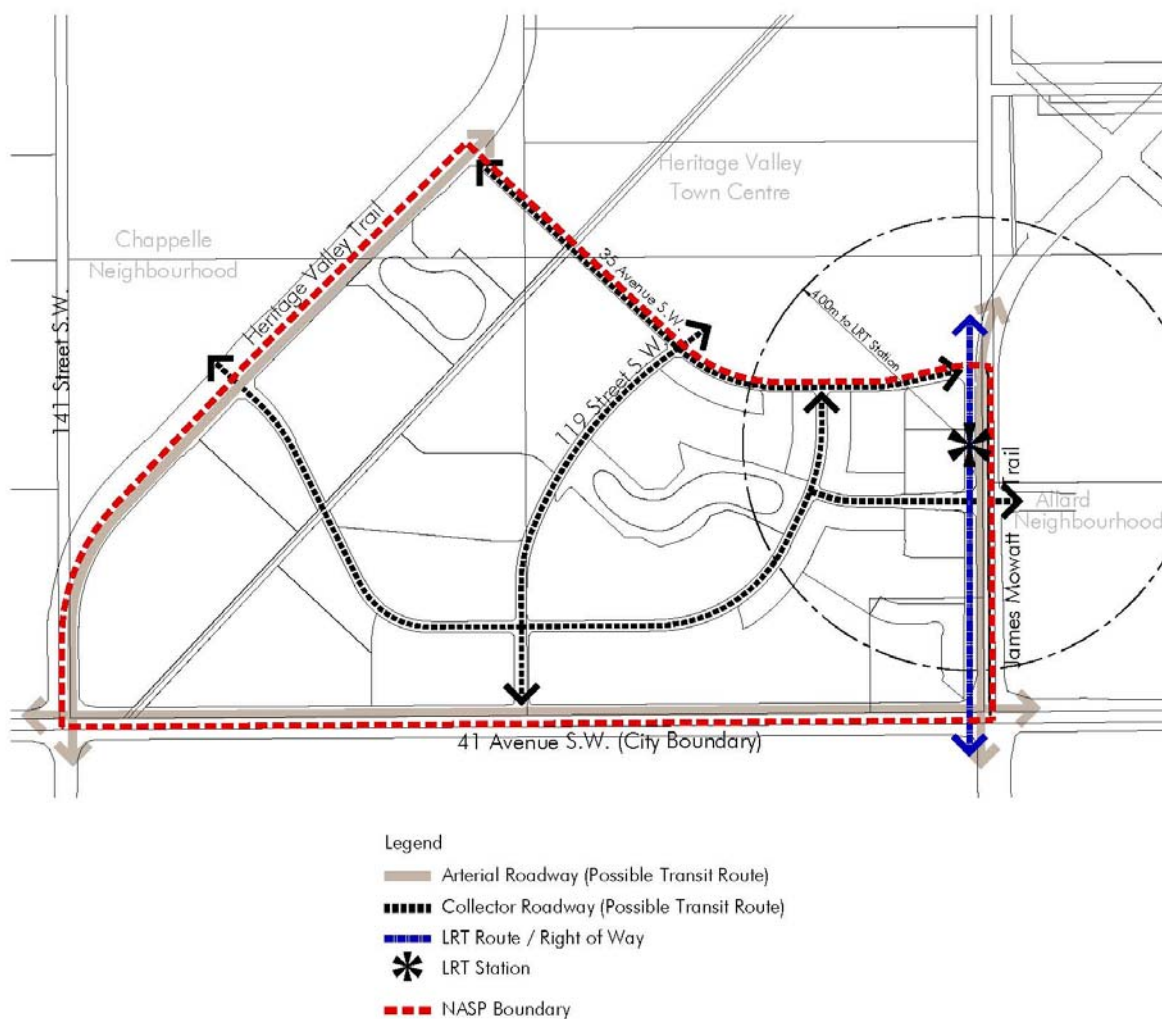
Neighbourhood Area Structure Plan

January 2014 - 1161 101790

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 8.0 – Transportation Network (as amended by Bylaw 16726, February 24, 2014)

Figure 8.0
Transportation Network



Note:
This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined at zoning and subdivision stage.



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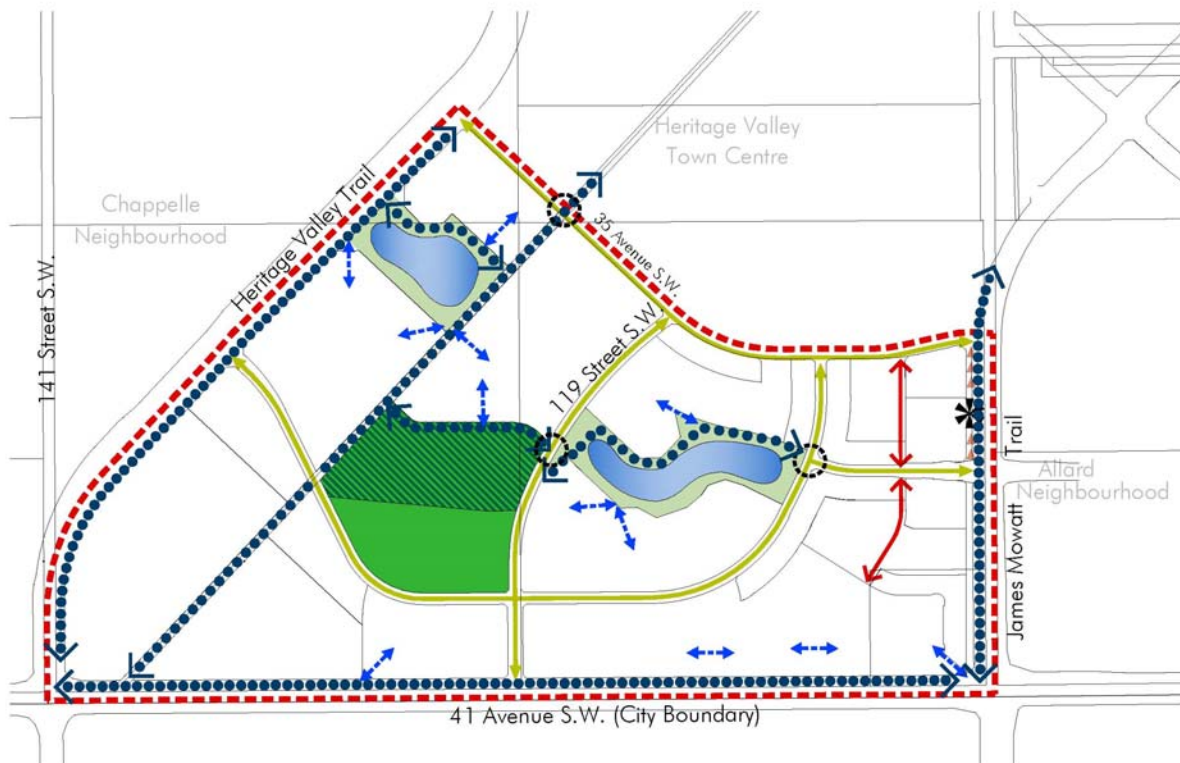
Desrochers Neighbourhood Neighbourhood Area Structure Plan

January 2014 -1161 101790

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 9.0 – Pedestrian Network (as amended by Bylaw 16726, February 24, 2014)

Figure 9.0
Pedestrian Network



Legend

- | | |
|---|--------------------------|
| Natural Area | Minor Pedestrian Linkage |
| School / Park Site | Major Pedestrian Linkage |
| Storm Water Management Facility | Key Pedestrian Crossing |
| Multi-Use Trail (hard surface) | LRT Platform Access |
| Pedestrian Sidewalk Along Roadway (Two Sides) | LRT Station |
| | NASP Boundary |

Note:

This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined at zoning and subdivision stage.



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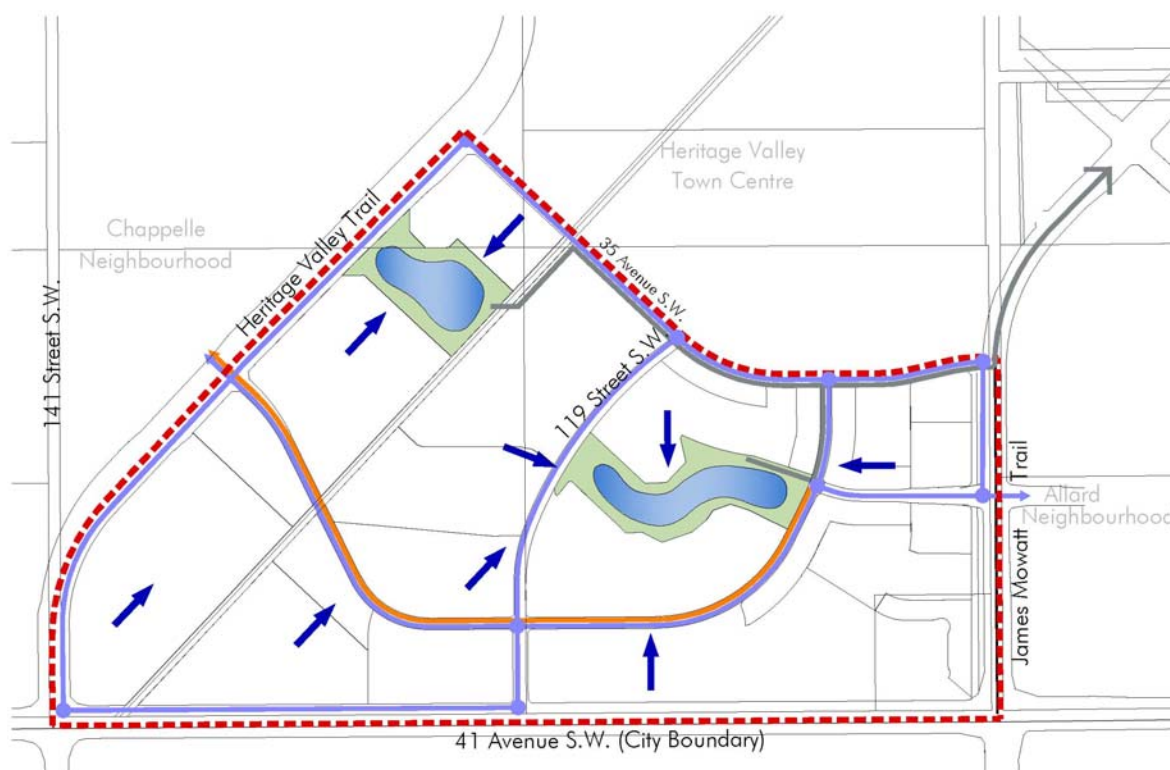
Desrochers Neighbourhood Neighbourhood Area Structure Plan

January 2014 -1161 101790

DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 10.0 – Servicing Concept (as amended by Bylaw 16726, February 24, 2014)

Figure 10.0
Servicing Concept



- Legend
- Stormwater Management Facility
 - Stormwater Flow
 - Water Main
 - Stormwater Trunk
 - Sanitary Trunk
 - NASP Boundary

Note:
This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined at zoning and subdivision stage.



Desrochers Neighbourhood Neighbourhood Area Structure Plan

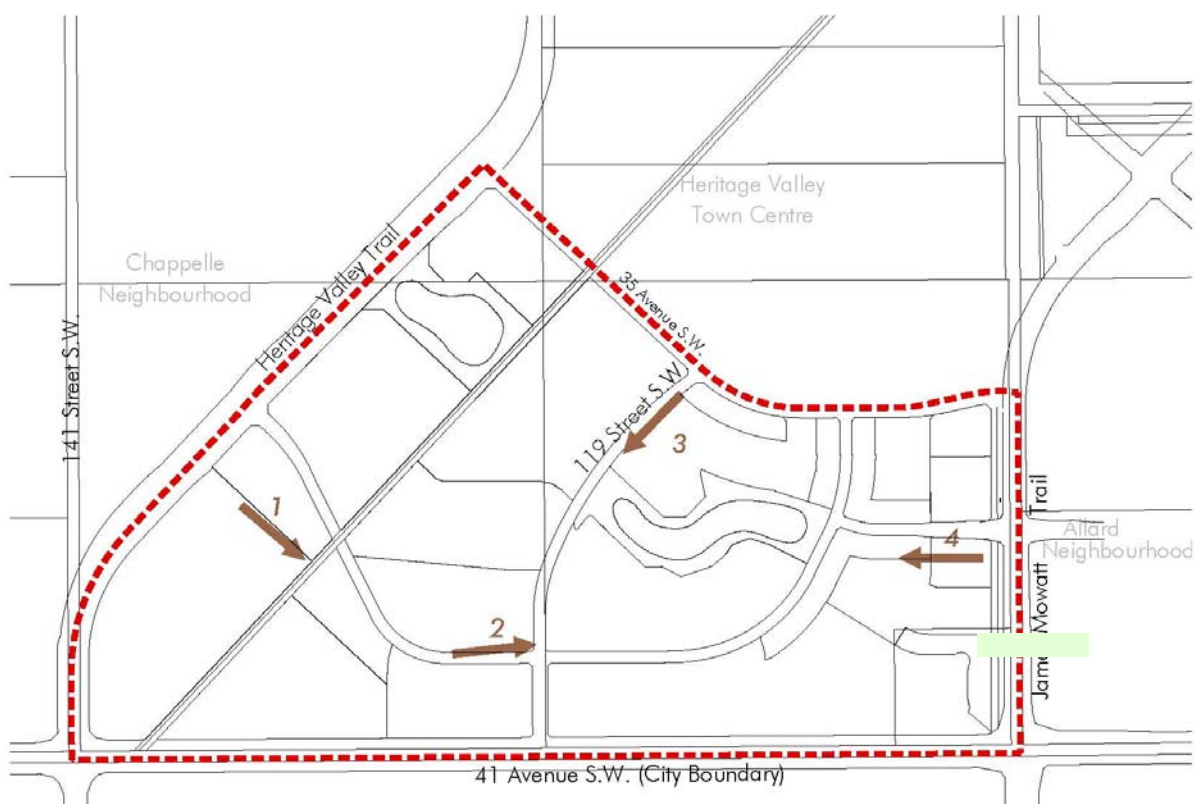
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DESROCHERS NEIGHBOURHOOD AREA STRUCTURE PLAN

Figure 11.0 – Development Staging (as amended by Bylaw 16726, February 24, 2014)

Figure 11.0
Development Staging



Legend

- General Direction and Timing of Development
- NASP Boundary

Note:

This map is conceptual in nature. The exact location and alignment of land uses, facilities, roadways and services will be determined at zoning and subdivision stage.



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Desrochers Neighbourhood Neighbourhood Area Structure Plan

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