

CALLAGHAN NEIGHBOURHOOD AREA STRUCTURE PLAN

Office Consolidation March 2011

Prepared by:

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

Bylaw 14116 was adopted by Council in December 2005. In March 2011, this document was consolidated by virtue of the incorporation of the following bylaws:

- Bylaw 14116* Approved December 7, 2005 (to adopt the Heritage Valley Neighbourhood 6 Neighbourhood Area Structure Plan)
- Bylaw 14533* Approved May 14, 2007 (to rename and adopt the plan as Callaghan Neighbourhood Area Structure Plan, amendment to the maps to incorporate the adjustment to the northern boundary, statistics updated and amendments made to development guidelines for Site A and Site B)
- Bylaw 14717* Approved November 1, 2007 (amendments to the maps and statistics to incorporate high density residential in the southwest corner of the Plan area)
- Bylaw 15450* Approved July 5, 2010 (amendments to accommodate medium density residential and low density residential uses in the southwest portion of the Plan area; relocating and replacing a portion of walkway)*
- Bylaw 15627* Approved December 13, 2010 (amendments made to density policies for Site C and Site F)

Editor's Note:

This is an office consolidation edition of the Callaghan Neighbourhood Area Structure Plan, Bylaw 14116, as approved by City Council on December 7, 2005.

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.

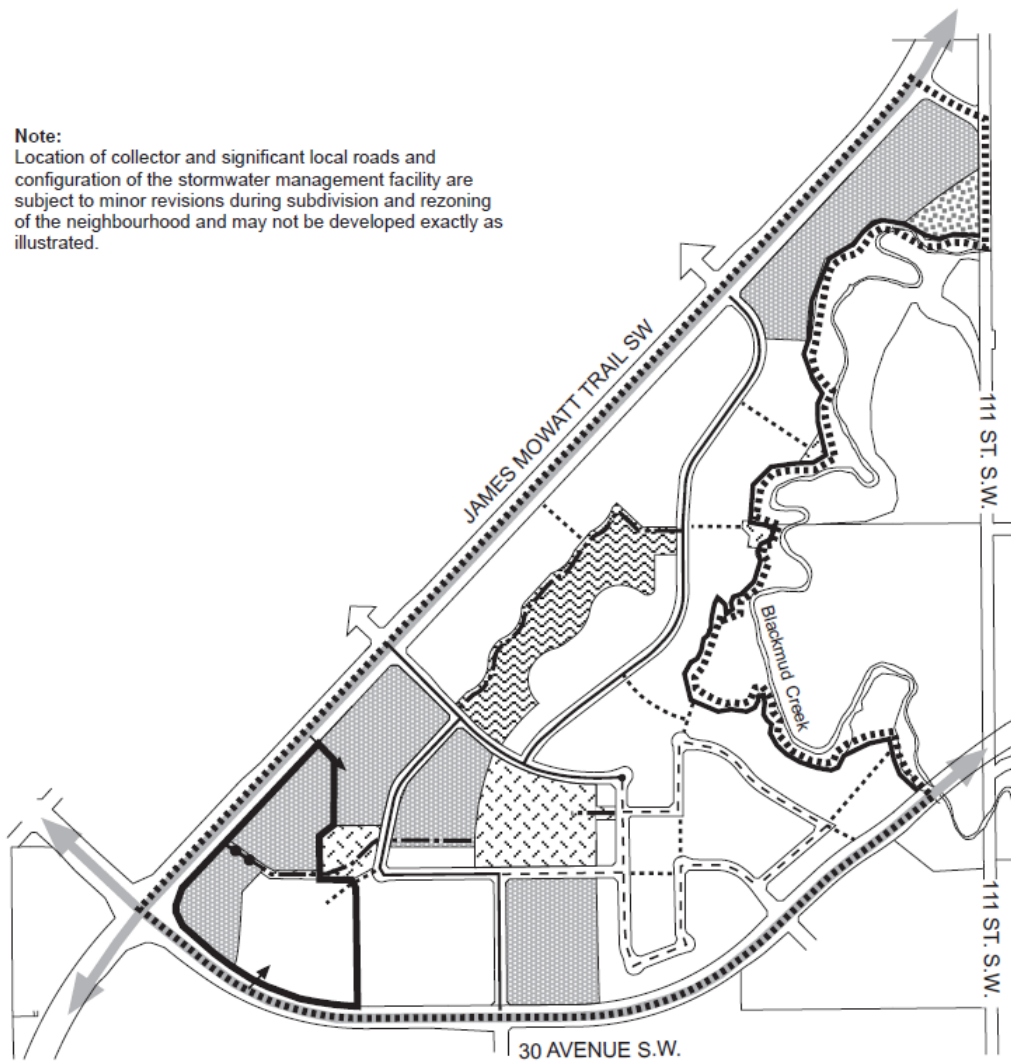
* All references here within to "111 Street" and "111 Street/127 Street" (with the exception of references to "existing 111 Street") have been deleted and replaced with "James Mowatt Trail" as per Bylaw 15450, July 5, 2010.

* All references here within to "25 Avenue SW" have been deleted and replaced with "30 Avenue SW" as per Bylaw 15450, July 5, 2010.

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








City of Edmonton
Planning and Development Department

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



BYLAW 15450
AMENDMENT to CALLAGHAN
 Neighbourhood Area Structure Plan
 (as amended)



- | | |
|--|--|
|  Low Density Residential |  Enhanced Walkway Connection |
|  Medium Density Residential |  Top of Bank Walkway |
|  Park |  Walkway |
|  Private Open Space (Park) |  Multi-Use Trail |
|  Stormwater Management Facility |  Collector Road |
|  Vehicular Access |  Significant Local Road |
|  Arterial Roadway |  NASP Boundary |
| |  Amendment Area |

PLANNING AND DEVELOPMENT

As Amended by Bylaw 15450 July 5, 2010

Callaghan NASP Office Consolidation March 2011

TABLE 1

**CALLAGHAN NEIGHBOURHOOD AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 15627**

LAND USE	Area (ha)	% of GDA
Gross Area	83.74	
Arterial Road Right-of-Way	6.73	
Gross Developable Area	77.01	100.0%
Parkland, Recreation, School, Municipal Reserve		
Park	4.00	5.2%
Greenway	0.08	0.1%
Private Open Space	0.76	1.0%
Transportation		
Circulation	12.71	16.5%
Infrastructure / Servicing		
Stormwater Management	3.58	4.6%
Total Non-Residential Area	21.13	27.4%
Net Residential Area	55.88	72.6%

RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units/ha	Units	People/Unit	Population	% of NRA
Low Density Residential						
<i>Single/Semi-Detached</i>	36.19	25	905	2.8	2534	64.8%
Medium Density Residential						
<i>Low-Rise/Medium Density Housing</i>	19.69	90	1773	1.8	3192	35.2%
Total	55.88		2678		5726	100.0%

Sustainability Measures

Population Per Net Hectare (ppnha)	103
Units Per Net Residential Hectare (upnrha)	48
[Single/Semi-Detached] / [Row Housing; Low-rise/Medium Density Housing] Unit Ratio	33.8% / 66.2%
Population (%) within 500m of Parkland	100%
Population (%) within 400m of Transit service	100%
Population (%) within 600m of Commercial service	70.0%

As Amended by Bylaw 15627, December 13, 2010

Callaghan NASP Office Consolidation March 2011

CALLAGHAN

A. NEIGHBOURHOOD AREA STRUCTURE PLAN



Table of Contents

(Amended by Editor)

1.0	INTRODUCTION.....	1
1.1	Purpose	1
2.0	DEVELOPMENT CONTEXT	5
2.1	Local Setting & Access	5
2.2	Plan Area	5
2.3	Existing Land Uses.....	6
2.4	Topography and Drainage	7
2.5	Soils	9
2.6	Natural Areas	9
2.7	Utility Corridors	9
2.8	Historical Resources	9
2.9	Geotechnical Assessment	10
2.10	Environmental Site Assessment	10
3.0	POLICY CONTEXT.....	11
3.1	Plan Edmonton: Edmonton Municipal Development Plan.....	11
3.2	Heritage Valley Servicing Concept Design Brief.....	11
3.3	Smart Choices.....	17
3.4	North Saskatchewan River Valley Bylaw.....	18
3.5	Edmonton International Airport Vicinity Protection Area Regulation.....	19
3.6	Suburban Neighbourhood Design Principles	19
3.7	Transportation Master Plan	20
3.8	Storm Water Management Design Guidelines	21
3.9	Top-of-Bank Roadway.....	21
3.10	CPTED.....	21

4.0	DEVELOPMENT OBJECTIVES, PRINCIPLES & COMMUNITY ENHANCEMENT	22
4.1	Development Objectives and Principles.....	22
4.2	Urban Design/Community Enhancement Objectives and Principles.....	26
5.0	DEVELOPMENT CONCEPT	28
5.1	Highlights	28
5.2	Distribution of Land Uses	28
5.3	Residential Land Use	29
5.4	Parks, Open Space & Recreation	39
5.5	Circulation.....	42
6.0	ENGINEERING SERVICES.....	44
6.1	Provision of Utility Services	44
6.2	Stormwater Management Facility & Drainage.....	44
6.3	Sanitary & Drainage Servicing.....	45
6.4	Water Servicing.....	47
6.5	Shallow Utilities	47
7.0	PLAN IMPLEMENTATION	49
7.1	Development Staging	49
7.2	Zoning & Subdivision.....	49

Appendices

Land Use & Population Statistics.....	53
---------------------------------------	----

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Neighbourhood Area Structure Plan (NASP) is to describe in detail a land use framework for the development and servicing of lands identified within the Heritage Valley Servicing Concept Design Brief (SCDB) as Neighbourhood 6. *Callaghan is located in southwest Edmonton (see **Figure 1 – Location Map**) and encompasses an area of approximately 84 ha of land with very promising development potential due to its natural vistas, proximity to the Blackmud Creek ravine, future Town Centre, the LRT Station, and the business commercial areas of Calgary Trail.*

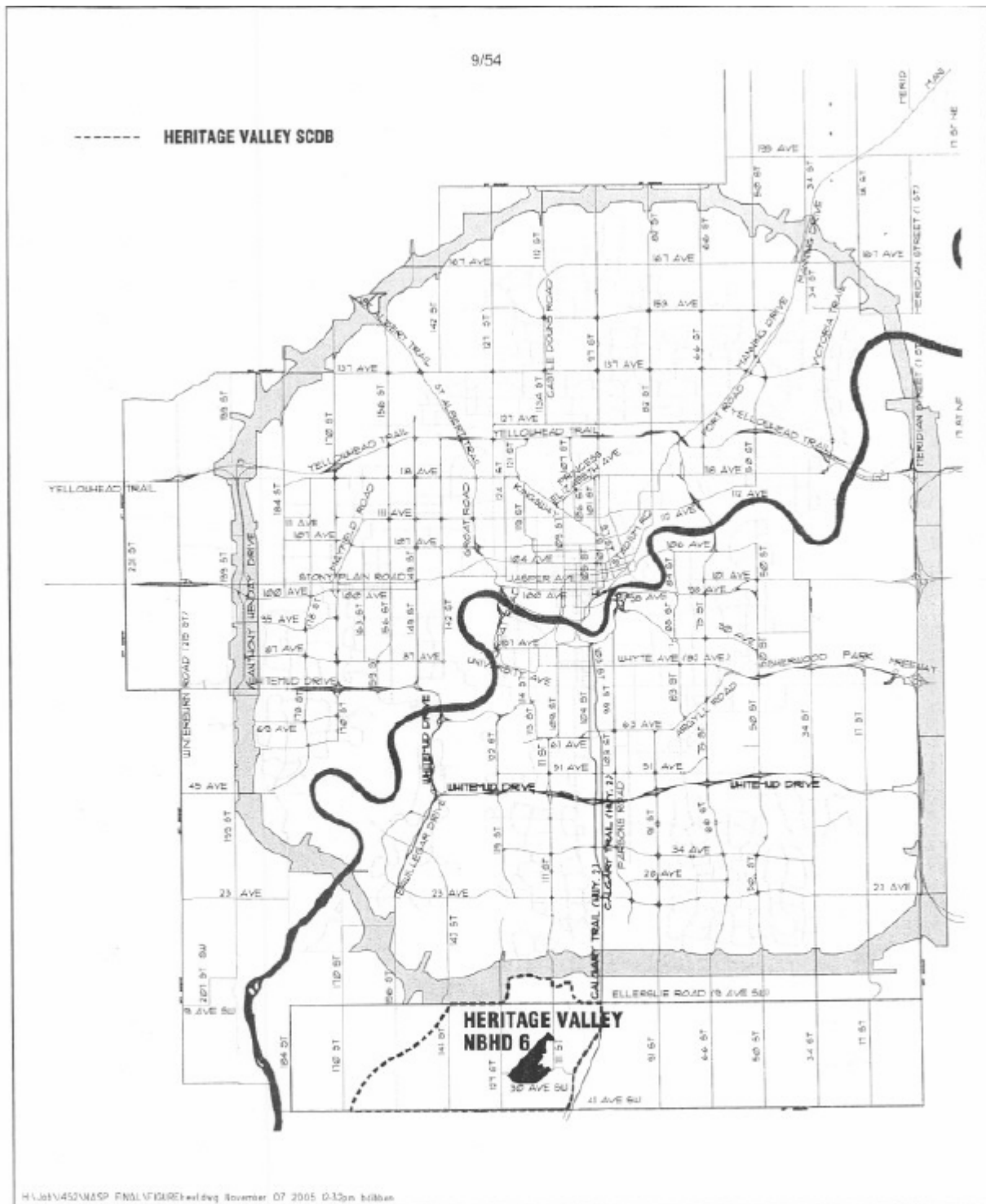
*Amended by Bylaw 15450,
July 5, 2010*

This NASP has been prepared in general conformance with the Municipal Development Plan (MDP), the Heritage Valley Servicing Concept Design Brief (SCDB), and other relevant municipal policies and guidelines set out in Section 3. The Neighbourhood Area Structure Plan (NASP) will implement the general land use framework set out in the SCDB by establishing the policies, objectives, principles and guidelines relating to the:

- type, density and location and distribution of various land uses, including residential, parks and open space, and public utilities and amenities;
- transportation network within Callaghan as it relates to the overall transportation objectives for Heritage Valley;
- conceptual servicing scheme and provision of utility services and infrastructure;
- unique environmental features; and
- implementation and staging of development.

The plan will be used as a tool to guide and evaluate future zoning, subdivision, and development of the lands in an orderly and effective manner. Over time, it is intended that the implementation of these objectives and principles will result in a healthy, sustainable and amenity rich neighbourhood with memorable urban spaces. General development guidelines and developer imposed architectural controls will help to realize the vision of a well-planned, comprehensively designed and transit- supportive neighbourhood where people wish to reside.

Figure 1.0 – Location Map
 (Bylaw 14116, December 7, 2005)



H:\GIS\452\MAPS\FINAL\FIGURE1.mxd 07 November 07 2005 0:35pm b.ribban



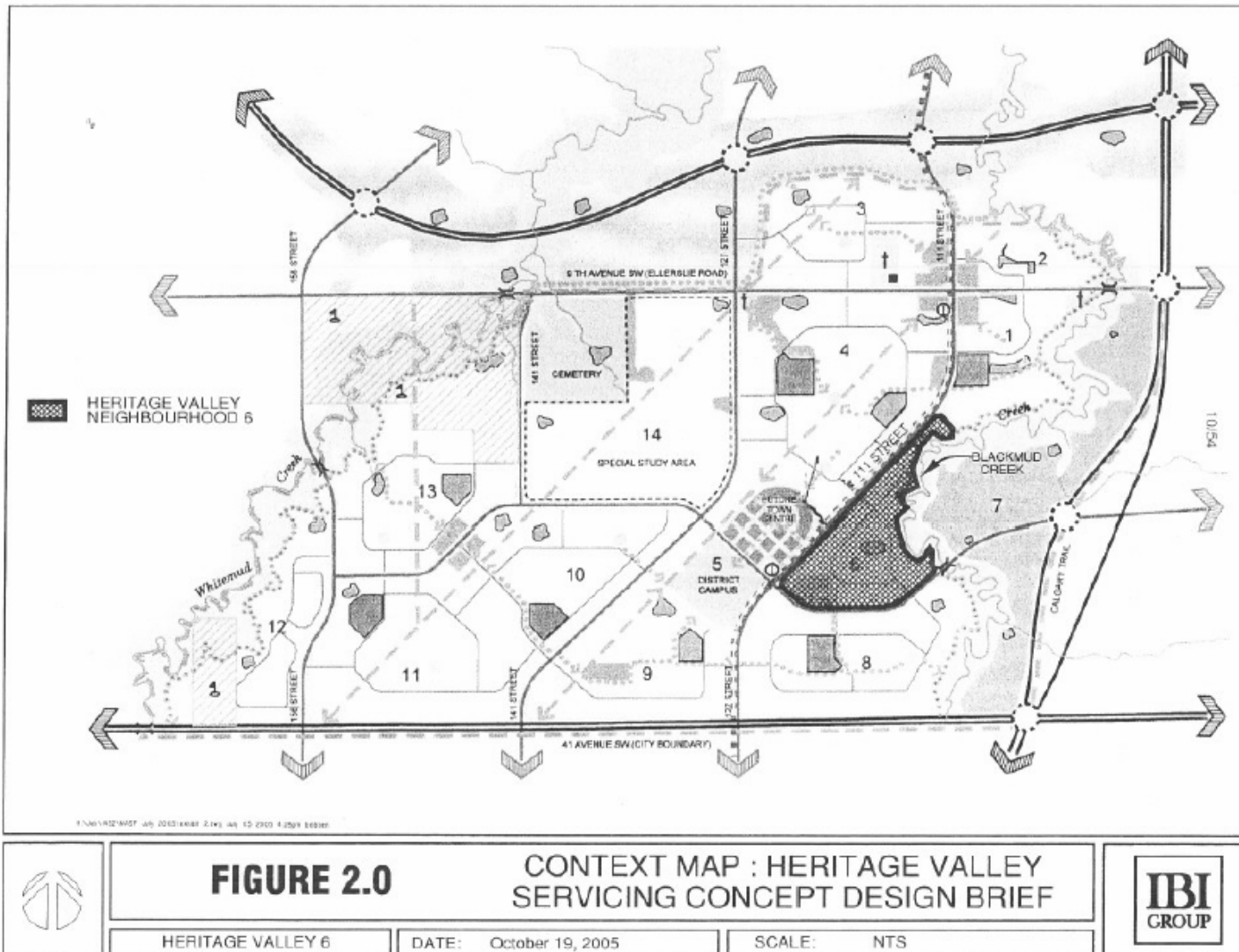
	<h1>FIGURE 1.0</h1>	<h1>LOCATION MAP</h1>	
	HERITAGE VALLEY 6	DATE: October 19, 2005	

Figure 2.0 – Context Map: Heritage Valley Servicing Concept Design Brief
 (Bylaw 14116, December 7, 2005)



2.0 DEVELOPMENT CONTEXT

2.1 Local Setting & Access

As illustrated in **Figure 2.0-Context Map**, Callaghan is located in southwest Edmonton, specifically west of the Blackmud Creek, east of Rutherford and south of Blackmud Creek neighbourhoods, and to the south by the future 30 Avenue arterial roadway.¹

At the present time, the neighbourhood and existing farmsteads are accessed by 30 Avenue and the existing 111 Street which may be closed partially in the future when the neighbourhood is built out and new accesses are provided.

2.2 Plan Area

The Plan area is a triangular shape and is comprised of a number of properties ranging in size from 1.5 to 23 ha. The Plan was prepared on behalf of private land-owners and/or beneficial land owners/developers controlling more than 80% of land within the Plan area.

The distribution of land ownership is shown in **Figure 3-Land Ownership**, and is summarized quantitatively in **Table 1**.

¹ All references here within to “25 Avenue SW” have been deleted and replaced with “30 Avenue SW” as per Bylaw 15450, July 5, 2010.

TABLE 1*

Land Ownership

Callaghan NASP

	Title Owner	Legal Description	Area (ha) in NASP
1	Private Corporation	PL0320993	17.4
2	Two Private Corporations	Lot 2, PL8522000	22.59
3	Two Private Owners (Offer to Purchase: Private Corporation)	Lot 1, PL8522000	2.16
4	Private Corporation	NW NE OT Sec. 18-51-24-W4M	14
5	<i>Private Corporation</i> <i>Two Private Owners</i>	Lot A, Plan 6236NY	10.46
6	<i>Private Owner</i>	Lot B, Plan 6236NY	1.92
7	<i>Private Corporation</i>	Lot 3, Plan 8522000	10.28
8	City of Edmonton	Road R.O.W	2.29
9	<i>Private Corporation</i>	SE ¼ 19-51-25-W4M	1.47

*Amended by Editor

2.3 Existing Land Uses

The Plan area is predominantly used for agricultural purpose and includes two farmsteads accessed from 30 Avenue. On the east side of the NASP area is a

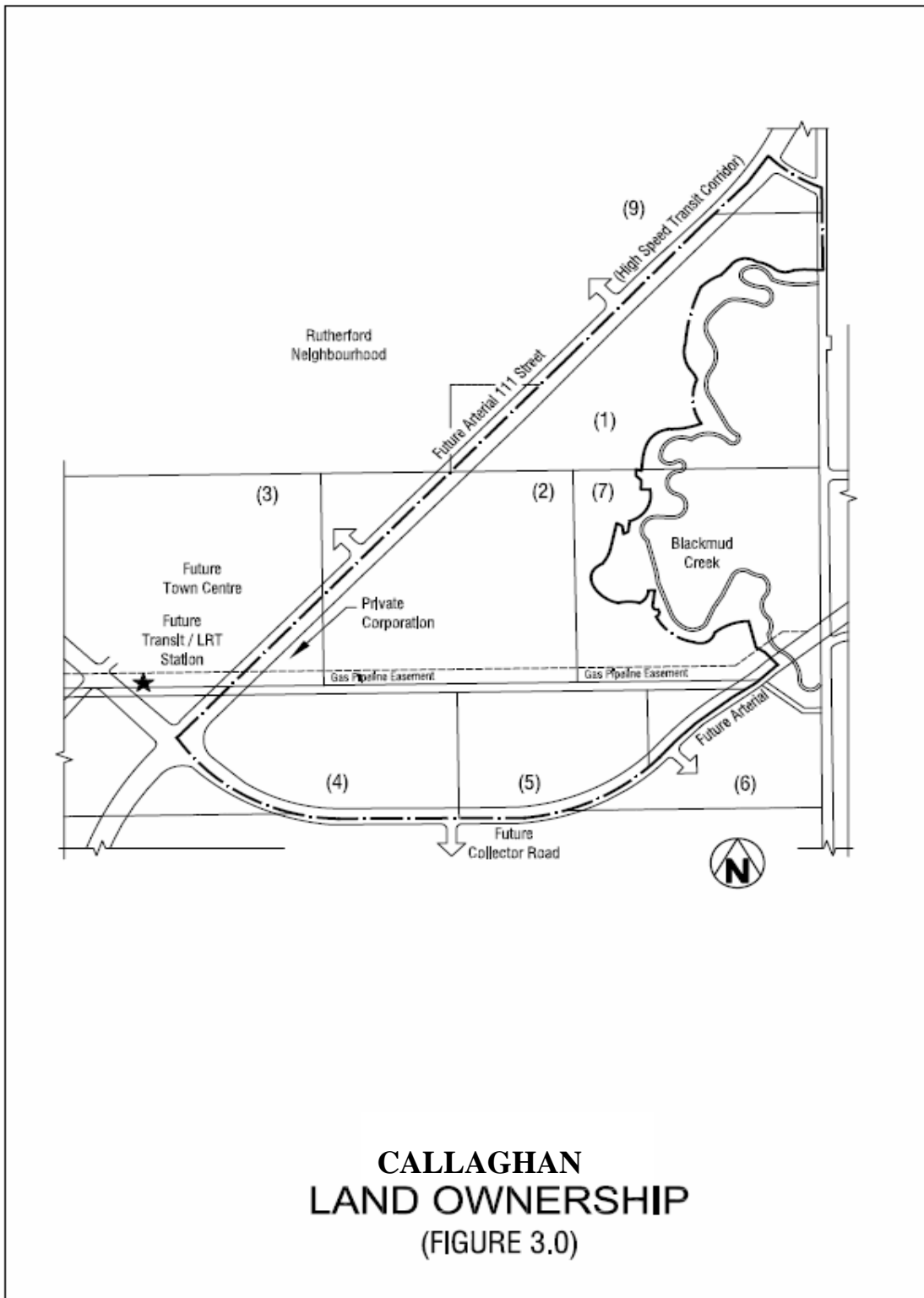
portion of the existing Seven Oaks golf course with its attendant Club House on approximately 7 ha of land.

2.4 Topography and Drainage

The plan area is generally flat with approximately 1% slope until it reaches the top of bank area near Blackmud Creek. The land generally decreases in elevation from the southwest to the east from 695.7 m to 690 m as shown on the contours in Figure 4.0 – Existing Land Use. The elevation of the land from the table area to the creek bed drops approximately 5 m. At some points, the change in elevation is steep while at other points it is more gradual. Site drainage for lands located north of the existing 30 Avenue is typically to Blackmud creek directly or through gullies that drain into Blackmud Creek. Topography and natural drainage will have some implications for design of engineering services.

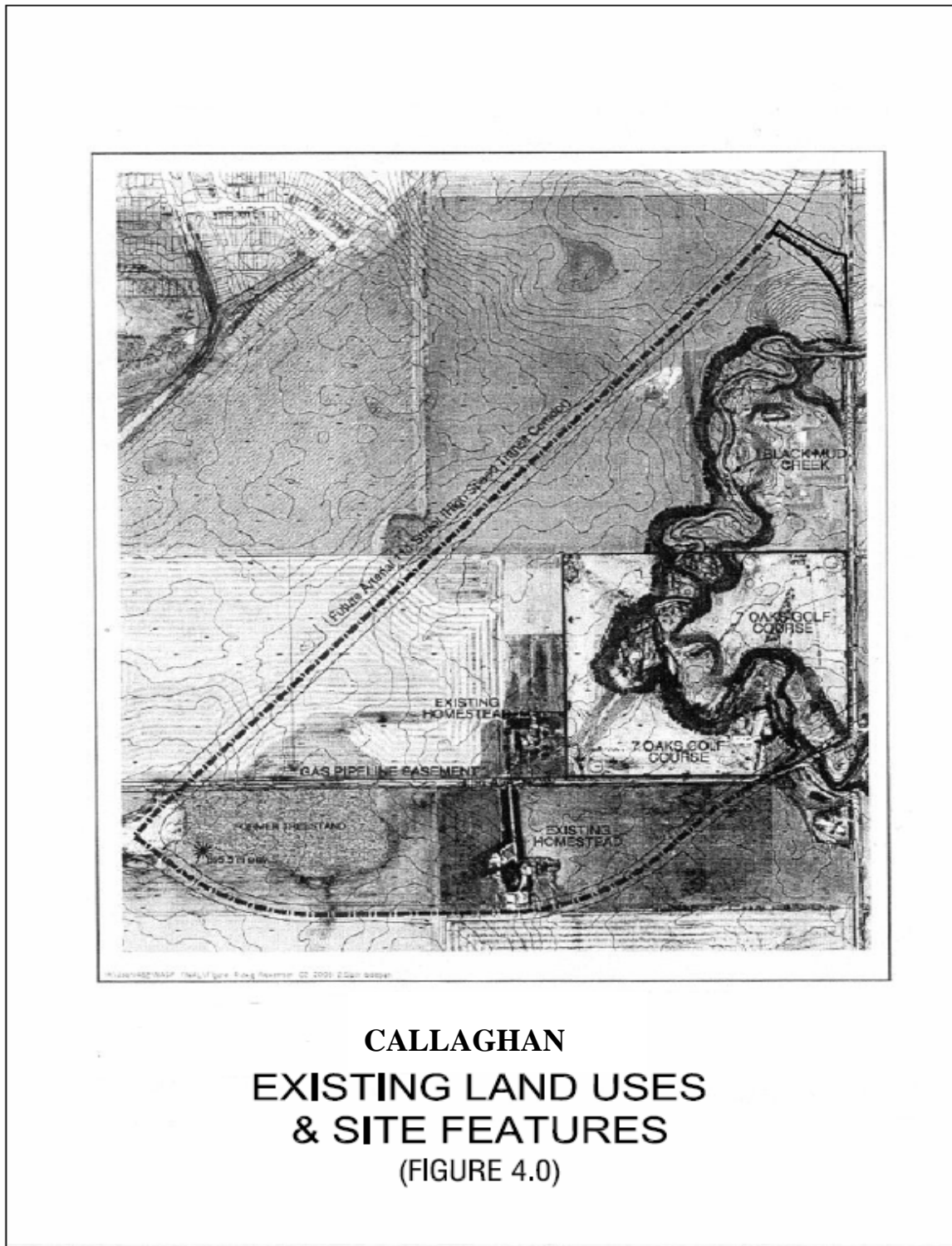
The creek bank slope varies in slope ranging between 20% - 60%. Lands located below the Top of Bank are not suitable for urban development and will be dedicated as Environmental Reserve.

Figure 3.0 – Land Ownership*
(Bylaw 14533, May 14, 2007)



*Amended by Editor

Figure 4.0 – Existing Land Uses and Site Features*
(Bylaw 14533, May 14, 2007)



*Amended by Editor

2.5 Soils

The existing soils within the plan area predominantly moderately to well drained clay to clay loam Chernozemic soils. At the Blackmud Creek ravine that borders the east edge of the neighbourhood, alluvial soils are found. Soil conditions are feasible for urban development using appropriate design and construction methods.

2.6 Natural Areas

The east boundary of the Neighbourhood is formed by the Blackmud Creek ravine. The southern portion of the ravine is being actively used as part of the 7 Oaks Golf Course and is in private ownership. The northern half of the ravine has been declared “Environmental Reserve” and transferred to the City as part of a previous subdivision. The top-of-bank has been established for the north part, and will be established for the southern section prior to rezoning and subdivision.

A mature stand of balsam poplar and younger aspen (SW8 Natural Area) was located within the southwest part of the plan area. The tree stand was removed by the land owner on the weekend of April 30, 2005.

2.7 Utility Corridors

In the south portion of Callaghan, is an existing natural gas distribution pipeline that lies in an east/west direction, as shown in **Figure 4.0 Existing Land Use**. The 36.6 m wide easement contains a 340-kPa, 60 mm PVC line. Discussions with a *private utility corporation* indicate that this line will be abandoned as development proceeds. The easement will be incorporated into future urban development.

Amended by Editor

2.8 Historical Resources

Altamira Consulting Ltd. conducted a Historical Resources Impact Assessment (HRIA) study for Callaghan, dated June 2004. This study concluded that the lands proposed for development do not contain any archaeological, palaeontological or historic period sites of historical importance. Alberta Community Development Cultural Facilities and Historical Resources Division (CFHRD) subsequently completed a review of the HRIA, and granted

the applicant *Historical Resources Act* clearance for the development proposed in the neighbourhood

2.9 Geotechnical Assessment

A geotechnical investigation was carried out in the Neighbourhood in April 2004 by J.R. Paine & Associates Ltd., submitted under separate cover with a supplemental letter dated February 8, 2005. The study concluded that geotechnical conditions are suitable for development and advises that design and construction procedures will have to account for variable soil conditions where soil swell potential exists.

The Assessment notes that groundwater conditions are low to moderate, located between 3.7 and 11.3 metres below surface. Water levels may fluctuate on a seasonal or yearly basis with higher measurements obtained in the spring or following heavy rainfall.

With respect to the top-of-bank condition, the geotechnical assessments recommend setbacks ranging between 7.5 m and 20 m with no roadway designed within the setback distance. Appropriate setbacks will be used to accommodate back-of-lots situations and caveats will be used to restrict development of structures in the setbacks.

2.10 Environmental Site Assessment

A Phase 1 Environmental Site Assessment (ESA) was conducted by Hoggan Engineering & Testing Limited for Callaghan during July/August 2004. This report was been submitted under separate cover. Hoggan Engineering advised that there are no significant concerns as the lands were historically used largely for agricultural purposes, There was however, a former aboveground fuel storage tank that was located with the 7 Oaks Golf Course in Lot 3, Plan 8522000. There is no further testing required at this time, except for soil sampling and testing for hydro carbons at the site of the former above ground fuel storage tank at the Seven Oaks Golf Course site. Further investigations and updates to the ESA may be required prior to the zoning and subdivision stages of development.

3.0 POLICY CONTEXT

The Callaghan NASP has been prepared having regard to not only physiographic considerations, but also to statutory plans, policies and design principles that govern land development in the City of Edmonton. These include the Edmonton Municipal Development Plan (MDP), the Heritage Valley Servicing Concept Design Brief (SCDB), the City of Edmonton Suburban Neighbourhood Design Principles and other relevant municipal planning policies and initiatives.

3.1 Plan Edmonton: Edmonton Municipal Development Plan

Plan Edmonton, the City of Edmonton MDP provides a strategic policy framework to guide the City's growth and economic development to sustain Edmonton's quality of life and resources for the benefit of its citizens. To manage land use and development in the suburbs, the MDP designates this community as a suburban area suitable for development.

The MDP also emphasizes that new growth in suburban areas be accommodated in a fiscally responsible manner. This means to be cost effective in the use of land, infrastructure and services by promoting compact and contiguous development, among other strategies.

The Callaghan NASP supports Plan Edmonton's strategies for managing suburban growth by accommodating development in an orderly, serviced and cost-effective manner; by providing for a range of housing types and densities, and by providing adequate recreational facilities, public open spaces and natural areas to create liveable communities in the suburbs.

3.2 Heritage Valley Servicing Concept Design Brief

The Heritage Valley SCDB provides several guiding principles and objectives for development within the Heritage Valley area and specifically dealing with neighbourhood designs. This SCDB provides a generalized framework for municipal infrastructure, services, land use distribution, and design principles. Several of these guidelines and strategies have been applied to the design of the neighbourhood plan and will be used to guide the rezoning and subdivision of lands prior to development. These include both community design principles and master plan elements as described below.

COMMUNITY DESIGN PRINCIPLES

A Compact Integrated Community

Principle 1 - Promote sustainable community design. The NASP provides medium density residential uses along arterial and collector roadways to support transit service along these roadways and the LRT Station in the Heritage Valley Town Centre. This orientation promotes the City's commitment to transit-supportive design and "smart growth". The plan also provides for a potential range of housing types that reflect a cross section of the demographic character of the city thus providing opportunity for life cycle residency within a single neighbourhood "community".

*Amended by Bylaw 15450,
July 5, 2010*

Principle 3 - Create a compact, pedestrian-oriented community. The NASP identifies an internal walkway and sidewalk system. Multi-use trails are provided between the natural area/park, SWMF and top-of-bank walkway. Linkages to the Town Centre and Transit Centre/LRT Station in the adjacent Neighbourhood are also identified. Pedestrian linkages through public open space and collector road corridors provide excellent community connectivity consistent with the "Walkable Edmonton" initiative.

In accordance with the SCDB, the NASP concentrates higher-density residential uses along the transit routes ensuring a greater number of users in close proximity to access the service. The single-family/multi-family split exceeds the traditional 65/35 relationship and is more compatible with transit-supportive design objectives and the proximity of the neighbourhood to the Heritage Valley Town Centre LRT Station. The proposed split is 33.8% low density residential development and 66.2% medium density development.

*Amended by Bylaw 15627,
December 13, 2010*

Liveable Neighbourhoods

Principle 1 - Encourage innovative designs and urban patterns in the built environment. The NASP identifies the location of medium density sites on the western edges of the neighbourhood and adjacent to transit infrastructure and commercial services. This approach supports transit-supportive design initiatives of the City.

*Amended by Bylaw 15450,
July 5, 2010*

The Plan allows a range of housing forms providing flexibility to the consumer and developer. *The multi-family site in the southwest corner, with excellent linkage to collector and arterial roads, as well as links to the Town Centre, public transportation system and adjacent open spaces provides a flexible opportunity to develop a range of multi-family housing types, with potential opportunity to develop the site as a single integrated housing project.* The multi-family sites adjacent to the ravine allow for innovative view-oriented development that is often limited to single family residential development outside of the inner city redevelopment areas.

*Amended by Bylaw 15450,
July 5, 2010*

Principle 2 - Provide adequate urban services, facilities and amenities in accordance with the planning principles outlined in the SCDB and the requirements established through existing City policies. The NASP locates a concentration of multi-family land uses at various densities, generally within walking distances to the Town Centre, neighbourhood parks and other amenities. This concentration supports the sustainability of the Town Centre and the associated public transit system. *The neighbourhood size (84 hectares) and proximity to the Town Centre limit the neighbourhood's suitability for independent urban services (schools and shopping).* Consequently, the neighbourhood focus is to maximize accessibility to adjacent and nearby services and amenities through linkages with the adjoining Neighbourhoods (Blackmud Creek, Rutherford, the Town Centre, and Allard and in so doing, create memorable and accessible urban spaces.

*Amended by Bylaw 15450,
July 5, 2010*

Three primary access points to the Blackmud Creek ravine system are also identified (responsive to geotechnical limitations). The valley basin access provided at the northeast corner of the plan area will be a Private Open Space serving the adjacent multi-family development. It will abut the top-of-bank walkway servicing the broader Heritage Valley Community. Two other public open spaces designed as view-point parks are also sited along the top-of-bank and provide walkway access.

Principle 3 - Provide for a mix of compatible land uses. The NASP provides development opportunities for a variety of residential uses ranging low density residential to row housing, stacked town housing and low to medium rise apartment buildings. The medium density residential land uses have been located near transit infrastructure, commercial services and open-space areas.

Commercial uses have not been introduced into the plan area in recognition of the adjacency of the neighbourhoods to the Town Centre. Appropriate transitions will occur consistent with City policies, zoning opportunities and regulations.

Principle 5 - Provide a diversity of housing types in each neighbourhood. *The NASP provides for a variety of housing in low and medium density forms. Diversity is not only achieved through density, it is also achieved through the placement of multi-family sites in diverse settings. The variety of multi-family parcel locations and sizes will create inherent diversity in the character of the housing types provided.*

*Amended by Bylaw 15450,
July 5, 2010*

Principle 6 – Support housing at increased densities in support of the City’s intensification strategies and to encourage the use of transit. *In accordance with the SCDB, the NASP concentrates higher-density residential uses along transit routes ensuring a greater number of users in close proximity to access the service. The single-family/multi-family split exceeds the traditional 65/35 relationship and is more compatible with transit-supportive design objectives and the proximity of the neighbourhood to the LRT Station. The proposed split is 42.6% low density residential development and 57.4% medium density development.*

*Amended by Bylaw 15450,
July 5, 2010*

This ratio is acceptable given the transit-supportive nature of the development, location and distribution of amenities, proximity to the Town Centre, and principles of Smart Choices that are inherent in this plan.

To ensure that the medium density sites evolve into attractive, liveable and fit well into the community, development guidelines are recommended for each site.

An Attractive, Well-Designed Community

Principle 2 - Ensure that each neighbourhood is designed with a focal point. Three major focal points are provided in the NASP offering different opportunities that appeal to different interests and users. Each sub-neighbourhood contains its own easily accessible focal point or characteristic that defines its immediate character. Neighbourhood linkages, and architectural guidelines and elements will provide the cohesive elements to link the individual sub areas. The combined locations of the SWMF and the central park create a

core open space central to the Neighbourhood. Focal points will be linked through the internal circulation system that links the neighbourhood elements.

These key focal points include:

The Blackmud Creek ravine that provides access to the natural environment on the east side of the NASP;

- a centrally located SWMF that will offer a more urban aesthetic environment for residents within the northwest portion of the plan; and
- a central neighbourhood park that provides the venue for active recreational pursuits.

Principle 3 - Design for direct linkages (pedestrian, bicycle, vehicular) from the surrounding communities to the neighbourhood centre and amenities. The NASP accommodates direct vehicular, bicycle and pedestrian access to the above mentioned local focal points and to the peripheral areas including the Town Centre, District Activity Park and adjacent neighbourhood school sites.

*Amended by Bylaw 15450,
July 5, 2010*

Balanced Transportation System

Principle 1 - Provide a balanced network for movement. The NASP provides a balanced system of collector and local roadways with safe and convenient connections to perimeter arterial roadways and facilities located in the adjacent Neighbourhoods.

To avoid short cutting through the neighbourhood, the collector roads either come to T intersections, or will be circuitous enough to discourage through traffic generated from outside the Neighbourhood. The alignment of the collector roads enhances accessibility to multi-family residential locations while providing access to low density residential areas via local roads.

*Amended by Bylaw 15450,
July 5, 2010*

Internal pedestrian and bicycle movements are accommodated through a combination of multi-use trails and sidewalks.

Efficient Servicing/Green Infrastructure

Principle 1 - Encourage efficient and cost effective development. Callaghan NASP allows for the efficient, cost-effective and coordinated delivery of engineering services. Existing water service can be extended from the north. Stormwater is to be detained onsite and discharged at pre-development rates from an on-site stormwater management facility to the adjacent Blackmud Creek. The sanitary sewerage system will be extended from the north. The developers will pay for the construction of the first two lanes of arterial roadways through the Arterial Roadway Assessments program, and will pay the full cost of collector and local roadways within the neighbourhood.

Preservation/Enhancement of the Environment.

Principle 1 - Protect and enhance the natural features of the community when designing and planning neighbourhoods, facilities and services. The NASP recognizes the value of the Blackmud Creek ravine as a recreational, educational and aesthetic resource, and incorporates its role in the NASP.

MASTER PLAN ELEMENTS

The Neighbourhood Concept for Heritage Valley describes 14 neighbourhoods, including the Town Centre, ranging in size from 82 ha to 262 ha. Each neighbourhood shall incorporate master plan elements objectives, dependent upon context. The Callaghan neighbourhood generally conforms to the following principles of the Master Plan:

Mixed Uses. As a residential neighbourhood, Callaghan has a mix of medium density and low-density developments with a higher proportion of multi-family than normally required by City guidelines, due to its proximity to the transit corridor.

Design Attractive Neighbourhoods. Callaghan is planned with numerous amenities and with streets that take advantage of the many vistas. The central park and SWMF are centrally located for easy access by all residents. Viewpoint parks are planned next to the ravine to provide access. Neighbourhood development guidelines and architectural controls will be used to improve design aesthetics and liveability.

Transit-Oriented Development Practices. *Medium density residential sites are planned along arterial and collector roadways, and in proximity to the Town Centre. They are planned to be above the 35/65 medium density to low-density unit ratio to adhere to the land use intensification guidelines of a Transit Supportive Design as set out in the Heritage Valley SCDB.*

*Amended by Bylaw 15450,
July 5, 2010*

A Full Array of Urban Services & Amenities. There are multiple opportunities for recreation sites in the neighbourhood including the central park, the SWMF, a private park and several dispersed parks, all accessible by roads and walkways.

A Strong Pedestrian-Oriented Street Network. *The neighbourhood has been planned to encourage walking and other non-motorized transportation modes. A series of linked walkways and multi-use trails link the neighbourhood to the Town Centre and LRT Station as well as to local amenities and park spaces.*

*Amended by Bylaw 15450,
July 5, 2010*

Minimize Environmental Impact. *Callaghan uses a transit supportive design to encourage the use of transit and to reduce the need for automobiles.*

*Amended by Bylaw 15450,
July 5, 2010*

Development adjacent to the Blackmud Creek Ravine will adhere to the policies and requirements of the North Saskatchewan River Valley Bylaw and setbacks established by geotechnical studies.

3.3 Smart Choices

The “Smart Choices for Developing our Community” project produced eight planning recommendations that were approved by City Council on March 23, 2004. The recommendations encourage sustainable development principles such as, comprehensive planning, design and development of communities that promote a range of housing, transportation, and employment options, preservation and conservation of natural and cultural resources, and community sense of place.

Three of the eight recommendations apply to the Callaghan neighbourhood.

Recommendation 1) - Transit-Oriented Development. Promote residential/commercial intensification around LRT and Transit Centres and LRT Stations where compact development may occur and efficiencies gained through shared infrastructure, resources, community facilities and services. This is

achieved through comprehensive planning, design and development of pedestrian-friendly environments within easy walking distance.

Recommendation 2) – Walkable City. Provide pedestrian routes, linkages and multi-use trails in the suburbs and prepare pedestrian and urban development guidelines to ensure the built environment reflects a pedestrian supportive community. *Callaghan is designed as a transit-supportive community with medium density residential uses located in close proximity to James Mowatt Trail and the LRT Station located in the Town Centre.*¹

*Amended by Bylaw 15450,
July 5, 2010*

The neighbourhood design also establishes a comprehensive walkway and open space system that encourages connectivity through the area.

Recommendation 8) – Urban Design. The intent is to develop design principles and guidelines to create aesthetically pleasing and functional urban spaces and built form at the neighbourhood level. Callaghan incorporates site-specific urban development guidelines in the plan to address special planning considerations for the higher density sites.

3.4 North Saskatchewan River Valley Bylaw

The NASP recognizes the various objectives and policies of the North Saskatchewan River Valley Bylaw that applies to development adjacent to the Blackmud Creek and its ravines.

The NASP respects the top-of-bank boundary on the northerly lands along the Creek within the plan area. The land below this TOB line is designated as Environmental Reserve by the City. The top-of-bank edge for the remainder of the lands will be established when the golf course ceases operations or at the rezoning or subdivision stage of development. The Blackmud Creek will be a point of discharge of the SWMF. The outfall will be designed and constructed following municipal, Provincial and Federal requirements.

¹ All references here within to “111 Street” and “111 Street/127 Street” (with the exception of references to “existing 111 Street”) have been deleted and replaced with “James Mowatt Trail” as per Bylaw 15450, July 5, 2010.

3.5 Edmonton International Airport Vicinity Protection Area Regulation

The Edmonton International Airport Vicinity Protection Area Regulation regulates land use that may affect the use of the Edmonton International Airport. The Regulation also established Noise Exposure Factor (NEF) contours within which residential development may be controlled or declined. The Callaghan NASP lies entirely outside the designated area. Therefore, there is no restriction on residential development within the plan area arising from this regulation.

3.6 Suburban Neighbourhood Design Principles

The City of Edmonton's Suburban Neighbourhood Design Principles report describes a variety of design principles intended to encourage flexibility and innovation in the design and servicing of new neighbourhoods. The following design principles have been used to design Callaghan:

Design Principle 1 - Design Neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods.

Design Principle 3 - Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods.

Design 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.

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

Design Principle 6 - Provide transit services to the edges of the new neighbourhoods using the arterial and collector roadways in conjunction with appropriately designed, strategically located and conveniently accessed transit-waiting zones.

Design Principle 8 - Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time.

Design Principle 9 - Explore opportunities to provide smaller, dispersed open space and parks in a neighbourhood to provide for localized needs while meeting the recreational needs of residents of the catchment area.

Design Principle 10 - Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and stormwater management facilities.

Design Principle 11 - Create a linked open space system through open spaces created by stormwater management facilities, some utility rights-of-ways, preservation of appropriate natural areas and drainage courses, and school and park open spaces.

Design Principle 12 - Locate multi-family uses toward the edges of new neighbourhoods and close to the community and neighbourhood focal points.

Design Principle 13 - Use stormwater management techniques which provide an alternative(s) to the man made lakes and dry ponds typical to Edmonton.

Design Principle 14 - Minimize the use of public utility lots and maximize the use of easements for underground services not located in road rights-of-way.

Design Principle 15 - Provide opportunity through the residential districts of the Land Use Bylaw for the intensification of housing forms and for alternative site design and building orientation on the site.

Design Principle 16 - Use current population and student generation formulas when planning facilities for a neighbourhood. Take into account the life cycle of the neighbourhood.

3.7 Transportation Master Plan

The NASP conforms to the City's Transportation Master Plan. The land use and road network of the NASP:

- is compatible with the proposed arterial system;
- *allows integration with the proposed transit corridor through the Town Center;*

*Amended by Bylaw 15450,
July 5, 2010*

- promotes land use intensification to achieve the principles of transit-supportive/transit-oriented design; and
- ensures safe and dispersed flow of traffic through the neighbourhood with multiple access points to the arterial road system.

3.8 Storm Water Management Design Guidelines

The Stormwater Management Facility is located centrally in the neighbourhood to maximize the aesthetic and functional benefits of the amenity, while allowing an acceptable setback from the top of bank. The location, design and construction of the stormwater management facility will conform with the City of Edmonton's Stormwater Management Guidelines.

3.9 Top-of-Bank Roadway

The configuration of the lands, the on-going operations of 7 Oaks Golf Course and the findings of the geotechnical assessment of the top-of-bank combine to reduce the viability and feasibility of a top-of-bank roadway. The geotechnical setback recommendations include setback development restrictions limiting road and building development. As a result, a top-of-bank walkway (multi-use trail) is proposed.

A top-of-bank walkway can be accommodated within the setback providing public accessibility through three access points to the planned walk; two access points from public open spaces and one from a private open space. Intra-neighbourhood linkages include the top-of-bank walk as an important public pedestrian/bicycle route.

The top-of-bank walkway will be a hard surfaced trail a minimum of 2.5 m wide, designed to accommodate bicycles and other wheeled users.

With the City's plans to close the existing 111 Street access at the north end of this Neighbourhood, a staging/parking area may be created at this location to provide another access point to the ravine.

3.10 CPTED

The NASP incorporates principles and guidelines established by Crime Prevention Through Environmental Design to minimize the number of crime

prone areas. Development of the street system, parks, SWMF, and the built environment will use CPTED principles to help create a safe and secure neighbourhood.

4.0 DEVELOPMENT OBJECTIVES, PRINCIPLES & COMMUNITY ENHANCEMENT

The land within Callaghan will be developed as a sustainable, primarily residential neighbourhood where residents can live safely in a healthy, well-designed, pedestrian friendly environment with adequate services and amenities accessible to all residents. The design goal is to maximize the proximity of the future Town centre and ecological benefits of the Blackmud Creek ravine, natural vistas and planned development of a large stormwater lake and centralized neighbourhood park. These will be made accessible to pedestrians and automobiles by a comprehensive walkway and road system that will lead to the adjacent neighbourhoods and associated amenities.

4.1 Development Objectives and Principles

The Neighbourhood Plan was developed in the context of the Heritage Valley SCDB and the unique site features available, reflecting, as well, the policies outlined in the previous sections. The Objectives and Principles outlined below will provide direction to ensure the Development Plan outlined in Section 5 is realized.

4.1.1 Objectives

The objectives of the Callaghan NASP will be the yardstick to achieve a sustainable, liveable neighbourhood as the neighbourhood evolves over time.

These objectives are:

- To develop a **liveable residential environment** to accommodate various age groups, income levels and lifestyles that will incorporate the City's intensification initiatives and Transit Supportive Design.
- to provide appropriate **scale of architecture and community enhancement** by promoting a range of densities and site planning that integrates these sites with each other and the greater neighbourhood.

- to provide for **parks, open spaces and community focal points**, views and vistas throughout the neighbourhood.
- to **enhance and preserve the natural environment** while providing active and passive recreational opportunities.
- to provide a **balanced transportation system** within and around the neighbourhood, incorporating linked parks and open spaces, the Town Centre, and neighbourhood focal points.
- To provide efficient, contiguous and **cost-effective infrastructure and services**.

4.1.2 Principles

Development of the various land uses within the NASP area will be guided by the following general principles:

A Liveable Residential Environment

- Provide for a liveable, compact, residential environment with a variety of housing types to accommodate various age groups, income levels, lifestyles and City intensification objectives.
- Establish a compact development pattern that promotes a strong sense of neighbourhood identity through the creation of well designed subdivisions that encourage neighbourliness, street life and walking through building design, site planning and pedestrian-friendly streets and linkages.
- Accommodate a range of residential densities to support the establishment and operation of neighbourhood facilities, recreation facilities, and public transit.
- Locate larger parcels of medium density development toward the collector and arterial road systems to provide efficient access.
- Locate larger parcels of medium density development in proximity to the Town Centre.
- Encourage the development of pedestrian-friendly streets and streetscapes.

- Provide street oriented housing such as semi-detached and row housing to provide a transition between higher density and lower density housing developments.
- In the low density residential areas, provide the opportunity for innovation in subdivision and lotting pattern, laned subdivisions, live-work opportunities, a greener environment and a high degree of accessibility, connectivity and linkages to enhance social interaction and liveability.

Scale of Architecture & Community Enhancement

- Employ principles of massing, setbacks and character of residential development to encourage building forms that do not dominate the street frontage, fosters diversity and fits within the context of the neighbourhood.
- Promote high quality architectural and building standards that are aesthetically pleasing and contribute to the image of a quality neighbourhood.
- Provide attractive site planning sensitive to provision of local amenity areas and streetscapes for medium density residential areas.
- Ensure sensitive transitions and integration between residential land uses through use of appropriate development guidelines.
- Create focal points throughout the neighbourhood consisting of a central park, dispersed park and viewpoint parks, and the stormwater management facility that are accessible to all residents.
- Create and enhance views and vistas through development of viewpoint parks, view corridors and vistas.

Parks, Open Spaces & Community Focal Points

- Provide a linked system of greenways to connect the stormwater management facility (SWMF), the central park, and the Blackmud Creek ravine system with direct and obvious connections to residential areas.
- Provide a multi-use trail along the north and west side of the SWMF to allow easy pedestrian access for residents.

- Provide for both active and passive recreation within the stormwater management facility, central park, ravine system, dispersed parks and viewpoint parks and other open spaces.
- Provide for landscaping and lighting within parks and greenways.
- Incorporate public access through viewpoint parks and walkways to the Blackmud Creek ravine system in accordance with the Top of Bank Public Roadway policy.
- Enhance higher density locations with dispersed, accessible park sites.

Enhance & Preserve the Natural Environment

- Preserve the integrity and ecological habitat of the Blackmud Creek Ravine.
- Ensure appropriate environmental assessments and geotechnical investigation are followed during the construction of facilities and urban development adjacent to the Blackmud Creek.
- Provide low impact pedestrian linkages to the natural amenities of the ravine system in accordance with the City Top of Bank Public Roadway Policy.
- Encourage naturalized landscaping on public and private lands to minimize environmental and economic costs associated with their maintenance.

Balanced Transportation System

- Provide a logical, safe and efficient transportation system within the plan area to address the pedestrian, bicycle, vehicular, and transit transportation needs of residents moving within, to and from the neighbourhood.
- Provide efficient multi-use trails connecting community amenities and focal points to residential areas.
- Facilitate convenient and safe pedestrian linkages to the nearby Town Centre and Transit Centre/LRT Station.
- Minimize walking distances through the use of sidewalks and inter-connected street systems combined with clearly defined walkways.

Cost Effective Infrastructure and Services

- Follow best practices in engineering for the provision of engineering services and other infrastructure works consistent with approved servicing schemes.
- Encourage compact land use patterns, intensification and shared infrastructure to reduce servicing costs and improve servicing efficiency.
- Utility rights- of-way, easements and other instruments will be provided to accommodate services and shallow utilities, as determined by utility agencies and City Departments;
- Utility rights- of-way, easements and road rights -of -way may be required to be pre-dedicated across undeveloped land to facilitate orderly and sequential development of urban land.

4.2 Urban Design/Community Enhancement Objectives and Principles

Community design and enhancement objectives and principles are included in the Callaghan NASP in order to improve the built environment and enhance people's experience of the community. The application of these guidelines are intended to enhance urban design for buildings, streets and open spaces to add to the liveability and quality of the community as a whole.

4.2.1 Objectives

The community design and enhancement objectives for Callaghan are:

- To create a compact pedestrian oriented community
- To encourage innovative urban designs and patterns
- To provide high quality, appropriate landscaping to enhance the built environment
- To create special spaces, and
- To maximize views and vistas throughout the community.

4.2.2 Principles

The NASP will achieve a well - designed enhanced urban community through the application of the following design principles:

- Creating/preserving community focal points accessible to different interests and users in the Neighbourhood, specifically:
 - Blackmud Creek ravine with its top-of-bank walkway, view point parks and multiple public access points;
 - the centrally located SWMF which provides visual interest to vehicles on the collector road and open space access/opportunity to pedestrians and cyclists;
 - a central recreation park with playing fields and community league building site.
- Accommodate innovative, low impact well-designed multi-family sites adjacent to the Blackmud Creek ravine to maximize views and recreational opportunities often limited to single-family residential development;
- Allow for development parcels of varying sizes through the use of cul-de-sacs and other planning techniques to create sub-neighbourhood theme opportunities;
- Apply architectural guidelines for each development lot, responsive to the overall theme established by the developers, in consultation with area residents, as portrayed by development entries/ gateways, streetscape, signage, street furniture and landscape design elements and building orientation.
- Use of Direct Control provisions, including DC1 or DC2 provisions of the Zoning Bylaw for larger medium density residential sites to reduce impacts on Low Density Residential areas or to achieve extraordinary or unique development in accordance with the Development Guidelines described in Section 5.0 of this plan.

5.0 DEVELOPMENT CONCEPT

5.1 Highlights

The Development Concept designed for Callaghan is illustrated in **Figure 5.0 the Development Concept**. *The concept reflects the unique location of the neighbourhood adjacent to the Blackmud Creek ravine and the Town Centre. The Development Concept incorporates the Development Objectives and Principles outlined in the previous sections. The Development Concept creates an attractive, compact, pedestrian oriented community with direct linkages for residents to local amenities and to the LRT Station in the Town Centre to the west. The Plan is aligned with the technical studies and recommendations such as the Neighbourhood Design Report, the Transportation Impact Assessment, Geotechnical studies, and others.*

*Amended by Bylaw 15450,
July 5, 2010*

*Amended by Bylaw 15450,
July 5, 2010*

The Development Concept establishes three key focal points that offer different opportunities and appeal to different interest and users. Each sub-neighbourhood contains its own easily accessible focal point or characteristic that defines its immediate character. The stormwater lake offers a more urban aesthetic environment for the west side of the neighbourhood; the central park creates a central community focal point and venue for active recreation; and the Blackmud Creek ravine provides access to the natural environment on the east side of the neighbourhood for all residents. These sub-areas or development cells will be linked through common architectural and landscaping themes to the overall vision established for the neighbourhood.

5.2 Distribution of Land Uses

*Callaghan is designed as a residential area of approximately 84 ha of which approximately 56 ha is designated for residential development as shown in the Development Concept, **Figure 5.0**. A statistical summary of the proposed land uses is shown in **Appendix 1**.*

*Amended by Bylaw 15450,
July 5, 2010*

*Amended by Bylaw 14717,
November 1, 2007*

The residential area is 73% of the total land area, with the balance designated for stormwater management, public parks, private open space and circulation. When fully developed, the neighbourhood will accommodate approximately 5,726 people at an average population density of approximately 103 persons per net residential hectare.

*Amended by Bylaw 15627,
December 13, 2010*

5.3 Residential Land Use

The majority of land uses, or 73% of the land area, in Callaghan is designated for residential development. This will accommodate a mix of low and medium density housing as shown in Figure 5.0.

*Amended by Bylaw 14717,
November 1, 2007*

*Amended by Bylaw 15450,
July 5, 2010*

The detailed design of the residential areas will be guided by this plan and will reflect a combination of market conditions, consumer preferences, and site conditions. The intent is to provide a range of housing types to accommodate various lifestyles, income levels, and age groups while creating a strong sense of neighbourhood identity and liveability. This is accomplished through the creation of well designed subdivisions, site planning and building designs that encourage quality, connectivity, neighbourliness and inclusion.

*Amended by Bylaw 14717,
November 1, 2007*

Residential land use for Callaghan is designed for medium and low-density housing. Of the approximately 55.88 ha of residential land, 16.69 ha will be medium density residential in the form of row housing, stacked town-housing, and low to medium-rise apartments based on an overall average density of 90 units per hectare. Low-density residential development will occupy 36.19 ha of land in the form of single-detached and semi-detached housing based on an overall average density of 25 units per hectare. The ratio of low density residential to medium density will be 33.8% to 66.2%. This exceeds the general guideline of 15% to 35% medium density in new neighbourhoods. With appropriate design and control to reduce the impacts on adjacent LDR areas, the MDR portion of the ratio is acceptable, due to the sites' location near the Town Centre and LRT Station and efforts to create a transit supportive neighbourhood.

*Amended by Bylaw 15627,
December 13, 2010*

Low Density Residential (LDR) consists of single detached and semi-detached housing. Medium Density Residential (MDR) consists of Row Housing and Low-rise/Medium Density Housing.

*Amended by Bylaw 15627,
December 13, 2010*

5.3.1 Low Density Residential

Low density residential land uses are distributed in the central, south, and east portions of the neighbourhood as shown in **Figure 5.0**. The low-density development will be in a variety of forms consisting of single and semi-detached housing forms with a variety of lot sizes. The residential environment is designed to take advantage of neighbourhood amenities and focal points.

The planning and design of the low-density areas will use a variety of subdivision design, site planning and architectural and landscaping techniques to create safe, attractive streetscapes and an integrated residential environment. The residential design and street pattern will take advantage of, or enhance any views and vistas created by dispersed parks, ravine access points and other amenities. Where possible, lots will front onto collector roads with lane access to ensure garages do not dominate the streetscape and to celebrate or enhance axial views to schools, dispersed parks and natural amenities.

The low density residential area in the southwest corner of the NASP, abutting the medium density residential site, should be implemented through the Direct Development Control Provision (DC1) of the Edmonton Zoning Bylaw to allow for more intensive form of single-detached housing. Such type of housing is intended to achieve relatively higher density by making more efficient use of land. This will reduce the overall development and servicing costs, thereby promoting housing affordability.

*Amended by Bylaw 15450,
July 5, 2010*

The DC1 zone is intended to be modeled on the Residential Small Lot Zone (RSL) and shall incorporate the following regulations:

- *Minimum site area: 315 m²*
- *Minimum site width: 9.9 m*
- *Maximum site coverage: 50%*

5.3.2 Medium Density Residential

The Medium Density Residential sites are distributed in the northeast, southwest, and south central portions of the Plan area as shown **Figure 6-Medium Density Residential Sites**. MDR sites range from 1.58 to 5.78 ha in size. In order to provide sufficient guidance to future MDR development, and ensure their connectivity and integration into the community, a set of development guidelines has been incorporated into the plan with reference to each site. *Sites that are over 2.15 ha in size may be developed under the Direct Control Provisions to achieve the liveability objectives of the Neighbourhood Plan.*

*Amended by Bylaw 15450,
July 5, 2010*

The northeast part of the plan area contains two sites totalling 6.41 hectares of medium density housing with an integrated private open space located adjacent to the Blackmud Creek ravine. This site is intended to provide an amenity-rich residential environment on the ravine in located at the northerly entrance of the neighbourhood adjacent to the collector roadway and arterial (James Mowatt Trail). This site is also in close proximity to the neighbourhood commercial site and natural area west of James Mowatt Trail in Rutherford.

The southwest part of the plan area contains 11.6 hectares of medium density residential dispersed among 5 sites. These sites are associated with specific development objectives and development guidelines to ensure their compatibility and connectivity with the surrounding low density development and park spaces. Local and collector roadways provide direct access to many of these medium density sites and with the rest of the neighbourhood. The location of medium density development in the southwest part of the plan area is strategically located based on the principles of Smart Choices to take advantage of proximity to the Town Centre with its associated commercial and transit amenities.

*Amended by Bylaw 15450,
July 5, 2010*

*Amended by Bylaw 15450,
July 5, 2010*

Medium density projects will incorporate design principles to encourage character of residential development and create building forms that do not dominate the street frontage, that foster diversity and fit within the context of the neighbourhood. These principles will deal with human-scaled buildings, quality materials, landscaping and building setbacks, and use of ground-oriented buildings to transition medium and low-density developments within the same sub-area or block. The design of MDR sites will promote pedestrian circulation through the sites and to other sites within the area.

Detailed descriptions of Development Guidelines for the medium density sites are provided in the following **Table.2**

Figure 5.0 – Development Concept
 (Bylaw 15450, July 5, 2010)

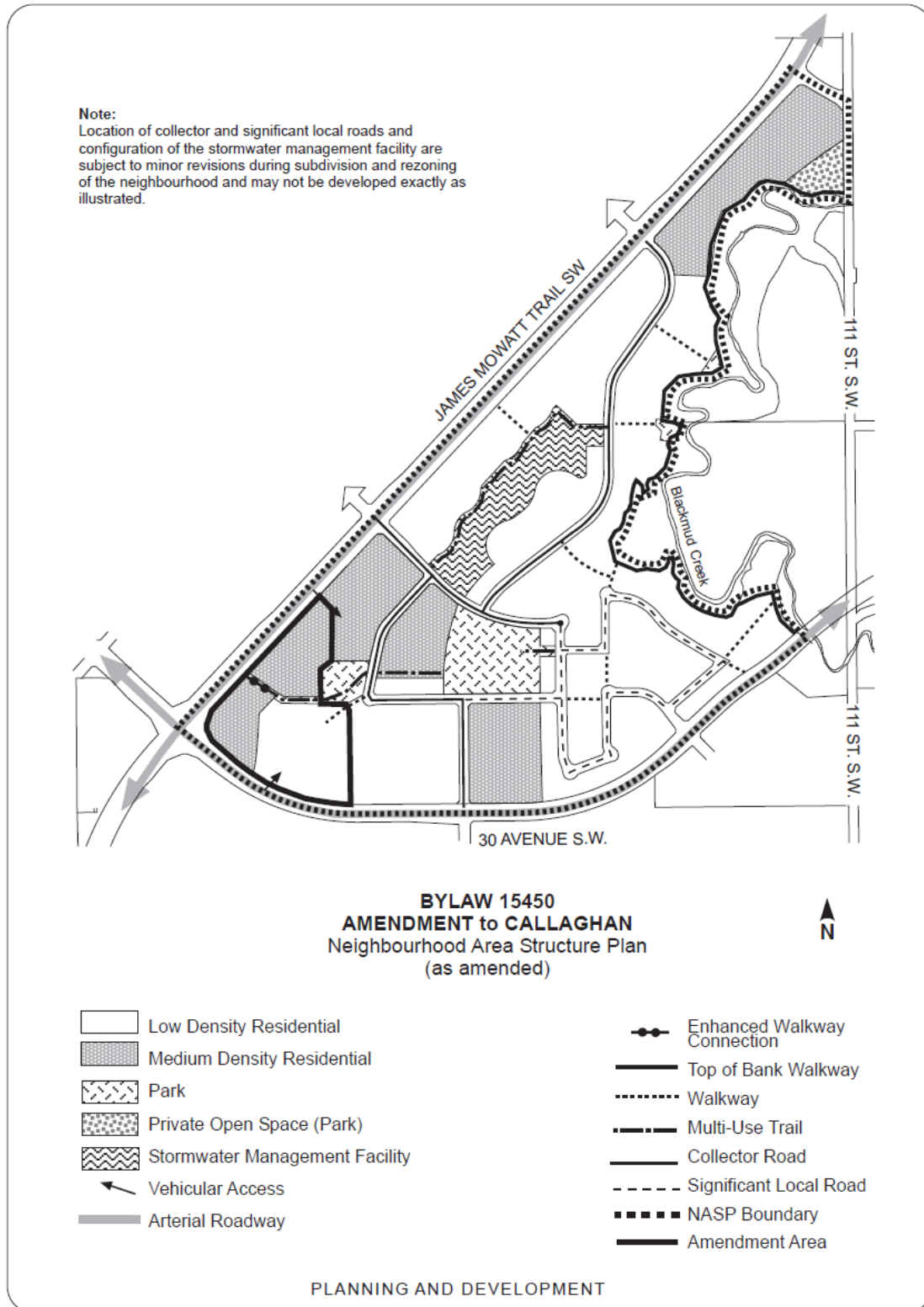
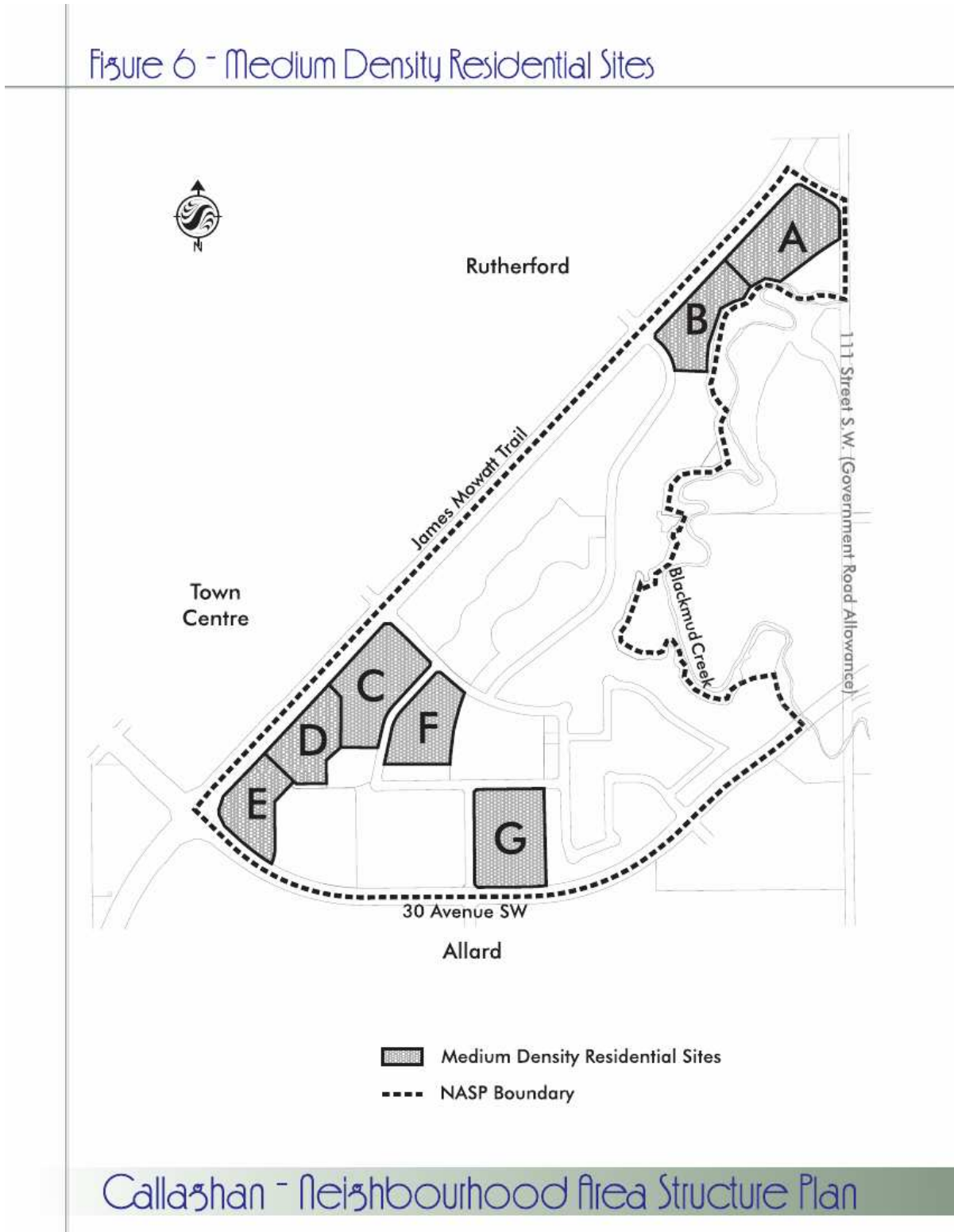


Figure 6.0 – Medium Density Residential Sites
(Bylaw 15450, July 5, 2010)



B. Table 2 -Summary of Medium Density Development Guidelines

Amended by Editor

SITE	SIZE	INTENT	APPLICABLE DEVELOPMENT GUIDELINES
A	4.29 ha including a 0.76 ha Private Open Space	To accommodate Medium Density Residential development that incorporates innovative and high architectural standards on a visible location adjacent to the ravine and James Mowatt Trail.	<p><u>Building Height, Density and Massing</u> <i>Site "A" will be developed under Direct Control provisions allowing one building at 11 storeys, including once penthouse level, two buildings at seven storeys, including one penthouse level, and a maximum density of 70 units per hectare.</i></p>
B	2.12 ha	<i>To accommodate resort style residential development, taking advantage of the site location to adjacent amenities</i>	<p><u>Building Height, Density and Massing</u> <i>Site "B" can accommodate a mix of dwelling types including apartments, row-housing, and semi-detached dwellings. Apartments will be limited to a maximum of four storeys. Row housing and semi-detached dwellings will be limited to a maximum height of 10.0 m or 2 ½ storeys, except for buildings abutting the Blackmud Creek Ravine, where the grade exposes the buildings lowest level by more than 1.83 m, three storeys is allowed. A maximum density of 50 units per hectare will be allowed.</i></p> <p><u>Architectural Treatments</u> The design intent of the site is to create a resort style character, using the adjacent ravine and the private park.</p> <p>Emphasis on viewpoints and retreat areas will be integrated into the landscaping and trail system.</p> <p>The multi-family apartment buildings of site A will have a terrace design up to six floors, maximizing views of the ravine and creating rooftop patios.</p> <p>The architecture for the apartment building will emphasize use of various materials, outdoor amenity spaces, roof profiles, and landscaping to create a resort feel.</p> <p>Entry features will be designed with water, rocks and other landscape materials to help establish the look and feel of a resort community.</p> <p>Focal elements will be designed at each entrance to the multi-family site to provide an interesting view and to tie the development together.</p> <p>The semi-detached bungalows in site B will provide for a transition to the estate homes in the adjacent low-density area.</p>

Amended by Bylaw 14533, May 14, 2007

			<p><u>Building Orientation and Relationship to the Street</u> These developments have access to the adjacent James Mowatt Trail arterial road and collectors on the north and south.</p> <p>Overlooking the ravine, this development will have dynamic views from all corners of the site.</p> <p>Site design is intended to de-emphasize the vehicle with curvilinear streets for traffic calming and a reduction in the “sea of asphalt” look.</p> <p>The private park will act as a gateway to the ravine park system for pedestrian traffic.</p> <p>Parking is to be internalized to emphasize the pedestrian character.</p>
			<p><u>Landscaping</u> Appropriate landscaping should be provided to enhance the architectural character of the building and fit within the context of the site.</p> <p>Detailed landscaping plans should be submitted and approved prior to or concurrent with the rezoning or development permit applications.</p>
C	3.08 ha	<i>To accommodate medium density, transit supportive residential development that incorporates innovative and high architectural standards.</i>	<p><u>Building Height, Density and Massing</u> This development will be limited to a density of 125 units per hectare. Development adjacent to the collector road shall be limited to 2 ½ storeys or appropriately setback to create a pedestrian orientated street frontage.</p> <p><u>Architectural Treatments</u> Exterior architecture will use various building materials and design features, such as balconies to reflect the high quality development of the area.</p> <p>This site will move further from the “resort style” towards the heritage design found in the adjacent Town Centre.</p> <p><u>Building Orientation and Relationship to the Street</u> This development will compliment the surrounding medium and low density land uses with a podium style residential design.</p> <p>It will provide an appropriate culmination of buildings from the low density of the east.</p> <p>Establish an appropriate interface and linkage between the multi-use corridor and buildings on the site.</p> <p>Parking is to be internalized to emphasize the pedestrian character.</p>

Amended by Bylaw 15627, December 13, 2010

			<p><u>Landscaping</u> Appropriate landscaping should be provided to enhance the architectural character of the building and fit within the context of the site.</p> <p>Detailed landscaping plans should be submitted and approved prior to or concurrent with the rezoning or development permit applications.</p>
D	1.58 ha	To accommodate Medium Density Residential development that incorporates innovative and high architectural standards.	<p><u>Building Height, Density and Massing</u> Perceived height and massing should be minimized through utilizing building setback variations at the upper levels, building orientation, roof treatment, and the choice of exterior materials and colours.</p> <p>The site shall permit developments up to a maximum height of 4 storeys.</p> <p>The site density will be a maximum of 125 units per hectare.</p> <p><u>Architectural Treatments</u> Building façades should use compatible and harmonious exterior finishing materials that are aesthetically pleasing.</p> <p>Buildings shall incorporate distinctive architecture that contributes to establishing a unique sense of place and character.</p> <p><u>Building Orientation and Relationship to the Street</u> To provide active and pedestrian inviting streetscapes at ground level.</p> <p>Buildings adjacent to streets should be designed with detail and articulation to create an attractive and inviting streetscape.</p> <p>Avoid exposed “dead” frontages along major circulation corridors.</p> <p>Establish an appropriate transition/interface with abutting uses through the use of integration/ separation, landscaping, building orientation, and the regulation of compatible and incompatible activities.</p> <p>Establish an appropriate interface and linkage between the multi-use corridor and buildings on the site.</p> <p>Buildings adjacent to the park area shall be oriented towards the park to establish a safe and functional community space.</p> <p><u>Landscaping</u> Appropriate landscaping should be provided to enhance the architectural character of the building and fit within the context of the site.</p> <p>Detailed landscaping plans should be submitted and approved prior to or concurrent with the rezoning or development permit applications.</p>

Amended by Bylaw 15450,
July 5, 2010

E	1.70 ha	To develop Medium Density Residential development that incorporates high quality architecture and urban design standards to establish a distinctive architectural character.	<p><u>Building Height, Density and Massing</u> Perceived height and massing should be minimized through utilizing building setback variations and façade articulation, building orientation, roof treatments, and a variety of exterior materials and colours.</p> <p>The site shall permit developments up to a maximum height of 4 storeys.</p> <p>The site density will be a maximum of 125 units per hectare.</p> <p><u>Building Orientation and Relationship to the Street</u> Orient buildings in a manner that defines and enlivens the street edge.</p> <p>Buildings fronting on to James Mowatt Trail and 30 Avenue SW should be designed with detail and articulation to create an attractive streetscape. This shall be established through the use of building articulation and configuration, the use of high quality façade materials, architectural themes and styles.</p> <p>Buildings adjacent to the park area should be oriented towards the park to establish a safe and functional community space.</p> <p>Establish an appropriate transition/interface with abutting uses through the use of integration/separation, landscaping, building orientation, and the regulation of compatible and incompatible activities.</p> <p>Parking is to be internalized to emphasize the pedestrian character.</p> <p>Provide safe and efficient pedestrian connections to the adjacent greenway / multi-use corridor.</p> <p><u>Landscaping</u> Appropriate landscaping should be provided to enhance the architectural character of the building and fit within the context of the site.</p> <p>Detailed landscaping plans should be submitted and approved prior to or concurrent with the rezoning or development permit applications.</p>
F	2.03 ha	To develop Medium Density Residential development that takes advantage of the adjacent central park site and acts as a transition from low density to higher density development from east to west.	<p><u>Building Height, Density and Massing</u> This site should have low-scale development, which may include semi-detached bungalows, town houses and/or stacked town houses. The density of the site will not exceed 80 units per hectare. This low level development will serve as a transition from the low-density single-family development to the higher density low rise apartments to the west.</p>

Amended by Bylaw 15450,
July 5, 2010

Amended by Bylaw 15627,
December 13, 2010

			<p><u>Architectural Treatments</u> <i>Building design is to carry elements of the resort character established by sites A and B to the north, while adapting to a heritage character, relating to its movement away from the ravine towards the Town Centre.</i></p> <p><u>Building Orientation & Relationship to the Street</u> <i>Parking is to be internalized to emphasize the pedestrian character.</i></p> <p><u>Landscaping</u> <i>Appropriate landscaping should be provided to enhance the architectural character of the building and fit within the context of the site.</i></p> <p><i>Detailed landscaping plans should be submitted and approved prior to or concurrent with the rezoning or development permit applications.</i></p>
G	3.17 ha	<p>To develop Medium Density Residential development that takes advantage of the adjacent central park site and access to the south arterial.</p> <p>This site will be developed under a Direct Control Provisions to reduce the impact on adjacent low density residential areas.</p>	<p><u>Building Height, Density and Massing</u> This site may contain a variety of multiple family housing forms including row and stacked town housing to apartment housing.</p> <p>The maximum allowable height will be 6-stories and the maximum density will be 50 units per hectare.</p> <p>Depending on the housing form, building height will transition downward from west to east to a level of three stories abutting the LDR.</p> <p>If the site is developed with only apartment housing, then transition to LDR will be accommodated through additional setbacks and landscaping.</p> <p><u>Architectural Treatments</u> The site will be integrated into the neighbourhood through the use of human scaled design, quality materials, landscaping and building setbacks.</p> <p><u>Building Orientation and Relationship to the Street</u> The boundary between the MDR and adjacent LDR will be appropriately demarcated through the use of fencing, landscaping or local roadways.</p> <p>Pedestrian linkages will be provided within the site to ensure safe and efficient pedestrian connections to neighbourhood focal points and the pedestrian corridor.</p> <p>Developments adjacent to the Neighbourhood Park shall be designed as street-oriented residential.</p> <p>Parking is to be internalized to emphasize the pedestrian character.</p> <p><u>Landscaping</u> Appropriate landscaping should be provided to enhance the architectural character of the building and fit within the context of the site.</p> <p>Detailed landscaping plans should be submitted and</p>

		approved prior to or concurrent with the rezoning or development permit applications.
--	--	---

5.4 Parks, Open Space & Recreation

The parks and open space system includes a combination of active and passive recreation opportunities. These amenities are connected through on-street sidewalks, walkways and greenways. **Figure 7.0** illustrates the green space and pedestrian/bicycle linkages.

A neighbourhood park of approximately 3.01 ha is centrally located in the neighbourhood. This park site is intended to act as a focal point and to accommodate active recreational needs and a community league facility. This park site provides a vista from the east, south, north and westerly entrances to the neighbourhood.

A smaller, dispersed park of approximately 0.81 ha is located among the medium density sites (C, D and E). It is intended to provide an amenity for active or passive recreation to the adjacent residential development. Its location along the collector roadway provides a vista from the east to the west.

A 10 m-wide greenway, of approximately 0.08 ha, is located immediately west of the dispersed park. This greenway culminates into the MDR site; however, the MDR site will incorporate an enhanced pedestrian connection to enable continuous pedestrian movement to James Mowatt Trail and the Heritage Valley Town Centre.

*Amended by Bylaw 15450,
July 5, 2010*

There are three viewpoint parks in the plan. The most northerly park is intended to be private open space and a part of the northerly medium density site. This private open space will be developed as a park and maintained by the abutting developer or a Home Owners Association. It will provide access to the ravine, thereby providing an amenity to local residents of the adjacent multi-family sites. Road access and pedestrian linkages shown in the Plan or determined at the subdivision stage will provide a point of access and view point for both top of bank and ravine basin trails and activities.

The stormwater management facility (SWMF) located in the north central portion of the neighbourhood provides a utility function as well as a community amenity for passive recreation. A multi-use trail will run along the west and north side of

the SWMF for pedestrian and bicycle circulation. The facility also provides for a vista from the south and has frontage on the collector roadway on the east and south to provide view opportunities. The public space provided around the facility will be developed in accordance with the Stormwater Management Development guidelines. The location of the facility along the collector roadway will provide for two viewpoints. The facility must be located a minimum distance from the ravine top of bank as recommended in the geotechnical report.

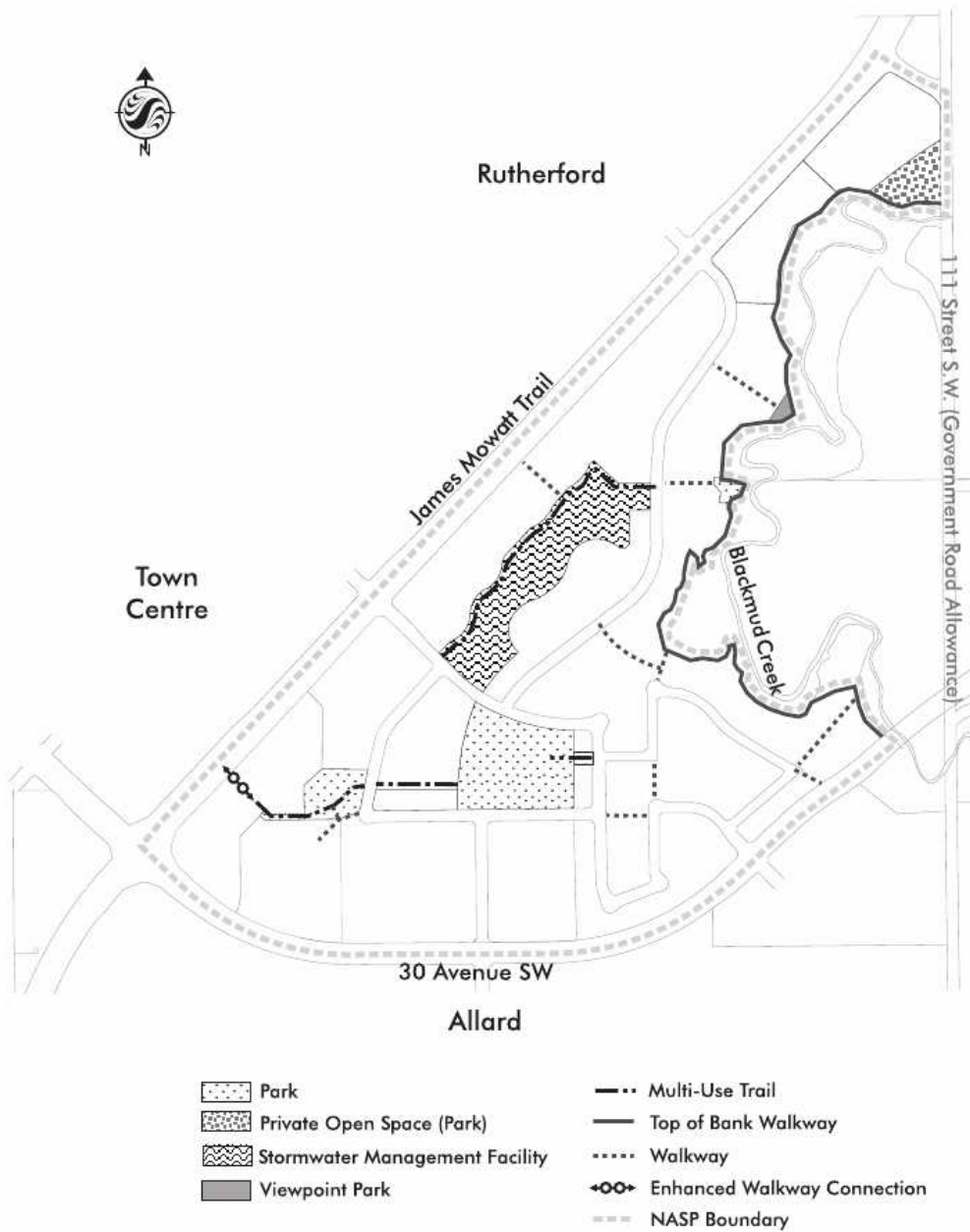
The Blackmud Creek ravine forms the east boundary of the plan area and will be made accessible to the public through a top-of-bank walkway and connector walkways and by viewpoint park entrances. There are two distinct areas of the ravine. The southerly portion has been modified through use as a privately owned golf course and has little of the natural flora or fauna or heritage features. This southerly portion will be subject to Environmental Reserve dedication at the time of zoning and subdivision. The northerly portion was used previously as agricultural land and has been dedicated to the City as Environmental Reserve. These areas may provide opportunity for reclamation and enhancement to improve aesthetics and recreational amenity to future residents. The lands below the top of the bank are not included in this plan.

The parks and open space system includes multi-use trails throughout the community and a multi-use trail developed along the top-of-bank, along surrounding arterials, and through the southern portion of the plan area as illustrated in **Figure 7.0**. These will be designed to emphasize pedestrian priorities and access to amenities in adjacent neighbourhoods. *The greenway proposed between the central park location, east to west, connects the neighbourhood with the Town Centre and the LRT Station.* A maximum of 10 m wide greenway is being created on a road right-of-way that will be abandoned. A road closure will be required such that the lands can be consolidated with adjacent lots and the greenway created.

*Amended by Bylaw 15450,
July 5, 2010*

Figure 7.0 – Greenspace/Pedestrian Linkage Plan
 (Bylaw 15450, July 5, 2010)

Figure 7 - Green Space Pedestrian Linkage Plan



Callaghan - Neighbourhood Area Structure Plan

5.5 Circulation

5.5.1 Vehicular Circulation

*The neighbourhood area is bound on the west and south by two arterial roadways, James Mowatt Trail and 30 Avenue SW, as illustrated in **Figure 8.0 Circulation**. Four major entrances to the neighbourhood are planned from these arterials. In addition to these major entrances, all-directional access points along James Mowatt Trail and 30 Avenue SW are contemplated to serve the neighbourhood.*

*Amended by Bylaw 15450,
July 5, 2010*

The collector roadway system is designed to provide efficient access into and out of the neighbourhood and efficient service for local residents while discouraging shortcutting through the neighbourhood by using T-intersection points.

In the southeast portion of the Plan area where there is no collector road, significant local roadways are planned to provide a network of connectivity to the north and west sub areas of the Plan. The local roadway network will include a connection through or along the north of the south central MDR site (labelled G).

5.5.2 Multi-Use Trails

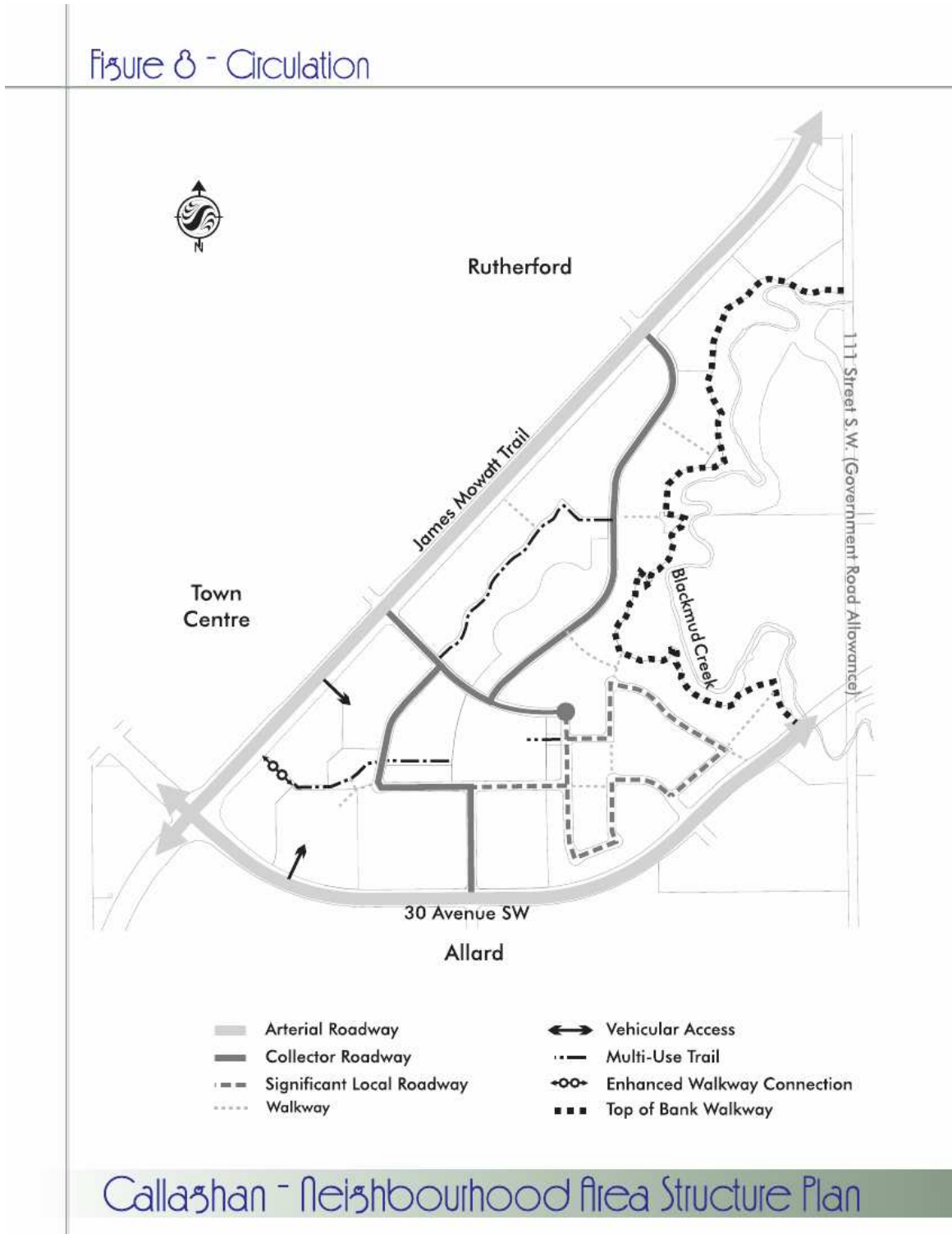
Pedestrian and bicycle circulation is accommodated through multi-use trails, the local roadways and connector walkways within the plan area. Walkways will be provided such that they are clearly visible at logical connections with local sidewalks. *A majority of multi-use trails are located within the abandoned road right-of-way, along arterial roadways and along the top-of-bank. The road right-of-way will be converted to a pedestrian corridor at a maximum 10 m width. The remainder of the existing road right-of-way will be consolidated with adjacent land uses.*

*Amended by Bylaw 15450,
July 5, 2010*

The pedestrian/bicycle network and open space linkages are shown in **Figure 7.0** and complement the sidewalk system in the neighbourhood.

Walkway widths and materials will be consistent with the City Standards and will be detailed through the subdivision process. The typical walkway is a 1.5 m

Figure 8.0 – Circulation
 (Bylaw 15450, July 5, 2010)



wide concrete walk; multi-use trail/bicycle paths are typically 2.5 m asphalt, however, wider paths may be required depending on location and expected users. The City's landscaping and lighting standards will also be followed.

The multi-use trails are designed to provide efficient access between the parks, the SWMF, the ravine top-of-bank multi-use trail system, and to the Town Centre and LRT Station.

*Amended by Bylaw 15450,
July 5, 2010*

5.5.3 Transit Service

*Public transit services will be extended into the NASP area in accordance with City of Edmonton Transit system guidelines and demands. Internal collector roadways will be developed to a suitable standard to accommodate transit service and provide readily accessible service to all areas of the neighbourhood. The proposed transit route is shown in **Figure 8.0**.*

A LRT Station is proposed to be located within the Heritage Valley Town Centre. Pedestrian access to the station will be accommodated through an at-grade crossing(s) at James Mowatt Trail.

6.0 ENGINEERING SERVICES

6.1 Provision of Utility Services

The Callaghan NASP plans for cost-effective municipal infrastructure and services as required by the goals of the Heritage Valley SCDB and Plan Edmonton. Callaghan is engineered to provide services that are safe and sustainable, with up to date technologies to ensure lower maintenance and servicing costs.

The servicing schemes for the NASP are described in the following sections.

6.2 Stormwater Management Facility & Drainage

The stormwater management facility has been located to conform to the natural contours of the land and low-lying areas. Good practice also suggests this facility be set back 100 m from the ravine top-of-bank. The facility presents an amenity opportunity and will be shaped to provide views from residential enclaves as well as from the collector roadway network. A multi-use trail will be

provided along the north side and west side of the stormwater facility that links the western portion of the plan area to the Blackmud Creek ravine.

6.3 Sanitary & Drainage Servicing

Stormwater Drainage

As shown in **Figure 9.0 - Drainage**, one stormwater management facility is designated within Callaghan. This facility has been located based on natural drainage patterns of the area and is generally consistent with the SCDB. The southerly facility, shown in the SCDB has been eliminated by directing drainage to the central pond facility. The facility in the central portion of the plan area is planned as a wet pond and will accommodate runoff from the Neighbourhood. The “wet” facility will also help control water quality prior to discharging to the creek.

Further details regarding the stormwater drainage schemes for Callaghan are provided in the associated Neighbourhood Drainage Report submitted under separate cover. Other reports such as Environmental Impact Assessment of the stormwater outfall will be undertaken at the time of development.

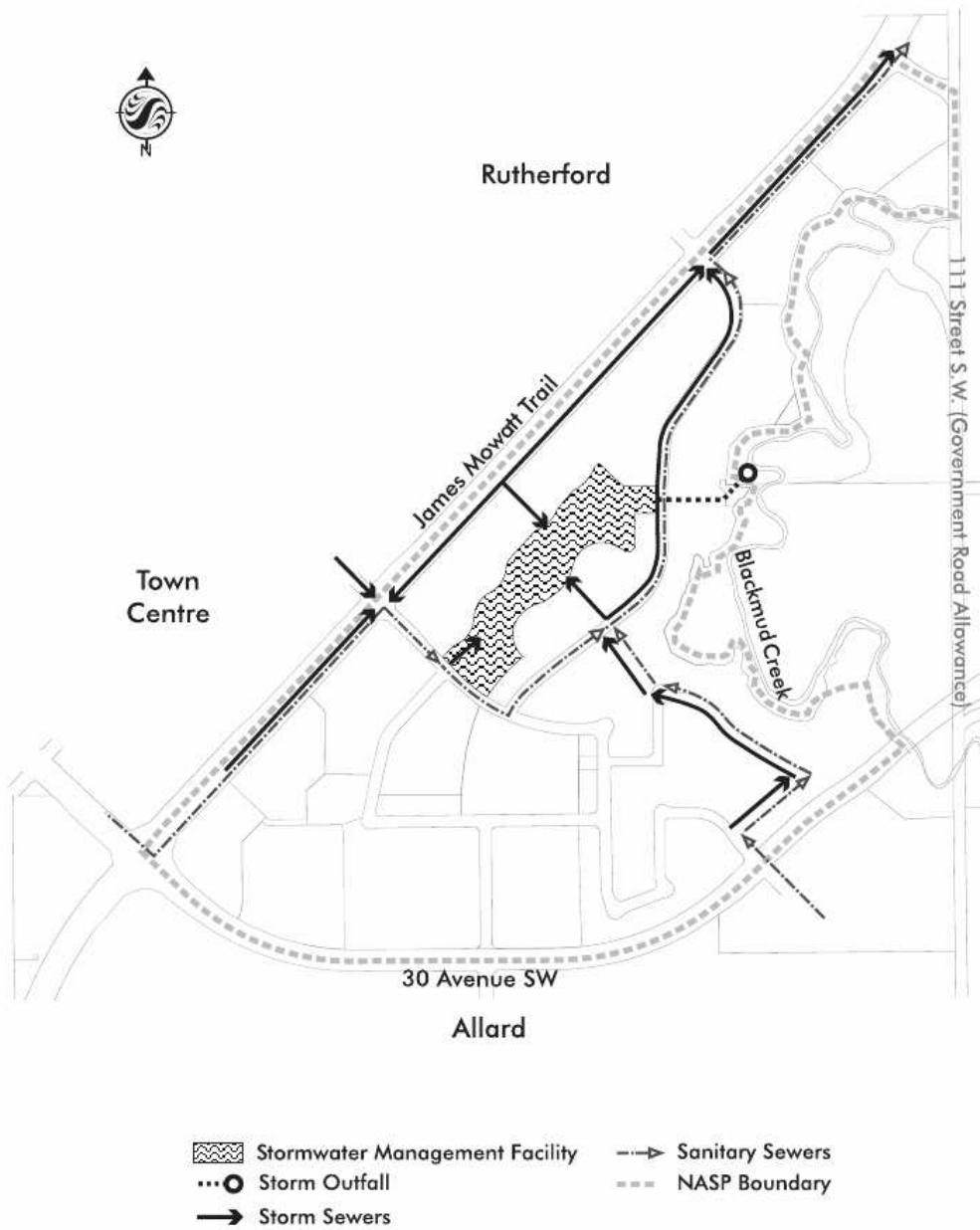
Sanitary Servicing

As shown in **Figure 9.0**, sanitary services will connect into a major sanitary trunk extended down from James Mowatt Trail. This trunk ties into the South Edmonton Sanitary Sewer (SESS). The on-site sanitary network will follow the internal roadway network and associated public utility lots.

Further details regarding the sanitary drainage schemes for Callaghan are provided in the associated Neighbourhood Drainage Report submitted under separate cover and approved in principle by Asset Management and Public Works-Drainage.

Figure 9.0 – Sanitary Service and Drainage Concept
 (Bylaw 15450, July 5, 2010)

Figure 9 - Sanitary Service & Drainage Concept



Callaghan - Neighbourhood Area Structure Plan

6.4 Water Servicing

The water servicing concept is presented as **Figure 10.0**.

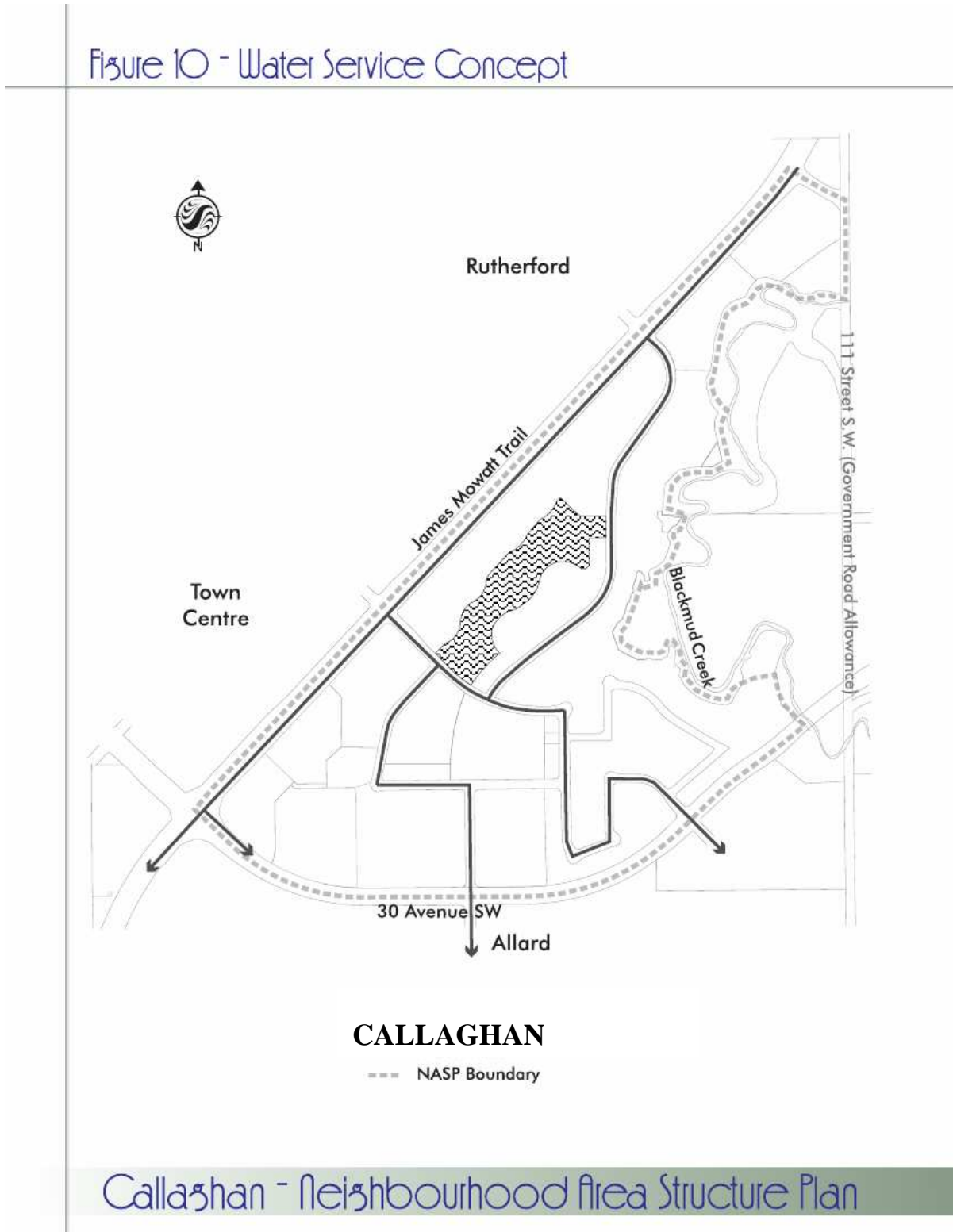
A 600 mm watermain is proposed in James Mowatt Trail to service future development. An additional 450 mm transmission main will traverse the neighbourhood ultimately connecting to the future arterial road. This main will supplement servicing of the lands east of Blackmud Creek. Separate watermains within the boundary arterial roads may be required to provide on street fire protection.

Water servicing within the Neighbourhood will be designed to provide peak hour flows and fire flows for low-density and medium-density uses. Water looping will be provided in accordance with the requirements of EPCOR. Prior to detailed design, a separate Water Network Analysis for each stage of development will be submitted to EPCOR for review and approval.

6.5 Shallow Utilities

Electric power, natural gas, and telecommunication infrastructure are all situated within close proximity to the plan area, and will be extended into Callaghan as required to service the proposed development pattern.

Figure 10.0 – Water Service Concept
(Bylaw 15450, July 5, 2010)



7.0 PLAN IMPLEMENTATION

7.1 Development Staging

The staging of future development within the plan area will take place as owners of individual parcels of land initiate the development with respect to their properties. A schematic sequence of staging that is likely to occur is illustrated in **Figure 11.0**.

Generally, infrastructure required to service development on any parcels in the plan area will require extensions from established utility and transportation facilities within neighbourhoods to the north and west of the plan area. Stages of residential development are expected to begin off James Mowatt Trail for the northerly multi-family site development. James Mowatt Trail will need to be extended to the first collector road entrance to accommodate low-density residential development. Development will continue to proceed southerly and easterly depending on market demand.

7.2 Zoning & Subdivision

Development of the Callaghan Neighbourhood shall generally follow the staging concept, and subsequent zoning and subdivision applications should generally conform to the land use distribution depicted in the development concept, and with the goals and objectives of the NASP. Where there is substantial deviation from the development intent of the NASP, an amendment to the NASP with subsequent zoning changes will be required. Zoning amendments or subdivision approvals shall not result in loss of pedestrian connectivity or negative impact to natural areas.

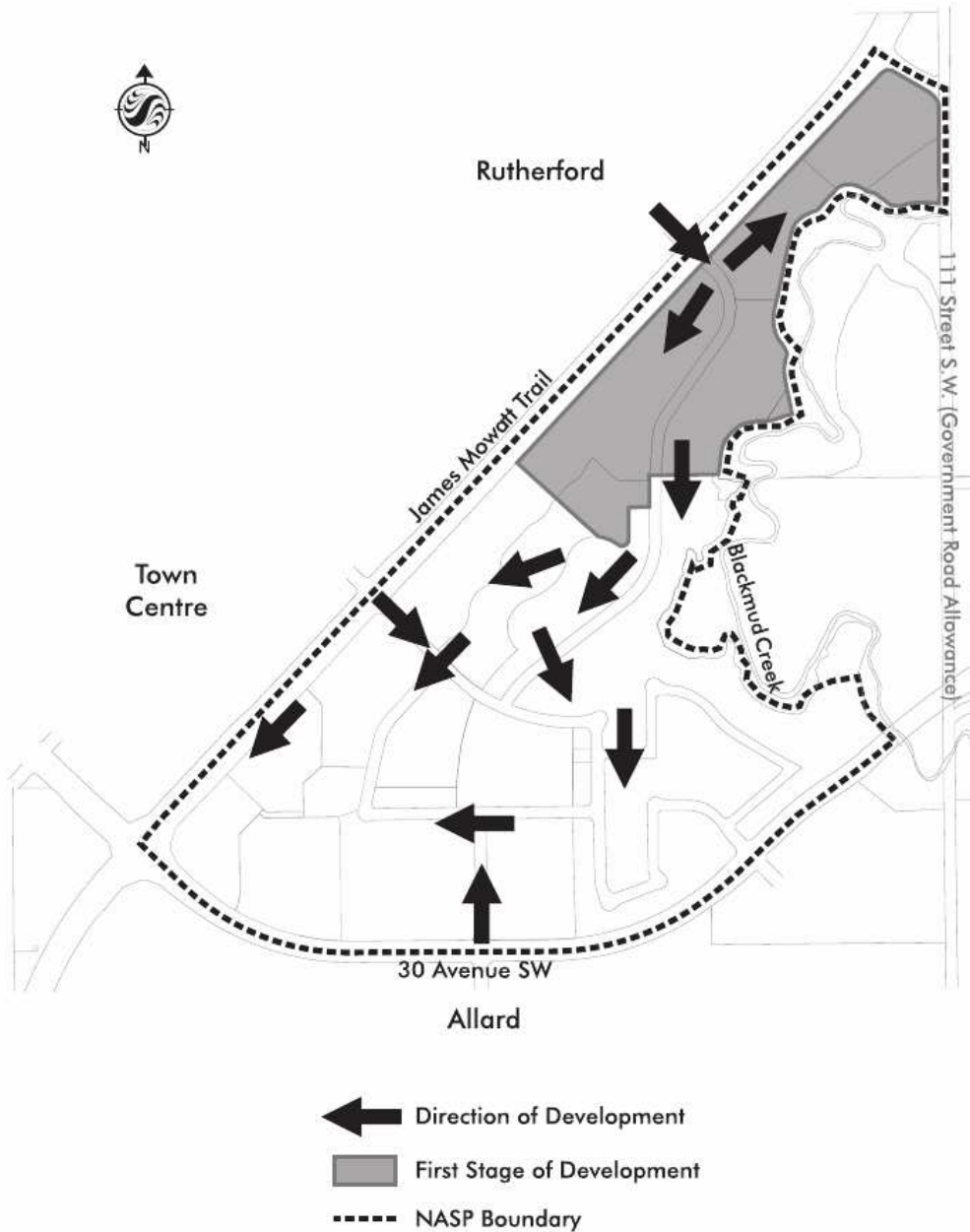
If conventional zoning does not achieve the neighbourhood objectives and development guidelines set out in the NASP, then Direct Control zoning may be required.

The portion of road right of way along 30 Avenue SW in the plan area will need to be closed and rezoned for alternate uses as shown in the Development Concept.

In accordance with the City of Edmonton's Urban Traffic Noise Policy, a noise evaluation will be carried out prior to subdivision application to verify that future noise levels meet the 60dBA objective adjacent to James Mowatt Trail and 30 Avenue SW. If the evaluation confirms that the 60dBA objective will be exceeded, noise attenuation will be provided at these locations by the developer.

Figure 11.0 – Staging Concept
(Bylaw 15450, July 5, 2010)

Figure 11 - Staging Concept



Callaghan - Neighbourhood Area Structure Plan

C. APPENDIX A

D. LAND USE & POPULATION STATISTICS

**CALLAGHAN NEIGHBOURHOOD AREA STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 15627**

LAND USE	Area (ha)	% of GDA
Gross Area	83.74	
Arterial Road Right-of-Way	6.73	
Gross Developable Area	77.01	100.0%
Parkland, Recreation, School, Municipal Reserve		
Park	4.00	5.2%
Greenway	0.08	0.1%
Private Open Space	0.76	1.0%
Transportation		
Circulation	12.71	16.5%
Infrastructure / Servicing		
Stormwater Management	3.58	4.6%
Total Non-Residential Area	21.13	27.4%
Net Residential Area	55.88	72.6%

RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units/ha	Units	People/Unit	Population	% of NRA
Low Density Residential						
<i>Single/Semi-Detached</i>	36.19	25	905	2.8	2534	64.8%
Medium Density Residential						
<i>Low-Rise/Medium Density Housing</i>	19.69	90	1773	1.8	3192	35.2%
Total	55.88		2678		5726	100.0%

Sustainability Measures

Population Per Net Hectare (ppnha)	103
Units Per Net Residential Hectare (upnrha)	48
[Single/Semi-Detached] / [Row Housing; Low-rise/Medium Density Housing] Unit Ratio	33.8% / 66.2%
Population (%) within 500m of Parkland	100%
Population (%) within 400m of Transit service	100%
Population (%) within 600m of Commercial service	70.0%

As Amended by Bylaw 15627, December 13, 2010