

# Graydon Hill Neighbourhood Area Structure Plan

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Office Consolidation February 2013

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*Prepared by:*

*Current Planning Branch  
Sustainable Development  
City of Edmonton*

**Bylaw 16323 was adopted by Council in January 2013. In February 2013, this document was consolidated by virtue of the incorporation of the following bylaws, which were amendments to the original Bylaw 16323:**

Bylaw 16323                      Approved January 21, 2013 (to adopt the Graydon Hill NASP)

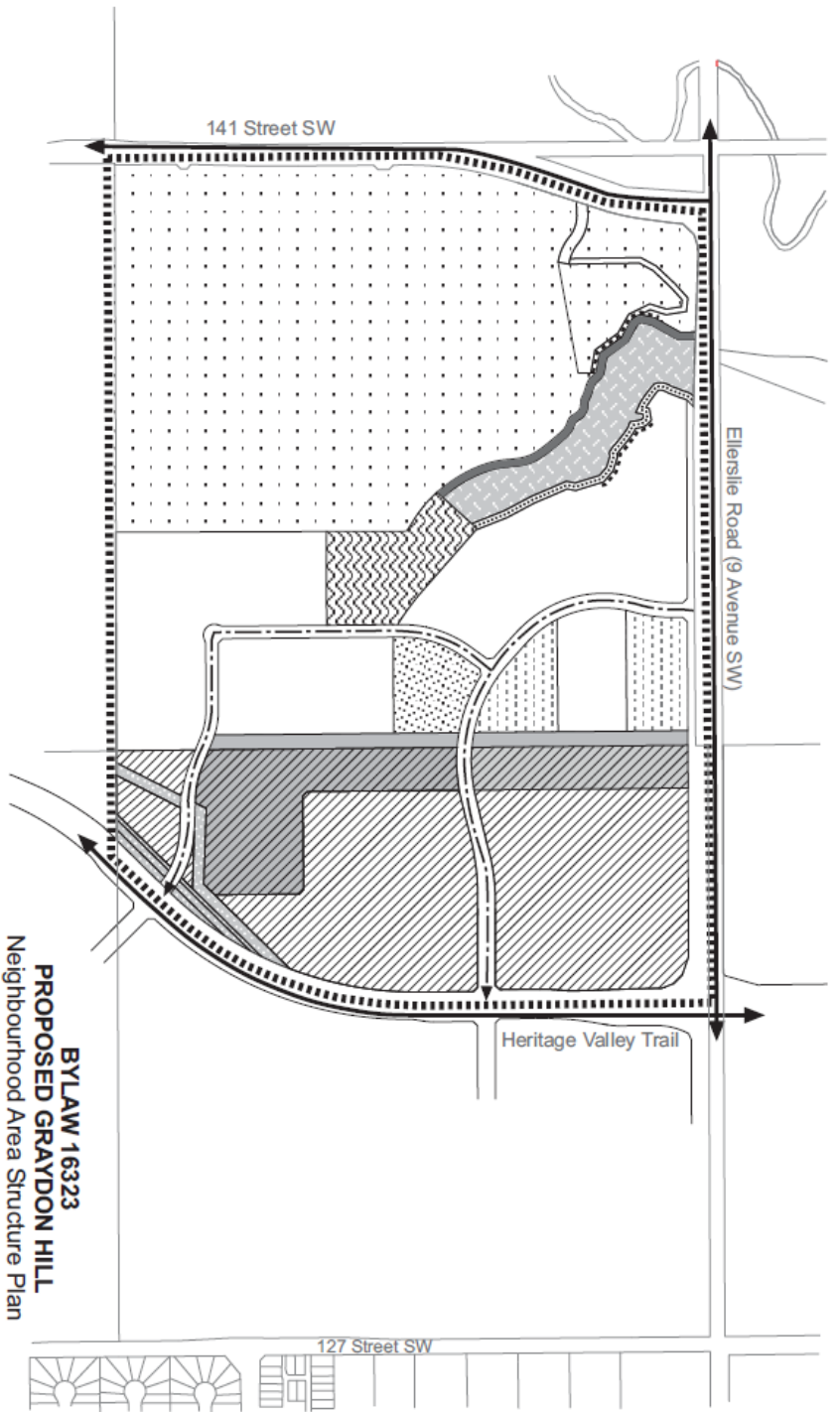
*Editor's Note:*

This is an office consolidation edition for the Graydon Hill NASP, as approved by City Council on January 21, 2013. For the sake of clarity a standardized format was utilized in this Plan. Private owner's names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. All text changes are noted in the right margin and are italicized where applicable. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaw.

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**



**BYLAW 16323**  
**PROPOSED GRAYDON HILL**  
 Neighbourhood Area Structure Plan

- Low Density Residential
- Medium Density Residential
- Institutional (Cemetery)
- Stormwater Management Facility

- Special Study Area (Government of Alberta)
- Natural Area/Special Study Area
- Natural Area
- Environmental Reserve
- Public Upland Area

- Top-of-Bank Shared-Use Path
- Top-of-Bank Roadway
- Public Utility R/W
- Collector Roadway
- Arterial Roadway
- NASP Boundary

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

**SUSTAINABLE DEVELOPMENT**

**GRAYDON HILL NEIGHBOURHOOD AREA STRUCTURE PLAN  
LAND USE AND POPULATION STATISTICS  
BYLAW 16323**

<b>LAND USE</b>	<b>Area (ha)</b>	<b>% of GA</b>
<b>GROSS AREA</b>	<b>88.78</b>	<b>100.0%</b>
Environmental Reserve	2.53	
Public Upland Area (ER)	0.88	
Land Between Urban Development Line and Top of Bank Roadway*	0.01	
Arterial Road Right-of-Way	5.07	
Utility Right of Way	1.03	
	<b>Area (ha)</b>	<b>% of GDA</b>
<b>GROSS DEVELOPABLE AREA</b>	<b>79.26</b>	<b>100%</b>
Institutional	32.60	0%
Cemetery**		32.60
Special Study Area	15.40	
Parks and Open Space***	8.12	10.2%
Pocket Park		1.25
Natural Area		6.87
Transportation	4.97	6.3%
Circulation		4.97
Infrastructure / Servicing	2.14	
Stormwater Management Facilities		2.14
<b>TOTAL Non-Residential Area</b>	<b>63.23</b>	<b>19.22%</b>
<b>Net Residential Area (NRA)</b>	<b>16.03</b>	<b>20.22%</b>

**RESIDENTIAL LAND USE, UNIT AND POPULATION COUNT**

<b>Land Use</b>	<b>Area (ha)</b>	<b>Units/ha</b>	<b>Units</b>	<b>% of Total</b>	<b>People/Unit</b>	<b>Population</b>
<b>Low Density Residential (LDR)</b>						
Single/Semi-Detached	13.61	25	340	61%	2.80	953
Row Housing****		45				
<b>Medium Density Residential (MDR)</b>						
Low-Rise/Medium Density Housing	2.42	90	218	39%	1.80	392
<b>Total</b>	<b>16.03</b>		<b>558</b>	<b>100%</b>		<b>1,345</b>

**SUSTAINABILITY MEASURES**

Population Density (ppnha):		84
Unit Density (upnrha)		35
Single/Semi-Detached // Rowhousing, Low-Rise/Medium Density Housing		63% / 37%
Population (%) within 500 m of Parkland		100%
Population (%) within 400 m of Transit Service		93%
Population (%) within 600 m of Commercial Service		0%
<b>Presence / Loss of Natural Area Features</b>	<b>Land</b>	<b>Water</b>
Protected as Environmental Reserve (ha)	3.42	n/a
Conserved as Naturalized Municipal Reserve (ha)	n/a	n/a
Protected through other means (ha)	n/a	n/a
Lost to Development (ha)	2.14	n/a

**STUDENT GENERATION STATISTICS**

<b>Public School Board</b>	<b>317</b>
Elementary	159
Junior High	79
Senior High	79
<b>Separate School Board</b>	<b>159</b>
Elementary	79
Junior High	40
Senior High	40
<b>Total Student Population</b>	<b>476</b>

\*As per TOB Policy C542, the area between the TOB roadway and the Urban Development Line shall be deducted from the gross area. Exact areas will be confirmed at the time of subdivision and through legal survey.

\*\* Municipal Reserve for Cemetery lands to be provided as DRC on Title.

\*\*\*Areas dedicated to Municipal Reserve to be confirmed by legal survey.

\*\*\*\* Row Housing will be limited to 10% of the total Low Density Residential units.

# Graydon Hill

## Neighbourhood Area Structure Plan



December 2012



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## 1. Administration

### 1.1 - Purpose

The purpose of the Graydon Hill Neighbourhood Area Structure Plan (NASP) is to depict the land use framework as well as the development and servicing goals for Graydon Hill. This NASP specifies the following:

- The location, configuration and area of various land uses including residential, parks, open spaces, institutional, special study area, and public utility land uses;
- The anticipate density of residential development;
- The pattern and alignment of the arterial and collector roadway and pedestrian walkway system;
- The required utility infrastructure concept; and,
- The implementation and phasing of development.

### 1.2 - Authority

The Graydon Hill NASP was adopted by Edmonton City Council on January 21, 2013 as Bylaw 16323 in accordance with Section 633 of the *Municipal Government Act* (MGA).

Amended  
by author

### 1.3 - Timeframe

Development in Graydon Hill is expected to commence in 2013 and is estimated at current absorption rates, to be complete within approximately 10 years.

### 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, rational, 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, without formal plan amendment.

### 1.5 - Monitoring

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



## 1.6 - Amendment

Amendments to the Graydon Hill NASP document involving policies, text or mapping shall be completed in accordance with the *Municipal Government Act*, *The Way We Grow: Edmonton's Municipal Development Plan (MDP)*, the *Heritage Valley Servicing Concept Design Brief (SCDB)* and all other applicable bylaws, policies, and procedures.

## 1.7 - Orientation

This document contains three sections and two appendices.

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





## 2. Plan Context

### 2.1 - Location

Graydon Hill is composed of three parcels listed in **Table 1 - Land Ownership**. Graydon Hill is one of 14 neighbourhoods in the Heritage Valley Servicing Concept Design Brief (SCDB), and covers approximately 88.78 ha (219.38 ac) in the southwest portion of Edmonton (**Figure 1 – Location Plan**).

Graydon Hill is defined by the following boundaries (see **Figure 2 – Context Plan**):

- North – Ellerslie Road (9<sup>th</sup> Avenue S.W.)
- East – Heritage Valley Trail
- South – Paisley (Neighbourhood 12) boundary
- West – 141<sup>st</sup> Street S.W.

The Transportation Utility Corridor (TUC) is located immediately north of Ellerslie Road (9<sup>th</sup> Avenue S.W.). A Special Study Area is located east of Heritage Valley Trail. Graydon Hill is located immediately north of the Paisley neighbourhood (Heritage Valley Neighbourhood 12). The Paisley NASP was adopted by City Council in August 2011 and is currently starting to develop. The Hays Ridge Neighbourhood is located immediately west of 141<sup>st</sup> Street. The Hays Ridge Neighbourhood was adopted by City Council in April 2012 and is currently starting to develop.

### 2.2 - Background

The Graydon Hill NASP was prepared in response to the current and anticipated market demands in the Edmonton area as well as the aspirations of the landowners in the plan area. Further information regarding land ownership, implementation, and site context can be found in **Section 2 – Plan Context** (see **Table 1 – Land Ownership** and **Figure 3 – Land Ownership**).

The preparation of this NASP has been guided by existing City of Edmonton statutory plans and policies including *The Way We Grow*, *The Way We Move*, *The Way We Green*, *The Way We Live*, The Heritage Valley SCDB, the Suburban Neighbourhood Design Principles (SNDP), the Urban Parks Management Plan (UPMP), and the City of Edmonton Housing Mix Guidelines as well as the Capital Region Growth Plan. Conformance to these policies is reference in **Appendix 1**.

The plan area is a sound planning unit that is suitable for a NASP and represents a logical extension of infrastructure and services related to currently planned neighbourhoods. It is designated as “Developing, Planned and Future Neighbourhoods” by *The Way We Grow* and is adjacent to the developing neighbourhoods of Chappelle, Rutherford, Hays Ridge and Paisley, and the future Heritage Valley 14 neighbourhood. Proximity of other service infrastructure will provide the necessary means of meeting the required municipal standards for the development of the entire neighbourhood.

Graydon Hill consists of undeveloped agricultural land, a cemetery and Government of Alberta lands.

The NASP is 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.

# Graydon Hill - Neighbourhood Area Structure Plan



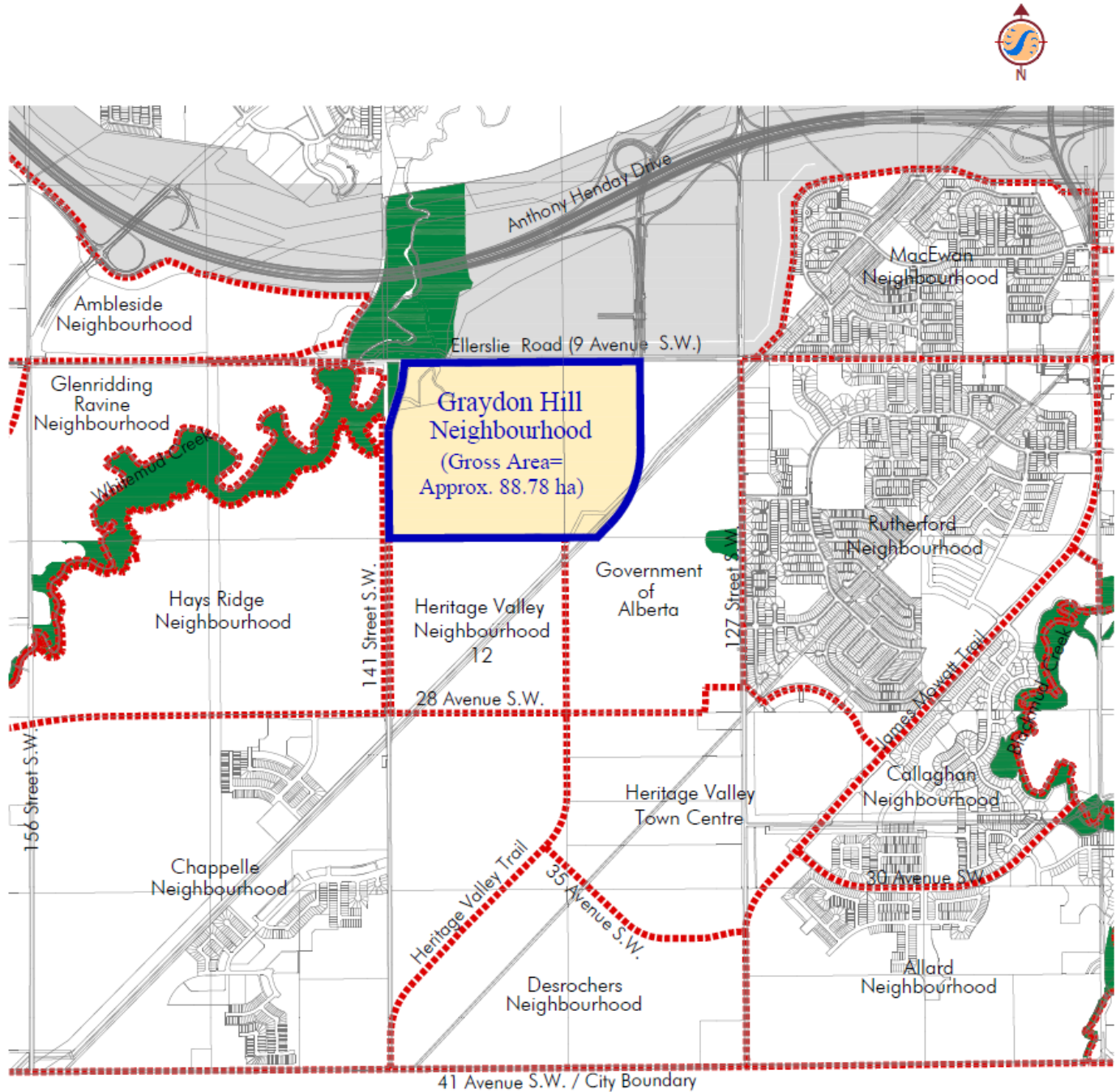
Figure 1  
Location Plan



# Graydon Hill - Neighbourhood Area Structure Plan



Figure 2  
Context Plan

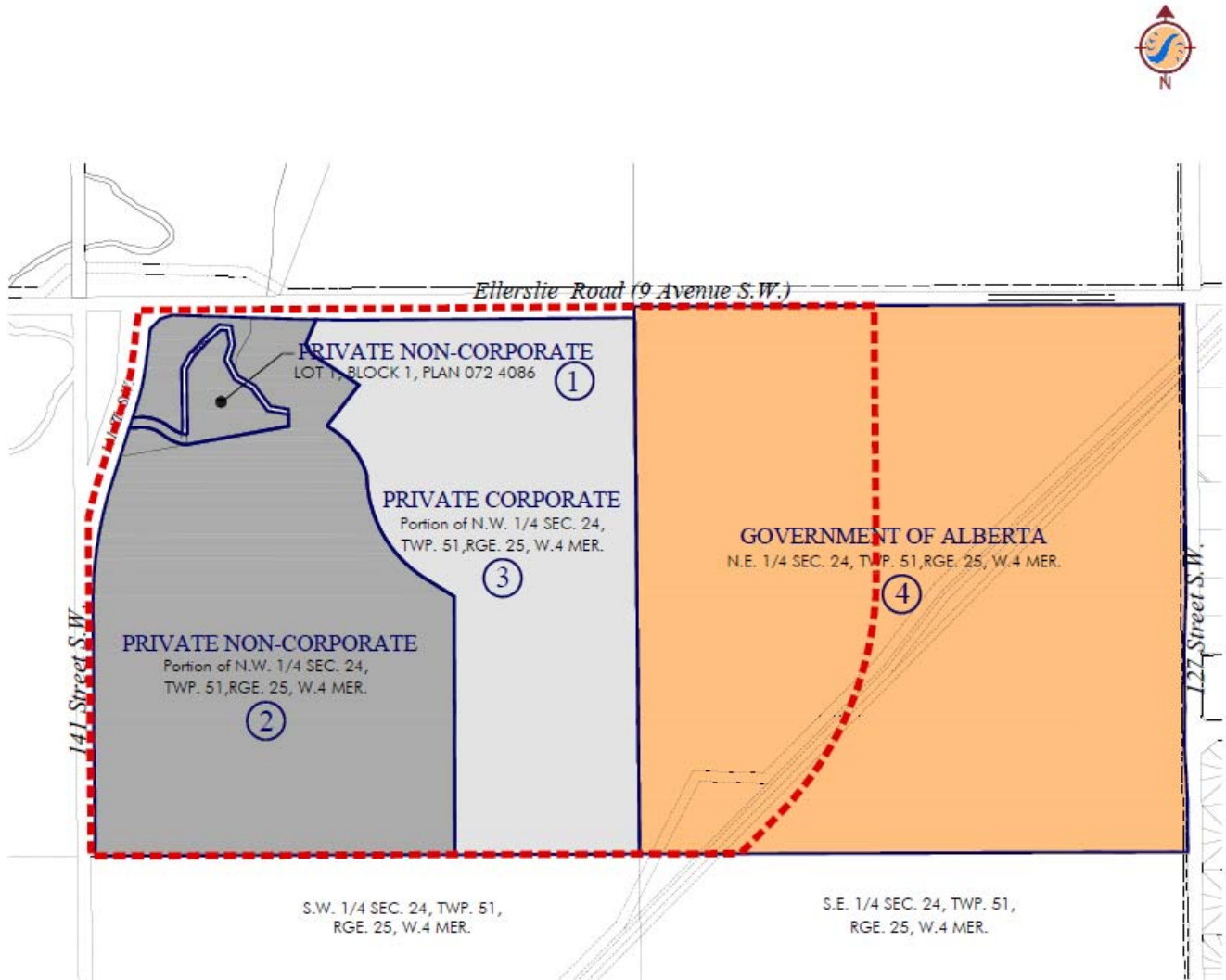


Legend

- Graydon Hill NASP Boundary
- Adjacent Neighbourhood Boundary



**Figure 3**  
**Land Ownership**



**Legend**

- Government Of Alberta
- Private Corporate
- Private Non-Corporate
- NASP Boundary
- # Map Reference Number



## 2.3 - Land Ownership

The NASP was prepared on behalf of a private developer, who has beneficial ownership of the land within the plan area at the time of plan preparation. The three remaining parcels are held by non-participating landowners and although not participating in the NASP process, both the Government of Alberta and Rosehill Cemetery have been consulted and are aware that an NASP is proposed for the subject lands. Current (2012) ownership is described below in **Table 1 - Land Ownership** and shown in **Figure 3 – Land Ownership**.

**Table 1 - Land Ownership**

Map Reference Number	Titled Owner	Legal Description	Area in NASP	Titled Area
1	Private Non-Corporate <sup>NP</sup>	Lot 1, Block 1, Plan 072	1.43 ha	1.43 ha
2	Private Non-Corporate <sup>NP</sup>	Portion of N.W. ¼ Sec. 24-51-25-4	31.87 ha	31.87 ha
3	Private Corporate	Portion of N.W. ¼ Sec. 24-51-25-4	27.79 ha	27.79 ha
4	Government <sup>NP</sup>	N.E. ¼ Sec. 24-51-25-4	25.63 ha	64.6 ha
	Ellerslie Road (9 <sup>th</sup> Avenue S.W.) & 141 Street Road Rights of Way		2.07 ha	
Total			88.78 ha	127.76 ha

<sup>NP</sup> Indicates a non-participating landowner

## 2.4 - Site Context

### 2.4.1 - Topography

The topography of the lands within Graydon Hill is gently undulating throughout and sloping northwest towards the Whitemud Creek (see **Figure 4 – Site Contours**). Elevations throughout the plan area vary between 670 m in the northwestern portion of the plan area to 690 m in the southeast portion of the plan area. Surface drainage generally flows towards the northwest. **Figure 5 – Site Features**, illustrates that the majority of the plan area has been cleared of vegetation with the exception of the tree stand that is centrally located.

### 2.4.2 - Soil and Groundwater Conditions

Soils within Graydon Hill generally consist of unconsolidated quaternary deposits underlain by bedrock, known as the Wapiti Formation, which consists of grey feldspathic, clayey sandstone, bentonitic muds, and scattered coal beds. The formation is non-marine in origin.

The groundwater flow direction is generally to the northwest. The possible regional groundwater yield from underlying water-bearing units is expected to range from 27 to 135 m<sup>3</sup>/day and flows towards the Whitemud Creek.

A Geotechnical Investigation was conducted for the participating landowner of the property contained within the plan area. The Geotechnical Investigation has been submitted to the City of Edmonton under separate cover and has been reviewed by the City of Edmonton's Geotechnical Engineer.

# Graydon Hill - Neighbourhood Area Structure Plan



Figure 4  
Site Contours



## Legend

- NASP Boundary



# Graydon Hill - Neighbourhood Area Structure Plan



Figure 5  
Site Features



## Legend

 Existing Structure	 Drainage Area	 Pipeline R/W
 Woodlot (SW26)	 Wetland	 NASP Boundary
 Ravine Tip	 Woodlot	



## 2.4.3 - Natural Areas and Ecological Resources

The City of Edmonton's Inventory of Environmentally Sensitive and Significant Natural Areas (Geowest, 1993) identifies one Natural Area within the NASP boundary (see **Figure 5 – Site Features**)

**SW26 Environmentally Sensitive Area (ESA) (University of Alberta Farm Woodland):** SW26 is a narrow remnant of a balsam poplar/trembling aspen stand, approximately 6.24 ha in size, with an understory of shrubby vegetation dominated by red-osier dogwood, rose, honeysuckle, gooseberry, snowberry, wild raspberry, and saskatoon. The tree stand will provide an ecological linkage and habitat for a variety of plant and wildlife species and will add aesthetic value to the neighbourhood. A buffer will be provided between SW 26 and urban development which will protect the natural area from impacts due to development and proximity to residential lots. The buffer will be measured from the drip line outwards 10 metres (see **Figure 7 – Land Use Concept**) and is approximately 0.63 ha in size.

The field reconnaissance identified a drainage area oriented northwest/southeast across the central portion of the proposed neighborhood and an associated ravine tip located adjacent to Ellerslie Road on the north boundary. The drainage area contains small pockets of emergent vegetation including reed canary grass and awned sedge amidst agronomic graminoid species such as smooth brome. The Ravine drains into Whitemud Creek. Vegetation observed within the Ravine Tip includes white spruce, birch, aspen, bracted honeysuckle, red osier dogwood, wild rose, and snowberry

An Environmental Network Report (ENR) prepared by Stantec Consulting Ltd. was submitted to the City of Edmonton under separate cover. The report recommends the preservation of the Environmental Reserve Area and SW26

A Natural Area Management Plan (NAMP) for the Natural Area - SW26, within the Special Study Area will be required prior to the rezoning stage.

## 2.4.4 - Wetland Assessment

A Wetland Assessment prepared by Stantec Consulting Ltd. will be submitted under separate cover to Alberta Environment and Water (AENVW) and Alberta Sustainable Resource Development (ASRD). The Wetland Assessment was conducted on behalf of the participating landowner in Graydon Hill.

The Wetland Assessment identified a drainage area observed through field reconnaissance in November 2011 and aerial photograph review dating back to 1950.

AENVW (administrator of the *Water Act*) and ASRD (administrator of the *Public Lands Act*) will be contacted regarding any drainage areas/wetlands that are to be disturbed. Under the *Water Act*, AENVW has a policy of no net loss in regards to wetlands in Alberta, and as such, requires compensation to be made if a wetland is to be disturbed. Under the *Public Lands Act*, ASRD can claim ownership of the bed and shore of water bodies deemed reasonably permanent. Within Graydon Hill, the drainage area identified in the associated Wetland Assessment will be disturbed and converted to a constructed wetland as development proceeds. Consultation with AENVW and ASRD will occur and appropriate regulatory approvals will be obtained.

## 2.4.5 - Existing Land Uses

The majority of the plan area currently (2012) consists of undeveloped agriculture land and a cemetery. None of these existing uses pose any particular constraints to future urban development. However, future development of any and all properties within the neighbourhood is at the discretion of the respective landowners.

## 2.4.6 - Environmental Site Assessment

The following information presented in **Table 2 – Environmental Site Assessments** and illustrated on **Figure 6 – Environmental Site Assessment Overview** is based on the Phase I Environmental Site Assessment (ESA) conducted





for the participating landowner within the plan area. The City of Edmonton requires that individual landowners provide ESAs or disclosure statements prior to 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.

**Table 2** summarized the status of completed Phase I ESA reports.

**Table 2 - Environmental Site Assessments**

Map Reference Number	Titled Owner	Legal Description	ESA
1	Private Non-Corporate <sup>NP</sup>	Lot 1, Block 1, Plan 072	Required
2	Private Non-Corporate <sup>NP</sup>	Portion of N.W. ¼ Sec. 24-51-25-4	Phase I ESA Signed-Off
3	Private Corporate	Portion of N.W. ¼ Sec. 24-51-25-4	Phase I ESA Signed-Off
4	Government <sup>NP</sup>	N.E. ¼ Sec. 24-51-25-4	Required

<sup>NP</sup> Indicates a non-participating landowner

## 2.4.7 - Historical Resources

A Statement of Justification (SoJ) for *Historical Resources Act* requirements has been completed for the participating lands and submitted to Alberta Culture and Community Spirit (ACCS) in support of the Graydon Hill NASP. **Table 3 – Historical Resources Overview** presents a summary of the parcels that have received clearance from ACCS study and outlines properties of non-participating landowners for which a Statement of Justification will be required prior to rezoning.

Based on ACCS’s review of the HRO, a Historical Resources Impact Assessment (HRIA) for palaeontology is required. The HRIA for palaeontology has been completed and *Historical Resources Act* clearance has been provided by ACCS.

Pursuant to Section 31 of the *Historical Resources Act* (HRA), development proponents and/or their representative(s) 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 Graydon Hill NASP is important to retaining local history and character that may also be of regional or provincial significance.

**Table 3 - Historical Resources Overview**

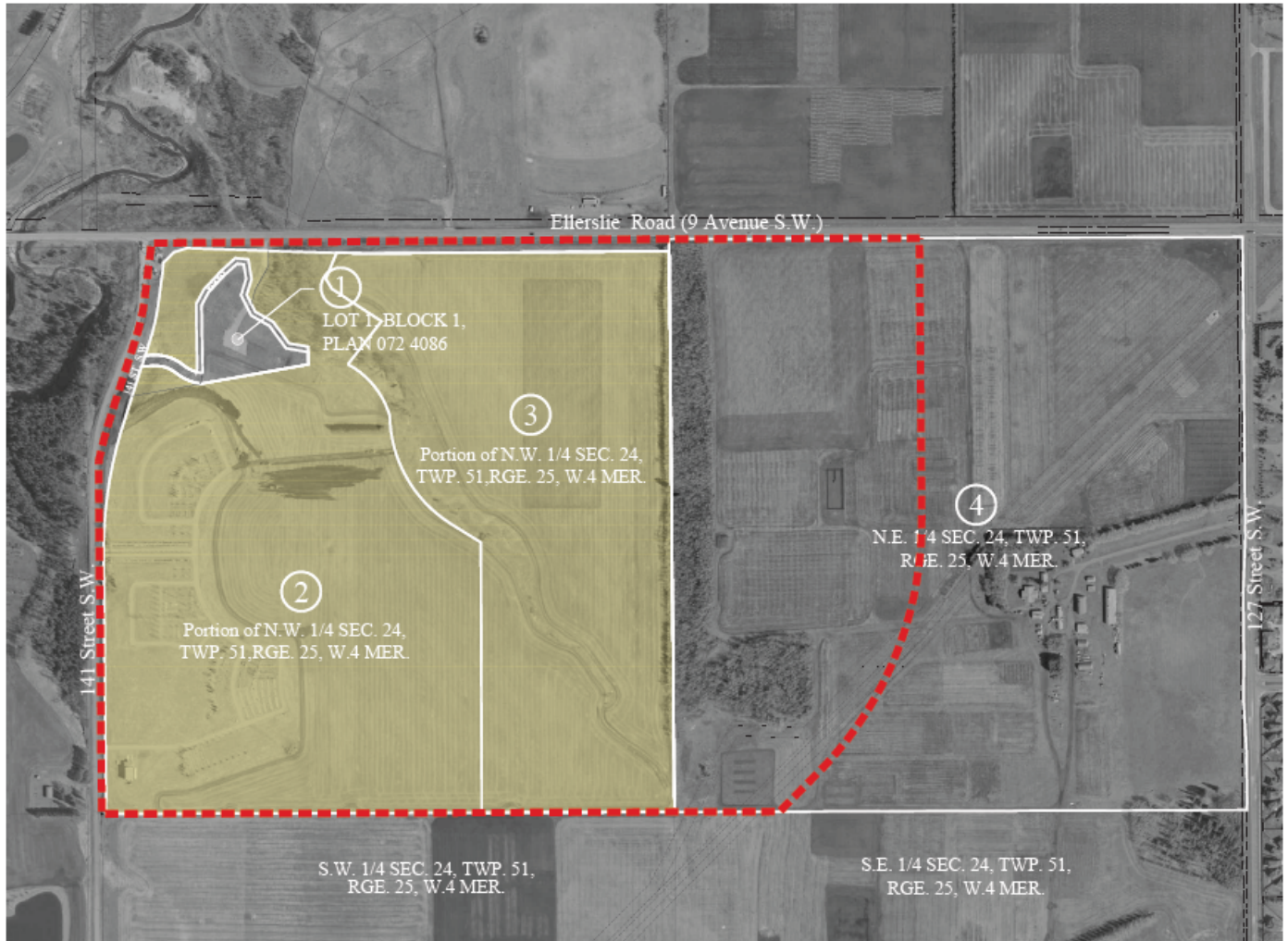
Map Reference Number	Titled Owner	Legal Description	SoJ	HRIA
1	Private Non-Corporate <sup>NP</sup>	Lot 1, Block 1, Plan 072	Required	
2	Private Non-Corporate <sup>NP</sup>	Portion of N.W. ¼ Sec. 24-51-25-4	Required	
3	Private Corporate	Portion of N.W. ¼ Sec. 24-51-25-4	Clearance	Clearance
4	Government <sup>NP</sup>	N.E. ¼ Sec. 24-51-25-4	Required	

<sup>NP</sup> Indicates a non-participating landowner



Figure 6

Environmental Site Assessment Overview



**Legend**



Environmental Site Assessment Completed



Map Reference Number



NASP Boundary



## 2.4.8 - Pipelines, Wells, and Utility Corridors

A review of information obtained from the Alberta Energy Resources Conservation Board (ERCB) shows that there are ten registered pipelines and no oil and gas wells within the NASP area (see **Figure 5 – Site Features**). Within the southeastern portion of the plan area is a pipeline corridor which contains six operational pipelines, three abandoned pipelines and one discontinued pipeline. The pipeline corridor runs diagonally (southwest to northeast) in the southeastern corner of the NASP. The six operational pipelines carry natural gas, as well as high vapour pressure (HVP) and low vapour pressure (LVP) products. All pipeline rights-of-way will be accommodated in the Land Use Concept.

**Table 4 - Pipeline Information Summary**

Pipeline License #	Licensee	Substance	Status
13023-4	Alberta Ethane Development Company Ltd.	HVP Products	Operational
6782-2	BP Canada Energy Company	HVP Products	Operational
8167-1	BP Canada Energy Company	HVP Products	Operational
50724-2	Keyera Energy Ltd.	HVP Products	Abandoned
50726-1	Keyera Energy Ltd.	LVP Products	Abandoned
50726-2	Keyera Energy Ltd.	LVP Products	Abandoned
50725-1	Keyera Energy Ltd.	HVP Products	Discontinued
1829-13	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	Operational
1829-87	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	Operational
13452-13	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	Operational

## 2.5 - Public Involvement

Consistent with Policy C513 – City of Edmonton’s Public Involvement Policy, advance notification was sent to surrounding property owners and affected Community Leagues on September 27, 2012 advising them of the application to create the Graydon Hill NASP and encouraging them to contact either the Sustainable Development Department or the applicant to communicate any possible concerns.

As part of the planning process, a public meeting was held by the City of Edmonton’s Sustainable Development Department on October 4, 2012 at the Ellerslie Rugby Club. Mailed notification letters were sent to landowners in proximity to the NASP area advising of this meeting. The meeting was also advertised in the Edmonton Journal on September 22, 2012. At the meeting, landowners had an opportunity to review and comment on the NASP. Landowners will also be notified of the Public Hearing and requested to provide either written or verbal comments to Council.



## 3. Land Use, Transportation, and Servicing

### 3.1 - Vision

Graydon Hill is a compact, well-connected neighbourhood that will provide a variety of housing types for all ages and economic levels. An integrated system of parks and open space will be provided along with the conservation of the area's natural features, enriching the neighbourhood with amenity space and recreational opportunities.

### 3.2 - Goals and Objectives

The Graydon Hill NASP was prepared in accordance with the policies and principles in The Way We Grow, The Way We Move, The Way We Live, The Way We Green, the Heritage Valley Servicing Concept Design Brief and other relevant municipal and statutory documents (see **Appendix 1**). The overall goals of the Graydon Hill NASP are to establish a neighbourhood that:

- ❖ Enables a variety of housing forms and residential densities to encourage diversity;
- ❖ Combines land use decisions with sustainable development and urban design principles;
- ❖ Encourages the development of community places which are safe and utilized to promote community interaction;
- ❖ Promotes connectivity within the community and encourages a pedestrian oriented environment;
- ❖ Provides a balanced transportation system that maximizes transit access and connects major inter-and intra-neighbourhood focal points;
- ❖ Provides efficient, contiguous and staged infrastructure and urban development.
- ❖ Addresses comfort and safety in response to year-round weather.

The following plan objectives were developed to assist in achieving the above noted goals:

#### Green Development

- 1) Consider sustainable development principles in the planning and design of Graydon Hill.
- 2) Ensure a compact urban form that uses land responsibly and efficiently.
- 3) Encourage naturalized landscaping on public and private lands.

#### Urban Design

- 4) Develop low density residential uses in the form of single/semi-detached housing, and medium density residential uses in the form of low-rise/medium density housing to a high urban design standard.
- 5) Design residential streets, which are pedestrian friendly, safe, and form an integral and attractive component of the public realm.
- 6) Create identifiable focal points that are integrated with the open space system of the neighbourhood.
- 7) Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.
- 8) Provide signage complementary to the theme of the neighbourhood.
- 9) Ensure neighbourhood infrastructure and design elements address year round weather conditions.

#### Ecology

- 10) Protect the Ravine Tip.
- 11) Strengthen Edmonton's ecological network.
- 12) Conserve the Environmentally Sensitive Area (SW26) within the plan area.



## Environment

- 13) Ensure that the environmental status of the lands within Graydon Hill are suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.
- 14) Ensure development respects the ongoing operation and integrity of existing pipeline infrastructure.

## Historical Resources

- 15) Ensure that historical, archaeological and paleontological resources are identified and conserved, where applicable.

## Residential

- 16) Provide a variety of housing types that serve a range of income groups, income levels and needs.
- 17) 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.
- 18) Establish affordable housing opportunities in Graydon Hill.
- 19) Locate Low-Rise/Medium Density Housing development to facilitate access to arterial and/or collector roadways, public transit service and/or in proximity to park spaces.

## Parks and Open Space

- 20) Accommodate City of Edmonton requirements for park sites within the neighbourhood.
- 21) Locate park spaces centrally within the neighbourhood to ensure accessibility via pedestrian linkages and automobiles.
- 22) Design a connected and integrated open space system that encourages active transportation.
- 23) Conserve the Environmentally Sensitive Area (SW26).

## Institutional and Special Study Area

- 24) Accommodate future institutional development of the existing cemetery within the NASP.
- 25) Maintain the land use designation of Special Study Area for the Government of Alberta lands.

## Transportation

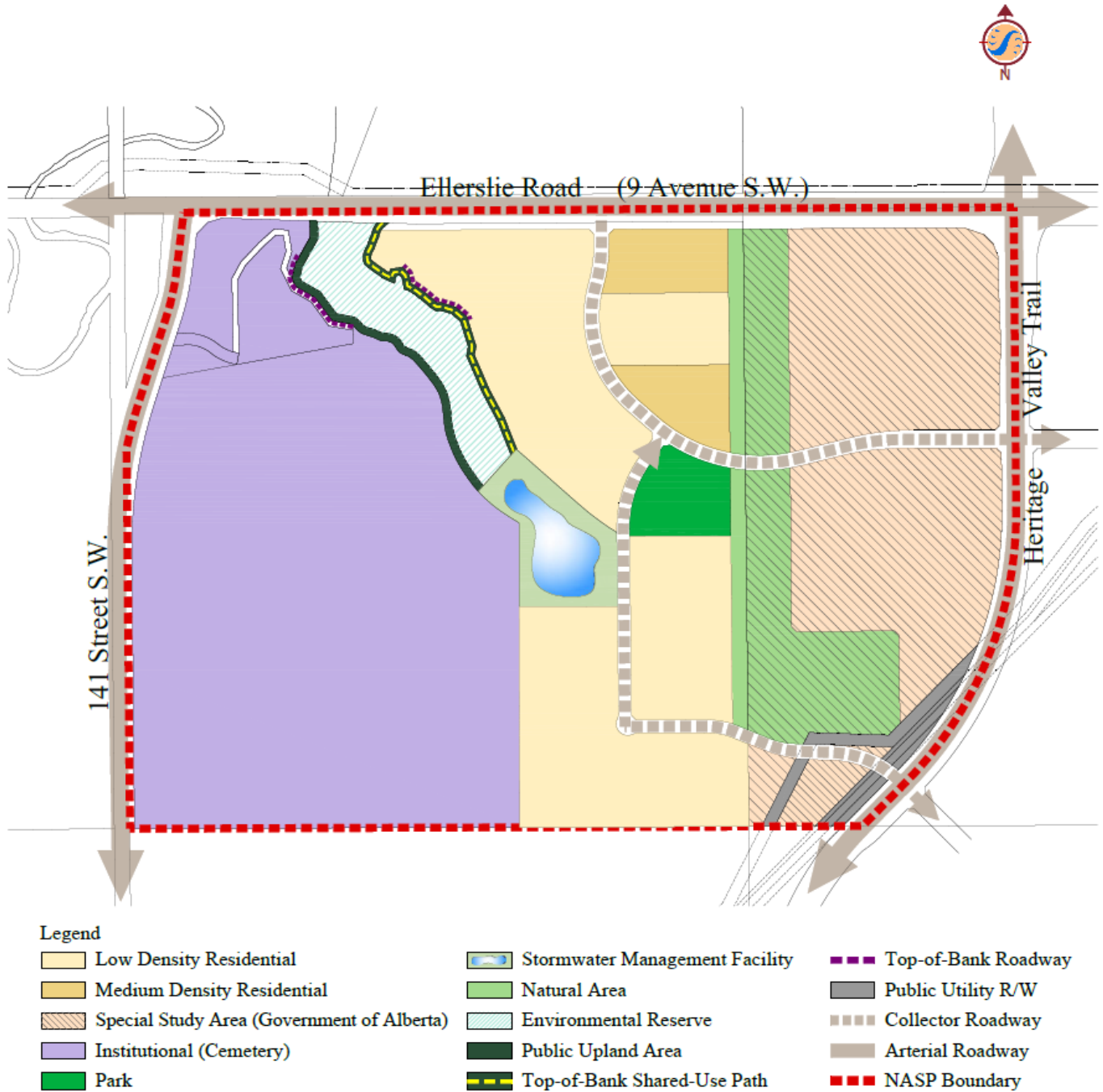
- 26) Implement the City of Edmonton road hierarchy system of an integrated arterial, collector, and local roadway network.
- 27) Provide opportunity for roadways to be developed with reduced or alternative standards.
- 28) Promote connectivity and pedestrian access to amenity areas such as the park, natural area, open spaces, and institutional uses by providing an alternative circulation system.
- 29) Maximize access to transit facilities for the greatest number of residents in accordance with City of Edmonton Transit System Guidelines and demands.
- 30) Create adequate locations for neighbourhood access.
- 31) Ensure that maximum length of cul-de-sacs in residential settings do not compromise City emergency response plans, operations and maintenance.
- 32) Provide noise attenuation where residential uses back onto major transportation corridors (i.e. Ellerslie Road (9<sup>th</sup> Avenue SW)), which has been designated or will be designated as truck routes.
- 33) Ensure that the cost of arterial roadways is shared throughout the Heritage Valley catchment area.

## Infrastructure

- 34) Ensure that Graydon Hill is serviced to a full urban standard.



Figure 7  
Land Use Concept



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

# Graydon Hill - Neighbourhood Area Structure Plan



**Table 5 – Land Use and Population Statistics**

<b>Graydon Hill Neighbourhood Area Structure Plan Land Use and Population Statistics</b>							
<b>LAND USE</b>	<b>Area (ha)</b>	<b>% of GA</b>					
<b>Gross Area</b>	<b>88.78</b>	<b>100.0%</b>					
Environmental Reserve	2.53						
Public Upland Area (ER)	0.88						
Land Between Urban Development Line and Top of Bank Roadway*	0.01						
Arterial Road Right-of-Way	5.07						
Utility Right of Way	1.03						
	<b>Area (ha)</b>	<b>% of GDA</b>					
<b>Gross Developable Area</b>	<b>79.26</b>	<b>100%</b>					
Institutional	32.60						0%
Cemetery**		32.60					
Special Study Area	15.40						
Parks and Open Space***	8.12						10.2%
Pocket Park			1.25				
Natural Area			6.87				
Transportation	4.97						6.3%
Circulation			4.97				
Infrastructure / Servicing	2.14						
Stormwater Management Facilities			2.14				2.7%
<b>TOTAL Non-Residential Area</b>	<b>63.23</b>	<b>19.22%</b>					
<b>Net Residential Area (NRA)</b>	<b>16.03</b>	<b>20.22%</b>					
<b>RESIDENTIAL LAND USE, UNIT AND POPULATION COUNT</b>							
<b>Land Use</b>	<b>Area (ha)</b>	<b>Units/ha</b>	<b>Units</b>	<b>% of Total</b>	<b>People/Unit</b>	<b>Population</b>	
<b>Low Density Residential (LDR)</b>							
Single/Semi-Detached	13.61	25	340	61%	2.80	953	
Row Housing****		45					
<b>Medium Density Residential (MDR)</b>							
Low-Rise/Medium Density Housing	2.42	90	218	39%	1.80	392	
<b>Total</b>	<b>16.03</b>		<b>558</b>	<b>100%</b>		<b>1,345</b>	
<b>SUSTAINABILITY MEASURES</b>							
Population Density (ppnha):						84	
Unit Density (upnha)						35	
Single/Semi-Detached // Rowhousing, Low-Rise/Medium Density Housing						63% / 37%	
Population (%) within 500 m of Parkland						100%	
Population (%) within 400 m of Transit Service						93%	
Population (%) within 600 m of Commercial Service						0%	
<b>Presence / Loss of Natural Area Features</b>		<b>Land</b>	<b>Water</b>				
Protected as Environmental Reserve (ha)		3.42	n/a				
Conserved as Naturalized Municipal Reserve (ha)		n/a	n/a				
Protected through other means (ha)		n/a	n/a				
Lost to Development (ha)		2.14	n/a				
<b>STUDENT GENERATION STATISTICS</b>							
<b>Public School Board</b>						<b>317</b>	
Elementary	159						
Junior High	79						
Senior High	79						
<b>Separate School Board</b>						<b>159</b>	
Elementary	79						
Junior High	40						
Senior High	40						
<b>Total Student Population</b>						<b>476</b>	

\*As per TOB Policy C542, the area between the TOB roadway and the Urban Development Line shall be deducted from the gross area. Exact areas will be confirmed at the time of subdivision and through legal survey.

\*\* Municipal Reserve for Cemetery lands to be provided as DRC on Title.

\*\*\*Areas dedicated to Municipal Reserve to be confirmed by legal survey.

\*\*\*\* Row Housing will be limited to 10% of the total Low Density Residential units.



## 3.2.1 - Green Development

*One of the goals of this NASP is the promotion of green building techniques, the preservation of natural ecological features and their integration into the neighbourhood.*

Objective 1	NASP Policy	Implementation
<p>Consider sustainable development principles in the planning and design of Graydon Hill.</p>	<p>Where appropriate the neighbourhood should incorporate alternative development standards such as energy efficient lighting and alternative road construction standards.</p>	<p>Allow flexibility between the developer, homebuilders and the City Administration 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.</p> <p>All alternative development standards shall be reviewed and approved by the City of Edmonton and will not compromise the City's goal of increasing the urban forest.</p>
<p><b>Rationale:</b></p> <p>The use of alternative development standards such as reduced roadway widths will be addressed within 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 alternative design and servicing techniques, roadway cross sections or infrastructure provisions that differs from the City of Edmonton standards) as a way of achieving sustainability.</p>		

Objective 2	NASP Policy	Implementation
<p>Ensure a compact urban form that uses land responsibly and efficiently.</p>	<p>The neighbourhood shall incorporate and support increased densities to make more efficient use of the land.</p>	<p><b>Figure 7 – Land Use Concept</b> and <b>Table 5 – Land Use and Population Statistics</b> illustrates the planned overall density for the NASP that meets the City of Edmonton Council approved Suburban Housing Mix Guidelines and minimum density target for Priority Growth Area Cw of the Capital Region Growth Plan.</p>
<p><b>Rationale:</b></p> <p>Compact development increases residential densities, and contributes to increased efficiency in the provision of municipal services, public transit, schools and nearby commercial developments and neighbourhood amenities.</p>		





Objective 3	NASP Policy	Implementation
<p>Encourage naturalized landscaping on public and private lands.</p>	<p>Landscaping of parks and open spaces should incorporate native and adapted plant species where appropriate.</p>	<p>Develop parks and open space areas using native and adapted plant species.</p> <p>Specific species for landscaping on public properties shall be determined between the developer and City Administration at the time of review of landscaping plans and as part of the engineering drawing review.</p>
<p><b>Rationale:</b></p> <p>Native plant species are those naturalized to a given area and vary by region and local area. The use of plant species which are native or adapted to the local area generally require less irrigation and maintenance than non-native species, which serves to minimize costs associated with development and maintenance. Naturalized landscaping within open spaces provides opportunities to create wildlife habitats, and strengthens the ecological network within the neighbourhood. Non-native species, on the other hand, require more maintenance and weaken an ecosystem's biodiversity and ecological network.</p>		

### Technical Summary

No specific technical requirements are identified.

### 3.2.2 - Urban Design

*Graydon Hill NASP incorporates relevant principles of urban design to establish an appealing, pedestrian friendly and sustainable community in support of the NASP Vision.*

Objective 4	NASP Policy	Implementation
<p>Develop low density residential uses in the form of single/semi-detached housing and row housing, and medium density residential uses in the form of low-rise/medium density housing to a high urban design standard.</p>	<p>Low Density (single/semi-detached and row housing) and Medium Density (low-rise/medium density housing) residential uses shall be appropriately designed to ensure uniformity in built form, unit siting, use of architectural elements and transitioning.</p>	<p>i) Low Density Residential development shall be implemented through Section 900 (Special Areas) of the Edmonton Zoning Bylaw.</p> <p>ii) Medium Density Residential development shall be implemented through Sections 100 and 200 of the Edmonton Zoning Bylaw.</p> <p>iii) The developer/landowner shall implement specific architectural controls to be adhered at the time of development in the neighbourhood.</p>



**Rationale:**

The character of the neighbourhood will be enhanced through regulation of the built form by means of architectural controls.

The neighbourhood will require the implementation of a Section 900 Special Areas Provision designation to regulate the use, design and extent of development within the NASP. The neighbourhood will promote the mixing of low density residential (single/semi-detached and row housing) land uses along many streets in the neighbourhood to create a unique streetscape. In addition, due to the compact nature of the neighbourhood, low-rise/medium density housing will be developed in close proximity to single/semi-detached uses. As a result, attention to detail with respect to urban design is required by means of appropriate transiting and landscaping

Objective 5	NASP Policy	Implementation
<p>Design residential streets, which are pedestrian friendly, safe, and form an integral and attractive component of the public realm.</p>	<p>i) Streetscape design should consider symmetry, variety, massing and opportunities for innovative site design.</p> <p>ii) All streets will form part of the pedestrian linkage system.</p> <p>iii) Appropriate landscaping such as boulevard trees shall be provided along the primary pedestrian linkage system (i.e. arterial or collector roads).</p> <p>Tree species which are salt tolerant shall be included in the detailed landscape design of boulevards.</p>	<p>i) Details regarding the specific type and location of residential uses shall be determined at the rezoning and subdivision application stage where consideration for these elements will be given.</p> <p>ii) Symmetry can be achieved by creating a compatible housing form and zoning designation on either side of a street.</p> <p>iii) The design of roadways, including provision of landscaping (i.e. boulevard trees) and sidewalks shall be implemented at the detailed design stage of development, to the satisfaction of Transportation Services and Sustainable Development.</p> <p>Selection of appropriate tree species shall be implemented at the detailed design stage of development, to the satisfaction of Transportation Services and Sustainable Development.</p>

**Rationale:**

Designing attractive residential streetscapes by using similar or compatible housing forms and zoning designation provides a comfortable physical environment. At the detailed design stage, the function of the roadway will dictate the appropriate cross sections to be used. To ensure comfortable pedestrian movement and safety, sidewalks should be separated from carriageways by treed boulevards and front drive access should be minimized to reduce pedestrian-vehicle conflict.

Objective 6	NASP Policy	Implementation
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<p>Create identifiable focal points that are integrated with the open space system of the neighbourhood.</p>	<p>i) Focal points include the park, stormwater management facility and environmental reserve.</p> <p>ii) Focal points shall function as amenity space for residents and should be comprised of one or a combination of the following elements: public art, seating area, plaza, street furniture, gazebo, fountain/water feature or other architectural elements.</p> <p>iii) Convenient, safe and efficient pedestrian connections for the neighbourhood into and through open spaces/focal points shall be provided.</p>	<p>i) <b>Figure 10 – Pedestrian Network</b> illustrates the connectivity of key neighbourhood focal points.</p> <p>ii) Details regarding the provision and placement of architectural elements within focal points shall be determined at the detailed design stage of development.</p> <p>iii) Detailed regarding the placement of pedestrian connections/crossings shall be determined at the subdivision approval or development stage.</p>
<p><b>Rationale:</b></p> <p>Neighbourhood focal points create community destinations within the neighbourhood. 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. Neighbourhood focal points within the neighbourhood include the pocket park and stormwater management facility. These provide key amenity spaces for local residents and add to the neighbourhood’s attractiveness, character and image as a pedestrian-oriented community and promote social interaction between residents.</p> <p>The location of the stormwater management facility has been determined based upon topography (e.g. low area) and with regards to ensuring an adequate land area for stormwater and utility functions. The park space has been centrally located in order to be easily accessed and viewed by residents. The stormwater management facility and park are generally connected to each other through a shared-use path, sidewalks and other pedestrian linkages.</p>		

Objective 7	NASP Policy	Implementation
<p>Develop park spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.</p>	<p>i) The stormwater management facility (SWMF) shall be designed using Crime Prevention Through Environmental Design (CPTED) principles, accessible through public lands, and not land –locked by private development.</p> <p>ii) Street frontage along roadways that abut the SWMF and pocket park shall be provided in order to maximize public access and provide clear sightlines and views.</p>	<p>i) The location and configuration of the SWMF and park are conceptually illustrated in <b>Figure 7 – Land Use Concept</b> and may be refined prior to zoning.</p> <p>ii) The Subdivision Authority shall have regard for the provision of adequate street frontage abutting the pocket park, per UPMP guidelines, to maintain and enhance view and surveillance opportunities.</p> <p>iii) SWMF landscaping shall be</p>



	<p>iii) The SWMF should be designed to include naturalized shoreline planting intended to provide habitat opportunities for wildlife and improve water quality.</p> <p>iv) Emergency access to the SWMF shall be provided.</p>	<p>determined between the Developer and City Administration at the time of review of landscaping plans and as part of engineering drawing review as part of the subdivision process.</p> <p>iv) The location of the emergency access to the SWMF shall be determined at the subdivision approval stage.</p>
<p><b>Rationale:</b></p> <p>The location, configuration and design of the SWMF and park integrate these uses into the pedestrian network and provide vistas from the abutting roadways, thereby heightening resident awareness of these facilities. This will promote them as walking destinations, and enhance their surveillance to prevent crime. The SWMF and park will be designed to serve as a destination for pedestrians and cyclists and to provide passive recreational opportunities.</p>		

Objective 8	NASP Policy	Implementation
<p>Provide signage complementary to the theme of the neighbourhood</p>	<p>i) Way finding signage shall be provided along pedestrian and cycling routes to encourage safe and efficient movement.</p> <p>ii) Signs should be designed in an aesthetically pleasing manner and in harmony with the architecture theme of the respective building.</p>	<p>i) ii) Details shall be determined at the engineering drawing stage. The Development Officer shall ensure that the Development Permit application is in conformance with the Sign Regulations of the Edmonton Zoning Bylaw.</p>
<p><b>Rationale:</b></p> <p>Signage plays an important role in way-finding and creating an identity for the 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 navigability of the neighbourhood without creating visual clutter.</p>		

*Technical Summary*

No technical study requirements are identified.



Objective 9	NASP Policy	Implementation
<p>Ensure neighbourhood infrastructure and design elements address year round weather conditions.</p>	<p>i) The neighbourhood shall be designed to accommodate infrastructure programming requirements in the public realm including snow clearing and landscaping maintenance.</p> <p>ii) Neighbourhood entrances and outdoor gathering spaces/focal points shall be designed to accommodate year round activity.</p> <p>iii) The design of streetscapes will take into account opportunities to capture sunlight and reduce potential high winds.</p>	<p>i) Boulevards shall be used to accommodate snow removal and year round service vehicles.</p> <p>Alternative development standards shall meet infrastructure programming needs for all seasons.</p> <p>ii) The location and design of outdoor spaces for neighbourhood activities shall consider the incorporation of design elements that respond to all seasons, through such measures as the creative use of light, colour, and ways to provide breaks from wind and extreme temperatures.</p> <p>iii) Higher density residential and commercial sites will be designed considering building orientation and variations in facade treatment that reduce the amount of sun shadowing and prevent wind tunnelling.</p>
<p><b>Rationale:</b></p> <p>Winter is a dominant season in Edmonton and paying close attention to winter design issues will help to alleviate the negative attitudes towards the cold climate. Effective landscaping and wind control measures in parks and public spaces (such as natural and constructed wind barriers and park orientation) can enliven public spaces even on the coldest days.</p>		

### 3.2.3 - Ecology

*The Graydon Hill NASP ensures that the natural area and ravine tip are maintained and protected. Consideration is given to ecological linkages between the natural area, parks, stormwater management facility and the ravine tip. Public access to the ravine tip and natural areas will be provided via pedestrian linkages, pocket park and a Top-of-Bank shared-use path/roadway.*

*The Graydon Hill NASP ensures that the ravine tip is preserved and protected through the establishment of an Urban Development Line (UDL) demarcating the boundary between the developable upland area (urban development) and non-developable area (Environmental Reserve). Public access to the ravine tip shall be provided via a combination of Top-of-Bank (TOB) roadway, totalling a minimum of 30% of the length of the UDL, and a TOB Shared-Use Path along the entire length of the Public Upland Area.*



Objective 10	NASP Policy	Implementation
<p>Protect the Ravine Tip.</p>	<p>i) The Urban Development Line (UDL) shall separate developable from non-developable area to preserve and protect the Ravine Tip, ensuring that urban development is reasonably safe from environmental hazard risk and that public access, visual amenities and recreational opportunities are maximized.</p> <p>ii) Lands below the Urban Development Line shall be protected from urban development.</p> <p>iii) A minimum setback of 10 m, or the setback recommendation of the approved Geotechnical and Slope Stability Analysis – whichever is greater – shall be provided between the Top-of-Bank and the Urban Development Line, in accordance with Policy C542. This area shall provide for public access circulation, and civic purposes including geotechnical monitoring and repair, firefighting, emergency and public safety</p> <p>iv) A restrictive covenant to meet the requirements of the geotechnical review shall be registered on all properties abutting the Urban Development Line.</p> <p>v) The stormwater outfall shall be further evaluated from a geotechnical perspective prior to the subdivision stage.</p>	<p>i) A Geotechnical report and Slope Stability analysis have been submitted for the plan area demarcating the UDL.</p> <p>ii) Lands that meet the criteria for Environmental Reserve (ER) under Section 664(1) of the MGA shall be dedicated to the City of Edmonton at the time of subdivision.</p> <p>iii) The Urban Development Line shall be demarcated at the time of rezoning and/or subdivision of lands adjacent to the ravine tip.</p> <p>iv) The Subdivision Authority shall ensure all subdivisions abutting the Urban Development Line provide restrictive covenants.</p> <p>v) Additional geotechnical analysis will be completed concurrent with an Environmental Screening Report for the stormwater outfall prior to development.</p>
<p><b>Rationale:</b></p> <p>The Top-of-Bank (TOB) and Urban Development Line (UDL) have been established through site visits with the participating landowner and City Administration, pursuant to geotechnical and slope stability analysis, and the requirements of Policy C542. A minimum 10 m Public Upland Area has been provided in all instances along the entire length of the TOB between the TOB and UDL, except where a greater setback is warranted due to geotechnical considerations. Lands deemed to be designated as Environmental Reserve shall be determined at the time of rezoning and/or subdivision.</p>		



A TOB Shared-Use Path along the entire length of the eastern UDL, within the Public Upland Area and a Top-of-Bank (TOB) roadway, totalling a minimum of 30% of the length of the UDL, will maximize access for local residents and the general public. This access is provided for circulation and amenity purposes, connection to the pocket park and stormwater management facility, slope repair and geotechnical monitoring, firefighting, emergency and public safety, drainage control and for dealing with encroachment issues.

A restrictive covenant will be required as a condition of subdivision approval for all properties on or abutting the Urban Development Lint. Legal, surveyed demarcation of the UDL will be undertaken to or concurrent with subdivision and development approval.

Objective 11	NASP Policy	Implementation
<p>Strengthen Edmonton’s ecological network</p>	<p>i) Graydon Hill is designed to integrate and link land use components (i.e. SW26, Ravine tip, SWMF, Pocket Park and shared-use path) to provide habitat and encourage ecological connectivity.</p> <p>ii) Plantings of native species should be utilized to add to the habitat value of the green network within the neighbourhood.</p> <p>iii) A Wetland Assessment shall be completed for each titled area within the NASP.</p> <p>iv) Low impact lighting should be considered in areas adjacent to natural areas to minimize light pollution into tree stands.</p>	<p>i) <b>Figure 7 – Land Use Concept</b> guides the development of the NASP.</p> <p>ii) Relevant City of Edmonton conservation planning and policy shall be adhered to (e.g. Policy C531). The recommendations and regulations of the City and Provincial environmental agencies shall be followed.</p> <p>iii) A Wetland Assessment will be required for each titled area prior to the rezoning approval. The Wetland Assessments will: identify any potential wetlands, determine required regulatory approvals, and determine potential sustainability of wetlands in the context of future development.</p> <p>iv) Low impact lighting should be provided along the shared-use path network, as shown on <b>Figure 10 – Pedestrian Network</b>. I</p>
<p><b>Rationale:</b></p> <p>The function and integrity of the ecological network in the Graydon Hill NASP is limited. The plan area is primarily agricultural land and the only ecological component identified by the City of Edmonton Ecological Network map is the SW26 Natural Area.</p> <p>Developing a new network with plantings of native species is a preferable approach to create connectivity and habitat value within the NASP area and between ecological network components located within and outside the NASP boundaries. From an ecological perspective, the NASP concept includes the following components: SW26 natural area, ravine tip, a stormwater management facility, pocket park and a north-south shared-use path.</p>		
Objective 12	NASP Policy	Implementation



<p>Conserve the Environmentally Sensitive Area (SW26) within the plan area.</p>	<p>i) The ecologically significant natural area (SW26) shall be retained within the NASP.</p> <p>ii) A Natural Area Management Plan (NAMP) shall be completed for natural area (SW26) at the time of rezoning the Special Study Area.</p>	<p>i) <b>Figure 7 – Land Use Concept</b> illustrates that the natural area (SW26) shall be conserved within the NASP.</p> <p>ii) A NAMP shall be completed and approved prior to rezoning lands within NE ¼ 24-51-25-W4. The NAMP will provide direction for the maintenance of the natural area.</p> <p>Dedication of the natural area (SW26) within the Special Study Area will be determined at the time of Rezoning.</p>
<p><b>Rationale:</b></p> <p>The Ecological Network Report (ENR) for Graydon Hill identifies two natural features within the plan area; Environmentally Sensitive Area (SW26), as well as a ravine tip. Based on the recommendations of the ENR, the NASP conserves and integrates areas of ecological significance within the land use concept (i.e. SW26 and Ravine tip).</p>		

### Technical Summary

An Ecological Network Report (ENR) was prepared for Graydon Hill NASP and was submitted under separate cover in support of the NASP. The ENR identifies natural features and provides an assessment of the existing ecological network as well as provides recommendations on how to conserve and protect the natural area.

A Wetland Assessment was prepared on behalf of the participating landowner. The Wetland Assessment identifies any potential wetlands, determines potential sustainability of wetlands in the context of future development, and outlines required regulatory approvals.

A Geotechnical Report and Slope Stability Analysis was prepared for Graydon Hill and has been submitted under separate cover in support of the NASP.

### 3.2.4 - Environment

*In order to ensure that the lands within the NASP area are suitable for development, the environmental status of the land must be evaluated. The City requires that Phase I Environmental Site Assessments (ESA) be submitted, reviewed, and endorsed prior to the rezoning stage of development.*

Objective 13	NASP Policy	Implementation
<p>Ensure that the environmental status of the lands within Graydon Hill are suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.</p>	<p>i) Determine the likelihood, types, and location of environmental concerns that may be present on the lands prior to rezoning.</p> <p>ii) Phase I ESA reports older than 1 year from the date of rezoning application shall be updated, and any Phase I ESA report older than 5</p>	<p>i) ii) ESAs and any follow-up shall receive sign-off by City administration prior to the rezoning stage of development.</p> <p>iii) Site remediation, where necessary, shall be conducted prior to rezoning. An environmental site assessment report verifying the</p>





	<p>years from the date of rezoning application shall be redone.</p> <p>iii) 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>remediation shall be submitted for approval by City administration prior to rezoning of the subject lands.</p>
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**Rationale:**

Lands within the Graydon Hill 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.

Objective 14	NASP Policy	Implementation
<p>Ensure that development respects the ongoing operation and integrity of existing pipeline infrastructure.</p>	<p>Integrate the existing pipelines into the NASP to make use of potential shared-use paths and pedestrian linkages while having regard for the safe, ongoing operation of these facilities.</p>	<p><b>Figure 5 – Site Features</b> illustrates the location of the pipelines.</p> <p>The Subdivision Authority shall have regard for lots and site design ensuring that appropriate setback distance between pipelines and residential uses.</p>

**Rationale:**

**Figure 5 – Site Features** illustrates the location of existing rights-of-way. Development abutting the pipelines shall be implemented according to the Edmonton Zoning Bylaw with respect to setbacks to ensure the integrity of the pipelines and safety of the public.

*Technical Summary*

A Phase I Environmental Site Assessment has been completed and signed off by the City of Edmonton for the participating landowner, in support of the Graydon Hill NASP. The Phase I ESA for NW ¼ 24-51-24-W4 confirms that the majority of the area is free of contamination and therefore suitable for development (see **Table 2 – Environmental Site Assessments** and **Figure 6 – Environmental Site Assessment Overview**). Follow-up items identified within the respective ESA shall be addressed prior to the rezoning of the subject areas, as per the implementation strategy.



## 3.2.5 - Historical Resources

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

Objective 15	NASP Policy	Implementation
<p>Ensure that historical, archaeological and paleontological resources are identified and conserved, where applicable.</p>	<p>Participating landowners within the plan area shall submit a Statement of Justification (SoJ) for <i>Historical Resources Act</i> Requirements (formerly Historical Resources Overview) and, if necessary, a Historical Resources Impact Assessment (HRIA).</p>	<p><b>Table 3 – Historical Resources Overview</b> confirms that a SoJ and HRIA has been completed for the participating landowner within the plan area and submitted to Alberta Culture and Community Spirit (ACCS). ACCS has provided clearance for the participating landowner’s lands.</p> <p>Where required, Historical Resources Impact Assessments (HRIA) will be submitted prior to rezoning approval.</p> <p>Those lands which have not received clearance on HRO/HRIA studies will be required to submit and receive sign off prior to rezoning.</p>
<p><b>Rationale:</b></p> <p>Based on ACCS’s review of the submitted SoJ, a Historical Resources Impact Assessment (HRIA) for palaeontology is required. The HRIA for palaeontology was submitted to ACCS and clearance has been granted.</p> <p>Those lands which have not completed a Statement of Justification for <i>Historical Resources Act</i> Requirements must submit documentation to ACCS prior to initiating development.</p>		

### Technical Summary

A Statement of Justification (SoJ) and Historical Resources Impact Assessment for Paleontology (HRIA) for *Historical Resources Act* Requirements was submitted to Alberta Culture and Community Spirit (ACCS) in support of the Graydon Hill NASP. Per Section 31 of the *Historical Resources Act*, development proponents and/or their representatives are required to report any archaeological, historic or paleontological resources encountered during construction and cease all work.



## 3.2.6 - Residential

*Approximately 16 hectares (ha) of the plan area is designated for residential land uses. The specific land uses will be determined on the basis of market conditions and consumer preferences at the time of zoning approval and are identified on **Figure 7 – Land Use Concept**.*

*The Graydon Hill NASP proposes an overall residential density of approximately 84 persons per net residential hectare and 35 net residential units per hectare. The area, number of dwelling units, and population attributed to each form of residential development is shown in **Table 5 – Land Use and Population Statistics**.*

**Low Density Residential (Single/Semi-detached and Row Housing)** will be developed on approximately 13.6 ha of land within the plan area. Single/Semi-detached housing will be developed at a maximum density of 25 units/ha. Row Housing will be developed with alley access, at a maximum height of 3 storeys and density of 45 units/ha. Row housing will be limited to 10% of the total low-density residential lots.

A Special Areas General Provision designation has been created for a portion of Graydon Hill. The Section 900 provides an opportunity to create Special Areas to regulate the use, design, and extent of development within specific geographic areas of the City in order to achieve the planning objective of a Neighbourhood Area Structure Plan for those areas with special or unique attributes which cannot be satisfactorily addressed through conventional land use districting or statutory plan overlays. The Zoning Bylaw requires that the Special Area be created through a Neighbourhood Area Structure Plan but that the uses and regulations are incorporated through districts in the Zoning Bylaw.

The Special Area includes provisions for single or semi-detached (front drive or rear lane access), zero lot line and street-oriented row housing residential uses which will serve as the mechanism to achieve the landowners' vision in providing new housing products which are distinct, diverse and affordable. It also provides an exclusive opportunity and the flexibility to integrate a mixture of housing types along the block faces– such as single detached, semi-detached or street-oriented row housing adjacent to each other in a block face – creating a special and unique urban streetscape with a mix of housing types.

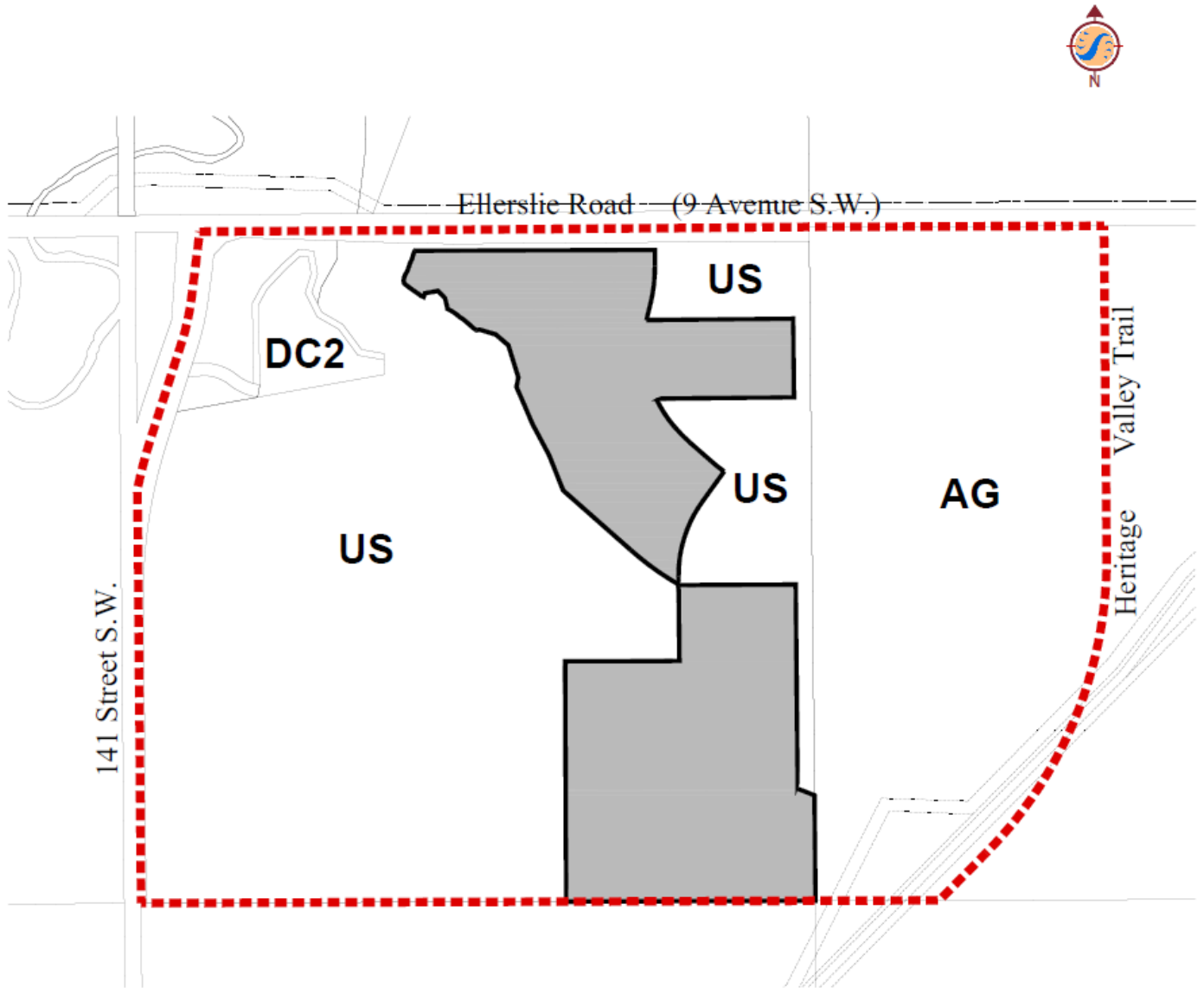
The Special Area creates a distinct land use District which will achieve the following objectives:

- Provide regulations facilitating the development of single or semi-detached housing with front drive or rear lane access;
- Establish regulations for the development of zero lot line housing with rear lane access, with respect to site area, site width, setbacks, site coverage and maintenance easements;
- Establish regulations facilitating the development of housing fronting to the pipeline corridor or open space with rear lane access, site area, site width, setbacks and site coverage; and,
- Provide regulations for the development of street-oriented row houses. Locations of row housing will be determined at the subdivision stage and will be established on the basis that there will not be extended continuous areas of row housing, and that no structure will contain more than five units. Row housing shall not exceed 10% of the proposed number of units within the low density residential area.



Once adopted, the Zone shall be applied to a specific area (portion of NW ¼ 24-51-25-W4) in the Graydon Hill NASP, as shown on **Figure 8 - Special Area Zoning**.



Figure 8  
Special Area Zone



### Legend

-  Special Area Boundary
-  NASP Boundary



**Medium Density Residential (Low-Rise/Medium Density Housing)** will be developed on approximately 2.4 ha within the plan area, at a maximum height of 4 storeys, and at an average density of 90 units per ha. Residential uses anticipated would be stacked row housing or low rise apartments consistent with the (RF6) Medium Density Multiple Family Zone and (RA7) Low Rise Apartment Zone under the City of Edmonton Zoning Bylaw.

Objective 16	NASP Policy	Implementation
<p>Provide a variety of housing types that serve a range of age groups, income levels and needs.</p>	<p>i) A mixture of residential dwelling types including single/semi-detached, row housing and low-rise/medium density housing shall be provided, allowing consumer choice, and a range of affordability options</p> <p>ii) Low density residential areas shall provide opportunity for a mixture of single or semi-detached housing, and row housing along individual block faces and/or from block face to block face</p> <p>iii) Row housing will be limited to 10% of the total low density residential lots.</p> <p>iv) The NASP shall allow for more intensive and/or innovative forms of low density residential housing through the use of various development regulations (i.e. smaller minimum site area and depth; reduced lot width, reduced yard requirements, higher site coverage, etc.)</p>	<p>i) <b>Figure 7 – Land Use Concept</b> illustrates the general location of residential land use designations.</p> <p>ii &amp; iii) Low Density Residential development shall be implemented through Section 900 (Special Areas) of the Edmonton Zoning Bylaw.</p> <p>iv) The City of Edmonton Zoning Bylaw provides for a range of densities and housing forms that shall be applied at the rezoning stage.</p>
<p><b>Rationale:</b></p> <p>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 households and also allows families to remain within the same community throughout their life-cycle. The ability to mix housing forms along a block face will create visual interest, variety and market appeal, while discouraging monotonous streetscapes by mixing compatible housing forms (single detached, semi-detached, and Row housing).</p> <p>Within the area designated Low Density residential, a variety of innovative housing forms such as single or semi-detached housing, zero lot line housing, compact lot semi-detached units and row housing units will be developed through implementation of a Section 900 Special Areas Provision designation in the Zoning Bylaw.</p> <p>Low-Rise/Medium Density Housing areas will employ land use zones (RF6) Medium Density Multiple Family Zone,</p>		



or (RA7) Low Rise Apartment Zone.

Objective 17	NASP Policy	Implementation
<p>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.</p>	<p>i) The Graydon Hill NASP shall meet or exceed the approved Suburban Housing Mix ratio for new neighbourhoods.</p> <p>ii) The Graydon Hill NASP shall meet or exceed the approved density target as set out by the Capital Region Growth Plan.</p>	<p>i) <b>Figure 7 – Land Use Concept</b> and <b>Table 5 – Land Use Concept and Population Statistics</b> shall guide intensified suburban development.</p> <p>ii) The Graydon Hill NASP density is approximately 34 units per net residential hectare.</p>
<p><b>Rationale:</b></p> <p>The approved Suburban Housing Mix ratio for new neighbourhoods in the City of Edmonton recommends the provision of 65% to 85% Low Density Residential(Single/Semi-Detached) development and 15% to 35% Medium Density Residential (Row Housing and Low Rise/Medium Density Housing). The Graydon Hill NASP exceeds this ratio. Establishing higher residential densities results in better use of municipal infrastructure and facilities. It also supports the use of transit, innovative design and helps meet the demand for housing in the City’s growing suburban neighbourhoods.</p> <p>Graydon Hill is located in the Capital Region Growth Plan’s Priority Growth Area “Cw” which sets a minimum density target of 30 units per net residential hectare. The Graydon Hill NASP meets this target.</p>		

Objective 18	NASP Policy	Implementation
<p>Establish affordable housing opportunities in Graydon Hill.</p>	<p>i) Developments shall comply with the City of Edmonton’s affordable housing policies and guidelines.</p> <p>ii) 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>iii) Opportunities such as secondary suites, garage suites or garden suites should be encouraged among builders.</p>	<p>i) City of Edmonton’s affordable housing policies and guidelines shall be applied prior to rezoning.</p> <p>ii) <b>Figure 7 – Land Use Concept</b> indicates the location of various residential land uses.</p> <p>iii) Secondary suites, garage suites or garden suites shall be implemented through Section 100 and 200 of the Edmonton Zoning Bylaw.</p>
<p><b>Rationale:</b></p> <p>Providing a variety of housing types creates affordable housing options for a variety of households. Secondary suites can further provide an important potential source of affordable housing for singles and other small households, and create mortgage helpers for the owner of the principle dwelling.</p>		



Objective 19	NASP Policy	Implementation
<p>Locate Low-Rise/Medium Density Housing development to facilitate access to arterial and/or collector roadways, public transit service and/or in proximity to park spaces.</p>	<p>Low-Rise/Medium Density Housing development should be located abutting collector and/or arterial roadways and along transit routes.</p>	<p><b>Figure 7 – Land Use Concept</b> conceptually illustrates the location of Low-Rise/Medium Density Housing development along collector and arterial roadways (possible bus routes).</p>
<p><b>Rationale:</b></p> <p>Location of Low-Rise/Medium Density Housing along transit routes and within walking distance of commercial uses, creates a more compact, walkable and liveable neighbourhood.</p>		

### Technical Summary

No specific technical requirements were further identified.

### 3.2.7 - Parks and Open Space

The NASP proposes one Pocket Park and one Natural Area within the neighbourhood. Accordingly, an integrated open space system is proposed for Graydon Hill, as shown in **Figure 10 – Pedestrian Network**. The area attributed to Park and Open Space is shown in **Table 5 – Land Use and Population Statistics**.

Objective 20	NASP Policy	Implementation
<p>Accommodate City of Edmonton requirements for park sites within the neighbourhood.</p>	<p>i) The NASP shall follow the guidelines for the hierarchy and distribution of park spaces as prescribed in the Urban Parks Management Plan.</p> <p>ii) The NASP Municipal Reserve owing for Graydon Hill shall be dedicated in full as land, cash-in-lieu of land or an acceptable combination thereof. The values for cash in place of land shall be agreed upon prior to subdivision.</p> <p>iii) The NASP shall consider winter issues in the landscaping of parks, open spaces, plazas and boulevards</p> <p>iv) Servicing shall be provided within roadways fronting onto the Pocket Park in order to accommodate any and all facilities which may be developed on site.</p>	<p>i) The Pocket Park, Natural Area and open spaces are conceptually illustrated in <b>Figure 7 – Land Use Concept</b>.</p> <p>ii) The Subdivision Authority shall determine the MR owing for the NASP and the areas dedicated as MR shall be confirmed by legal survey at the time of subdivision.</p> <p>iii) Selection of tree species shall be implemented at the detailed design stage of development, to the satisfaction of Transportation Services and Sustainable Development.</p> <p>iv) The neighbourhood servicing scheme shall ensure that the type and amount of servicing provided within roadways adjacent to parkland adequately meets the needs of parkland facilities into the future.</p>



**Rationale:**

The Urban Parks Management Plan (UPMP) provides strategic direction for the acquisition, design, development, and management of Edmonton’s parkland until the year 2016. The NASP uses the hierarchy of park sites and land assembly guidelines set out in UPMP.

*Pocket Park*

A 1.25 ha Pocket Park is located in the central portion of the plan area and provides approximately 50% of roadway frontage along the abutting collector roadway. The placement of the Pocket Park will ensure that all residents are within 500 m of park space, offering convenient access to parkland for everyday activities. This park is intended to serve as a gathering place for the neighbourhoods and provides opportunities for passive recreation space for residential uses at the local level.

*Natural Area*

The Natural Area is located in the eastern portion of the plan area and is approximately 6.24 ha in area. The appropriate designation for the preservation and protection of the existing tree stand within the Special Study Area will be determined at a later date, when the Special Study Area is further defined. A Natural Area Buffer of approximately 0.63 ha in area will also be provided between the Natural Area and urban development which will protect the natural area from impacts due to development and proximity to residential lots. The Natural Area buffer will be measured from the drip line outwards 10 metres and will be dedicated as greenway right-of-way.

*Stormwater Management Facility*

One Stormwater Management Facility (SWMF) is proposed in Graydon Hill. This facility provides an amenity area and is part of the open space system within the plan area. In addition, the location and configuration of the SWMF integrates well with the pedestrian network and provides vistas from abutting roadways, thereby heightening resident awareness and use of this public facility. This in turn will promote it as a walking destination, and enhance surveillance to prevent crime and will serve as a destination for pedestrians and cyclists and provide passive recreation opportunities. The extent of public open space around the facility will depend on City policies at the time of development.

*Municipal Reserve*

Overall, land provided for municipal reserve dedication for the Graydon Hill NASP is approximately 10.2%, which exceeds the Municipal Reserve entitlement of 10%. Municipal Reserve dedication exceeding the 10% entitlement will be purchased by the City of Edmonton Based on market value

*Utility Servicing*

Utility servicing (i.e. water, gas, electrical, sewer, etc) for the park site will be provided, as required, through the engineering drawings and servicing agreement processes and will be done to relevant City standards.

The area and percentage of Gross Developable Area attributed to each form of park and open space development is shown in **Table 5 –Land Use and Population Statistics**.

Objective 21	NASP Policy	Implementation
Locate park spaces centrally within the neighbourhood to ensure accessibility via pedestrian linkages and automobiles.	i) Street frontage along roadways that about the SWMF and pocket park shall be provided in order to ensure sightlines, natural surveillance, and adequate lighting.  ii) Landscaping and design of park spaces shall take into consideration basic CPTED principles and design	i & ii) The Subdivision Authority shall have regard for the subdivision design to ensure adequate public roadway frontage on all parks illustrated in <b>Figure 7.0 – Land Use Concept</b> .





	<p>principles included in the Design Guide for a Safer City and Urban Parks Management Plan (UPMP).</p> <p>iii) Park space shall be designed to accommodate active or passive recreation activities for different age groups.</p>	<p>iii) Design and development of future parks and open spaces shall consider programming needs of the community and be implemented based on requirements of the Sustainable Development Department.</p>
<p><b>Rationale:</b></p> <p>The park is located adjacent to roadways, and is connected through a network of shared-use path, walkways and sidewalks to ensure that the park space is accessible and dispersed with the residential uses in the plan area.</p>		

Objective 22	NASP Policy	Implementation
<p>Design a connected and integrated open space system that encourages active transportation.</p>	<p>i) The NASP shall incorporate an array of pedestrian linkages along sidewalks, walkways and shared-use paths that connects the park space, stormwater management facility and various other focal points.</p> <p>ii) A shared-use path will be constructed along a minimum of 50% of the SWMF.</p>	<p><b>Figure 7 – Land Use Concept</b> and <b>Figure 10 – Pedestrian Network</b> conceptually guide the location of the neighbourhood pocket park, open spaces, pedestrian connections and SWMF which should connect residents to the focal points.</p>
<p><b>Rationale:</b></p> <p>Graydon Hill provides an internal pedestrian network that is highly connected, direct and convenient via linkages along sidewalks, walkways, and shared-use paths. All parks and open spaces are connected to the pedestrian network within the neighbourhood to ensure that they are accessible to the residential land uses in the plan area and the surrounding developing neighbourhoods. The park location is linked with linear corridors, enabling additional recreational options and increasing active transportation (i.e. walking, bicycling, in-line skating) possibilities within the neighbourhood. These connections will be provided by a combination of minor pedestrian linkages and a shared-use path.</p>		

Objective 23	NASP Policy	Implementation
<p>Conserve the Environmentally Sensitive Area (SW26).</p>	<p>The natural shall be retained through the following measures:</p> <p>a) dedication of municipal reserve - 10 percent of the gross developable area of affected titles area; and,</p> <p>b) purchase of the remaining land by the City of Edmonton based on market value; or,</p>	<p><b>Figure 7 – Land Use Concept</b> illustrates that the location and configuration of SW26 being conserved.</p> <p>The City of Edmonton and the affected landowner will enter into discussions and negotiations in good faith, regarding timely purchase of portions of SW26, without impeding</p>



	<p>c) land/property exchange; or,</p> <p>d) other mutually acceptable arrangement.</p>	<p>the timing of development.</p> <p>In the event that the City and the landowner are unable to reach an agreement, an amendment to the NASP Bylaw may be initiated by the landowner to re-designate the relevant portions of the natural area from parkland to residential (or other developable) land uses.</p>
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**Rationale:**

The NASP endeavours to conserve the environmentally sensitive natural area (SW26) by means of dedicating the site, up to ten percent of the gross developable titled area, as municipal reserve. The affected landowner and the City of Edmonton may enter into negotiations regarding the purchase of the natural area at fair market value. If purchase or compensation cannot be agreed upon by both parties, an NASP amendment may be necessary.

*Technical Summary*

A Parkland Impact Assessment (PIA) has been completed outlining Graydon Hill’s compliance with the UPMP vision and guidelines.

A Community Knowledge Campus Needs Assessment (CKC NA) was completed. Both the Edmonton Public School Board (EPSB) and Edmonton Catholic School Board (ECSB) advised that they do not require a school site within Graydon Hill.

3.2.8 - Institutional and Special Study Area

*The Graydon Hill NASP designates an existing cemetery site as Institutional (portion of NW ¼ 24-51—25-W4) and the Government of Alberta lands as Special Study Area (portion of NE ¼ 24-51-25-W4). The Institutional site is approximately 32.6 ha and is located in the western portion of the plan area. The Special Study Area is approximately 15.40 ha and is located in the eastern portion of the plan area.*

Objective 24	NASP Policy	Implementation
Accommodate future institutional development of the existing cemetery within the NASP.	<p>i) Development of cemetery related uses shall be permitted under the Institutional designation.</p> <p>ii) An appropriate buffer shall be established between residential uses and the cemetery.</p>	i) ii) <b>Figure 7 – Land Use Concept</b> illustrates the location of the Institutional parcel in the western portion of the plan area.

**Rationale:**

The Institutional designation is meant to accommodate the existing lands use/ownership and future land use aspirations of the cemetery. The location of the cemetery, adjacent to 141 Street and Ellerslie Road (9<sup>th</sup> Avenue SW) ensures that appropriate traffic dispersion and transitions are provided.

Objective 25	NASP Policy	Implementation
Maintain the land use designation	The Government of Alberta lands	<b>Figure 7 – Land Use Concept</b>



of Special Study Area for the Government of Alberta lands.	(portion of NE ¼ 24-51-25-W4) shall be designated as Special Study Area in the Graydon Hill NASP.	illustrates the location of the Special Study Area in the eastern portion of the plan area.
<p><b>Rationale:</b></p> <p>The Government of Alberta owns the subject lands and is not bound by the City of Edmonton’s planning and policies guidelines. The Government of Alberta shall maintain the land use designation of Special Study Area for the lands legally described as a portion NE ¼ 24-51-25-W4 within the plan area.</p> <p>The NASP has been designed for the eventual incorporation of residential development – single/semi-detached, row housing, low-rise/medium density housing, should the Government of Alberta decide to release the lands. An amendment to the NASP Bylaw shall be required to re-designate the relevant portions of the Special Study Area to the appropriate residential land uses.</p>		

### Technical Summary

No technical requirements were further identified.

### 3.2.9 - Transportation

*The overall transportation network within the Graydon Hill NASP is based on the provision of efficient vehicular, transit and pedestrian circulation. This is conceptually illustrated in **Figure 9 – Transportation Network** and **Figure 10 – Pedestrian Network** which identifies the roadway network and alternative circulation system that accommodates the movement of automobiles, transit, bicycles and pedestrians within the neighbourhood and the connections to adjacent communities.*

Objective 26	NASP Policy	Implementation
Implement the City of Edmonton road hierarchy system of an integrated arterial, collector and local roadway network.	A well-integrated system of arterial, collector and local roadways shall be established for vehicular and pedestrian circulation within the NASP boundaries and the adjacent neighbourhoods.	Road right-of-way and arterial road widening shall be dedicated to the City of Edmonton in accordance with the NASP at the subdivision stage of development.
<p><b>Rationale:</b></p> <p>The transportation network has been designed to meet both the internal and external traffic flow requirements generated by the neighbourhood in accordance with City of Edmonton’s guidelines and standards. A hierarchy of roads are intended to facilitate the efficient movement of vehicular traffic (see <b>Figure 9 - Transportation Network</b>). Vehicular access to the surrounding arterial roadways will be provided via three neighbourhood entrance/exits.</p> <p>Regional Roadway Network</p> <p>The Graydon Hill NASP will benefit from a high level of accessibility to the metropolitan Edmonton area as a result of its close proximity to the following existing regional roadways (see <b>Figure 9- Transportation Network</b>). These roadways include:</p> <ul style="list-style-type: none"> <li>• Anthony Henday Drive</li> <li>• Terwillegar Drive / 170 Street</li> <li>• Whitemud Drive</li> </ul>		



- Calgary Trail / Gateway Boulevard

### Arterial Roadways

Arterial roadways facilitate the movement of intra-municipal traffic and generally maintain limited direct access to adjacent land uses. Within Graydon Hill, Ellerslie Road (9 Avenue SW) 141 Street SW, and Heritage Valley Trail are designated as arterial roadways. Appropriate spacing of intersections and access-egress requirements are respected along these arterial roadways

Lands within the NASP will be subject to an Arterial Road Assessment (ARA) to cost-share the construction of arterial roadway facilities needed to service the area. In general terms, the ARA outlines the developer’s responsibility for roadway construction within a catchment area and is based on the estimated costs of constructing arterial roads in a catchment area.

### Collector Roadways

Collector roadways, which provide internal/external accesses, are spaced at appropriate intervals to facilitate traffic progression and to ensure that sufficient distance is available to allow for right and left turn-bay development. The collector roadway network provides efficient and convenient access to residential areas, prevents cut-through traffic, and enhances overall safety in the neighbourhood.

### Local Roadways

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

### Parking

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

Objective 27	NASP Policy	Implementation
<p>Provide the opportunity for roadways to be developed with reduced or alternative standards.</p>	<p>i) The NASP shall provide opportunity for roadways to be developed with reduced or alternative standards, provided all essential services are met.</p> <p>Incorporate boulevards into the design of roadways to facilitate snow removal and storage</p> <p>ii) The developer will provide the land necessary for roads and public utilities to achieve the goals and objectives of the NASP.</p>	<p>i) Roadway design and construction standards shall be completed to the satisfaction of Transportation Services.</p> <p>All alternative development standards shall be reviewed and approved by the City of Edmonton</p> <p>ii) <b>Table 5 – Land Use and Population Statistics</b> and <b>Figure 7 – Land Use Concept</b>, illustrate the approximate land dedication requirements for roadways and public utilities to adequately service the NASP. Areas shall be confirmed at the time of subdivision to the satisfaction of the Subdivision Authority.</p>



**Rationale:**

The NASP has been designed, in part, with a goal of minimizing roadway infrastructure through narrower roadways, innovative housing forms, and dispersal of vehicular traffic flow throughout the neighbourhood. To achieve this goal, less land for internal roadways is anticipated. These factors will facilitate a compact, walkable and connected community with a balanced transportation system. Where possible, a reduced or alternative standard will be used which may reduce the width of the carriageway, provide sidewalks on both sides and parking on one side.

Objective 28	NASP Policy	Implementation
<p>Promote connectivity and pedestrian access to amenity areas such as the park, natural areas, open spaces, and institutional uses by providing an alternative circulation system.</p>	<p>i) A network of hard-surfaced sidewalks, walkways, and shared-use paths shall be provided that accommodates both winter and summer modes of transport to promote walkability and access to park space, open space, and stormwater management facility.</p> <p>ii) Minor walkways should be provided to promote walkability and access to transit facilities and neighbourhood amenities.</p>	<p>i) <b>Figure 10 – Pedestrian Network</b> shall guide the future application of walkways, sidewalks and shared-use path.</p> <p>ii) The Subdivision Authority should have regard for the dedication of walkways to promote walkability and appropriate access to transit facilities and neighbourhood amenities. All local and collector roadways in Graydon Hill shall be developed with sidewalks.</p>

**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 of movement that links destinations, provides access and is integrated with its environment.

**Pedestrian Network**

An efficient and continuous walkway network connecting key nodes within the NASP will provide pedestrian circulation throughout the neighbourhood. All local and collector roadways in Graydon Hill shall be developed with sidewalks providing a sufficient level of pedestrian access within the NASP. The pedestrian circulation network has been designed to encourage the continuation of a pedestrian route from Paisley to the Whitemud Creek Ravine.

**Walkways**

A number of walkways are proposed in the plan area, which serve as minor pedestrian linkages. These walkways enhance pedestrian connectivity in the NASP as well as provide connections to adjacent residential enclaves and major pedestrian facilities (e.g., sidewalks along collectors/arterial roadways).

**Shared-Use Path**

The NASP proposes three shared-use paths, as identified on **Figure 10 –Pedestrian Network**. The Shared-Use Paths will function as a multi-use (e.g., pedestrian, bicycle, other) trail with logical connections provided within the neighbourhood. The Shared-Use Paths will be constructed along the eastern edge of the environmental reserve parcel; within the natural area buffer; and, along a minimum of 50% of the stormwater management facility. The



design of the Shared-Use Paths shall be reviewed by the City of Edmonton at the roadway design stage.

### Bicycle Circulation

Bicycle circulation within the Graydon Hill NASP is designed to follow collector and local roadways. Bicycle routes will be integrated with the shared-use path and walkways connecting internal and adjacent residential areas and amenities. Routes will be clearly marked using appropriate signage and markings in order to minimize potential conflicts between vehicles, cyclists, and pedestrians in the neighbourhood.

Objective 29	NASP Policy	Implementation
<p>Maximize access to transit facilities for the greatest number of residents in accordance with City of Edmonton Transit System Guidelines and demands.</p>	<p>i) The location of all residential land uses should be within 400 m of a transit route.</p> <p>ii) Transit service shall be initiated in the initial stages of development of the neighbourhood.</p>	<p>i) 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>Of the total residential units in Graydon Hill, 6% are outside of the 400m walking distance from transit services. Of the total single-family units, 10% or 35 units are outside of the 400m walking distance.</p> <p>ii) In an effort to provide transit service earlier in the development of the neighbourhood, the participating landowner shall cooperatively fund transit service for the first two years of service. Following this two year period, Edmonton Transit shall undertake the full responsibility of providing transit service.</p>

### Rationale:

Future public transit services will be extended into the Graydon Hill NASP area in accordance with City of Edmonton Transit System Guidelines and demands. The neighbourhood has been designed to ensure that the majority of residents are within 400 m (approximately 5 minute walk) of transit service. Convenient and accessible transit areas are reinforced through a continuous network of pedestrian walkways and shared-use paths.

Future transit routes will be established on the basis of the proportion of trips, which are expected to be generated from within the neighbourhood and adjacent areas. Future transit service will be accommodated within the neighbourhood and the internal collector roadway will be developed to a suitable standard to accommodate transit service and provide readily accessible service to all areas of the neighbourhood.

Objective 30	NASP Policy	Implementation
<p>Create adequate locations for</p>	<p>i) Collector roadways shall have</p>	<p>i) <b>Figure 9 – Transportation</b></p>



<p>neighbourhood access.</p>	<p>adequate access to arterial roadways in order to maintain appropriate traffic flow in and out of the neighbourhood.</p> <p>ii) A local roadway connection between Graydon Hill and Paisley should be considered. At a minimum, emergency access between the two neighbourhoods shall be provided.</p>	<p><b>Network</b> illustrates collector roadway accesses to arterial roadways.</p> <p>ii) Subdivision design in residential settings shall be determined prior to subdivision approval.</p>
<p><b>Rationale:</b></p> <p>The location of access points are illustrated in <b>Figure 9 – Transportation Network</b>, and have been developed to ensure that adequate access by a variety of transportation modes is provided throughout the plan area with the support of the Transportation Impact Assessment (TIA).</p>		

Objective 31	NASP Policy	Implementation
<p>Ensure the maximum length of cul-de-sacs in residential settings do not compromise City emergency response plans, operations and maintenance.</p>	<p>Development of long cul-de-sacs should be avoided.</p>	<p>Cul-de-sac lengths in residential settings shall be determined prior to subdivision approval.</p> <p>The Subdivision Authority should ensure cul-de-sacs are in accordance with the applicable City policies and directives.</p>
<p><b>Rationale:</b></p> <p>Subdivision design should ensure that cul-de-sac length does not exceed 120 m to reduce impacts to City operations (e.g., fire and medical access, garbage collection and snow clearing). Where the length of cul-de-sac must exceed 120 m due to land characteristics, the provision of an emergency access to an adjacent cell of development will be required.</p>		

Objective 32	NASP Policy	Implementation
<p>Provide noise attenuation where residential uses back onto major transportation corridors (i.e. Ellerslie Road (9<sup>th</sup> Avenue SW) and Heritage Valley Trail) which have been designated or will be designated as truck routes.</p>	<p>Appropriate noise attenuation shall be provided for residential uses adjacent to Ellerslie Road (9<sup>th</sup> Avenue SW) and Heritage Valley Trail.</p>	<p>A noise attenuation assessment is required for residential development at the subdivision approval stage, in accordance with the City of Edmonton Urban Traffic Noise Policy C506.</p>
<p><b>Rationale:</b></p> <p>Where residential development will be constructed adjacent to Ellerslie Road (9<sup>th</sup> Avenue S.W.) and Heritage Valley Trail the City of Edmonton requires the developers to address noise concerns. Therefore, a Noise Attenuation</p>		



Needs Assessment will be carried out in accordance with City of Edmonton’s Urban Traffic Noise Policy at the time of subdivision. 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 devices may be required (i.e. berm and fence) to be incorporated in the design of subdivisions bordering Ellerslie Road (9th Avenue S.W.) and Heritage Valley Trail.

Objective 33	NASP Policy	Implementation
Ensure that the cost of arterial roadways is shared throughout the Heritage Valley catchment area.	Lands within the Graydon Hill NASP shall be subject to an Arterial Road Assessment (ARA) to cost share the roadway facilities needed to service the area.	The Arterial Roads for Development Bylaw 14380 identifies that the Graydon Hill NASP is within the Heritage Valley Catchment area.
<p><b>Rationale:</b></p> <p>In general terms, the ARA outlines the arterial roadway facilities needed to service a catchment area, all developer responsibilities for roadway construction within the catchment area and are based on the estimated costs of constructing arterial roads in a catchment area.</p>		

### *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 Transportation Impact Assessment (TIA) has been submitted under separate cover for review and approval by Transportation Services. Other access and roadway requirements will be determined at the rezoning and subdivision stages to the satisfaction of Transportation Services.

A future Noise Attenuation Needs Assessment will be required at the time of subdivision, in accordance with City of Edmonton’s Urban Traffic Noise Policy.





### 3.2.10 - Infrastructure, Servicing and Staging

Graydon Hill will be a fully serviced neighbourhood designed and constructed in accordance with City servicing standards.

Objective 34	NASP Policy	Implementation
<p>Ensure that Graydon Hill is serviced to a full urban standard, in an efficient, contiguous and staged manner</p>	<p>i) Sanitary and stormwater servicing shall be provided in accordance with the approved Neighbourhood Design Report in support of the Graydon Hill NASP.</p> <p>ii) Water servicing to the NASP area shall be provided in accordance with the approved Water Network Analysis.</p> <p>iii) Shallow utilities shall be extended into the plan area as required.</p>	<p>i) ii) Approval of engineering drawings and servicing agreements shall be required for installation of water, sanitary, and stormwater servicing.</p> <p>iii) Installation of shallow utilities shall be executed through servicing agreements.</p>
<p><b>Rationale:</b></p> <p><i>Sanitary Servicing</i> The flow of the sanitary system designed for Graydon Hill moves from south to north/northwest. The sanitary servicing system is illustrated on Figure 11 - Sanitary Servicing. Further details regarding the sanitary drainage schemes for Graydon Hill are provided in the associated Neighbourhood Design Report to be submitted under separate cover.</p> <p><i>Stormwater Servicing</i> As shown on Figure 12 - Stormwater Servicing, one stormwater management facility is designated within the NASP. The stormwater management facility has been located based on natural drainage patterns and pre-development sub-basin drainage boundaries. More details regarding the stormwater drainage schemes for Graydon Hill are provided in the associated Neighbourhood Design Report that has been submitted under separate cover.</p> <p><i>Water Servicing</i> The conceptual design for the water distribution network for Graydon Hill is shown in Figure 13 - Water Servicing. Water services for the neighbourhood will be extended from Ellerslie Road (9 Avenue SW) and from 141 Street. EPCOR requires a 300mm water main on the existing bridge at Ellerslie Road and Whitemud Creek be provided. Water servicing within the neighbourhood will be designed to provide peak hour flows and fire flows for low, medium, and high density residential uses. Water looping will be provided in accordance with the requirements of EPCOR Water as per the Water Network Analysis.</p> <p><i>Shallow Utilities</i> Power, gas and telecommunication services are all located within close proximity to the NASP and will be extended into the plan area as required.</p> <p><i>Development Staging</i> <b>Figure 14 - Staging Concept</b> shows the anticipated direction of development for Graydon Hill. The anticipated sequence of development for Graydon Hill is expected to proceed from the north of the plan area</p>		



with the general direction of the development to the south.

In general, development will proceed in a manner that is contiguous, logical and economical with respect to municipal servicing. Development of individual phases may vary from the actual zoning and subdivision applications depending on contemporary market demands and aspirations of the respective landowners. Should sufficient demand warrant or engineering design be made more efficient, portions of separate phases may be developed concurrently.

### *Technical Summary*

The Graydon Hill 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.

Details regarding stormwater drainage and sanitary service schemes for the Graydon Hill NASP are provided in the associated Neighbourhood Design Report to be submitted under separate cover by Stantec Consulting Ltd. Water looping will be provided in accordance with the requirements of EPCOR Water Services Inc. A Water Network Analysis (WNA) for the Heritage Valley overall area was previously prepared and approved by EPCOR. A neighbourhood level and subdivision level WNA will be required at the time of subdivision.



Figure 9

Transportation Network

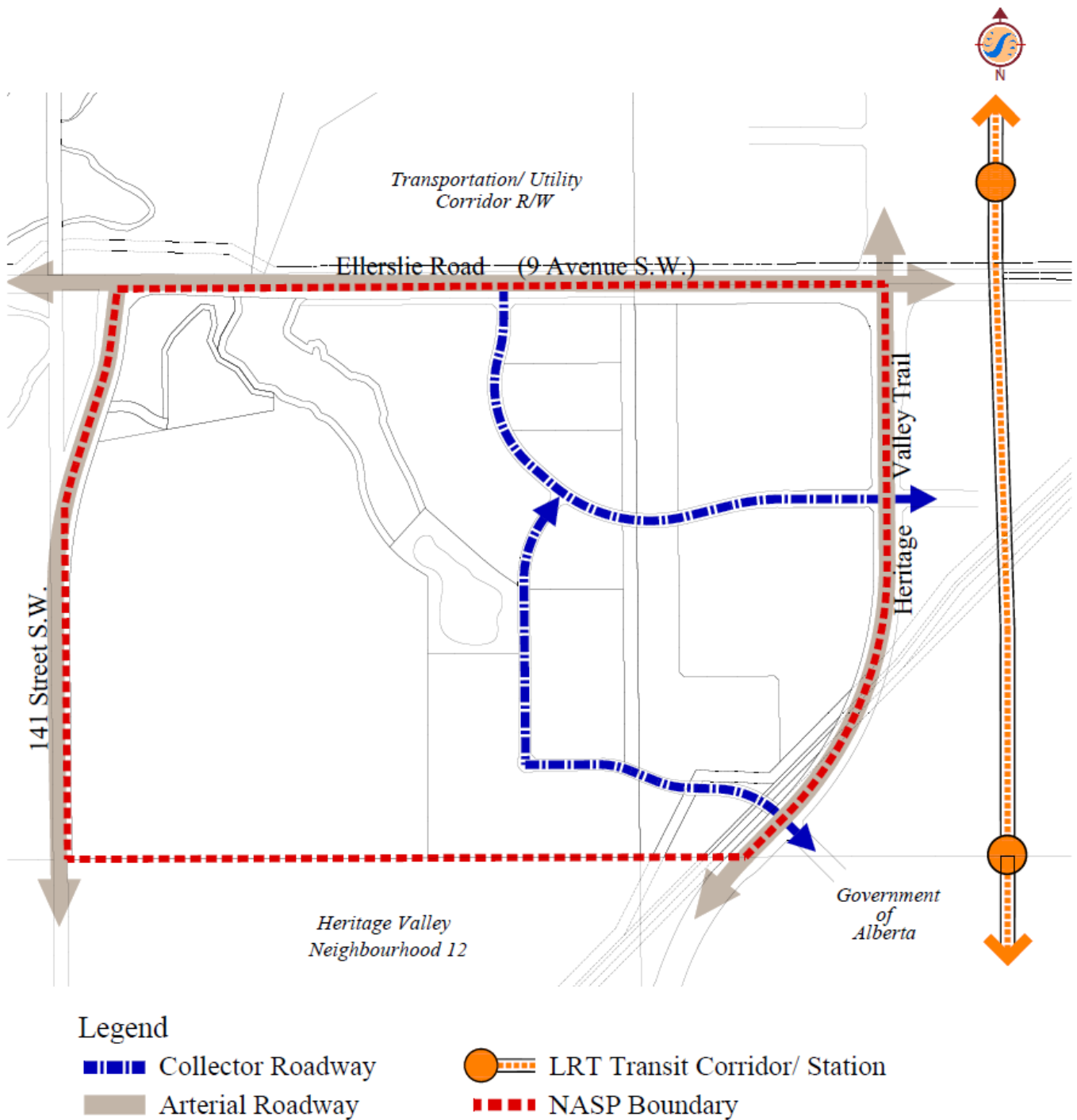
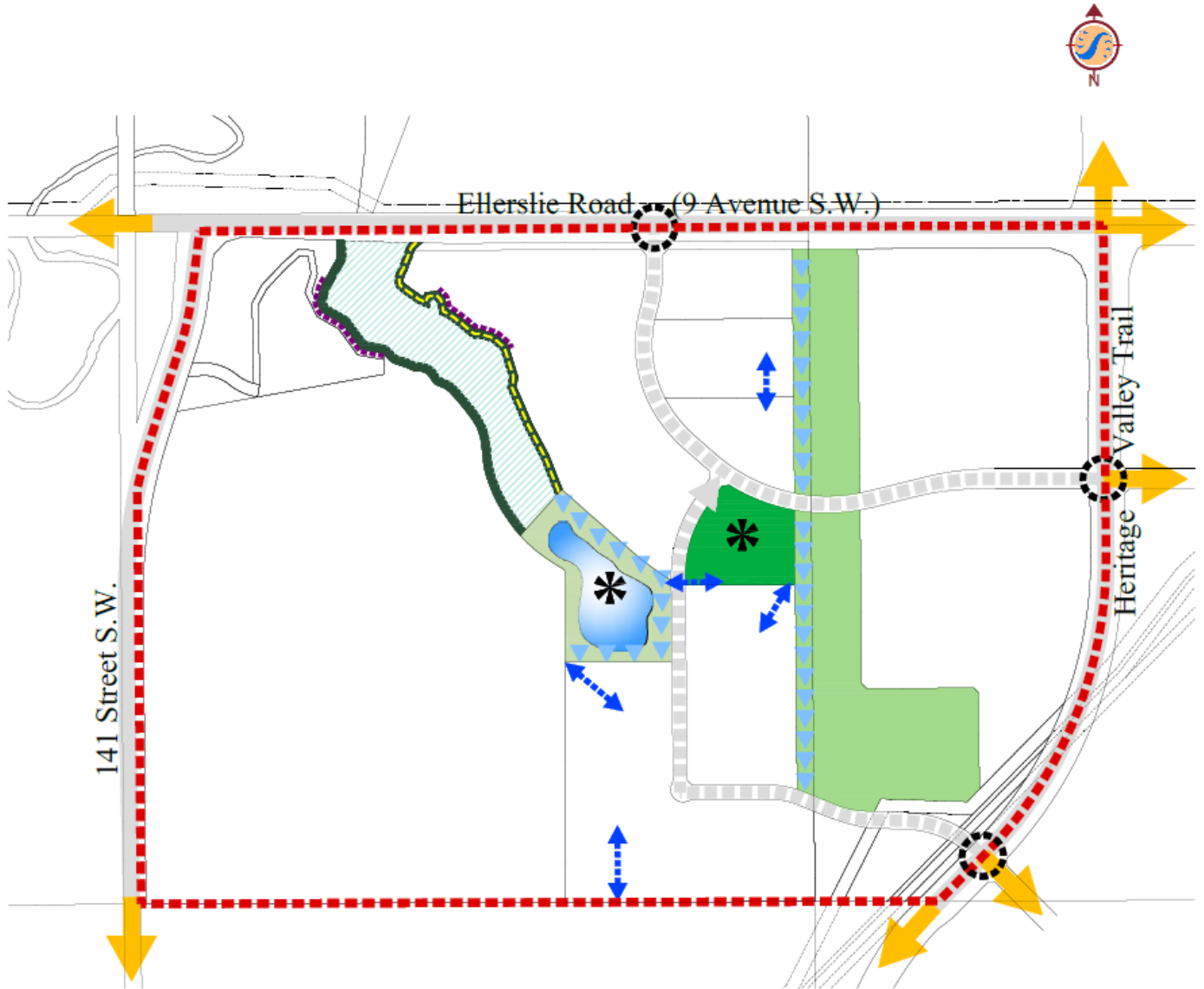




Figure 10  
Pedestrian Network

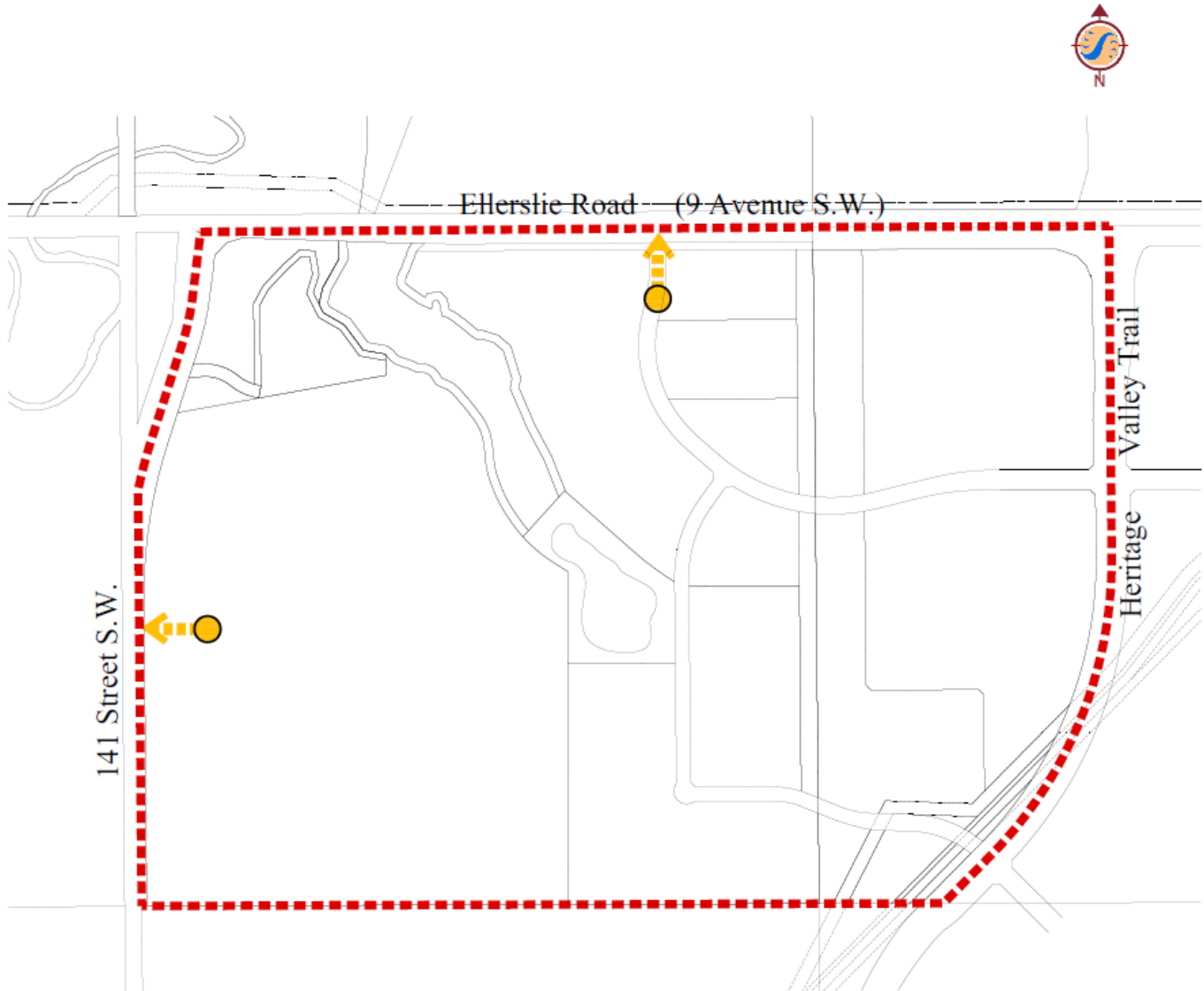


**Legend**

- |                                |                               |                         |
|--------------------------------|-------------------------------|-------------------------|
| Stormwater Management Facility | Top-of-Bank Shared-Use Path   | Focal Point             |
| Park                           | Top-of-Bank Roadway           | Key Pedestrian Crossing |
| Natural Area                   | Minor Pedestrian Linkages     | NASP Boundary           |
| Environmental Reserve          | Shared Use Path               |                         |
| Public Upland Area             | Linkage To Adjacent Community |                         |



Figure 11  
Sanitary Servicing



### Legend



-  Sanitary Trunk
-  NASP Boundary



Figure 12  
Stormwater Servicing

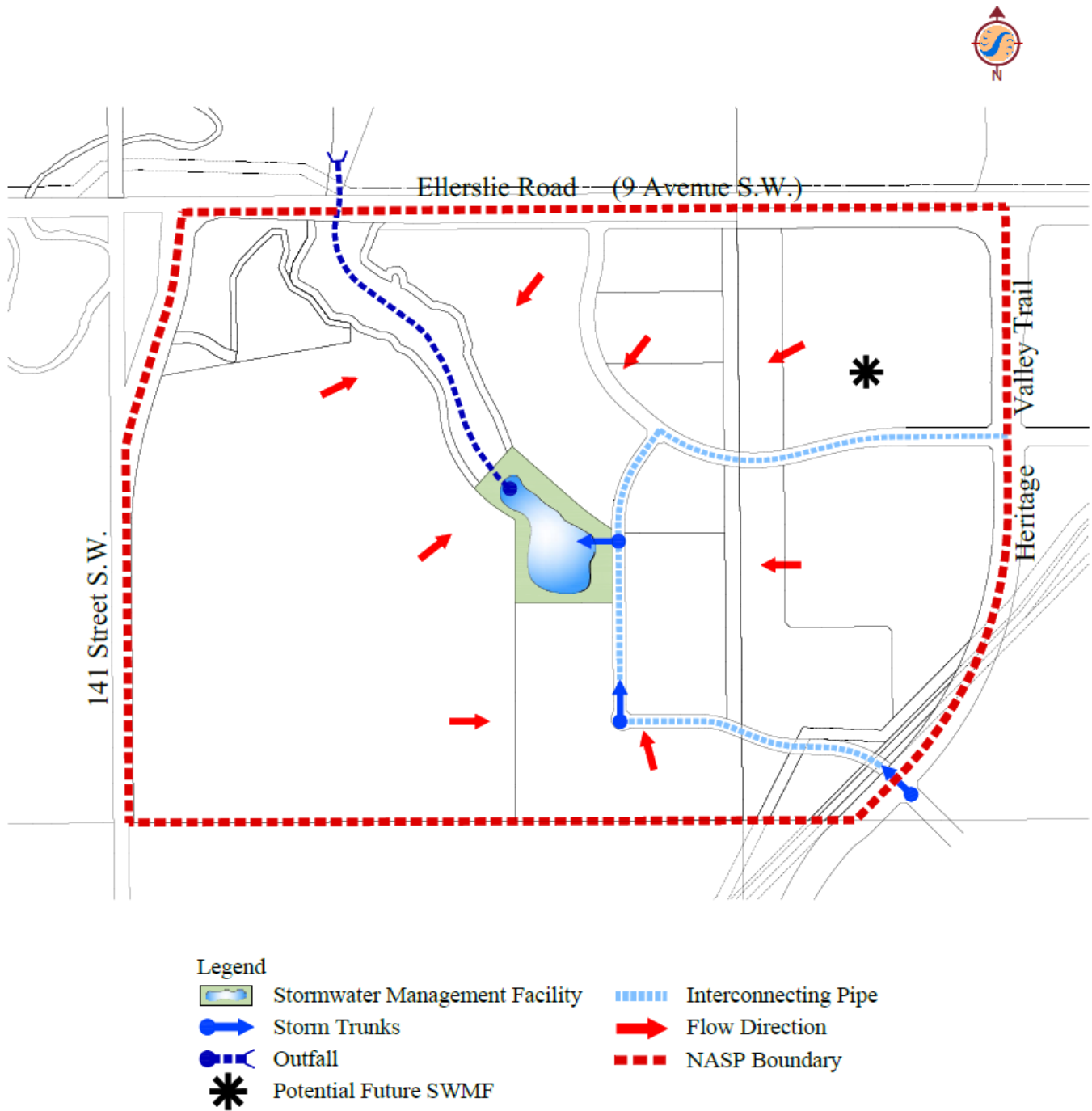




Figure 13  
Water Servicing

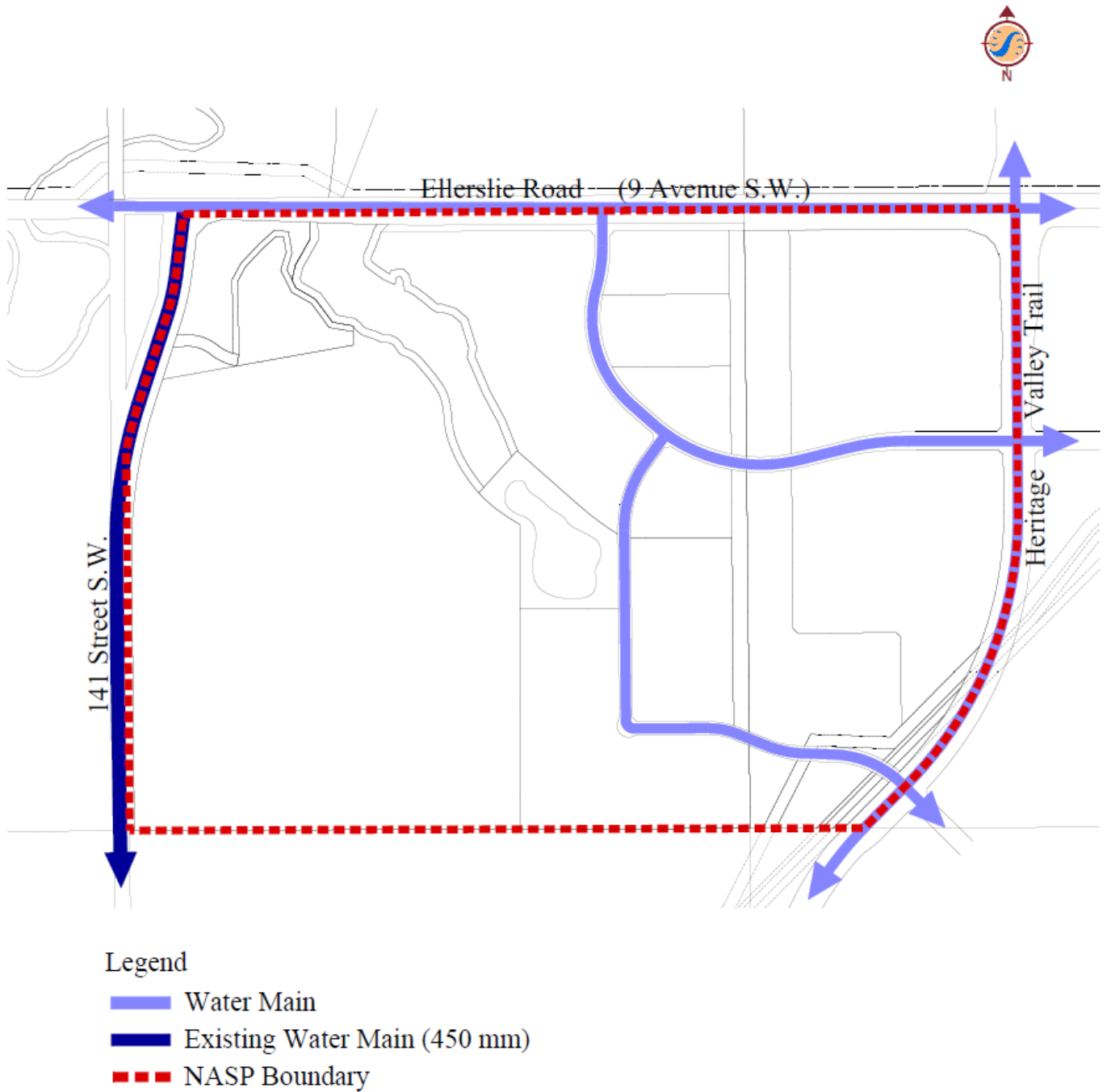
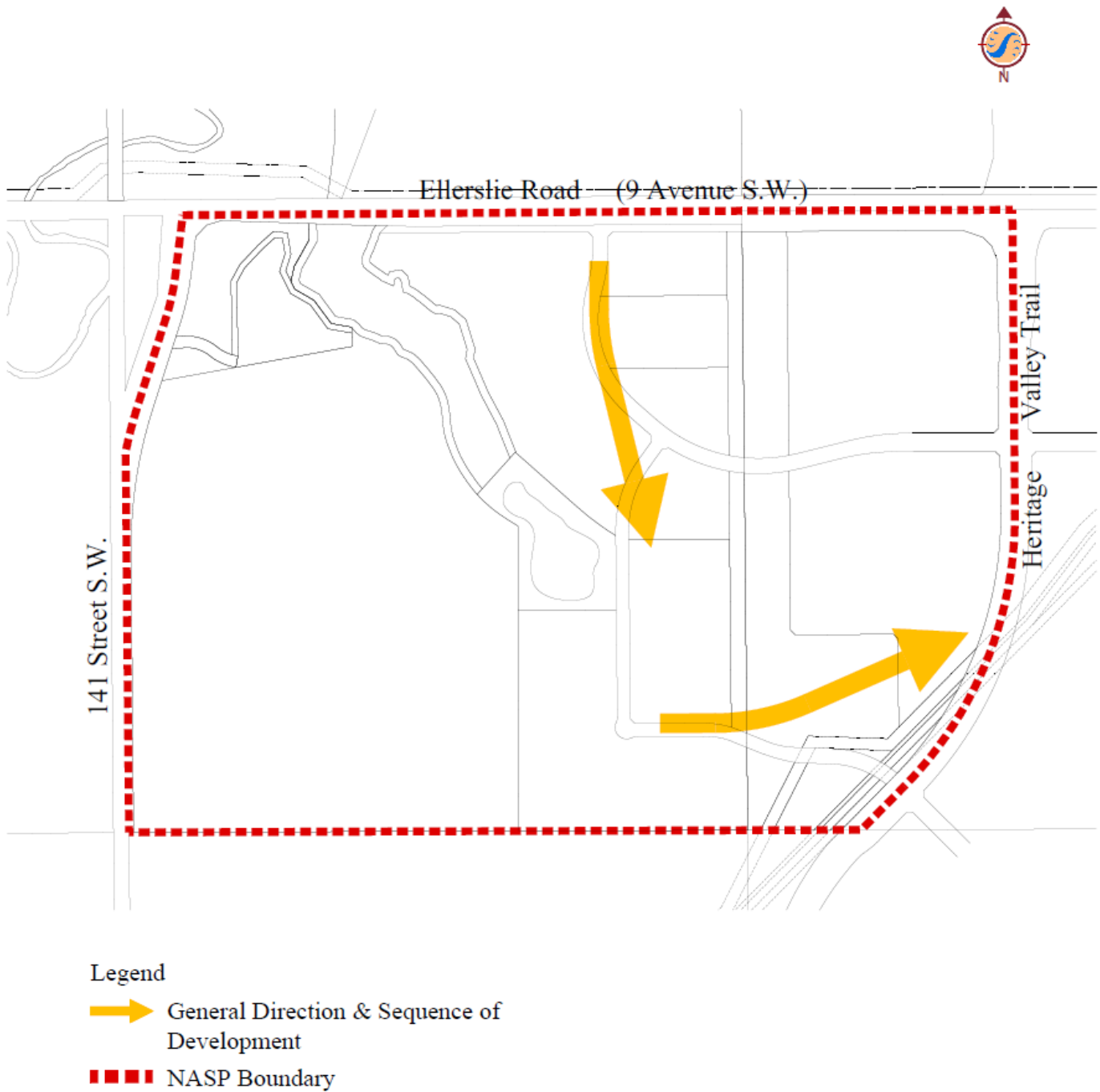




Figure 14  
Staging Concept







## 4. Appendix A - Planning Policy Context

The Graydon Hill NASP is in conformance with and supports a number of policies and guidelines identified in the “Capital Region Land Use Plan”, “The Way We Grow”, “The Way We Move”, the “City of Edmonton’s Suburban Neighbourhood Design Principles”, “Heritage Valley Servicing Concept Design Brief”, and other relevant policy / statutory documents. This section of the Plan describes the relevant policies from these documents and outlines the NASP’s conformance to each policy. 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 Growth Plan (CRGP) “Growing Forward” – The CRGP was approved by the Government of Alberta on March 11, 2010. The Growth Plan provides a vision for the Capital Region in the future.
- Municipal Development Plan (MDP) “The Way We Grow” - The MDP is a document that provides the policies and strategies to help guide growth and development in Edmonton over the long-term.
- Transportation Master Plan (TMP) “The Way We Move” – The TMP is the overarching strategic document that provides the framework for how the City of Edmonton will address its future transportation needs.
- People Plan “The Way We Live” –The Way We Live: Edmonton’s People Plan is a strategic plan that sets the direction, establishes priorities, and guides decisions about current and future people services in the City of Edmonton.
- Environmental Strategic Plan—“The Way We Green”—is the City of Edmonton’s environmental strategic plan that sets out principles, goals, objectives and strategic actions and approaches for Edmonton to live in balance with nature.
- Heritage Valley Servicing Concept Design Brief (SCDB) –The SCDB is a non-statutory document which establishes the general framework for land use, municipal infrastructure and servicing and environmental requirements in the Heritage Valley area of southwest Edmonton
- Suburban Neighbourhood Design Principles (SNDP) - The City of Edmonton’s Suburban Neighbourhood Design Principles describes a variety of design principles intended to encourage flexibility and innovation in the design and servicing of new neighbourhoods.
- Smart Choices for Developing Our Community – Council Recommendations - The Smart Choices Recommendations were approved by City Council on March 23, 2004, to promote urban sustainability.
- Crime Prevention Through Environmental Design (CPTED) – These guidelines are based upon the theory that the proper design and effective use of the built environment can reduce crime, the fear of crime, and improve the quality of life.
- Urban Parks Management Plan (UPMP) – These guidelines provide strategic direction for the acquisition, design, construction, maintenance, preservation and animation (or use) of parks.

The following tables summarize key objectives from the above-noted policy documents applicable to the design of the Graydon Hill NASP, and demonstrates how each has been incorporated in to the NASP.

### 4.1.1 - Capital Region Growth Plan: Growing Forward

The primary purpose of the Capital Region Land Use Plan is to manage sustainable growth that protects the region’s environment and resources, minimizes the regional development footprint, strengthens communities, increases transportation choice and supports economic development. The Graydon Hill NASP aims to accomplish these objectives through an integrated and strategic approach to planning which coordinates planning and



development decisions in the Region and identifies a regional development pattern to complement existing infrastructure, services and land uses.

The Graydon Hill NASP complies with the following Growth Plan strategies:

Capital Region Land Use Plan	NASP Compliance with Policy
<b>I. Protect the Environment and Resources</b>	
<p><b>A. Preserve and Protect the Environment</b></p> <p><b>Policy (ii)</b> – Any development which fragments contiguous natural features, functions and habitat, such as water systems, moraines, forests, wetlands and wildlife habitat and corridors shall be discouraged.</p> <p><b>Policy (vi)</b> – Manage land use distribution patterns to reduce reliance on automobiles.</p>	<p>The Graydon Hill NASP preserves and protects an environmental significant natural area and ravine tip in the NASP.</p> <p>A network of roadways, along with sidewalks, walkways and a shared-use path will provide residents with the ability to drive, walk, or cycle, through the neighbourhood or into the surrounding region.</p>
<b>II. Minimize Regional Footprint</b>	
<p><b>B. Concentrate New Growth Within Priority Growth Areas</b></p> <p><b>Policy (i)</b> – Most new growth shall occur within priority growth areas.</p> <p><b>Policy (ii)</b> 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"> <li>a) Existing and proposed multi-movement corridors, including transit nodes;</li> <li>b) Adjacent to existing and proposed major employment areas;</li> <li>c) Redevelopment and intensification opportunities within existing urban areas; and</li> <li>d) Locations that utilize existing infrastructure and servicing capacity or logically and efficiently extend that infrastructure.</li> </ul> <p><b>Policy (v)</b> Priority growth areas shall incorporate intensive forms of development that significantly exceed existing development patterns.</p>	<p>Graydon Hill is located Priority Growth Area “C<sub>w</sub>” which sets a density target of 30 – 40 units per net residential hectare in order to facilitate development within existing development patterns.</p> <p>The NASP meets the density target.</p> <p>Graydon Hill is situated near Anthony Henday Drive, Ellerslie Road and Heritage Valley Trail, and takes advantage of existing infrastructure and servicing capacity in south Edmonton.</p> <p>The NASP continues the trend of residential intensification in suburban areas.</p>
<p><b>D. Support Expansion of Medium and Higher Density Residential Housing Forms</b></p> <p><b>Policy (i)</b> – New residential development shall provide a greater proportion of higher density residential units.</p> <p><b>Policy (iii)</b> – Greenfield developments shall make provision for a mixture of uses including a diversity of housing forms, community services, local retail and employment opportunities.</p> <p><b>Policy (iv)</b> – Transit accessibility must be included in the design of all new developments.</p>	<p>The Graydon Hill NASP provides the opportunity for residential units as medium density housing.</p> <p>The NASP is bounded on three sides by arterial roadways all of which will accommodate transit service. The internal roadway network has also been designed with transit routing through the neighbourhood.</p> <p>The proximity of these roadways along with careful attention to subdivision design will ensure the NASP meets the goals of the Capital Region Growth Plan in providing transit accessibility.</p>



<b>III. Strengthen Communities</b>	
<b>B. Support Healthy Communities</b> <b>Policy (ii)</b> – 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.	Graydon Hill includes sidewalks and a shared use path in the plan area to encourage active Transportation and a healthy lifestyle.
<b>C. Support Public Transit</b> <b>Policy (i)</b> Provide a mix of higher intensity land uses along transit corridors, at nodes, and employment centres. <b>Policy (iii)</b> – New developments shall be designed for connectivity and accessibility to transit facilities.	Higher residential densities have been located adjacent to arterial and/or collector roadways to promote walkability and transit usage.
<b>D. Support Innovative and Affordable Housing Options</b> <b>Policy (ii)</b> – All residential developments shall provide a greater variety of housing types.	The Graydon Hill NASP allows for the development of a range of residential housing types based on Single/Semi-Detached, Row Housing, and Low-Rise/Medium Density Housing.
<b>IV. Increase Transportation Choice</b>	
<b>A. Integrate Transportation Systems with Land Use</b> <b>Policy (iii)</b> – Design Transportation infrastructure to support multiple modes of transport. <b>Policy (iv)</b> – Support development of inclusive communities to reduce the need for travel.	A network of roadways, along with sidewalks, walkways and a shared-use path will provide residents with the ability to drive, walk, or cycle, through the neighbourhood or into the surrounding region.
<b>B. Support the Expansion of Transit Service in Various Forms</b> <b>Policy (i)</b> – Expand and extend the level, quality and range of public Transportation options available to serve the Region. <b>Policy (iv)</b> Support multi-modal transportation options by providing multi-use streets sufficient to accommodate bicyclists, motorists and pedestrians.	<p>The Graydon Hill NASP has been designed to support public transportation ridership.</p> <p>A network of roadways, along with sidewalks, walkways and a shared-use path will provide residents with the ability to drive, walk, or cycle, through the neighbourhood or into the surrounding region.</p> <p>In addition, Graydon Hill is located in close proximity to future proposed light rail stations in the Heritage Valley area.</p>



## 4.1.2 - Municipal Development Plan: The Way We Grow

The Municipal Development Plan (MDP), “The Way We Grow,” approved in May 2010, is the City’s strategic growth and development plan. Through its MDP, the City of Edmonton will shape the city’s urban form and direct the development and implementation of more detailed plans.

The plan is closely integrated with the Transportation Master Plan (TMP) to achieve more coordinated decision making. The plan also includes a regional component which addresses the coordination of future land use, growth patterns and Transportation systems with Edmonton’s neighbouring municipalities.

The Graydon Hill NASP complies with the following policies:

Municipal Development Plan: The Way We Grow	NASP Compliance with Policy
<b>3.2.1.1</b> – Ensure a combination of single family and multi-family housing development potential is available for the next 30 years.	The NSP will provide single family and multi-family housing for approximately 10 years at current absorption and development rates in southwest Edmonton.
<b>3.2.1.3</b> – Achieve a balance between residential, industrial, commercial, institutional, natural and recreational land uses in the city through land development policies and decisions.	The NASP establishes a variety of development opportunities through the provision of various land use components – residential, institutional and parks.
<b>3.6.1.6</b> – Support contiguous development and infrastructure in order to accommodate growth in an orderly and economical fashion.	Development of Graydon Hill will be contiguous, efficient, and economical, and fills an undeveloped gap in the Heritage Valley area.
<b>4.3.1.1</b> – The City of Edmonton will take municipal reserve, school reserve or municipal and school reserve, or cash-in-lieu in accordance with the Municipal Government Act and will use the land or money for purposes as defined by the Municipal Government Act.	Municipal reserve shall be provided as a combination of land and cash-in-lieu of land.
<b>4.3.1.5</b> – Time the development of parks as closely as possible with the development they are intended to serve.	The development of parks and open spaces will coincide with residential development in Graydon Hill.
<b>4.4.1.1</b> – Provide a broad and varied housing choice, incorporating housing for various demographic and income groups in all neighbourhoods.	The NASP includes a mix of housing types and sizes to support a range of income levels.
<b>4.5.1.2</b> – Encourage new development and infill redevelopment to incorporate affordable housing that is visually indistinguishable from market housing.	The Graydon Hill NASP incorporates a mix of housing types and lot sizes to accommodate residents of different age, income, and family types.
<b>4.6.1.1</b> – Support Corporate initiatives to improve walkability and other active transportation modes.	The NASP has a well-connected and integrated roadway network and open space system which allows residents the opportunity to choose modes of transportation other than the private vehicle.
<b>4.6.1.3</b> – Support the design of accessible and safe active transportation networks in accordance with best practices in	The network of roadways, sidewalks, walkways and shared-use path will be



Municipal Development Plan: The Way We Grow	NASP Compliance with Policy
universal design.	designed according to best practices in universal design and will provide residents with the ability to walk, cycle, in-line skate, etc. within the neighbourhood.
<b>5.5.1.2</b> – Incorporate sustainable neighbourhood design principles, low impact development and ecological design approaches when planning and building new neighbourhoods.	The NASP preserves the site’s natural area as Municipal Reserve and encourages active modes of Transportation with a shared-use path through the site.
<b>5.6.1.4</b> – 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 density residential areas have been located near arterial and/or collector roadways to promote walkability and transit use. All other uses have a high degree of access to arterial and collector roadways with transit service.
<b>5.7.1.1</b> – 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 as a means of providing pedestrian safety and attractive street designs. Boulevards and medians may be used to improve the appearance and function of the streetscape.
<b>7.1.1.7</b> – 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 planning and design.	The NASP protects and integrates the natural area and ecological network into the neighbourhood.
<b>7.4.1.1</b> – Link parks and open spaces with natural systems through development and design to strengthen the connectivity of Edmonton’s ecological network, where feasible.	Park, storm water management facility and other open spaces are inter-connected in order to serve as neighbourhood destinations for pedestrians and cyclists and to provide passive recreation opportunities. These same trails and connections will also contribute to enhancing ecological connectivity.
<b>8.1.7.3</b> – 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, Cw or Ce will be required to meet or exceed the Capital Region’s minimum density targets.	Graydon Hill 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 NSP meets this target.
<b>9.3.1.4</b> – 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.	Urban development in the vicinity of all resource well sites and pipelines will be planned in accordance with the City policy and procedures.



## 4.1.3 - Transportation Master Plan: The Way We Move

The Transportation Master Plan (TMP) “The Way We Move”, is the framework that responds to the City of Edmonton’s future Transportation needs. The TMP directs policies and gives guidance for funding projects and programs that work towards an integrated Transportation network. The TMP strives to ensure transit sustainability and increase transit ridership, improve travel options to reduce barriers between different modes of Transportation, increase traffic safety and manage traffic congestion to facilitate travel through and around the city.

The Graydon Hill NASP complies with the following TMP strategic goals:

TMP Strategic Goal	NASP Compliance with Strategic Goal
<p><b>Transportation and Land Use Integration</b></p> <p>The transportation system and land use/urban design complement and support each other so that the use of transit and transportation infrastructure is optimized and supports best practices for land use.</p>	<p>The NASP provides a network of roadways which are compatible and complementary to the primarily residential development within the neighbourhood, with access to transit which meets the City’s walkability requirement.</p>
<p><b>Access and Mobility</b></p> <p>The Transportation system is interconnected and integrated to allow people and goods to move efficiently throughout the city and to provide reasonable access with a variety of modes for people across demographic, geographic, socio-economic and mobility spectrums.</p>	<p>The NASP transportation network encourages multiple modes of Transportation, including public Transportation, personal vehicle, and active Transportation to accommodate local residents and connect residents with services in surrounding communities.</p>
<p><b>Transportation Mode Shift</b></p> <p>Public Transportation and active Transportation are the preferred choice for more people making it possible for the Transportation system to move more people more efficiently in fewer vehicles.</p>	<p>Graydon Hill has been designed to support direct, safe, convenient and accessible routes for all residents and provides a well-integrated network between sidewalks, walkways and a shared-use path connecting people to amenities.</p>
<p><b>Sustainability</b></p> <p>Transportation decisions reflect an integrated approach to environmental, financial and social impacts thereby creating sustainable, liveable communities that minimize the need for new infrastructure and increase residents’ quality of life.</p>	<p>The NASP supports sustainable development by providing increased residential densities, public transit and active transportation opportunities. Services are located nearby and are readily accessible.</p>
<p><b>Health and Safety</b></p> <p>The Transportation system supports healthy, active lifestyles, and addresses user safety and security including access for emergency response services, contributing to Edmonton’s liveability.</p>	<p>The network of sidewalks, walkways and multi-use trails provide residents with the ability to walk, or cycle through the neighbourhood, improving health and wellness.</p>



#### 4.1.4 - People Plan – The Way We Live

The City of Edmonton’s People Plan “The Way We Live,” approved by Council in July 2010, sets the direction, establishes priorities, and guides decisions about current and future people services. This 10-year strategic plan is intended to help the City of Edmonton connect people and create communities where people can age in place and actively nurturing an arts, culture and athletic community.

The Graydon Hill NASP complies with the following objectives from “The Way We Live”:

The Way We Live	NASP Compliance with Objectives
<p><b>Objective 2.1</b></p> <p>The City of Edmonton celebrates and promotes healthy living.</p>	<p>The NASP allocates park space and recreational trails to connect neighbourhood focal points within the neighbourhood and between surrounding communities</p>
<p><b>Objective 2.2</b></p> <p>The City of Edmonton provides for the well-being of its citizens through outstanding parks, natural, green, and public spaces.</p>	<p>The NASP provides one pocket park, open space, stormwater management facility, protection of the ravine tip, preservation of a natural area, and recreational trails along the Top of Bank.</p>

#### 4.1.5 - Environmental Strategic Plan – The Way We Green

The City of Edmonton’s Environmental Strategic Plan—“The Way We Green”—is a framework to guide the protection and preservation of Edmonton’s environmental resources. It sets out the principles, goals, objectives, and strategic actions for Edmonton to live in balance with nature. The Way We Green describes the 10-year route Edmonton will take to become a national leader in setting and achieving the highest standards of environmental preservation and sustainability, in our own civic practices and those of our partners.

The Graydon Hill NASP complies with the following objectives from “The Way We Green”:

The Way We Green	NASP Compliance with Objectives
<p><b>Objective 6.1</b></p> <p>Edmonton’s overall built environment (i.e. an urban form that includes buildings, roads, and infrastructure) is designed to minimize energy consumption.</p>	<p>The NASP encourages alternative development standards such as energy efficient lighting and alternative road construction standards.</p>
<p><b>Objective 6.3</b></p> <p>Edmonton’s building stock is energy-efficient.</p>	<p>The NASP encourages sustainable development practices and energy efficient buildings.</p>
<p><b>Objective 6.6</b></p> <p>Edmonton is conserving and efficient in its use of light.</p>	<p>The NASP encourages energy efficient lighting in public spaces.</p>



## 4.1.6 - Heritage Valley Servicing Concept Design Brief

The Heritage Valley Servicing Concept Design Brief (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 a City Council 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 Graydon Hill NASP complies with the following SCDB strategic goals:

Heritage Valley SCDB Principles	NASP Compliance with SCDP Principles
<b>3.1 (1)</b> – Promote sustainable community design	The NASP establishes higher residential densities, which optimizes the land for suburban development. It also supports the future, adjacent LRT system by clustering higher densities along major roadways and towards the edges of the neighbourhood and through pedestrian connections and liveability efforts.
<b>3.1 (3)</b> – Create a compact, pedestrian-oriented community	The NASP pedestrian network is at the heart of the plan, ensuring connectivity and a human-scale development. Higher residential densities, mixed development and somewhat smaller lot sizes enable compact, efficient development.
<b>3.2 (4)</b> – Establish a linked system of public open spaces	The park site, the stormwater management facility, natural area and other open spaces are all connected by minor pedestrian linkages and a shared-use path and are accessible to adjacent roadways.
<b>3.2 (5)</b> – Provide a diversity of housing types in each neighbourhood	Single/Semi-detached, Row Housing and Low-Rise/Medium Density Housing uses allow for the development of diverse housing types.
<b>3.2 (6)</b> – Support housing at increased densities in support of the City’s intensification strategies and to encourage the use of transit	The NASP proposes a more intensified housing unit ratio of 63% LDR and 37% MDR, with a total net residential density of 34 units per net residential hectare
<b>3.3 (2)</b> – Ensure that each neighbourhood is designed with a focal point	The stormwater facility and park site act as community focal points.
<b>3.5 (1)</b> – Provide a balanced network for movement	The NASP provides opportunities for movement by car, public transit, bicycle, walking, etc. via adjacent and internal shared-use paths, internal roadways, sidewalks, and transit routes.
<b>3.5 (2)</b> – 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 modified grid roadway system and arterial roadways that border the neighbourhood ensures that the majority of the Neighbourhood is accessible via transit within a 400 m walking distance.





Heritage Valley SCDB Principles	NASP Compliance with SCDP Principles
<b>3.5 (3)</b> – Improve connectivity	Pathways, shared-use path, and roadway patterns provide linkages and improve connectivity to community focal points, the nearby future transit and LRT system, employment centre and adjacent neighbourhoods.
<b>3.5 (5)</b> – 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.
<b>3.7 (2)</b> – Protect and enhance the natural features of the community when designing and planning neighbourhoods, facilities and services	Naturalized landscaping along open space corridors should work to restore ecological connections within the area.

#### 4.1.7 - Suburban Neighbourhood Design Principles

The purpose of the Suburban Neighbourhood Design Principles (SNDP) is to encourage flexibility and innovation in the design and servicing of new neighbourhoods. The applicable principles are listed below:

Suburban Neighbourhood Design Principle	NASP Compliance with SNDP Principles
<b>Principle 1:</b> Design neighbourhoods with the intent of sharing common infrastructure facilities among neighbourhoods	Through site orientation and location, proximity to future transit system and connectivity these development will provide options for service delivery for adjacent neighbourhoods.
<b>Principle 2:</b> Design and locate school and community facilities to provide inter-neighbourhood focal points	The park site within the NASP is central to the perceived catchment area and will be used by neighbourhood residents.
<b>Principle 3:</b> Design the arterial and collector roads along a grid pattern, peripheral to the neighbourhoods. Use local roadways to distribute neighbourhood traffic from/to these arterial and collector roadways.	The arterial roads on three sides of the Graydon Hill NASP are designed in a grid pattern.
<b>Principle 4:</b> Design neighbourhood streets (both neighbourhood design and cross section of roadway) with standards that cater to the main intended use of the road.	<p>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. Street types are organized in a hierarchical fashion, depending on their use.</p> <p>New roadway cross-sections will be considered as an innovative way of making local roadways more efficient for traffic movement and more enjoyable for residents.</p>
<b>Principle 5:</b> Provide convenient pedestrian and bicycle access throughout the neighbourhood and especially between destination points within and outside the neighbourhood	Pathways, walkways, sidewalks and shared-use path connect pedestrians and cyclists to community focal points and destinations such as the park site, SWMF, adjacent neighbourhoods, future adjacent transit system, employment centres and the Towne Centre.
<b>Principle 6:</b> Provide Transit Services to the edges of	Future transit service is appropriate along the arterial

# Graydon Hill - Neighbourhood Area Structure Plan



Suburban Neighbourhood Design Principle	NASP Compliance with SNDP Principles
new neighbourhoods using the arterial and collector roadways in conjunction with appropriately designed, strategically located and conveniently accessed transit waiting zones	and collector roadway network. Alignment of collector roadways and the strategic location of walkways are designed so that all areas of the neighbourhood are accessible to transit stops within a 400m walking distance.
<b>Principle 7:</b> 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	Distribution of park sites throughout the neighbourhood ensures that parkland will be developed on a timely basis.
<b>Principle 8:</b> Design park and institutional sites and buildings within the neighbourhood and community focal points to be adaptable to other uses or levels of education over time	In time, the park site may be redeveloped to address the changing needs and uses of the community. The central location will support this evolution.
<b>Principle 9:</b> Explore opportunities to provide smaller, dispersed open space and parks in a neighbourhood to provide for localized needs while meeting the recreational needs of residents of the catchment area	There is a pocket park site located in the Plan area which will accommodate opportunity for passive recreation for area residents.
<b>Principle 10:</b> Optimize the use of land and capital requirements for facilities such as churches, schools, community leagues and storm water management	A park site and stormwater facility are located together to maximize their use potential.
<b>Principle 11:</b> Create a linked open space system through open spaces created by stormwater management facilities, some utility rights-of-way, preservation of appropriate natural areas and drainage courses, and school and park open spaces	The NASP provides excellent opportunities for linkages throughout and beyond the plan area to connect residents with amenities and potential commercial service areas. An integrated open space system and shared-use path provide linkages between the stormwater management facility, natural area and pocket park site, as well as access to visual amenities, and passive and active recreation opportunities.
<b>Principle 12:</b> Locate multi-family uses toward the edge of new neighbourhoods and close to the community and neighbourhood focal points	Higher density residential uses have been located near arterial roadways, with connections to neighbourhood focal points.
<b>Principle 13:</b> Use stormwater management techniques which provide an alternative(s) to the manmade lakes and dry ponds typical to Edmonton	The NASP has been designed to incorporate the existing lay of the land to take advantage of the existing contours and depressions for the SWMF.  Alternative stormwater management techniques should be considered, such as constructed wetlands, where appropriate, and will be pursued at the subdivision stage to the satisfaction of the City of Edmonton.
<b>Principle 15:</b> Provide opportunity through the residential districts of the Land Use Bylaw for the intensification of housing forms and for alternative site design and building siting	The Graydon Hill NASP proposes a Section 900 zoning to intensify development and provide alternative and innovative site designs.



## 4.1.8 - 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.

Urban Parks Management Plan Principle	NASP Compliance
<b>Principle 1 – Active Living:</b> City and partner actions demonstrate a strong commitment to active living through the acquisition of a network of connected parks and open spaces.	The NASP identifies a network of park, open spaces, stormwater management facilities and shared-use path which together create a connected and public open space system.
<b>Principle 2 – Urban Wellness:</b> City and partner actions demonstrate a strong commitment to building social capital and urban wellness in the community through the development of urban parks.	The Graydon Hill NASP ensures visual and physical access to parks, and public safety through application of CPTED principles.
<b>Principle 3 – Natural Capital:</b> City and partner actions demonstrate a strong commitment to preservation of natural capital through ecological decision making.	Naturalized landscaping along open space corridors should work to sustain ecological connections within the area.
<b>Principle 4 – Creative Urban Design:</b> City and partner actions demonstrate a strong commitment to a higher quality of life and urban sustainability through placemaking, creative urban design and the provision of diverse landscape opportunities and experiences.	The design of the NASP promotes opportunities to enhance the community’s quality of life through placemaking, creative urban design, and provision of diverse landscape opportunities.  The NASP ensures land uses adjacent to public parks are complementary. Examples of desirable adjacent land uses include Row Housing, Low-Rise/Medium Density Residential Housing, Stormwater and Management Facilities.
<b>Principle 5 – Safe Parks:</b> City and partner actions demonstrate a strong commitment to user safety through the creation and management of safe park environments.	The NASP ensures visual and physical access to parks, and public safety through application of CPTED principles.
<b>Principle 7 – Integrated Parks:</b> City and partner actions demonstrate a strong commitment to the integration of City, school and community facilities into the park system to meet community need.	The Graydon Hill NASP provides a central park site to meet community needs. The central park site may be increased to an appropriate Urban Village Park size should the future redevelopment of the Special Study Area occur.

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



## 4.1.9 - City of Edmonton Housing Mix Guidelines

Council approved (1991) guidelines recommend the ratio of dwelling types in new suburban neighbourhoods be based on a mix of 65% to 85% LDR units and 15% to 35% MDR units. These guidelines encourage a mix of housing types, a range of choice in housing, and a measure of intensification.

The Graydon Hill NASP meets this ratio and proposes a mix of 63% LDR (Single/Semi-Detached) and 37% MDR (Row Housing and Low-rise/Medium density residential). 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.

## 4.1.10 - Resource Well Sites and Pipelines

Development of lands within Graydon Hill 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 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
- Operation 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 NSP 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.



## 5. Appendix B - Technical Studies

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

- Neighbourhood Design Report (NDR)
- Transportation Impact Assessment (TIA)
- Environmental Site Assessment (ESA) Phase I
- Environmental Network Report (ENR)
- Wetland Assessment (WA)
- Historical Resources Overview (HRO)
- Geotechnical Report
- Parkland Impact Assessment (PIA)
- Community Knowledge Campus Needs Assessment (CKC NA)