Marquis Neighbourhood Structure Plan

Office Consolidation November 2015

Prepared by:

Urban Planning and Environment Branch
Sustainable Development
City of Edmonton

Bylaw 17022 (as amended) was adopted by Council in April 28, 2015. In November 2015, this document was consolidated by virtue of the incorporation of the following bylaws which were amendments to the original Bylaw 17022.

Bylaw 17022	Approved April 28, 2015 (to adopt the Horse Hill Neighbourhood #2 Neighbourhood Structure Plan)
Bylaw 17396	Approved November 2, 2015 (to rename Horse Hill Neighbourhood #2 to the "Marquis" neighbourhood, and to slightly adjust the Natural Area and surrounding land uses based on ground surveying)

Editor's Note:
This is an office consolidation edition of the Marquis (Horse Hill Neighbourhood #2) Structure Plan, Bylaw 17022, as approved by City Council on April 28, 2015. This edition contains all amendments and additions to Bylaw 17022.

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

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

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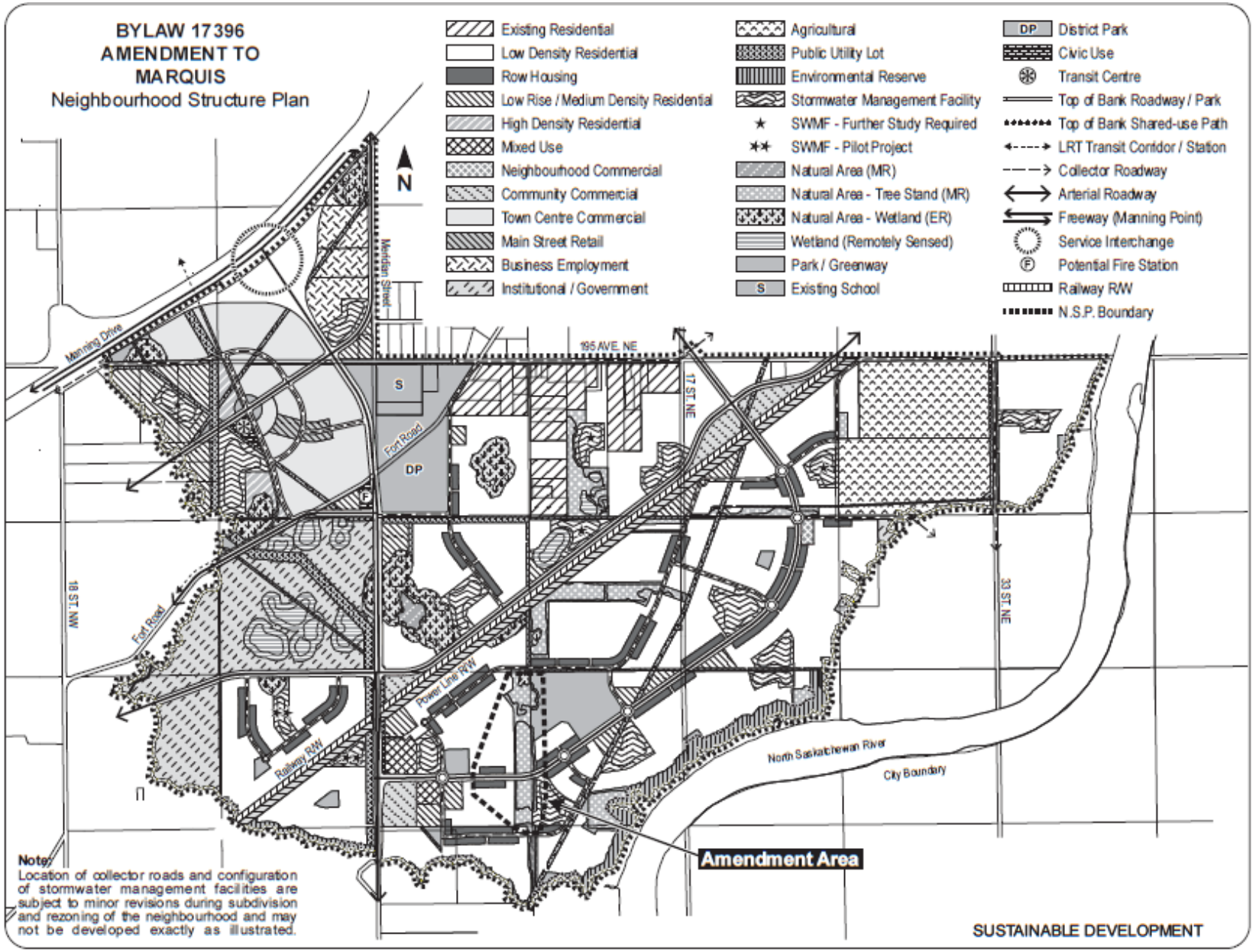
BYLAW 17396
AMENDMENT TO
MARQUIS
Neighbourhood Structure Plan
Existing Residential
Low Density Residential
Row Housing
Low Rise / Medium Density Residential
High Density Residential
Mixed Use
Neighbourhood Commercial
Community Commercial
Town Centre Commercial
Main Street Retail
Business Employment
Institutional / Government
Agricultural
Public Utility Lot
Environmental Reserve
Stormwater Management Facility
SWMF - Further Study Required
SWMF - Pilot Project
Natural Area (MR)
Natural Area - Tree Stand (MR)
Natural Area - Wetland (ER)
Wetland (Remotely Sensed)
Park / Greenway
Existing School
District Park
Civic Use
Transit Centre
Top of Bank Roadway / Park
Top of Bank Shared-use Path
LRT Transit Corridor / Station
Collector Roadway
Arterial Roadway
Freeway (Manning Point)
Service Interchange
Potential Fire Station
Railway R/W
N.S.P. Boundary
N
Meridian Street
Manning Drive
195 AVE. NE
17 ST. NE
Fort Road
18 ST. NW
33 ST. NE
Power Line R/W
Railway R/W
North Saskatchewan River
City Boundary
Amendment Area
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

Marquis Neighbourhood Structure Plan

Prepared for:
Walton Development and Management LP
Cameron Development Corporation

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1 Introduction

1.1 PLANNING FRAMEWORK AND PLAN AREA

The purpose of the Marquis Neighbourhood Structure Plan (NSP) is to establish a framework for future land use planning and the provision of municipal infrastructure, services and amenities in conformance with established planning policies, objectives and requirements of the City of Edmonton based on the characteristics and opportunities contained within the site.

This NSP specifies the following:

- The location, configuration and area of various land uses including residential, commercial, parks, open spaces, urban agriculture, institutional, and public utility land uses;
- The anticipated density of residential development;
- The pattern and alignment of the arterial and collector roadway and pedestrian network;
- The required utility infrastructure concept; and
- The implementation and phasing of development.

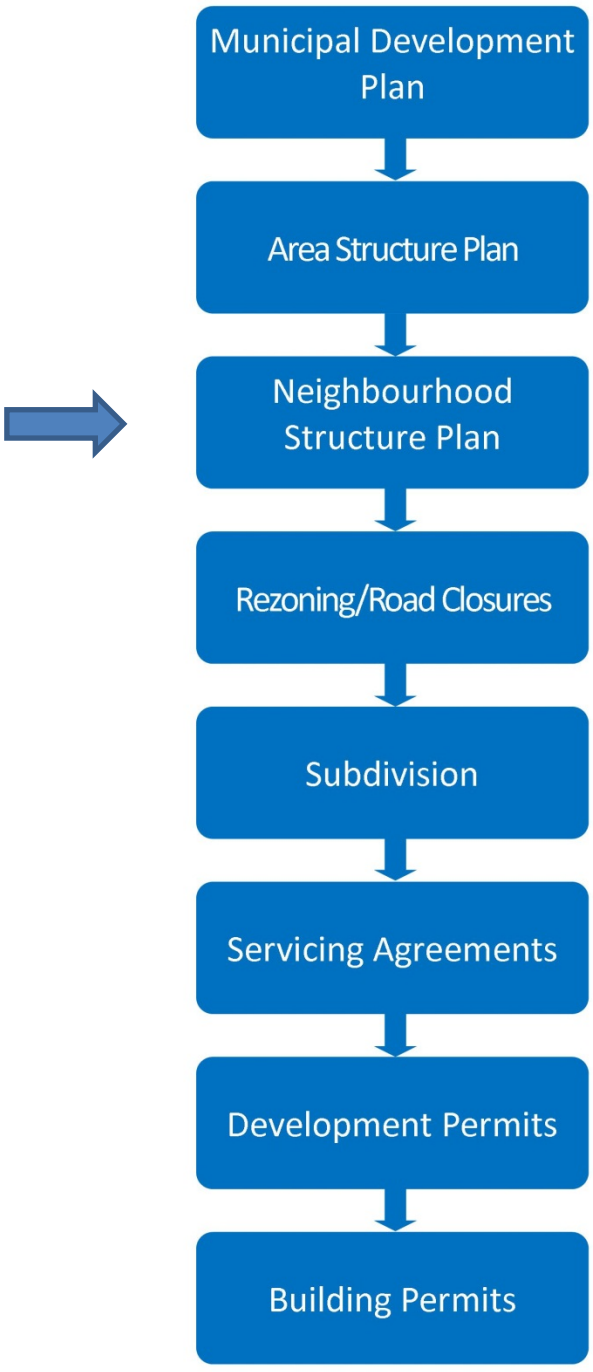
The Horse Hill Area Structure Plan (ASP) was approved in May 2013 through the adoption of Bylaw 16353. The Marquis neighbourhood is identified in the Horse Hill ASP as neighbourhood 2. The Marquis NSP was prepared in response to current and anticipated market demands in the Edmonton area as well as the aspirations of the landowners in the Plan area. The preparation of the NSP has been guided by existing City of Edmonton statutory plans and policy documents, see **Figure 1: Sequence of Neighbourhood Planning**. The Plan area is a sound planning unit that is suitable for a NSP and represents a logical extension of infrastructure and services related to currently planned neighbourhoods.

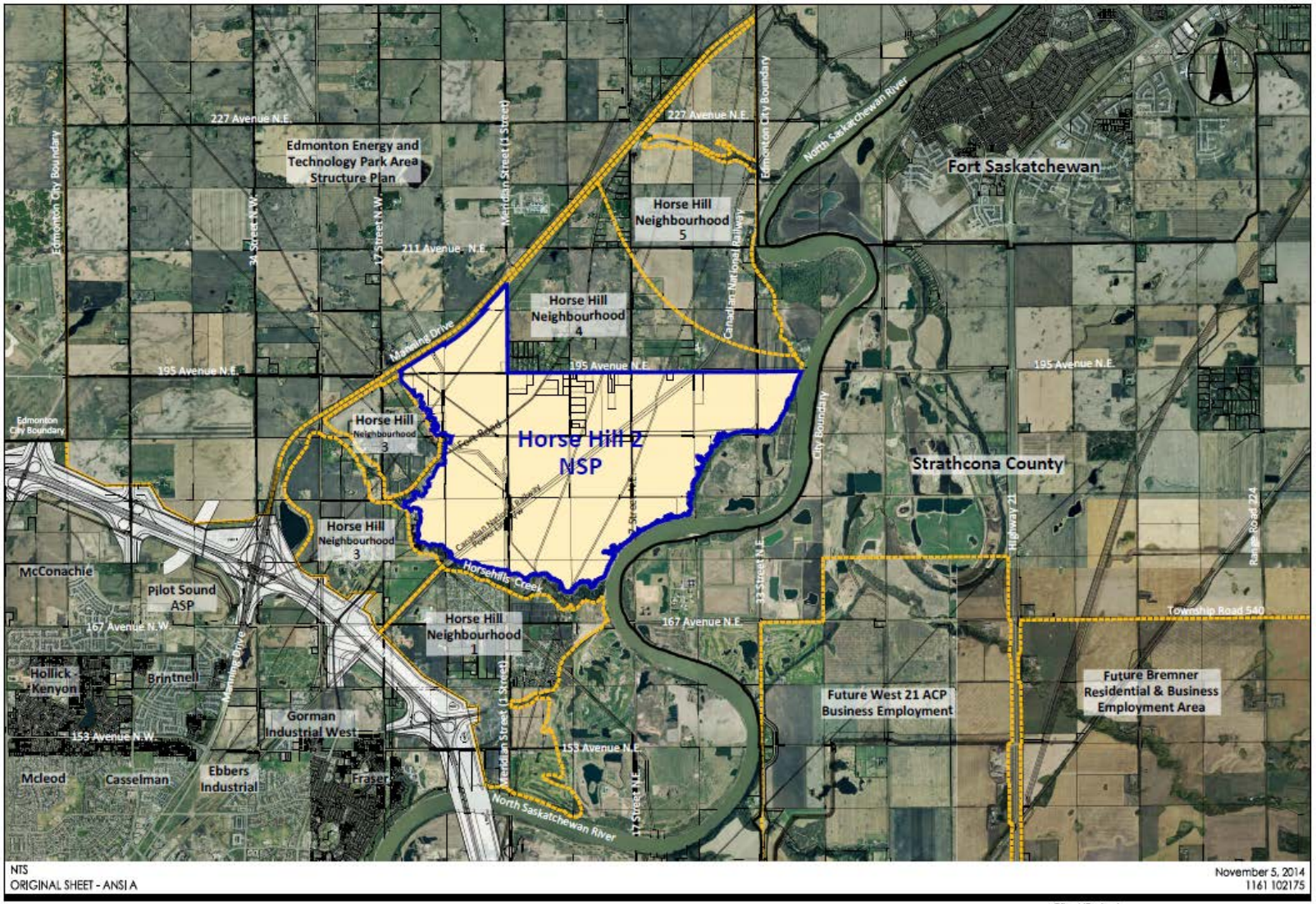
The Marquis neighbourhood is defined by the following boundaries, see **Figure 2: NSP Boundaries**:

- North – Manning Drive/195 Avenue
- East – North Saskatchewan River Valley
- South – Horsehills Creek/North Saskatchewan River Valley
- West – Horsehills Creek

Development in the Marquis neighbourhood is expected to commence in 2015 and should develop over the next 15 to 20 years.

Figure 1: Sequence of Neighbourhood Planning





Legend

- Horse Hill Neighbourhood 2 NSP Boundary
- Adjacent Neighbourhood Boundary

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Horse Hill Neighbourhood 2
Neighbourhood Structure Plan

Figure No.
2.0

Title
NSP Boundaries

1.2 AUTHORIZATION

As per policy 3.2.1.11 of The Way We Grow, Edmonton's Municipal Development Plan (MDP), all neighbourhood structure plans within the Northeast Urban Growth Area require Council authorization and compliance with the Growth Coordination Strategy, the Integrated Management Plan, and the City-Wide Food and Agriculture Strategy. A report was prepared for Council consideration and on July 17, 2013 Edmonton City Council provided authorization for work to commence on the Marquis NSP.

The Horse Hill ASP was adopted by Edmonton City Council in May 2013 as Bylaw 16353 in accordance with Section 633 of the *Municipal Government Act* (MGA). The Marquis NSP complies with all higher documents including the Horse Hill ASP.

1.3 INTERPRETATION

All symbols, locations, and boundaries shown in the NSP figures shall be interpreted as conceptual unless otherwise specified in the document, or where they coincide with clearly recognized physical or fixed features within the Plan area. The images, both pictorial and renderings, provided throughout the document are conceptual and for illustrative purposes only.

Policy statements containing "shall" are mandatory and must be implemented. Where a policy proves impractical or impossible, an applicant may apply to amend the Plan. Policy statements containing "may" or "should" are advisory statements, indicating 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.

1.4 STAKEHOLDER CONSULTATION

In 2013, the Marquis NSP was initiated on behalf of landowners within the Plan area. All landowners in the Plan area were notified prior to plan initiation and invited to participate in the process. All affected landowners and community leagues in the area have been notified in accordance with the City of Edmonton's policies and application requirements for new neighbourhood plans. The consultation process was over and above the City's standard public involvement process. The following is a summary of consultation activities that took place prior to submitting the official NSP application to Sustainable Development in December 2013.

A stakeholder session was held on October 3rd, 2013. This session involved landowners, The City of Edmonton and residents located within the neighbourhood. The purpose of this session was to present information about the NSP, the process, and to receive comments from the stakeholders. These comments focused around:

- The need to effectively address traffic for safety measures;
- The need for a future interchange;
- The need for more crossings over the Canadian National (CN) railway; and
- Discussion of the uses and timing around the proposed Town Centre.

A NSP visioning session was held on October 7th, with the City of Edmonton and the proponents. The commentary in these sessions focused around:

- The need to maintain existing agriculture areas;
- Promoting recreational Urban Agriculture practices throughout the NSP area;
- The creation of a complete community with a vibrant Town Centre;
- The establishment of quality public open spaces;
- The provision of a diversity of housing options, and active transportation options; and
- The creation of linkages to the North Saskatchewan River Valley.

A second stakeholder session was held on December 2, 2013. This session involved landowners, the City of Edmonton and residents located within the neighbourhood. The purpose of this session was to present the draft land use concept and information on the NSP as well as receive comments prior to submission to the City. Comments received include:

- Positive feedback on the progress so far on the plan; and
- The need to continue the momentum built.

A public open house was held on May 27, 2014. Notification was sent to area landowners, and was advertised on the project website. The purpose of the meeting was to present the latest land use concept and to solicit feedback.

These sessions guided the development of the principles and vision for the Marquis NSP.

1.4.1 Advanced Notification

Consistent with Policy C513, the City of Edmonton's Public Involvement Policy, advance notification was sent to property owners and residents on June 13, 2014 advising them of the NSP application and encouraging them to contact either Sustainable Development or the applicant (Stantec Consulting Ltd.) with any questions or possible concerns. Neighbouring municipalities, including Fort Saskatchewan, Strathcona County and Sturgeon County, were also notified.

1.4.2 Public Meeting

A public meeting hosted by Sustainable Development was held to review the draft Plan on June 26, 2014. Mailed notification letters were sent to landowners in and surrounding the NSP area advising of this meeting. The purpose of the meeting was to provide an update on the proposed Plan and the planning process followed to date, and to hear from attendees regarding their questions, comments and concerns. All feedback received at the public meeting will be summarized in Sustainable Development's report to City Council.

1.4.3 Public Hearing

Landowners have been notified of the Public Hearing and have been given the opportunity to provide written comments or register to speak at Council. In accordance with the MGA, a public hearing was held

in order to hear representations made by parties affected by the proposed bylaw and to receive approval by Council.

1.5 AMENDMENT

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 development.

Amendments to the Marquis NSP 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 Horse Hill Area Structure Plan (ASP) and all other applicable bylaws, policies, and procedures.

2 Neighbourhood Concept

2.1 GENERAL PLAN CONTEXT

The Marquis neighbourhood is one of five neighbourhoods in the Horse Hill Area Structure Plan (ASP), located in the northeast portion of Edmonton. Currently, the Marquis neighbourhood consists of undeveloped agricultural land, existing residential development, a school site, existing Municipal Reserve, natural areas, and Government of Alberta lands, see **Figure 3: Context & Site Constraints**.

The Plan area is a sound planning unit that is suitable for a NSP and represents a logical extension of infrastructure and services related to currently planned neighbourhoods. It is designated as "Urban Growth Area" by The Way We Grow and is adjacent to the future Horse Hill Neighbourhoods 1, 3 and 4. Proximity of other service infrastructure will provide the necessary means of meeting the required municipal standards for the development of the entire neighbourhood.

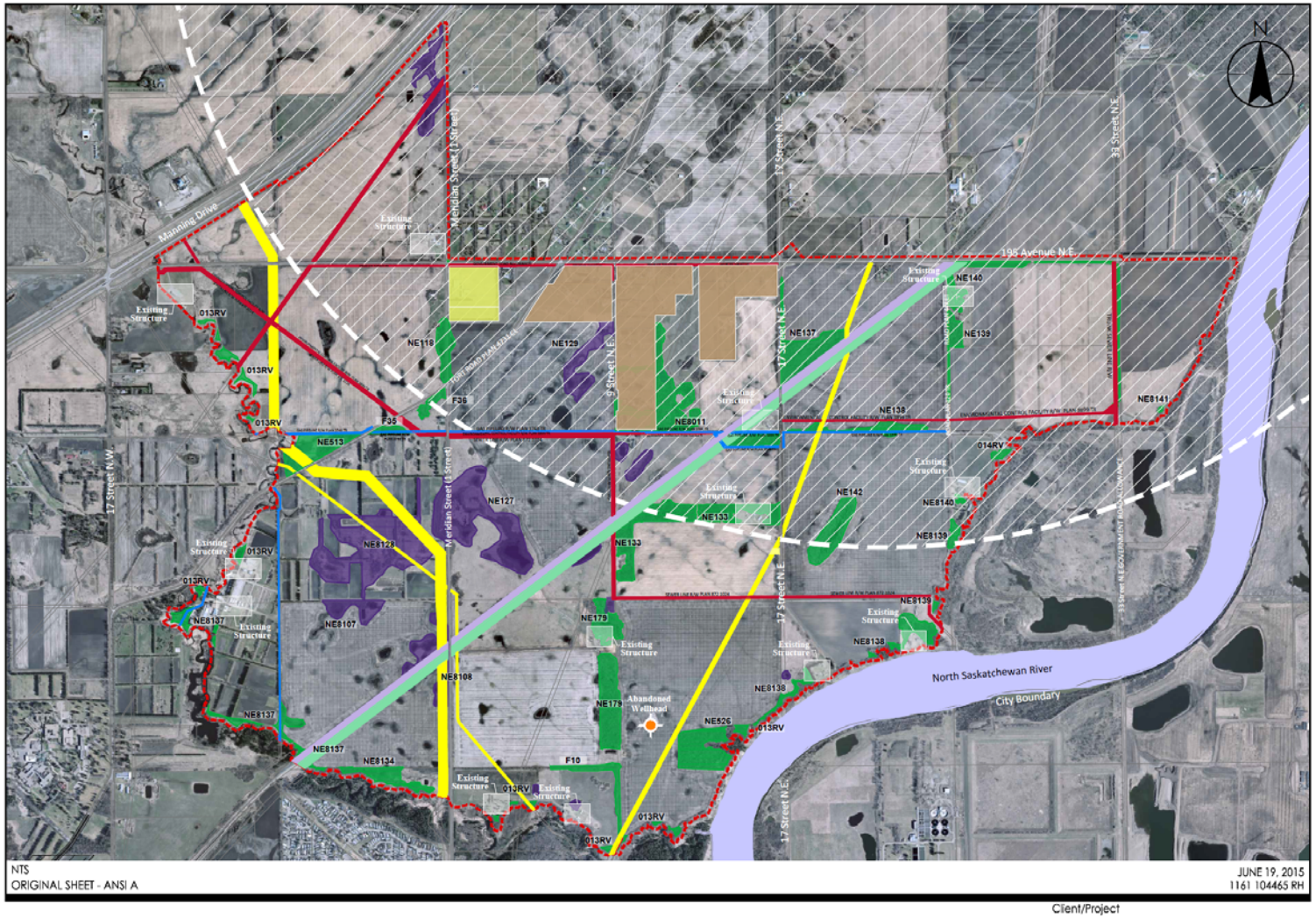
The NSP is designed in accordance with City of Edmonton servicing standards. Development staging and extension of infrastructure will be contiguous, efficient, and economical while having regard for potential environmental and ecological impacts.

2.1.1 Land Ownership

The NSP was prepared on behalf of two private corporations, who have ownership of land within the Plan area at the time of plan preparation. The remaining parcels are held by non-participating landowners and although not directly participating in the NSP process, they have been consulted and are aware that an NSP is proposed for the subject lands.

2.1.2 Waterbody Delineation and Legal Survey

A legal survey has been completed for the crown claimed wetlands located within participating landowner's lands. Final delineation of all wetlands will be required at the Natural Area Management Plan (NAMP) level. Landowners will be required to contact Alberta Environment and Sustainable Resource Development (AESRD) to provide notice, intent, assessment, and necessary information as per the *Water Act*. Legal survey of identified water features within the Plan area shall be the responsibility of the landowner.



Legend

- Existing Residential
- Wetland
- Natural Area
- Existing School & Park Site
- Canadian National Railway
- Altalink Powerline R/W
- Existing Structure
- Abandoned Wellhead
- Oil Pipeline R/W
- Sewer Line R/W
- Gas Pipeline R/W
- DND Consultation Area
- NSP Boundary

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WALTON DEVELOPMENT & MANAGEMENT INC.

MARQUIS NEIGHBOURHOOD
NSP AMENDMENT

Figure No.
3.0

Title
Context & Site Constraints

Bylaw 17396, November 2, 2015

2.1.3 Existing Land Uses

Existing land uses within the Plan area include:

- Rural residential uses, located in the northern portion of the Plan area.
- Private agricultural uses throughout.
- Horse Hill School, a public elementary school, is located at the intersection of 195 Avenue and Meridian Street.
- Lands owned by the Government of Alberta, situated in the western portion of the NSP area.
- Canadian National (CN) railway which runs diagonally through the Plan area.
- AltaLink power line which runs diagonally through the Plan area.

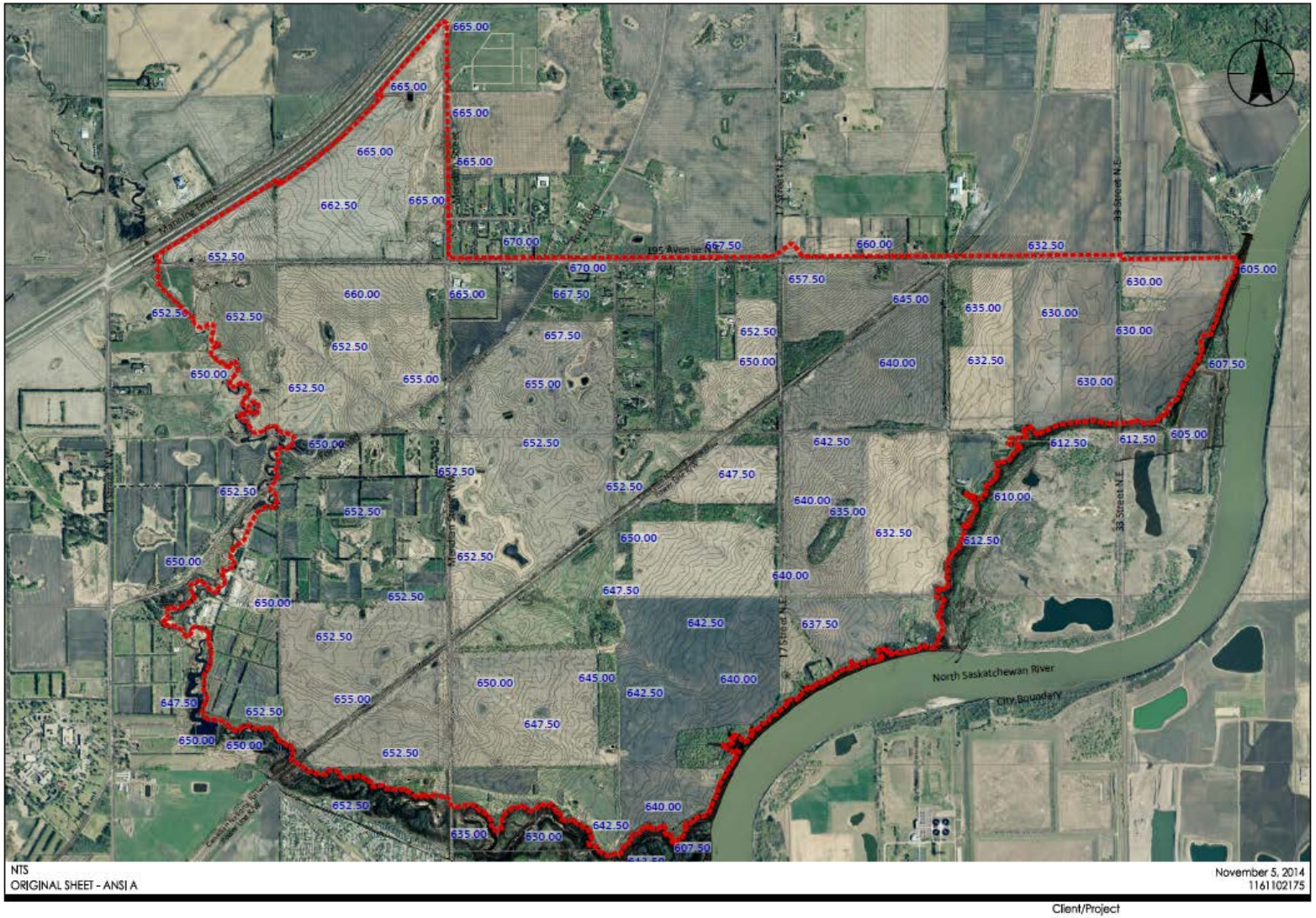
2.1.4 Topography

The topography of the land within the Marquis neighbourhood is gently undulating, with isolated low hills, depressions, shallow creek and drainage courses, and slopes southeast towards the North Saskatchewan River, see **Figure 4: Site Contours**. Elevations throughout the Plan area vary between 670 m in the northern portion to 630 m along the eastern boundary. Surface drainage generally flows towards the southeast to the North Saskatchewan River through creeks and drainage courses.

2.1.5 Soil and Groundwater Conditions

Soils within the Marquis neighbourhood generally consist of Class 1 soils which have no significant limitations in use for crops. There is also a portion of class 2 soils located along the North Saskatchewan River Valley. These class 2 soils have moderate limitations that restrict the range of crops or require special conservation practices.

The groundwater flow direction is generally to the southeast running towards Horsehills Creek and then towards the North Saskatchewan River. A geotechnical investigation was conducted for the participating landowners of the property contained within the Plan area and has been submitted to the City of Edmonton under separate cover to be reviewed by the City of Edmonton's Geotechnical Engineer.



NTS
ORIGINAL SHEET - ANSI A

November 5, 2014
1161102175

Legend

Elevation In Metres

NSP Boundary

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Figure No.
4.0

Title
Site Contours

2.1.6 Natural Areas and Ecological Resources

The Marquis neighbourhood is located in the Central Parkland Natural Subregion of Alberta, which is a transition zone between grasslands to the south and closed aspen forests to the north. This entire subregion has been intensively cultivated due to the fertile nature of the soils. The project area is located in the North Saskatchewan River Basin, which is comprised of 12 tertiary watersheds; the Marquis neighbourhood is located in the western portion of the Beaverhill tertiary watershed. This watershed is characterized by an abundance of wetlands, lakes, and forests that support a diverse range of plants and animals.

The 1993 *Inventory of Environmentally Sensitive and Significant Natural Areas* (Geowest Environmental Consultants Ltd. 1993) identified four natural areas or significant natural areas within the Marquis neighbourhood, see **Figure 3: Context & Site Constraints**. In addition, the 2013 Ecological Network Report (ENR) Phase I Report (Ecoventure Inc. 2013) identified over 100 wetlands, including two Crown claimed water bodies, and a number of additional natural areas consisting of tree stands, windrows, or forest-wetland complexes in the neighbourhood.

The lands that comprise the Horse Hill area are generally considered to be prime agricultural lands, due to the rich soils that result from the close proximity to the North Saskatchewan River. This area is currently home to a variety of food producers including Sunstar Nurseries, Riverbend Gardens, Kuhlmanns Market Gardens, and Horse Hill Berry Farms. The following provides descriptions of the significant natural areas in the NSP area.

NE8011 – Horsehills Woodland

NE8011 is identified as a significant natural area. NE8011 is located within NE-9-54-23-W4M and is characterized as a diverse area consisting of a mature balsam poplar/aspen stand, a small willow/sedge wetland, improved pasture, and a small area of native grass. The area is an important natural area which provides habitat for bird and mammal species and acts as a wildlife linkage between adjacent natural areas and the North Saskatchewan River Valley.

NE133 – CNR – 17th Street Woodland

NE133 is identified as a significant natural area. NE133 is located within SE-9-54-23-W4M and is characterized as a mature balsam poplar / aspen stand with a well-developed understory. The area is important for providing habitat for bird and mammal species due to the age of the stand and the vegetation diversity, while functioning as a linkage between other natural areas and the North Saskatchewan River Valley.

The North Saskatchewan River Valley and Ravine System

The North Saskatchewan River Valley borders the Marquis NSP. The North Saskatchewan River Valley falls under the North Saskatchewan River Valley Area Redevelopment Plan (Bylaw 7188) which provides the tools to protect the river valley and any natural areas which fall within its boundaries. Although outside the boundaries of the Marquis NSP, the North Saskatchewan River Valley is an integral part of the

greater ecological network of the area. The North Saskatchewan River Valley contains the Horsehills Creek environmentally sensitive area along the southern and western boundaries of the NSP.

The North Saskatchewan River Valley is identified as a national environmentally sensitive area. The North Saskatchewan River Valley is an important natural area as it provides a unique combination of vegetation and landform features which act as critical habitat for a diverse range of wildlife species and also provides corridors and linkages to adjacent table lands within the City of Edmonton.

Horsehills Creek

Horsehills Creek is identified as a local environmentally sensitive area with actively eroding banks. The creek is an extensive drainage system originating in the Horse Hills area and entering the North Saskatchewan River Valley within Sec 4-54-23-W4M. Horsehills Creek consists of diverse plant communities that provide habitat for a wide range of wildlife species and acts as a critical linkage to the North Saskatchewan River Valley. Stormwater outfall structures will not be located within Horsehills Creek or its tributaries.

Ecological Network

In 2012, Ecoventure Inc. was contracted by the developing landowners to conduct a Phase I Ecological Network Report (ENR) with the Horse Hill ASP. A Phase 2 ENR was completed by Fiera Biological Consulting (December 2013) in support of the Marquis NSP and was submitted to the City of Edmonton under a separate cover. This report details all natural areas located within participating landowners' lands in the neighbourhood, assesses the importance of individual natural areas based on ecological connectivity, and provides recommendations for maintaining and supporting wildlife and vegetative populations with respect to the Marquis neighbourhood design.

The North Saskatchewan River (NSR) Valley and Horsehills Creek are key habitat nodes that facilitate movement within the Marquis neighbourhood, as well as beyond the neighbourhood. The habitat node containing Horsehills Creek received the highest connectivity score, both at the neighbourhood and local scale, which suggests that this corridor is a critical linkage within the City of Edmonton. In addition, the NSR received high connectivity scores at both the neighbourhood and local scales. All Horsehills Creek crossings and access points to the NSR Valley and ravines will require an environmental review as per Bylaw 7188.

Three centrally located natural areas, F10, NE179, and NE133, also received some of the highest connectivity scores at both the neighbourhood and local scale. In particular, F10 appears to be one of the most important habitat nodes in the neighbourhood. Despite the small size of this natural area, this habitat node is clearly an important corridor between larger habitat patches, including Horsehills Creek to the south, and NE179 to the north. NE8128, located on the government lands, and NE8011, located within the existing residential lands, also received high connectivity scores at the local scale. These natural areas are relatively large patches, and provide links to a number of smaller surrounding habitat patches.

Habitat Restoration

The Phase 2 ENR recommends that habitat restoration of natural areas and the naturalization of public parks, greenways, and existing pipeline and utility corridors be a central focus of the development of the Marquis neighbourhood. Many of the natural areas that will be retained within the NSP area contained at least one common noxious weed, including Canada thistle, perennial sow thistle, and leafy spurge. Thus, efforts to control the occurrence and spread of these species will be a high priority. In addition, restoration efforts will include establishing native forbs, grasses, and shrubs to create high quality and more structurally complex habitat in areas that are considered to be important linkages in the neighbourhood. For example, restoring connectivity between Natural Area F10 and NE179 will provide an important wildlife corridor link to Horsehills Creek.

Naturalization efforts will focus on the establishment of native grasses and low-lying shrubs along utility corridors as well, focusing on creating high quality ground cover and a more complex shrub layer comprised of native, edible shrubs where possible. Naturalization and restoration will also occur along the top of the North Saskatchewan River and Horsehills Creek in areas where the native vegetation has been previously disturbed by agricultural activity. Within the Urban Development Line setback, very little native vegetation has been retained; thus, restoration efforts will be coupled with naturalization to create high quality and structurally diverse habitat.

A Natural Area Management Plan (NAMP) will also be prepared for each Natural Area that is retained and will be required prior to rezoning. The NAMP will establish the management and conservation goals for each Natural Area retained in the neighbourhood.

2.1.7 Wetlands

As part of the Phase 2 ENR, field reconnaissance of the Marquis neighbourhood plan area confirmed the presence of 141 water bodies. Ten of the semi-permanent and permanent water bodies identified in the study area were determined from historical air photos to be anthropogenically created (i.e., dugouts), with the remaining 131 water bodies classified as wetlands. A total of three wetlands were determined to be naturally occurring, but had been modified by human activity sometime between 1967 and June 2013. A total of 102 wetlands and 7 of the anthropogenic water bodies were assessed in the field. The remaining 29 wetlands (as well as 3 anthropogenic water bodies) were located on non-participating lands; as a result, the location, class, and boundaries of these wetlands could not be field verified.

The majority of the field verified wetlands were Class I, II, or III. Thirty wetlands were Class I, which are characterized as having surface water for only short periods in the spring, and are typically dominated by bluegrass, goldenrod, and other wetland low-prairie species. Another 37 wetlands were classified as Class II, which are dominated by wet meadow vegetation such as fine-stemmed grasses, sedges and associated wet forbs. These wetlands are low-lying areas covered by standing or slow-moving water for several weeks after snowmelt, or after a heavy rainfall event. An additional 26 wetlands were classified as Class III, which typically contain persistent water until July or August, and are characterized by shallow marsh vegetation in the center of the wetland that is dominated by emergent wetland grasses, sedges, and rushes. The remaining nine wetlands were Class IV or V. Class IV wetlands maintain water throughout the growing season (May to September), and are dominated by deep marsh vegetation in the center of the

wetland, with the emergent zone characterized by cattails, bulrushes, and pondweeds. Class V wetlands typically have year-round permanent water, where the wetland center is characterized by open water. Submergent plant species may occur in the center of the wetland, with emergent species dominating the margin of the wetland. The following is a description of two crown claimed wetlands that have been identified in the Plan area.

Wetlands 77 & 81 – Crown Claimed Wetlands

Wetlands 77 and 81 are crown wetlands that make up Natural Area NE127, NE120, and NE136. These two wetlands occupy an area just north of the intersection of the CNR line and Meridian Street within SW-9-54-23 W4M. Wetland 77 encompasses an area of approximately 2.3 ha and Wetland 81 encompasses an area of approximately 2.2 ha. These wetlands are a Class IV Semi Permanent pond and Class V Permanent pond respectively.

The existence of such a large wetland complex is somewhat rare in agricultural and urban landscapes, and the diversity of both plants and animals observed in this natural area was high. 87.5% of Natural Area 127 will be retained within the post development network of the Marquis neighbourhood and Wetland 77 will be partially lost due to road placement. When the design of this roadway is initiated, the Province will be engaged and wildlife passage needs will be addressed should the road continue to bisect the wetland. This wetland complex will provide an important movement corridor and has the potential to provide excellent habitat for amphibians, wildlife, and birds.

The total area of wetland habitat that will be lost as a result of the development of the Marquis neighbourhood is 21.5 ha. At a 3:1 replacement ratio, the amount of wetland habitat that will be required as compensation under the provincial *Water Act* is 64.5 ha. Should compensation occur outside of the immediate watershed, a wetland compensation ratio of greater than 3:1 may be required. Given the large amount of compensatory habitat that is required, the majority of wetland compensation will be applied off-site. Opportunities for on-site compensation are quite limited due to a number of factors, including restrictions imposed by the Department of National Defence as it relates to the designation of a Bird Hazard Zone. In addition, there are few opportunities for the restoration of previously drained wetland basins, though, there are several opportunities to enhance existing habitat, or create additional wetland habitat. As mentioned, the wetland complex that is NE 127 is being retained within the neighbourhood. The efficacy of using these areas for on-site wetland compensation would need to be further explored and discussed with both the City of Edmonton and Alberta Environmental and Sustainable Resource Development. A Phase 2 ENR was completed and submitted to the City of Edmonton under separate cover.

2.1.8 Geotechnical Report

A Preliminary Geotechnical Report and Slope Stability Assessment were prepared by J.R Paine and Associates Limited and were submitted under separate cover to the City of Edmonton. Further assessment will be reviewed at the rezoning stage, as required.

2.1.9 Environmental Site Assessment

An Environmental Overview of the Horse Hill area was completed for participating lands and signed off by the City with the Horse Hill ASP. Full Phase 1 Environmental Site Assessments (ESA) will be required at the rezoning stage. All properties within the Marquis NSP will require ESAs to be completed and signed off prior to rezoning approval. 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.

2.1.10 Historic Resources

Horse Hill has a few tangible but important historical resources that tie it to the area's original trail system, agricultural development and government institutional uses. If retained or incorporated into future development, they will enable future generations to better understand how the area was originally developed and settled over time. The preservation, conservation and integration of cultural, historical and/or archaeological resources within Horse Hill are important to retaining local history and character that may also be of regional or provincial significance.

A Statement of Justification (SoJ), prepared to the requirements of the *Historical Resources Act* (HRA), has been completed for parcels under the ownership of the plan proponents and submitted to Alberta Culture in support of the Marquis NSP. Other landowners will be required to submit a SoJ for their respective parcels prior to rezoning.

Based on Alberta Culture's review of the SoJ, Historical Resources Impact Assessments (HRIA) for archaeological and paleontological resources were required. The HRIAs for the proponents' lands have been completed and HRA clearance has been provided by Alberta Culture. The HRIA was conducted for 4-54-23 W4M, 9-54-23 W4M, 17-54-23 W4M, and 33-53-23 W4M.

Pursuant to Section 31 of the 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 Marquis NSP are important to retaining local history and character.

2.1.11 Pipelines, Wells and Utility Corridors

A review of information obtained from the Alberta Energy Resources Conservation Board (ERCB) shows that there is one abandoned well site located in the southern portion of the NSP area and 12 registered pipelines within the NSP area, see **Figure 3: Context & Site Constraints** and **Table 2: Pipeline and Well Information Summary**. The 11 operational pipelines, which are dispersed throughout the Plan area, carry natural gas, crude oil, low vapour pressure products (LVP) and high vapour pressure products (HVP). All pipeline rights-of-way will be accommodated in the Development Concept.

An electrical transmission corridor, carrying an existing 240 kV power line, passes through the centre of the NSP area, running from southwest to northeast adjacent to the Canadian National Railway corridor. An existing 138/144 kV power line also runs north to south along Meridian Street.

Table 1: Pipeline and Well Information Summary

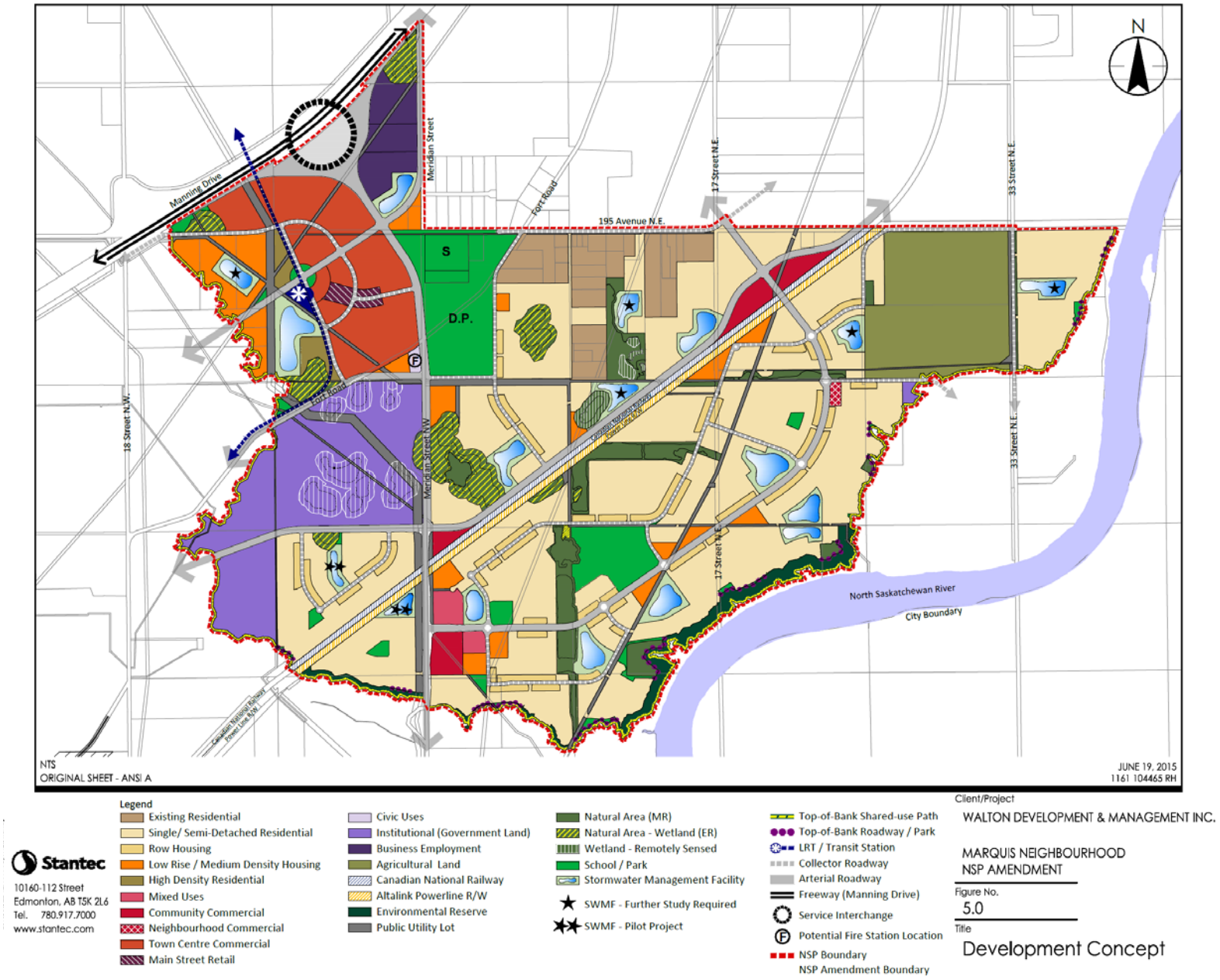
Pipeline License #	Licensee	Substance	Maximum Operating Pressure (kPa)	Outside Diameter (mm)	H2S (mol/kmol)	Status
2594-5	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	3450	168.3	0	Operational
8908-1	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	3450	114.3	0	Operational
8908-2	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	0	114.3	0	Abandoned
8738-1	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	3450	88.9	0	Operational
3361-1	ATCO Gas and Pipelines Ltd. (South)	Natural Gas	3450	60.3	0	Operational
52568-2	Pembina Pipeline Corporation	LVP Products	8000	323.9	0	Operational
6926-16	Pembina Pipeline Corporation	Crude Oil	5650	508	0	Operational
8262-3	Alberta Oil Sands Pipeline Ltd.	Crude Oil	7210	406.4	0	Operational
37742-76	Alberta Oil Sands Pipeline Ltd.	Crude Oil	5320	559	0	Operational
6001-1	Plains Midstream Canada ULC	Crude Oil	5380	610	8	Operational
54001-1	Plains Midstream Canada ULC	HVP Products	9930	323.9	0	Operational
9420-3	Imperial Oil Resources Limited	HVP Products	9460	168.3	0	Operational
Well License #	**Licensee**	**Substance**				**Status**
22648	Northwestern Utilities Limited	Unknown	–	–	–	Abandoned

2.3 NEIGHBOURHOOD VISION STATEMENT

The Marquis neighbourhood is a complete community with a vibrant Town Centre, quality public open spaces, a unique natural landscape, and integrated urban agriculture in a diverse residential setting. The neighbourhood celebrates its agricultural heritage while allowing for innovative incorporation of sustainable food systems. An integrated network of parks and natural areas allows access to outdoor recreational opportunities and connections to the North Saskatchewan River Valley and Ravine System. A central transit hub and LRT station provides convenient access to commercial and employment areas, while enhancing walkability and encouraging active transportation.

2.4 NEIGHBOURHOOD CONCEPT

The following section outlines the development concept for the Marquis NSP. The NSP has been developed having regard for urban planning best practice principles, the City of Edmonton's Designing New Neighbourhoods Policy C572, and in response to current and anticipated commercial and residential market demand in northeast Edmonton based upon historical and contemporary growth trends and aspirations of the various land owners in the Plan area. The Development Concept for the Marquis neighbourhood is shown in **Figure 5: Development Concept**. The Development Concept designates land at a general purpose level including: residential, mixed use (residential, commercial, office and institutional), commercial, institutional, civic, parks and open space. For more detailed information please refer to **Table 2: Land Use & Population Statistics**.



Legend

- Existing Residential
- Single/ Semi-Detached Residential
- Row Housing
- Low Rise / Medium Density Housing
- High Density Residential
- Mixed Uses
- Community Commercial
- Neighbourhood Commercial
- Town Centre Commercial
- Main Street Retail
- Civic Uses
- Institutional (Government Land)
- Business Employment
- Agricultural Land
- Canadian National Railway
- Altalink Powerline R/W
- Environmental Reserve
- Public Utility Lot
- Natural Area (MR)
- Natural Area - Wetland (ER)
- Wetland - Remotely Sensed
- School / Park
- Stormwater Management Facility
- SWMF - Further Study Required
- SWMF - Pilot Project
- Top-of-Bank Shared-use Path
- Top-of-Bank Roadway / Park
- LRT / Transit Station
- Collector Roadway
- Arterial Roadway
- Freeway (Manning Drive)
- Service Interchange
- Potential Fire Station Location
- NSP Boundary
- NSP Amendment Boundary

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Client/Project
WALTON DEVELOPMENT & MANAGEMENT INC.

MARQUIS NEIGHBOURHOOD
NSP AMENDMENT

Figure No.
5.0

Title
Development Concept

Bylaw 17396, November 2, 2015

Table 2: Land Use & Population Statistics *Bylaw 17396, November 2, 2015*

MARQUIS
NEIGHBOURHOOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS*
BYLAW 17396

GROSS AREA	**1,004.7**	**100.0%**	
Environmental Reserve			
Natural Area – Wetland	26.6	2.7%	
Other ER	25.6	2.5%	
Remotely Sensed Wetland**	3.8	0.4%	
Pipeline & Utility Right-of-Way			
Pipeline	35.0	3.5%	
Power transmission	14.4	1.4%	
Transportation			
Manning Drive	15.2	1.5%	
Arterial Roadway	52.8	5.3%	
Railways	11.8	1.2%	
GROSS DEVELOPABLE AREA	**819.7**		**100.0%**
Existing Land Uses			
Residential	36.6	3.6%	
Institutional – Provincial Government	79.7	7.9%	
Institutional – Municipal Reserve	0.8	0.1%	
Municipal Reserve/School Site	6.3	0.6%	
Agricultural Land	56.6	5.6%	
ADJUSTED GROSS DEVELOPABLE AREA	**639.8**		**100.0%**
Commercial			
Business Employment	15.2	2.4%	
Town Centre Commercial	50.1	7.8%	
Main Street Commercial	2.4	0.4%	
Community Commercial	11.9	1.9%	
Neighbourhood Commercial	0.8	0.1%	
Mixed Use			
Residential/Commercial (non-residential portion)	2.3	0.4%	
Parkland, Recreation, School (Municipal Reserve)			
School/Park	54.5	8.5%	
Natural Area	33.6	5.3%	
Institutional			
Fire Station/Civic Use	0.8	0.1%	
Transportation			
Circulation	128.0	20.0%	
Transit Centre and LRT Station	1.1	0.2%	
Light Rail Transit Corridor	1.5	0.2%	
Infrastructure & Servicing			
Stormwater Management Facilities	54.1	8.5%	
TOTAL Non-Residential Area	**356.3**	**55.7%**	
Net Residential Area (NRA)	**283.6**	**44.3%**	

Bylaw 17396, November 2, 2015

RESIDENTIAL LAND USE, UNIT AND POPULATION COUNT

Land Use	Area (ha)	Units/ha	Units	% of Total	People/Unit	Population
Single/Semi-Detached	216.0	25	5,401	76.2%	2.80	15,122
Row Housing	28.6	45	1,285	10.1%	2.80	3,599
Low-rise/Multi/Medium Rise Units	32.2	90	2,897	11.3%	1.80	5,215
Medium to High Rise Units	4.6	225	1,033	1.6%	1.50	1,549
Mixed Uses (residential uses)	2.3	90	203	0.8%	1.80	366
Total	**283.6**		**10,819**	**100%**		**25,851**

SUSTAINABILITY MEASURES

Population Density (p/nnha)			91.2
Units Density (du/nrha)			38.2
Single/Semi-detached /Row Housing; Low-Rise/Medium Density; Medium to High Rise Unit Ratio		49.9%	50.1%
Population (%) within 500m of Parkland (park site 2 ha or greater)			33%
Population (%) within 400m of Transit Service			99%
Population (%) within 600m of Commercial Service			70%
Presence/Loss of Natural Areas***			
Protected as Environmental Reserve (ha)	56.6		
Conserved as Naturalized Municipal Reserve (ha)	32.3		
Protected through other means (ha)	0.0		
Loss to Development (ha)	31.9		

STUDENT GENERATION STATISTICS		
Public School Board		**2,558**
Elementary	1,279	
Junior High	639	
Senior High	639	
Separate School Board		**1,279**
Elementary	639	
Junior High	320	
Senior High	320	
Total Student Population		**3,837**

* Numbers have been rounded. Totals are correct but sub-areas may not sum accurately.
** Excludes wetlands on Provincial government's lands
*** Approximate areas. See ENR for details.

Within the NSP area, a number of key features have shaped the overall pattern for the neighbourhood, including: the roadway network, LRT system, natural areas, existing development (residential, agriculture, and institutional), CN railway line, and utility and pipeline corridors. The primary characteristics of the development concept are as follows:

- **Town Centre** – The Town Centre will be a pedestrian-friendly, mixed-use transit oriented focal point for the NSP area and the wider Horse Hill area. It will be defined by a human-scale Main Street Retail area. Through the diversity of land uses (medium and high density residential development, commercial, office, and institutional), in close proximity to the LRT Station and Transit Centre, the Town Centre will create a dynamic urban environment, that is transit supportive, where people can live, work, and play.
- **Commercial** - A wide variety of commercial opportunities are provided, adding to the vibrancy and sustainability of the community. Commercial uses will provide opportunities for local employment and the ability for residents to live, work and shop in their neighbourhood. The locations of the commercial sites along arterial roadways, and within walking distance of residential development, allows for ease of access by residents through vehicular or active transportation methods.
- **Residential** - A broad range of housing densities, types (from single detached to high rise apartment), and choices are provided within the NSP area. This promotes the creation of a more complete and diverse neighbourhood; one that can accommodate a range of incomes, market segments and various types of households allowing individuals and families to stay within the community throughout their lifecycle. Medium and high density residential development is primarily located adjacent to arterial and collector roadways with access to transit and amenities as well as acting as a transition to low density residential development.
- **Mixed Use** - Mixed use sites are also provided for within the NSP area allowing for the compatible development of residential (primarily medium density), commercial, office, business or institutional uses in a carefully designed environment. Mixed use areas are highly accessible and visible, located in prominent locations along arterial or collector roadways. Intensification in these locations will create unique focal points for the neighbourhood.
- **Institutional and Civic** - Institutional and civic uses add to the creation of a complete community. Future institutional and civic uses will be placed in prominent locations within the NSP. The NSP area will feature a district activity park which will incorporate a multi-purpose recreation centre, public high school and a catholic high school. The existing Horse Hill School is located within the proposed district activity park. Additional sites for both public and catholic K-9 schools are also identified within the Plan area. Opportunities for religious assemblies are provided within the Plan area as well as civic uses such as a fire station. These uses provide educational, recreational and social resources for residents in the Horse Hill area and will be major nodes of activity. The operations of existing government and institutional uses are also respected and incorporated into the NSP area.
- **Ecology and Parks** - The Marquis NSP provides a variety of parks and open spaces throughout the Plan area to meet the passive and active recreational needs of residents. In addition, the NSP preserves the North Saskatchewan River Valley and ravine system where it abuts the Plan area and ensures that natural areas are carefully integrated. All parks have been configured to provide residents opportunities for active and passive recreation and have been located such that the majority of residential areas are within 500 m of a park space. Natural areas along with parks, stormwater

management facilities, and utility and pipeline corridors have been integrated into a network that provides ecological and pedestrian linkages throughout the Plan area.

- **Urban Agriculture** –The NSP supports approaches to encourage local food production in the area, to grow the local food market, as well the promotion of education and sustainable food practices. Opportunities for agricultural activities range from the more intensive agricultural practices such as horticulture, green houses and fresh vegetable and fruit production to less intensive community gardens, orchards, and private back yard gardens. The incorporation of agricultural activities will create an interest and uniqueness to the Marquis neighbourhood while increasing access to local food and encouraging a healthy sustainable food system.
- **Transportation** – The Marquis neighbourhood will establish a neighbourhood that provides a transportation system that is well connected within and outside the Plan area and maximizes access to a variety of travel modes to the greatest number of residents.

2.4.1 Goals and Objectives

The Marquis NSP was prepared in accordance with the policies and principles identified in *The Way We Grow*, the Horse Hill ASP, *Designing New Neighbourhoods: Guidelines for Edmonton's Future Residential Communities* and other relevant municipal and statutory documents. To fulfill the vision for the Marquis neighbourhood the NSP identifies the following goals:

1. Provide a complete community with a diversity of land uses and a vibrant Town Centre in which to live, work and recreate.
2. Provide a unique neighbourhood that celebrates its agricultural heritage and preserves existing agricultural activities.
3. Protect existing natural areas and residential, agricultural, and institutional activities through appropriate urban design (i.e. transitional land use, site planning and design).
4. Establishes a variety of housing and residential densities to meet consumer needs, encourage diversity and support public transit ridership.
5. Promote connectivity and accessibility within the community and encourages a pedestrian-oriented environment through the development of an integrated network of diverse public parks, opens spaces, natural areas, and storm water management facilities, with connections to the North Saskatchewan River Valley and Ravine System.
6. Preserve natural areas and integrate them into the neighbourhood.
7. Establish safe and complete neighbourhood streets that are walkable, attractive, and comfortable for residents and which are designed to accommodate winter transportation issues.
8. Provide a balanced transportation system that maximizes transit access and connects major inter-and-intra neighbourhood focal points.
9. Provide efficient, contiguous and staged infrastructure and urban development.

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

Urban Design

1. Employ sustainable planning principles such as LEED ND or other comparable measurable sustainable development standards in the design of the Marquis Development Concept.
2. Use natural areas and notable locations such as the Town Centre, to create focal points and gathering places.
3. Design streets and built form within 400 m of the Transit Centre and LRT Station to create a transit-oriented, walkable community.
4. Ensure transition is provided between higher and lower intensity uses.
5. Develop public spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.
6. Promote the use of Crime Prevention Through Environmental Design (CPTED) principles to create a safe and secure neighbourhood.
7. Minimize light pollution into natural areas to reduce the impact of development on wildlife.

Historic and Cultural Resources

8. Ensure that historical, archaeological and paleontological resources are identified and conserved, where applicable.

All Weather Design

9. Ensure neighbourhood infrastructure and design elements address year-round weather conditions.
10. Incorporate urban design elements to maximize the benefits of the winter season.
11. Consider the winter season in the landscaping of schools, public parks, open spaces, plazas, and boulevards.

Landscaping

12. Promote the use of natural landscaping using native tree and plant species.
13. Promote the use of edible landscaping in suitable locations within the NSP area.

Commercial

14. Provide commercial development opportunities to meet the large and small scale commercial/retail needs of residents and provide local employment opportunities within the neighbourhood.
15. Locate and orient commercial sites along highway, arterial and/or collector roadways to ensure high visibility and accessibility by multiple modes of transport, such as vehicular, transit and walking.
16. Minimize the impact of commercial development on adjacent land uses.
17. Provide residents with convenient pedestrian access to commercial development so that residents have the opportunity to walk to commercial services.

Residential

18. Provide a variety of residential housing types in different built forms, for a range of household types, income levels, ages and needs.
19. Establish an overall residential density that meets or exceeds the Suburban Housing Mix Guidelines and the minimum density target set out by the Capital Region Growth Plan.
20. Develop low-rise/multi-/medium and high rise residential sites to a higher urban design standard.
21. Establish affordable housing opportunities within the NSP.
22. Provide opportunities for conservation (cluster) developments which allow for the integration of residential or mixed uses with urban agriculture uses.
23. Residential development shall take into consideration existing rural and agricultural uses and ensure compatible uses are provided.
24. Integrate existing residential uses into the NSP area and ensure compatible uses in proximity to existing residential uses.
25. Provide a transition between residential uses of significantly different densities.
26. Accommodate Reverse Housing development.

Mixed Use

27. Encourage a variety of mixed use developments which may include different housing forms, residential and institutional uses, residential and commercial uses or a combination of the above in appropriate locations, to create complete communities.

Town Centre

28. Provide opportunity for commercial development in the Town Centre to meet the commercial needs of residents in the NSP area and surrounding Horse Hill area.
29. Provide opportunity for the integration of commercial, residential, and office uses in the Main Street area.
30. Locate and orient commercial sites in the Town Centre to ensure high visibility and convenient access points.
31. Provide increased residential densities within the Town Centre in support of public transit.
32. Create a Town Centre which is defined by a distinct human-scale Main Street retail area that is located adjacent to a variety of commercial uses, the district activity park site, residential opportunities and with convenient access to public transit, including the LRT.
33. Ensure careful integration between public transit (LRT [corridor and station] and Transit Centre) and the built environment.
34. Establish strong connections between the Town Centre and the rest of the Horse Hill area through a series of well-designed and well-connected streets, pedestrian walkways, multi-use trails, open spaces and transit.
35. Explore opportunities for sustainability measures within the Town Centre.
36. Within the Main Street design pedestrian friendly streetscapes which are characterized by human scale built form with active building frontages, wide-sidewalks, and pedestrian oriented landscaping.

37. Provide buildings that feature high quality architecture to help create an 'urban character' environment.
38. Orient buildings to assist in creating pedestrian-friendly streets.
39. Manage off-street parking to complement the urban character of the Town Centre.
40. Within the Town Centre design streets to reduce vehicular speed to promote a walkable urban environment.
41. Design public roadways that support various modes of transport such as pedestrians, bicycles, buses, cars and service vehicles.
42. Incorporate plazas, public spaces, parks and open space with the built form and character of the Town Centre.
43. Promote enhanced pedestrian circulation within the Town Centre.
44. Provide signage within the Town Centre that is complementary to the theme of the neighbourhood.

Institutional / Urban Service

45. Ensure that future institutional uses are accommodated in the NSP.
46. Ensure that existing government and institutional uses are accommodated in the NSP.
47. Use civic buildings in prominent locations to create focal points.

Environment and Energy Infrastructure

48. Ensure the environmental status of lands in the Marquis NSP is suitable for development and that Environmental Site Assessments are complete and up-to-date at the time of rezoning.
49. Minimize potential environmental hazards and disruption for future residential areas caused by oil and gas wells through careful neighbourhood design and ensuring urban development around resource operations and abandoned well sites adheres to the requirements of the Alberta Energy Regulator (AER), City of Edmonton Policy C515 – Oil and Gas Facilities, Abandoned Well Sites and Policy Guidelines for the Integration of Resource Operations and Urban Development (1985).
50. Ensure that development respects the ongoing operation and integrity of existing pipeline infrastructure.
51. Ensure public safety near oil, gas and railway facilities through the use of appropriate risk mitigation measures to mitigate the risk to an acceptable level in line with the recommendations of the risk assessment.

Natural Areas

52. Establish an Urban Development Line, based upon geotechnical recommendations and current City Policy, to ensure enjoyment, preservation and protection of the North Saskatchewan Valley and Ravine System, including Horsehills Creek.
53. Strengthen Edmonton's ecological network and maintain ecological linkages to support the presence of wildlife in the NSP area.
54. Conserve natural areas within the Plan area.
55. Encourage habitat restoration of natural areas and the naturalization of public parks, greenways, and existing pipeline and utility corridors where possible.

Parks and Open Space

56. Accommodate schools and park sites in the NSP area.
57. Provide schools, parks, open spaces, and stormwater management facilities along arterial, collector or local roadways, and ensure accessibility.
58. Design a connected and integrated open space system that encourages active transportation.
59. Ensure the North Saskatchewan River Valley is publically accessible.
60. Create identifiable focal points that are integrated with the open space system of the neighbourhood.
61. Encourage naturalized and/or edible landscaping on public and private lands and low impact development principles in public spaces.

Agriculture and Food

62. Retain land for private agriculture in the NSP area.
63. Provide buffers between agricultural and non-agricultural uses.
64. Provide opportunities to promote urban agriculture in the Marquis neighbourhood.
65. Support the development of local food infrastructure.

Sanitary and Stormwater Drainage

66. Ensure that the sanitary and stormwater drainage systems within the Marquis NSP area are provided at a full urban standard and in an efficient, contiguous and staged manner using contemporary and emerging sustainable infrastructure solutions.
67. Low Impact Development principles should be utilized for the design of the stormwater management system, including bioswales and naturalized wetlands.

Water Distribution

68. Ensure that the water distribution system within the NSP area is provided at a full urban standard and in an efficient, contiguous and staged manner.

Shallow Utilities

69. Ensure that shallow utilities are provided at a full urban standard in an efficient and contiguous manner.

Modal Types

70. Provide opportunities for a variety of modes of transportation within the NSP area.

Road Network

71. Implement the City of Edmonton's road hierarchy system of an integrated arterial, collector, and local roadway network.

Complete Streets

72. Design multi-use streets that support various modes of transport such as by foot, bicycles, transit, cars, and service vehicles, utilizing the City's Complete Streets Guidelines.

Streetscapes

73. Provide attractive, safe, and functional streets through roadway design.

Transit Oriented Development

74. Transit Oriented Development shall be integrated with the LRT station and Transit Centre within 400 m.

Noise Attenuation

75. Mitigate the effects of noise and vibration caused by vehicle and train traffic, and discourage trespassing on railway corridors.

3 Urban Design

CONTEXT AND APPROACH

Designing attractive streetscapes by using compatible uses, forms and zoning designations provides a comfortable physical environment and creates a consistent mass and scale. Orientation of buildings towards public spaces (i.e. streets, parks, constructed wetlands) also plays an important role in creating interesting and varied streetscapes and increases a sense of awareness of neighbourhood activities and safety.

3.1.1 Objective 1

Employ sustainable planning principles such as LEED ND or other comparable measurable sustainable development standards in the design of the Marquis Development Concept.

3.1.1.1 NSP Policy

Development should strive to achieve sustainable planning principles as promoted through such programs as LEED ND.

Implementation

The Marquis NSP encourages the incorporation of sustainable planning principles into the design of the neighbourhood. A combination, although not limited to this list, of the below principles may be explored:

- Conserving wetlands and water bodies within the plan area.
- Conservation of agricultural lands.
- Ensuring employment opportunities are provided in close proximity to residential developments.
- Restoration of habitat, wetlands or water bodies.
- Providing walkable streets and a neighbourhood that is well connected.
- Providing opportunities for mixed use neighbourhood centres.
- Ensuring access to transit as well as the incorporation of transit facilities within the plan area.
- Incorporation of transportation demand management.
- Civic uses including recreational facilities, schools, and other public spaces are accessible to the public.
- Public consultation is completed as part of the planning process.
- Opportunities for local food production.
- Providing boulevard trees along streets.
- Providing water efficient landscaping through incorporation of native plants.
- Consider adaptive reuse in building design.

3.1.2 Objective 2

Use natural areas and notable locations such as the Town Centre, to create focal points and gathering places.

3.1.2.1 NSP Policy

Focal points in the form of the Town Centre, park spaces, schools, community gardens, and natural areas shall be created to bring the community together.

Implementation

Focal points are located throughout the neighbourhood providing opportunities for gathering places within close proximity to residents.

Source: Stantec

3.1.3 Objective 3

Design streets and built form within 400 m of the Transit Centre and LRT Station to create a transit-oriented, walkable community.

3.1.3.1 NSP Policy

Streets and land uses within 400 m of the Transit Centre and LRT Station shall be designed to provide a safe, convenient and attractive connection to the Transit Centre and LRT station.

Implementation

Streets and land uses will conform to the City of Edmonton *Transit Oriented Development Guidelines* for areas within 400 m of the transit centre and LRT station.

Connections to the transit centre and LRT station will be provided at the subdivision stage through a combination of shared-use paths, walkways and sidewalks. Also at the rezoning and subdivision stages, attention shall be paid to ensure where parcels front onto roadways providing connections to the transit centre and LRT station are street oriented and designed to a human scale where possible.

3.1.4 Objective 4

Ensure transition is provided between higher and lower intensity uses.

3.1.4.1 NSP Policy

Ensure a proper transition between higher and lower intensity uses, as well as between existing country residential and new development. Transitional elements shall include, but is not limited to, building setbacks, landscaped buffers, and variations in architectural design techniques to minimize building massing. Where new development directly abuts existing country residential, low density residential shall be required.

Implementation

Proposed residential and commercial uses will be designed with attention to compatibility with adjacent planned uses. The Subdivision Officer and Development Officer will have regard for lot and site design ensuring proper separation distances and landscape buffers as set out in the Zoning Bylaw.

3.1.5 Objective 5

Develop public spaces and stormwater management facilities which are visually and physically accessible and aesthetically pleasing.

3.1.5.1 NSP Policy

Public spaces such as parks and stormwater management facilities (SWMFs) shall be designed to encourage both passive and active recreational opportunities.

Implementation

The location and configuration of parks and SWMFs are conceptually illustrated in **Figure 5: Development Concept** and may be refined at the rezoning and subdivision stage. Consideration shall be given to ensure connectivity through the provision of shared-use paths and a variety of activities are accommodated through park and SWMF design.

Source: Stantec

3.1.5.2 NSP Policy

The neighbourhood shall provide road frontage and multiple points of pedestrian access to public open space.

Implementation

At the subdivision stage, parks and SWMFs will be designed with frontage onto public streets and in safe proximity to residential uses.

3.1.5.3 NSP Policy

SWMFs should include naturalized shoreline plantings intended to provide habitat opportunities for wildlife and improve water quality.

Implementation

SWMF landscaping will be determined by the Developer and City Administration, in consultation with the Department of National Defence (DND), at the time of review of landscaping plans as part of the engineering drawing review process.

3.1.6 Objective 6

Promote the use of Crime Prevention Through Environmental Design (CPTED) principles to create a safe and secure neighbourhood.

3.1.6.1 NSP Policy

At the subdivision stage, the design shall ensure parks and SWMFs have a combination of frontage onto public streets as well as residential development with unobstructed views.

Implementation

The subdivision officer shall have regard for the provision of a combination of street frontage and residential development abutting parks and SWMF's. This will ensure the open space network provides 24/7 surveillance and activity in these areas.

3.1.7 Objective 7

Minimize light pollution into natural areas to reduce the impact of development on wildlife.

3.1.7.1 NSP Policy

Explore lighting design and placement solutions that minimize projection into natural areas.

Implementation

Development adjacent to natural areas should strive to incorporate wildlife-friendly lighting solutions, such as strategically placed fixtures, downward lighting, and appropriate wavelengths.

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4 Historic and Cultural Resources

Overview & Rationale

Historical characteristics should be conserved to maintain a neighbourhood's unique ties to its past and to foster a sense of place.

In review of development within the Marquis neighbourhood, a Statement of Justification and/or Historic Resource Impact Assessment is to be submitted to Alberta Culture. Historical resources in the neighbourhood include important ties to the areas original trail system, agricultural development, and government institutional uses.

4.1.1 Objective 8

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

4.1.1.1 NSP Policy

Participating landowners within the Plan area shall submit a Statement of Justification (SoJ) for *Historical Resources Act* requirements (formerly Historical Resources Overview) and, if necessary, a Historical Resources Impact Assessment (HRIA).

Implementation

SoJs and HRIAs have been completed for participating landowners within the Plan area. These SoJs and HRIAs were submitted to Alberta Culture and the lands were subsequently provided clearance.

Those lands in the Plan area that have not received clearance on SoJ/HRIA studies will be required to submit and receive sign off prior to rezoning.

Technical Summary

To satisfy *Historical Resources Act* requirements, SoJs and HRIAs for participating landowners were submitted to Alberta Culture in support of the Marquis NSP. Per Section 31 of the *Historical Resources Act*, proponents and/or their representatives are required to report any archeological, historic or paleontological resources encountered during construction and cease all work.

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5 All Weather Design

Overview & Rationale

Neighbourhoods designed to accommodate year-round weather conditions will provide opportunities for residents to enjoy and experience all the amenities their neighbourhood has to offer, in all seasons.

Winter is a dominant season in Edmonton, and utilizing winter design initiatives will help to make outdoor public spaces enjoyable throughout the winter months. The City embraces our winters and through the Winter City Strategy encourages us to celebrate the winter months. Through a variety of methods such as effective sun capture and wind control measures, as well as landscaping in parks and other outdoor spaces we can enliven these spaces in all seasons.

5.1.1 Objective 9

Ensure neighbourhood infrastructure and design elements address year-round weather conditions.

5.1.1.1 NSP Policy

The neighbourhood shall be designed to accommodate infrastructure programming requirements in the public realm including snow clearing and landscaping maintenance.

Implementation

Where boulevards are provided they shall be used to accommodate snow removal and year-round service vehicles.

Alternative development standards shall meet infrastructure programming needs for all seasons.

Source: Stantec

5.1.1.2 NSP Policy

The design of streetscapes will take into account opportunities to capture sunlight and reduce potential high winds.

Implementation

Commercial sites and higher density residential areas shall be designed with consideration given to building orientation and variations in façade treatment that reduce the amount of sun shadowing in the winter and to prevent wind tunneling.

5.1.2 Objective 10

Incorporate urban design elements to maximize the benefits of the winter season.

5.1.2.1 NSP Policy

Incorporate design elements into buildings, parks and public spaces that protect users from the wind and maximize access to sunlight.

Implementation

Developers shall include winter design considerations and elements within architectural controls. The City of Edmonton shall encourage winter design consideration and elements in public buildings, parks and public spaces.

5.1.2.2 NSP Policy

Encourage the integration of vibrant colours and warm materials in residential, institutional and commercial buildings.

Implementation

Developers shall include winter design considerations and elements within architectural controls. The City of Edmonton shall encourage winter design consideration and elements in public buildings.

Source: Stantec

5.1.3 Objective 11

Consider the winter season in the landscaping and design of schools, public parks, open spaces, plazas, and boulevards.

5.1.3.1 NSP Policy

The landscaping and design of schools, public parks, open spaces, plazas, and boulevards 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.

Source: Stantec

Implementation

Landscape design for public land will be developed in conjunction with relevant City Departments and incorporate design elements from the City of Edmonton's Winter City Strategy.

5.1.3.2 NSP Policy

Hardy tree species shall be included in the detailed landscape design of public parks, plazas, and open spaces such that they provide wind shelter and enable solar penetration.

Implementation

Landscape design for public land will be developed in conjunction with the corresponding City Departments and incorporate design elements from the City of Edmonton's Winter City Strategy.

5.1.3.3 NSP Policy

Programming for parks and public plazas should consider incorporating gas hook-ups for large portable fire pits to provide warm gathering spaces for park users during winter.

Implementation

Design and development of future parks and public plazas will consider programming needs of the community, with implementation based on the requirements of the corresponding City Departments.

Source: Edie McIntyre

5.1.3.4 NSP Policy

Neighbourhood entrances and outdoor gathering spaces / focal points shall be designed to accommodate year-round activity.

Implementation

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, landscaping and built form to provide protection from extreme climate conditions.

Technical Summary

No specific technical requirements were identified.

5.2 LANDSCAPING

Overview & Rationale

Neighbourhood landscaping will enhance the unique character of the Marquis neighbourhood, and reinforce the urban agriculture theme. Native plant species are those naturalized to a given area and vary by region and local area. Utilizing native plant species generally requires less maintenance and irrigation than non-native, ornamental species, which minimizes costs associated with development and maintenance.

Naturalized landscaping within open spaces provides opportunities to create wildlife habitats, and strengthens the ecological network within the Marquis neighbourhood.

Using edible species to landscape public spaces, increases fresh produce within the neighbourhood and enhances the urban agriculture theme in the NSP area.

Also, neighbourhood focal points create destinations for the residents within the area. Through thoughtful planning and design these focal points can become active places which are alive and utilized and promote community interaction.

5.2.1 Objective 12

Promote the use of natural landscaping using native tree and plant species.

5.2.1.1 NSP Policy

Landscaping of parks, open spaces, and stormwater management facilities should incorporate native and adapted plant species where appropriate. Habitat restoration of natural areas should also be undertaken where appropriate.

Implementation

Develop parks, open spaces, and stormwater management facilities using native and adapted species, and carry out restoration where appropriate. 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.

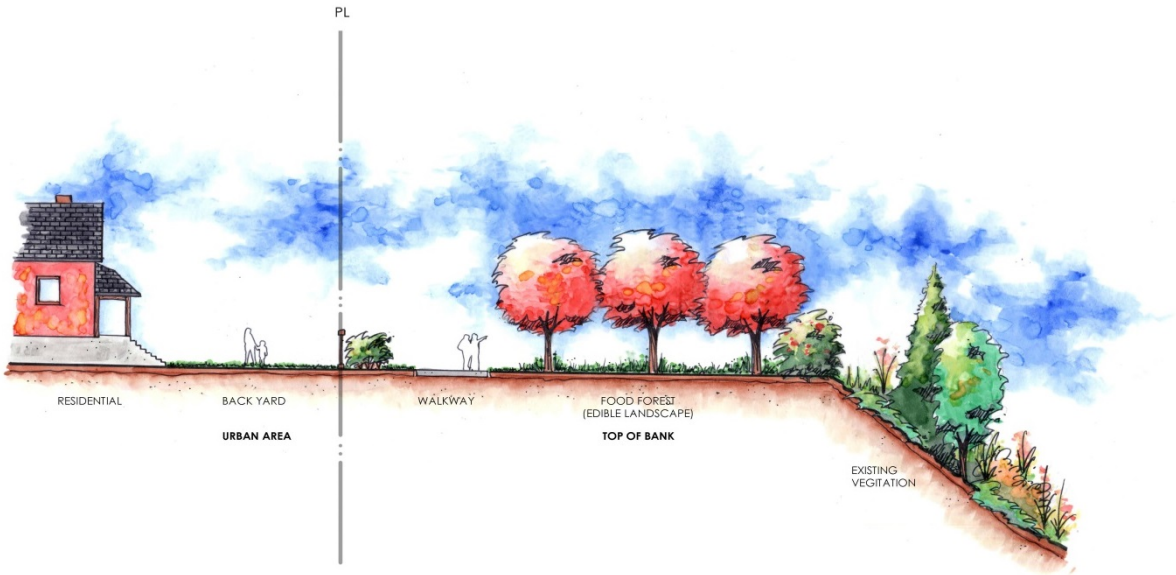
Source: Stantec

5.2.2 Objective 13

Promote the use of edible landscaping in suitable locations within the NSP area.

5.2.2.1 NSP Policy

Landscaping of parks, open spaces, and stormwater management facilities should incorporate edible landscaping elements, where appropriate.



Implementation

The development of parks, open spaces, and stormwater management facilities should incorporate edible landscaping, where appropriate. Specific species used shall be determined between the Developer and City Administration at the time of review of landscaping plans as part of the engineering drawing review.

Technical Summary

No specific technical requirements were identified.

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6 Land Use

CONTEXT AND APPROACH

Within the Marquis NSP area the main land use components are residential, mixed-use, commercial, and institutional development. These land use components are discussed below. The thoughtful integration of these land uses in combination with parks, open space, agriculture and transportation options will create a complete community with a vibrant Town Centre. Information regarding parks, open spaces and agriculture is presented in Section 5 and transportation is discussed in Section 7.

6.1 COMMERICAL

Overview & Rationale

Commercial uses add to the vibrancy and sustainability of the community. They provide local employment opportunities and the ability for residents to live, work and shop in the same neighbourhood, reducing the dependency on commercial uses outside the community and offering the appeal of being closer to home. The locations of the commercial sites are within walking distance of residential areas and are accessible through the pedestrian network, thereby reducing the need for automobile usage. A variety of commercial opportunities have been provided throughout the NSP area.

Town Centre Commercial and Main Street Retail

The Town Centre located in the north-west portion of the Plan area will be a major focal point for the community and the Horse Hill area. A wide variety of commercial uses will be provided for through the Town Centre Commercial and Main Street Retail zones. Due to the importance of the Town Centre and the wide variety of uses located within it (commercial, residential, LRT station, Transit Centre) a separate section (Section 6.4 Town Centre) has been prepared with this NSP. Please refer to this section for specific information on Town Centre Commercial and Main Street Retail provisions.

Business Employment

Business employment uses are intended to serve the immediate needs of the neighbourhood and neighbouring communities while providing regional facilities and local employment opportunities. Within the NSP area business employment uses are proposed in the north-west potion, located adjacent to Manning Drive and Meridian Street.

Community Commercial

Within the NSP area three sites have been identified for community commercial uses. Two of the sites are located in the north-east portion of the Plan area. These sites will be primarily vehicle oriented due to the separation of the sites from the rest of the neighbourhood by arterial roadways and the CN Railway These sites may also be used for religious assembly purposes due to their prominent locations and good vehicular access. A third community commercial site is provided within the south-west portion of the Plan area, located at the corner of Meridian Street and an arterial roadway entrance. The location of this commercial site provides for high visibility and convenient access to local residents of the neighbourhood and neighbouring communities.

Neighbourhood Commercial

Neighbourhood commercial uses within the Plan area are intended to serve the commercial and retail day-to-day needs of residents in the neighbourhood and neighbouring communities. A neighbourhood commercial site has been identified in the east portion of the Plan area located at the intersection of an arterial roadway and a collector roadway.

Source: Stantec

6.1.1 Objective 14

Provide commercial development opportunities to meet the large and small scale commercial/retail needs of residents and provide local employment opportunities within the neighbourhood.

Source: Stantec

6.1.1.1 NSP Policy

The provision of Town Centre Commercial and Main Street Retail sites, located in the Town Centre, as well as Business Employment, Community Commercial and Neighbourhood sites located in other portions of the NSP area shall serve the large and small scale needs of residents located within the NSP area and beyond.

Implementation

Figure 5: Development Concept illustrates the location and general configuration of commercial areas which will be confirmed prior to rezoning approval.

6.1.2 Objective 15

Locate and orient commercial sites along highway, arterial and/or collector roadways to ensure high visibility and accessibility by multiple modes of transport, including car, transit and walking.

6.1.2.1 NSP Policy

Commercial sites shall be placed along highway, arterial and/or collector roadways, transit routes and along pedestrian corridors to ensure high visibility and accessibility.

Implementation

Figure 5: Development Concept illustrates the location and conceptual configuration of commercial areas, which will be confirmed prior to rezoning approval. Commercial sites are distributed throughout the neighbourhood in locations with high visibility and accessibility by different modes of travel.

6.1.3 Objective 16

Minimize the impact of commercial development on adjacent land uses.

6.1.3.1 NSP Policy

Activity areas associated with commercial development should be oriented towards the abutting highway, arterial, and/or collector roadways.

Implementation
The Development Officer should have regard for building placement and activity areas in assessing and conditioning development applications for commercial development under the applicable zone.

6.1.3.2 NSP Policy

Consideration should be given for the separation distance between residential development and abutting commercial development.

Implementation
The Subdivision Authority should ensure that appropriate transitional elements (i.e. landscaping, setbacks, lot orientation, etc.) are implemented so that residential uses are appropriately interfaced with commercial development.

6.1.4 Objective 17

Provide residents with convenient pedestrian access to commercial development so that residents have the opportunity to walk to commercial services.

6.1.4.1 NSP Policy

Commercial development should be designed with pathways that interconnect building entrances, parking, transit stops, public sidewalks and crossings, adjacent properties, adjoining off-street paths or pedestrian walkways and other key destinations on or adjacent to the site. The internal pedestrian system and linkages should foster connectivity within the site and to the surrounding neighbourhood. Pedestrian routes should be direct and shall minimize potential conflicts with vehicles.

Implementation
The Development Officer should have regard for building placement, pedestrian accessibility and activity areas assessing and conditioning development applications for commercial development under the applicable zone.

Technical Summary

A commercial needs assessment titled “Horse Hill Commercial Market Study” was prepared by Urbanics Consultants Ltd, in August 2013, in support of the Marquis NSP. The assessment was submitted to the City of Edmonton under separate cover.

6.2 RESIDENTIAL

Overview & Rationale

The Marquis NSP provides for a broad range of housing densities, types and choices. The specific land uses will be determined on the basis of market conditions and consumer preferences at the time of zoning approval. Residential land uses are identified in **Figure 5: Development Concept**. The area, number of dwelling units and population attributed to each form of residential development is shown in **Table 2: Land Use and Population Statistics**.

The provision of a variety of housing types promotes the creation of a more complete and diverse neighbourhood; one that can accommodate a range of incomes and market segments, along with various types of households. This allows individuals and families to stay within the community throughout their lifecycle. The use of a wide variety of housing types as well as innovative urban design in housing forms, site development, and streetscapes contributes to a sustainable land use pattern.

Existing Residential

Existing residential use within the NSP boundary is developed as country residential. These areas are primarily located in the north central portion of the NSP area. There is opportunity to provide future compatible transitional uses (i.e. single detached housing) around these existing rural residences in a sensitive manner. Where existing country residential uses are proposed to interface with future low density residential uses, the future site shall be designed to allow for a transition by addressing building location and the provision of buffering through the use of elements such as landscaping, fencing, etc.

The existing country residential development may remain in perpetuity. Any future redevelopment of existing residential uses would be required to meet the City of Edmonton and *Capital Region Growth Plan* residential density targets.

Low Density Residential

Low density residential opportunities are provided throughout the Plan area and will primarily take the form of single detached and semi-detached housing. These housing forms will be provided in a variety of lot sizes to accommodate a range of households and income levels as well as changes to the composition of households as the trend towards multi-generational housing increases.

Medium Density Residential

Medium density housing forms within the Plan area may include row housing, stacked row housing and low rise apartment units. Street oriented row housing has been identified separately within the land use concept, however row housing is permitted within the Medium Density Residential designation. Medium Density Residential uses will primarily be located in prominent and accessible locations within the neighbourhood adjacent to arterial and collector roadways. Medium density housing forms also provide transition between low density residential and higher density

High Density Residential

High density residential shall take the form of medium and high rise units. Within the NSP area higher density uses are located in highly visible and accessible areas within the Town Centre. These uses are within walking distance of the LRT station, Transit Centre, commercial uses, district park site and employment areas. The combination of these uses in close proximity supports the creation of a more compact walkable and liveable neighbourhood.

Conservation (Cluster) Residential

Source: Stantec

Conservation (Cluster) developments are a way to retain or add open space (in this case for agriculture) by clustering or grouping residential or other urban land uses, typically at higher densities. Examples include residential development clustered around a community-supported agriculture (CSA) operation, small commercial farm, or orchard.

A conservation (cluster) development could be operated in a manner similar to a golf course community, in that shared space is administered and maintained by residents through a condominium corporation, residents association, or housing co-operative. Similarly, residences could group around small parcels of existing farm land as the land transitions into a more urban agriculturally-dominated landscape.

6.2.1 Objective 18

Provide a variety of residential housing types in different built forms, for a range of household types, income levels, ages and needs.

6.2.1.1 NSP Policy

A mixture of residential dwelling types and densities including single/semi-detached, row housing, low/medium rise density housing and medium/high rise density housing shall be provided, allowing consumer choice, a range of affordability options.

Implementation

Figure 5: Development Concept illustrates the general location of residential land use designations. Sections 100 and 200 of the City of Edmonton Zoning Bylaw provide for a range of densities and housing forms that shall be applied at the rezoning stage.

6.2.1.2 NSP Policy

The NSP shall support a greater mix of housing types and allow for intensive and/or innovative housing forms 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.).

Implementation

The City of Edmonton Zoning Bylaw, through conventional zones, Direct Control Provisions, and Special Areas, provides for a range of densities and housing forms that shall be applied at the rezoning stage. Incentives shall be considered to encourage Conservation (Cluster) Residential development, to be integrated into and/or adjacent to existing agricultural properties where appropriate to promote continuation of agricultural practices within this neighbourhood.

6.2.2 Objective 19

Establish an overall residential density that meets or exceeds the City of Edmonton's *Suburban Housing Mix Guidelines* and the minimum density target set out by the *Capital Region Growth Plan*.

6.2.2.1 NSP Policy

The Marquis NSP shall meet or exceed the approved Suburban Housing Mix Ratio for new neighbourhoods and the density target as set out by the Capital Region Growth Plan.

Implementation

Figure 5: Development Concept and **Table 2: Land Use Concept and Population Statistics** shall guide intensified suburban development.

6.2.3 Objective 20

Develop low-rise/multi-/medium and high rise residential sites to a higher urban design standard.

Source: Stantec

6.2.3.1 NSP Policy

Low-rise/multi-/medium and high rise residential uses shall be designed to have a strong street presence, with parking areas located underground or away from the street.

Implementation

The Development Officer should have regard for site design, landscaping, parking areas, building articulation and transitioning with other land uses.

6.2.4 Objective 21

Establish affordable housing opportunities within the NSP.

6.2.4.1 NSP Policy

Developments shall comply with the City of Edmonton's *Affordable Housing Policies and Guidelines*.

Implementation

City of Edmonton's *Affordable Housing Policies and Guidelines* shall be applied prior to rezoning.

6.2.4.2 NSP Policy

The NSP shall allow for a wide variety of housing types to create a more inclusive neighbourhood.

Implementation

Figure 5: Development Concept indicates the location of various residential land uses. A variety of housing options provides choices for individuals in different stages of their life as well as different market segments.

6.2.4.3 NSP Policy

Encourage builders to develop secondary suites, garage suites or garden suites in suitable locations.

Implementation

Secondary suites, garage suites or garden suites shall be implemented through Section 100 and 200 of the Edmonton Zoning Bylaw.

6.2.5 Objective 22

Provide opportunities for conservation (cluster) developments which allow for the integration of residential uses or mixed uses with urban agriculture uses.

6.2.5.1 NSP Policy

Promote conservation (cluster) subdivision development which clusters residential or mixed use development in a concentrated rather than dispersed pattern to preserve agricultural lands, ecologically sensitive areas, and other unique characteristics of the land being subdivided.

Implementation

Conservation (cluster) development shall be implemented through Section 900 (Special Area) or a Direct Development Control Provision of the Edmonton Zoning Bylaw and shall meet minimum required residential densities.

6.2.6 Objective 23

Residential development shall take into consideration existing rural and agricultural uses and ensure compatible uses are provided.

6.2.6.1 NSP Policy

Ensure that compatible land uses are developed in proximity to existing rural and agricultural uses and that appropriate transitions are provided between existing and future land uses.

Implementation

Figure 5: Development Concept illustrates the general location of land uses. The rezoning and subdivision processes should ensure that appropriate transitional elements (i.e. landscaping, setbacks, lot orientation, etc.) are implemented so that existing rural and agricultural uses are separated or properly integrated with future development.

6.2.7 Objective 24

Integrate existing residential uses into the NSP area and ensure compatible uses in proximity to existing residential uses.

6.2.7.1 NSP Policy

Consideration should be given to separation distance between existing residential development and abutting future residential development.

Implementation

Figure 5: Development Concept illustrates the general location of land uses. The rezoning and subdivision processes should ensure that appropriate transitional elements (i.e. landscaping, setbacks, lot orientation, etc.) are implemented so that existing residential uses are separated from future residential development.

6.2.8 Objective 25

Provide a transition between residential uses of significantly different densities.

Source: Stantec

6.2.8.1 NSP Policy

Encourage appropriate transitions between low rise or medium/high rise units and single or semi-detached housing.

Implementation

Figure 5: Development Concept illustrates the general location of land uses. The Development Officer shall have regard for the placement of low rise or medium rise units when adjacent to single or semi-detached housing.

6.2.9 Objective 26

Accommodate Reverse Housing development. “Reverse Housing” is a housing concept in which homes front onto an open space area, such as a park or pipeline corridor. Vehicular access is provided through the rear alley.

6.2.9.1 NSP Policy

Ensure that residential units fronting onto pipeline corridors and/or public open spaces have pedestrian and emergency access, and that vehicular access is provided from a rear alley.

Implementation

Reverse Housing shall be regulated through the Direct Control or Special Areas provisions of the Zoning Bylaw. Where residential lots front onto the pipeline corridor or public open space, walkway/emergency access shall be provided at a minimum of every 120 m. The location and design of the alleys and walkways shall be identified at the time of subdivision.

Technical Summary

No technical studies associated with this topic have been submitted.

6.3 MIXED USE

Overview & Rationale

In addition to the mixture of uses located within close proximity to each other in the Town Centre, the NSP identifies two mixed use sites within the Plan boundary. The purpose of the mixed use designation is to allow for the compatible development of residential (medium density), commercial office, office, business, institutional or civic uses in a carefully designed, suburban environment. Mixed use areas are highly accessible and visible, located in prominent locations along arterial or collector roadways. Intensification in these locations will create unique focal points for the neighbourhood. Potential uses include:

- Row Housing (including stacked or cluster)
- Low Rise Apartments
- Commercial Retail
- Restaurants
- Specialty Food Services
- Professional, Financial and Office Support Services
- Child / Adult Day Care Facility
- Private Education
- Religious Assembly
- Recreational Uses
- Seniors Housing
- Extended Medical Treatment Services

Locating a mix of uses such as retail, offices, residential, institutional and civic within walking distance of each other promotes independence of movement, especially for the young and the elderly who can conveniently walk, cycle, or use transit. Overall, this results in a reduction of automobile use, particularly for shorter trips. The range of housing choices provides for opportunities for higher density development as well as options for different types and sizes of households and various income groups as well as assisted living. These housing choices allow individuals the opportunity to remain in the same neighbourhood as they age.

Stantec / Hancock Bruckner Eng & Wright

6.3.1 Objective 27

Encourage a variety of mixed use developments, which may include different housing forms, residential and institutional uses, residential and commercial uses or a combination of the above in appropriate locations, to create complete communities

6.3.1.1 NSP Policy

Mixed use sites shall be located in areas which are transit supportive and provide excellent accessibility and visibility. Mixed use developments shall include a variety of different housing forms, commercial uses and institutional uses where appropriate.

Implementation

Figure 5: Development Concept illustrates the location of mixed use sites in the NSP area. Specific uses will be confirmed prior to rezoning approval. Implementation of development objectives may require the provision of a Direct Control District to ensure developments are transit supportive, uses are compatible, and a high level of design guidelines are followed to ensure a distinct and unique area.

Source: Stantec

Technical Summary

No technical studies associated with this topic have been submitted.

6.4 TOWN CENTRE

Overview & Rationale

The Town Centre will be a pedestrian friendly, mixed-use transit oriented focal point for the NSP area and the wider Horse Hill area. Through the diversity of land uses (medium and high density residential development, commercial, office and institutional) in close proximity to the LRT Station and Transit Centre the Town Centre will create a dynamic urban environment that is transit supportive in which people can live work and play.
Zoning for the Town Centre shall be implemented through Section 900 (Special Areas) of the City of Edmonton Zoning Bylaw, unless otherwise specified.

Town Centre Commercial (TC-C)

The intent of the Town Centre Commercial is to allow for the development of high quality, pedestrian friendly, commercial developments. These developments would incorporate a variety of large, medium and small retail formats, office and entertainment uses in proximity to transit services (LRT station and Transit Centre). Buildings will frame entrances and intersections along pedestrian-friendly routes, and surface parking will be "broken-up" or minimized when abutting public streets. In addition to the Main Street Commercial, additional sub-areas are to be created within the Town Centre Commercial: Large Format Retail; Commercial Pads; Retail Centre; Entertainment District; Business Employment; and Residential components, providing a variety of commercial opportunities.

Source: Whole Foods – Folsom, CA

Source: Perkowitz and Ruth

Large Format Retail

The Large Format Retail areas are intended to provide larger free standing retail opportunities. Large format retail is to be located around the periphery of the town centre providing services to both residents of Horse Hill as well as the region. Large Format Retail sites may also include commercial pads to frame access points and provide additional commercial opportunities.

Potential uses within the Large Format Retail sub-area include, but are not limited to the following:

- General Retail

Commercial Pads

Commercial pads may be developed as stand-alone buildings with one tenant or as buildings with multiple tenants.

Potential uses within the Commercial Pad sub-area include, but are not limited to the following:

- General Retail
- Eating and Drinking Establishments
- Professional, Financial and Office Support Services

Source: The Domain – Austin, Texas

Source: Bloomfield Hills - MI

Source: Fairfax Corner – Fairfax, VA

Retail Centre

Retail Centres provide a mix of uses, including retail, leisure amenities, and opportunities for residential development.

Potential uses within the Retail Centre sub-area include, but are not limited to the following:

- General Retail
- Residential
- Professional, Financial and Office Support Services
- Eating and Drinking Establishments
- Recreational

Maximum Density

- 225 Units Per Hectare

Maximum Height

- 15 Storeys

Source: Potomac Town Centre – Woodbridge, VA

Source: Bridge Street Town Centre - Huntsville

Source: Solera Apartments – Denver, CO

Source: Rhode Island Row – Washington, DC

MAIN STREET RETAIL (MSR)

The intent of the Main Street Retail is to allow for the development of a pedestrian friendly and transit supportive Main Street. Retail and service uses would be located on the ground floor of buildings adding to the vibrancy of the street which may have opportunities for residential and/or office uses located above street level. To ensure a pedestrian-oriented streetscape, buildings would be oriented to align with the street, with parking located on-street or at the rear of buildings.

Source: Manning Town Centre – Edmonton, AB

Source: Market Street – Woodlands, Texas

Potential Uses:

- General Retail
- Residential
- Eating and Drinking Establishments
- Professional, Financial and Office Support Services
- Institutional

Maximum Density

- 75 Units Per Hectare

Maximum Height

- 4 Storeys

Entertainment District

The Entertainment District is typically anchored by a larger user such as a theater. The entertainment district provides opportunities for additional dining, music and nightlife.

Potential uses within the Entertainment District sub-area include, but are not limited to the following:

- General Retail
- Eating and Drinking Establishments
- Recreational

Source: Winrock Town Centre – Albuquerque, NM

Source: Stantec

Residential

High Density Residential (HDR) and Medium Density Residential (MDR) designations are intended to promote higher density, high quality and transit supportive development within the Town Centre. HDR will take the form of medium and high rise units and MDR will take the form of row housing, stacked row housing and low rise apartment units. These residential uses are within walking distance of the LRT station, Transit Centre, commercial uses, district park site and employment areas and will support the creation of a more compact walkable and liveable neighbourhood. The intent is to apply standard zones to the Medium and High Density residential designations.

Source: Streets of SouthGlenn - Colorado

6.4.1 Objective 28

Provide opportunity for commercial development in the Town Centre to meet the commercial needs of residents in the NSP area and surrounding Horse Hill area.

6.4.1.1 NSP Policy

Commercial development opportunities shall be provided in the Town Centre to serve the needs of residents located in the Marquis neighbourhood and the broader Horse Hill area.

Source: Santana Row - California

Implementation

Figure 5: Development Concept illustrates the locations and general configurations of Town Centre Commercial and Main Street Retail areas within the Town Centre. A variety of commercial and retail uses shall be allowed in the Town Centre and implemented through Section 900 (Special Areas) of the Edmonton Zoning Bylaw.

6.4.2 Objective 29

Provide opportunity for the integration of commercial, residential, and office uses in the Main Street area.

6.4.2.1 NSP Policy

Main Street Retail shall allow for opportunities, where appropriate to develop apartment housing above ground floor retail, commercial and/or office uses.

Implementation

Figure 5: Development Concept illustrates the location and general configuration of Main Street Retail. The Main Street Retail policies shall be implemented through Section 900 (Special Areas) of the Edmonton Zoning Bylaw.

6.4.3 Objective 30

Locate and orient commercial sites in the Town Centre to ensure high visibility and convenient access points.

6.4.3.1 NSP Policy

Commercial sites in the Town Centre shall be located along Manning Drive, arterial and/or collector road roadways, transit routes, pedestrian linkages, and in proximity to the LRT Station and Transit Centre to ensure high visibility and accessibility.

Implementation

Figure 5: Development Concept illustrates the location of commercial sites in the Town Centre. The Main Street Retail and Town Centre Commercial will be located within walking distance of the LRT Station and Transit Centre.

6.4.4 Objective 31

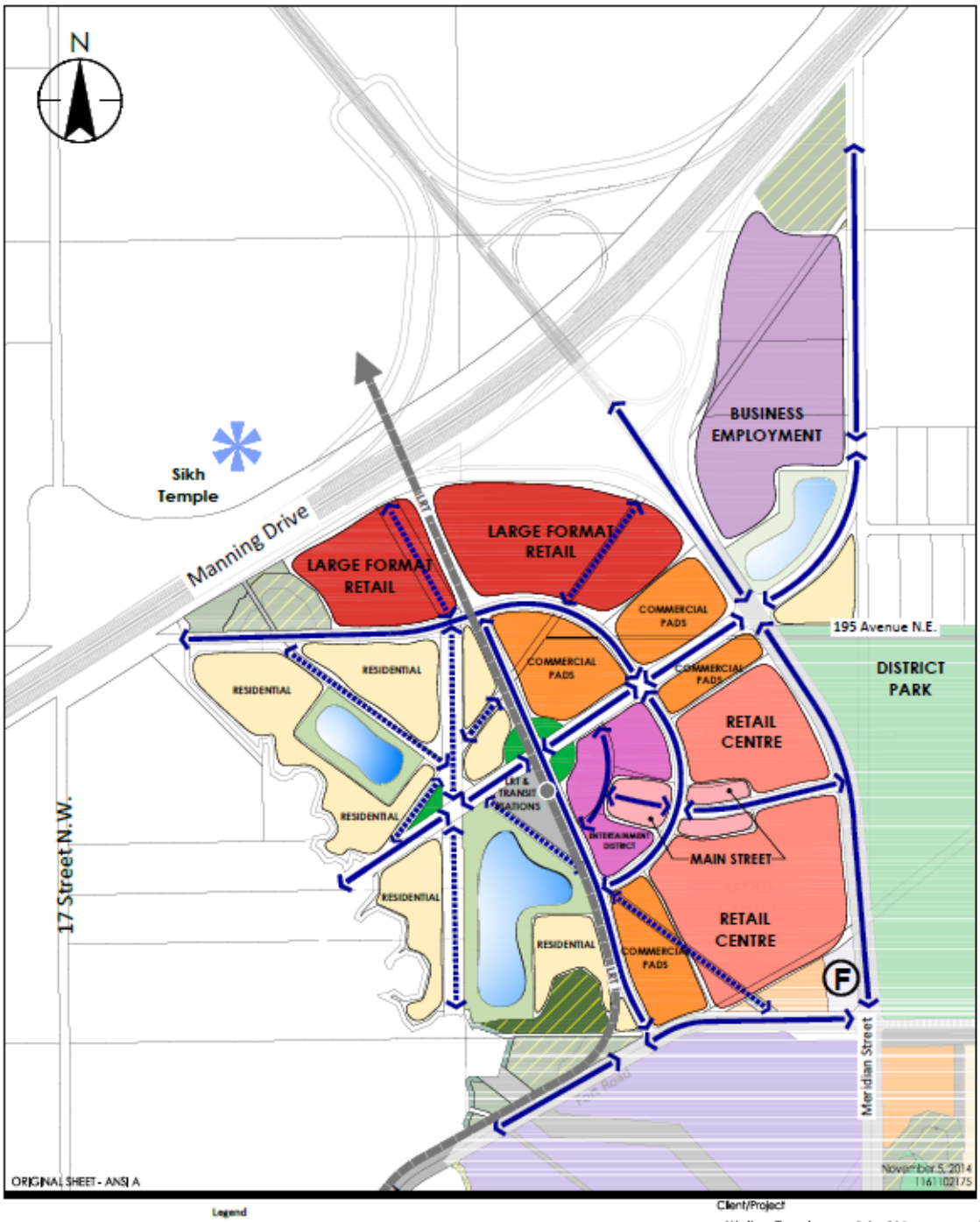
Provide increased residential densities within the Town Centre in support of public transit.

6.4.4.1 NSP Policy

The NSP will incorporate medium and high density residential uses within the Town Centre to provide increased residential densities within walking distance of the LRT and Transit Centre.

Implementation

Figure 6: Town Centre Development Concept illustrates the location of residential sites in the Town Centre. Medium density and high density residential development in the Town Centre shall be implemented through Sections 100 and 200 of the Edmonton Zoning Bylaw.



Legend

Pedestrian Connections

Vehicular & Pedestrian Connections

Stantec

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Client/Project

Walton Development And Management
Cameron Development Corporation
Horse Hill Neighbourhood 2
Neighbourhood Structure Plan

Figure No.

6.0

Title

Town Centre
Development Concept

URBAN DESIGN

Town Centre Level

6.4.5 Objective 32

Create a Town Centre which is defined by a distinct human-scale Main Street retail area that is located adjacent to a variety of commercial uses, the district activity park site, residential opportunities and with convenient access to public transit, including the LRT.

6.4.5.1 NSP Policy

The Town Centre shall maximize opportunities to provide a variety of commercial, main street retail, medium/high density residential, and amenities within 400 m of the proposed LRT Station.

Implementation

Figure 6: Town Centre Development Concept guides the land uses for the Town Centre.

6.4.5.2 NSP Policy

Provide opportunities to integrate residential towers within the Town Centre Commercial area.

Implementation

For Special Area sites within the Town Centre Commercial area (i.e. town Centre Commercial and Main Street Retail) opportunities for residential towers may be provided through Section 900 or Direct Control Provisions of the Edmonton Zoning Bylaw.

6.4.5.3 NSP Policy Design streets to create a walkable, urban environment within the Town Centre.

Implementation

Walkability in the core of the Town Centre shall be promoted through the use of walkways and strees that include wide sidewalks, good quality street lighting, and street trees and plantings. Where appropriate, other traffic calming devices shall be incorporated into the design of the streets.

6.4.6 Objective 33

Ensure careful integration between public transit (LRT Station and Transit Centre) and the built environment.

6.4.6.1 NSP Policy

The LRT Station and Transit Centre shall be designed to integrate with surrounding development and complement the character of the Town Centre in scale, quality of materials, finishes, landscaping and the pedestrian environment.

Source: Cascade Station – Portland, OR

Implementation

The LRT Station Plan and the development of the Transit Centre should comply with the policies of the NSP.

6.4.6.2 NSP Policy

Where required, fences within the LRT Station or corridor shall be decorative and transparent to ensure appropriate interface with adjacent land uses.

Implementation

The LRT Station Plan should comply with the intent of the policies of the NSP.

6.4.6.3 NSP Policy

Town Centre commercial uses that are adjacent to the LRT station should be integrated with the LRT Station.

Implementation

The NSP policy shall be implemented through Section 900 of the Edmonton Zoning Bylaw.

6.4.6.4 NSP Policy

Safe, logical and attractive pedestrian connections, which employ elements such as wayfinding, lighting, etc., shall be provided to the LRT station and Transit Centre from the surrounding area.

Implementation

For Special Area sites (i.e. Town Centre Commercial and Main Street Retail) NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR pedestrian connections shall be provided to ensure accessibility to the LRT Station and Transit Centre.

6.4.7 Objective 34

Establish strong connections between the Town Centre and the rest of the Horse Hill area through a series of well-designed and well-connected streets, pedestrian walkways, multi-use trails, open spaces and transit.

Source: Bridgeport Village - Oregon

6.4.7.1 NSP Policy

Streets and pedestrian linkages within the Town Centre should be designed to allow vehicular and pedestrian accessibility to the rest of the surrounding areas.

Implementation

Figure 7: Ecological Network and Parks and **Figure 14: Active Mode Transportation Network** illustrates the pedestrian and vehicular connectivity of the Town Centre to the rest of the Marquis neighbourhood and surrounding areas.

6.4.8 Objective 35

Explore opportunities for sustainability measures within the Town Centre.

6.4.8.1 NSP Policy

Where feasible and appropriate incorporate alternative development standards and sustainability measures within the Town Centre.

Implementation

Allow flexibility between the developer, homebuilders and 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 Town Centre. Techniques and technologies that may be considered include but are not limited to, low impact development, such as bioswales and rain gardens, rooftop gardens, energy efficiency in building design, adaptive reuse, etc.

BUILT FORM

6.4.9 Objective 36

Within the Main Street, design pedestrian friendly streetscapes which are characterized by human scale built form with active building frontages, wide-sidewalks, and pedestrian oriented landscaping.

6.4.9.1 NSP Policy

Developments should provide transition in building form (height and massing), landscaping in relation to surrounding uses, and, where feasible, building orientation that optimizes solar exposure in all seasons.

Source: University Village – Seattle, WA

Implementation

The Development Officer shall have regard for building transition, landscaping in relation to the surrounding uses, and, where feasible, building orientation that optimizes solar exposure in all seasons.

6.4.9.2 NSP Policy

The massing of long building walls shall be reduced through architectural elements such as columns, ribs, pilasters or piers, changes in plane (e.g. recesses and projections), changes in building finishes, materials and textures, or features that create a sense of human scale.

Implementation

Development permit applications shall be in conformance with the relevant zoning.

6.4.9.3 NSP Policy

Buildings fronting onto a focal point, amenity area, or an arterial, collector or local roadway shall be designed and finished to create an active building frontage. Active building frontages are characterized by entrance features/doorways, wall niches, windows, porches, patios or features that lend visual interest and create human scale.

Source: Bridge Street Town Centre - Huntsville

Implementation

Development permit applications shall be in conformance with the relevant zoning.

6.4.10 Objective 37

Provide buildings that feature high quality architecture to help create an 'urban character' environment.

6.4.10.1 NSP Policy

Buildings shall be of high quality and designed in an aesthetically pleasing manner.

Implementation

For Special Area sites, the NSP policies shall be implemented through Section 900 of the Zoning Bylaw. For the MDR and HDR parcels, development permit applications shall be in conformance with the relevant zoning.

6.4.10.2 NSP Policy

Building rooftop mechanical equipment, utility equipment and garbage enclosures shall be screened from street view or concealed by incorporating it within the roof envelope or by screening it in a way that is consistent with the character and finishing of the building.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Zoning Bylaw. For the MDR and HDR parcels, development permit applications shall be in conformance with NSP Policy 6.4.10.2.

6.4.10.3 NSP Policy

The perceived amount of off-street surface parking abutting arterial, collector and local roadways should be minimized, where possible.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Zoning Bylaw. For the MDR and HDR parcels, development permit applications shall be in conformance with the relevant zoning.

6.4.11 Objective 38

Orient buildings to assist in creating pedestrian-friendly streets.

6.4.11.1 NSP Policy

Techniques to promote pedestrian-friendly streetscapes such as building orientation, transparency, scale, etc. should be explored.

Source: Southlands – Aurora, CO

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR an HDR parcels, development permit applications shall be in conformance with the relevant zoning.

6.4.11.2 NSP Policy

Major vehicular and pedestrian access points into the Town Centre and corners of prominent intersections should receive special design and architectural treatment to ensure that the development presents an attractive and inviting face to the rest of the Marquis neighbourhood and surrounding areas.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR parcels, development permit applications shall be in conformance with the relevant zoning.

6.4.12 Objective 39

Manage off-street parking to complement the urban character of the Town Centre.

Source: Stantec

6.4.12.1 NSP Policy

Large parking areas shall be "broken-up" by means of on-site private roads, landscaped islands, amenity spaces, and/or pedestrian walkways.

Implementation

Parking areas are "broken up" by means of on-site private roads, landscaped islands, amenity spaces, and/or pedestrian walkways when assessing and conditioning development permit applications.

6.4.12.2 NSP Policy

Parking areas shall be designed to minimize pedestrian / vehicular conflicts.

Implementation

At the Development Permit stage parking areas shall be designed to incorporate elements such as landscaping and wayfinding.

6.4.12.3 NSP Policy

Bicycle parking should be located near amenities or building entrances in at-grade locations.

Implementation

Bicycle parking shall be located at-grade locations near amenities or building entrances.

6.4.12.4 NSP Policy

Parking, loading and passenger drop-off areas should be easily accessible and designed to minimize pedestrian / vehicle conflicts.

Implementation

Accessibility and minimization of pedestrian / vehicle conflicts for parking, loading and passenger drop-off areas will be assessed and conditioned in development permit applications.

6.4.12.5 NSP Policy

Garbage collection for buildings which are located at-grade shall be located within a structure or enclosure that is architecturally compatible with the project design and screened from street view and any residential site.

Implementation

Garbage collection areas located at-grade shall be appropriately located, screened and designed.

6.4.12.6 NSP Policy

Loading dock areas shall be screened from abutting public roadways and uses and designed to ensure that vehicles do not encroach onto public or private road right-of-way.

Implementation

Loading docks shall be screened from abutting public roadways and uses and designed to ensure that vehicles do not encroach onto public or private road right-of-way.

6.4.13 Objective 40

Within the Town Centre, design streets to reduce vehicular speed to promote a walkable urban environment.

6.4.13.1 NSP Policy

Prominent public roadways should include the following design features and elements

- Wide sidewalks with appropriate buffers to increase walkability
- Good quality street lighting and furniture (i.e. benches, waste receptacles, bollards, etc.)
- Street trees and plantings
- Additional focus on pedestrian crossings may include pavement markings, changing surface materials, curb extensions, etc.
- Bus stops must be physically accommodated with no street furniture or plantings obstructing loading /unloading operations
- Smaller curb radii at intersections to shorten the pedestrian crossing distance and reduce vehicle turning speed

Source: Stantec

Where appropriate, other traffic calming devices should be integrated into the design of arterial and collector roadways.

Implementation

The NSP policies for the design of public roadways shall be implemented at the detailed roadway design stage of development.

6.4.14 Objective 41

Design public roadways that support various modes of transport such as pedestrians, bicycles, buses, cars and service vehicles.

6.4.14.1 NSP Policy

Consideration should be given where possible for public roadways within the Town Centre to be designed as multi-use streets that promote pedestrian activity, cycling and transit.

Implementation

The NSP polices for the design of public roadways within the Town Centre shall be incorporated into the detailed design of roadways and will be reviewed by the Transportation Department at the roadway design stage.

6.4.14.2 NSP Policy

Local streets shall provide pedestrian connectivity through the provision of sidewalks on one or two sides and appropriate lighting.

Implementation

Local streets shall provide pedestrian connectivity and appropriate illumination at the subdivision or development permit stage.

6.4.15 Objective 42

Incorporate plazas, public spaces, parks and open space with the built form and character of the Town Centre.

6.4.15.1 NSP Policy

Focal points should be provided within the Town Centre and should function as amenity space for people and should be comprised of, but not limited to, one or a combination of the following elements: public art, seating area, plaza, street furniture, fountain, water feature, fireplace, or other architectural elements. These focal points may be developed on private lands with public accessibility.

Source: The Lake at Thousand Oaks, California

Implementation

For Special Area sites (i.e. Town Centre Commercial and Main Street Retail) NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR sites, amenity areas shall be provided in accordance with Section 100 or 200 of the Edmonton Zoning Bylaw.

6.4.15.2 NSP Policy

Landscaping that enhances the character of the buildings and creates a positive relationship with the buildings shall be provided.

Implementation

For Special Area sites (i.e. Town Centre Commercial and Main Street Retail) NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR sites, amenity areas shall be provided in accordance with Section 100 or 200 of the Edmonton Zoning Bylaw.

6.4.15.3 NSP Policy

Open space within the Town Centre should be designed to promote its continued use and include, but not be limited to, features such as trees, flowers, unit pavers, pedestrian lights, benches, trash receptacles, etc. Open space design should also take into consideration basic CPTED principles. In addition these spaces should be designed to promote year round use.

Implementation

For Special Area sites (i.e. Town Centre Commercial and Main Street Retail) NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR sites, amenity areas shall be provided in accordance with Section 100 or 200 of the Edmonton Zoning Bylaw.

6.4.15.4 NSP Policy

Continuity of landscape design elements (i.e. street lights, trees, furnishings, paving, and other elements) which are reflective of an overall theme should be provided within Special Area sites.

Implementation

For Special Area sites (i.e. Town Centre Commercial and Main Street Retail) NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw.

Source: University Village – Seattle, WA

6.4.15.5 NSP Policy

Landscaping shall not impede or block sight lines between motorists and pedestrians, particularly at crossing points.

Implementation

For Special Area sites (i.e. Town Centre Commercial and Main Street Retail) NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR sites, amenity areas shall be provided in accordance with Section 100 or 200 of the Edmonton Zoning Bylaw.

Source: Stantec

6.4.16 Objective 43

Promote enhanced pedestrian circulation within the Town Centre.

Source: Stantec

6.4.16.1 NSP Policy

The overall circulation system for the Town Centre should promote connectivity within the Town Centre and extend to the surrounding areas with multiple route options.

Implementation

Figure 7: Ecological Network and Parks illustrates the pedestrian connections within the Town Centre and the broader Marquis neighbourhood.

6.4.16.2 NSP Policy

Open spaces and focal points in the Town Centre should be designed to be accessible through well-planned pedestrian connections.

Implementation

For Special Area sites (i.e. Town Centre Commercial and Main Street Retail) NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR sites, pedestrian connections shall be provided to ensure the accessibility of open space and focal points.

6.4.16.3 NSP Policy

Convenient, safe and efficient located pedestrian crossing shall be provided.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR sites, the pedestrian connections shall be provided to ensure the accessibility of open space and focal points.

6.4.16.4 NSP Policy

Pedestrian pathways may include, but not be limited to, landscaping, pavement markings, changing surface materials, curb extensions, etc. to define pedestrian connections where practical and appropriate.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For the MDR and HDR sites, pedestrian connections shall be defined, where practical and appropriate. Elements that may be used to define pedestrian connections include, but are not limited to, landscaping, pavement markings, changing surface materials, curb extensions, etc.

SIGNAGE

6.4.17 Objective 44

Provide signage within the Town Centre that is complementary to the theme of the neighbourhood.

Source: Stantec

6.4.17.1 NSP Policy

Wayfinding signage shall be provided along pedestrian and cycling routes to encourage safe and efficient movement.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For MDR and HDR sites, development permit applications shall be in conformance with the Sign Regulations of the Edmonton Zoning Bylaw.

6.4.17.2 NSP Policy

Signs should be designed in an aesthetically pleasing manner and in harmony with the architectural theme of the respective building.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For MDR and HDR sites, development permit applications shall be in conformance with the Sign Regulations of the Edmonton Zoning Bylaw.

6.4.17.3 NSP Policy

Directional signage is encouraged to provide information at critical locations relating to primary tenants, parking lots, loading zones, pick up areas, entrances, exits and amenity areas.

Implementation

For Special Area sites, NSP policies shall be implemented through Section 900 of the Edmonton Zoning Bylaw. For MDR and HDR sites, development permit applications shall be in conformance with the Sign Regulations of the Edmonton Zoning Bylaw.

Technical Summary

A commercial needs assessment titled “Horse Hill Commercial Market Study” and was prepared by Urbanics Consultants Ltd, in August 2013, in support of the Marquis NSP. The assessment was submitted to the City of Edmonton under separate cover.

Main Street Retail

Site Plan and Design

1. Buildings shall be oriented to align with the Main Street to create a pedestrian oriented streetscape and an engaging public realm.
2. There will be no minimum yard requirements.
3. Any uses provided on the ground story shall be street oriented.
4. Consider CPTED Principles during site planning and design.

Building Design

1. Buildings shall be of high quality and be designed in an aesthetically pleasing manner. Chain architecture should generally be limited to corporate logos and signage.
2. Facades of buildings should be designed to incorporate individualized storefronts through the use of variable building setbacks and other architectural treatments.
3. Primary entrances of individual buildings shall be emphasized through the use of recesses, projections, columns, material, colours, etc. to make them visible.
4. Apartment Housing with Commercial Uses on the ground floor shall have access at Grade that is separate from the Commercial premises.
5. Landmark structures such as (e.g. steeples, clock towers, chimneys, water fountains and elements, etc.) could be utilized to enhance focal points within the development.

Street Character

1. Buildings and site amenities should emphasize architectural elements and façade enhancements, particularly to the first and second levels of a project to create a pedestrian friendly environment. Lower floors should be articulated to add variety, interest and human scale dimension. Design elements may include: placement of windows to allow for viewing into the building by pedestrians, doorways or entrance features, street furniture, arcades, canopies wall niches, and/or features that lend visual interest and create a human scale.
2. The massing of long building walls shall be reduced through architectural elements such as columns, ribs, pilasters or piers, changes in plane (e.g. recesses and projections), changes in building finishes, materials and textures, or features that create and identifiable pattern and sense of human scale.
3. The pedestrian character of the street should be emphasized through streetscape elements that create visual identity, such as treed sidewalks and treed medians.

Pedestrian Circulation

1. Wide sidewalks shall be provided along Main Street to facilitate pedestrian movement and activities.
2. A pedestrian walkway that establishes a connection through such elements as wayfinding, paving, etc. to the LRT Station through the Town Centre Commercial sites shall be provided.

Roadways and Parking

1. On-street parking shall be provided along Main Street where appropriate.
2. There shall not be any significant off-street parking immediately abutting Main Street.
3. Areas for bicycle parking shall be provided to promote alternative modes of transportation.

Open Space and Landscaping

1. Pedestrian oriented landscaping shall be provided along Main Street. It may include street trees, plantings, and street furniture such as benches, waste receptacles, bollards, pedestrian-oriented lighting, etc.

Town Centre Commercial

Site Plan and Design

1. Buildings shall generally be oriented to:
   a. Frame the corners of prominent intersections bordering the site;
   b. Frame major vehicular and pedestrian access points into the site;
   c. Permit views into the site along the axis of roadways and walkways intersecting the abutting perimeter public roadways;
   d. Consider CPTED principles during site planning and design.
2. Development of an internal circulation pattern that facilitates logical movement throughout the site as well as accommodates intensification over time.

Building Design

1. Buildings shall be of high quality and be designed in an aesthetically pleasing manner. Chain architecture should generally be limited to corporate logos and signage.
2. The massing of large format retail stores shall be reduced through architectural elements such as columns, ribs, pilasters or piers, changes in plane (e.g. recesses and projections), changes in building finishes, materials and textures, or features that create an identifiable pattern and sense of human scale.
3. Highly visible wall surfaces should be architecturally enhanced and/or landscaped to avoid exposed blank frontages abutting public roadways.
4. Buildings with multiple users shall be defined separately through individual signs, entrances, canopies, architectural elements, etc.
5. Buildings shall be designed to include a clearly identifiable primary entrance through the use of recesses, projections, canopies, porticos, overhangs, arcades, peaked roof forms, arches, outdoor patios, display windows, planters, walls, or other similar design elements.

Street Character

1. Private internal roadways shall be provided through Town Centre Commercial sites. These roadways shall provide vehicular and pedestrian connections to adjacent public roadways.
2. Pedestrian sidewalks with boulevard landscaping shall be provided where appropriate.

Pedestrian Circulation

1. Strong landscaped pedestrian connections through Town Centre Commercial blocks shall be provided to facilitate pedestrian interaction with the Main Street, LRT Station, Transit Centre and the adjacent district park.
2. Enhanced parking islands with walkways shall be provided to facilitate safe pedestrian movement from the parking areas to the stores. Remedial treatments such as raised pedestrian crossings, landscaping, special paving, lighting or bollards may be provided at significant points for pedestrian and vehicular crossings.
3. Attractive landscaped sidewalks shall be provided in front of large format buildings and the fronts of free standing buildings to facilitate pedestrian movement and activities.

Roadways and Parking

1. Large parking areas shall be "broken-up" by means of on-site private roads, landscaped islands, amenity spaces, and/or pedestrian walkways.
2. The perceived amount of surface parking abutting public streets should be minimized, where possible.
3. Where parking is located adjacent to public streets landscaped islands shall be provided.

Open Space and Landscaping

1. Landscaping along large format buildings shall be arranged in a manner that softens the building edge and creates visual relief.
2. Pedestrian oriented landscaping shall be provided along public roadways.
3. Site entrances into the Town Centre and landscaped edges should receive special design attention to ensure that the Town Centre presents an attractive and inviting face to surrounding areas.
4. An integrated landscaping theme should be used to highlight major circulation patterns and pedestrian linkages.

6.5 INSTITUTIONAL / CIVIC

Overview & Rationale

Institutional and civic uses add to the creation of a complete community. Future institutional and civic uses such as health care facilities, emergency services, schools, recreation centre, post office, government offices, library, cultural and religious institutions, and community buildings should be placed in prominent locations within the NSP. The civic area identified on **Figure 5: Development Concept** has been identified as the location for the future Fire Station.

The intent of the District Activity Park is to incorporate a multi-purpose recreation centre, public high school and a catholic high school. The existing Horse Hill School is located within the proposed District Activity Park. An additional school site has been identified within the NSP area.

The operations of existing government and institutional uses are also respected and incorporated into the NSP area.

6.5.1 Objective 45

Ensure that future institutional and civic uses are accommodated in the NSP.

6.5.1.1 NSP Policy

Institutional and civic development opportunities shall be provided to serve the needs of residents located within the NSP area and beyond. Emergency services such as a fire rescue and emergency medical services shall be located on major arterials that provide convenient and efficient access to service areas.

Source: City of Edmonton

Implementation

Figure: 5 Development Concept illustrates the location and general configuration of some of the areas which institutional and civic uses may be located such as institutional (government land), school sites, and the District Activity Park.

6.5.2 Objective 46

Ensure that existing government and institutional uses are accommodated in the NSP.

6.5.2.1 NSP Policy

Developments within the NSP shall respect and incorporate the operations of the existing government and institutional uses into their subdivision design and site plans.

Implementation

Figure 5: Development Concept identifies the locations of institutional uses in the NSP. Consultation with the Department of National Defence (DND) is required prior to undertaking rezoning within the DND Consultation Area identified in **Figure 3: Context & Site Constraints**.

6.5.3 Objective 47

Use civic buildings in prominent locations to create focal points.

6.5.3.1 NSP Policy

Civic buildings such as libraries, churches, schools and community leagues should be placed in prominent locations, which are easily accessible to transit and pedestrian networks, to create landmarks within the community.

Implementation

Details regarding placement of civic buildings shall be determined at the concept stage of development.

Source: Stantec

Technical Summary

A Community Knowledge Campus Needs Assessment was prepared by Stantec Consulting Ltd., in December 2013, in support of the Marquis NSP and has been submitted under separate cover to the City of Edmonton.

6.6 ENVIRONMENT AND ENERGY INFRASTRUCTURE

Overview & Rationale

In order to ensure that the lands with the NSP 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.

6.6.1 Objective 48

Ensure the environmental status of lands in the Marquis NSP is suitable for development and that Environmental Site Assessments are complete and up-to-date at the time of rezoning.

6.6.1.1 NSP Policy

The likelihood, types, and location of environmental concerns that may be present on the lands, shall be determined prior to rezoning

Implementation

ESA's and any follow-up shall receive sign-off by City Administration prior to the rezoning stage of development

6.6.1.2 NSP Policy

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 years from the date of rezoning application shall be redone. If this policy is in contradiction with City policy, the latter shall be considered correct.

Implementation

ESA's and any follow-up shall receive sign-off by City Administration prior to the rezoning stage of development

6.6.1.3 NSP Policy

Where necessary, contaminated material shall be removed and disposed of in an environmentally sensitive manner, in accordance with Federal, Provincial and Municipal regulations.

Implementation

Site remediation, where necessary, shall be conducted prior to rezoning. An environmental site assessment report verifying the need for remediation shall be submitted for approval to City Administration prior to the rezoning of the subject lands.

6.6.2 Objective 49

Minimize potential environmental hazards and disruption for future residential areas caused by oil and gas wells through careful neighbourhood design and ensuring urban development around resource operations and abandoned well sites adheres to the requirements of the Alberta Energy Regulator (AER), City of Edmonton Policy C515 – Oil and Gas Facilities, Abandoned Well Sites and *Policy Guidelines for the Integration of Resource Operations and Urban Development* (1985).

6.6.2.1 NSP Policy

Where development is proposed around an abandoned well site, establish appropriate setbacks to provide for work space and access to the well.

Implementation

Setback requirements will be confirmed at time of subdivision approval. Current standards call for a 10m x 15m work area around the well and an 8m access corridor for service vehicles. A minimum 5m setback is required from the abandoned well head to the edge of the work area.

6.6.2.2 NSP Policy

Abandoned well areas should only assume land uses that will allow for immediate maintenance should the well ever require servicing. Roadways, parking lots, or public utility lots (i.e. open spaces) are preferred land uses that will allow for access and the maximum movement for repair requirements on the abandoned well site.

Implementation

Figure 2: Context & Site Features illustrates the location of abandoned well sites. **Figure 5: Development Concept** illustrates land use designations. Abandoned well sites should be incorporated into land uses such as roadways, parking lots, or public utility lots at the time of zoning

6.6.2.3 NSP Policy

Prior to development, a temporary identification marker shall be placed as precisely as possible on the abandoned well site to prevent damage both to the well site and to the construction or excavation equipment.

Implementation

Appropriate temporary identification markers shall be placed on site prior to rezoning approval.

6.6.3 Objective 50

Ensure that development respects the ongoing operation and integrity of existing pipeline infrastructure.

6.6.3.1 NSP Policy

Integrate existing utility and pipeline rights-of-way into the NSP to make use of potential multi-use corridors and pedestrian linkages while having regard for the safe, ongoing operation of these facilities.

Implementation

Figure 3: Context & Site Constraints illustrates the location of existing rights-of-way. The Subdivision Authority shall have regard for lots and site design ensuring that appropriate setback distances between rights-of-way and residential uses. **Figure 5: Development Concept** illustrates how the rights-of-way have been incorporated into the overall land use concept.

Source: Stantec

6.6.4 Objective 51

Ensure public safety near oil, gas and railway facilities through the use of appropriate measures to mitigate the risk to an acceptable level in line with the recommendations of the risk assessment.

6.6.4.1 NSP Policy

Ensure public safety near oil, gas and railway facilities, through the use of risk mitigation measures.

Implementation

The method of risk mitigation may include, but is not limited to, the use of Direct Control zoning at the time of rezoning. Special care will be taken to mitigate risk and ensure safety of Low Rise/Medium Density, High Density, and Mixed Uses residential development near oil, gas and railway facilities.

A Risk Assessment was prepared at the NSP stage and recommendations will be implemented at the detailed design stage. These may include setbacks, barriers, building design and materials, or other mitigation measures.

NSP Policy

Prior to zoning of land adjacent to a pipeline corridor, development shall adhere to relevant policies and regulations.

Implementation

Pipeline operators will be contacted at the time of rezoning regarding pipeline corridors adjacent to development.

Technical Summary

An Environmental Overview of the Horse Hill area was completed for participating lands and signed-off by the City with the Horse Hill ASP. Full Phase 1 Environmental Site Assessments (ESA) will be required at the rezoning stage. All properties within the Marquis NSP will require ESAs to be completed and signed off prior to rezoning approval. 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.

A Risk Assessment was prepared to inform land use planning, site design and building design in close proximity to dangerous goods routes, active pipelines and railway facilities.

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7 Ecology, Parks and Amenities

CONTEXT AND APPROACH

The Marquis NSP ensures the North Saskatchewan River Valley and Ravine System, Horsehills Creek, and natural areas are conserved and protected within the NSP area. These natural areas have been carefully integrated along with parks, stormwater management facilities, and utility and pipeline corridors into an open space system that provides passive and active recreation opportunities for residents while strengthening Edmonton's ecological network and maintaining ecological linkages to support the presence of wildlife in the NSP area. Wildlife crossings will be considered in accordance with the Wildlife Passage Guidelines and specific structure types are detailed in the ENR (section 8.1.2 Habitat Connectivity and Wildlife Passage). **Figure 13: Transportation Network** shows potential wildlife passage locations.

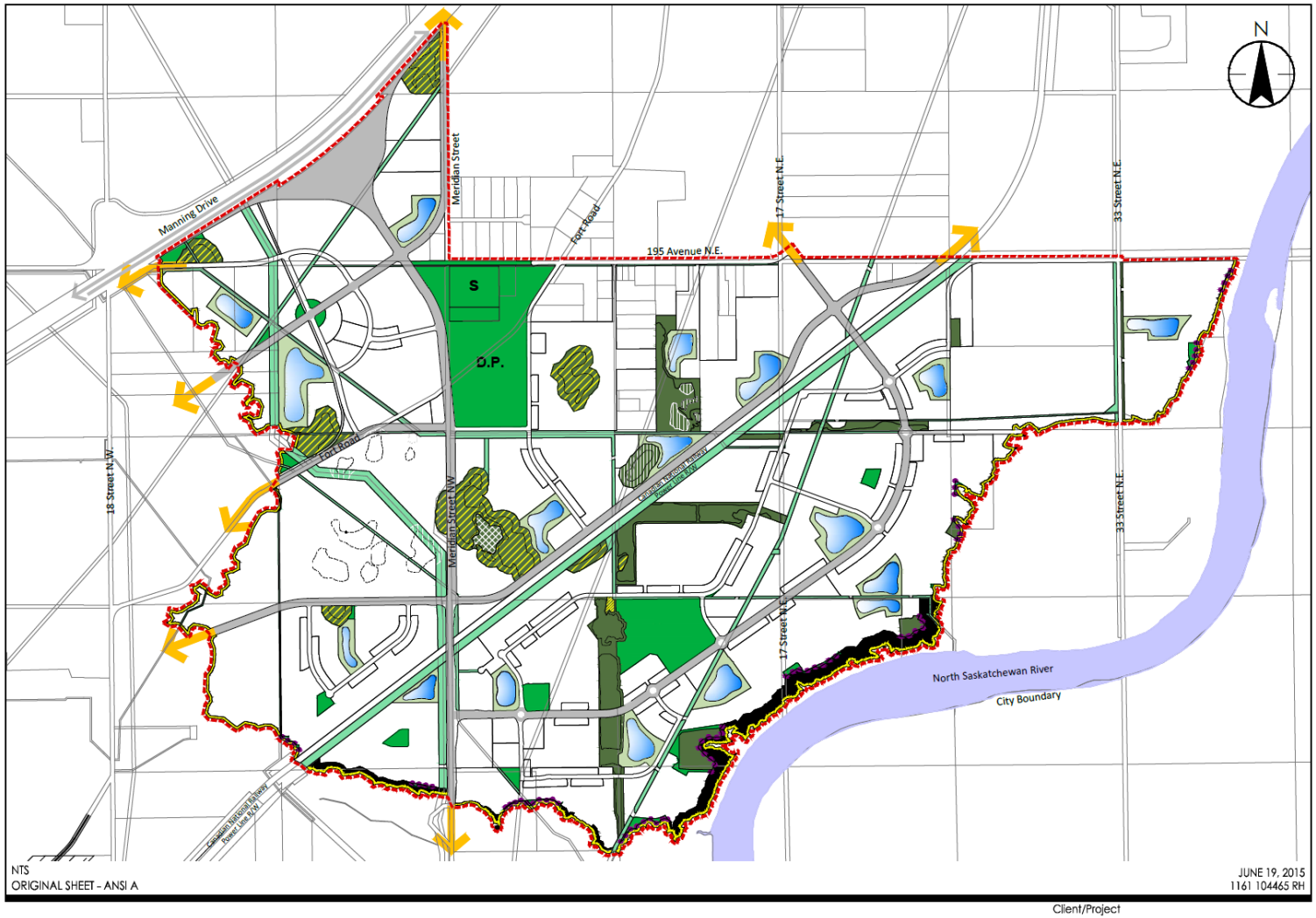
In addition, the Marquis neighbourhood, as part of the broader Horse Hill area, has a rich agricultural history. To promote a continuation of agricultural activities the NSP proposes a number of land uses, policies, and approaches to support local food production in the area, to grow the local food market, as well as to promote education and sustainable food practices.

7.1 NATURAL AREAS

Overview & Rationale

The function and integrity of the ecological network with the NSP area are important. The Marquis NSP ensures that the North Saskatchewan River Valley and Ravine System, Horsehills Creek, and key natural areas (NE 8011, NE133, NE127 and NE126), as well as other natural areas are conserved and protected. These natural areas, along with parks, stormwater management facilities, and utility and pipeline corridors have been integrated into a network that provides ecological linkages throughout the Plan area, see **Figure 7: Ecological Network & Parks**.

The North Saskatchewan River Valley and Ravine System is an important ecological system in the Plan area. The NSP ensures that the River Valley and Ravine System is preserved and protected through the establishment of an Urban Development Line (UDL) demarcating the boundary between developable upland area (urban development) and non-developable area (Environmental Reserve). Public access to the River Valley and Ravine System shall be provided via a combination of Top of Bank (TOB) roadway and park, totaling a minimum of 30% of the length of the UDL, and a TOB Shared-Use Path (SUP) along the entire length of the Public Upland Area. The TOB roadway shown in the plan is illustrative only -- the actual location of roadways will be determined at the rezoning and subdivision stages (i.e. no NSP amendment is required). The TOB roadway and SUP will maximize access for local residents and the general public. This access is provided for circulation and amenity purposes, connection to the parks and open space system in the NSP area and beyond, slope repair and geotechnical monitoring, firefighting, emergency and public safety, drainage control and for dealing with encroachment issues.



Legend

- Natural Area - Tree Stand (MR)
- Natural Area (MR)
- Natural Area - Wetland (ER)
- Wetland - Remotely Sensed
- School / Park
- Stormwater Management Facility
- Environmental Reserve (to be confirmed by Studies)
- Public Utility Lot as Multi- Use Trail
- Top-of-Bank Shared-use Path
- Top-of-Bank Roadway / Park
- Linkage To Adjacent Community
- NSP Boundary

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Client/Project
WALTON DEVELOPMENT & MANAGEMENT INC.

MARQUIS NEIGHBOURHOOD
NSP AMENDMENT

Figure No.
7.0

Title
Ecological Network & Parks

Bylaw 17396, November 2, 2015

7.1.1 Objective 52

Establish an Urban Development Line, based upon geotechnical recommendations and current City Policy, to ensure enjoyment, preservation and protection of the North Saskatchewan Valley and Ravine System, including Horsehills Creek.

7.1.1.1 NSP Policy

The Urban Development Line shall separate developable from non-developable areas to preserve and protect the North Saskatchewan River Valley and Ravine System (including Horsehills Creek), ensuring that urban development is reasonably safe from environmental hazard risk and that public access, visual amenities, and recreational opportunities are maximized.

Source: Stantec

Implementation

The geotechnical report and slope stability analysis for participating landowners have been submitted to the City for the Plan area demarcating the Urban Development Line.

7.1.1.2 NSP Policy

Environmental Reserve shall be dedicated to the City of Edmonton at the time of first subdivision.

Implementation

Lands that meet the criteria for Environmental Reserve (ER) shall be dedicated to the City of Edmonton at the time of first subdivision. Policy C531 which provides guidelines on the determination of ER as directed by the MGA shall also be followed.

7.1.1.3 NSP Policy

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, drainage control, and dealing with private property encroachment issues.

Implementation

The Urban Development Line shall be demarcated at the time of rezoning and/or subdivision of lands adjacent to the North Saskatchewan River Valley and Ravine System (including Horse Hill Creek). At that

stage, amendments may be required to this plan and the North Saskatchewan River Valley Area Redevelopment Plan to reflect the surveyed Top-of-Bank.

7.1.1.4 NSP Policy

A restrictive covenant to enforce the requirements of the geotechnical review shall be registered on the land titles of the respective properties abutting the Urban Development Line.

Implementation
The Subdivision Authority shall ensure all subdivisions abutting the Urban Development Line provide restrictive covenants.

7.1.1.5 NSP Policy

The stormwater outfall location(s) shall be further evaluated from a geotechnical and/or environmental perspective prior to the subdivision stage.

Implementation
Additional geotechnical and/or environmental analysis will be completed concurrently with the required Environmental Screening Report for the stormwater outfall prior to subdivision.

7.1.1.6 NSP Policy

Consider the impacts of outfall location on the NSRV.

Implementation
An Outfall Location Study is currently underway to identify the optimal location and number of outfall structures.

7.1.2 Objective 53

Strengthen Edmonton's ecological network and maintain ecological linkages to support the presence of wildlife in the NSP area.

7.1.2.1 NSP Policy

Developments within the Marquis neighbourhood shall integrate and link land use components (i.e. North Saskatchewan River Valley and Ravines System, Horsehills Creek, NE133, NE8011, NE 127, NE136, parks, SWMF, and utility and pipeline rights-of-way) to provide habitat and encourage connectivity.

Implementation
Figure 5: Development Concept guides the development of the NSP.

7.1.2.2 NSP Policy

Plantings of native species should be utilized to add habitat value of the green network within the neighbourhood.

Implementation

Relevant City of Edmonton conservation planning and policy shall be adhered to (e.g. Policy C531). The policies and regulations of the City and Provincial environmental agencies shall be followed.

7.1.3 Objective 54

Conserve natural areas within the Plan area.

7.1.3.1 NSP Policy

Ecologically significant natural areas shall be retained within the NSP.

Implementation

Figure 5: Development Concept illustrates the natural areas that will be retained within the NSP, as directed by City policy and the MGA. Rezoning and Subdivision applications within 250m of a retained natural area will not be accepted without an approved Natural Area Management Plan (NAMP). Exceptions to this requirement must be approved by the Urban Ecology Unit. Wetlands on non-participating lands will be evaluated prior to development, and final delineation will be required prior to rezoning within 250m of these wetlands. Water body buffers will be based on the guidelines provided in City of Edmonton Policy C531 regarding Environmental Reserve dedication. Upland buffers are set to 10 m unless otherwise indicated as per the Phase I ENR. Efforts will be made to minimize ground disturbance outside of the Critical Root Zone and within 10 m of retained natural areas. Such efforts may include matching pre-development grading, restrictive covenants, and/or other low impact development techniques, as determined during the development of NAMPs. Details on conservation and specific setbacks are provided in the ENR.

7.1.4 Objective 55

Encourage habitat restoration of natural areas and the naturalization of public parks, greenways, and existing pipeline and utility corridors where possible.

7.1.4.1 NSP Policy

The restoration of natural areas and the naturalization of public spaces shall be considered where possible.

Implementation

Figure 5: Development Concept illustrates the natural areas that will be retained within the NSP, as directed by City policy and the MGA as well as public open space in the form of parks, stormwater

management facilities and utility corridors. Further information on the restoration and naturalization of these areas are provided in the ENR.

Technical Summary

A Phase 2 ENR was completed by Fiera Biological Consulting (December 2013) in support of the Marquis NSP and was submitted to the City of Edmonton under a separate cover. This report details all natural areas located within the neighbourhood, assesses the importance of individual natural areas based on ecological connectivity, and provides recommendations for maintaining and supporting wildlife and vegetative populations with respect to the Marquis neighbourhood design.

A preliminary technical geotechnical investigation and slope stability assessment was completed by J.R. Paine and Associates Limited, and submitted to the City of Edmonton under separate cover.

7.2 PARKS AND OPEN SPACE

Overview & Rationale

The Marquis NSP provides a variety of parks and open spaces throughout the Plan area to meet the passive and recreational needs of residents. In addition, the NSP preserves the North Saskatchewan River Valley where it abuts the Plan area and ensures that compatible natural areas are carefully integrated. All parks have been configured to provide opportunities for active and passive recreation and have been located such that the majority of residential areas are within 500 m of a park space.

District Activity Park

The District Activity Park, located within the northwest area of the NSP, is intended to incorporate a wide range of recreation programming. The District Activity Park offers the opportunity for active and passive outdoor recreation uses, including sports fields, playgrounds, and community gardening spaces. In addition to outdoor recreation, the park is intended to accommodate a recreation centre which would provide both indoor and outdoor recreation uses, such as skating rinks, swimming pools, gymnasiums, etc. as well as associated parking for this use. Also proposed to be located in the District Activity Park are a public high school, a Catholic high school, and a Francophone School. Currently, the Horse Hill School is located within the proposed district activity park site. Further planning will be required to determine if the school will remain in its current location or be relocated to a new school/park site.

School and Community Park

In addition to the school sites provided in the district activity park, there is one other site located in the south central portion of the NSP area that has been identified as a school site. This site is intended to accommodate a public elementary/junior high school, a Catholic elementary/junior high school, community park space, a community league, and associated parking for these uses. The development (timing) of the schools are dependent on available funding and need (i.e. a threshold of school aged population being present in the neighbourhood). The school/park site is accessible to vehicular, transit and pedestrian traffic from other parts of the neighbourhood.

Pocket Parks

A number of Pocket Parks have also been located within the various residential sub-areas of the NSP to provide local level opportunities for active and/or passive recreation. A larger Pocket Park is located in the south west portion of the plan area. The park is intended to serve as a gathering place for neighbourhood residents, and to provide opportunities for active and passive recreation. All parks are located with frontage along either a local or collector roadways and are connected to the pedestrian network (including sidewalks) to ensure that they are assessable and intermixed with the residential uses in the Plan area.

Stormwater Management Facilities

Stormwater management facilities are considered an amenity and part of the open space system. In addition to functioning as part of the storm servicing network, open space is planned around these SWMFs. These facilities provide visual amenity for local residents and are linked within the neighbourhood pedestrian network, which complements the open space system by providing additional areas for passive recreation. The extent of public open space (and private land) around the facilities will depend on City policies at the time of development.

Linkages

Combined with an array of linkages along sidewalks, greenways, walkways, and shared-use paths the NSP provides a pedestrian network that is highly connected, direct and convenient. This facilitates the development of a walkable community, encourages a healthy community lifestyle, and better quality of life.

7.2.1 Objective 56

Accommodate schools and park sites in the NSP area.

7.2.1.1 NSP Policy

The NSP shall follow the guidelines for the hierarchy and distribution of park spaces as prescribed by the *Urban Parks Management Plan*.

Implementation

The parks and open spaces identified in **Figure 5: Development Concept** will be dedicated to the City of Edmonton through Municipal Reserve (MR) at the time of subdivision.

7.2.1.2 NSP Policy

The Marquis NSP shall provide Municipal Reserve as a combination of land, cash-in-lieu, or a combination thereof of as per the *Municipal Government Act*.

Source: Stantec

Implementation

The Subdivision Authority will determine the Municipal Reserve owing for the NSP, which shall be dedicated in full as land, money-in-lieu, or an acceptable combination thereof, at the time of subdivision. Although Municipal Reserve in the Marquis neighbourhood is over 10%, due to the presence of the district park and natural area within the neighbourhood, Municipal Reserve is balanced throughout the ASP area.

7.2.1.3 NSP Policy

The District Activity Park space shall be used efficiently to ensure adequate recreation programming.

Implementation

Opportunities for shared school and recreation facilities between schools on the District Activity Park site should be explored.

7.2.1.4 NSP Policy

The location of utilities on park sites shall not be permitted, with the exception of those that uniquely serve a park space.

Implementation

Installation of utilities within the Marquis NSP will follow the guidelines set out in the UPMP (Principle 1, (f.)(ii)) regarding the presence of utilities on park sites.

7.2.2 Objective 57

Provide schools, parks, open spaces, and stormwater management facilities along arterial, collector or local roadways, and ensure accessibility.

7.2.2.1 NSP Policy

Schools, parks, open spaces, and stormwater management facilities shall have frontage along public roadways to ensure sightlines, natural surveillance, and adequate lighting. Lighting, frontage, and design of spaces shall take into consideration basic CPTED principles and design principles included in the *Design Guide for a Safer City and Urban Parks Management Plan*.

Implementation

The Subdivision Authority shall have regard for the subdivision design to ensure adequate public roadway frontage on all parks illustrated in **Figure 5: Development Concept**.

7.2.2.2 NSP Policy

Park space shall be designed to accommodate active and passive recreation activities for different age groups. With the exception of park areas adjacent to the Urban Development Line where grade changes and topography may pose design difficulties, all park space within the neighbourhood should be universally accessible.

Source: Stantec

Implementation

Design and development of future parks and open spaces shall consider programming needs of the community and be implemented based on requirements of relevant City Departments.

7.2.3 Objective 58

Design a connected and integrated open space system that encourages active transportation.

7.2.3.1 NSP Policy

Developments within the NSP shall incorporate an array of pedestrian linkages along sidewalks, walkways and shared-use path corridors that connect park spaces, natural areas, storm water management facilities, the North Saskatchewan River Valley and Ravine System and various other focal points.

Implementation

Figure 5: Development Concept and **Figure 7:**

Ecological Network and Park conceptually guide the location neighbourhood parks, open spaces, pedestrian connections and stormwater management facilities which will connect residents to focal points.

7.2.4 Objective 59

Ensure the North Saskatchewan River Valley is publically accessible.

Source: Stantec

7.2.4.1 NSP Policy

Pedestrian linkages will connect the NSP area with the River Valley and Ravine System. Public access to the River Valley and Ravine System shall be provided via a combination of Top of Bank (TOB) roadway and park, totaling 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.

The TOB roadways and shared-use paths shown in the Plan are illustrative in nature -- the actual location of roadways and paths will be determined at the rezoning and subdivision stages. Should the locations of roadways and paths differ from the Plan, no amendments to the NSP are required. Amendments to the NSRV ARP and the North Saskatchewan River Valley and Ravine System Protection Overlay may be required when the top-of-bank is determined at the zoning and subdivision stages.

In the event that an at-grade pedestrian crossing of the CNR is not feasible at Horsehills Creek, the top-of-bank walk should tie back into the community to allow for a looping system. If a looping system cannot be provided, the provision of a top-of-bank walk should be re-evaluated.

Implementation

Figure 7: Ecological Network & Park conceptually illustrates pedestrian linkages to the River Valley and Ravine System and the top-of-bank shared-use path.

7.2.4.2 NSP Policy

Vehicular roadways will be provided to connect the NSP area with the River Valley and Ravine System.

Implementation

Figure 5: Development Concept identifies opportunities for two collector roadways in the north-east portion of the Plan area that would allow vehicular access to the North Saskatchewan River Valley.

7.2.5 Objective 60

Create identifiable focal points that are integrated with the open space system of the neighbourhood.

7.2.5.1 NSP Policy

Convenient, safe and efficient pedestrian connections from the neighbourhood into and through open spaces/focal points shall be provided.

Implementation
Details regarding the placement of pedestrian connections and crossings shall be determined at the subdivision approval stage or development stage in partnership with the City of Edmonton.

7.2.6 Objective 61

Encourage naturalized and/or edible landscaping on public and private lands and low impact development in public spaces.

7.2.6.1 NSP Policy

Landscaping of parks and open spaces should incorporate native and/or edible plant species where appropriate.

Implementation
Plant, shrub, and tree 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.

7.2.6.2 NSP Policy

Stormwater management facilities should be designed to include naturalized planting intended to provide habitat opportunities for wildlife and improve water quality.

Implementation
Stormwater management landscaping shall be determined between the Developer and City Administration at the time of review of landscaping plans and as part of engineering drawing review as part of the subdivision process.

7.2.6.3 NSP Policy

Where appropriate and in order to minimize the amount of impervious surfaces, permeable trails should be considered for pedestrian linkages.

Implementation

It is anticipated that alternative surface treatments, such as permeable pavements or gravel trails, will be investigated for pedestrian linkages within natural areas and along public utility lots as part of the overall low impact development strategy for the neighbourhood. Details of the pedestrian linkages will be designed at zoning or subdivision. Proposed alternative standards will require approval from Transportation Services.

7.2.6.4 NSP Policy

Constructed wetland stormwater management facilities shall restore natural vegetation to provide additional natural animal habitat and promote natural water filtration.

Implementation

Detailed design of constructed wetland stormwater management facilities will be reviewed by Drainage Services and Parks + Biodiversity.

Technical Summary

A Community Knowledge Campus Needs Assessment was prepared by Stantec Consulting Ltd., in December 2013, to support of the Marquis NSP. This assessment has been submitted under separate cover to the City of Edmonton.

A Parkland Impact Assessment (PIA) was prepared by Stantec Consulting Ltd., in December 2013, outlining the Marquis neighbourhood's compliance with the Urban Parks Management Plan vision and guidelines. The PIA has been submitted under separate cover to the City of Edmonton.

7.3 AGRICULTURE AND FOOD

A Vision for Urban Agriculture within the Marquis Neighbourhood.

Marquis must be positioned and planned as a neighbourhood that is different, a neighbourhood that "Celebrates the past and embraces the future."

The past celebrates Marquis' agricultural history as a food producer. The future celebrates Marquis as the leader in the urban agriculture and the urban food experience within an Edmonton neighbourhood. Upon entering the Marquis neighbourhood, future residents will immediately note and feel a difference. The neighbourhood will

Source: Stantec

have a welcoming "horticultural gateway" that leads to a streetscape with ornamental fruit trees. Arrival in late May and early June will create the greatest impression with trees in full bloom, especially within the urban orchard location adjacent to the North Saskatchewan River Valley. As you proceed further into the neighbourhood a preponderance of urban gardens, both private and community, will become evident. Gardens of differing shapes and sizes prevail throughout the community. The community will be active and involved in a local farmers market, located in the District Activity Park site recreation facility.

The Marquis neighborhood will celebrate education and a learning culture. During June, for example, residents could see groups of school children gathered around some form of agricultural or horticultural activity – clearly the result of an active and engaged school program that features experiential learning in these areas. The grade school program could be part of a broader educational outreach program provided by the Urban Agriculture Institute – a newly formed initiative within the Faculty of Agricultural, Life and Environmental Sciences, University of Alberta. Courses are offered to a local Horse Hill school or community centre on a regular basis, as well as online.

Marquis will have an active Urban Agriculture Society, with dedicated volunteer leaders to organize community gardens as well as support individuals who want to learn more about how to grow food on their properties. The Society is supported by professional agrologists and horticulturalists that actively volunteer in the community and are technical experts for Alberta Agriculture and Rural Development as well as the University of Alberta. Small scale, intensive agricultural practices such as horticulture, greenhouses, and fresh vegetable and fruit production are part of the land uses of the neighbourhood.

A vibrant and active community group in Marquis could be established as part of the community league. This group of local volunteers could coordinate a variety of activities and festivals: Horse Hills Food festival, Horse Hill Community Kitchen (located in the community league building), and the Horse Hill Horticultural society. Community gardens, on both private and public lands, would be strategically located throughout the neighbourhood and coordinated by the local community league.

It should also be recognized that an urban agricultural neighbourhood is foremost, a community development initiative – a place where people can connect and experience connections through food and the growing, preparing and celebrating of food in a new way. While some food production and processing activities may develop to become small businesses or part time enterprises, it is not fundamentally an economic development strategy. Supporting the local food economy in the Marquis neighbourhood helps contribute to the development of the local economy, and can encourage a healthy sustainable food system. Value-added food production will be encouraged to promote the use and production of local foods in the Marquis neighbourhood. In support of a healthy and sustainable food system, developers will offer to provide residents with a fruit tree or berry bush on their lot.

The Marquis NSP supports the intent of *Fresh*, Edmonton's City-Wide Food and Agricultural Strategy. It does this by proposing a number of land uses, policies and approaches to support local food production in

the area, to grow the local food market, as well as to promote education and sustainable food practices. Incorporation of urban agriculture in the form of community gardens, orchards, etcetera, will create an interest and uniqueness to the Marquis neighbourhood, and will increase access to local food, see **Figure 8: Agriculture and Food**.

7.3.1 Objective 62

Retain land for private agriculture in the NSP area.

7.3.1.1 NSP Policy

Land may be retained for permanent private agricultural uses.

Intensive livestock operations or other high-impact operations are not considered appropriate and are not permitted.

Implementation

Land has been designated for private agriculture as shown in **Figure 5: Development Concep**t. The private agriculture designation may be applied for, at the discretion of the landowner. Lands may be preserved as permanent agriculture through the creation of an Agricultural Land Reserve (ALR) designation which may be applied for by landowners of privately owned farmland who self-declare their intent to retain agricultural uses within the NSP area.

7.3.2 Objective 63

Provide buffers between agricultural and non-agricultural uses.

7.3.2.1 NSP Policy

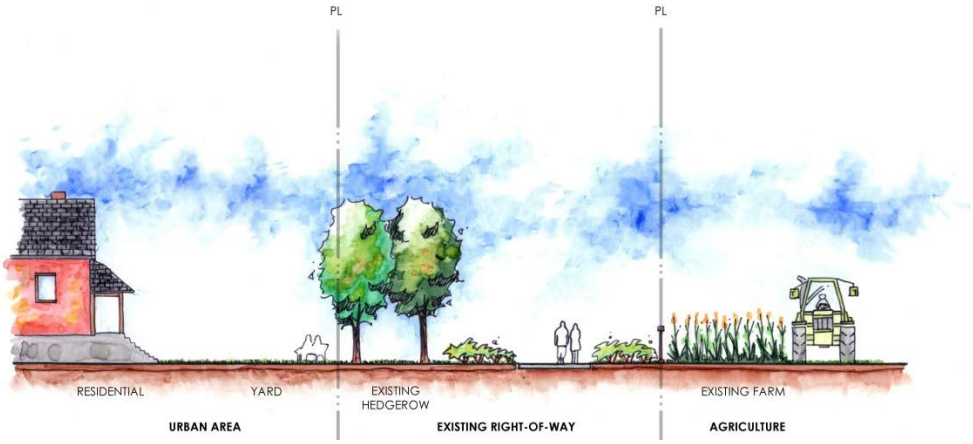
Provide appropriate buffers or compatible land uses adjacent to retained private agricultural parcels. Where agricultural operations predate new developments, the responsibility for buffering shall fall to new land uses.

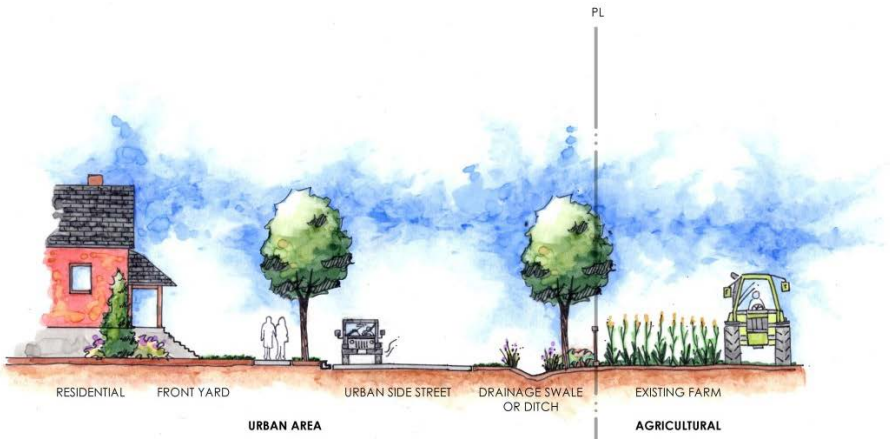
Implementation

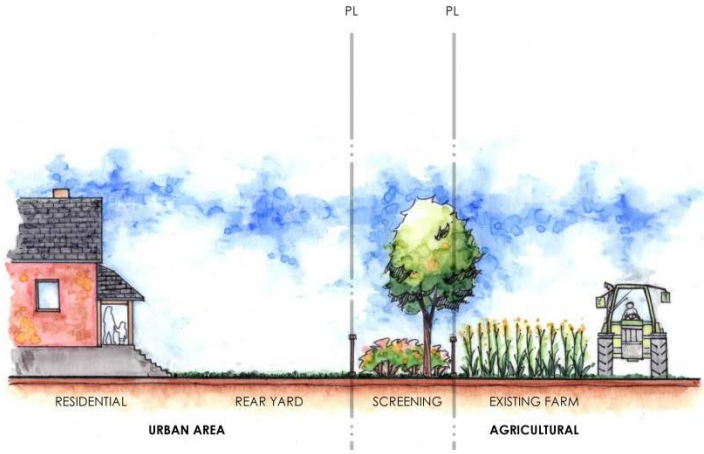
Agricultural uses may or can produce noise and dust. For agricultural uses and future residential uses to coexist, appropriate transitional elements will be required. The private agricultural parcel within the neighbourhood will be buffered from adjacent residential land uses by appropriate transitional elements. Examples of transitional elements include, but are not limited to, retention of existing hedgerows, roadways, pathways, public utility lots, SWMFs, municipal reserves, berms and fences. The buffer shall include a vegetated component and is in addition to the Zoning Bylaws required building setbacks. The details of the buffer, including distance and composition, will be site specific and determined at the rezoning and subdivision stage dependent on the locational attributes of the adjacent

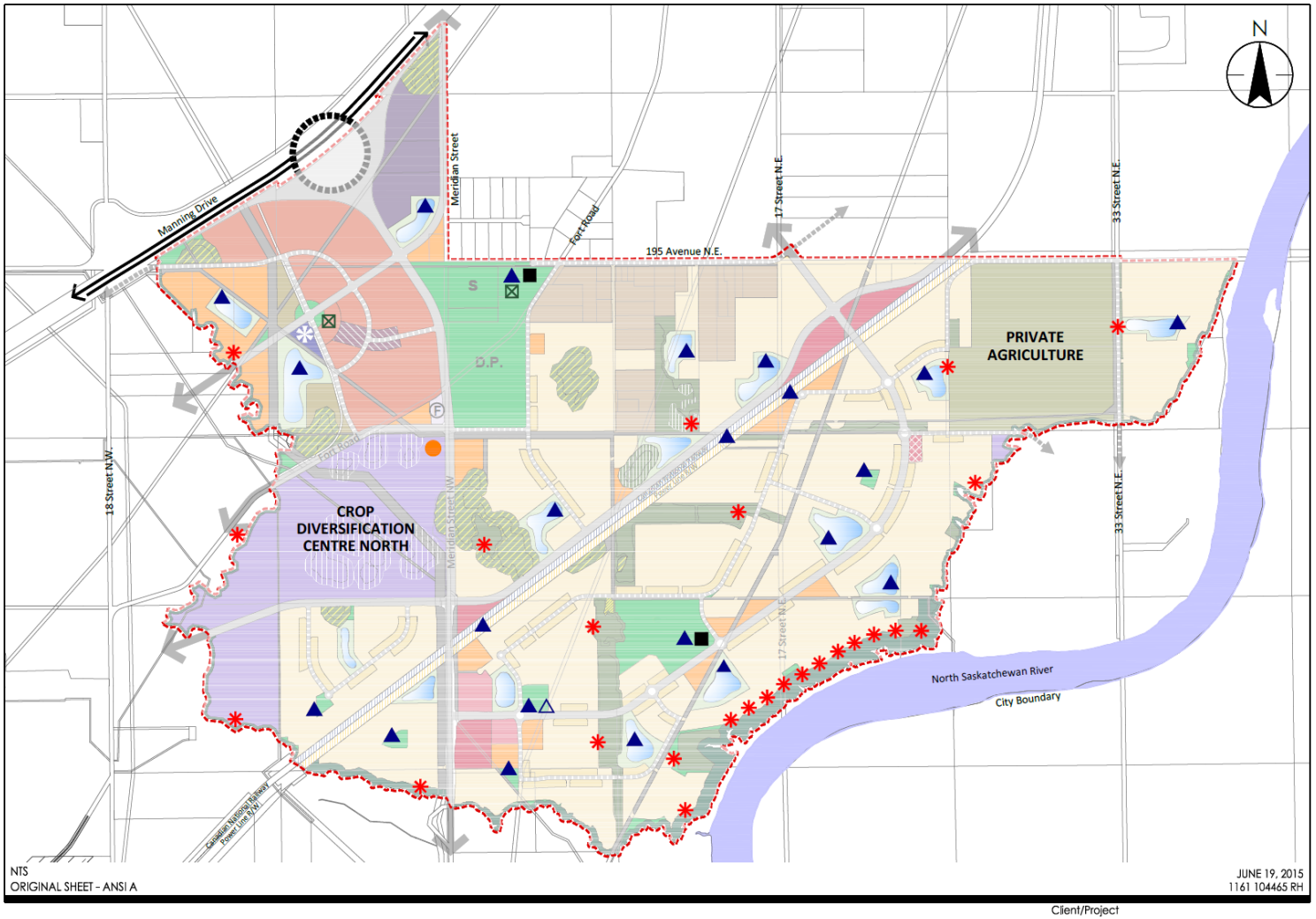
agricultural and residential lands, to the satisfaction of the developer, City of Edmonton and the existing agricultural landowner. The buffer in this area will comply to any approved policies developed by the City of Edmonton on agricultural buffers..

Examples of potential buffers:









Legend

- Potential Community Garden Location
- Potential Orchard Location
- Potential Community Kitchen Location
- Potential Farmers Market
- Potential Naturalized Edible Landscaping
- Potential Food Education & Collaboration

NOTE: ADDITIONAL OPPORTUNITIES AVAILABLE ON PRIVATE PROPERTY AND ON ROAD RIGHTS OF WAY.

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WALTON DEVELOPMENT & MANAGEMENT INC.

MARQUIS NEIGHBOURHOOD
NSP AMENDMENT

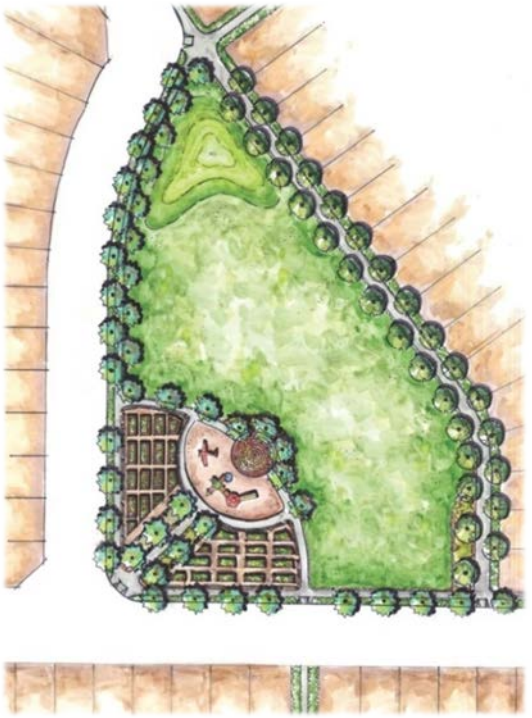
Figure No.
8.0

Title
Agriculture & Food

Bylaw 17396, November 2, 2015

7.3.3 Objective 64

Provide opportunities to promote urban agriculture in the Marquis neighbourhood.



7.3.3.1 NSP Policy

Opportunities for community garden plots within public lands shall be explored.

Implementation

Community gardening is considered both a recreational and community building activity. Community gardens shall be incorporated into the programming for community parks in balance with other park programming needs. Community gardens could also be integrated into other public utility spaces, such as stormwater management facilities and public utility lots.

Implementation of community gardens will be explored at the detailed landscape design stage in consultation with Parks +Biodiversity.

7.3.3.2 NSP Policy

Opportunities to utilize harvested rainwater for irrigation of parks and community gardens shall be explored.

Implementation

Detailed design of community gardens should incorporate low impact development strategies.

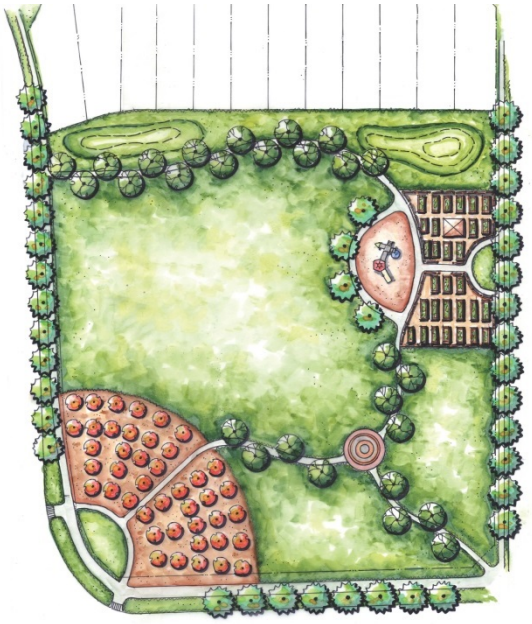
Source: Stantec

7.3.3.3 NSP Policy

Landscaping of public parks, municipal reserve, open spaces and private spaces should consider edible fruit and vegetable plants where appropriate. The Developer shall also explore the opportunity to provide naturalized edible landscaping for the TOB setback area adjacent to the North Saskatchewan River valley.

Implementation

Naturalized edible landscaping will utilize native species. Components such as orchards may be explored in areas that have been impacted by agriculture. No clearing of natural vegetation will occur to accommodate such features. Implementation of edible landscaping on public lands will be explored further at the detailed landscape design stage in consultation with Parks + Biodiversity. Naturalized edible landscaping with natural areas shall be further discussed within Natural Area Management Plans.



Edible landscaping within private property shall be encouraged through consultation with both the Developer and the builder.

7.3.3.4 NSP Policy

Opportunities for urban agriculture such as community gardens, community orchards, food forests, berry patches and beekeeping in the NSP area should be considered, where appropriate.

Implementation

Edible landscaping will utilize native species. Orchards will only be placed in areas that have been impacted by agriculture, and no clearing of natural vegetation will occur to accommodate such features. Implementation of urban agriculture activities shall be explored further at the detailed landscape design stage in consultation with Parks + Biodiversity.

7.3.3.5 NSP Policy

Low-rise, medium-rise, and high-rise multi-family developments are encouraged to provide growing space per multi-family dwelling unit within the amenity area.

Implementation

Implementation of growing space requirements will be explored at the detailed landscape design stage in consultation with Parks + Biodiversity. Amendments to the Zoning Bylaw may be required to determine requirements.

Source: Stantec

7.3.3.6 NSP Policy

Investigate urban agriculture opportunities on utility rights-of-way.

Implementation

Implementation of community gardens and other urban agriculture on road and utility rights-of-ways will be explored at the detailed roadway and landscape design stage in consultation with utility and pipeline companies, Transportation Services, Drainage Services and Parks + Biodiversity.

7.3.4 Objective 65

Support the development of local food infrastructure.

7.3.4.1 NSP Policy

Support the development of public space for community farmers' markets within the Plan area.

Implementation

Support the establishment of a farmers' market within the plan, in areas such as the Town Centre or the city recreation facility on the District Park site. Consideration shall be provided to ensure accessibility, suitable parking areas and streets.

Source: Stantec

7.3.4.2 NSP Policy

Support the establishment of an urban agriculture incubator and education center.

Implementation

Dialogue will be encouraged with the Edmonton Food Council and the Provincial Crop Research Center to help establish an urban agriculture incubator and education center within the NSP area.

Source: Stantec

7.3.4.3 NSP Policy

Promote the development of an innovative College of Urban Agriculture in partnership with a local post-secondary institution.

Implementation

Explore opportunities to develop a College of Urban Agriculture in partnership with a post-secondary institution with the Capital Region. This opportunity could be considered on some of the provincial lands adjacent to the Town Centre area.

7.3.4.4 NSP Policy

Developments should provide opportunities to locate year-round pocket markets, mobile markets and mobile food vendors in public and quasi-public spaces (plazas, recreation centers, shopping center parking lots, or streets).

Source: Stantec

Implementation

Design and development of future parks, public plazas and streets will consider the establishment of year-round pocket markets, mobile markets and mobile food vendors in public spaces (e.g. plazas, recreation centers, streets) based upon the programming needs of the community and be implemented based on the requirements of relevant City Departments. Where these activities are proposed on private lands (e.g. shopping center parking lots) they shall be supported through the provision of suitable parking areas.

7.3.4.5 NSP Policy

Support the development of community and agri-food hubs.

Source: Stantec

Implementation

There are opportunities for a food hub to be integrated within the plan area in locations such as the community recreation centre, community league sites, College of Urban Agriculture or business employment areas.

Partnerships with private business and other economic agencies may be pursued to establish a commercial / private sector food hub, such as commercial kitchens, permanent farmers' market location(s), incubator kitchens or community kitchens.

7.3.4.6 NSP Policy

Value-added food/urban agriculture businesses are permitted in the business / employment area of the Marquis NSP.

Implementation

Opportunities for value-added production (innovative local processing and storage) are available within areas designated for business employment. Further synergies and opportunities are potentially available within the adjacent Edmonton and Energy Technology Park.

Source: Stantec

7.3.4.7 NSP Policy

Support the development or improvement of neighbourhood-scale food infrastructure.

Implementation

The City and Developers are encouraged to work with community organizations, Community Leagues, and the Edmonton Food Council to identify potential locations such as community kitchens within the district park or school sites, and improve existing facilities and programs.

7.3.4.8 NSP Policy

The City and Developers will support the creation of vibrant, attractive and unique places that celebrate food and enhance the local food culture.

Implementation

The City of Edmonton will work with the Developer and local groups to design public spaces to use food as a way to enhance the local food culture and animate and enliven shared spaces.

Implementation of community gardens and other urban agriculture elements such as edible landscaping on public spaces will be explored at the detailed landscape design stage in consultation with Parks + Urban Ecology.

Source: Stantec

Incorporation of public art which celebrates food and local food culture shall be explored at the detailed landscape design stage in consultation with Parks + Urban Ecology.

7.3.4.9 NSP Policy

The Marquis NSP encourages the collaboration of the City of Edmonton, Developers, Builders, Local Farmers and the Food Council to educate residents on local food.

Implementation

Developers are encouraged to work with Builders to incorporate urban agricultural components to private parcels such as garden plots, educational materials, edible landscaping, or urban agricultural themed welcome packages.

Technical Summary

No technical study requirements are identified.

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8 Infrastructure and Servicing

CONTEXT AND APPROACH

The Marquis NSP area will require the installation of infrastructure to provide servicing to City of Edmonton standards. The neighborhood servicing plan will be designed to facilitate efficient and economical staging of infrastructure while also taking into consideration the potential environmental and ecological impacts.

Further details on the sanitary and stormwater collection services will be supplied in the Marquis Neighborhood Design Report (NDR), under separate cover. Details on the water distribution system will be given in a Hydraulic Network Analysis (HNA), submitted under separate cover and approved by EPCOR Water Services.

8.1 SANITARY AND STORMWATER DRAINAGE

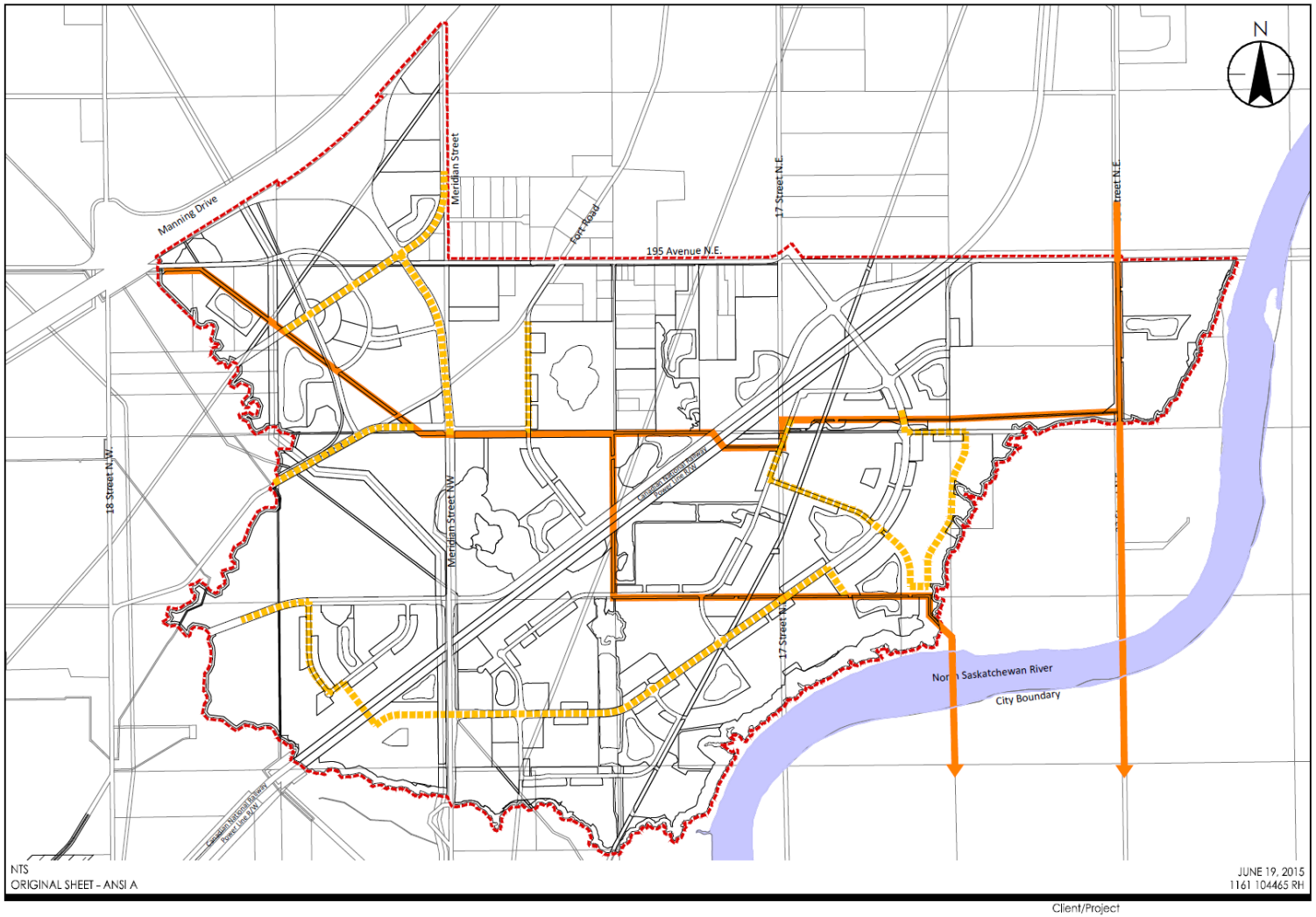
Overview & Rationale

Sanitary flows will be directed into two existing sanitary trunks by gravity, at multiple tie-in locations: the St. Albert Regional Trunk (START) and the Northeast Regional Trunk Sewer (NERTS), as seen in **Figure 9: Sanitary Servicing**. Both START and NERTS transport flows under the North Saskatchewan River to the Alberta Capital Regional Wastewater Treatment Commission (ACRWTC) Wastewater Treatment Plant (WWTP).

Stormwater flows will be transported to Stormwater Management Facilities (SWMF) via the onsite stormwater collection system, see **Figure 10: Stormwater Servicing**. All SWMFs will be designed as constructed wetlands, which provide water quality treatment in addition to runoff detention. A portion of the Plan area falls within the Edmonton Garrison Heliport Approach Zone. Any proposed SWMF within this zone must be designed to meet Department of National Defence (DND) requirements. The SWMFs will discharge into an interconnecting trunk network. The trunks will transport and discharge flows into the North Saskatchewan River.

The SWMF's identified as "★ SWMF – Further Study Required" on **Figure 5.0 Development Concept** and **Figure 10: Stormwater Servicing** have been sized to accommodate one (1) hectare of open water as per City requirements. The ultimate location and size of these facilities will be verified prior to rezoning to determine the servicing scheme is appropriate for the proposed land uses.

The SWMF's identified as "★★ SWMF – Pilot Project" on **Figure 5.0 Development Concept** and **Figure 10: Stormwater Servicing** have been selected by the City of Edmonton Drainage Services for a pilot project. Additional monitoring of the facilities will be required by the developer. Further details in regards to the pilot project and monitoring are provided within the NDR.



Legend

- Proposed Sanitary Trunk
- Existing Sanitary Trunk
- NSP Boundary

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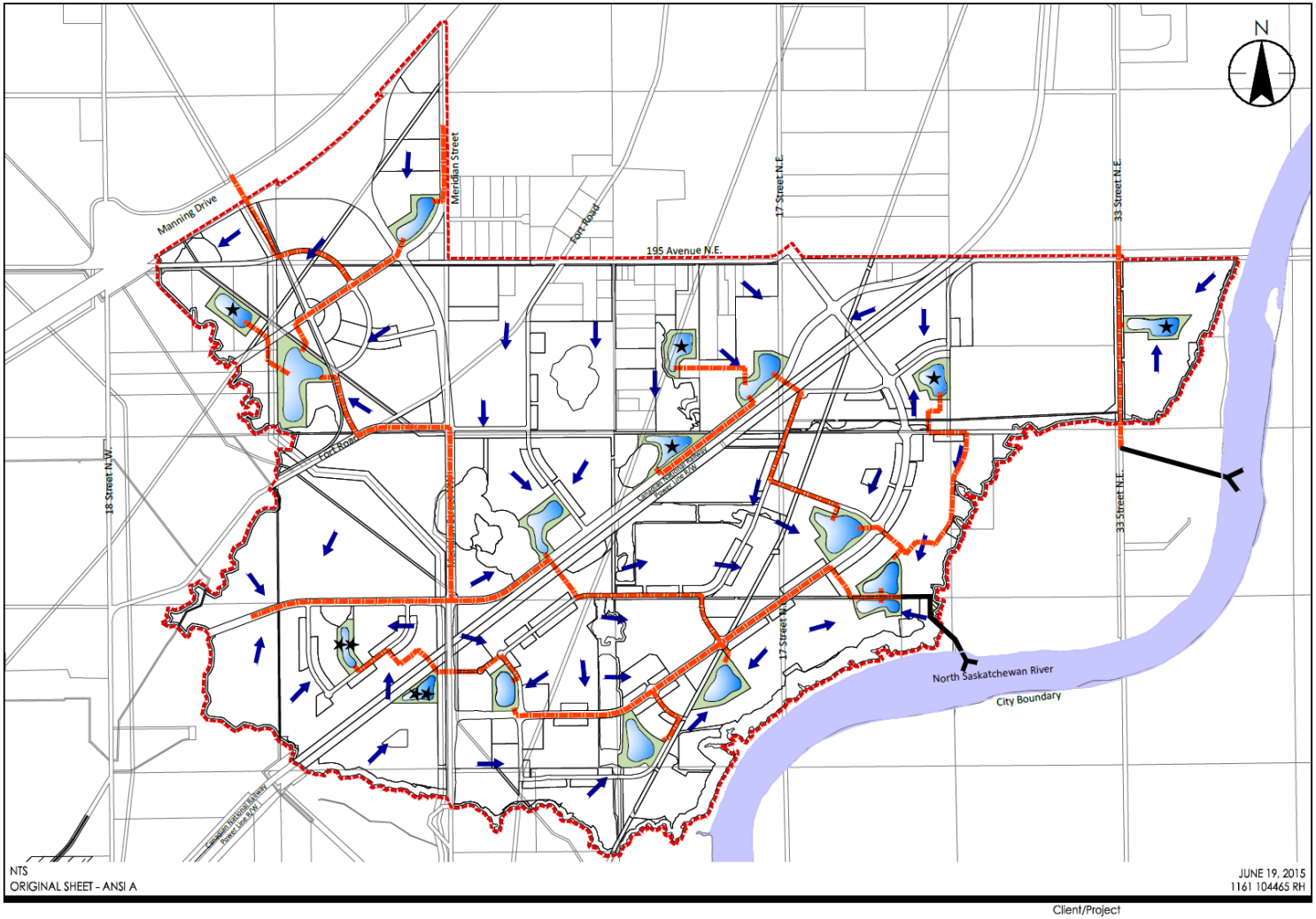
Figure No.
9.0

Title
Sanitary Servicing

Bylaw 17396, November 2, 2015



Legend

- Stormwater Management Facility
- Storm Trunk & Interconnecting Pipe
- Outfall
- Direction of Flow
- NSP Boundary
- SWMF - Further Study Required
- SWMF - Pilot Project

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NSP AMENDMENT

Figure No.
10.0

Title
Stormwater Servicing

Bylaw 17396, November 2, 2015

8.1.1 Objective 66

Ensure that the sanitary and stormwater drainage systems within the Marquis NSP area are provided at a full urban standard and in an efficient, contiguous, and staged manner using contemporary and emerging sustainable infrastructure solutions.

Source: Stantec

8.1.1.1 NSP Policy

Sanitary and stormwater servicing shall be provided in accordance with the associated Neighbourhood Design Report for the Marquis NSP.

Implementation

Approval of engineering drawings and servicing agreements shall be required for installation of sanitary and stormwater servicing.

Source: Stantec

8.1.2 Objective 67

Low Impact Development principles should be utilized for the design of the stormwater management system, including bioswales and naturalized wetlands.

8.1.2.1 NSP Policy

Where possible, incorporate Low Impact Development principles that promote stormwater infiltration, filtering, storage, evaporation, in addition to the detention of runoff close to the surface.

Implementation

Principles of Low Impact Development such as bioswales and naturalized stormwater management facilities shall be integrated, where feasible, through consultation with City Administration.

Source: Stantec

Technical Summary

Details regarding stormwater drainage and sanitary service schemes for the Marquis NSP are provided in the associated Neighbourhood Design Report to be submitted under separate cover by MMM Group Limited.

8.2 WATER DISTRIBUTION

Overview & Rationale

Water services will be extended into the Plan area from the south via two existing water mains, and ultimately from the north, across Manning Drive, see **Figure 11: Water Servicing**. Water servicing within the Neighborhood will be designed to provide peak hour flows and fire flows for low, medium and high density residential land uses as well as commercial and institutional land uses. The water distribution network will be designed to provide looping in accordance with EPCOR Water requirements. A hydraulic network analysis was submitted to EPCOR Water detailing the modeling and design of the distribution system.

8.2.1 Objective 68

Ensure that the water distribution system within the NSP area is provided at a full urban standard and in an efficient, contiguous and staged manner.

8.2.1.1 NSP Policy

Water servicing in the NSP area shall be provided in accordance with the Hydraulic Network Analysis.

Implementation

Approval of engineering drawings and servicing agreements shall be required for installation of water servicing.

Source: Urecon

8.2.1.2 NSP Policy

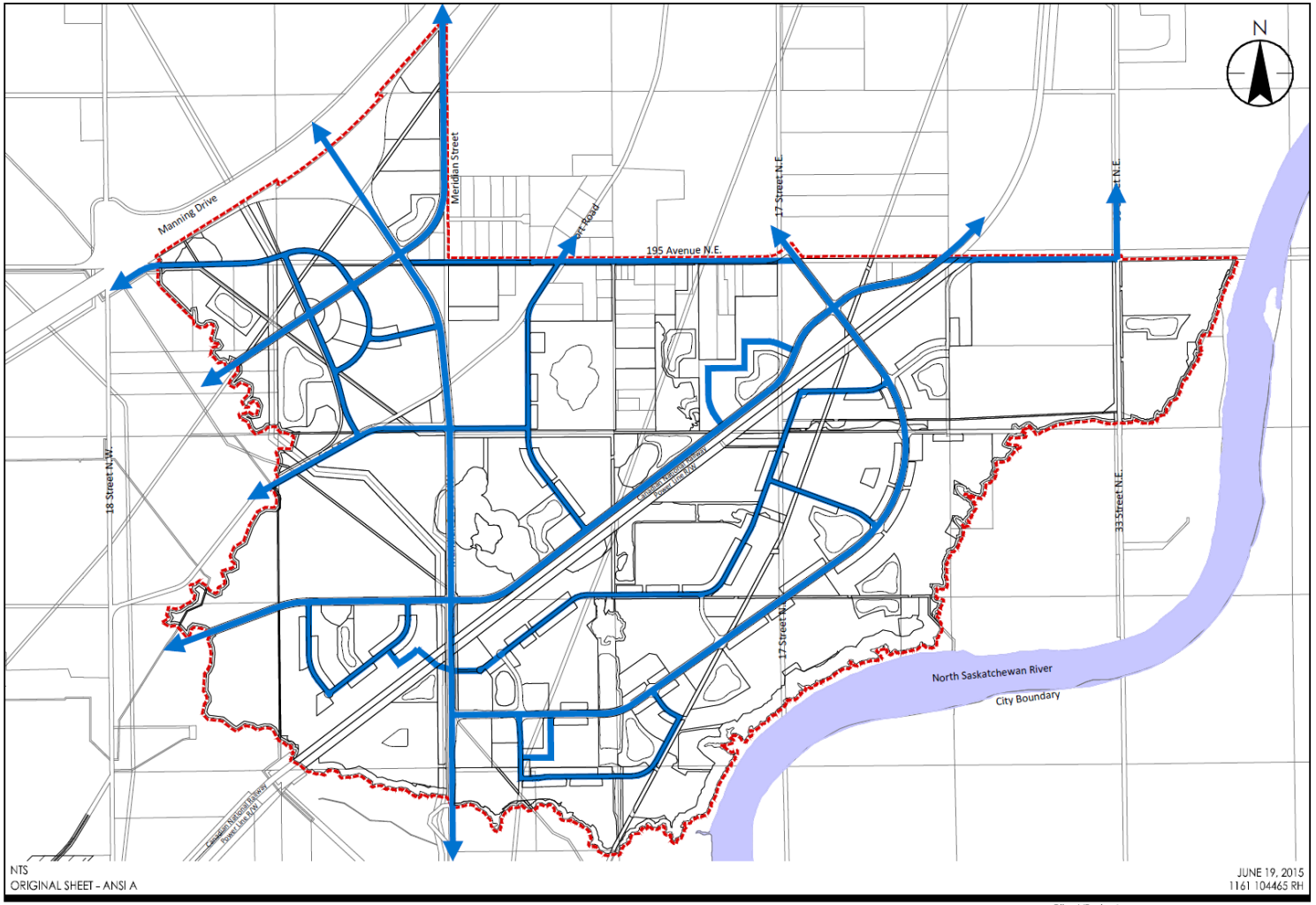
Water mains shall be strapped to the bridge structure on Meridian Street.

Implementation

During the bridge construction stage, attached water mains shall be accommodated.

Technical Summary

Water looping will be provided in accordance with the requirements of EPCOR Water Services Inc. A Hydraulic Network Analysis was provided under separate cover to EPCOR Water Services.



Legend

Water Main

NSP Boundary

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Figure No.
11.0

Title
Water Servicing

Bylaw 17396, November 2, 2015

8.3 SHALLOW UTILITIES

Overview & Rationale

Power, gas and telecommunication services are all located in proximity to the NSP and will be extended into the plan area by the Proponent as required.

8.3.1 Objective 69

Ensure that shallow utilities are provided at a full urban standard in an efficient and contiguous manner.

8.3.1.1 NSP Policy

Shallow utilities shall be extended into the Plan area by the Proponent as required.

Implementation

Installation of shallow utilities shall be executed through servicing agreements.

Technical Summary

No technical study requirements are identified. Instillation of shallow utilities shall be executed through servicing agreements.

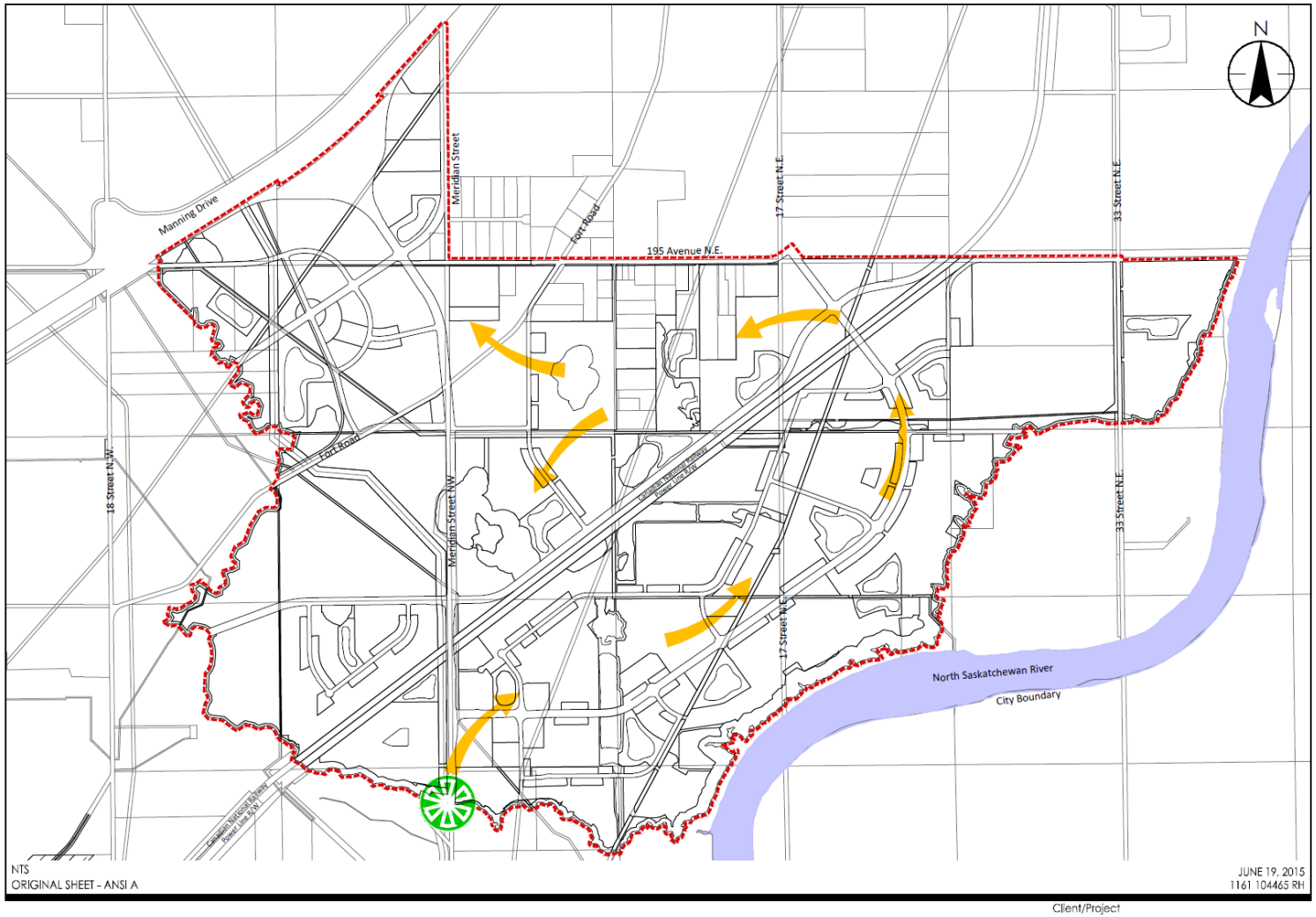
8.4 STAGING

Overview & Rationale

The anticipated sequence of development for the Marquis NSP is shown in **Figure 12: Staging**. Initial development is expected to proceed from the south of the Plan area with the general direction of development to the east.

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 the aspirations of the respective landowners. Should sufficient demand warrant or engineering design be made more efficient, portions of separate phases may be developed concurrently.

More detailed staging of development around natural areas will be provided within the Natural Area Management Plan.



Legend

- General Direction & Sequence Of Development
- Development Starting Point
- NSP Boundary

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Figure No.
12.0

Title
Staging Plan

Bylaw 17396, November 2, 2015

9 Transportation

CONTEXT AND APPROACH

A sustainable neighbourhood requires a comprehensive, well-connected street network, providing efficient and safe movement for vehicles, pedestrians and cyclists. In addition to providing a connected street pattern, this neighbourhood also incorporates the concept of complete streets. Roadways are expected to respond to differing needs, according to location, context and anticipated uses, while accommodating a diverse group of users.

Public transit services will be extended into the area in accordance with City of Edmonton Transit System Guidelines and demands. The developers of the Marquis neighbourhood will assist in funding transit service during the early neighbourhood development stages, prior to the area meeting the required threshold. The neighbourhood has been designed to a scale whereby a majority of the residential areas will be within 400 m walking distance from transit service. This service will be accommodated within the neighbourhood as demand warrants. Internal collector roadways will be developed to accommodate transit service and provide readily accessible service to all areas of the neighbourhood. The NSP also provides a potential alignment of the LRT. The town centre area is meant to concentrate housing, shopping and employment along a network of walkable and bikeable streets within a five-minute walk of the transit centre and LRT station.

9.1 MODAL TYPES

Overview & Rationale

The Marquis neighbourhood will accommodate multiple modes of travel, including automobiles, buses, LRT, walking and bicycles. The transportation system has been designed to balance efficiency, safety and comfort for all types of users and modes.

9.1.1 Objective 70

Provide opportunities for a variety of modes of transportation within the NSP area.

9.1.1.1 NSP Policy

Streets should accommodate pedestrians and cyclists as well as automobiles. Trails, paths and walkways shall supplement, not replace, shared roadway facilities.

Implementation

Figure 13: Transportation Network shows the proposed roadway network, as well as shared-use paths and pedestrian pathways. **Figure 7: Ecological Network and Parks** and **Figure 14: Active Mode Transportation Network** show the network plans for active modes including bicycle users and pedestrians. Specific roadway configuration and facilities will be developed at the detailed design stage.

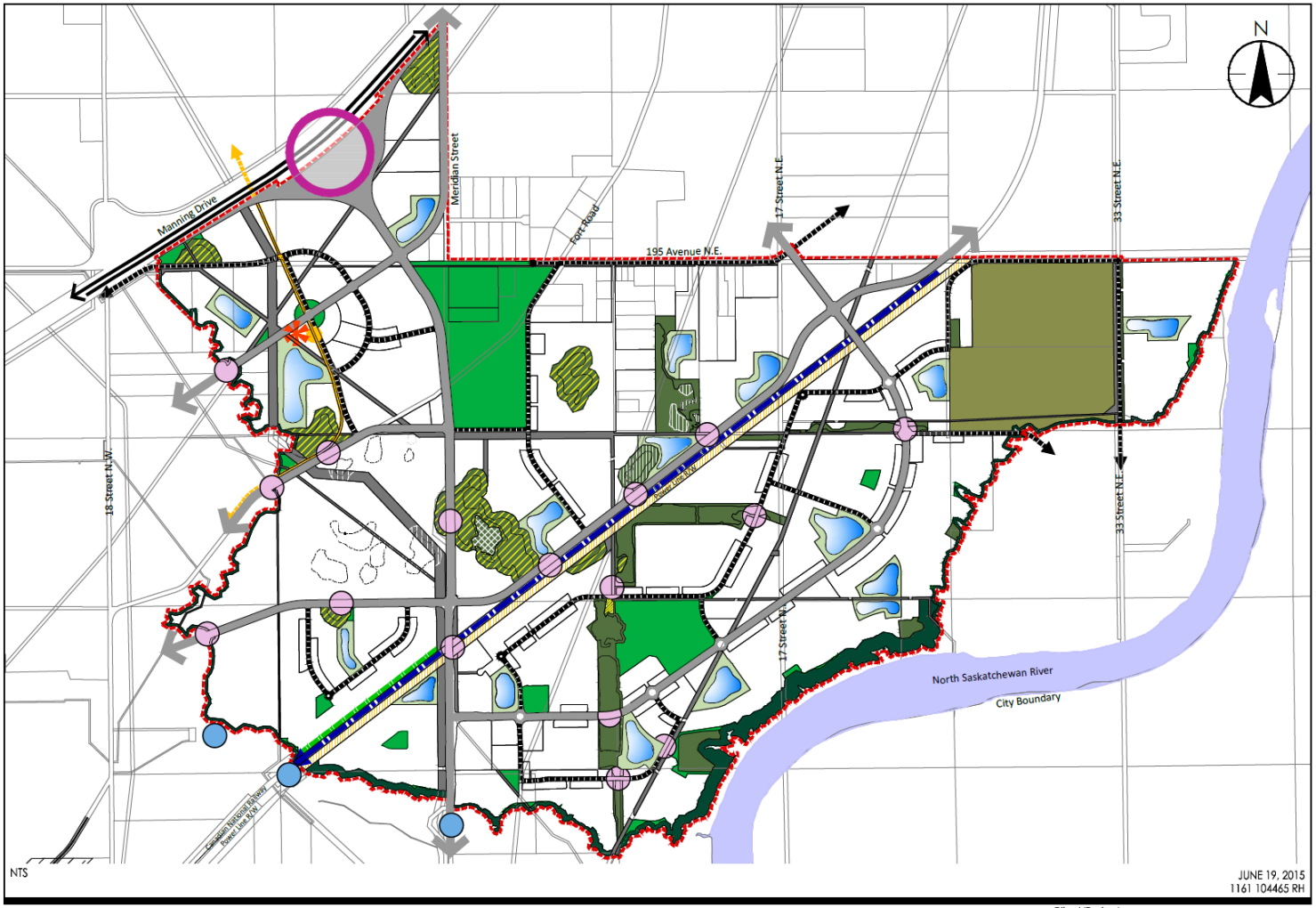
Source: Stantec

9.1.1.2 NSP Policy

Developers shall work with City Administration to encourage alternative modes of travel, such as incentive programs to increase transit ridership, expediting the extension of LRT into the area, development of bus rapid transit, transportation demand management programs, and providing appropriate infrastructure within the roadway network to prioritize active modes of transportation.

Implementation

Developers will work with City Administration to develop a transportation strategy including infrastructure and programming needs, timing, cost sharing or funding.



Legend

- Canadian National Railway
- LRT Transit Corridor/ Station
- Collector Roadway
- Arterial Roadway
- Natural Area - Tree Stand (MR)
- Natural Area (MR)
- Natural Area - Wetland (ER)
- Wetland - Remotely Sensed
- School / Park
- Stormwater Management Facility
- Agricultural Land
- Altalink Powerline R/W
- Environmental Reserve
- Public Utility Lot
- Freeway (Manning Drive)
- Transit Centre
- Service Interchange
- NSP Boundary
- Wildlife Crossing
- Existing Wildlife Crossing Barrier
- Proposed Berm and Fence

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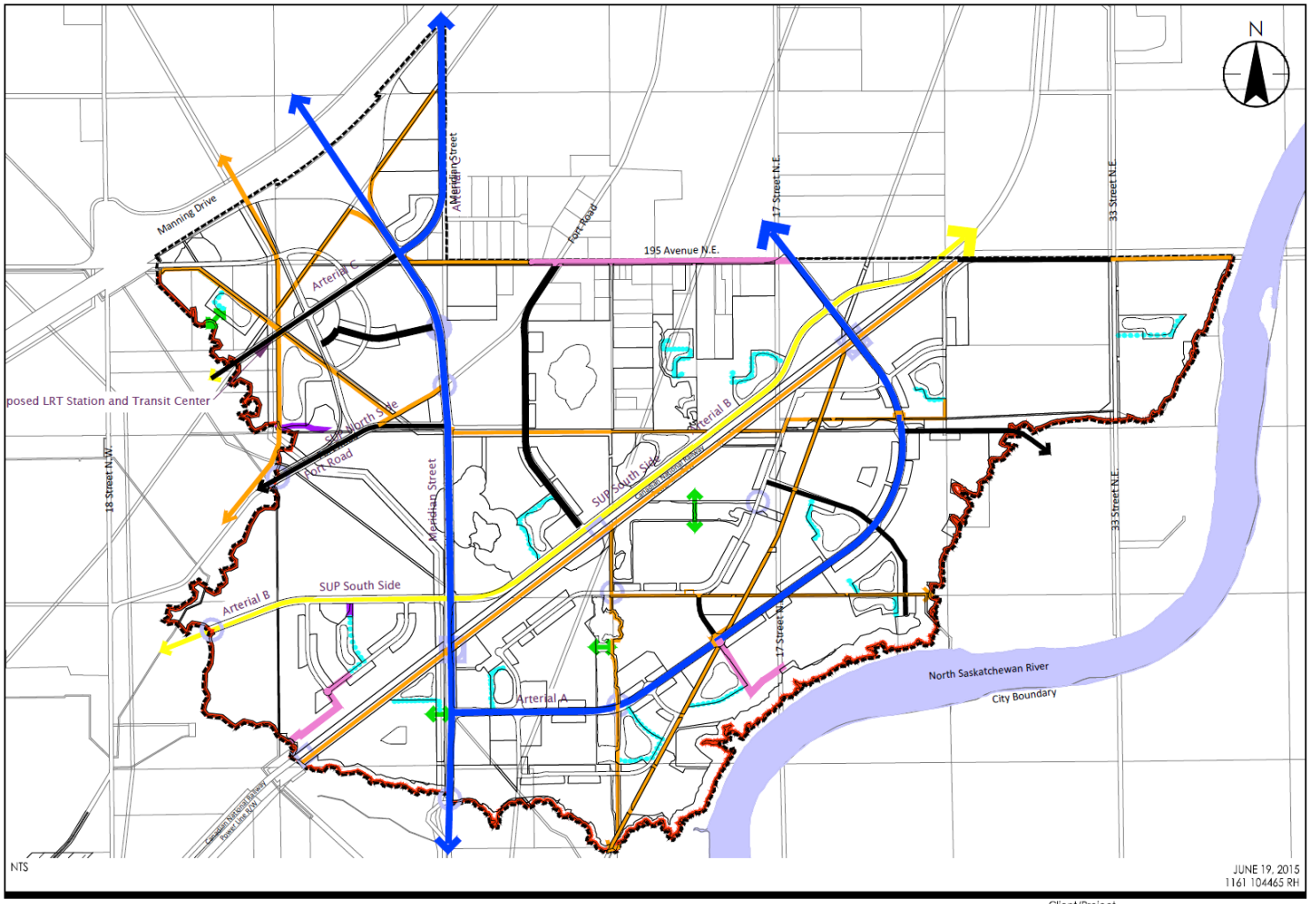
Figure No.
13.0

Title
Transportation Network

Bylaw 17396, November 2, 2015



Legend:

- Primary Bike Network
- Secondary Bike Network
- Tertiary Bike Network Paved
- Shared use Path
- Top of Bank Shared Use Path
- SWMF Shared Use Path
- Granular Shared Use Path Adjacent to Natural Area
- Standard Arterial
- Pedestrian Connections & Greenways
- Priority Pedestrian Crossing
- Midblock
- Potential At-Grade CN Pedestrian Crossing
- Potential long Term Grade Separated

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NSP AMENDMENT

Figure No.
14.0

Title
Active Mode Transportation Network

Bylaw 17396, November 2, 2015

9.1.1.3 NSP Policy

All residential land uses should be within 400 metres walking distance of a transit route, LRT station, or transit centre.

Implementation

Arterial and collector roadways have been identified as future transit routes. Edmonton Transit will determine the routing for bus service through the Plan area. A potential LRT station and transit centre has been located in the town centre area, of shown in **Figure 5: Development Concept**.

Technical Summary

No technical studies were required.

9.2 ROAD NETWORK

Overview & Rationale

The transportation network has been designed to meet both the internal and external traffic flow requirements generated by the neighbourhood. A hierarchy of collector and local roadways is intended to facilitate the efficient movement of vehicular traffic and other modes of travel (see **Figure 13: Transportation Network**).

9.2.1 Objective 71

Implement the City of Edmonton's road hierarchy system of an integrated arterial, collector, and local roadway network.

9.2.1.1 NSP Policy

An integrated system of arterial, collector and local roadways shall be established for travel within the neighbourhood and to adjacent areas.

Implementation

Road right of way will be dedicated to the City of Edmonton in accordance with the NSP design at the subdivision stage. Alternate roadway design will be considered in accordance with the Complete Streets Policy.

9.2.1.2 NSP Policy

Front drive access shall not be permitted to residential units along arterials or directly across from the school/park site. Furthermore, front driveways must not conflict with future bus stop locations. Notwithstanding the foregoing, in exceptional circumstances, the Subdivision Officer may allow front drive access.

Implementation

Conformance with these policies shall be reviewed at the rezoning and subdivision stages.

9.2.1.3 NSP Policy

Lands within the Plan area shall be subject to an Arterial Road Assessment (ARA) to share the cost of roadway facilities needed to service the area.

Implementation

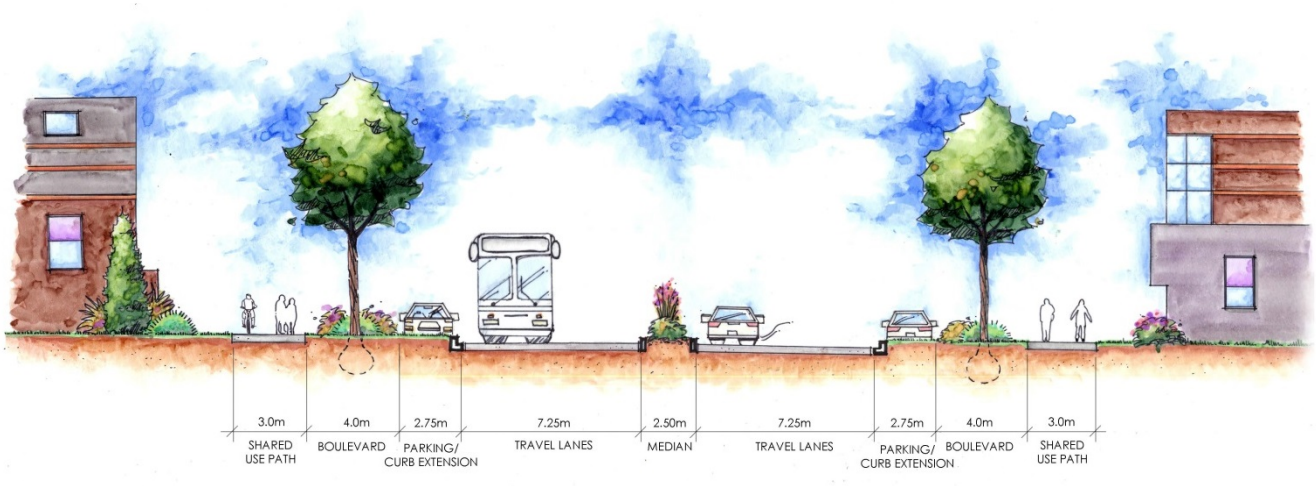
The arterial roads for Development Bylaw will be amended to include the Marquis neighbourhood.

Technical Summary

A Transportation Impact Assessment prepared by Bunt & Associates Engineering has been submitted under separate cover to the City of Edmonton.

COMPLETE STREETS

In May 2013, City Council approved the Edmonton Complete Streets Policy and accompanying guidelines. The intent of the guidelines is to provide a network of streets that are safe, welcoming, attractive,



Source: Stantec

comfortable and functional for all users. The guidelines provide flexibility of design, allowing certain modes of transport to be prioritized over others, depending on location and context.

Source: Stantec

9.2.2 Objective 72

Design multi-use streets that support various modes of transport such as by foot, bicycles, transit, automobiles, and service vehicles, utilizing the City's Complete Streets Guidelines.

9.2.2.1 NSP Policy

Use the Complete Streets Guidelines in the design of streets.

Implementation

Certain roadways may require designs that differ from current design standards. The Complete Streets Guidelines should be consulted to provide design guidance and to ensure that complete streets principles are followed.

9.2.2.2 NSP Policy

A neighbourhood-wide network for pedestrians and cyclists shall be provided and incorporated into developments.

Implementation

Figure 14: Active Mode Transportation Network and **Figure 7: Ecological Network & Parks** show the pedestrian and bicycle network within the neighbourhood. This network provides connectivity to adjacent areas and to key destinations within the Plan area (e.g. schools, recreation centres, and commercial areas).

The active modes network is proposed to include the following components:

Key roadways within the plan area have been identified for the extension of the City of Edmonton's Conceptual Bike Network into the plan area. Primary Bike Routes include arterial roadways with Shared Use Paths (SUPs) on both sides of the road. Secondary Bike Routes include the incorporation of bike lanes, buffered bike lanes, and/or SUPs along collector and local roadways. Tertiary Bike Routes include the incorporation of shared lanes (in-line or side-by-side), bike lanes, and/or SUPs along local roadways, enhanced local roadways, or low volume collectors. A key element along tertiary bike routes is signs and information related to way-finding.

Paved SUPs are identified along utility right-of-ways, the future LRT right-of-way, natural areas, and portions of existing road right-of-way that are not anticipated to ultimately accommodate a roadway. Top-of-bank SUPs will be provided along the North Saskatchewan River Valley and Horsehills Creek. SUPs will be developed adjacent to 50% of the perimeter of storm water management facilities (SWMF). Based on the overall active modes network and the location of storm water management facilities, the majority of the SWMF SUPs are anticipated to provide short recreational links and are not anticipated to be used as major connectors through the plan area.

Source: Stantec

Granular SUPs have been identified adjacent to two wetland areas west of Meridian Street to provide connections along the overall active modes network. These granular SUPs will need to be implemented in consultation with Parks Planning and Biodiversity.

Greenway and pedestrian connections have been noted within the plan area to take advantage of existing rights-of-way (Fort Road) and existing breaks through natural areas, as well as to provide connections to the top-of-bank paths.

Arterial roadways not identified as a primary bike route will include a SUP on one side of the roadway and a sidewalk on the opposite side as per current City of Edmonton standards.

Source: Stantec

Wherever possible, the shared-use paths should be extended to adjacent intersections to facilitate pedestrian crossings. However, the active modes network illustrated in **Figure 14: Active Mode Transportation Network** also identifies a number of potential mid-block pedestrian crossing locations that are anticipated to be required. As well, the intersection on Meridian Street adjacent to the transit centre is proposed to be a priority pedestrian crossing.

It is anticipated that arterial roadways will be grade separated at the CN railway tracks; therefore, the

shared-use path along the Altalink right-of-way will transition to street level via ramps and/or stairs.

Two potential at-grade CNR pedestrian crossings have been identified: one within the southwest portion of the NSP to provide a connection across the CNR along the Horsehills Creek top-of-bank and one approximately midway between Meridian Street and the arterial to provide improved pedestrian connectivity from the east part of the plan area to the district park. The provision of at-grade crossings of the CNR will need to be approved by CN prior to implementation.

In the event that an at-grade pedestrian crossing of the CNR is not feasible at Horsehills Creek, the top-of-bank walk should tie back into the community to allow for a looping system. If a looping system cannot be provided, the provision of a top-of-bank walk should be re-evaluated. For example, only a short section of top-of-bank walk would be provided with the development of the proposed residential lands north of the CNR and west of Meridian Street. Without the development of the provincial lands to the west, access to the top-of-bank will be limited and a logical recreational active modes loop is not anticipated to be available. Therefore, the top-of-bank walk in this area should not be constructed until such time as the provincially owned lands to the west are developed.

9.2.2.3 NSP Policy

Key roadway crossings for pedestrians and cyclists shall be identified and prioritized.

Implementation

Figure 7: Ecological Network & Parks shows the location of intersections and mid-block crossings that are anticipated to act as key roadway crossings for pedestrians and bicycle users. Roadway design in these locations shall consider the movement and interaction of all modes of transport, with the goal of providing a high degree of safety and comfort for pedestrians and bicycle users.

9.2.2.4 NSP Policy

A shared-use path shall be provided within the upland setback area above the top-of-bank line of the River Valley and Ravines.

Implementation

The exact location of the shared-use path will be determined at the time of subdivision.

9.3 TRANSPORATION AND LAND USE INTEGRATION

STREETSCAPES

The design of streets and adjacent developments plays an important role in creating an environment that aesthetically pleasing, safe, and comfortable.

9.3.1 Objective 73

Provide attractive, safe, and functional streets through roadway design.

9.3.1.1 NSP Policy

Pedestrian-friendly environments shall be emphasized in key locations such as streets within the Town Centre area, near school park sites, and near commercial or mixed use sites.

Implementation

Block size and street design will be reviewed at the subdivision stage.

Source: Stantec

9.3.1.2 NSP Policy

Local residential streets shall generally incorporate boulevards. Alternate roadway cross sections may be allowed if it can be demonstrated that site conditions or other circumstances make boulevards infeasible.

Implementation

Boulevards offer several uses, including snow storage in the winter, planting space for street trees, and separation between pedestrians and automobiles.

TRANSIT ORIENTED DEVELOPMENT

Transit oriented development (TOD) within the NSP provides a mix of residential, commercial, and employment land uses, integrated with public transit facilities that are located in destination nodes, such as the Town Centre. Co-location and integration of transit facilities with other land uses allows for more efficient development and increased effectiveness of public transit. Movement within these areas will be pedestrian-oriented, walkable, and very accessible. Access outside of the community is provided via transit, and an integrated street network for vehicles, pedestrian, and bicycle movement.

Successful TOD development focuses higher densities within a 10-minute walk (400-800m) of the transit centre. Successful TODs in suburban greenfield development often have a variety of housing typologies and densities. “Graded density” is often used, and refers to the concept of clustering highest density at and around mixed-use service centres, while gradually decreasing residential densities toward the farthest reaches of the community.

9.3.2 Objective 74

Transit Oriented Development shall be integrated with the LRT station and Transit Centre within 400 m.

9.3.2.1 NSP Policy

Development surrounding the LRT station and transit centre shall be developed in accordance with the City’s *Transit Oriented Development Guidelines*.

Implementation

Figure 5: Development Concept shows land uses near the LRT station and Transit Centre. Section 6.4 Town Centre provides details regarding permitted land uses and design guidelines. LRT alignment and station location are subject to further study and may change.

Source: TOD-Portland, OR

Technical Summary

No technical studies were required.

NOISE ATTENUATION & RAIL SAFETY

The NSP area contains several major roadways and a railway. The NSP attempts to locate compatible land uses to avoid the impact of nuisance noise and vibration where possible, or to use design and building techniques to mitigate noise where needed. Barriers should be provided to prevent trespassing onto the railway corridor in accordance with the Guidelines for New Development in Proximity to Railway Corridors and other applicable policies.

Source: Stantec

9.3.3 Objective 75

Mitigate the effects of noise and vibration caused by vehicle and train traffic, and discourage trespassing on railway corridors.

9.3.3.1 NSP Policy

Appropriate noise attenuation shall be provided by the developer and home builder where residential uses abut major roadways, light rail transit, or rail facilities.

Fencing shall be provided along the railway corridor where there is risk of trespass.

Implementation

A noise attenuation assessment is required for residential development prior to the subdivision stage of development, in accordance with the City of Edmonton Urban Traffic Noise Policy. Discussions with the Urban Ecology Unit and applicable Transportation section will be required to address the effects of noise attenuation structures on wildlife passage across the rail line. Requirements for fencing will be assessed in conjunction with Transportation Services at the time of subdivision.

Technical Summary

A noise attenuation assessment will be submitted prior to the time of subdivision.

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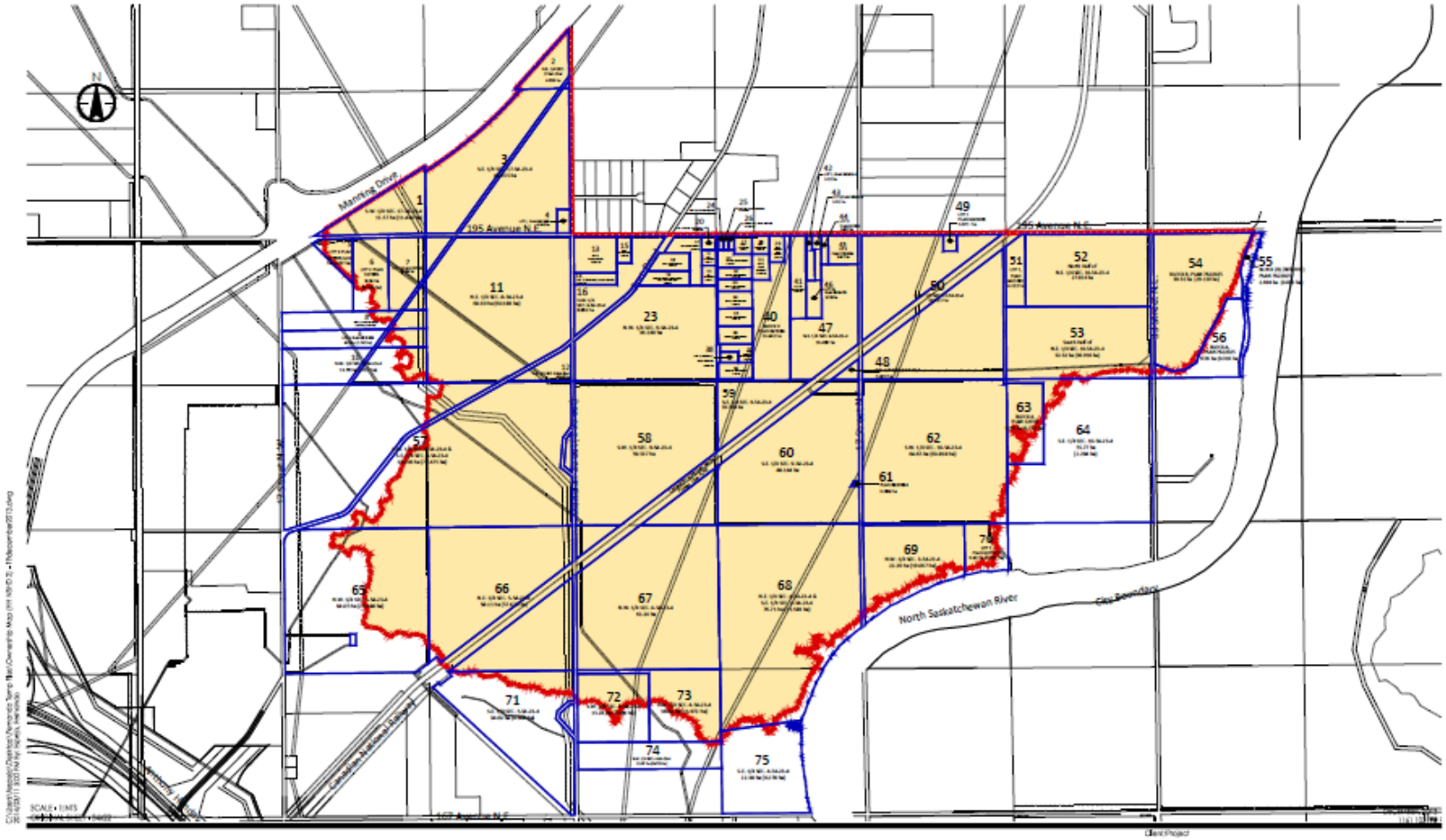
10 Appendices



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Map Reference Number	Titled Owner	Legal Description	Titled Area (ha)	Area in NASP (ha)
1	PRIVATE CORPORATION	S.W. 1/4 SEC. 17-54-23-4	11.57	11.44
2	PRIVATE CORPORATION	N.E. 1/4 SEC. 17-54-23-4	4.83	4.83
3	PRIVATE CORPORATION	S.E. 1/4 SEC. 17-54-23-4	48.66	48.66
4	PRIVATE	LOT 1, PLAN 9322859	0.95	0.95
5	PRIVATE	LOT 3, PLAN 5278RS	3.03	2.46
6	PRIVATE	LOT 2, PLAN 5278RS	8.09	6.53
7	PRIVATE	LOT 1, PLAN 5278RS	8.09	8.09
8	PRIVATE	LOT 5, PLAN 9521823	8.02	2.32
9	PRIVATE	LOT 6, PLAN 9521823	8.02	1.74
10	PRIVATE	N.W. 1/4 SEC. 8-54-23-4	15.78	2.02
11	PRIVATE CORPORATION	N.E. 1/4 SEC. 8-54-23-4	60.30	60.18
12	PRIVATE CORPORATION	N.E. 1/4 SEC. 8-54-23-4	3.55	3.55
13	SCHOOL DISTRICT	LOT B, PLAN 1878RS	4.85	4.85
14	THE CITY OF EDMONTON	LOT "R"(RESERVE), PLAN 7621431	1.58	1.58
15	PRIVATE	LOT C, PLAN 9620080	1.21	1.21
16	PRIVATE CORPORATION	N.W. 1/4 SEC. 9-54-23-4	8.85	8.85
17	PRIVATE	LOT B, PLAN 5233KS	2.86	2.86
18	PRIVATE	LOT 2, PLAN 9721057	2.09	2.09
19	PRIVATE	LOT 1, PLAN 9721057	2.09	2.09
20	PRIVATE	N.W. 1/4 SEC. 9-54-23-4	0.61	0.61
21	PRIVATE	LOT D, PLAN 9020626	0.69	0.69
22	PRIVATE	LOT E, PLAN 9020626	0.88	0.88
23	PRIVATE CORPORATION	N.W. 1/4 SEC. 9-54-23-4	36.14	36.14
24	PRIVATE	LOT 19, PLAN 5481MC	0.20	0.20
25	PRIVATE	LOT 20, PLAN 5481MC	0.22	0.22
26	PRIVATE	LOT 18, PLAN 6974BG	0.23	0.23
27	PRIVATE	BLOCK Y, PLAN 6974BG	1.00	1.00

Map Reference Number	Titled Owner	Legal Description	Titled Area (ha)	Area in NASP (ha)
55	THE CITY OF EDMONTON	BLOCK (R) (RESERVE), PLAN 7622025	2.69	0.03
56	HER MAJESTY THE QUEEN	BLOCK A, PLAN 7622025	9.56	0.32
57	HER MAJESTY THE QUEEN	S.W. 1/4 SEC. 8-54-23-4 & S.E. 1/4 SEC. 8-54-23-4	126.03	72.48
58	PRIVATE CORPORATION	S.W. 1/4 SEC. 9-54-23-4	59.54	59.54
59	PRIVATE	S.E. 1/4 SEC. 9-54-23-4	10.39	10.39
60	PRIVATE CORPORATION	S.E. 1/4 SEC. 9-54-23-4	48.14	48.14
61	PRIVATE CORPORATION	BLOCK VALVE SITE, PLAN 8920834	0.09	0.09
62	PRIVATE CORPORATION	S.W. 1/4 SEC. 10-54-23-4	64.65	63.82
63	PRIVATE	BLOCK A, PLAN 120TR	9.19	6.77
64	THE CITY OF EDMONTON	S.E. 1/4 SEC. 10-54-23-4	55.77	2.29
65	HER MAJESTY THE QUEEN	N.W. 1/4 SEC. 5-54-23-4	64.05	21.95
66	PRIVATE CORPORATION	N.E. 1/4 SEC. 5-54-23-4	58.11	57.68
67	PRIVATE CORPORATION	N.W. 1/4 SEC. 4-54-23-4	61.24	61.24
68	PRIVATE CORPORATION	N.E. 1/4 SEC. 4-54-23-4 & S.E. 1/4 SEC. 4-54-23-4	76.71	71.58
69	PRIVATE CORPORATION	N.W. 1/4 SEC. 3-54-23-4	22.20	19.04
70	PRIVATE	LOT 1, PLAN 9221617	6.92	4.45
71	PRIVATE CORPORATION	S.E. 1/4 SEC. 5-54-23-4	34.63	4.36
72	PRIVATE	S.W. 1/4 SEC. 4-54-23-4	15.24	7.09
73	PRIVATE	S.W. 1/4 SEC. 4-54-23-4	16.82	11.97
74	PRIVATE	S.W. 1/4 SEC. 4-54-23-4	12.07	0.07
75	PRIVATE CORPORATION	S.E. 1/4 SEC. 4-54-23-4	22.38	0.28
Total			1236.69	947.74