

## PART B.14 Westerra Neighbourhood Plan

City of Regina





Executive Summary Westerra is located in the west area of the City of Regina on lands annexed from the Rural Municipality of Sherwood No. 159. The Plan Area is bounded by Dewdney Avenue to the north, Courtney Street to the east, Pinkie Road to the west and the Canadian Pacific Rail line to the south (See **Figure 1: Location and Context Plan**). The Neighbourhood Plan Area includes approximately +/- 199.84 hectares (+/- 493.79 acres) of land.

At full build out, the neighbourhood plan area will house approximately 7,500 residents in a complete community consisting of a range of housing, commercial and employment uses. Westerra shall be an area where residents daily needs can be met and where access to employment and retail land uses are supported by pedestrian, transit, cycling and road connections.

The Neighbourhood Plan (NP) implements policy identified within **Design Regina - The Official Community Plan Bylaw No. 2013-48 (Design Regina OCP)** and has been informed by the City's sustainability priorities. The NP has been developed through careful and ongoing consultation with the City, landowners, the general public, school boards, builders and other key stakeholders. The NP establishes the broad land use and servicing expectations for the plan area which will be used to direct the preparation of subsequent concept plans, land use and subdivision applications.

### **Neighbourhood Plan**

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# Table of Contents

1.0 Introduction	1
1.1 Background	1
1.2 Site Context	1
1.3 Plan Area Ownership	2
1.4 Regulatory Framework and Compliance	4
2.0 Site Inventory & Analysis	7
2.1 Topography	7
2.2 Natural Features and Existing Conditions	7
2.3 Development Constraints	12
2.3.1 Wells, pipelines and utilities	12
2.3.2 Regina International Airport	14
2.3.3 Canadian Pacific Railway Line	16
2.3.4 Adjacent Industrial Uses	16
3.0 Community Design & Land Use	19
3.1 Westerra Vision	19
3.2 Alignment with Design Regina: The Official Community Plan Bylaw No. 2013-48	20
3.3 Design Principles	21
3.4 Land Use Overview	22
3.5 Residential	24
3.5.1 Low-Density Residential	25
3.5.2 Medium-Density Residential	26
3.5.3 Live Work Residential	26
3.5.4 High-Density Residential	27
3.6 Urban Centre	27
3.7 Main Street Retail	28
3.8 Community Retail	29
3.9 Large Format Retail	29
3.10 Business Park	30
3.11 Civic Uses	32
3.11.1 Potential School Site	32
3.11.2 Emergency Services Facility	32
3.12 Parks and Open Space	33
3.12.1 Pathways and Trails	33
3.12.2 Municipal Reserve	36
3.12.3 Municipal Buffer	37
3.12.4 Municipal Utility Parcel(s)	38
3.12.5 Environmental Reserve	38

4.0 Transportation	39
4.1 Overview	39
4.2 Road Network Hierarchy	42
4.3 Public Transit	44
5.0 Servicing Strategy	45
5.1 Wastewater Collection System	45
5.1.1 Existing Conditions	45
5.1.2 Proposed Development	45
5.1.3 Timing of Capital Improvements	46
5.2 Water Servicing	48
5.2.1 Existing Conditions	48
5.2.2 Proposed Development	48
5.2.3 Timing of Capital Improvements	50
5.3 Stormwater Management	50
5.3.1 Existing Conditions	50
5.3.2 Proposed Development	52
5.3.3 Timing of Capital Improvements	54
5.4 Shallow and Above-Ground Utility Servicing	54
6.0 Implementation	56
6.1 Phasing	56
6.2 Concept Plans	56

# Figures

Figure 1 - Location and Context Plan	1
Figure 2 - Legal Description & Ownership of Plan Area	3
Figure 3 - Design Regina OCP Policy Context	5
Figure 4 - Site Context and Natural Features	8
Figure 5 - Local & Regional Transportation Network	10
Figure 6 - Community Infrastructure	11
Figure 7 - Land Use and Development Constraints	13
Figure 8 - NEF Contours and Height Limitations	15
Figure 9 - Land Use Transition Buffer	18
Figure 10 - General Land Use Concept	23
Figure 11 - Business Park - Residential Interface	31
Figure 12 - Parks, Pathway and Open Space Network	35
Figure 13 - Transportation Network	41
Figure 14 - Transit Roads	43
Figure 15 - Sanitary Servicing Concept	47
Figure 16 - Water Servicing Concept	49
Figure 17 - Catchment Area Concept	51
Figure 18 - Storm Servicing Concept	53
Figure 19 - Shallow & Above-Ground Existing Utilities	55
Figure 20 - Concept Plan Boundaries	57

# Tables

Table 1 - Plan Area Ownership	2
Table 2 - Neighbourhood Plan Land Use Statistics	22
Table 3 - Residential Density & Population Projections	24
Table 4 - Open Space System & Potential Facilities	34
Table 5 - Municipal Reserve Requirements and Proposed Dedication	37
Table 6 - Peak Wastewater Flows Based on Land Use and Anticipated Density	45
Table 7 - Wastewater Flows from Outside Sources	46

# 1.0 Introduction

### 1.1 Background

The purpose of this Neighbourhood Plan (NP) is as follows:

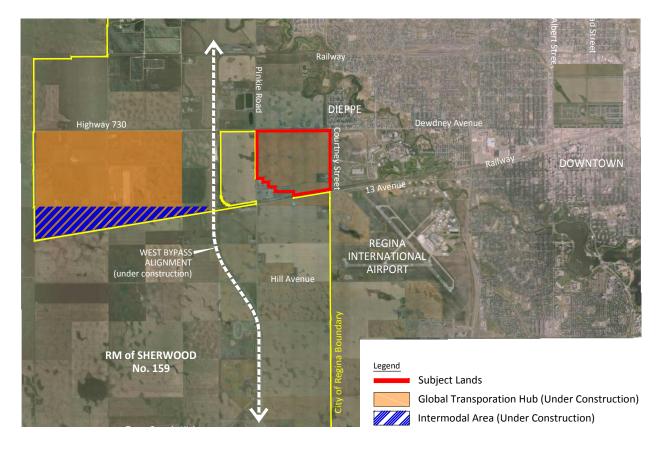
- To implement the policies contained in the *Design Regina OCP* and, in doing so, provide a framework for future development of the plan area that reflects the City's aspiration to be a sustainable, vibrant, inclusive and attractive community
- To guide and direct the preparation and the approval of subsequent Concept Plans, Land Use Amendment and Subdivision applications within the plan area.

To accomplish this purpose, the Neighbourhood Plan contains development objectives, a land use concept and policies that will ensure the NP is achieved over time.

### 1.2 Site Context

The NP applies to a defined area referred to as "Westerra" and is outlined on **Figure 1: Location and Context Plan**. The plan area is located approximately 6.5 km from downtown Regina and serves as a western gateway for the City. Westerra is located in a strategic location in proximity to the Global Transportation Hub. The area is bound by Dewdney Avenue to the north, Pinkie Road to the west and Courtney Road to the east. The CPR rail line forms the southern boundary of the Plan area. The surrounding land use context includes the Dieppe neighbourhood to the northeast, the RCMP training centre to the east, the Regina International Airport to the southeast and the Sakimay First Nations to the west. There are existing industrial uses situated to the southwest of the plan area which are situated in the RM of Sherwood No. 159.

Figure 1 - Location and Context Plan



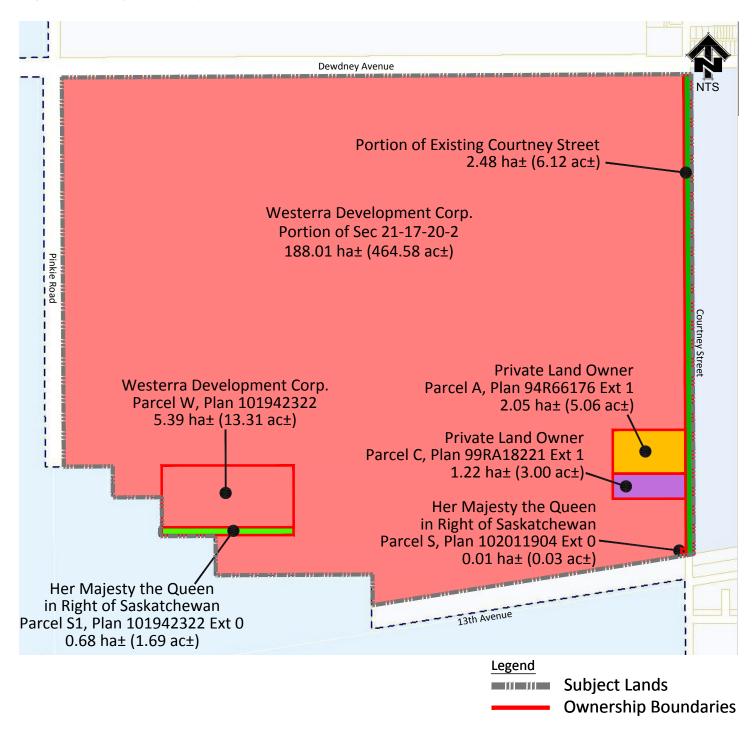
### 1.3 Plan Area Ownership

The NP area is comprised of approximately +/- 199.84 hectares (+/- 493.79 acres) consisting of a variety of legal parcels of land. The majority of the plan area is owned by Westerra Development Corp. A summary of the legal land holdings and ownership of the plan area is outlined in **Table 1: Plan Area Ownership** and **Figure 2: Legal Description and Ownership of Plan Area**.

LANDOWNER	LEGAL DESCRIPTIONS	AREA (HA)	AREA (AC)	% OF PLAN AREA
Westerra Development Corp.	Pt. Sec. 21-17-20-2	188.01	464.58	94.08%
Westerra Development Corp.	Parcel W Plan 101942322	5.39	13.31	2.70%
Private Landowner	Parcel A Plan 94R66176 Ext 1	2.05	5.06	1.02%
Private Landowner	Parcel C Plan 99RA182221 Ext 1	1.22	3.00	0.61%
Her Majesty the Queen in Right of Saskatchewan	Parcel S Plan 102011904 Ext o	.011	.03	0.01%
Her Majesty the Queen in Right of Saskatchewan	Parcel S1 Plan 101942322 Ext 0 – Existing Legal Roadway - General Road Closure and Consolidation Assumed	0.68	1.69	0.34%
Her Majesty the Queen in Right of Saskatchewan	Existing Legal Roadway - Courtney Street Partial Closure and Consolidation Assumed	2.48	6.12	1.24%
	Total	199.84	493.79	100%

#### Table 1 - Plan Area Ownership

The subject lands were annexed to the City of Regina as part of the planning and construction of the Global Transportation Hub. These annexed lands form a well-defined growth corridor between the built up area of the City of Regina, the airport and the Global Transportation Hub. The *Design Regina OCP* has identified the plan area for future urban development and envisions a mixed-use area that supports a live-work environment including a range of housing options, regional commercial, local commercial, non-manufacturing industrial and employment uses.



#### Figure 2 - Legal Description and Ownership of Plan Area

### **1.4 Regulatory Framework and Compliance**

#### Design Regina OCP

The NP must be consistent with other policy documents approved by Council, including but not limited to Design Regina OCP in accordance with the Planning and Development Act, 2007.

This NP has been prepared in accordance with the policy direction contained in *Design Regina OCP*. The *Design Regina OCP* establishes two levels of planning instruments for new areas in the city involving the initial preparation of a 'Neighbourhood Secondary Plan' for new neighbourhoods of approximately 200 hectares or more, followed by the preparation of 'Concept Plans' on a phased basis within the Neighbourhood Plan area. The Secondary Plan (Neighbourhood Plan) will be adopted by bylaw and appended to the *Design Regina OCP*.

Westerra contains approximately +/- 199.84 hectares (+/- 493.79 acres) of land and proposes a new mixed – use area. Therefore a Neighbourhood Plan (NP) is required to be prepared in accordance with the *Design Regina OCP*. The NP, in turn, contains a phasing plan that provides direction for the preparation of more detailed "Concept Plans" (CP). Concept plans shall be developed and submitted as required to provide further detail required to rationalize detailed zoning, subdivision and development applications.

Under the *Design Regina OCP*, the Westerra lands have been designated as a priority growth area and a "New Mixed-Use Neighbourhood." As shown on **Figure 3**: *Design Regina OCP* Policy Context, Dewdney Avenue to the north is identified as an 'Express Transit Corridor.' The *Design Regina OCP* also shows an 'urban centre' straddling Dewdney Avenue with lands to the north of Westerra. Under the official community plan, new mixed use neighbourhoods are intended to be complete communities that are inclusive and provide a mix of all land uses to allow residents to live, work and play in their own community. These mixed use neighbourhoods are to be a location for intensification of land uses and are required to be developed at a minimum gross population density of 50 persons per hectare (pph). A concept plan is required for all new neighbourhoods and the Guidelines for Complete Neighbourhoods as contained in the *Design Regina OCP* must be observed.

This Neighbourhood Plan has been prepared in accordance with the *Design Regina OCP* requirements for a secondary plan for new or mixed-use neighbourhood areas and demonstrates overall conformity with the official community plan. Westerra is a plan for an integrated mixed - use community complete with residential uses of varying densities, commercial, open space and business park uses. Located along Dewdney Avenue, the plan calls for the creation of intensive and well defined main street as a central hub/entrance into the community which is supportive of the City's desire to develop Dewdney as 'Express Transit Corridor,' and to support the development of an 'urban centre' in this area. Anchoring the main street retail area, medium to high density residential development is envisioned. The plan area is linked by an interconnected road network and supported by a parks and open space system providing passive and active recreational opportunities throughout the community.

#### City of Regina Zoning Bylaw No. 9250

Lands within the proposed neighbourhood are currently zoned Urban Holding District under the current Zoning Bylaw. The lands are also subject to the City of Regina's Zoning Bylaw Regina Airport Noise Attenuation Overlay Zone. Prior to subdivision and eventual development of the lands, the developer will apply for zoning bylaw amendment consistent with the approved Concept Plans to harmonize with this Neighbourhood Plan and the *Design Regina OCP*.

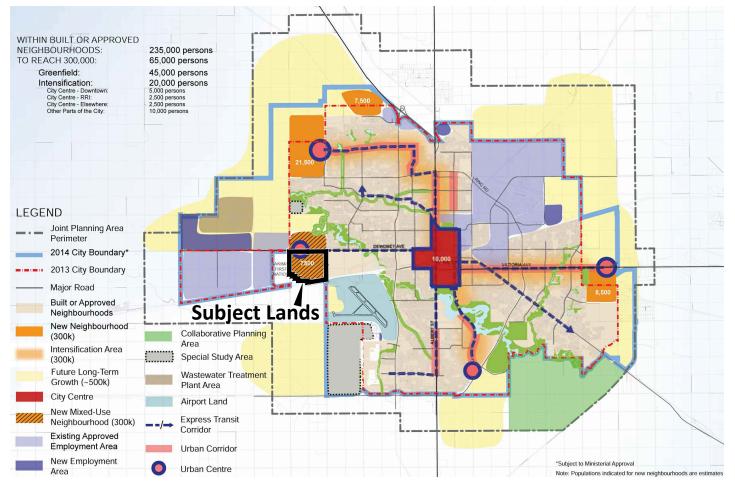
#### Regina Airport Zoning Regulations (Aeronautics Act)

Under the Government of Canada Aerounautics Act, the Westerra lands are within the boundaries of the *Regina Airport Zoning Regulations* administered by the Regina Airport Authority and enforced by Transport Canada. These Regulations are under Federal jurisdiction. These Regulations apply certain height and other building restrictions to structures within an area affecting the flight path and other operations of the airport. All future development within Westerra shall comply with both applicable municipal and federal regulations for development in proximity to airports and should comply with applicable provisions of *Land Use in Vicnity of Airports Guidelines (TP 1247E)* as published by Transport Canada.

#### Timeframe of the Plan

This NP is future-oriented and establishes the overall pattern for how Westerra is to be developed over an extended period of time. Development is expected to occur over the next 10-20 years. However, the exact timing of the build out of Westerra remains subject to market demand and other factors.

#### Figure 3 - Design Regina OCP Policy Context



Source: Design Regina - Official Community Plan 2013

#### **Map Interpretation**

Unless otherwise specified within the NP, the boundaries or locations of any symbols or areas shown on a map are approximate only, not absolute, and will be interpreted as such. They are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries such as existing property lines, existing roads or existing utility rights-of-way.

The precise location of land use boundaries will be evaluated and determined by City Administration at the time of concept plan, rezoning and subdivision application. Where adjustments are made as a result of further delineation through the concept plan process an amendment to the maps within this NP shall not be required.

#### **Policy Interpretation**

In the interpretation of the policies within this plan, the word 'shall' outlines mandatory compliance. 'Should' policy statements demonstrate that compliance is encouraged and recommended. However, 'should' statements may not always be practical and flexibility is provided in such circumstances. 'May' statements indicate no obligation to undertake what is proposed, but implies that the approving authority shall give due consideration to the policy.

#### Amendment of the Plan

Where required, an amendment to the NP shall be held in accordance with the *Planning and Development Act, 2007*. If an amendment to the NP is proposed by an applicant, the applicant must submit the justification and information necessary to support the amendment.

#### Monitoring of the Plan

The policies within the NP will be monitored in relation to development activity. Where necessary, the policies will be amended either generally or in response to a specific issue.

# 2.0 Site Inventory & Analysis

### 2.1 Topography

The high point of the subject lands is in the southeastern portion of the site and the general topography of the area leads to drainage running to the southwest and northeast portions of the site. This is illustrated on **Figure 4: Site Context and Natural Features**. Drainage to the northeast flows through the existing ditch and culvert with an outlet to Wascana Creek. Drainage to the southwest flows towards Pinkie Road.

### 2.2 Natural Features and Existing Conditions

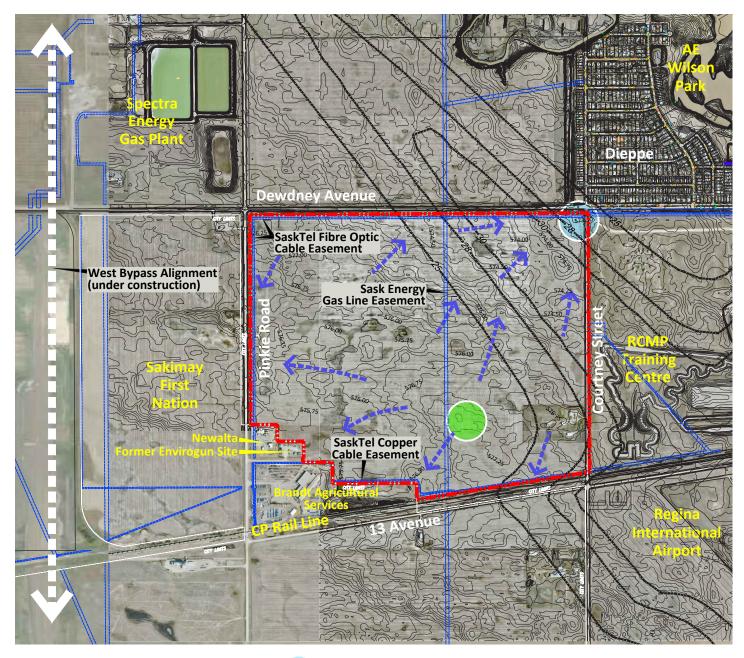
As shown in **Figure 4: Site Context and Natural Features**, there is little tree cover and natural habitat present with the exception of a tree farm located to the southeast of the subject property. The area contains cultivated land with some low areas and drainage paths throughout. Existing conditions were identified as part of the planning process and informed the development of the secondary plan. Bounded by Dewdney Avenue to the north, Courtney Street to the east, Pinkie Road to the west and the CPR line to the south, the area is relatively flat with a few low areas and drainage paths. As shown in **Figure 4: Site Context and Natural Features**, currently the site is cultivated with little to no vegetation. The subject site contains two country residential subdivisions to the southeast which are under separate ownership as well as one (1) undeveloped 15 acre vacant parcel which is situated to the north of the undeveloped extension of General Road.

#### **Environmental Site Assessment**

As part of the due diligence process in acquiring lands within the plan area, two (2) phase one environmental site assessments were commissioned by Westerra Development Corp. and completed in September 2013. Based on the results of these initial Phase one assessments, one (1) phase two site assessment was completed to examine the potential for contaminant migration from above ground storage tanks on industrial land situated adjacent to the plan area in the southeast corner. The results of these assessments and subsequent follow up investigations have concluded that the risk of soil and/or groundwater contamination stemming from historical uses on the properties within the plan area and adjacent uses is low and that no further investigative analysis is warranted. Copies of the environmental site assessments have been provided to the City of Regina under separate cover.

#### **Geotechnical Conditions**

In support of this Neighbourhood Plan, a geotechnical assessment was completed. The geotechnical investigation consisted of the drilling of 28 test holes throughout the plan area to examine subsurface soil conditions and geotechnical conditions to arrive at development recommendations. The analysis found no significant geotechnical constraints to the development of residential, commercial and industrial uses envisioned for Westerra. In addition, the analysis provided a series of considerations relative to the construction activities and requirements for future development. These requirements shall be considered as the implementation of the project proceeds. A copy of the geotechnical assessment has been provided to the City of Regina under separate cover.



#### Figure 4 - Site Context and Natural Features

Legend

Subject Lands NEF Contours Surface Drainage Arrow



Approximate Low Point

Approximate High Point

Contours (0.25m Interval)

#### **Transportation Network**

As illustrated in **Figure 5: Local and Regional Transportation Network**, existing transportation infrastructure in proximity to the plan area consists of the bounding roads -- Dewdney Avenue, Pinkie Road and Courtney Street. The *Design Regina OCP* has identified the Westerra lands as a potential transit node. Courtney Street and Pinkie Road are shown as potential future arterial roads under the *Design Regina OCP*. A potential urban expressway is shown traversing west towards the highway south of the subject area. Potential railway grade separation intersections are indicated at Pinkie Road and Courtney Street. The West Regina Bypass is located to the west of plan area.

The Province is moving forward with the construction of the West Bypass to further strengthen the regional transportation infrastructure network for the GTH including connections to the TransCanada and Highway 11. This Province - led initiative will help alleviate traffic congestion within the city by diverting truck traffic off of local streets. Preparation of this NP has been undertaken in consideration of the existing and future local and regional transportation network as outlined in the *Design Regina OCP*.

#### **Global Transportation Hub**

The Global Transportation Hub (GTH) is a development that has important implications for the subject lands. The GTH is rapidly developing with the relocation of Canadian Pacific's (CP) Intermodal Facility (IMF) from downtown Regina. The Global Transportation Hub (GTH) consists of an intermodal terminal and industrial expansion - all part of the Asia-Pacific Gateway and Corridor initiative. The location of this facility in proximity to the Regina bypass and Dewdney Avenue will influence transportation movements and conditions on the roadways in proximity to Westerra.

#### **Heritage Resources**

The Plan area has been subject to a prolonged history of agricultural disturbances. In support of this Neighbourhood Plan, an application for Historical Resource Clearance was submitted to the Province. Historical Resource Clearance was obtained and no Historical Resource Impact Assessment is required.

#### **Community Infrastructure**

The majority of community infrastructure is located to the east of the plan area and includes several activity centres mainly along Elphinstone Street and a hospital and library. The nearest existing fire stations are in the North Central and Walsh Acres/ Lakeside neighbourhoods which are approximately 4.5 km from central portion of Westerra. In the event of an emergency requiring fire response prior to the construction of an additional fire hall in Westerra, the plan area is anticipated to be served by the existing City fire hall at 3855 Dewdney Avenue. The estimated emergency response time from this facility to Westerra is approximately 7 minutes as the fire-hall is situated approximately 4.5 km from the planned main street entrance to Westerra.

There is a police station located in downtown Regina and one in the North Central area. It is anticipated that police service would be provided to Westerra from the North Central station. The plan area is also expected to be served by the Ambulance base located at Albert Street and Dewdney Avenue. The hospital and library are located in the North Central neighbourhood. Aside from a public elementary school in the Dieppe neighbourhood which has been recently closed there are no schools within half a mile of the subject area. The location of major community infrastructure and proposed emergency access route from the existing fire hall to Westerra is outlined in **Figure 6: Community Infrastructure**.

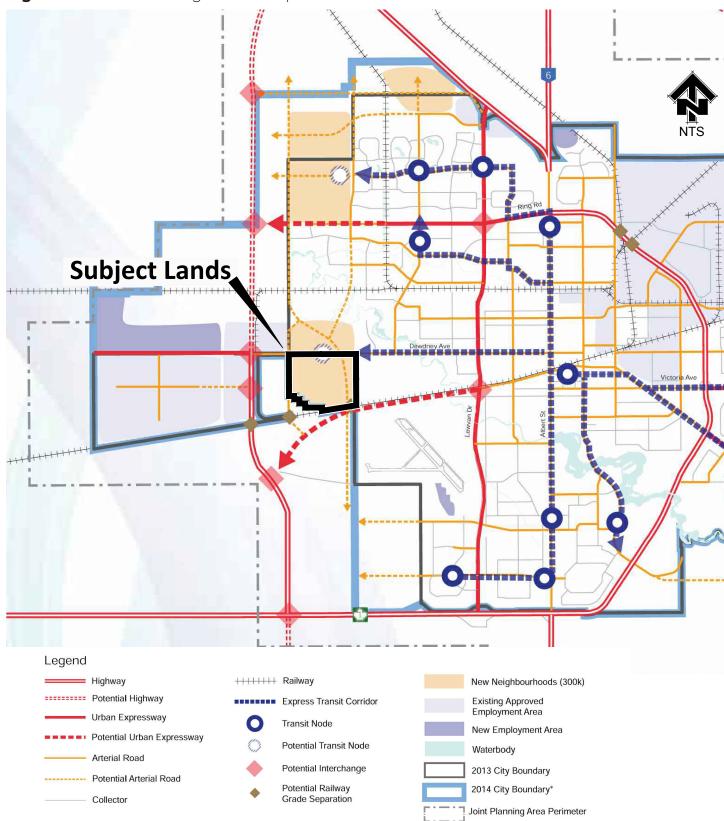
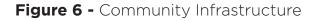
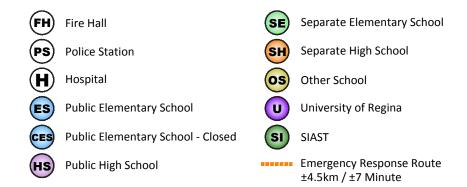


Figure 5 - Local and Regional Transportation Network

SE ES ES ES SE ES ES ES SE SH ESHS SE ES Avenu FH ES os ES HS ES CES ES FH 8km os Dewdney Avenue **(H) ourtney Street** 5km PS 2km FH **CP** Railway oria ES (FH) ES SE H PS SE os SHHS ES HS Regina A ES SH ES ES OS os liament Aven SE HS FH ES ES Gordon Road SE ES ES





### 2.3 Development Constraints

The surrounding land uses include agricultural uses, smaller scale development along Dewdney Avenue and the residential neighbourhood of Dieppe to the northeast as shown on **Figure 4: Site Context and Natural Features**. Land uses located to the west of the plan area include the Sakimay First Nations and an area of existing industrial use. Directly to the north, the site is bordered by privately held land and to the east by the RCMP training centre. Located to the northwest, the wastewater treatment plant and lagoon have development setbacks that must be respected; residential development must be 1600 metres from a lagoon or sewage treatment plant. Development in Westerra is located outside of this setback area.

As part of the planning process, a risk assessment assessing the potential risk posed by the Spectra Energy Facility, adjacent Newalta operations, and the SaskEnergy gas line to the proposed development and residential uses was completed. The findings have concluded that the plan area is suitable for urban development purposes subject to consideration of specific mitigation measures. These recommended mitigation measures, coupled with feedback from the City of Regina have informed the preparation of this NP. A summary of land use constraints that have directed and informed the development of this NP are outlined on **Figure 7: Land Use and Development Constraints** and **Figure 8: NEF Contours and Height Limitations**.

#### 2.3.1 Wells, pipelines and utilities

In terms of wells, pipelines and utilities, there are no known operating wells or sour gas pipelines within the plan area. As illustrated by **Figure 7: Land Use and Development Constraints**, the NP area includes a number of rights of way which require consideration as part of the NP. Development of buildings within the existing registered rights of way is not permitted and all future development of land must respect the encumbrances and development restrictions as registered on title. These restrictions shall carry forward to any subdivided lands which include the existing rights of way.

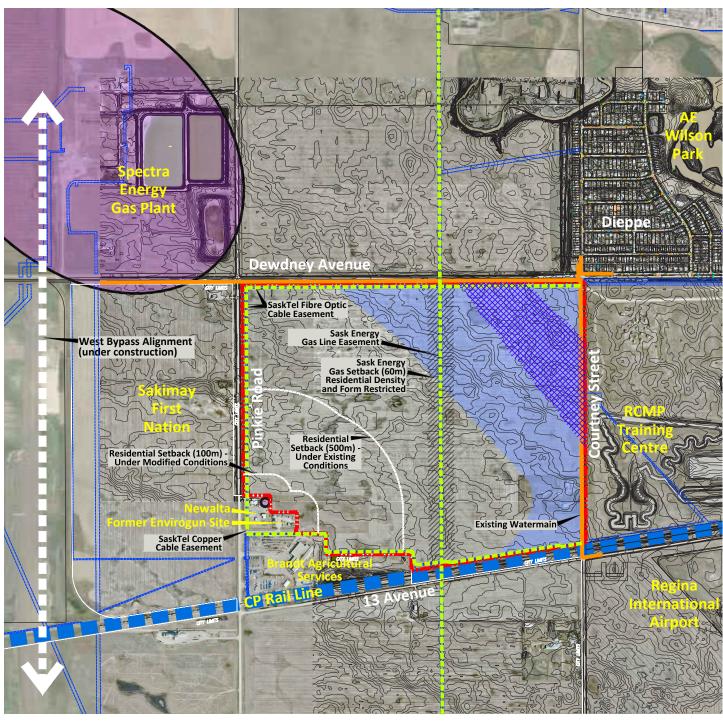
A natural gas pipeline operated by SaskEnergy bisects the NP area on a north – south axis and supports the City's natural gas distribution system. Based on an updated risk assessment completed in support of this NP (submitted under separate cover), there are additional constraints associated to the development of lands in proximity to this pipeline beyond the immediate registered right of way. These additional development constraints are summarized as follows:

- Residential density within 60 metres of the pipeline structure is restricted (low-medium density, max. 50 upnh)
- Residential density housing forms within 60 metres of the pipeline restricted to ground oriented housing
- Future surface development (i.e. buildings) must not encroach on registered pipeline right of way
- Potential schools facilities and structures must be setback 60 metres from the pipeline structure

These constraints have been considered in the development of this Neighbourhood Plan. Lands situated within 60 metres of the SaskEnergy pipeline have been identified as a "Special Development Area" and policy has been identified to help ensure that future development within the special development area complies with the recommendations of the updated risk assessment.

Other utility considerations include an easement for an electrical distribution line along the west side of the plan area that is no longer required and is being discharged. Buried telecommunication lines run along the north, west and south borders of the Plan area and are contained within 7.5 metre rights – of – way. The NP has been designed in consideration of existing easement arrangements. These easements have been integrated within the parks and open space system where appropriate. Encumbrances will carry forward onto new parcels of land through the subdivision process including development restrictions related to the easement. These encumbrances will need to be considered by end users of the land when developing and forming detailed building and development proposals.

- 2.3.1 (a) Lands situated within 60 metres of the centerline of the SaskEnergy pipeline facility as shown on Figure 7: Land Use and Development Constraints shall be considered as a special development area and shall have development regulated as follows:
  - i. Residential density shall be restricted to a maximum of 50 units per net hectare. ii. Residential housing forms shall be restricted to ground oriented housing forms.



#### Figure 7 - Land Use and Development Constraints



NEF 30 Contour (Residential Uses Not Permitted)

#### 2.3.2 Regina International Airport

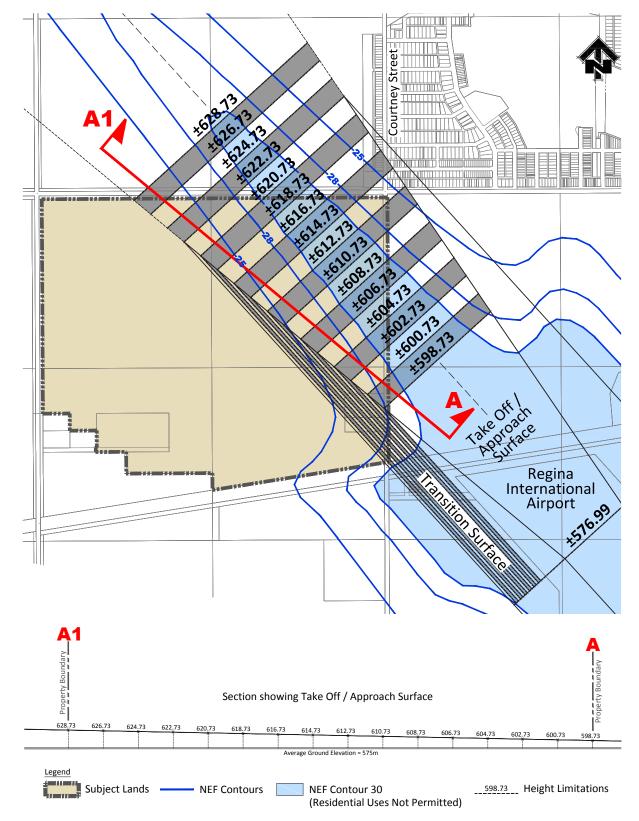
Westerra is located in close proximity to the Regina International Airport and benefits from economic and transportation synergies. The safe operation of the airport as well as the well being of city residents is paramount. It is the role of land use planners to avoid the creation of land use conflicts. As such, several regulations and guidelines at the federal, provincial and municipal jurisdictional level have been established to guide development and activity so as not to interfere with the safe operation of the airport.

The proximity of the plan area to the Regina International Airport presents some development constraints for portions of the plan area. These development constraints are primarily situated in the northeast corner of the plan area and relate to potential noise impacts and height restrictions. Portions of the the northeast corner of the plan area are contained within the Noise Exposure Forecast (NEF) 30 contour for the airport, within which residential development is not allowed. With residential development restricted in this area, the NEF contours have informed the location of the proposed business park land use within this portion of the plan area. Another impact that will influence the building form is the height restriction related to the flight path of airplanes associated with take off/approach and transitional surfaces. It should also be noted that storm pond facilities are another consideration and the area must be designed so as not to encourage waterfowl that could interfere with the operations of the airport. The NP has been developed in accordance with these constraints and future development shall remain fully compliant with all airport related development restrictions. A summary of the NEF and height Limitation development constraints in relation to the plan area is outlined in **Figure 8: NEF Contours and Height Limitations**.

- 2.3.2 (a) All applications for land use redesignation, subdivision and development permits shall have due regard for the safe and efficient operation of the Regina International Airport.
- 2.3.2 (b) Residential development shall not be permitted on those lands contained within the Noise Exposure Forecast contour of 30 or greater as outlined on Figure 8: NEF Contours and Height Limitations.
- 2.3.2 (c) Residential building construction within the 25-30 NEF contours must comply with all applicable Federal and Provincial regulations regarding noise attenuation.
- 2.3.2 (d) In order to support the safe operations of aircraft, retention stormwater ponds or stormwater channels shall be prohibited within the neighbourhood plan area.
- 2.3.2 (e) Permanent or temporary development of lands in Westerra shall adhere to all applicable legislation regarding the Regina International Airport inclusive of the City of Regina Zoning Bylaw and the Regina Airport Zoning Regulations.
- 2.3.2 (f) Permanent or temporary development of lands in Westerra should consider all applicable provisions of Land Use in the Vicinity of Airport Guidelines (TP 1274E) as published by Transport Canada.
- 2.3.2 (g) Where determined appropriate by the approving authority, concept plan, redesignation, subdivision and development permit applications should be referred to the Regina Airport Authority, NAV Canada and Transport Canada for comment.

Figure 8 - NEF Contours and Height Limitations

Source: Adapted from the Regina Airport Zoning Regulations, July 1, 2009 and City of Regina Noise Exposure Forecast Data



#### 2.3.3 Canadian Pacific Railway Line

The Canadian Pacific Railway (CPR) Line borders a portion of the south boundary of the plan area. This transportation infrastructure serves an important role in the Global Transportation Hub initiative. Land use compatibility through attention to site design and best management practices must be considered to ensure compatibility between the existing CPR line and the development of the plan area. As such, adherence to best practices and sound planning principles in terms of setbacks and mitigation measures have and will continue to be implemented as development occurs in proximity to the existing CPR railway.

In this regard, residential land uses in the south portion of the plan area, in proximity to the existing CPR railway will be sufficiently setback from the existing CPR right of way boundary. A municipal buffer and local roadway is envisioned to help separate residential land uses from active rail operations and to help mitigate against potential impacts from existing railway operations such as noise and vibration. A conceptual overview of this land use transition buffer is outlined in **Figure 9 - Land Use Transition Buffer**. It is anticipated that the proposed municipal buffer would include a berm, landscaping treatment and local pathway system.

#### **POLICIES:**

- 2.3.3 (a) Residential Land uses shall be setback a minimum of 40 metres from the existing CPR rail line right of way boundary.
- 2.3.3 (b) The City shall require the dedication and construction of a municipal buffer abutting the CPR corridor that is in general accordance with the conceptual illustration outlined in Figure 9 Land Use Transition Buffer , and the following minimum requirements:
  - I. A minimum overall width of 40 metres;
  - II. A landscaped berm sufficient to provide safety and noise attenuation;
  - III. Landscaping and a pathway constructed along north side of the berm;
  - IV. A safety fence constructed along the rail corridor property line.
- 2.3.3 (c) The berm situated within the proposed municipal buffer as detailed in Figure 9 Land Use Transition Buffer shall be constructed prior to any residential occupancy of land within Phase 2 as shown in Figure 20 - Concept Plan Boundaries.
- 2.3.3 (d) Adequate pedestrian crossings and measures to prevent trespass from the proposed municipal buffer to the CPR rail right of way shall be considered and implemented where possible in coordination with CPR.

#### 2.3.4 Adjacent Industrial Uses

Situated to the southwest boundary of the Neighbourhood Plan area is an existing industrial area situated in the Rural Municipality (RM) of Sherwood No. 159. At present, this industrial area contains a range of industrial uses including Newalta and Brandt.

Newalta is located immediately adjacent to the southwest boundary of the plan area. Based on discussions with the City and operator of the Newalta Site, it is understood that Newalta operation is involved in the management and processing of oil field waste and associated by-products. The site adjacent to Newalta contains a facility which is now closed but was previously operated by Envirogun as a waste processing facility. The third site is operated by Brandt, which occupies a large portion of the existing industrial area. The existing Brandt operation is an active agricultural equipment manufacturing plant with large portions of their site dedicated to outdoor storage of equipment.

Based on the existing land uses occurring on the Newalta site and the previous use of the former Envirogun site, the City has identified that under the Hazardous Substances and Waste Dangerous Goods Act, future residential development within Westerra should be setback 100 metres from hazardous waste facilities with indoor storage and 500 metres from hazardous waste facilities with outdoor storage. The extent of the current residential setback requirement in relation to the plan area is shown on **Figure 7: Land Use and Development Constraints**.

In response to this development constraint, residential land uses within 500 m of the existing Newalta and the former Envirogun site cannot be realized under these existing development conditions. The ultimate development of residential lands within this current setback area cannot occur until such time as the current operations of the Newalta site change to reduce or nullify the current 500 m setback requirement. A change in current industrial activities could include the conversion of outdoor processing activities to indoor processing activities or the complete decommissioning of operations. Should existing operations cease, provincial approvals relative to decommissioning and reclamation of both sites may be required. This provincial process involves decontamination, reclamation, monitoring and management of the affected area.

**Figure 7: Land Use and Development Constraints** has identified the portions of the plan area impacted by the current 500 metre residential setback requirements. The setback area and supportive policy recognizes that under the existing development conditions of the Newalta and former Envirogun site that future residential land uses in the setback area cannot be realized until such time as the operations within the Newalta and former Envirogun site are modified (i.e. conversion to indoor storage) or terminate (i.e. facilities are no longer in operation).

When residential development within this portion of the plan area is able to proceed, to ensure the compatibility of future residential uses with existing Brandt operations and the potential light industrial use of the Newalta site and former Envirogun site, a 40-60 metre municipal buffer with a 5 metre high berm along the southern boundary of the Neighbourhood Plan area as shown in **Figure 9 – Land Use Transition Buffer** is proposed. The provision of this municipal buffer with berm would provide a consistent treatment of lands along the entire southern boundary of the plan area and provide a logical land use transition area between the existing CPR lands and future residential development and existing industrial area and future residential development.

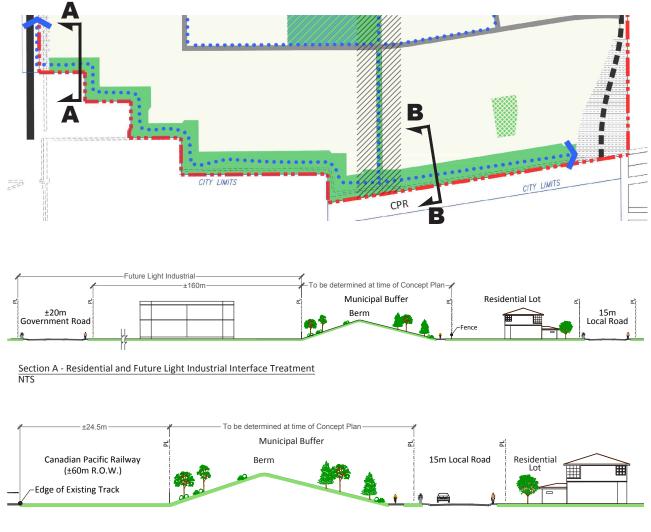
#### **POLICIES:**

### 2.3.4 (a) Where residential is proposed adjacent to existing industrial lands, the City, at its discretion, may require:

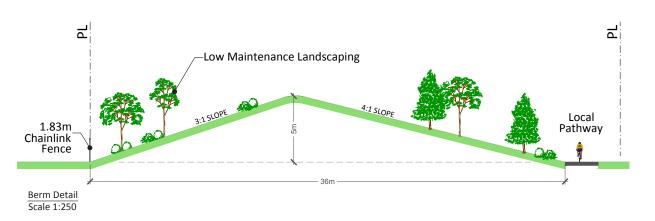
- I. A landscaped buffer, or
- II. In the case of indoor storage of hazardous waste, adjacent to proposed residential, a 100 metre setback distance in addition to a landscaped buffer (within the setback), or
- III. In the case of outdoor storage of hazardous waste, adjacent to proposed residential, a 500 metre setback distance in addition to a landscaped buffer (within the setback), or
- IV. Any combination of buffering and separation that the City may require to ensure land-use compatibility.
- 2.3.4 (b)Notwithstanding any other policy of this Plan, the City will not approve a concept plan or rezoning of the Phase III lands, as identified on Figure 20 Concept Plan Boundaries, unless it can be demonstrated, to the City's satisfaction, that there are no adjacent land-uses or operations (e.g. outdoor storage of hazardous waste material) that might render the Phase III lands as inappropriate for residential development.
- 2.3.4 (c)Through the concept plan process, the City may require, at its discretion, the submission of a noise impact/attenuation study in order to determine appropriate setbacks from adjacent land uses associated with potential noise impacts (i.e. railways, RCMP operations, industrial operations). The results of the noise impact/attenuation study should further inform setback requirements and mitigation measures necessary to ensure land use compatibility.

Figure 9 - Land Use Transition Buffer





Section B - Residential and CPR Railway R.O.W. Interface Treatment NTS



Regina OCP - Part B Part B.14 - Westerra Neighbourhood Plan Page 18 of 60

# **3.0** Community Design & Land Use

### 3.1 Westerra Vision

Building on the recent success and completion of the *Design Regina OCP* and guidelines for complete neighbourhoods, "Westerra" represents a complete community within the City of Regina. A variety of employment and commercial land uses are integrated throughout the plan area to meet both regional and local needs. Neighbourhoods are well connected and include defined focal points, a range of housing options are supported by a connected roadway network and parks and open space system supportive of passive and active recreational opportunities. The vision statement from the *Design Regina OCP* defines Regina as a sustainable community where people live in harmony. Complete communities provide choice and opportunities to get around easily. The Westerra Neighbourhood Plan builds upon the City's vision.

"The year is 2030. Westerra is fully developed and has established itself as dynamic neighbourhood that is evolving and vibrant. Westerra contributes to the City of Regina's reputation as an attractive, sustainable and inclusive community within the Region. The main street retail area of Westerra has become a key element of its identity and sets it apart from any other community. Westerra's mix of land uses, choice and ease of getting around solidifies the neighbourhood as the prime environment to achieve an overall balanced lifestyle.

Westerra contains several thriving neighbourhoods each with its own individual focus, which altogether contribute to an overall vibrant complete community. The north contains a bustling main street with a mix of uses along with regional shopping. A business park area in the northeast provides employment for Westerra residents and the city, while diversifying the municipal tax base. The far northeast corner features an open space that functions as a detention pond as well a buffer between the business park area and adjacent residential area to the northeast. A greenway links all areas of the neighbourhood on a diagonal axis to the regional Devonian Pathway system.

The central area contains residential development of varying densities characterized by an open space system and future potential school site and a smaller field that incorporates the stormwater management system to the west. The residential area transitions through another linear open space to an open space buffer strip along the south. At the entrances of the community are features that create a sense of arrival for residents, and distinguish the area from adjoining areas."

### **3.2 Alignment with Design Regina:** The Official Community Plan Bylaw No. 2013-48

The Vision and Design Concept for Westerra relates to and supports the City of Regina's Vision and Community Priorities as established during the Design Regina process and the formation of Design Regina: The Official Community Plan Bylaw No. 2013-48.

#### **Design Regina OCP Vision Statement**

"Regina will be Canada's most vibrant, inclusive, attractive, sustainable community, where people live in harmony and thrive in opportunity.

- VIBRANT Young people and creative spirits are inspiring dynamic neighbourhoods and an exciting Downtown, all of which feature first-rate facilities for health, wellness and artistic expression.
- **INCLUSIVE** Our community welcomes people. We live the values of respect and trust and celebrate the strength that comes from our diversity.
- ATTRACTIVE Residents and visitors choose Regina because it is clean, green, lively, friendly, affordable and fun!
- **SUSTAINABLE** People forge a balance between the economic, social, environmental and cultural dimensions of their decisions by serving as stewards of the resources we share and by demonstrating leadership.
- HARMONY Empathy and understanding come from, and lead to, being safe in our homes and neighbourhoods; building strong social networks throughout the community creates synergy and sense of belonging.
- **OPPORTUNITY** The entrepreneurial spirit powers Regina as a centre of success where research, innovation and excellence abound."

CITY OF REGINA COMMUNITY PRIORITIES			
Develop complete neighbourhoods	<ul> <li>Create better, more active ways of getting around</li> </ul>		
<ul> <li>Embrace built heritage and invest in arts, culture, sport and recreation</li> </ul>	<ul> <li>Promote conservation, stewardship and environmental sustainability</li> </ul>		
Support the availability of diverse housing options	<ul> <li>Achieve long term financial viability</li> </ul>		
Foster economic prosperity	Optimize regional cooperation		

### 3.3 Design Principles

In accordance with the approved priorities of *Design Regina OCP*, Westerra has been planned as a mixed – use, complete community based on the principles of smart growth and sustainability. The concept of an urban centre anchored by an express transit corridor have been assessed and integrated into the plan area for Westerra.

Key design principles embodied in the Neighbourhood Plan include:

- LAND USE DIVERSITY Westerra contains a wide range of residential and non-residential land uses strategically situated and oriented throughout the plan area to meet regional and local land use needs and requirements.
- HOUSING MIX A wide range of housing product and housing density will be offered in Westerra to support a diverse population and allow residents to remain in the community as they move through various stages of their life-cycle. Anticipated housing will range from low to high density residential development and include single detached residential, attached housing forms, seniors housing and apartment units.
- **CONNECTIVITY** The street network will provide multiple access points into and out of the community to ensure integration of Westerra with surrounding development and the regional transportation system. A comprehensive system of sidewalks, muti-use pathways, greenways, and local/ regional pathways will support pedestrian circulation within the community and to major recreational amenities including Wascana Park. Strong physical connections between community facilities and amenities will promote and support interaction amongst residents and activate key corridors in Westerra.
- **COMMUNITY PLACES** Westerra will offer a wide range of passive and active recreational opportunities and community gathering places through the distribution of its parks and open space system. A strategically situated potential school site shall serve as the anchor of the reserve network and the integration of reserve dedication with greenways shall provide strong recreational linkages throughout the community.
- **COMMUNITY THEME AND DESIGN QUALITY** Forming the western gateway into the City of Regina, Westerra will maintain a high standard of architectural design and quality. Community theme and branding shall be expressed through the design details of improvements to the public realm including but not limited to lighting, signage, and street furniture throughout the community. The architectural integrity and standard of private realm development may be maintained throughout the community via the preparation and developer led administration of architectural control and design guidelines and where necessary, the preparation and adoption of direct control land use districts.

### 3.4 Land Use Overview

Westerra is planned as a complete community consisting of a full range of residential, commercial and business park land uses. An open space system providing both amenity sites and supporting the proposed stormwater management system has been integrated throughout the plan area. A series of interconnected collector, arterial and local roads provide several access points from within the community to the surrounding perimeter roads and to adjacent neighbourhoods. The general land use concept for Westerra is outlined in **Figure 10: General Land Use Concept**.

**Table 2** - **Neighbourhood Land Use Statistics** provides an overview of the land use statistics for the Neighbourhood Plan. These statistics have been calculated in order to provide clarity and direction with regards to anticipated land use yields, residential density and population projections.

LAND USE	AREA HECTARES	AREA ACRES	PERCENTAGE OF PLAN AREA
Low Density Residential	41.72	103.09	20.9%
Medium Density Residential	24.10	59.55	12.1%
High Density Residential	14.56	35.98	7.3% %
Live – Work Residential	1.20	2.96	0.6%
Large Format Retail	15.97	39.47	7.99%
Community Retail	7.34	18.13	3.67%
Main Street Retail	2.79	6.89	1.40%
Business Park	12.80	31.64	6.4%
Potential School on Municipal Reserve (MR)	3.00	7.41	1.50%
Municipal Reserve (MR)	13.60	33.59	6.80%
Municipal Buffer (MB)	8.98	22.20	4.50%
Municipal Utility Parcel (MUP)	1.71	4.22	0.85%
Municipal Walkway(s)	0.02	0.04	0.01%
Courtney Overpass ROW Dedication	2.21	5.46	1.11 %
Pinkie Road Widening ROW Dedication	2.90	7.17	1.45%
Roads (Minor Arterial, Collector, Local, Alleys)	46.95	115.99	23.49 %
Total	199.84	493.79	100%

#### Table 2 - Neighbourhood Plan Land Use Statistics

- 3.4 (a) The location and type of land use, open space, park features and transportation networks shall be in conformity with an approved concept plan which is in general compliance with this Neighbourhood Plan.
- 3.4 (b) Notwithstanding policy 3.4.(a), minor variances to the generalized land use concept introduced at the time a concept plan, rezoning and/or subdivision application is submitted shall not require an amendment to this Neighbourhood Plan.

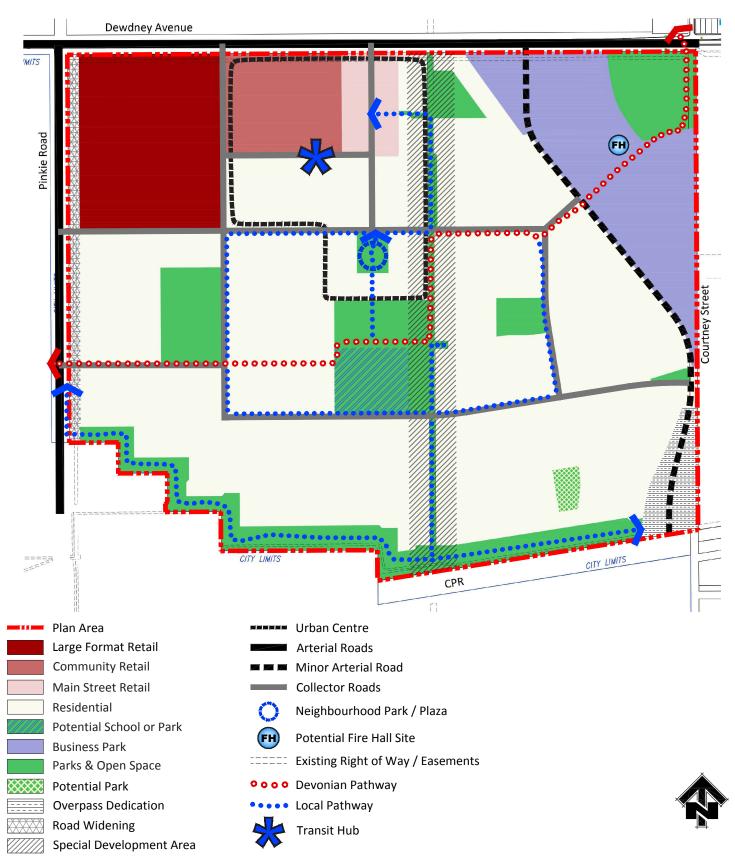


Figure 10 - General Land Use Concept

### 3.5 Residential

Under the *Design Regina OCP*, new residential areas are required to achieve a minimum gross population density of 50 persons per gross hectare. Based on the City requirements and the general land use concept, the minimum population target for Westerra is summarized as follows:

GROSS DEVELOPABLE	CITY POPULATION INTENSITY	MIN. POPULATION
RESIDENTIAL AREA (HA)	TARGETS	REQUIREMENTS
146.23 ha	50 persons per gross hectare**	7,312

**Figure 10 - General Land Use Concept** has identified those portions of Westerra envisioned for future residential development. At full build out, the population of Westerra is estimated to be approximately 7,464 persons based on projected land use yields, density targets and population per household estimates. This population projections equates to approximately 51.05 persons per gross hectare<sup>\*\*</sup>. A summary of anticipated residential density and population projections is outlined in **Table 3** - **Residential Density and Population Projections**:

#### Table 3 - Residential Density and Population Projections

RESIDENTIAL LAND USE	NET AREA (HECTARES)	DENSITY (UPNH)	NUMBER OF UNITS	POPULATION PER UNIT	POPULATION PROJECTIONS
Low Density Residential	41.72	25	1,043	3.0	3,129
Medium Density Residential	24.10	42	1,012	2.1	2,126
Live Work Residential	1.20	42	50	2.1	106
High Density Residential	14.56	85	1,238	1.7	2,104
Total	81.58	n/a	3,343	n/a	7,464
Population of <b>7,464 equates to 51.05 persons per gross hectare</b> **					

\*\* For this plan, density and population numbers correspond to land reserved for residential areas only (including local commercial, but excluding employment areas, restricted areas etc.).

The purpose of these policies is to provide for a range of housing types within Westerra that provide for choice and diversity to meet market demand while accommodating different economic levels, backgrounds and stages of life. The predominant housing form in Westerra will be single-detached dwellings. Multi-unit and innovative housing will be located throughout the Plan area to help achieve density requirements. Appropriate interface areas will be provided along with gradients in density to provide for transition and compatibility between the various uses.

#### **POLICIES:**

- 3.5 (a) Single-detached dwellings shall represent the predominant residential housing form in the community.
- 3.5 (b) Multi-dwelling residential development shall be located throughout the area predominantly in locations that support transit and mixed use development.
- 3.5 (c) Multi-dwelling residential development should be sensitive to the context of adjacent development and have a strong street presence.
- 3.5 (d) In addition to single-detached dwellings and multi-dwelling development, alternative forms of housing shall be encouraged and supported within the community in order to meet the needs of different lifestyles and to support the delivery of affordable housing.
- 3.5 (e) Alternative forms of housing may include, but are not restricted to: secondary suites; live-work housing; laneway housing and mixed-use housing.

#### 3.5.1 Low-Density Residential

The majority of residential development in Westerra will be low – density residential development in the form of single detached residential housing with an anticipated density of approximately 25 units per net hectare. Low density residential development is envisioned mainly in the central and southern half of community. Laned product will be made available in appropriate locations along with a variety in lot sizes and dimensions.

- 3.5.1 (a) The predominant use of land within the low density residential area shall be singledetached residential uses.
- 3.5.1 (b) The density target for low-density residential development should be approximately 25 units per net hectare.
- 3.5.1 (c) Secondary suites may be permitted within the low density residential area where determined to be compatible and appropriate.
- 3.5.1 (d) The general categories of uses identified shall be refined through the land use districts applied to the residential area.

#### 3.5.2 Medium-Density Residential

Medium density residential will form the second largest category of residential land use in the community. Medium density is similar in overall impact and visual appearance to low – density development but consists of various types of ground oriented multi-family housing forms such as semi-detached, row – housing and certain mixed – use developments. Anticipated density for medium density residential development is 42 units per net hectare.

Medium – density residential development is envisioned to be situated in proximity to collector roadways to keep traffic out of the low – density areas and to support planned transit routing. Notwithstanding, this type of development falls within the middle of the density continuum and can be easily integrated with the lower – density areas on a limited basis without negative impacts. The nuanced features of medium – density development housing forms and the ability to blend with areas of low – density enhances the mixed – use character of the community.

#### **POLICIES:**

- 3.5.2 (a) The predominant use of land within the medium density residential area shall be multi dwelling development including single detached housing with secondary suites, single detached housing with laneway housing, semi-detached housing, row – housing style and appropriate mixed use developments.
- 3.5.2 (b) The following types of uses may be permitted within the medium density residential area where determined to be compatible and appropriate: Single detached dwellings containing two (2) dwelling units; duplexes; triplexes; fourplexes; row houses; townhomes.
- 3.5.2 (c) The density target for medium-density development should be approximately 42 units per net hectare.
- 3.5.2 (d) The general categories of uses identified shall be refined through the Land Use Districts applied to the medium density residential area.

#### 3.5.3 Live Work Residential

A small portion of the future residential area is envision for future live - work residential uses. The intent of the live work residential area is to support a transition from main street retail / mixed use area to centralized open space and predominantly residential areas in the south portion of the plan area. This classification will permit the development of medium density housing forms in conjunction with limited business, office or limited retail functions. The anticipated density of the live work residential area is 42 units per net hectare. The proposed blocking of the live work area, road network and alley configuration will support on street parking and rear unit access which could be utilized to meet visitor parking requirements. The joint tenure and smaller scale of live work buildings between residential and business use will help differentiate the live work area from the main street area and which may consist of mixed retail and residential uses and will define the character of the entrance to Westerra from Dewdney Avenue.

- 3.5.3 (a) Live/work building units may be considered for development within the urban centre, between the proposed main street and the neighbourhood park/urban plaza.
- 3.5.3 (b) The predominant use of land within the live work area shall be medium residential development with optional small scale business, office or retail functions which are secondary to the primary residential use of the building.
- 3.5.3 (c) The density target for live work residential development should be approximately 42 units per net hectare.
- 3.5.3 (d) The general categories of uses identified shall be refined through the Land Use Districts applied to the medium density residential area.

#### 3.5.4 High-Density Residential

High density development in Westerra shall generally consist of multi – family development typically characterized by smaller units and higher – rise developments (four stories and less) such as apartments and mixed – use developments. High density residential development is envisioned to be situated near entryways into the community, along collector roadways and transit routes and in immediate proximity to the urban centre. High density residential development in Westerra could potentially accommodate seniors housing when located in proximity to transit, services and amenities. Anticipated density for high density residential development is 85 units per net hectare.

#### **POLICIES:**

- 3.5.4 (a) Higher density residential development shall be generally directed to those lands and surrounding areas identified as the urban centre and along the major roadways and transit corridors identified to support the development of the NP area.
- 3.5.4 (b) The predominant use of land within the high density residential area shall be apartments (four stories and less) and mixed use developments where appropriate.
- 3.5.4 (c) Notwithstanding policy 3.5.4 (b) higher density buildings greater than four stories in height may be permitted within the urban centre where minimum parking requirements are located within the building.
- 3.5.4 (d) High density residential development shall be separated from low density development through the utilization of transitional land uses such as such as medium residential density uses and/or the utilization of landscaping, fencing and other buffering techniques identified as part of a site development plan for high density development.
- 3.5.4 (e) The density target for high density development should be approximately 85 units per net hectare.
- 3.5.4 (f) The general categories of uses identified shall be refined through the land use districts applied to the high density residential area.

### 3.6 Urban Centre

Consistent with the direction set out in the City of Regina Official Community Plan, Westerra envisions the creation of a lively, activated urban centre as a key component of its land use and development framework. In the most general sense, the purpose of the urban centre is as follows:

- To create a daily shopping, living and employment focus for the surrounding area; and
- To provide a wide range of retail goods and services serving Westerra and the surrounding area.

For the purposes of this Neighbourhood Plan, the urban centre is generally considered to consist of a portion of the community retail area, main street area, live work residential and medium - high density residential areas situated in the north central portion of the plan area. The location of medium to high density development in proximity to the urban centre has been undertaken to activate and support these varying scales of retail and employment uses and to support this area as the main focal point of Westerra.

- 3.6 (a) The use of land in the urban centre should include: a main street retail area; high density residential; a community retail area; live/work residential; medium density residential; local commercial services; civic and recreational uses; urban plaza and a transit hub.
- 3.6 (b) Public uses and accessory uses may also be allowed within the urban centre where determined to be compatible and appropriate.

- 3.6 (c) The general categories of uses identified shall be refined through the land use districts applied to the urban centre at the time of a land use bylaw amendment application.
- 3.6 (d) The urban centre should be designed and developed as a compact, mixed-use pedestrian oriented environment.
- 3.6 (e) Vertical mixed use development of residential uses with retail uses within the urban centre should be encouraged.
- 3.6 (f) Local/neighbourhood office and medium scale office may be allowed within the urban centre, in accordance with the office policies of the *Design Regina OCP*.
- 3.6 (g) The gateway to the urban centre situated at the intersection of Dewdney Avenue and the proposed main street should be framed by buildings with a form and character which respects their gateway function and provides significant aesthetic amenity to Dewdney Avenue.
- 3.6 (h) Within the urban centre area as shown on Figure 10: General Land Use Concept, a centrally located urban plaza should be developed to serve as a key focal point for the plan area and provide a location for passive and active recreational opportunities, outdoor civic activities, arts/ culture events and leisure. Key elements of the plaza may include: public art, fountain(s), hard surfacing, performance area, etc.
- 3.6 (i) The City may amend the Zoning Bylaw in order to ensure that appropriate standards and regulations are enacted, which will implement the policies of this Plan relating to the design and function of the urban centre.

### 3.7 Main Street Retail

The central access point into Westerra is intended to be formed and characterized by a main street retail land use and built form. Served by angled parking and characterized by a well landscaped and defined central median, the main street retail area is envisioned to be fine – grained, street – level small format retail uses with pedestrian and vehicular access from the street. Where possible, vertically mixed-use buildings with residential uses situated above retail shall be encouraged. The built form of the main street retail area is anticipated to be approximately 1-2 storeys in height which will provide definition of this area as the centre of Westerra and also establish a sense of enclosure to the pedestrian environment. The pedestrian environment is key in this type of retail use and attention to architectural and urban design details shall remain paramount. Residential density and intensity is envisioned to cluster around the main street retail area, which is intended to support and activate this proposed land use.

- 3.7 (a) The use of land in the main street retail area may include: civic and recreational uses; small format retail; mixed use retail/residential; mixed use retail/office/employment; local commercial services, entry features; and one or more bus transit stops.
- 3.7 (b) The predominant use of land in the main street retail area shall be smaller-scale retail uses and employment or residential uses located in mixed use buildings fronting onto the central main shopping street.
- 3.7 (c) Pedestrian use shall be priority when designing streetscape features such as store fronts, sidewalks, walkways, etc.
- 3.7 (d) The general categories of uses identified shall be refined through the land use district applied to the main street retail.

### 3.8 Community Retail

The community retail area will primarily accommodate medium scale commercial uses that cater to the daily needs of local residents. A secondary use within the community retail area may include high density residential development located within the south and/or east boundaries of the community retail area.

Community retail falls within the middle range of the retail continuum and blends well with main street retail on the eastern edge and large format retail on the western edge. As such, the community retail serves as a transition between the main street commercial uses to the east and the large format retail to the west. The commercial uses are located along Dewdney Avenue for maximum exposure to traffic and to create the conditions for a transit hub. Commercial traffic can easily travel from the community retail area to the large – format retail area to the west. The addition of strategically placed high density residential development within this area will further strengthen the urban centre and serve as an appropriate transition to medium density residential uses to the south of these lands.

Community retail uses might include small to medium scale commercial uses such as banks, pharmacy, liquor store, grocery store, restaurants, hotels, and personal services such as hair salons. Accessory uses to the community retail area are envisioned to include parking areas, pedestrian walkways and plazas where appropriate. Pedestrian features should be integrated into the design of the community retail area to support safe pedestrian circulation and promote and enhance linkages and connections to surrounding development including adjacent residential areas and the proposed main street retail area.

#### **POLICIES:**

- 3.8 (a) The use of land in the community retail area may include: community retail (e.g. grocery stores, restaurants, hotels, shops and services); plazas and walkways; office and other employment related uses; civic and recreational uses; local commercial services; one or more bus transit stops and high density residential (at the south and/or east boundaries of the community retail).
- 3.8 (b) Should the City require the development of a central transit hub facility in proximity to the community retail area, the master site development plan of the community retail area should support synergy between the transit hub and the adjacent community retail uses.
- 3.8 (c) Public uses and accessory uses may also be allowed within the community retail area where determined to be compatible and appropriate.
- 3.8 (d) The general categories of uses identified shall be refined through the land use districts applied to the community retail area.
- 3.8 (e) As a prerequisite for rezoning and subdivision approval, a master site development plan shall be submitted, pertaining to the proposed community retail area, which shows the general location of: building footprints; landscaping and lighting; parking; access; pedestrian connections; traffic signals and markings; transit facilities; etc.

### 3.9 Large Format Retail

The large format retail area will serve as a regional draw that benefits from high visibility, large traffic volumes and convenient access from Dewdney Avenue and Pinkie Road. Large format retail typically includes larger format stand – alone structures with parking sufficient to accommodate a regional trade market. Large format retail building forms typically involve single story, large footprint, buildings and are usually located on a single site. They are also typically operated as part of a chain store. Larger volumes of traffic are anticipated to visit the large format retail and accordingly it is situated at a major intersection with two access points off of Dewdney Avenue and Pinkie Road.

#### **POLICIES:**

3.9 (a) The predominant use of land in the large format retail area should be larger format retail commercial uses that serve as a regional commercial draw and support the development of the large format retail, community retail and main street areas.

- 3.9 (b) The following additional uses may be allowed in the large format retail area where determined to be compatible and appropriate: plazas and walkways; public uses, and accessory uses.
- 3.9 (c) The general categories of uses identified shall be refined through the land use districts applied to the large format retail area.
- 3.9 (d) As a prerequisite for rezoning and subdivision approval, a master site development plan shall be submitted, pertaining to the proposed large format retail area, which shows the general location of: building footprints; landscaping and lighting; parking; access; pedestrian connections; traffic signals and markings; transit facilities; etc.

### 3.10 Business Park

The purpose of the business park area is to accommodate light industrial uses, office uses and other employment generating land uses within a comprehensively developed business park format. The business park has been strategically located in the north east portion of Westerra to address the land use constraints associated with the Regina International Airport, specifically lands with the NEF contour of 30 or greater.

The business park area is situated between residential uses to the southwest and municipal reserve uses to the northeast. As part of the generalized land use concept, provisions have been made to establish a greenway connection through the business park area to connect with the parks and open space system proposed for Westerra with the Dieppe community to the north. It is anticipated that this greenway connection, coupled with the proposed municipal reserve network shall provide passive and active recreational opportunities.

In order to establish a consistent and appropriate interface between the proposed business park and the adjacent residential uses, the City may require the construction of a landscaped berm, which is located on private lots and is privately owned and maintained. A conceptual overview of the proposed berm treatment is outlined in **Figure 11: Business Park - Residential Interface.** It is anticipated that once constructed, all obligations to maintain the landscaped berm shall be the responsibility of residential and business park lot owners.

- 3.10 (a) Land uses within the business park area should generally correspond with the City's Prestige Industrial zone; however, the City may consider other appropriate uses, such as:
  - I. Office development, in accordance with the Official Community Plan (Part A)
  - II. Light industrial development located on lots within the interior of the business park area;
  - III. Research and development;
  - IV. Compatible and appropriate commercial development.
- 3.10 (b) The general categories of uses shall be refined through the land use districts applied to the business park area.
- 3.10 (c) In order to achieve a high quality, fully serviced employment area for Westerra and surrounding area, the business park area shall provide for an integrated sidewalk, walkway, pathway and greenway system to accommodate transit stops, pedestrian connectivity, and building linkages.
- 3.10 (d) In order to ensure compatibility with the adjacent residential areas, the business park should be designed to provide a well-defined interface and transition to the adjacent residential areas.
- 3.10 (e) Notwithstanding any other policy herein, the City shall not require the construction of the buffer described in Figure 11 Business Park Residential Interface, unless authorized by the Zoning Bylaw; however, the landowner(s) are encouraged to undertake the buffer construction as a private development.



Figure 11 - Business Park - Residential Interface



## 3.11 Civic Uses

Civic uses are addressed in *Design Regina OCP* in terms of culture, health and safety and social needs. Civic needs have been assessed for Westerra in consultation with the appropriate agencies and provided for accordingly in the NP. In addition to providing high level guidance to civic uses within the NP area, the NP also provides a framework for the parks and open space system.

#### 3.11.1 Potential School Site

Institutional needs have been assessed for Westerra in consultation with the appropriate agencies and provided for accordingly in the NP. The school authority has indicated the potential need for a school site in the area and the Plan has been designed to incorporate this use along with connections to the parks and open space system. Should a school not be required on this land, the alternative would be park space.

#### **POLICIES:**

- 3.11.1 (a) A site for a potential school shall be reserved, as generally shown on Figure 10 General Land Use Concept; however, through the concept plan process, the City shall work with the school authorities to determine the need for, specific location of, and size of the school site.
- 3.11.1 (b) The concept plan that applies to the proposed school site shall include a street and park configuration that will allow the school site to transition to an appropriate park area should the school not be required.
- 3.11.1 (c) Portions of the potential school site intended for building and development purposes shall not be situated within the following areas:
  - Those lands situated with the NEF 30 or greater noise forecast contour of the Regina International Airport
  - Those lands situated within 60 metres of the natural gas pipeline situated in the SaskEnergy gas line easement
  - Those lands situated within 75 metres of the CPR right of way
- 3.11.1 (d) Notwithstanding any other policy of this Neighbourhood Plan, should the City and the school authority determine that a potential school site is not required, the concept plan which includes the potential school site may allow for those portions of the potential school site identified for building and development purposes to allow for park uses without an amendment to this plan, or any applicable concept plan, being required.

#### 3.11.2 Emergency Services Facility

The planning for a future fire hall location within Westerra has been requested by emergency services personnel during the preparation of this Neighbourhood Plan. **Figure 10** - **General Land Use Concept** has identified the approximate location of a future fire hall which would have good access and be compatible with adjacent land uses. The exact location and size of this site will be will be determined at the time of zoning and subdivision.

In the event of an emergency requiring fire response prior to the construction of an additional fire hall in Westerra, the plan area is anticipated to be served by the existing City fire hall at 3855 Dewdney Avenue. The estimated emergency response time from this facility to Westerra is approximately 7 minutes as the fire hall is situated approximately 4.5 km from the planned main street entrance to Westerra. The main Police station located in downtown Regina is expected to provide police service to the area. The plan area is also expected to be served by the Ambulance base located at Albert Street and Dewdney Avenue.

POLICIES:

3.11.2 (a) Specific needs and location of an additional Emergency Services site shall be identified at the time of zoning and subdivision under consultation with local emergency services personnel.

## 3.12 Parks and Open Space

The City of Regina Open Space Management Strategy was adopted in October 2007 with five main objectives. Firstly to make sure the city's open spaces are planned with maximum flexibility to accommodate multiple uses. Secondly the intent is to ensure that planning for park space is incorporated into the overall planning process and to ensure that the municipal open space system is coordinated and linked in a comprehensive manner throughout the city.

The open space system for Westerra has been designed to support the stormwater management requirements of the NP as well as to provide recreational and amenity space to residents and visitors. In general terms, the open space system consists of both municipal reserve, municipal buffer dedications and municipal utility parcel(s). Efforts have been undertaken to consider the linkages and relationship between these open space elements.

The parks and open space system has been designed to provide ease of access to the majority of future residents of Westerra. A five minute walking radius standard was utilized to distribute the parks throughout the plan area. The form and function of park dedication and the parks programming should be established at the time of the concept plan, zoning and subdivision.

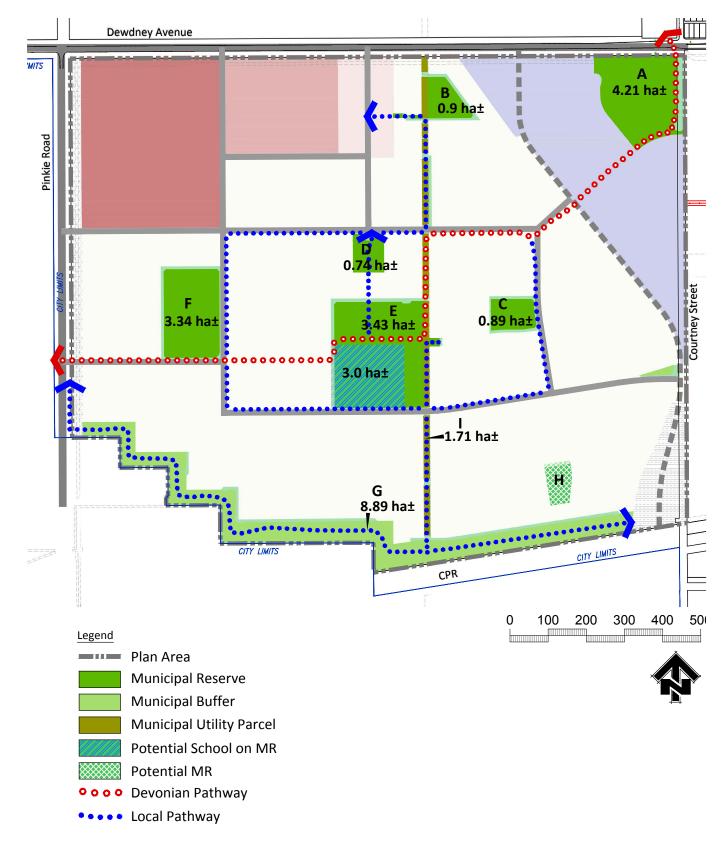
- 3.12 (a) The parks and open space system for Westerra should consist of a combination of municipal reserve, municipal buffer(s) and municipal utility parcel(s).
- 3.12 (b) A minimum of 10% for gross residential areas and 5% for gross non residential areas within the plan area should be devoted to municipal reserve; however, the City shall first deduct, from the gross area, land use elements that qualify, in accordance with the Planning and Development Act, 2007, for municipal reserve exemption.
- 3.12 (c) Municipal reserve (park spaces) should:
  - Be centralized to support neighbourhood activities
  - Be highly visible to address CPTED issues and concerns
  - Be accessible and strategically located
  - Serve as a terminus or place making function where appropriate
  - Support linkages between the Devonian pathway and the Dieppe neighbourhood
  - Be designed for year round use where possible
  - Be designed to be accessible to the physically disabled
- 3.12 (d) The configuration of the Westerra Open Space Network is generally shown on Figure 12: Parks, Pathway and Open Space Network but shall be confirmed at the concept plan, zoning and subdivision stage to the satisfaction of the City of Regina.
- 3.12 (e) Programming for the Open Space areas shall take place at the Concept Plan, Zoning and/or Subdivision Stage.
- 3.12 (f) As a condition of subdivision approval for each phase of development, the Developer shall provide a public open space amenities plan, prepared by a qualified professional, to detail the specific type and location of public open space dedication, including an illustration and description of proposed grading, plantings, and/or improvements anticipated therein, to the satisfaction of the City.

- 3.12 (g) All improvements proposed within a public open space shall be provided by the Developer and maintained by the City of Regina, as per a subdivision and development agreement established at the subdivision stage to the satisfaction of the City of Regina.
- 3.12 (h) Where parks are intended to accommodate stormwater:
  - I. The parks shall be designed to support active recreation as the primary use;
  - II. A design solution and drainage study shall be submitted by the developer, at the subdivision stage, demonstrating to the City's satisfaction how stormwater can be accommodated without detracting from the viability of the park as an active recreation space.

**Table 4 -** Open Space System and Potential Facilities

AREA	ТҮРЕ	POTENTIAL FACILITIES	AREA (HECTARES)	AREA (ACRES)
А	Municipal Reserve	Neighbourhood Park that supports multi- purpose sports fields and play areas.	4.21	10.40
В	Municipal Reserve	Neighbourhood Park, Playfield, and Playground	0.90	2.22
с	Municipal Reserve	Neighbourhood Park, Playfield, and Playground	0.89	2.20
D	Municipal Reserve	Urban Park/Plaza, soft and hard landscaping improvements, local pathway	0.74	1.83
E	Municipal Reserve	Neighbourhood Park that supports a multi- purpose sports field and/or school site and play area	6.43	15.89
F	Municipal Reserve	Neighbourhood Park that supports multi- purpose sports fields and play areas.	3.34	8.25
G	Municipal Buffer	Landscaped Berm, Fencing, Local Pathway	8.89	21.97
н	Potential Municipal Reserve	Neighbourhood Park and playground	0.00	0.00
I	Municipal Utility Parcel	Linear Park, Pathway	1.71	4.23
		Total	27.11	66.99

An overview of the proposed municipal reserve network is outlined in **Figure 12: Parks, Pathway and Open Space Network.** A summary of the major open space areas within the Neighbourhood Plan, classification type and intended programming is outlined in **Table 4** - **Open Space System and Potential Facilities**. It is anticipated that the detailed programming of reserve lands shall be provided at the time of concept plan, land use and subdivision application and developed in consideration of all overall facility requirements based on forecast population and in consultation with the City of Regina parks department. Where appropriate, reserve lands may be utilized in part to support the development of community gardens within Westerra.



#### Figure 12 - Parks, Pathway and Open Space Network

#### 3.12.1 Pathways and Trails

Local and regional pathway systems will be provided throughout the NP area as an amenity for residents as shown in **Figure 12: Parks, Pathway and Open Space Network.** Local and regional pathways will promote a healthy environment, active living and social interaction.

The regional pathway system has been designed to link into the regional Devonian pathway system within the Dieppe community to the northeast. A greenway following a northeast diagonal axis transitioning between the residential and the business park area will be implemented as part of the road network in accordance with the City of Regina's policies regarding same.

**POLICIES:** 

- 3.12.1 (a) A network of linear open space and pathways should be established generally in conformance with Figure 12: Parks, Pathway and Open Space Network.
- 3.12.1 (b) Internal pathways and open spaces shall be illustrated in a Concept Plan for each area of development, and shall provide links to the overall NP pathway system identified in Figure 12: Parks, Pathway and Open Space Network.
- 3.12.1 (c) As shown on Figure 12, pathways shall be designed and implemented as part of the Westerra road network to supplement and support the proposed open space network, local and regional pathway system.

#### 3.12.2 Municipal Reserve

The purpose of these policies is to outline the future dedication of municipal reserve land in order to meet the educational and recreational needs of Westerra. As outlined on **Figure 12: Parks, Pathway and Open Space Network** proposed municipal reserve dedication is situated throughout the plan area to support a range of amenity spaces, passive and active recreational opportunities for residents and visitors to Westerra. Based on the provisions of the *Planning and Development Act*, the total amount of municipal reserve owing (residential and non-residential) based on the land use plan for Westerra is +/- 16.59 hectares. It is anticipated that this number will be refined and confirmed as concept plan, land use and subdivision applications proceed. An overview of municipal reserve requirements and proposed municipal reserve dedication is outlined on **Table 5 - Municipal Reserve Requirements and Proposed Dedication**.

**POLICIES:** 

3.12.2 (a) The location, size and use of municipal reserve space shall generally be in accordance with Figure 12: Parks, Pathway and Open Space Network, Table 4 - Open Space System and Potential Facilities and Table 5 - Municipal Reserve Requirements and Proposed Dedication; however, the exact location, size and use of municipal reserve shall be determined at the concept plan stage and finalized at the subdivision stage.

	± HECTARES	± ACRES
Total Plan Area	199.84	493.79
Less Courtney Overpass Right of Way Dedication and Purchase	2.21	5.46
Less Regional Roadways (Courtney Street as Minor Arterial)	4.58	11.31
Less Pinkie Road Right of Way Dedication and Purchase	2.90	7.17
Less Municipal Utility Parcel lands	1.71	4.22
Gross Developable Area (for municipal reserve calculation purposes)	188.44	465.63
Gross Residential Area of GDA	143.50	354.60
MR outstanding (10 % Gross Residential Area)	14.35	35.46
Gross Non - Residential Area of GDA	44.93	111.03
MR outstanding (5 % Gross Non – Residential Area)	2.25	5.55
Total Municipal Reserve Requirement (Residential and Non - Residential)	16.59	41.01

#### Table 5 - Municipal Reserve Requirements and Proposed Dedication

\*Additional municipal reserve will be dedicated in phases 2 and 3 to ensure requirements of the PDA are met.

#### 3.12.3 Municipal Buffer

Municipal buffer dedication is intended to provide a buffer to prevent land use conflicts. In the Westerra NP, the southern boundary of the plan area has been carefully designed to accommodate a sensitive interface alongside the residential development and the CPR line and adjacent industrial area to the south. This will qualify as municipal buffer dedication (MB) and has been incorporated to form part of the parks and open space system. This buffer will be designed and constructed to include a landscaped berm, pathway and perimeter fence as shown in **Figure 9 - Land Use Transition Buffer**. As such, this buffer serves to transition between land uses but also supports the recreational needs of residents. The Plan proposes to dedicate +/- 8.89 hectares of municipal buffer. At the time of detailed design, the municipal buffer may be constructed in accordance with the specifications outlined in the Guidelines for New Development in Proximity to Railway Operations and also in consideration of any future noise impact/attenuation studies completed in advance of Phase 3.

- 3.12.3 (a) The location, size and use of municipal buffer space shall generally be in accordance with Figure 12: Parks, Pathway and Open Space Network and Table 4 - Open Space System and Potential Facilities; however, the exact location, size and use of municipal buffer shall be determined at the concept plan stage and finalized at the subdivision stage; furthermore, a municipal buffer along non-railway lands shall be at the discretion of the City.
- 3.12.3 (b) The design and configuration of the proposed municipal buffer should be in general accordance with Figure 9- Land Use Transition Buffer.

#### 3.12.4 Municipal Utility Parcel(s)

Municipal utility parcel dedication is intended for lots and/or corridors that provide an exclusive public utility function. For the purposes of this plan, portions of the SaskEnergy pipeline right of way have been identified for future dedication as a municipal utility parcel. Although dedicated for utility purposes, it is intended that these lands will also serve part of the overall parks and open space system by accommodating pathway, and landscaping improvements as permitted by the existing encumbrances registered on title. Where portions of the pipeline have not been identified within a future municipal utility parcel, the registered right of way and associated encumbrances shall carry forward on to subdivided lands. All future development of lands encumbered with the right of way shall comply with the development restrictions as outlined in these encumbrances.

#### **POLICIES:**

- 3.12.4 (a) The location, size and use of municipal utility parcels shall generally be in accordance with Figure 12: Parks, Pathway and Open Space Network and Table 5; however, the exact location, size and use of municipal utility parcels shall be determined at the concept plan stage and finalized at the subdivision stage.
- 3.12.4 (b) The location and amount of municipal utility parcel dedication shall be detailed at the time of a concept plan, zoning and subdivision application.
- 3.12.4 (c) Where permissible by registered encumbrances, municipal utility parcels may include trail and landscaping improvements to support passive and active recreational opportunities and pedestrian/bicycle circulation throughout the NP area.
- 3.12.4 (d) All future development of lands encumbered by a right of way plan and an accompanying right of way agreement shall comply with the terms of the registered agreement and consult with the registered encumbrance holder in the preparation of site development plans.
- 3.12.4 (e) Where underground services cannot be accommodated in the back of private lot(s) when abutting designated public space, underground services may be located within a strip of land, dedicated as a municipal utility parcel, abutting the designated public space.

#### 3.12.5 Environmental Reserve

There are no lands that are eligible for the purpose of the dedication of environmental reserve (ER) land in accordance with the provisions of the *Planning and Development Act*. No significant natural features are present within Westerra, such as wetlands and watercourses. As such, no land has been dedicated as environmental reserve.

## 4.0 Transportation

### 4.1 Overview

**Figure 13: Transportation Network** provides an overview of the transportation concept to support the ultimate development of Westerra. The proposed road network provides for multiple all directional access and egress points to Dewdney, Pinkie and Courtney Street in accordance with City standards and requirements. In support of the Neighbourhood Plan, a comprehensive traffic impact assessment has been completed (submitted under separate cover) to identify immediate and long term improvements to the transportation network necessary to support the implementation of Westerra.

The traffic impact assessment has informed the road network classification for the NP area and provided detailed and technical summary of required improvements to support the phased development of the NP area.

Key findings and recommendations of the traffic impact assessment are as follows:

- Dewdney Avenue will require a four-lane cross-section as part of the first phase of development.
- Several intersection treatments, particularly left-turn bays entering and exiting the development will be required along Dewdney Avenue in order to efficiently service the site.
- Pinkie Road and Courtney Street are expected to operate relatively well with a two-lane cross-section at the Phase 1, Year 2020 forecast horizon, however will require an upgrade to a four-lane cross-section by the Year 2040 forecast horizon.
- It is recommended that Pinkie Road and Courtney Street be widened as required based on traffic growth and the need for additional north-south capacity in West Regina.

- 4.1 (a) A maximum of two (2) all directional access points to Pinkie Road, three (3) all directional access points to Dewdney Avenue, and two (2) all directional access points to Courtney Street shall be provided to support the ultimate development of Westerra.
- 4.1 (b) The location and function of major transportation infrastructure shall generally be in accordance with Figure 13 Transportation Network; however, the exact location and function of major transportation infrastructure shall be determined at the concept plan stage and finalized at the subdivision stage.
- 4.1 (c) Land dedication for potential road widening and overpass requirements shall generally be in accordance with Figure 10 General Land Use Concept. Land dedication requirements shall be confirmed at time of concept plan, redesignation and subdivision.
- 4.1 (d) Roadway and intersection improvements shall be undertaken in a phased and staged manner as warranted by traffic impact assessments accompanying concept plan submissions.
- 4.1 (e) Noise Impact/Attenuation studies may be required at the time of zoning and subdivision of residential lands adjacent to Courtney Street, Pinkie Road and Dewdney Avenue in order to determine if and when an interface treatment between adjacent residential lands and the roadway is required.
- 4.1 (f) Visual screening and sound attenuation measures such as sound walls should be incorporated into the design of roads where required by a noise impact study. Sound walls should be located on private property.

- 4.1 (g) Major roadways should connect to existing and planned roads within the City and the RM of Sherwood No. 159 in order to ensure that a coordinated regional network is achieved.
- 4.1 (h) A traffic impact assessment shall be required to accompany concept plan applications in order to confirm internal road network requirements, and appropriate intersection treatments with the external roadway system.
- 4.1 (i) Concept plans prepared for the south portion of the plan area, abutting the CPR corridor, shall identify the location(s) and footprint(s) pertaining to any grade separated rail crossing that may be required.

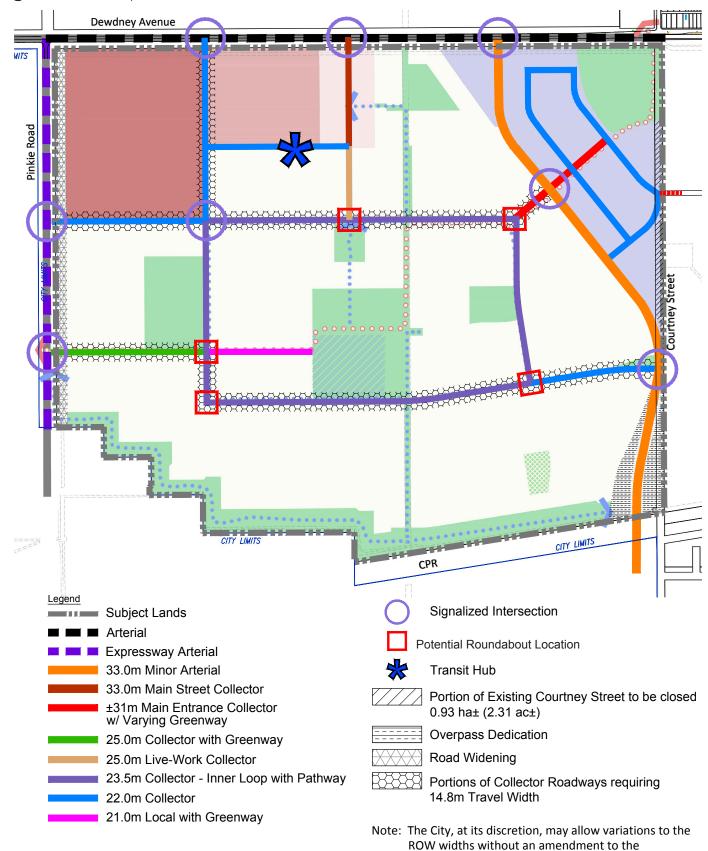


Figure 13 - Transportation Network

Neighbourhood Plan being required.

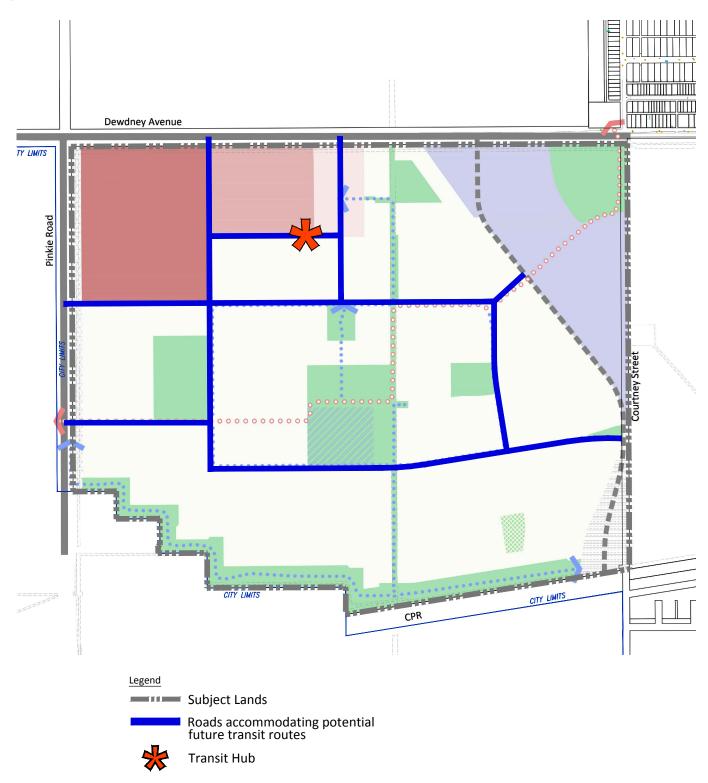
## 4.2 Road Network Hierarchy

Section drawings of the proposed road network hierarchy shall be confirmed at the time of a concept plan, zoning and subdivision application submission. Roadway sections proposed have been designed to accommodate pedestrian and cyclists requirements to support efficient pedestrian and cycling circulation throughout the plan area. Specifically, a number of roadway sections includes multi-use pathways for the joint use of pedestrians and cyclists.

The proposed road network provides a layout that balances the needs of vehicle, cycling and pedestrian traffic in a safe and efficient manner. In this regard, the internal roads (i.e. collector and local roads) should facilitate connectivity and achieve a high quality neighbourhood environment. Connectivity results from a network design with multiple and parallel routes that disperse vehicle traffic flows and encourage walking, particularly for shorter destination and casual walking trips. A quality neighbourhood environment is achieved through a streetscape containing trees and sidewalks, together with on-street parking and uniform building setbacks and facades. These measures are considered integral to the achievement of a sustainable community design.

- 4.2 (a) Collector streets within the proposed internal road network are shown on Figure
   13:Transportation Network, however, the final configuration of the collector network may be
   subject to minor amendments at the time of a concept plan, zoning and subdivision application
   without an amendment to this plan being necessary at the discretion of the City.
- 4.2 (b) The layout of the collector streets should accommodate effective transit routing.
- 4.2 (c) The layout of the local streets shall be detailed at the time of concept plan submission and should provide for multiple routing options throughout the NP area.
- 4.2 (d) The layout of the local streets should ensure direct and efficient connections between the residential areas in the Plan and other origin/ destination points.
- 4.2 (e) The internal road network and block pattern shall be comprised of interconnected streets that are based on a modified or traditional grid development pattern.
- 4.2 (f) Final road design cross sections may be subject to minor amendments at the time of a concept plan, zoning and subdivision application without an amendment to this plan being necessary.
- 4.2(g) The easternmost north-south major roadway should include the following:
  - I. Pedestrian and cycling infrastructure;
  - II. A landscaped centre median and boulevards;
  - III. A design speed and function sufficient to accommodate active transportation; multiple intersections.
  - IV. A right of way sufficient to accommodate a four lane road with landscaped median and pedestrian infrastructure.
- 4.2 (h) Roundabouts may be provided as traffic control and calming devices at intersections within the internal road network, as determined appropriate.
- 4.2 (i) Where appropriate, City roadway design standards may be adjusted or modified to accommodate the provision of a green-way or bike-way.
- 4.2 (j) The City shall ensure that municipal infrastructure (e.g. roadway overpasses) does not exceed airport related height restrictions.

Figure 14 - Transit Roads



## 4.3 Public Transit

The purpose of these policies is to provide for efficient public transit service at the point in time where population growth and transit demand makes the provision of local public transit feasible. Roads that will potentially accommodate transit have been identified within the community and marked on **Figure 14: Transit Roads**.

- 4.3 (a) Roads identified on Figure 14: Transit Roads will be constructed to support potential future transit routing; however, the City may allow other route options without an amendment to this Plan being required.
- 4.3 (b) The City may require the construction of a transit hub facility, in accordance with the following requirements:
  - I. The precise location of the transit hub shall be identified through the concept plan process, but shall be located within the urban centre, in close proximity to the main street area, community retail area, and high density residential uses;
  - II. The transit hub may include the following elements: an area sufficient to accommodate at least three buses concurrently; a heated and enclosed shelter; a passenger drop off area; benches and waste receptacles; landscaping, lighting, and bicycle facilities.
  - III. At the City's discretion, the land reserved for the transit hub may be dedicated at the time of subdivision as Municipal Utility Parcel; the land should be sufficient in size to accommodate a modest shelter (e.g. a heated bus shelter of approximately 20 by 30 feet in area).
- 4.3 (c) Transit bus routing and road alignments should ensure that dwelling units are located within a convenient walking distance from a transit stop.
- 4.3 (d) Transit stops should be located to serve multi-dwelling residential projects and activity centres (such as neighbourhood nodes) and achieve walking distance requirements as set out by the City of Regina.
- 4.3 (e) Transit stops should be capable of accommodating suitable amenities such as benches, shelters, and bicycle racks.
- 4.3 (f) The final location and design of transit stops and amenities shall accompany detailed plans and specifications which follow concept plan, zoning and subdivision approval.
- 4.3 (g) The design and configuration of the transit system and associated improvements to support the development of the NP area shall be undertaken in consultation with the City of Regina.

# 5.0 Servicing Strategy

As part of the preparation of the Westerra Neighbourhood Plan, an analysis of servicing requirements to support the phased development of Westerra was completed. The following section provides an overview of the approach to deliver water, sanitary, stormwater and utility infrastructure to support the development of Westerra. An overview of existing conditions, the servicing requirements to accommodate the proposed development and the timing of major capital improvements necessary to deliver municipal servicing is provided.

## 5.1 Wastewater Collection System

#### 5.1.1 Existing Conditions

The existing sanitary sewer system in the vicinity of Westerra consists of a shallow 200mm sewer main that serves the residential properties on Dewdney Avenue east of Courtney Street. This main is not of sufficient depth to provide any service to Westerra. In addition, there is minimal available capacity in the trunk sewer downstream and limited capacity at the McCarthy Boulevard pumping station. Consequently, sanitary sewer service for the Westerra Subdivision must be provided by a new pumping station and forcemain that conveys flows to the dual 1050mm McCarthy Boulevard pumping station forcemains approximately 1.6km north of Dewdney Avenue.

#### 5.1.2 Proposed Development

The preliminary wastewater collection system layout is shown in the Sanitary Servicing Concept diagram in **Figure 15: Sanitary Servicing Concept**. In this concept, wastewater flows are conveyed via a gravity collection system to a new sanitary trunk to be constructed through the centre of the development area. This trunk would discharge at the sanitary pumping station along the west edge of the subdivision. The maximum estimated sanitary sewer flows were calculated using the Harmon formula and the "high" population density targets identified in the land use statistics. A summary of the calculated peak flows are indicated in the table below (**Table 6 - Peak Wastewater Flows Based on Land Use and Anticipated Density**).

	SUMMARY OF LAND USE		SANITARY SEWER DEMANDS			
	Area		Pop Density	Рор	Av Flow	Peak Flow
	ac	ha	ppl/ha	ppl	L/cd	L/s
Low Density Residential	98.34	39.80	75.00	2985	225	36.45
Medium Density Residential	50.94	20.62	88.22	1819	225	22.15
Live/Work Residential	3.28	1.33	87.971	117	225	1.61
High Density Residential	42.54	17.22	144.48	2488	225	26.93
Commercial	64.83	26.24	70.00	1837	454	41.26
Business Park	31.65	12.81	35.00	448	454	12.53
						140.93

#### Table 6 - Peak Wastewater Flows Based on Land Use and Anticipated Density

In consultation with City of Regina staff, it is understood that the City prefers to adopt a regional approach to municipal infrastructure whenever practical. As such, depending on the timing of development in the vicinity of Westerra, the future lift station may need to be expanded to accommodate flow from external sources such as the Sakimay lands west of Pinkie Road, private development north of Dewdney Avenue to Wascana Creek and east of Pinkie Road. In addition, it may be advantageous to the City to redirect the existing 100mm private forcemain that serves the Brandt Agricultural Products facility located at the southwest corner of this development area.

Although little information is currently available regarding development plans for these external areas, the following assumptions have been made in order to calculate estimated flows that might need to be accommodated by the future sanitary pumping station.

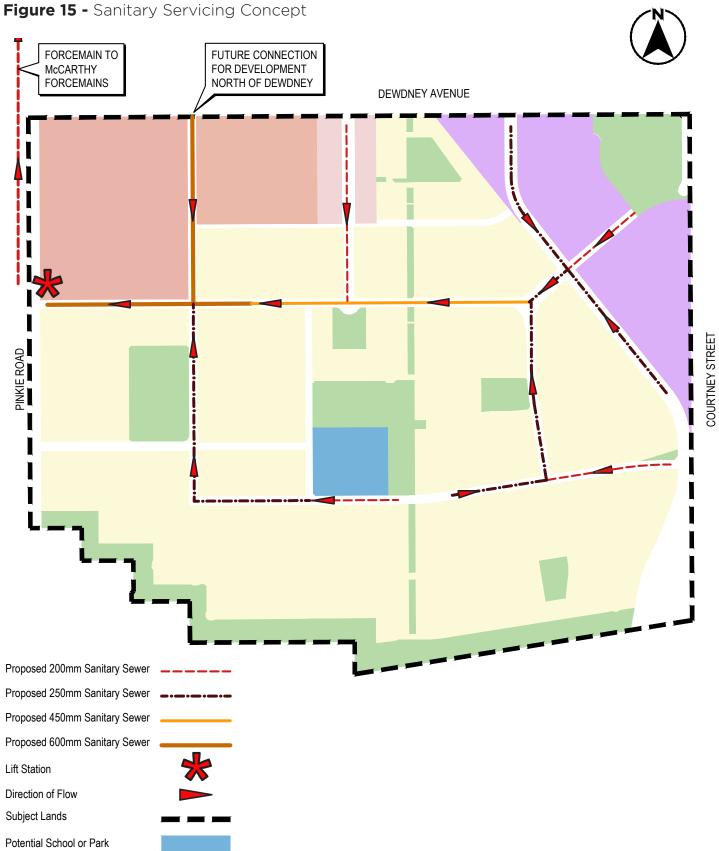
	SAKIMAY	NORTH OF DEWDNEY	BRANDT
Approximate Size (ha)	120	233	15
Assumed Land Use	Industrial	Residential	Industrial
Assumed Density (p/ha)	25	85	25
Estimated Peak Flow (L/s)	83.43	193.66	11.60

Table 7 - Wastewater Flows from Outside Sources

#### 5.1.3 Timing of Capital Improvements

As there are currently no sanitary sewermains in the vicinity of Westerra with the depth or capacity to manage additional flows, the new sanitary pumping station and forcemain are critical capital improvements that must be completed prior to occupancy of any new buildings in this subdivision. Although it is the City's desire to accommodate flows external to this development area with this pumping station, very little information is readily available on the planned land use or timing of development in these neighbouring properties. As such, the wet well and pumps should be designed to be constructed in phases and expanded as needed for future developments. Further, the forcemain from this lift station should either be oversized during the first phase of development or be twinned at a future date when additional capacity is required.

- 5.1.3 (a) The wastewater collection system to service the plan area shall be designed adequately and efficiently to address all required wastewater requirements.
- 5.1.3 (b) The wastewater collection system should be in general accordance with Figure 15: Sanitary Servicing Concept; however, refinements to the sanitary servicing concept may take place at the time of detailed engineering design concurrently with the concept plan, rezoning and subdivision process without an amendment to this NP.
- 5.1.3 (c) Portions of the plan area may be set aside as a municipal utility parcel to accommodate the location and construction of a sanitary pumping station and/or forcemain requirements.
- 5.1.3 (d) The developer may be required to enter into a servicing agreement with the City outlining obligations and responsibilities relating to the design and construction of a lift station, forcemain, and wastewater collection system. Where appropriate, such agreement may include financing and cost recovery provisions which are acceptable to both the developer and the City.
- 5.1.3 (e) The City may require, as a prerequisite for rezoning or subdivision approval, detailed modelling and analysis for wastewater servicing, which identifies network routing; capital improvements; a pre-design of the sanitary pump station and force-main and solutions for providing an appropriate level of service both within the development and beyond.
- 5.1.3 (f) As future development proceeds within the plan area, weeping tile discharge into the sanitary sewer system shall be prohibited.



## 5.2 Water Servicing

#### 5.2.1 Existing Conditions

Water service in this part of the city is available via the trunk main that currently feeds the Global Transportation Hub. This trunk runs adjacent to the subject property along Courtney Street from the CPR crossing to Dewdney Avenue as a 750mm diameter main. It then changes to a 600mmm diameter main and follows Dewdney Avenue west towards the GTH.

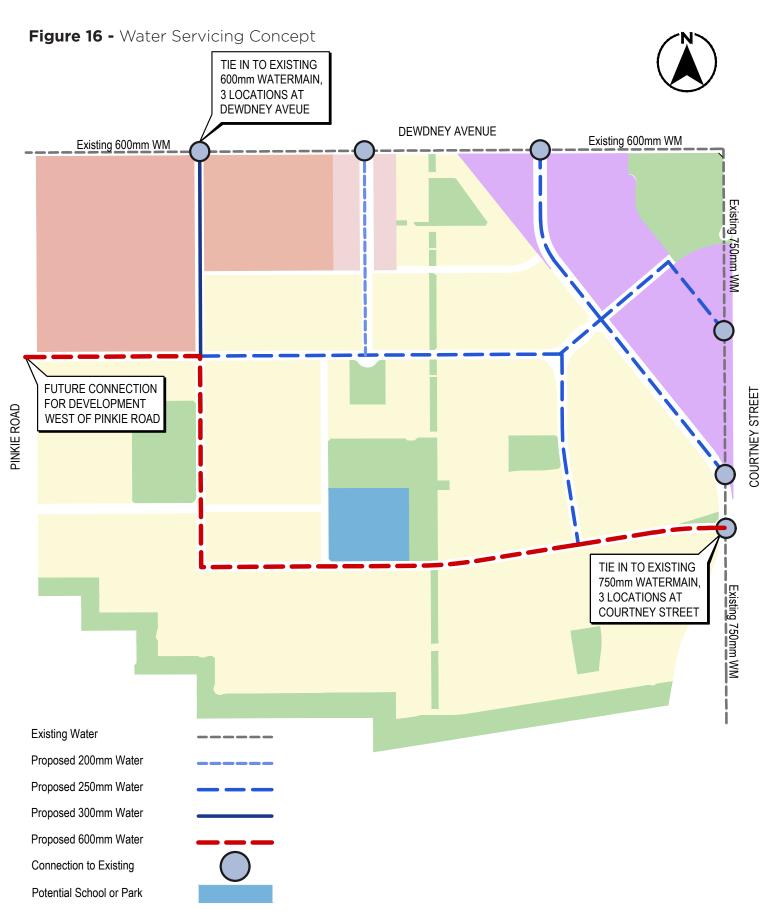
#### 5.2.2 Proposed Development

Water service will be provided to this development as shown in the water servicing concept that is included in **Figure 16: Water Servicing Concept**. The following connections to the existing trunk main are proposed:

- 1. 300mm feeder loop connected to 600 mm trunk at Dewdney
- 2. 250mm distribution loop to provide Level 3 service to prestige industrial lands connected to the 750mm trunk at Courtney Street and once to the 600mm trunk at Dewdney Avenue
- I. 200mm distribution main to provide looped service for the main street retail and live/work residential land use areas connected to the 600mm trunk at Dewdney Avenue
- 2. 600 mm trunk main from Courtney Street to Pinkie Road to provide service to future development to the west

In order to support the variety of land uses contained within the proposed development, the water distribution system will need to satisfy Level 1, 2, and 3 fire flow requirements. As such the system was modelled in WaterCAD under the 90L/s, 150L/s and 250L/s fire flow scenarios in addition to the peak day and peak hour demand scenarios. The proposed system was modelled using the City of Regina WaterCAD model for the 235,000 population demand criteria.

The fire flow analysis for full build-out of the subdivision indicates sufficient capacity exists to serve Westerra. Further, the resulting demand for the land use identified within the Westerra Concept Plan was modelled in the City-wide WaterCAD model under the 235,000 population demand criteria. A review of the 90 L/s fire flow scenario for the pre-development condition indicates 271 node failures. Once the Westerra demand is added to the model, there are 274 node failures. Further analysis using Peak Hour demand shows 405 of 4188 (9.7% of the system) nodes falling below the minimum pressure criteria of 269.4 kPa in the existing system compared to 593 failures post-development (13.7% of the system). The average pressure drop after full build-out of Westerra during Peak Hour demand is 4.1kPa.



#### 5.2.3 Timing of Capital Improvements

The existing water mains along Courtney Street and Dewdney Avenue have sufficient capacity to provide water service to this subdivision. Consequently, no significant capital improvements shall be required within the water distribution system during the initial stages of development. In the future, if a grade-separated crossing of the CPR is required for Courtney Street, a portion of the 750mm water main may need to be re-aligned such that it is not within the footprint of the crossing.

#### **POLICIES:**

- 5.2.3 (a) The water system to service the plan area shall be designed adequately and efficiently to address water servicing and fire flow requirements.
- 5.2.3 (b) The water system should be in general accordance with Figure 16: Water Servicing Concept; however, refinements to the water servicing concept may take place at the time of detailed engineering design concurrently with the concept plan, rezoning and subdivision process without an amendment to this Neighbourhood Plan.
- 5.2.3 (c) The developer may be required to enter into a servicing agreement with the City outlining obligations and responsibilities relating to the design and construction of water servicing system. Where appropriate, such agreement may include financing and cost recovery provisions which are acceptable to both the developer and the City.
- 5.2.3 (d) The City may require, as a prerequisite for rezoning or subdivision approval, detailed modelling and analysis for water servicing, which identifies network routing; capital improvements and solutions for providing an appropriate level of service both within the development and beyond.
- 5.2.3 (e) The 600 mm trunk main from Courtney Street to Pinkie Road has been oversized at the request of the City; therefore, direct service connections shall be allowed from any future residential lots that have frontage on this oversized pipe corridor.

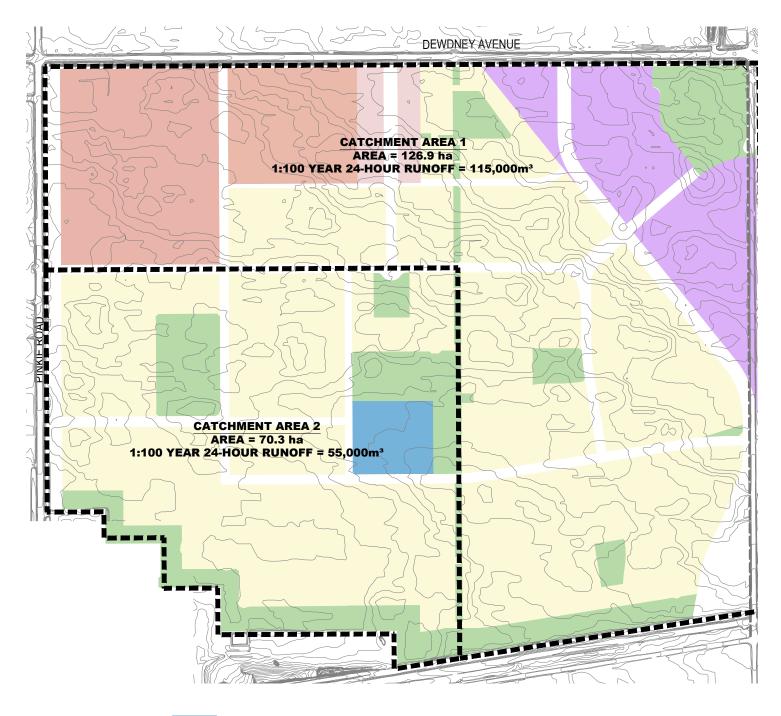
### 5.3 Stormwater Management

#### 5.3.1 Existing Conditions

The subject property is currently cultivated farmland separated into two major catchment areas that are separated by a high point that runs diagonally through the area from northwest to southeast. Runoff in the northeast catchment area flows to the 2400mm X 2400mm box culvert through Dewdney Avenue then north to Wascana Creek via the Courtney Street Drainage Ditch. The second catchment area drains to the southwest corner of the property, south along Pinkie road with the final outlet at the Grand Coulee Drainage Ditch. The area is relatively flat with an average grade of 0.5% from the centre to the edges of the property.

Figure 17 - Catchment Area Concept





Potential School or Park

#### 5.3.2 Proposed Development

The City of Regina's stormwater management strategy follows the urban dual drainage concept whereby the minor (piped) system conveys flows generated by the 1 in 5 year storm event and the major (surface) system manages flows generated by the 1 in 100 year event. The City of Regina requires that for all new developments, the stormwater management system be designed to manage flows generated by the 24-hour 1:100 year design storm. Stormwater flows for this development were modelled using PCSWMM and the 1:100 year 24 hour City of Regina design storm. Results of this simulation are summarized as follows:

- Catchment Area #1 126.9 Hectares, 100 year 24 hour runoff = 115,000m3
- Catchment Area #2 70.3 Hectares, 100 year 24 hour runoff runoff = 55,000m3

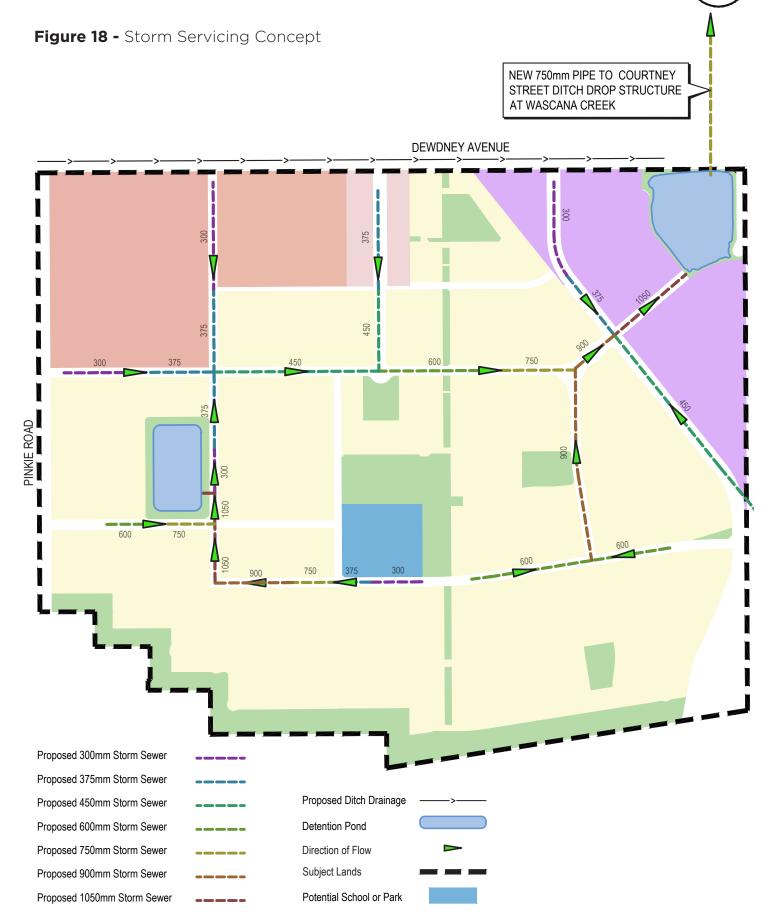
The preferred option for management of stormwater flows is to drain both catchment areas through the northeast outlet to Wascana Creek. During the 2001 Courtney Street Drainage Ditch Improvement project, this outlet was designed and upgraded to manage peak stormwater flows of 15 m3/s. Consequently this channel has sufficient capacity to contain the runoff from future development in the vicinity. In order to implement this strategy, a deep storm trunk would be constructed from the west detention pond to the east detention pond.

Preliminary design of the minor system for Westerra shows that a storm trunk starting at the southwest boundary of the property and draining towards Dewdney Avenue by gravity will result in an invert elevation that is 1.60m below the south invert of the Dewdney Avenue culvert. As such, three options have been reviewed to convey flows to the outlet at Wascana Creek:

- Option #1 A stormwater lift station, located in the northeast corner of the proposed development, could drain the detention pond directly to the Dewdney Avenue culvert then be conveyed to Wascana Creek via the existing Courtney Street ditch.
- Option #2 Deepen the Courtney Street drainage ditch and lower the Dewdney Avenue Culvert.

## Option #3 – Construct a new gravity sewer in the right of way for the Courtney Street drainage ditch that connects to the existing drop structure at Wascana Creek.

A preliminary analysis of these options indicates that Option #3 is the preferred method of conveying stormwater flows to Wascana Creek as it is the least expensive to construct and results in the lowest long term operations/maintenance costs. An overview of the proposed stormwater servicing concept is outlined in **Figure 17- Catchment Area Concept and Figure 18 - Storm Servicing Concept.** 



#### 5.3.3 Timing of Capital Improvements

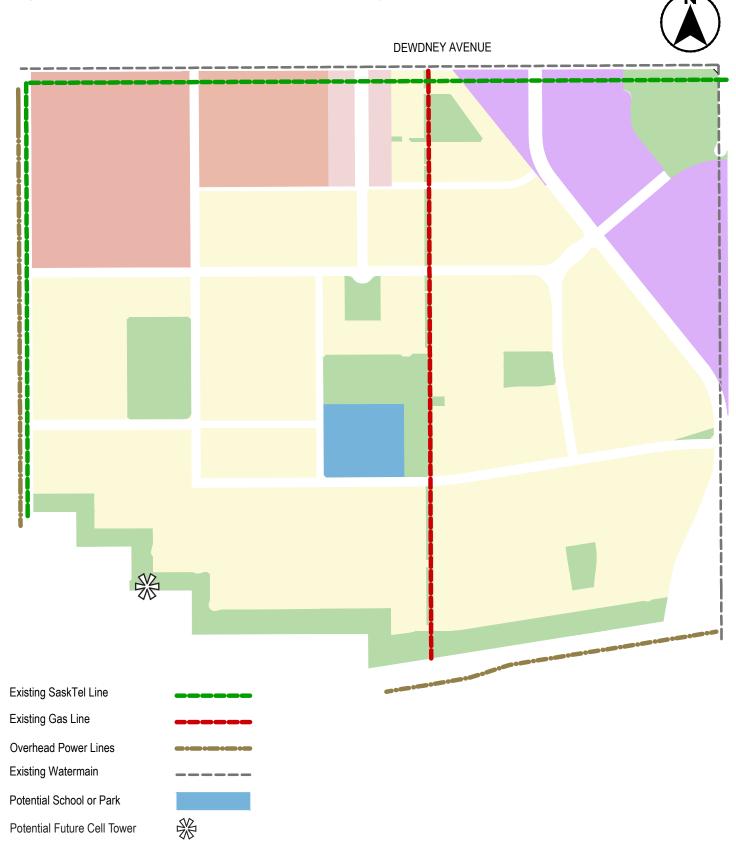
As there is no piped collection system in the vicinity of Westerra, construction of the northeast detention pond and outlet to Wascana Creek will need to coincide with the first phase of development. In order for discharge of the west catchment across Pinkie road to proceed, the drainage ditch through the Sakimay lands from the west Regina by-pass to Pinkie road would be required prior to progressing with any development in the west catchment area. Consequently, draining the entire property to the northeast is a more attractive approach.

**POLICIES:** 

- 5.3.3 (a) The stormwater management system to service the plan area shall be designed adequately and efficiently to address all necessary stormwater management requirements.
- 5.3.3 (b) The stormwater management system should be in general accordance with Figure 17: Catchment Area Concept and Figure 18: Storm Servicing Concept; however, refinements to the stormwater management plan may take place at the time of detailed engineering design concurrently with the concept plan, rezoning and subdivision process without an amendment to this NP.
- 5.3.3 (c) Stormwater discharge from Catchment Area # 2 as shown on Figure 17- Catchment Area Concept should be directed to the outlet at the northeast corner of the property.
- 5.3.3 (d) The developer may be required to enter into a servicing agreement with the City outlining obligations and responsibilities relating to the design and construction of stormwater servicing system. Where appropriate, such agreement may include financing and cost recovery provisions which are acceptable to both the developer and the City.
- 5.3.3 (e) As a prerequisite for subdivision approval, a detailed stormwater solution and analysis for all of Phase I shall be prepared by the developer, and submitted to the City, which demonstrates, to the City's satisfaction, the requirements, location and design of stormwater detention and conveyance.
- 5.3.3 (f) The requirements for further stormwater analysis outlined in Policy 5.3.3 (e) shall also apply to other subsequent phases of development.

### 5.4 Shallow and Above-Ground Utility Servicing

Existing power, gas, and telecommunications infrastructure in the vicinity of Westerra is shown on the Existing Utility Diagram in **Figure 19** - **Shallow and Above-Ground Existing Utilities**. During preparation of this plan, all existing shallow utilities were exposed with hydro-vac equipment and located via GPS survey. Once a proposed plan of subdivision is created for Westerra, it will be forwarded to the utility corporations for their use in detailed design of the necessary infrastructure to serve this property. Stakeholder meetings held with the utility corporations have confirmed that adequate capacity exists within their systems to provide service to the land use proposed for the Westerra Subdivision.



#### Figure 19 - Shallow and Above-Ground Existing Utilities

# 6.0 Implementation

## 6.1 Phasing

Development in Westerra will occur in phases based upon logical planning units and the efficient extension of municipal infrastructure. The phasing of development will also be supported by the provision of community services and amenities and influenced by market absorption of units. The completion of specific capital improvement projects may be required prior to or concurrent with additional phases proceeding. Phases of planning for Westerra will generally follow the boundaries as shown in **Figure 20: Concept Plan Boundaries**.

#### **POLICIES:**

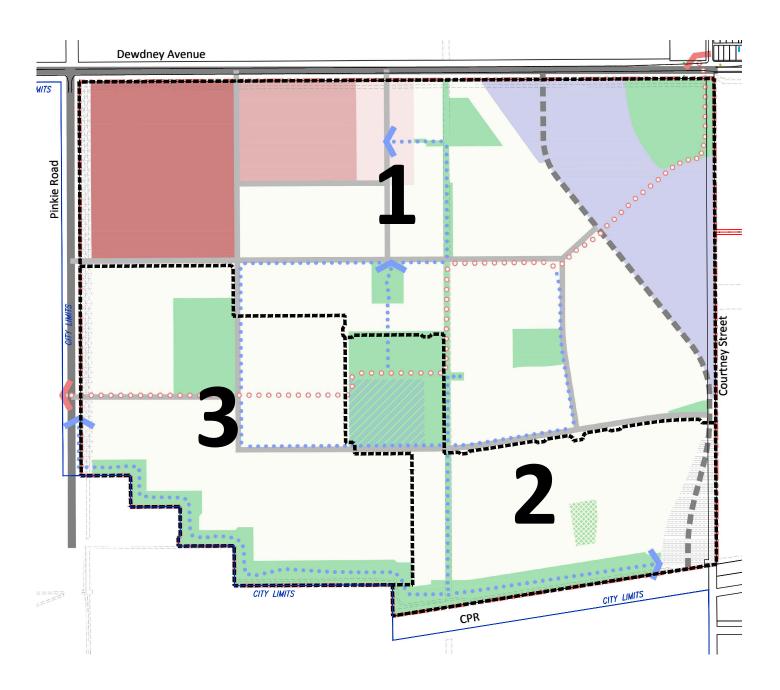
- 6.1 (a) Planning phases for Westerra should generally follow the concept plan areas as outlined in Figure 20: Concept Plan Boundaries.
- 6.1 (b) Notwithstanding 6.1 (a), 6.2 (a) and Figure 20: Concept Plan Boundaries, Concept Plan boundaries may be adjusted without an amendment to this Plan being required.
- 6.1 (c) Concept plan submissions shall include detailed phasing plans to help direct and guide rezoning and subdivision applications and the logical extension of municipal services and infrastructure.

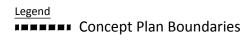
## 6.2 Concept Plans

To advance development on the subject lands, a Concept Plan must first be prepared in accordance with the *Design Regina OCP* to bridge the gap between the planning and servicing considerations for the full build out of the plan area and the more detailed level of planning and servicing for each phase. The purpose of a Concept Plan is to provide for more detailed planning on a smaller scale within the overall Neighbourhood Plan. Concept Plans are based on infrastructure considerations and planning logic. Concept Plans have been defined based on logical and sequential access points into the community and to provide key infrastructure and generally follow the phasing boundaries referenced in **Figure 20: Concept Plan Boundaries**.

- 6.2 (a) As a prerequisite for rezoning approval, a concept plan shall be prepared and approved for the applicable areas as outlined in Figure 20: Concept Plan Boundaries.
- 6.2 (b) The location and type of land use, residential density and development intensity, open space, park features and transportation networks shall be in conformity with an approved concept plan, which is in general compliance with this Neighbourhood Plan.
- 6.2 (c) Notwithstanding Policy 6.2(a) and 6.2(b), the City may approve a rezoning, without a concept plan being required, for public uses, utility or transportation infrastructure, or any other use at the City's discretion.
- 6.2 (d) Where the location and type of land use, open space, or transportation and servicing networks Illustrated in a proposed concept plan varies from this Neighbourhood Plan, the City may approve the concept plan, with the proviso that:
  - I. The variation is deemed by the City to be minor in nature;
  - II. The variation does not directly conflict with a particular policy statement; and
  - III. The proposed concept plan substantially conforms with this Neighbourhood Plan.
- 6.2 (e) Concept plans shall contain, for each applicable phase, a detailed land use plan, and detailed circulation plan (road and street networks, transit routes, pedestrian and cycling routes, where applicable).









## Neig<mark>hbour</mark>hood Plan