



Westerra

Phase 1 Concept Plan

MAY 26, 2014

Version 2.0 - Circulation Draft





Phase 1 Concept Plan

May 2014

Prepared for:
Westerra Development Corp.

Contact: Chad Jedlic, Residential Land Manager,
Harvard Developments Inc., 306.777.0669

Contact: Blair Forster, President,
Forster Projects Inc., 306.533.1193

Prepared by: Brown & Associates Planning Group
Contact: Nathan Petherick 403.692.4356

Project Team:

Project Engineers
WSP/Genivar
Contact: Jeff Halliday 306.585.1990

Transportation Consultants
MMM Group
Contact: Bruce Belmore 306.522.7158

Risk Assessment and Analysis
Bercha Group Limited
Contact: Frank Bercha 403.270.2221

Retail Impact Assessment
MXD Development Strategists
Contact: 403.272.6937

Geotechnical Investigation
Environmental Site Assessment
Ground Engineering Consultants Ltd.
Contact: 306.569.9075

Table of Contents

1.0 Introduction	1	4.0 Transportation	53
1.1 Background	1	4.1 Transportation System Overview	53
1.2 Plan Area Context	5	4.2 Road Network Hierarchy	54
1.2.1 Phase 1 Development Constraints	5	4.3 Road Cross Sections	56
1.2.2 Existing Policy	7	4.4 Traffic Impact Analysis & Off Site Improvements	60
1.2.2.1 Western Neighbourhood Plan	7	4.5 Public Transit	60
1.2.2.2 Policy Alignment	9	4.6 Active Transportation	60
1.3 Project Vision	11		
1.4 Goals and Objectives	12	5.0 Servicing	63
		5.1 Servicing Overview	63
2.0 Existing Conditions	13	5.2 Water	64
2.1 Location & Ownership	13	5.3 Sanitary	66
2.2 Natural Features	17	5.4 Stormwater	68
2.2.1 Topography and High Points	17	5.5 Shallow Utilities	71
2.2.2 Existing Drainage Course and Wetlands	17		
2.3 Built Features and Surrounding Land Uses	17	6.0 Implementation	72
2.4 Heritage Resources	19	6.1 Staging Plan	72
		6.2 Capital Improvement Plan	74
		6.3 Proposed Land Use	74
3.0 Land Use Strategy	21	6.4 Subdivision	75
3.1 Community Design	21	6.5 Master Site Development Plan	75
3.1.1 Low Density Residential Development	26		
3.1.2 Medium Density Residential Development	27		
3.1.3 High Density Residential Development	28		
3.1.4 Live-Work Residential Development	29		
3.2 Commercial	32		
3.2.1 Urban Centre	32		
3.2.2 Main Street Retail Area	34	Table 1: Westerra Phase 1 Concept Plan Elements and Policy Alignment	9
3.2.3 Mixed-Use Community Retail Area	38	Table 2: Westerra Phase 1 Concept Plan Land Use Composition	25
3.2.4 Large Format Retail	40	Table 3: Residential Densities and Population Projections	31
3.2.5 Business Park Area	42	Table 4: Residential Densities and Population Intensity	31
3.3 Civic/Recreation	45	Table 5: Municipal Reserve	52
3.4 Community Services	45		
3.5 Parks and Open Space	45		
3.5.1 Pathway System	49		
3.6 Municipal Reserve	52		

Tables

Figures

Figure 1: Location and Context Plan	4
Figure 2: Phase 1 Development Constraints	6
Figure 3: Westerra Neighbourhood Plan General Land Use Concept	8
Figure 4: Local and Regional Transportation Network	14
Figure 5: Existing Zoning	15
Figure 6: Site Context and Natural Features	18
Figure 7: Existing Shallow Utilities	20
Figure 8: Westerra - Phase One Illustrative Plan	22
Figure 9: Key Plan Elements	23
Figure 10: Detailed Land Use Concept for Phase 1	24
Figure 11: Live-Work Residential in Relation to Main Street	30
Figure 12: Main Street Retail Area Plan Overview	35
Figure 13: Key Elements of Main Street and Live-Work Area	36
Figure 13a: Main Street Area - Looking South	37
Figure 14: Key Elements of Large Format and Mixed-Use Community Retail Area	39
Figure 15: Large Format Retail - Looking Northeast	41
Figure 16: Key Elements of Eastern Gateway	43
Figure 17: Business Park - Residential Interface	44
Figure 18: Overview of Parks and Open Space Looking Southwest	47
Figure 19: Open Space Dedication	48
Figure 20: Couplet Entrance	50
Figure 21: Main Entrance from Courtney Street - Looking Southwest	51
Figure 22: Circulation Plan	55
Figure 23: Road Cross Sections	57
Figure 24: Transit Coverage and Mobility Assessment	61
Figure 25: Active Transportation	62
Figure 26: Water Servicing	65
Figure 27: Sanitary Servicing	67
Figure 28: Catchment Area Concept	69
Figure 29: Storm Servicing Concept	70
Figure 30: Staging Plan	73

1.0 Introduction

1.1 Background

Westerra is a new community by Westerra Development Corp. located in central - west Regina as shown on **Figure 1. Location and Context Plan**. Westerra is approximately +/- 198.46 ha (490 acres +/-) in size and at full build out is designed to accommodate a future population of approximately 5,797 – 9,262 residents. The Phase 1 Concept Plan (CP) comprises the initial Phase of Westerra and consists of approximately 96.71 ha (238.96 acres) and is comprised of commercial, business park and residential uses. The CP area is projected to be developed in a staged manner immediately upon Concept Plan, rezoning and subdivision approval.

Westerra is envisioned as a complete community aligning with the City's recently approved Official Community Plan (OCP), which is a high level statutory document providing broad direction for transportation and land use. Land uses for Westerra consist of low, medium and high density residential uses, large format retail, mixed-use community retail, main street retail, and business uses. The CP encompasses a range of these land uses including a variety of commercial areas, a range of residential areas, the business park area and portions of the parks and open space system. The CP marks the beginning of a complete community in this area of the city of Regina. Key elements which have informed the development of the Westerra Phase 1 CP are summarized as follows:

URBAN CENTRE

The Urban Centre is identified as a planning component within the OCP and the Westerra Neighbourhood Plan (NP). This component creates a distinct focus for the community of Westerra with a mixture of uses and transit supported development. The Urban Centre contains the main street retail area as a key entrance.

POTENTIAL FUTURE EXPRESS TRANSIT CORRIDOR

Westerra is located along Dewdney Avenue, which is considered a future transit corridor. This route leads to the Global Transportation Hub (GTH) to the west, which will be a significant employment area. Dewdney Avenue also intersects with Courtney Street and Pinkie Road providing further linkages. Commercial and business uses in the CP along with higher density residential development create the critical mass required for a viable Urban Centre. In turn, this critical mass will support the realization of the future express transit corridor envisioned within this portion of the City.

RESIDENTIAL DEVELOPMENT

The CP residential focus is located south of the proposed business park and east of the commercial area and consists of varying intensities. Residential uses include low, medium and high density development. Live work residential uses are adjacent to the Main Street area to take advantage of the synergies and short commuting distances. The Urban Centre and adjacent residential area will have a distinct sense of place. The Noise Exposure Forecast (NEF) contours along the northeast corner and the commercial area provide the northern boundaries for proposed residential uses contained within the CP.

HOUSING MIX

A diverse housing product is envisioned within the residential portion of the plan area. This housing mix contains low density residential housing forms including single family dwellings, medium density residential housing forms including semi - detached dwellings, row houses and townhouses and high density residential housing forms including apartment buildings less than five storeys. Live-Work development is planned to the south of the Main Street area and forms part of Westerra's approach to offer innovative housing alternatives within the community.

FUSED GRID PATTERN

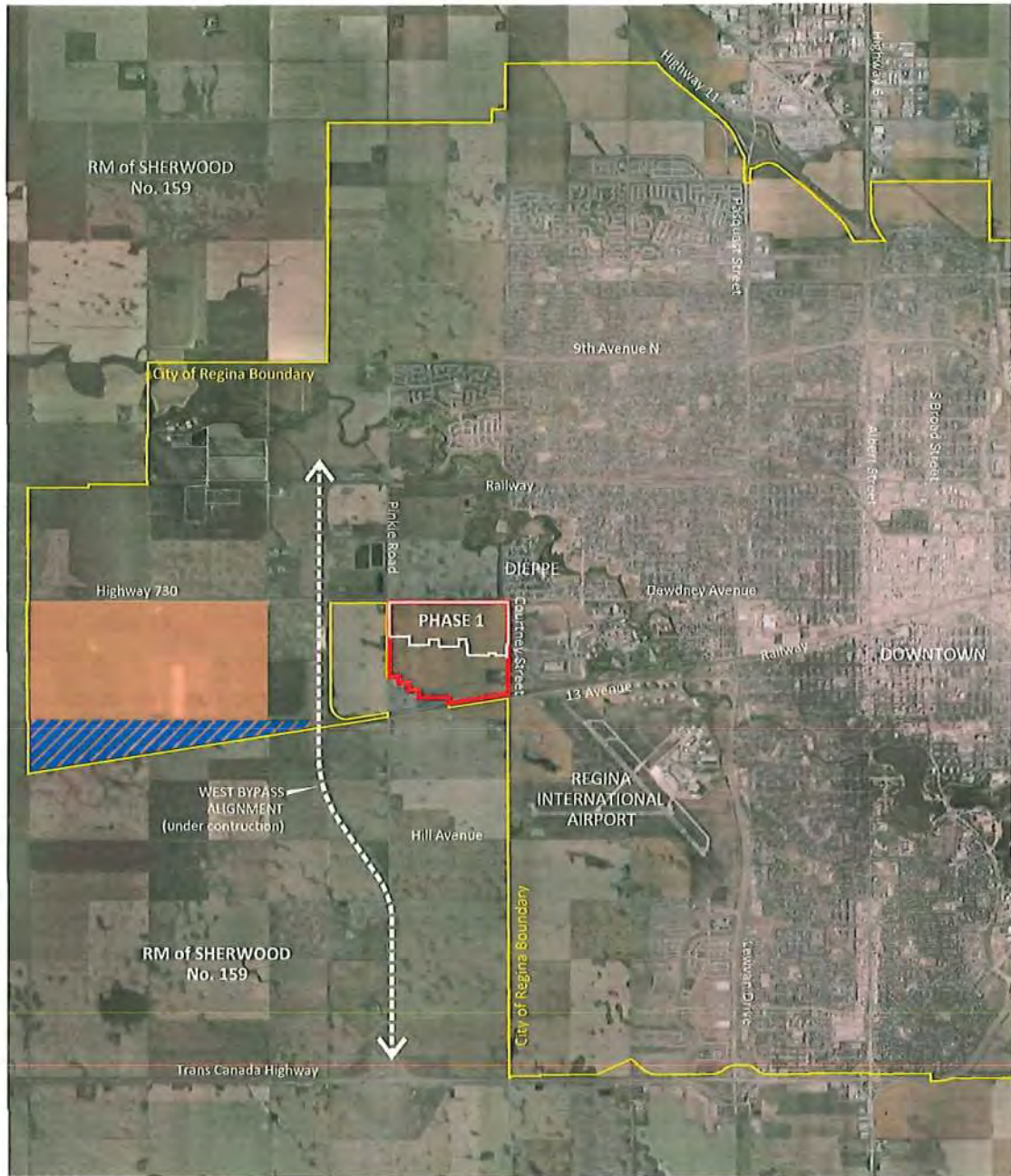
The Westerra plan is based on a modified grid. This pattern provides multiple linkages, connecting various areas within the CP area with the Urban Centre and potential future express transit corridor, as well as the perimeter arterial roads in Westerra. The parks and open space system and related amenities have been located to supplement this road network, promote connectivity and enhance a sense of place within the neighbourhood.

PARKS AND OPEN SPACE

The parks and open space network for Westerra centres on the potential future school site within the centre of Westerra and radiates outward towards the northeast and southwest of the NP. Neighbourhood parks, walkways and buffers support passive and active recreational uses, enhance pedestrian connectivity and provide visual, social and ecological functions within the community. The proposed open space area forming part of the CP represents the initial assembly of parks space for Westerra. As per the approved Neighbourhood Plan, the parks and open space system is envisioned to connect to the Devonian pathway system and surrounding open space network through future connections to the north of the plan area.

ACCESS

Access to the CP area will be provided off Dewdney Avenue, Pinkie Road and Courtney Street, which serve the area from a regional perspective. As part of the Westerra NP, a portion of Courtney Street will eventually be closed and realigned to connect with Dewdney Avenue. The realignment of Courtney has been undertaken to support the development of the proposed business park area as well as to optimize a future intersection location with Dewdney Avenue which can support the development of the adjacent lands to the north of the CP area.



Legend

- Subject Lands
- Global Transportation Hub (Under Construction)
- Intermodal Area (Under Construction)

Figure 1 - Location and Context Plan

1.2 Plan Area Context

1.2.1 Phase 1 Development Constraints

There are no known operating wells or sour gas pipelines within the CP area as shown on **Figure 2. Phase 1 Development Constraints**. A primary natural gas pipeline operated by SaskEnergy bisects the Plan area on a north-south axis. Based on the recommendations of an updated risk assessment completed by Bercha Limited (submitted under separate cover), lands within 60 metres of the pipeline have been identified and classified as a "Special Development Area." As part of the CP, the pipeline right of way has been incorporated into the proposed blocking of land. Future development of lands encumbered by the pipeline easement and any other easements will be required to establish appropriate development and building plans which address and respect these constraints. Plans must comply with the development provisions that apply to the special development area policy provisions outlined in the Westerra NP.

The "Final Report on Analysis of Risks to the Proposed Westerra Subdivision from Adjacent Industrial Facilities," completed by Bercha Group Limited, provides a risk assessment for the CP area. The Spectra Energy site located to the northwest of the subject lands contains propane and butane subterranean storage caverns. The Newalta facility located to the southwest of the plan area within adjacent industrial development situated in the RM of Sherwood. Based on the risk assessment completed, there are no restrictions stemming from either the Spectra Energy Facility or the existing Newalta site which impact the Phase 1 CP area. Therefore, no special planning considerations are required as part of the Phase 1 CP. Similarly, proximity to the CP rail line have been considered and no negative impacts are anticipated given the distance of the CP area from existing rail operations.

Proximity to the airport requires that the CP respect the Noise Exposure Forecast Contour (NEF) and height limitations. Areas within the NEF have been designed as a business park and open space, which are compatible land uses. Height limitations have been addressed at the NP level and buildings and structures will not exceed these limits.

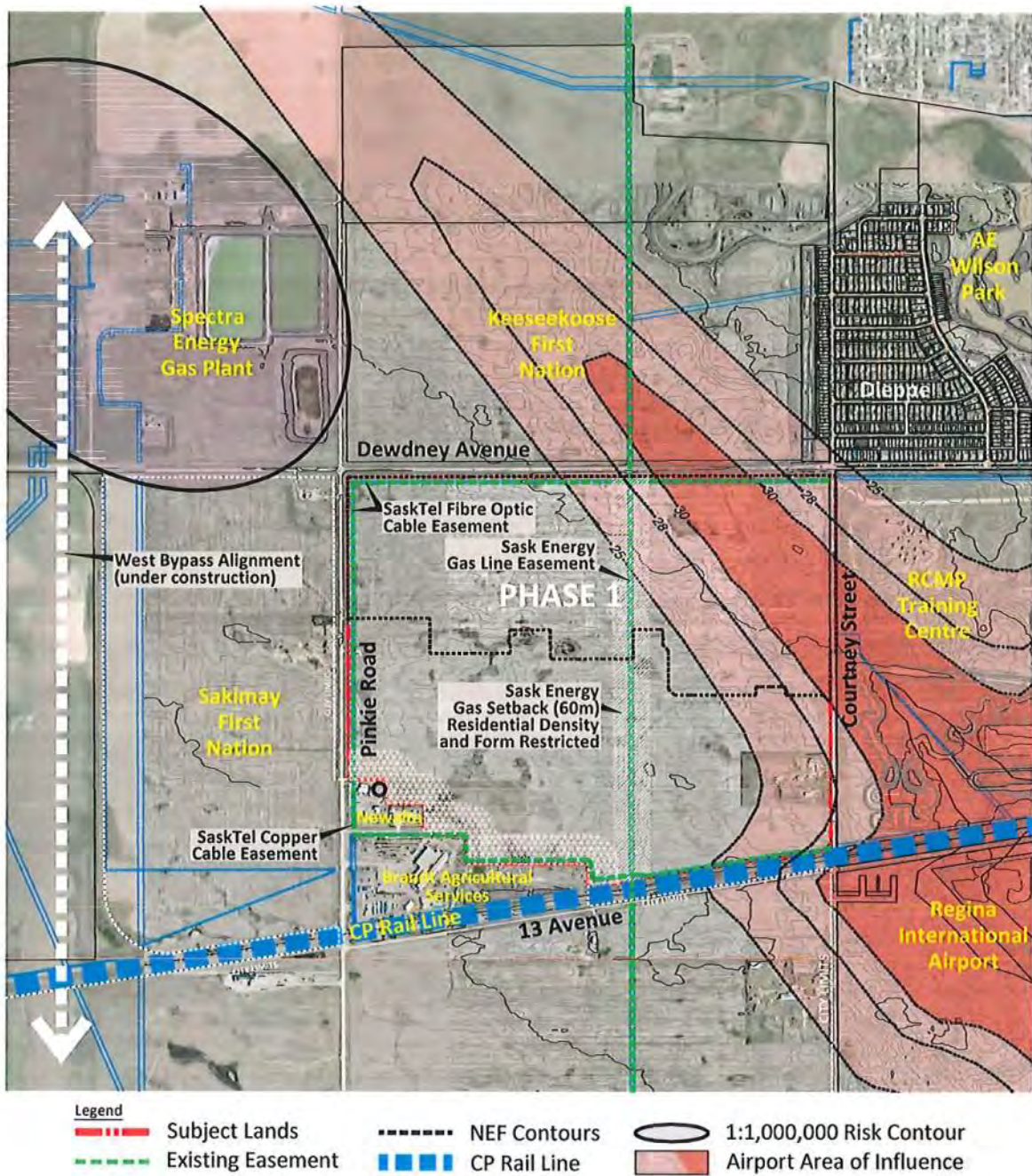


Figure 2 - Phase 1 Development Constraints

1.2.2 Existing Policy

1.2.2.1 Westerra Neighbourhood Plan

The CP will be subject to the policies contained within the Westerra Neighbourhood Plan (NP). **Figure 3. Westerra Neighbourhood Plan General Land Use Concept** provides the NP General Land Use Concept. Key elements of the NP policy and Official Community Plan (OCP) which apply to the Phase 1 CP are identified in **Table 1. Westerra Phase 1 Concept Plan Elements and Policy Alignment**.



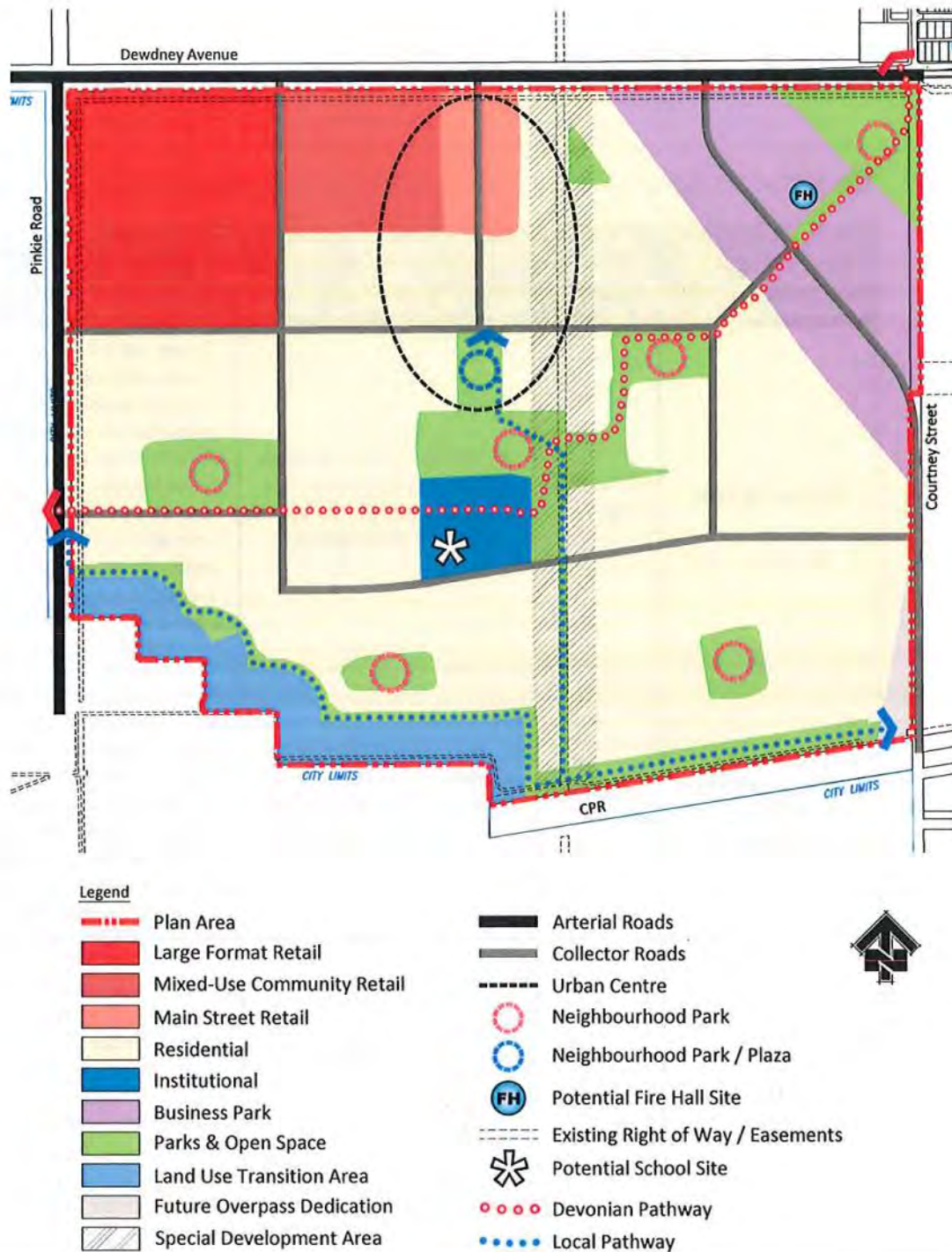


Figure 3 - Westerra Neighbourhood Plan General Land Use Concept

1.2.2.2 Policy Alignment

Table 1 - Westerra Phase 1 Concept Plan Elements and Policy Alignment

Key Element of Westerra Phase 1: Concept Plan	OCP Policy	Approved Neighbourhood Plan and OCP Policy Context	Design Response
URBAN CENTRE	SECTION D5, GOAL 3	An Urban Centre is an area of intensity and mixed use with opportunities for transit oriented development.	There will be an overall higher density of residential development mixed with employment, commercial and transit services. Provision for mixed use development and community amenities in the form of open space, a school site, etc. The intent of the CP is to create a complete community with residential, employment and recreational uses that transitions appropriately with adjacent areas and the Global Transportation Hub in terms of uses and servicing.
POTENTIAL FUTURE EXPRESS TRANSIT CORRIDOR	SECTION D3, GOAL 2	Westerra is bordered by an Potential Future Express Transit Corridor	Dewdney Avenue is intended to act as a Potential Future Express Transit Corridor that will serve as a link to transit nodes within the City. Development has been intensified and mixed along the Potential Future Express Transit Corridor within the CP and includes main street retail, a business park, large format and mixed-use community retail uses.
NEW MIXED-USE NEIGHBOURHOOD	SECTION C, GOAL 4	OCP indicates new mixed-use neighbourhoods will be designed and planned as complete neighbourhoods with a minimum gross population density of 50 persons per hectare (pph) during the Concept Plan process	A Neighbourhood Plan has been designed for the entire area that meets the mixed-use and density requirement and has been incorporated into the CP. Based on the proposed housing mix, density factors and unit projections, the projected population intensity per net hectare is estimated between 76.91 and 139.74 persons per net hectare for the proposed residential area within the CP.

<p>URBAN CENTRE AND LARGE FORMAT RETAIL</p>	<p>SECTION D5, GOAL 4</p>	<p>Large Format Retail is to be concentrated within Urban Centres according to the OCP (Goal 4, Policy 7.17).</p>	<p>A large format retail area has been located along the northwest portion of the CP. Convenience and main street retail uses have also been oriented towards Dewdney Avenue to provide a range of employment opportunities while serving regional and local service requirements.</p>
<p>NEF CONTOURS</p>	<p>SECTION D9, GOAL 3</p>	<p>Residential development is prohibited within the 30 NEF contour.</p>	<p>Business Park development has been located in alignment with the NP and the 30 NEF. A residential – business park interface has been provided via a 13 metre landscaped berm.</p>
<p>PARKS AND OPEN SPACE SYSTEM</p>	<p>SECTION D7, GOAL 1</p>	<p>A series of Neighbourhood Parks have been identified throughout the plan area</p>	<p>The open space system has been designed to support a pathway system and stormwater management functions and is integrated throughout the plan area.</p>
<p>GUIDELINES FOR COMPLETE NEIGHBOURHOODS</p>	<p>APPENDIX A</p>	<p>Interconnectivity, mixed-use, sense of place, diversity, open space and mobility considerations have all been incorporated into the design.</p>	<p>The CP provides a gradient of densities and intensity of use to support transit oriented and sustainable development.</p>

1.3 Project Vision

The vision of the CP is to create an innovative community in Regina – one that recognizes the values and needs of residents. Westerra provides choice, convenience and a sense of place. Westerra is a complete community with opportunities to live, work, shop, and play. Services, recreation and employment are accessible to residents in a vibrant community.

Westerra offers a range of housing types and styles. Main Street, the open space system, the organization of uses and amenities function together to create a sense of place. Transportation options are supported throughout the community contributing to environmental sustainability. The modified grid promotes connectivity and the overall community design creates a sense of identity. The result is a community that is complete.



1.4 Goals and Objectives

Certain goals guided the design process for the CP. These goals are as follows.

Westerra will be designed:

- To connect people and places;
- To create places to live, work and play;
- To allow people to stay in the community;
- To provide choice in housing forms and mobility;
- To create an employment area with amenities and services;
- To respect the environment; and
- To establish a smart – growth and sustainable community.



The objectives of the CP are to:

- a) Summarize existing conditions for CP area within the context of the Westerra Neighbourhood Plan to confirm development opportunities and significant constraints which require appropriate mitigation strategies;
- b) Refine the development concept for the CP within the approved Neighbourhood Plan land use framework in order to facilitate implementation of the commercial, business park and residential uses in accordance with the Official Community Plan's and Westerra Neighbourhood Plan policy provisions;
- c) Establish a detailed strategy to implement appropriate transportation and utility service infrastructure improvements as required for proposed development in the CP;
- d) Confirm the general configuration of open space system within the CP;
- e) Establish expectations for provision of emergency response within the CP area; and
- f) Establish an overall staging strategy for development within Phase 1 based on infrastructure availability and market demand.

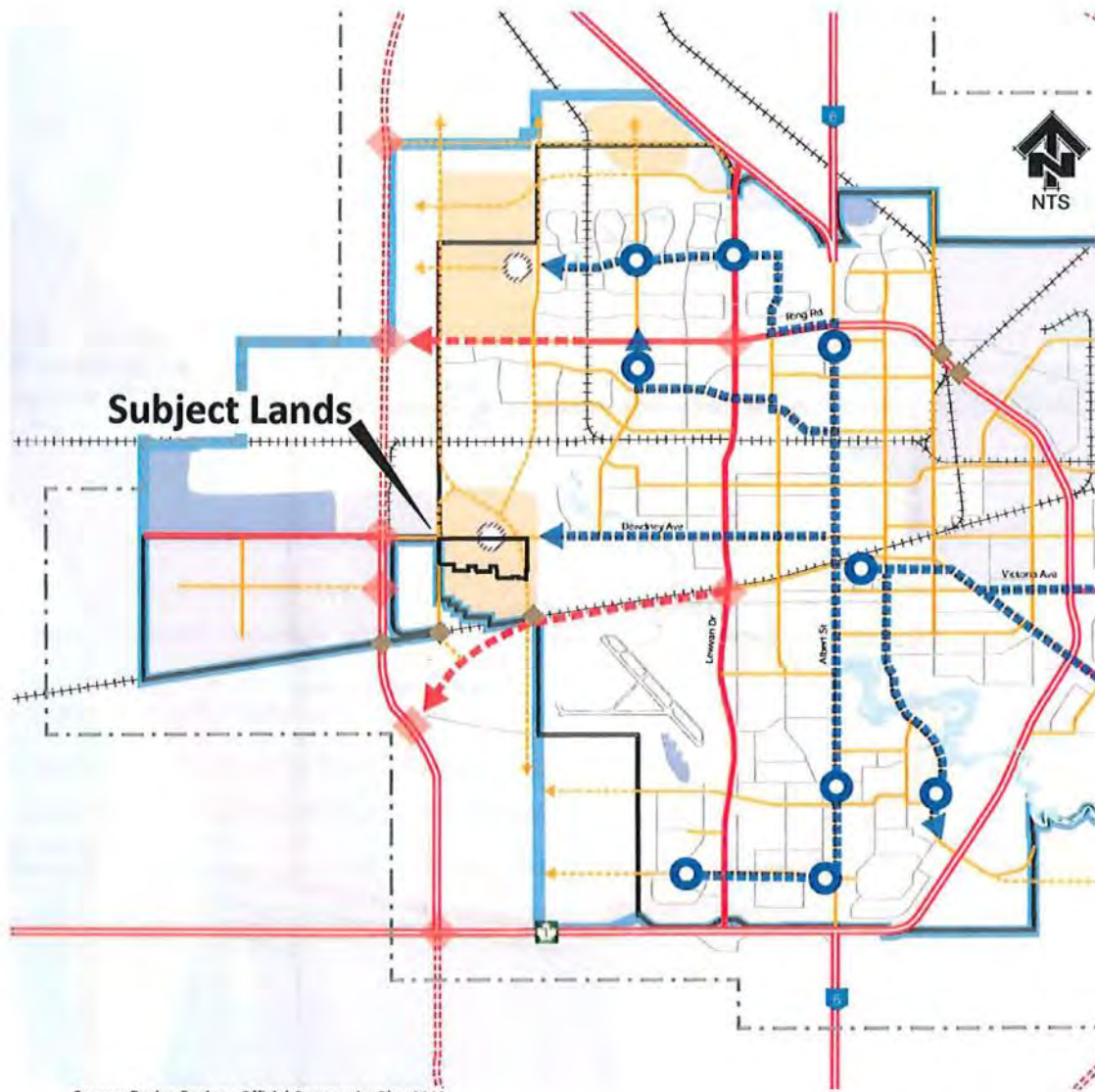


2.0 Existing Conditions

2.1 Location & Ownership

The CP is the first Concept Plan within the approved Westerra Neighbourhood Plan. The CP consists of the following key elements:

- +/- 96.71 ha (238.96 ac) of land;
- Bounded by Dewdney Avenue to the north, Pinkie Road to the west and Courtney Street to the east (as shown in **Figure 1. Location and Context Plan** and **Figure 4 - Local and Regional Transportation Network**);
- Forms a portion of the Westerra Neighbourhood Plan;
- Is bordered by the RCMP lands to the east and the airport to the southeast;
- Is bordered by the Sakimay First Nations to the west;
- Is bordered by the Dieppe residential neighbourhood to the northeast;
- Is bordered by Keeseekooseland to the North;
- Is legally owned by Westerra Development Corp.; and
- Is currently zoned as Urban Holding District (as shown in **Figure 5. Existing Zoning**).



Source: Design Regina - Official Community Plan 2013

Legend

- | | | |
|----------------------------|------------------------------------|-----------------------------------|
| Highway | Railway | New Neighbourhoods (300k) |
| Potential Highway | Express Transit Corridor | Existing Approved Employment Area |
| Urban Expressway | Transit Node | New Employment Area |
| Potential Urban Expressway | Potential Transit Node | Waterbody |
| Arterial Road | Potential Interchange | 2013 City Boundary |
| Potential Arterial Road | Potential Railway Grade Separation | 2014 City Boundary* |
| Collector | | Joint Planning Area Perimeter |

Figure 4 - Local and Regional Transportation Network

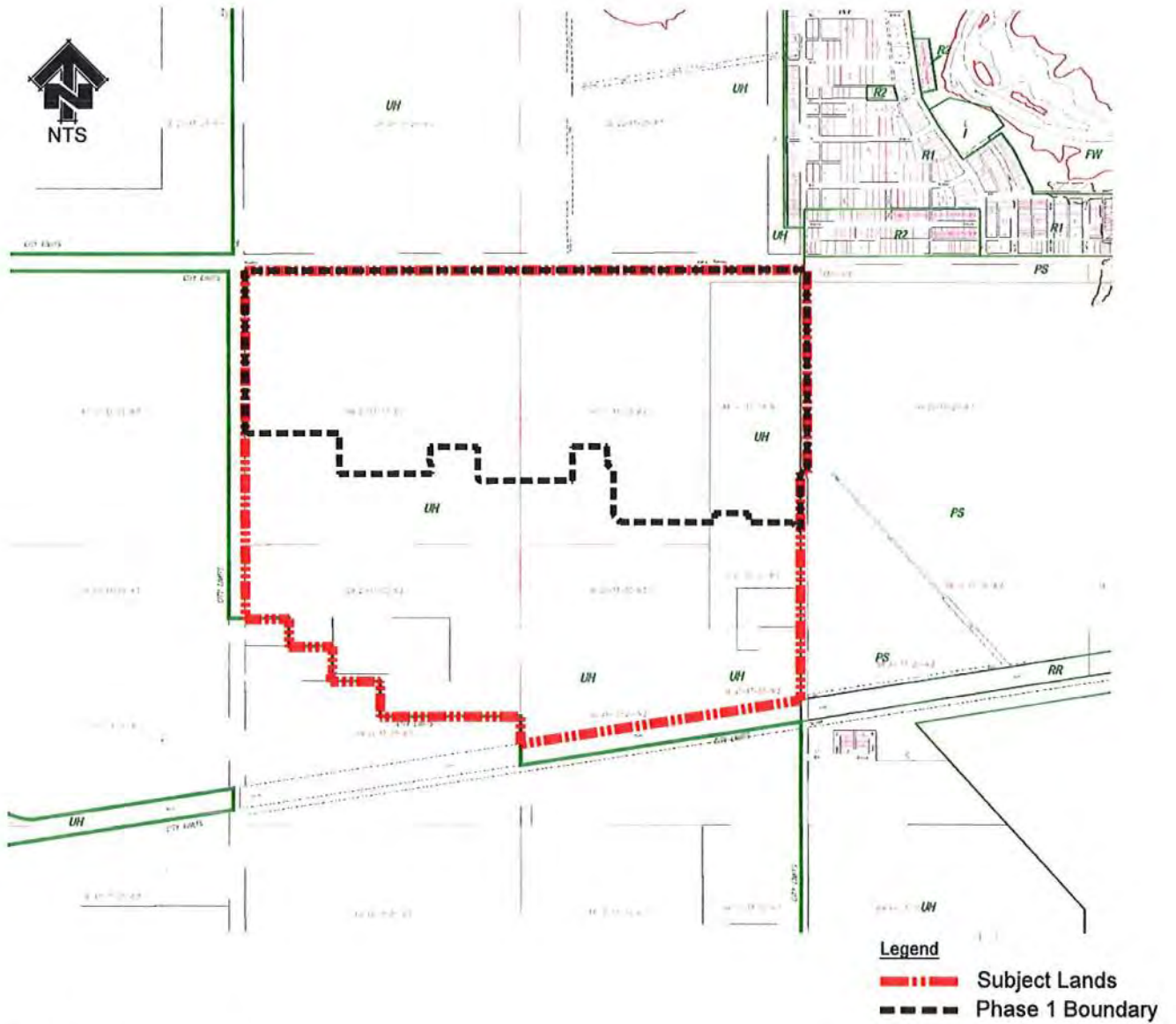


Figure 5 - Existing Zoning

Legal Description:

The Concept Plan area includes +/-96.27 ha (237.87 ac) with current ownership and legal descriptions described as per the following:

Legal Description	Owner	Area (ac)
Pt Sec. 21-17-20-2	Westerra Development Corp.	237.87
Portions of Courtney Street - Closure and Consolidation with Plan Area Assumed	City of Regina	1.09
TOTAL		238.97

Areas of Courtney Street will need to eventually be closed and consolidated with the remainder of the CP area. These have been included within the CP area total.

2.2 Natural Features

The following is a brief description of the existing CP area conditions.

2.2.1 Topography and High Points

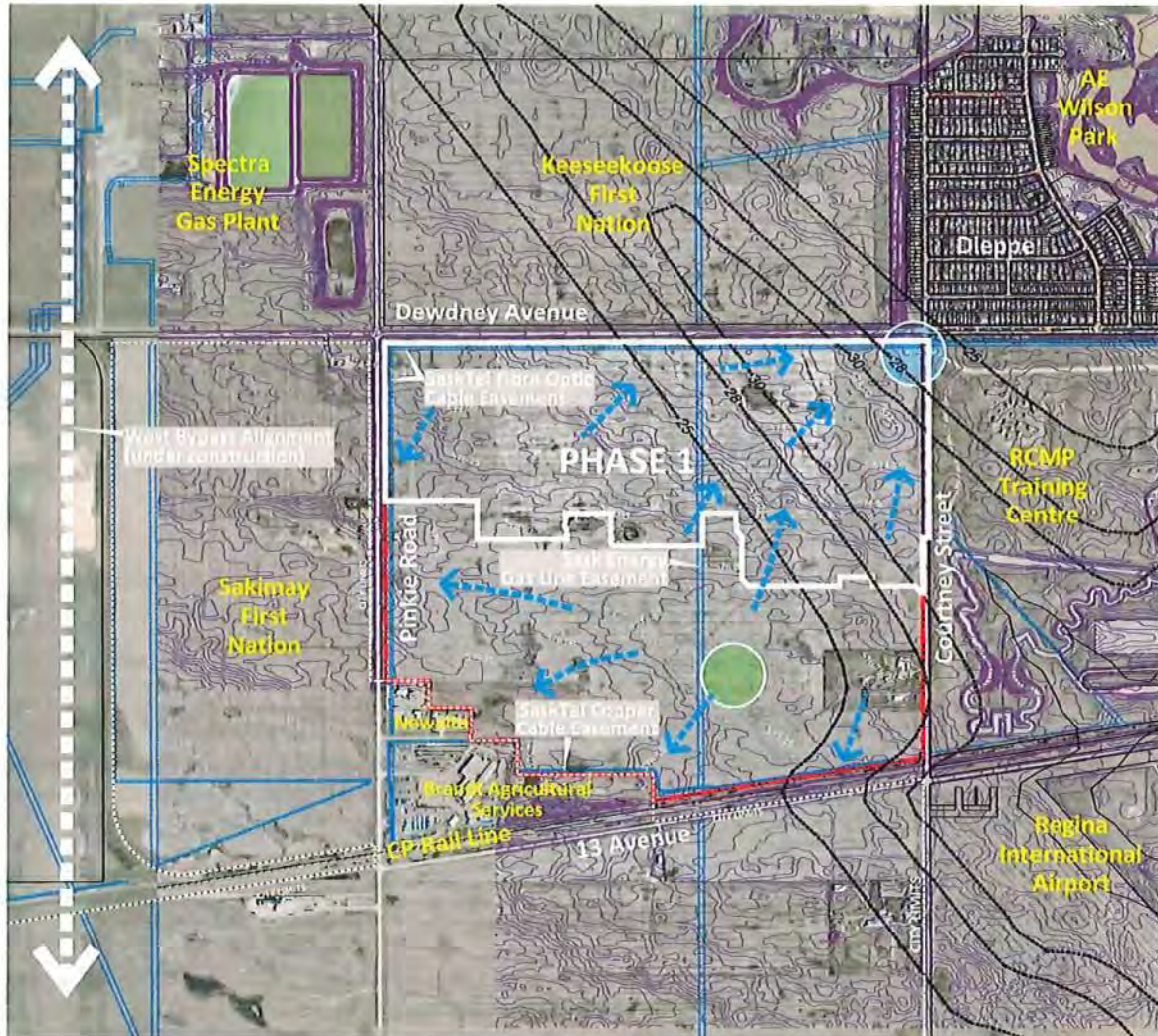
Westerra contains a high point which runs from the NW to SE corners of the NP. Within the CP, drainage is generally towards the northeast corner. The topography is generally flat and there are no slope constraints.

2.2.2 Existing Drainage Course and Wetlands

As indicated in the Westerra Neighbourhood Plan, there is little to no vegetation on the subject lands and there are no wetlands. Existing drainage pathways traverse the CP area as shown on **Figure 6. Site Context and Natural Features**. As such, no Biophysical Impact Assessment was required for the Neighbourhood Plan and no further study is required for this northern portion of the CP area. The existing drainage pattern has been incorporated into the stormwater management system proposed for the CP.

2.3 Built Features and Surrounding Land Uses

At present, there are no existing structures within the Phase 1 CP area. The CP area is relatively flat with a few low areas and drainage paths. As shown in **Figure 6: Site Context and Natural Features**, currently the CP area is cultivated with little to no vegetation. The surrounding land uses include agricultural uses, smaller scale development along Dewdney Avenue and the residential neighbourhood of Dieppe to the northeast. The Regina International Airport is located adjacent to the southeast of the CP area. Land uses located to the west include the Sakimay First Nations. Directly to the north, the CP area is bordered by First Nations lands and to the east by the RCMP training centre. Located to the northwest of the plan are the wastewater treatment plant, lagoon and a Spectra Energy facility. To the southwest of the CP area is the Newalta facility. The Westerra development is in compliance with all required setbacks from these off site features.



- Legend**
- - - - - Subject Lands
 - - - - - NEF Contours
 - ← - - - - Surface Drainage Arrow
 - Approximate Low Point
 - Approximate High Point
 - Contours (0.25m Interval)

Figure 6 - Site Context and Natural Features

2.4 Heritage Resources

The CP area has been subject to a prolonged history of agricultural disturbances. The subject lands do not contain any significant topographical features or water courses. Notwithstanding, in support of the 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.

2.5 Shallow Utilities

Shallow utility services including electric power, natural gas, telephone, cable and internet services will be provided by local utility companies. It is anticipated that underground utilities will be located within the road rights-of-way and private easements as required to serve all proposed development.

The location of existing power, gas, and telecommunications infrastructure in relation to the CP area is shown on **Figure 7. Existing Shallow Utilities**. 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 Neighbourhood Plan. The developer will work with the utility companies at the time of subdivision to provide all necessary services.

2.6 Environmental Analysis

As part of the Westerra Neighbourhood Plan submission, a Phase 1 and Phase 2 environmental site assessment was prepared by *Ground Engineering Consultants Ltd* (submitted under separate cover). The subject property has never been developed and has historically been used as cultivated farmland. The study found that the risk of significant soil and/or groundwater contamination is considered to be low and no further investigation was recommended.

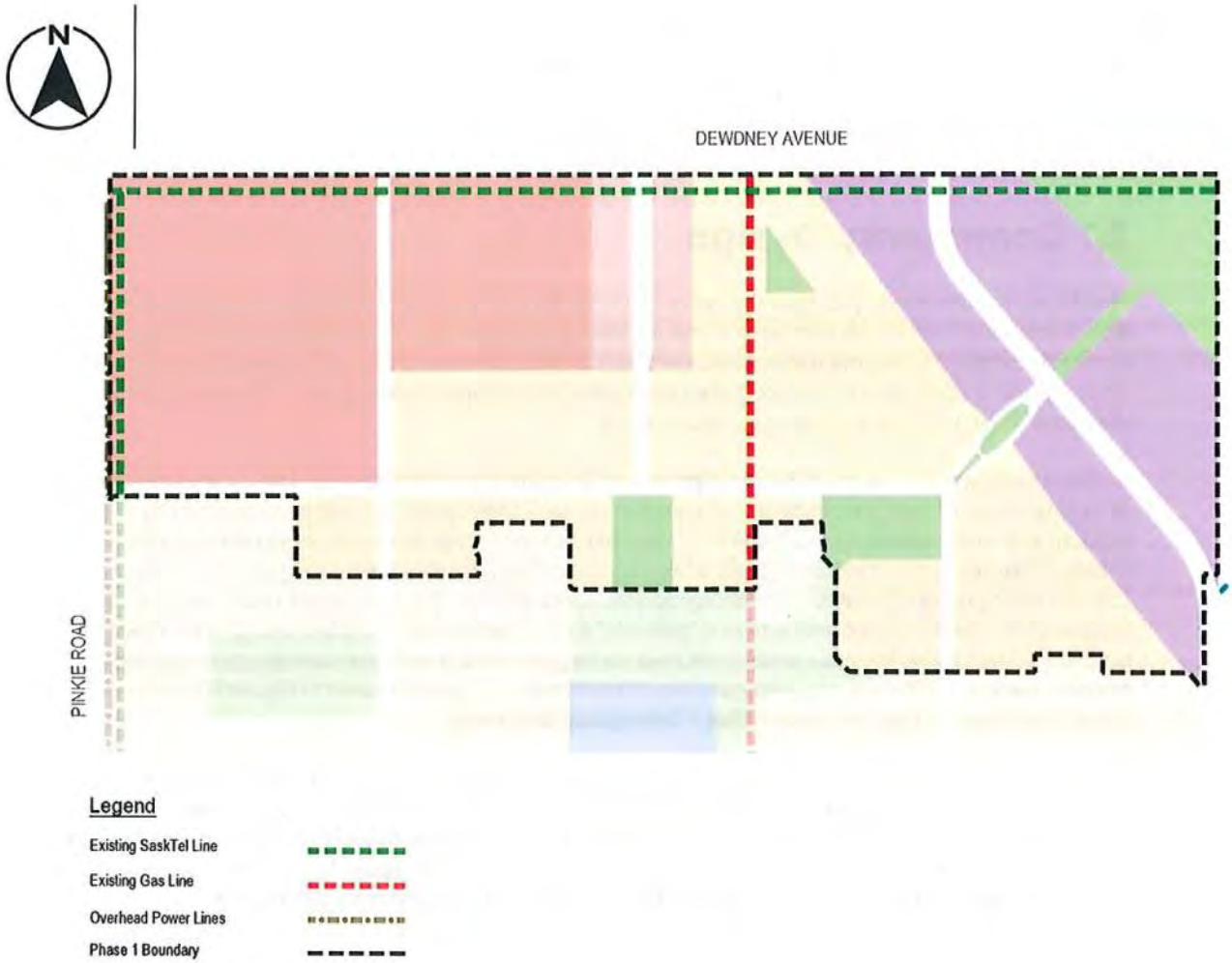


Figure 7 - Existing Shallow Utilities

3.0 Land Use Strategy

3.1 Community Design

The Westerra community provides the opportunity for future residents to live and work in an area that blends residential uses with commercial and business park uses. The CP includes an urban centre that accommodates a mix of employment and commercial uses, provides a range of housing product and intensity and is supported by an integrated road network and open space system. The key elements of Westerra Phase 1 CP are illustrated in Figures 8 - 10.

Residents will live in a variety of low to high density housing forms including Live-Work units within an arrangement of uses that combine to create a vibrant community. This will be supported by an efficient and interconnected road network. The open space system serves an important function linking different areas in the community while also providing a stormwater management function. The on-street greenway maintains mobility options for residents. The main street retail area is a key feature of the development and acts as a 'gateway' to the community. Supplementing main street retail uses, the CP also includes areas dedicated for large format, mixed use community retail, and business park uses. The general configuration of the Phase 1 CP area is shown in **Figure 8. Westerra – Phase One Concept Plan Illustrative Plan – Conceptual Overview**.

An overview of the land use composition for the Phase 1 CP area is outlined in **Table 2 - Westerra Phase 1 Concept Plan Land Use Composition**. Proposed residential densities for the CP area are outlined in **Table 3 - Residential Densities and Population Projections**. Based on projected density, unit assumptions and household size, **Table 4 - Residential Densities and Population Intensity** provides a summary overview of the overall residential density and population intensity forecast for the CP.

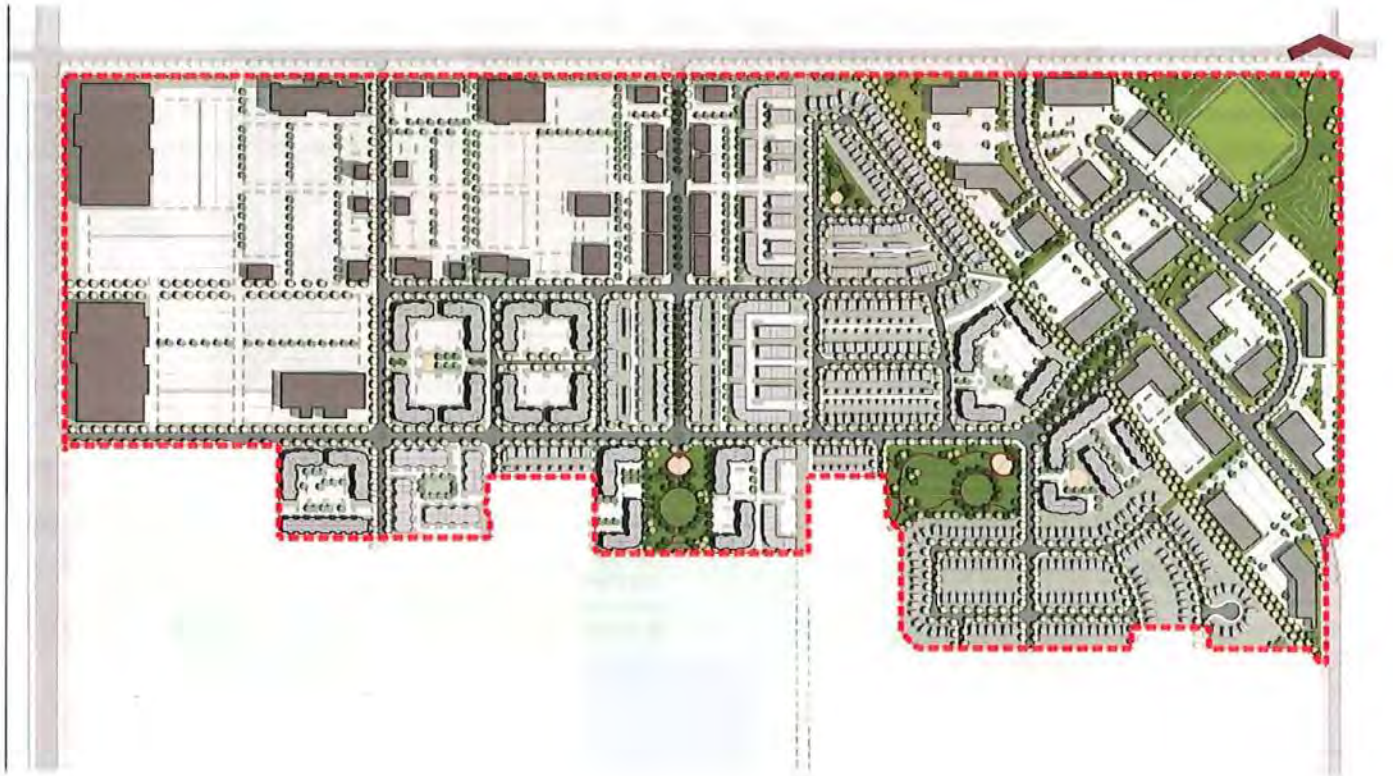
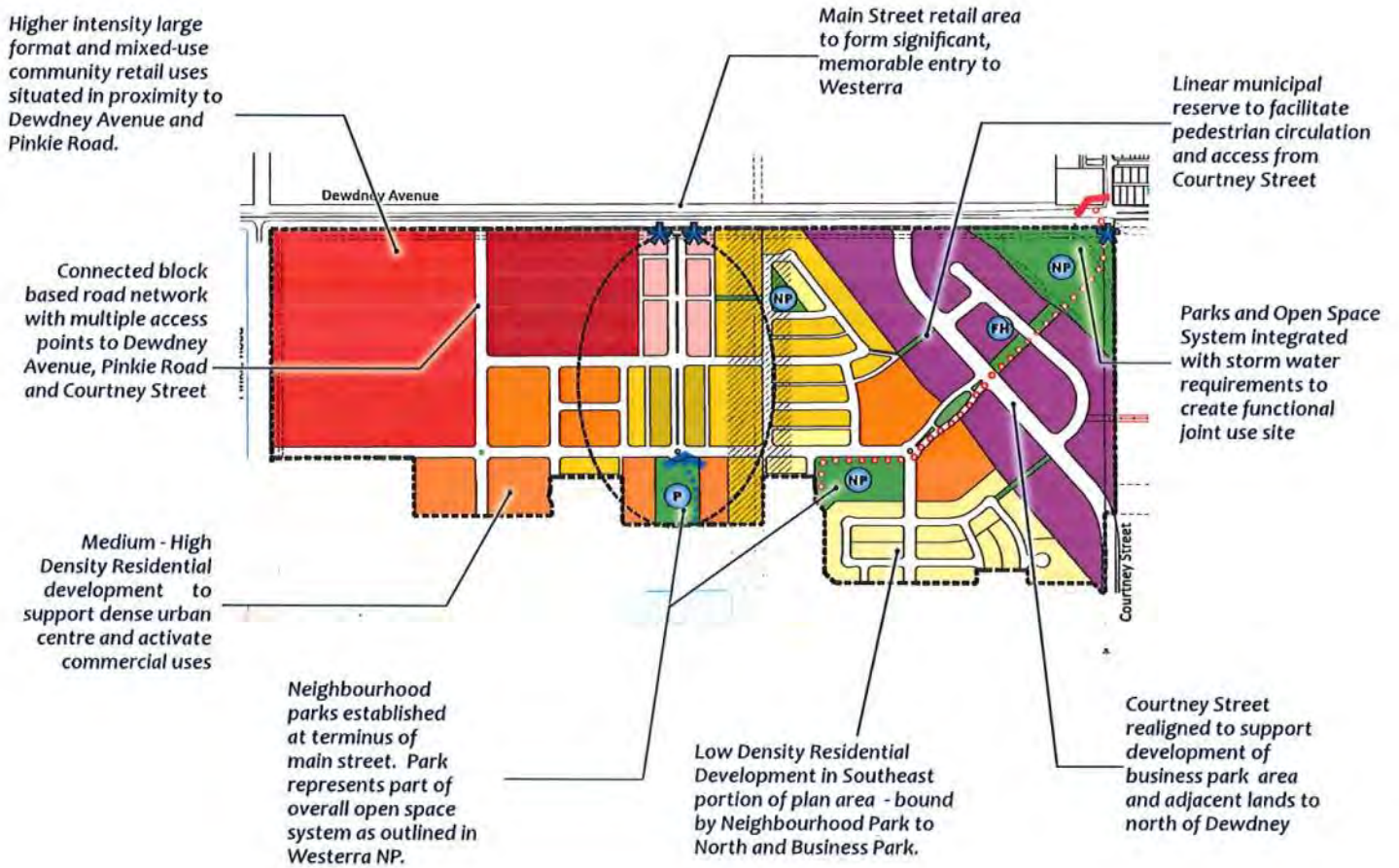


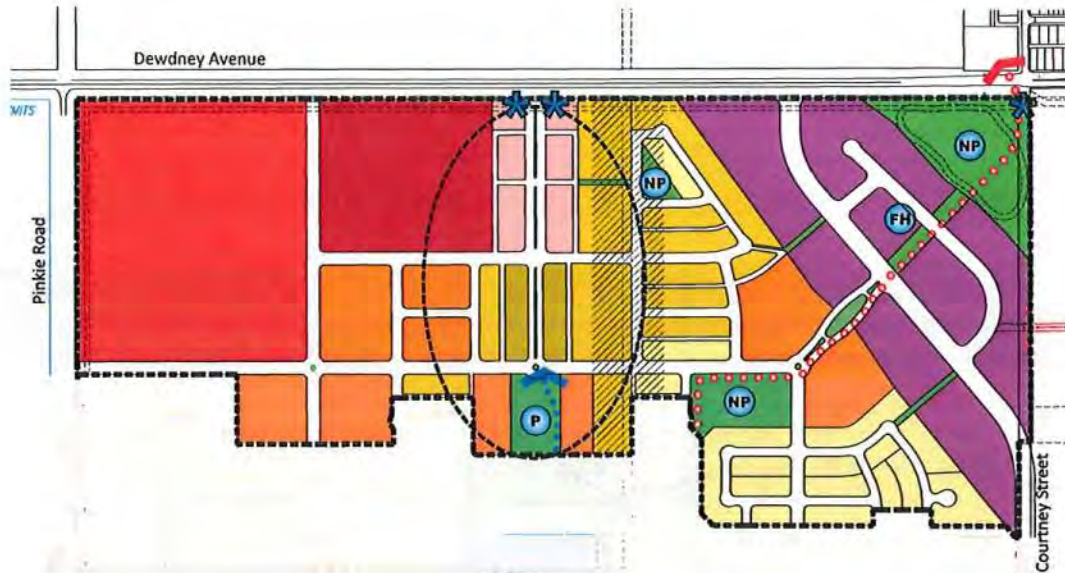
Figure 8 - Westerra - Phase One Concept Plan Illustrative Plan - Conceptual Overview



Legend		Net Area	
Phase 1 Boundary	66.73 has (239.01 act) (100.0%)		
Large Format Retail	17.25 has (42.61 act) (17.8%)		
Mixed-Use Community Retail	7.55 has (18.66 act) (7.8%)		
Main Street Retail	2.32 has (5.74 act) (2.4%)		
High Density Residential	11.69 has (28.88 act) (12.1%)		
Medium Density Residential	9.95 has (24.57 act) (10.3%)		
Low Density Residential	6.87 has (16.99 act) (7.1%)		
Live Work Residential	1.30 has (3.20 act) (1.3%)		
Business Park	14.82 has (36.63 act) (15.3%)		
Open Space			
Municipal Reserve	7.55 has (18.66 act) (7.8%)		

Roads		17.43 has (43.07 act) (18.0%)	
Special Development Area (60m Setback)			
Existing Right of Way Easement			
Neighbourhood Park (NP)		Stormwater Facility	
Neighbourhood Park / Plaza (P)		Entry Feature	
Potential Fire Hall Site (FH)		Devonian Pathway	
Urban Centre		Local Pathway	

Figure 9 - Key Plan Elements



Legend

	Net Area
■ Phase 1 Boundary	96.73 ha± (239.01 ac±) (100.0%)
■ Large Format Retail	17.25 ha± (42.61 ac±) (17.8%)
■ Mixed-Use Community Retail	7.55 ha± (18.66 ac±) (7.8%)
■ Main Street Retail	2.32 ha± (5.74 ac±) 2.4%
■ High Density Residential	11.69 ha± (28.88 ac±) (12.1%)
■ Medium Density Residential	9.95 ha± (24.57 ac±) (10.3%)
■ Low Density Residential	6.87 ha± (16.99 ac±) (7.1%)
■ Live Work Residential	1.30 ha± (3.20 ac±) (1.3%)
■ Business Park	14.82 ha± (36.63 ac±) (15.3%)
Open Space	
■ Municipal Reserve	7.55 ha± (18.66 ac±) (7.8%)
Roads	
■ Special Development Area (60m Setback)	17.43 ha± (43.07 ac±) (18.0%)
— Existing Right of Way Easement	☁ Stormwater Facility
⊙ NP Neighbourhood Park	✳ Entry Feature
⊙ P Neighbourhood Park / Plaza	⊙ Devonian Pathway
⊙ FH Potential Fire Hall Site	⋯ Local Pathway
○ Urban Centre	



Figure 10 - Detailed Land Use Concept for Phase 1

Table 2 - Westerra Phase 1 Concept Plan Land Use Composition

Land Use (Phase 1)	Area (Hectares)	Area (Acres)	Percentage (%) of Phase 1 Concept Plan Area
Low Density Residential	6.87	16.99	7.1
Medium Density Residential	9.95	24.57	10.3
High Density Residential	11.69	28.88	12.1
Live Work Residential	1.30	3.20	1.3
Large Format Retail	17.25	42.61	17.8
Mixed - Use Community Retail	7.55	18.66	7.8
Main Street Retail	2.32	5.74	2.4
Business Park	14.82	36.63	15.3
Municipal Reserve	7.55	18.66	7.8
Roads	16.05	39.67	16.6
Laneways	1.38	3.40	1.4
Total	96.73	239.01	100

3.1.1 Low Density Residential Development

Located mainly in the southeast portion of the CP area, the low density residential development area will consist of predominantly laneless single detached housing. The low density residential portion of the CP is approximately 6.87 ha (16.99 acres) in size. The low density residential area is bounded by a neighbourhood park to the northwest, business park uses to the east and is structured by the proposed collector and local road network. To address the residential-business park interface, a privately maintained berm shared between residential lots and business park lots is proposed. Key elements of this interface and preliminary design parameters are discussed further in the business park section of this CP. **Table 3: Residential Densities and Population Projections** provides an overview of the projected low -density residential area density targets, unit assumptions and projected population thresholds.



3.1.2 Medium Density Residential Development

Located mainly to the east of the main street retail area in the northeast portion of the CP is the medium density development area consisting of 9.95 ha (24.57 acres). The medium density residential development will consist of both laned and non-laned product including semi-detached, townhouses, row housing and combinations thereof.

Defined by the modified grid street network in the east and a general grid network to the west, the medium density residential development area provides a transition between the low and high density development areas. The residential – business park interface provides a buffer with a berm along the back of the lots. This is discussed further in the business park section of this Plan. **Table 3: Residential Densities and Population Projections** provides an overview of the projected medium density area density targets, unit assumptions and projected population thresholds.



3.1.4 High Density Residential Development

Located at the entry to the residential area from Courtney Street and to the south of the Large Format and Mixed-Use Community Retail area is the high - density development area which consists of approximately 11.69 ha (28.88 acres). Its boundaries are delineated largely by east-west major roads, a neighbourhood park and the on-street greenway. The neighbourhood parks support amenity areas for the higher density development area and its residents. The eastern edge is delineated by NEF 30 contour boundary and the business park area. The residential – business park interface provides a buffer with a berm along the back of the lots. This is discussed further in the business park section of this Plan. **Table 3: Residential Densities and Population Projections** provides an overview of the projected high –density residential area density targets, unit assumptions and projected population thresholds.



3.1.4 Live-Work Residential Development

Located within the central portion of the CP, north of a neighbourhood park and south of the main street area are Live-Work units consisting of 1.30 hectares (3.20 acres). This is an innovative type of development intended to support the sustainability of Westerra by allowing residents to work from home, eliminating commuting distances and providing a market for retail uses in the community. Live-Work units are envisioned to take the form of attached housing units. The Neighbourhood Park to the south provides an amenity both in terms of recreation and visual aesthetics. The Live-Work unit area is shown in **Figure 11. Live-Work Residential in Relation to Main Street**. The Live-Work and high density residential uses are essentially an extension and transition from the main street retail area to the residential portion of Phase 1. **Table 3. Residential Densities and Population Projections** provides an overview of the projected Live-Work residential area density targets, unit assumptions and projected population thresholds.



Main Street Retail area forms defining entrance to Westerra from Dewdney Avenue with high quality pedestrian environment and range of local services.

Live Work Area defined by central median and marks transition to neighbourhood park/plaza from Main Street Retail Area



Figure 11 - Live-Work Residential in Relation to Main Street

Table 3 - Residential Densities and Population Projections

Residential Land Use (Phase 1)	Gross Area (hectares)	Net Area (hectares)	Density – Low (upnh)	Density – High (upnh)	Number of Units Low	Number of Units High	Population Per Unit	Population Projections (Low)	Population Projections (High)
Low Density Residential	9.30	6.87	22	25	151	172	3.1	469	532
Medium Density Residential	13.00	9.95	25	50	249	498	2.6	647	1,294
Live Work Residential	2.09	1.30	25	50	33	65	1.8	59	117
High Density Residential	14.62	11.69	50	100	585	1,169	1.8	1,052	2,104
Total	39.01	29.81			1,017	1,903		2,226	4,047
<i>Population of 2,226 over 39.01 gross residential acres in CP area equates to 57 persons per gross hectare Population of 4,047 over 39.01 gross residential acres in CP area equates to 104 persons per gross hectare</i>									

Table 4 - Residential Densities and Population Intensity

Density Summary (Phase 1)	Low Population Scenario	High Population Scenario
Residential Density – Units per net hectare	34.11	63.85
Residential Density – Units per net acre	13.81	25.85
Population intensity of Residential Area (ppnh)	74.67	135.76
Population of Intensity of Residential Area (ppna)	30.23	54.96

3.2 Commercial

3.2.1 Urban Centre

Located in the central portion of the CP area along Dewdney Avenue is the Urban Centre. The Urban Centre is a local shopping, living and working area for the surrounding community. Map 1 of the Official Community Plan (OCP) shows Westerra as the location of an Urban Centre. According to Section D5, Goal 3 in the OCP, an urban centre is defined as an area for pedestrian and transit-oriented mixed-use development. It is also an area intended to function as a hub for community interaction and identity (p. 41 of the Official Community Plan, 2013). Goal 3, Policy 7.10 also defines an Urban Centre as an area of higher density residential and commercial uses, transit oriented development, community amenities and open space.

The Westerra Urban Centre is located at the intersection of Dewdney Avenue and the Main Street retail area. It is considered an Urban Centre because it is located along a potential future express transit route, a major transportation route, and provides multiple pedestrian opportunities throughout. The main street retail area is the focus of the Urban Centre and provides a sense of place in an area where residents interact. Mixed uses in the area include commercial, residential and employment uses. The Urban Centre is a node supported by higher density development, aligning with the policy direction of the OCP.



The Urban Centre is an important contribution to the Westerra Community and West Regina because it provides an intensity and diversity of uses to this neighbourhood and sector of the City. As the southern anchor to the Urban Centre, the Live – Work area provides a transition to the south and the rest of the CP area. A Neighbourhood Park is centrally located south of the Live-Work area serving as an amenity for the surrounding residential uses as well as the southerly terminus of main street.



3.2.2 Main Street Retail Area

The Main Street Retail area is one component of the urban center and is envisioned as the focal point of Westerra and will contain neighbourhood scaled retail and mixed uses. This area, containing 2.32 ha (5.74 acres), is unique and the identity, design, product mix and density all combine to create a high quality, pedestrian scaled atmosphere. Main Street features a central landscaped median which serves to enhance the aesthetics and entrance into the area. Angled parking is accommodated on both sides of the street to promote easy access to businesses. The buildings have been situated to provide rear service access. The preliminary layout of the main street retail area is shown in **Figure 12. Main Street Retail Area Plan Overview.**

In general, buildings will be 1.5 – 2 storeys with a mix of uses possibly including 2nd storey residential. Parking is envisioned to be angled in the front with perpendicular parking in the rear. All parking will comply with City land use bylaw standards. This Main Street includes a landscaped median and building fronts are anticipated to be approximately 120 feet across from each other. This creates a comfortable pedestrian environment. Key elements forming part of the main street, live work and adjacent areas are outlined in **Figure 13: Key Elements of Main Street and Live Work Area – Conceptual Overview** and shown in **Figure 13a: Main Street Detail Looking South - Conceptual Overview.**



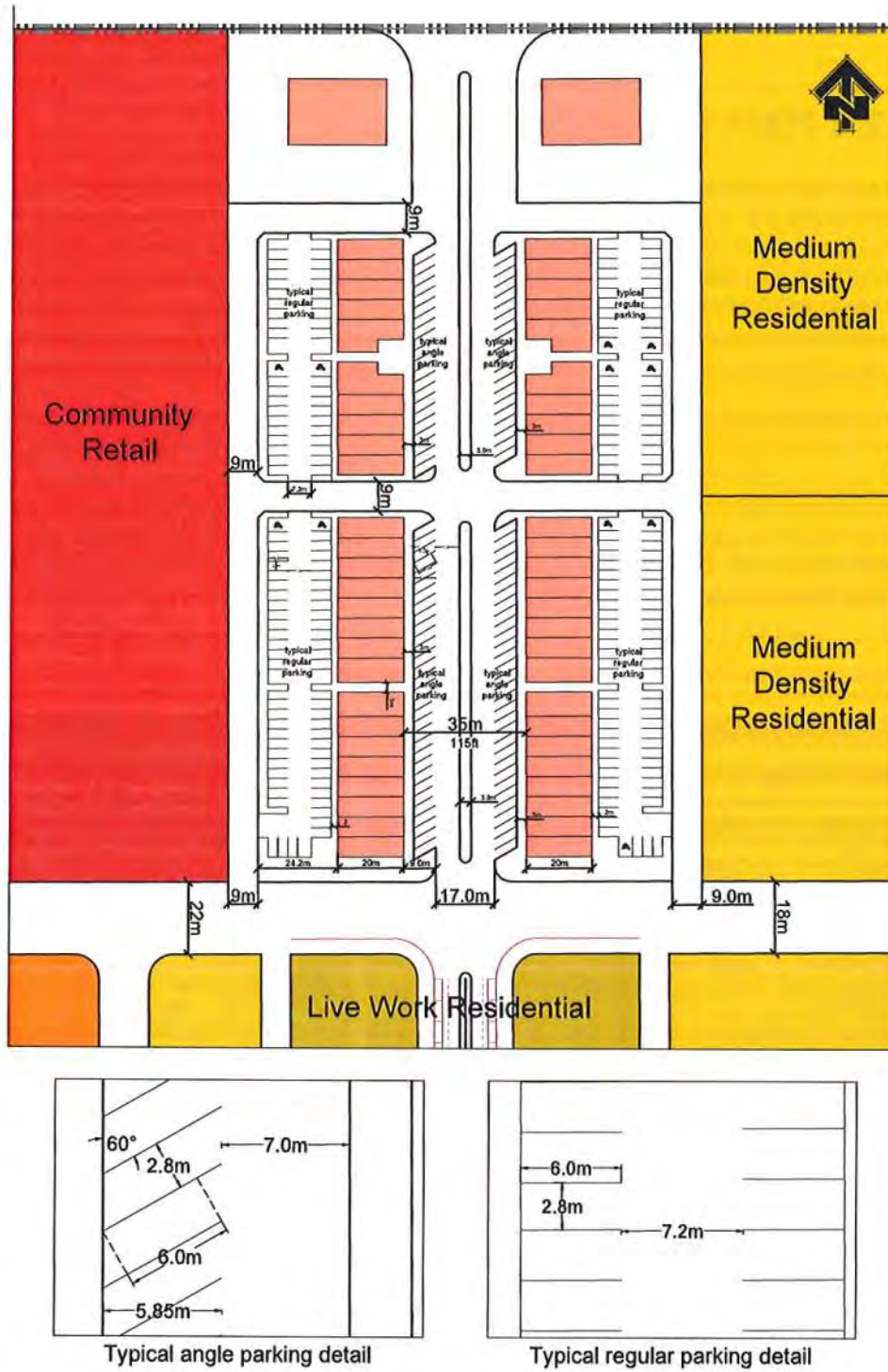


Figure 12 - Main Street Retail Area Plan Overview

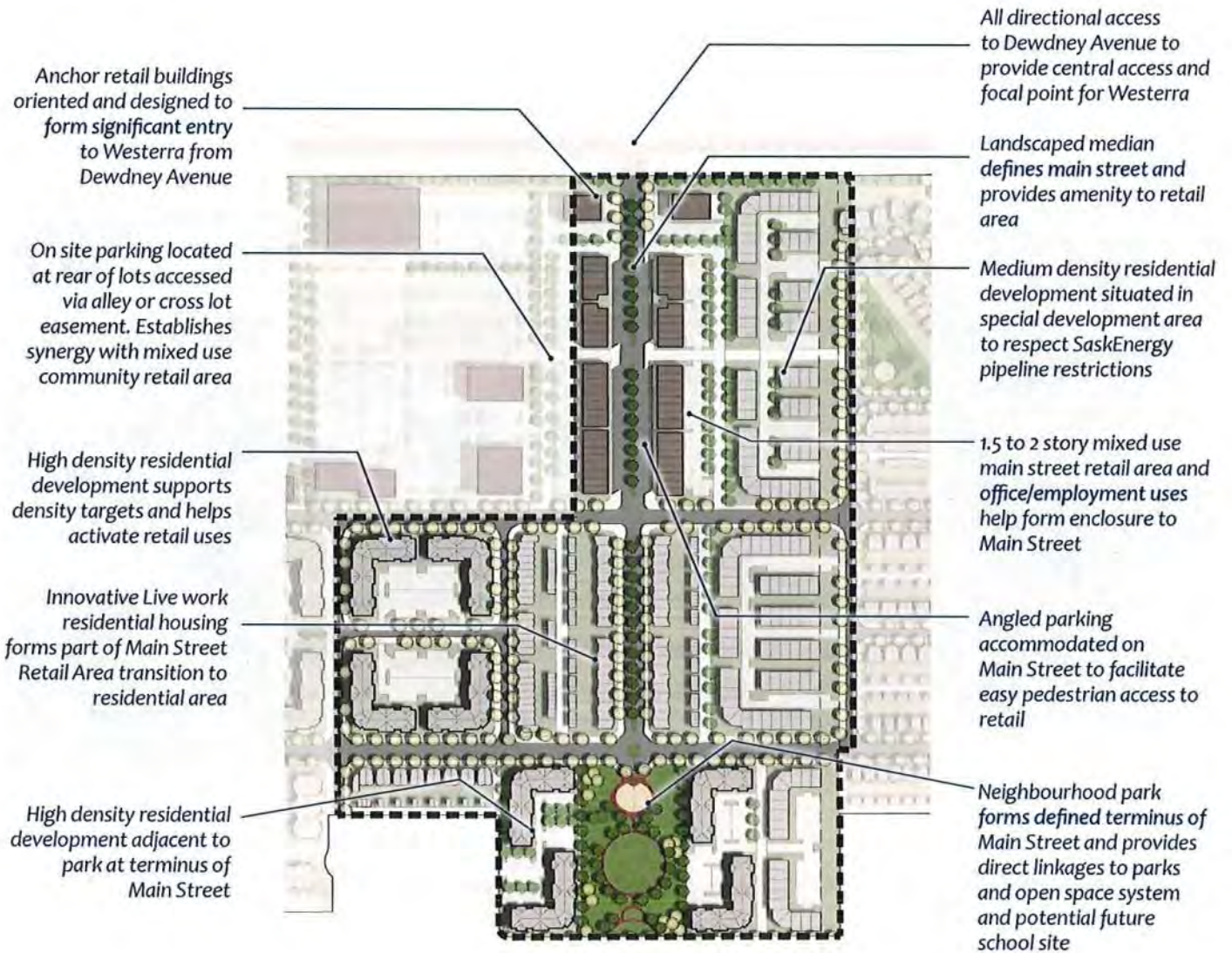


Figure 13 - Key Elements of Main Street and Live-Work Area - Conceptual Overview



Figure 13a - Main Street Area - Looking South - Conceptual Overview

3.2.3 Mixed-Use Community Retail Area

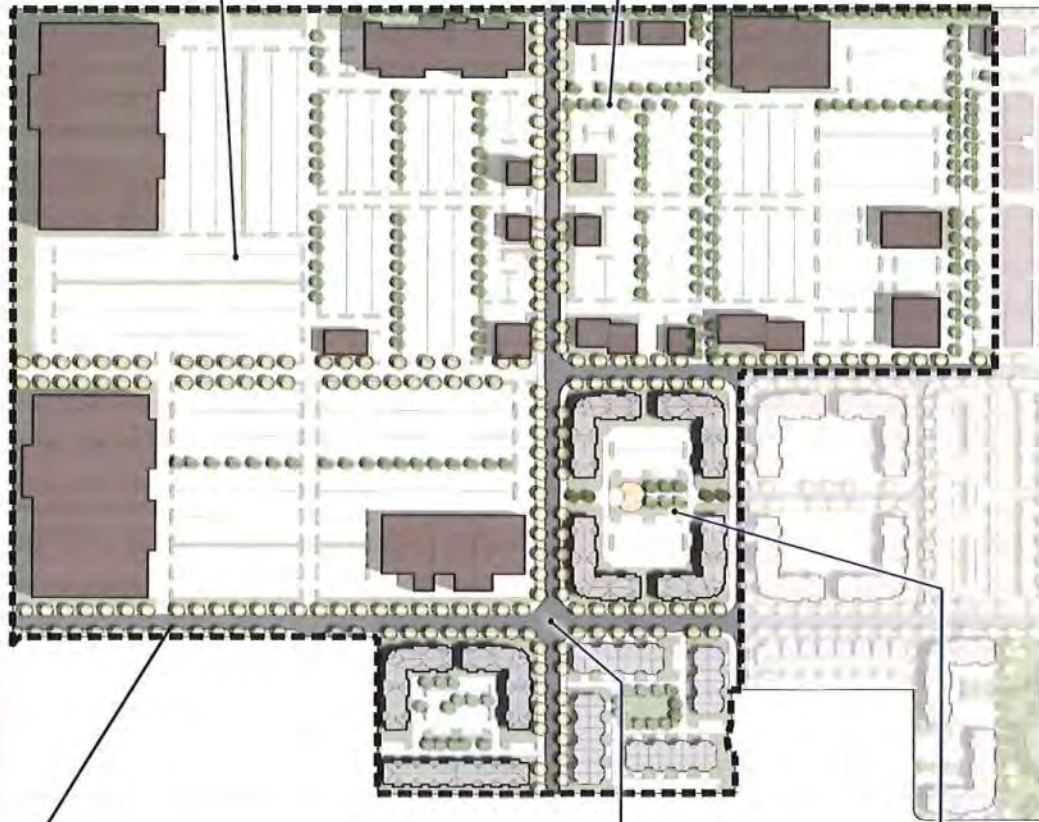
Located to the west of the Main Street area, the Mixed-Use Community Retail area of 7.55 hectares (18.66 acres) is intended to provide commercial amenities to residents of Westerra, west Regina and the R.M. of Sherwood. This area is shown in Figure 14. **Key Elements of Large Format and Mixed - Use Community Retail Area – Conceptual Overview.** Significant emphasis is placed on pedestrian connectivity within the CP area and the adjacent Main Street Area. People can park in the mixed-use community retail area and walk to the Main Street area. The close proximity of shopping & services enables residents to rely less on cars.

Major roadways act as boundaries to the mixed-use community retail area. Access to the area is available from Dewdney Avenue and the northern edge is clearly defined by a major arterial. Possible uses include small to medium scale commercial uses such as banks, pharmacies, liquor stores, grocery stores, restaurants, and personal services such as hair salons. Accessory uses are envisioned to include a parking area, pedestrian walkways and patios where appropriate. Internal circulation and connections will be planned to connect with the Large Format Retail area to the west and the Main Street Retail area to the east. The Mixed-Use Community Retail area may also encompass some form of high density residential development along its eastern and southern boundaries. The intent of infusing high density development into this area will be to further support the proposed main street area.



Large scale large format retail oriented at junction of Dewdney Avenue and Pinkie Road to support regional commercial needs

Mixed-Use Community retail situated with good exposure to Dewdney and proximity to Main Street. Mixed Use Community Retail may also support future high density residential development to further activate Urban Centre.



Collector roadway provides access to retail area and supports separation between residential and commercial uses

Roundabout to support intersectional functions at this location

High density residential development to help activate and support main street and mixed-use community retail areas

Figure 14 - Key Elements of Large Format and Mixed-Use Community Retail Area - Conceptual Overview

3.2.4 Large Format Retail

The Large Format Retail area is located in the northwest corner of Westerra with access from Dewdney Avenue and Pinkie Road as illustrated on **Figure 15. Conceptual Rendering Large Format Retail**. This area is a high visibility site with excellent access from arterial roads and is intended to serve a regional market. This area will provide building forms that typically include single story buildings with a large footprint on a single site. Large format retail can accommodate big – box, stand - alone types of development that require large parking areas.

The approximate location of a lift station intended to serve Westerra is shown in the southwest corner of the large format retail site (**Figure 10-Detailed Land Use Concept for Phase 1**). Internal site circulation will accommodate traffic and pedestrian flows and connections to adjacent areas.

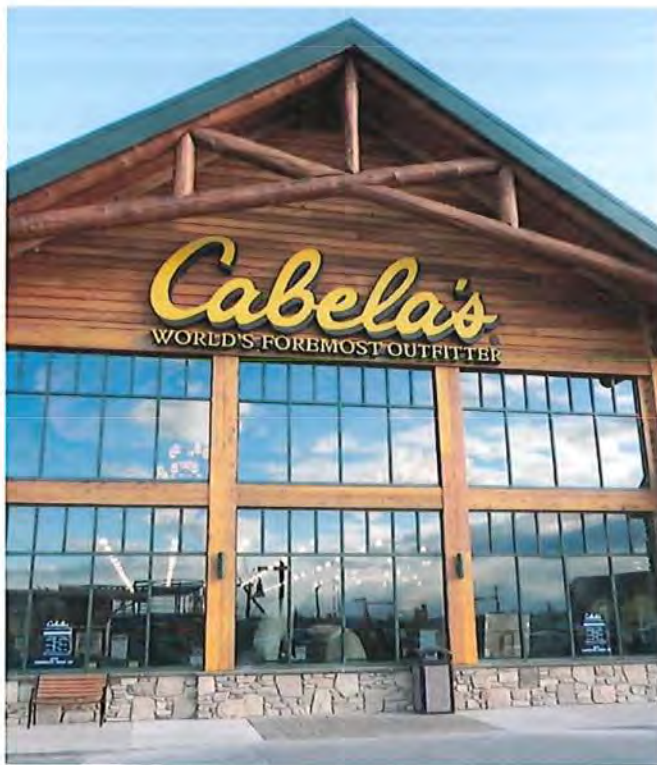




Figure 15 - Large Format Retail - Looking Northeast - Conceptual Overview

3.2.5 Business Park Area

The Business Park Area will accommodate a variety of business uses including a mix of office and non-manufacturing industrial developments – comprehensively planned in a campus-style setting as conceptually shown in **Figure 16 - Key Elements of Eastern Gateway - Conceptual Overview**. The form of development will blend land use situated west of the NEF 30 contour. While the business park area serves as a compatible use with the adjacent residential use west of the NEF contour, consideration has been given to establishing an appropriate and consistent transition between the proposed business park and adjacent residential area. To support this transition, the plan envisions the construction of a landscaped berm between the business park and residential area. It is anticipated that wood material will be used for fence construction. This interface is illustrated in **Figure 17. Business Park-Residential Interface**. The berm will be constructed by the developer and maintenance responsibilities would be assumed by lot owners. It is acknowledged that the City will not assume ownership of the berm.

13 metre landscaped berm to establish appropriate separation and transition from residential to business park area

Courtney Street realigned through plan area to service business park lands and to provide optimal intersection location to support future development north of Westerra

Significant entrance amenity forms defining feature of entrance into Westerra residential area from Courtney Street

Linear Municipal Reserve to support proposed regional pathway network and tie into Devonian pathway system

Neighbourhood park situated at terminus of entrance street adding to entrance experience Park ties into overall parks and open space system

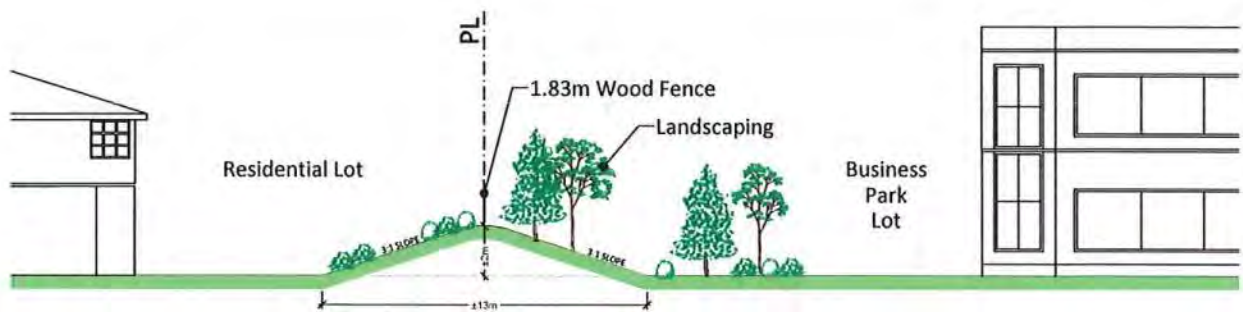
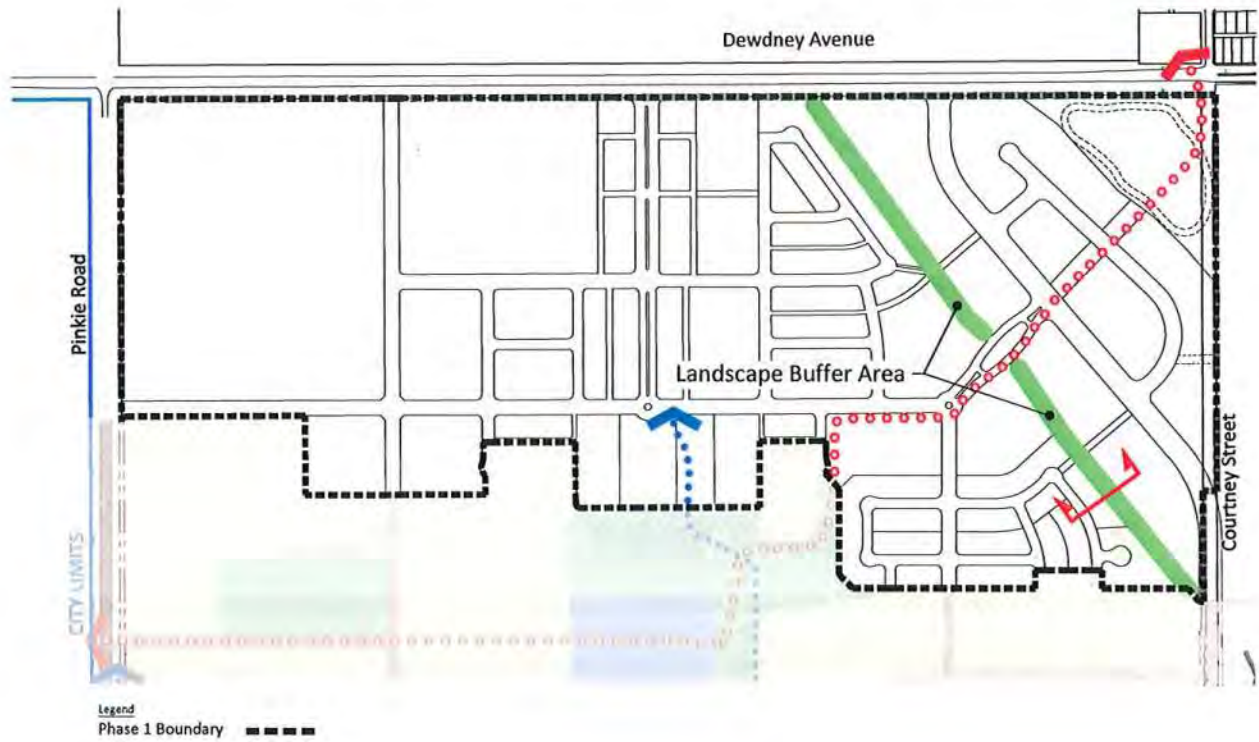
Business Park area planned and designed to business park standard to support gateway function of Courtney Street

Roundabout to facilitate efficient vehicular flow at this location and add amenity value

High density residential development fronting street and park to form significant entry into Westerra residential area



Figure 16 - Key Elements of Eastern Gateway - Conceptual Overview



Residential and Business Park Area Interface Treatment Cross Section
Scale 1:250

Figure 17 - Business Park - Residential Interface

3.3 Civic/Recreation

No school is contemplated within the immediate term for this development. However, a potential future area within the central portion of the NP has been set aside for this purpose. This area is not included within the CP and will be addressed in a subsequent Concept Plan. The open space areas contained within the CP are connected to this recreational/public use site and implementation of these connections are envisioned as part of the overall civic and open space strategy for the plan area.

3.4 Community Services

In terms of emergency services, the need for a fire hall has been identified through consultation with the City and a preliminary location has been identified within the business park area. This is shown on **Figure 10. Detailed Land Use Concept for Phase 1**. To fulfill this need, the developer will work with the City on finalizing this location at the redesignation and subdivision Phase.

3.5 Parks and Open Space

Open Space within the CP is designed to facilitate a range of passive and active recreational opportunities, enhance pedestrian connectivity and provide aesthetic, social and infrastructure functions in the context of the overall Westerra Neighbourhood Plan. Overall, the open space strategy in the Westerra Neighbourhood Plan area is based upon a dispersed and interconnected system of open spaces serving recreational, transportation and stormwater management functions. The NP open space system is centered on the potential future school site in the centre which is connected to the various smaller neighbourhood parks situated throughout the community in proximity to residents of all the neighbourhoods in Westerra. These areas are all connected by various pathways and walkways. A regional pathway traverses the area from east to west and connects Westerra with adjacent lands to the west and the Devonian Pathway system to the northeast.

Key elements of the parks and open space system are illustrated in **Figure 9. Key Neighbourhood Plan Elements – Conceptual Overview**. Key components of the overall Westerra Neighbourhood Plan include:

- An interconnected open space network that integrates the central potential future school site, the proposed stormwater facilities and the connections to the Devonian Regional and local pathway system.
- An on-street greenway which ties into the proposed parks and open space system. Collectively, the greenway, parks and open space within Westerra will support a local and regional pathway system. The regional pathway is intended to connect to and form an extension of the Devonian pathway system.

The CP open space system involves the construction of portions of the proposed open space system as outlined in the approved Neighbourhood Plan and includes an open space stormwater detention pond in the northeast corner, forming part of the stormwater management system. This is illustrated in **Figure 18 Overview of Parks and Open Space Looking Southwest**. This area is intended to serve as a recreational amenity for residents of Westerra and Dieppe, and an aesthetic amenity for the employees in the business park. The area also serves as a transitional use between the business park and the Dieppe neighbourhood and will help support the extension of the regional pathway system through Westerra.

In terms of an appropriate tie-in into the Devonian pathway system, as an interim option, it is anticipated that Westerra's regional pathway will connect to the existing regional pathway system that currently runs along the north side of Dewdney Avenue. A pedestrian crossing will be considered. However, the ultimate connection to the Devonian pathway system is subject to planning for the lands to the north and must be integrated appropriately at the detailed planning stage.

Within the CP, the detention pond transitions into the on-street greenway identified through the business park area to the residential area, terminating in a neighbourhood park.

A second neighbourhood park is proposed to the north of the potential future school site, connecting to the pedestrian environment in the main street retail area. Programming of this park is anticipated to include soft and hard landscaping. The park will support the commencement of the local pathway network identified within the Westerra NP.

Lastly, a small neighbourhood park is proposed within the residential area situated east of the main street retail area. A small piece of linear municipal reserve has been proposed to support pedestrian access from this residential area to the main street retail area.

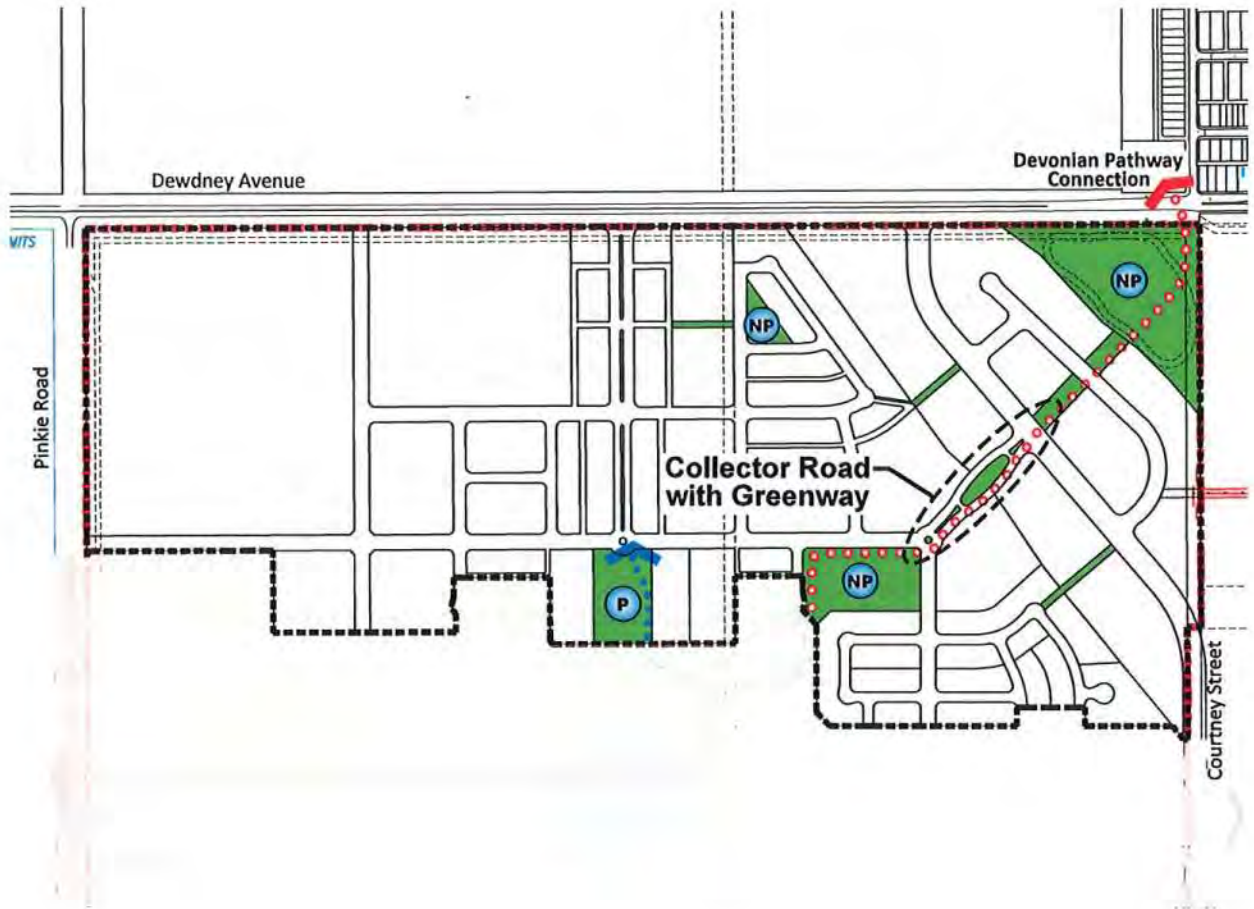
The configuration, siting and location of the open space components in the CP are shown in **Figure 19. Open Space Dedication**. These elements form part of the CP area and are part of a larger open space network. They are envisioned to unify Westerra, as documented in the Neighbourhood Plan. Detailed plans for the proposed parks and open space system forming part of the CP will be detailed in plans and specifications submitted to the City following subdivision approval.





Figure 18 - Overview of Parks and Open Space Looking Southwest





Legend

- Phase 1 Boundary
- Municipal Reserve
- NP Neighbourhood Park
- P Neighbourhood Park / Plaza
- ○ ○ ○ Devonian Pathway
- ● ● ● Local Pathway



Figure 19 - Open Space Dedication

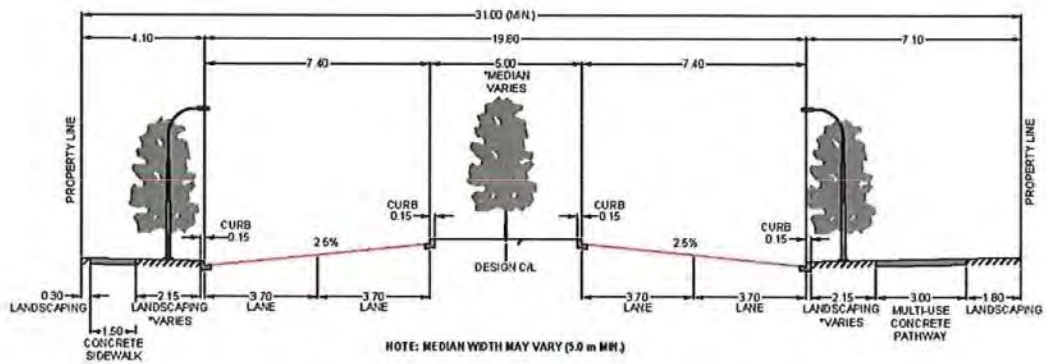
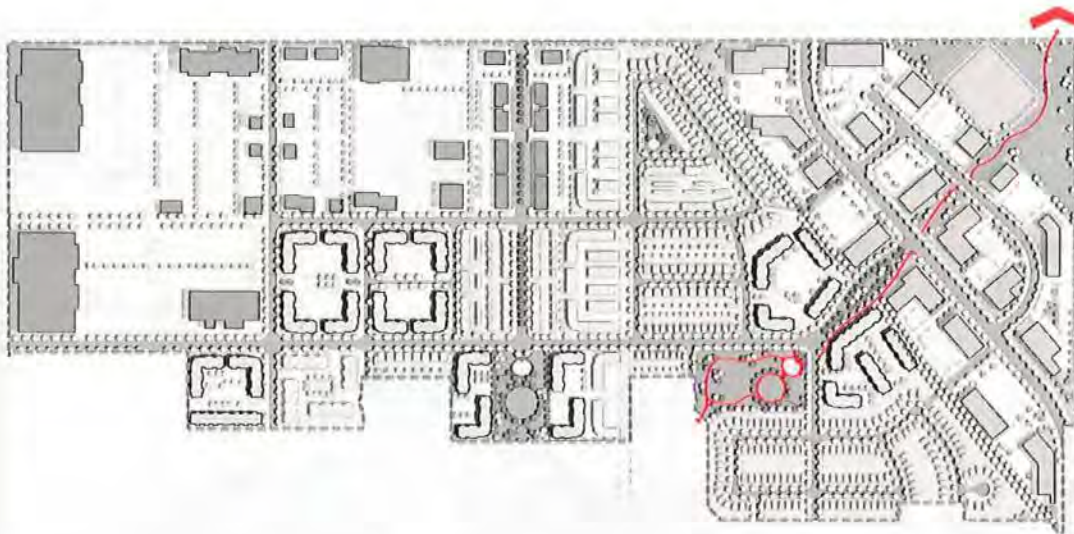


3.5.1 Pathway System

Implementation of a pedestrian and bike network is anticipated within the CP area through the provision of a local and regional pathway system which is consistent with the Westerra Neighbourhood Plan. The proposed pathway system is envisioned to form part of the parks and open space system. The pedestrian and bike network within the CP orients toward the Devonian Pathway to the northeast of Westerra. When situated outside of the park system, the proposed regional pathway is supported by a linear on-street greenway.

The location of the proposed regional pathway system within the proposed reserve lands and the on-street greenway is shown in **Figure 19 - Open Space Dedication**. As shown, the on-street greenway includes a proposed couplet with a landscaped median within the road right-of-way (ROW) at the main entrance off of Courtney Street. Key elements of this gateway are shown in **Figure 20: Couplet Entrance** and **Figure 21: Main Entrance from Courtney Street - Looking Southwest**.

Ultimately, it is envisioned that the regional pathway system as identified in the Westerra NP, will extend northward through adjacent lands to tie into the Devonian pathway system. At this time, planning for the lands to the north of Westerra has not yet been completed and hence this desired pathway connection at this point in time is premature. Notwithstanding, as an interim approach, a connection to the Devonian network via the existing via the existing pathway on the north side of Dewdney Avenue is proposed. The approximately location of this proposed connection point is identified in **Figure 19 - Open Space Dedication**.



31.0m Main Entrance Collector Section

Figure 20 - Couplet Entrance Overview



Figure 21 - Main Entrance From Courtney Street - Looking Southwest



3.6 Municipal Reserve

A summary of proposed municipal reserve dedication associated with the Phase 1 plan area is outlined below. Following Phase 1 reserve dedication, the amount of Municipal Reserve (MR) outstanding shall be deferred to other lands within the Westerra Neighbourhood Plan. The proposed municipal reserve dedication and the amount of municipal reserve owing under the Neighbourhood Plan and deferred to is summarized in **Table 5 - Municipal Reserve**.

Table 5 - Municipal Reserve

	+/-Acres	+/-Hectares
MR Requirement for Neighbourhood Plan Area	40.27	16.29
Proposed Municipal Reserve (MR) dedication as part of Phase 1 Concept Plan	18.66	7.55
Amount of MR Outstanding – Deferred to Balance	21.61	8.74

4.0 Transportation

4.1 Transportation System Overview

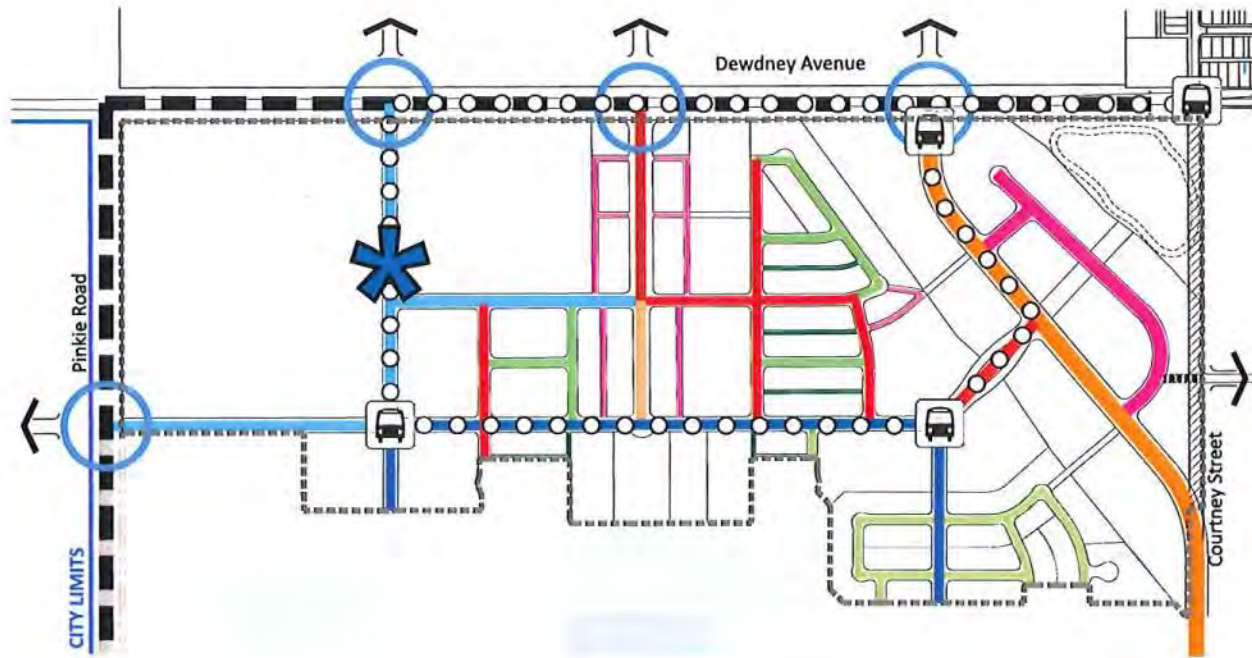
The intent of the NP transportation system within the Westerra Neighbourhood Plan is to provide a road network that is compatible with the existing and future regional road network. The network provides frequent and direct access to the boundary arterial and collector roads. The internal road network is based on a modified grid network and provides two east-west road links through the central portion of the plan area. Three accesses off of Dewdney Avenue provide entrances into the community. Two other accesses are provided off Pinkie Road; one provides mainly commercial access and the other provides mainly residential access. Accesses from Courtney Street are also provided; one through the business park area and one through the residential area.

The internal road network for the CP builds on the road network presented in the Westerra Neighbourhood Plan. This is shown on **Figure 22. Circulation Plan**. The CP recognizes that the road network shown on **Figure 22. Circulation Plan** is preliminary and that the exact road and street pattern will be determined at the subdivision stage. It is also recognized that a portion of Courtney Street will be closed and consolidated into the CP area at some future time during the development of the CP area.

4.2 Road Network Hierarchy

The proposed road network provides for multiple all directional access and egress points to Dewdney Avenue, Pinkie Road and Courtney Street in accordance with City standards and requirements. The internal road network is comprised of a series of collector, local and on-street greenway roads all based on a modified grid system. This system enhances the focus on the central potential future school site. The internal collector road system is also designed to facilitate access between: the Main Street Area, the Mixed-Use Community and Large Format Retail Area, the Business Park Area and the Residential Areas. The proposed road network hierarchy for the CP is shown on **Figure 22. Circulation Plan**.

The Plan allows for three connections to the land north of the CP, a connection to the land to the west, and one connection into the RCMP lands to the east.



- Legend**
- Phase 1 Boundary
 - ■ ■ Arterial
 - 33.0m Major Collector
 - 35.0m Main Street Collector
 - ±31m Main Entrance Collector w/ Varying Greenway
 - 25.0m Live-Work Collector
 - 24.0m Industrial
 - 23.5m Collector - Inner Loop
 - 22.0m Collector
 - 18.0m Local Road
 - 15.0m Local Road
 - 9.0m Lane
 - 6.0m Lane
 - Tie-in to RCMP Training Centre
 - ○ ○ ○ Transit Route
 - ☎ Transit Stop
 - ★ Transit Hub
 - Signalized Intersection
 - ▨ Portion of Existing Courtney Street to be closed 1.17 ha± (2.89 ac±)

Figure 22 - Circulation Plan

4.3 Road Network Cross Sections

Section drawings of the proposed road network hierarchy contained within the Phase 1 CP area are outlined in **Figure 23. Road Network Cross Sections**. The proposed road network provides a layout that balances the needs of vehicle 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 appropriate building setbacks and facades. These measures are considered integral to the achievement of a sustainable community design.

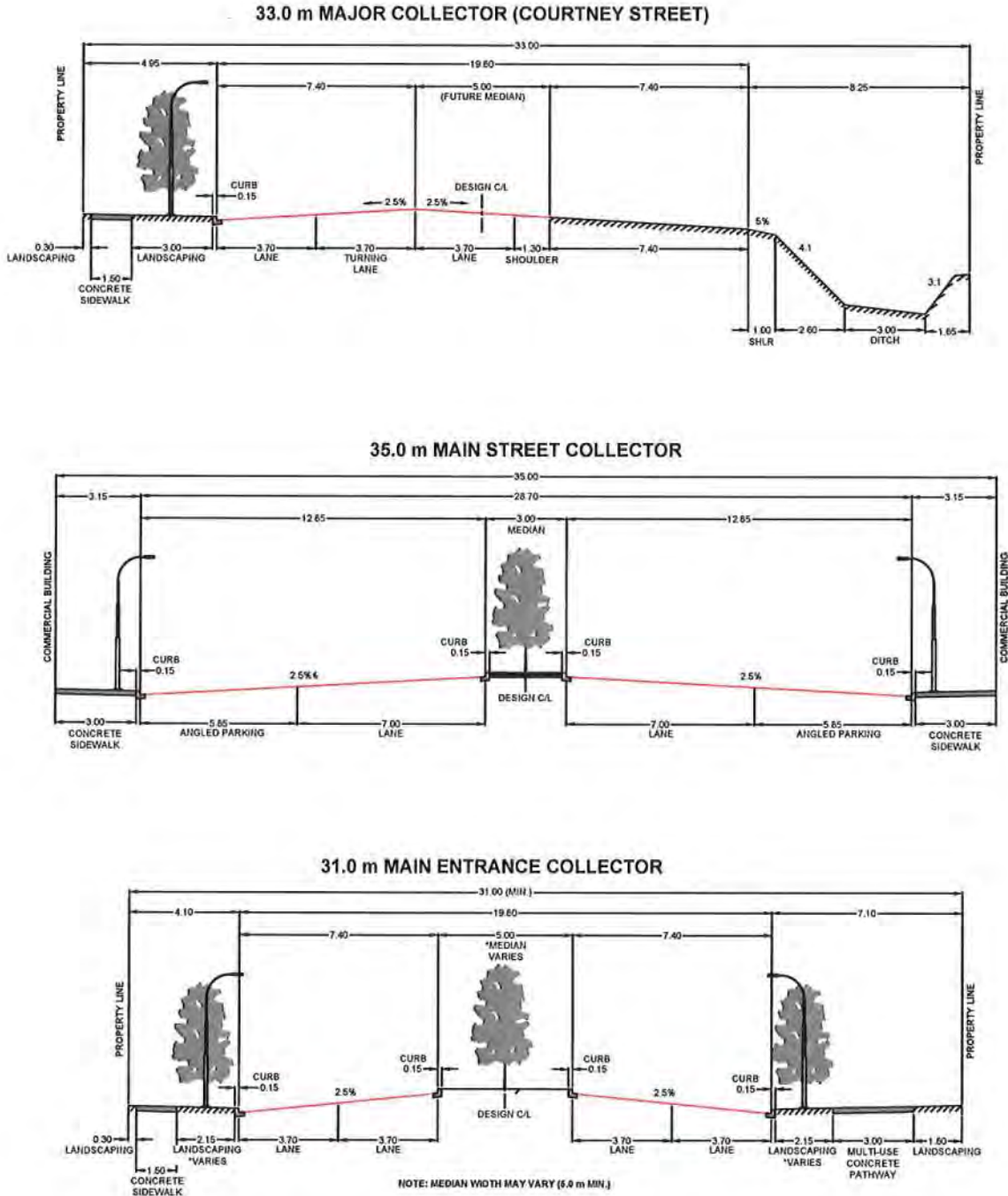
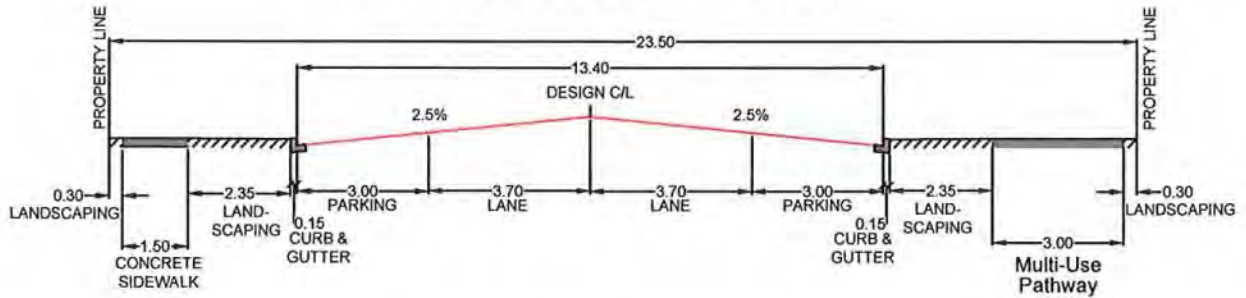
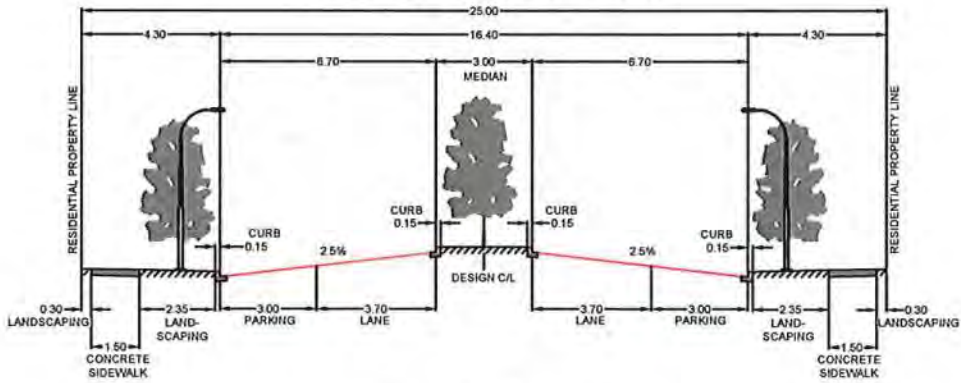


Figure 23 - Road Network Cross Sections

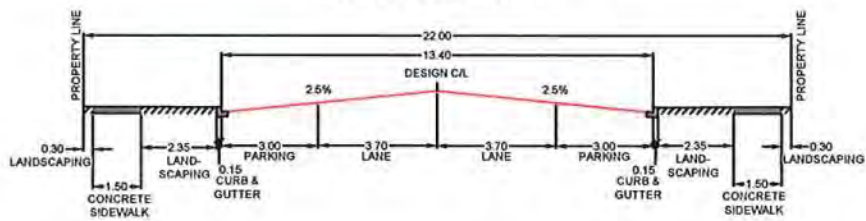
23.5 m COLLECTOR - INNER LOOP

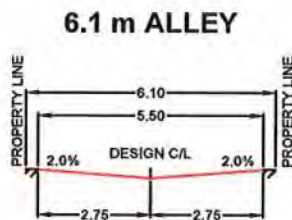
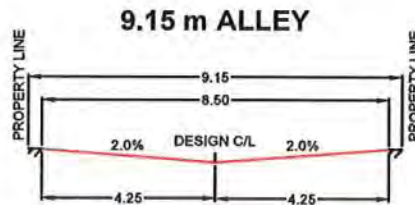
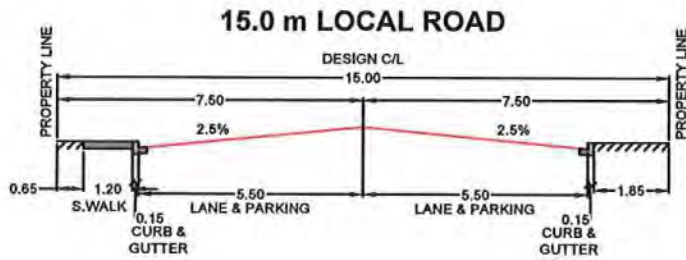
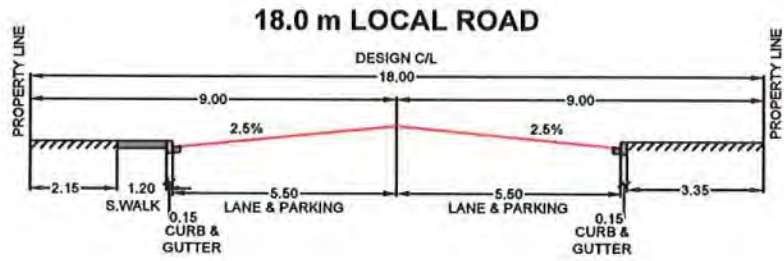


25.0 m LIVE WORK COLLECTOR



22.0 m COLLECTOR





4.4 Traffic Impact Analysis and Off Site Improvements

In support of the Concept Plan, a traffic impact assessment has been completed by MMM Group Limited to identify immediate and long term improvements to the transportation network necessary to support the implementation of Westerra. This has been submitted under separate cover. The improvements contemplated for the CP shall be undertaken by the developer in accordance with the traffic impact assessment.

4.5 Public Transit

The purpose of the overall Westerra Neighbourhood Plan is to accommodate efficient future public transit service at the point in time where population growth and transit demand makes the provision of local public transit feasible. A transit and mobility assessment is included in the Neighbourhood Plan. As part of the CP, the proposed transit routing, transit stop locations and a transit hub is shown on **Figure 24: Transit Coverage and Mobility Assessment**. The transit hub will provide the appropriate amenities for passengers such as shelter, benches, a paved landing, and good lighting, etc. Transit stops have been identified at strategic locations to provide adequate service for the plan area. As later phases of Westerra are introduced, changes to the transit routing may be undertaken to achieve the ultimate transit scenario as detailed in the Westerra NP.

4.6 Active Transportation

The CP provides active transportation opportunities via cycling, walking and transit as shown in **Figure 25. Active Transportation**. Roadways within the CP area have been designed to support pedestrian, vehicular and cycling circulation in a manner which is consistent with the direction and intent of the Westerra NP. Mid-block crossings have been incorporated at appropriate locations for pedestrian and cyclist safety. Various methods of marking the crossings and traffic calming devices will be identified at the detailed design stage. The collector roads within the CP area shall serve as the main bicycle route and room for cyclists has been accommodated on portions of the collector road network considered the Collector - Inner Loop (See **Figure 23-Road Network Cross Sections**). Cyclists and vehicles will be encouraged to share the road where there is no designated cycling infrastructure. Similarly, pedestrians are accommodated through a system of sidewalks and walkways as shown on **Figure 25-Active Transportation**. Together with transit, active modes of transportation will provide access to all services within the community, including the retail and employment areas in the CP.

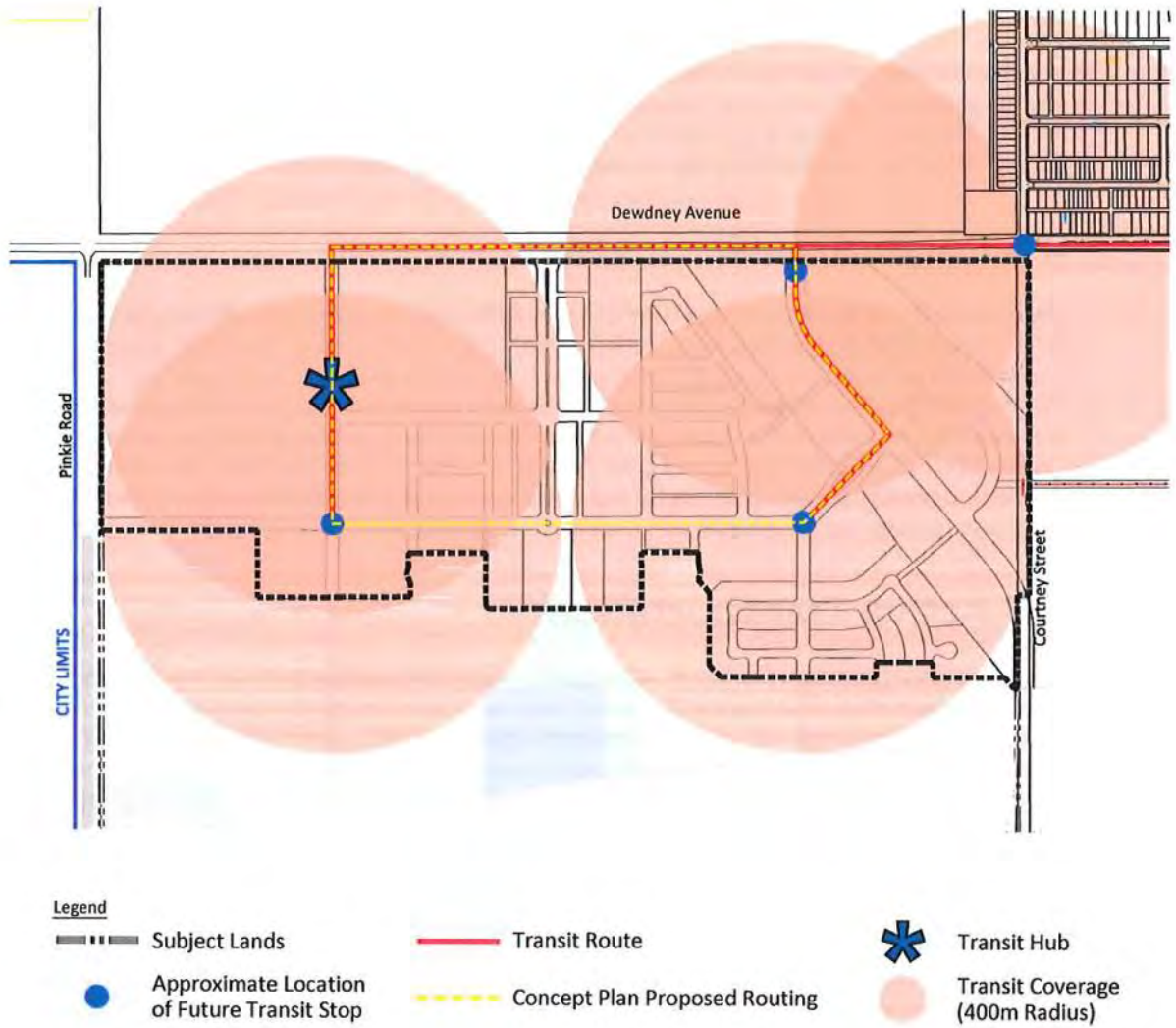
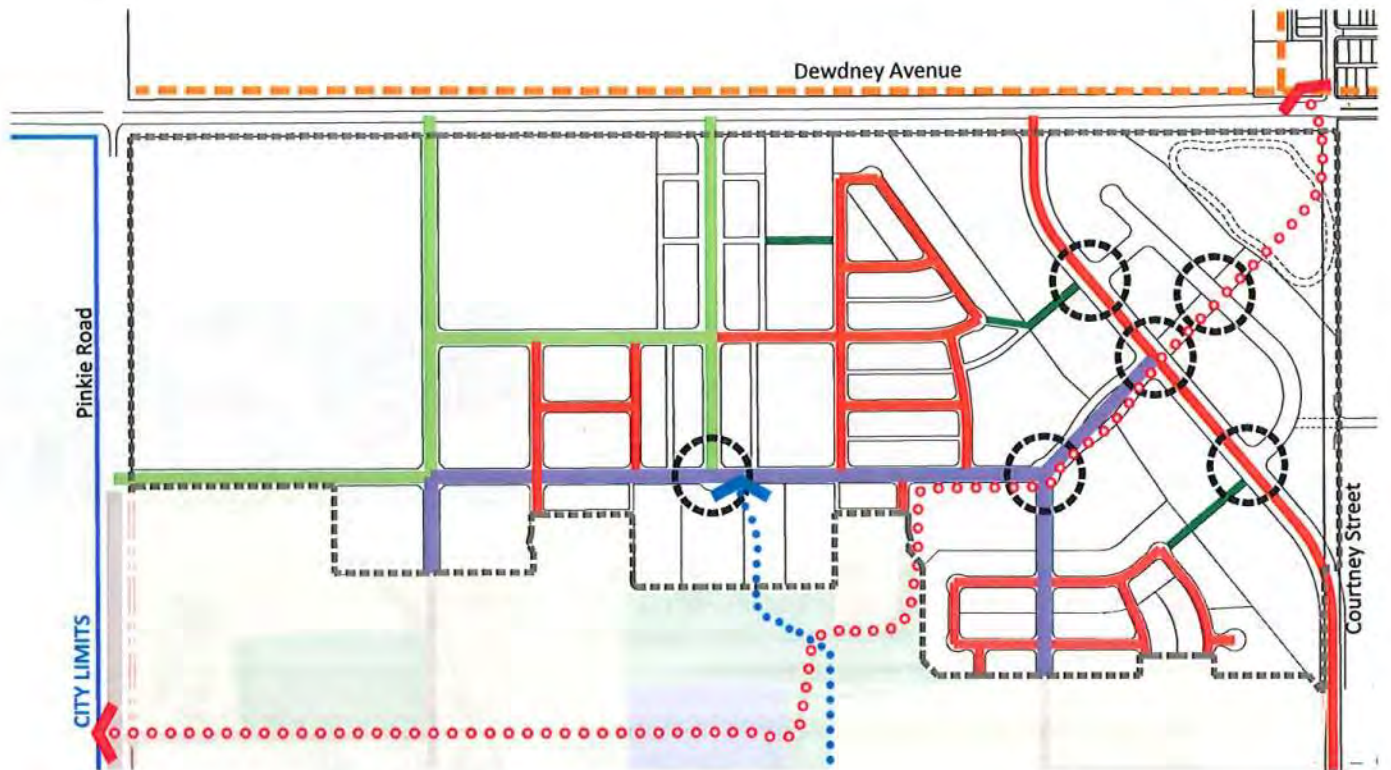


Figure 24 - Transit Coverage and Mobility Assessment



Legend

- Phase 1 Boundary
- Sidewalk Both Sides
- Sidewalk One Side and Multi-Use Pathway On Other Side
- Sidewalk One Side Only
- Potential Future Multi-Use/Boulevard Trail
- Walkways
- o o o o Devonian Pathway
- o o o o Local Pathway
- o o o o Mid-Block Crossings

Figure 25 - Active Transportation

5.0 Servicing

5.1 Servicing Overview

Servicing includes the provision of water, sanitary and stormwater management. The quality of servicing is fundamental to the ability of a community to sustain itself over time. The NP addresses servicing for the entire community of Westerra and has been based on efficiency and involves logical extensions of existing infrastructure. The alignments have been determined in consultation with the City.

The CP requires construction of portions of the overall servicing network. Servicing will be implemented as required by the proposed development within the CP and will be administered via servicing agreements.

In general, stormwater management has been integrated within the open space system featuring a detention pond in the northeast corner. This area will be a recreational and aesthetic feature for the CP. Water and sanitary servicing generally follow the routing of the road network. A lift station will be required as part of the sanitary servicing and as part of the storm water servicing.



5.2 Water

Water service will be provided to the development as shown in the water servicing concept included in Figure 26. **Water Servicing.** Connections in Phase 1 include a 250 mm distribution loop to provide Level 3 service to the business park lands connected to the 750 mm trunk at Courtney Street and the 600 mm trunk at Dewdney Avenue. A 200 mm distribution main will be used to provide looped service for Main street retail and live/work residential land use areas connected to the 600 mm trunk at Dewdney Avenue. 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 Phases of development. The detailed water servicing analysis is contained in the Servicing Plan prepared by WSP/Genivar in support of the Westerra Neighbourhood Plan.

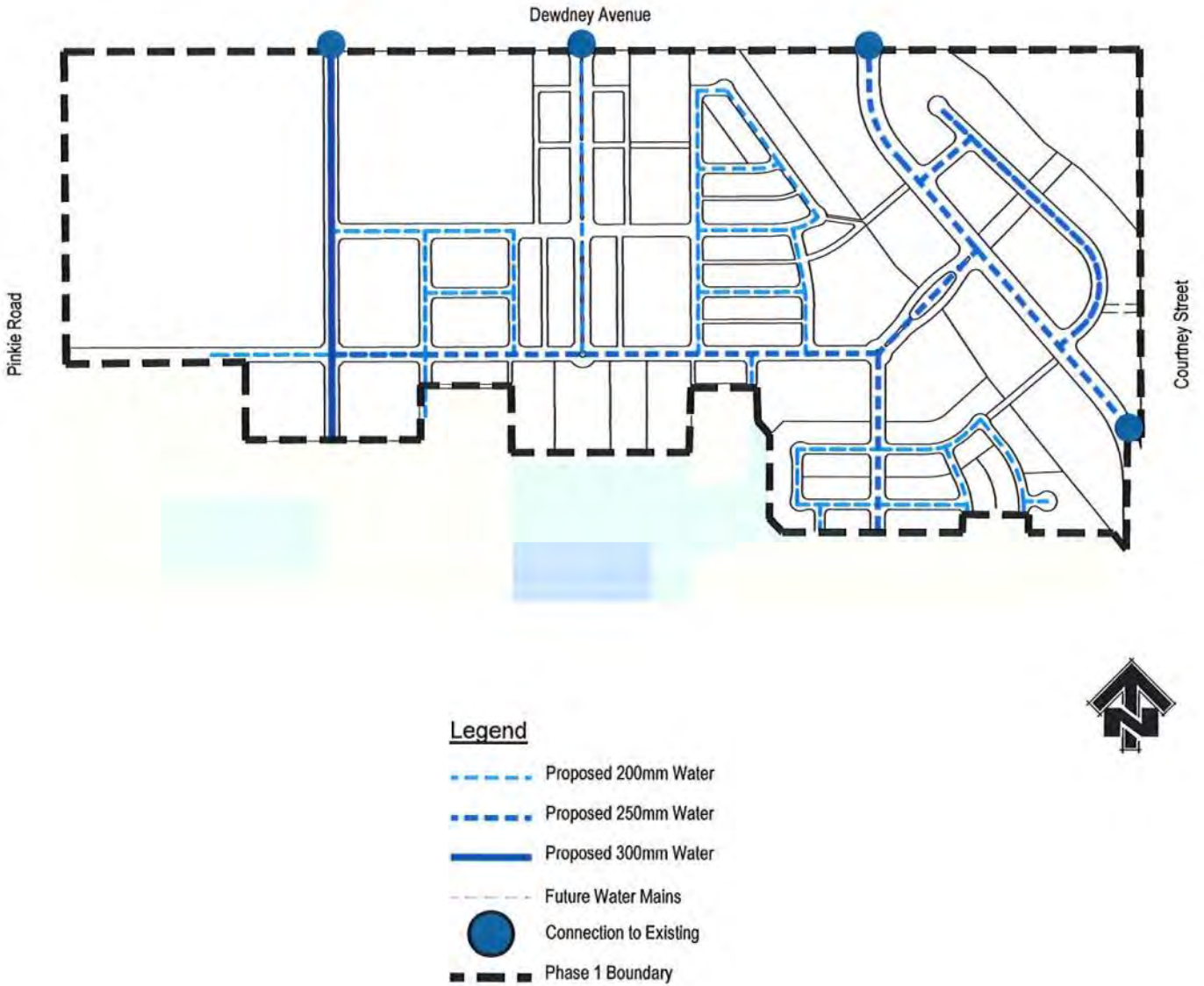


Figure 26 - Water Servicing

5.3 Sanitary

The preliminary sanitary collection system layout is shown in the Sanitary Servicing Concept diagram in **Figure 27 Sanitary Servicing**. The CP requires construction of a lift station and force main, which will be able to be expanded to accommodate off site sanitary flows depending on future development. The pumps will be designed to be constructed in phases and expanded as needed for future developments. Further, the force main from this lift station will either be oversized during the first phase of development or be twinned at a future date when additional capacity is required. The detailed wastewater servicing analysis is contained in the Servicing Plan prepared by WSP/Genivar in support of the Westerra Neighbourhood Plan.

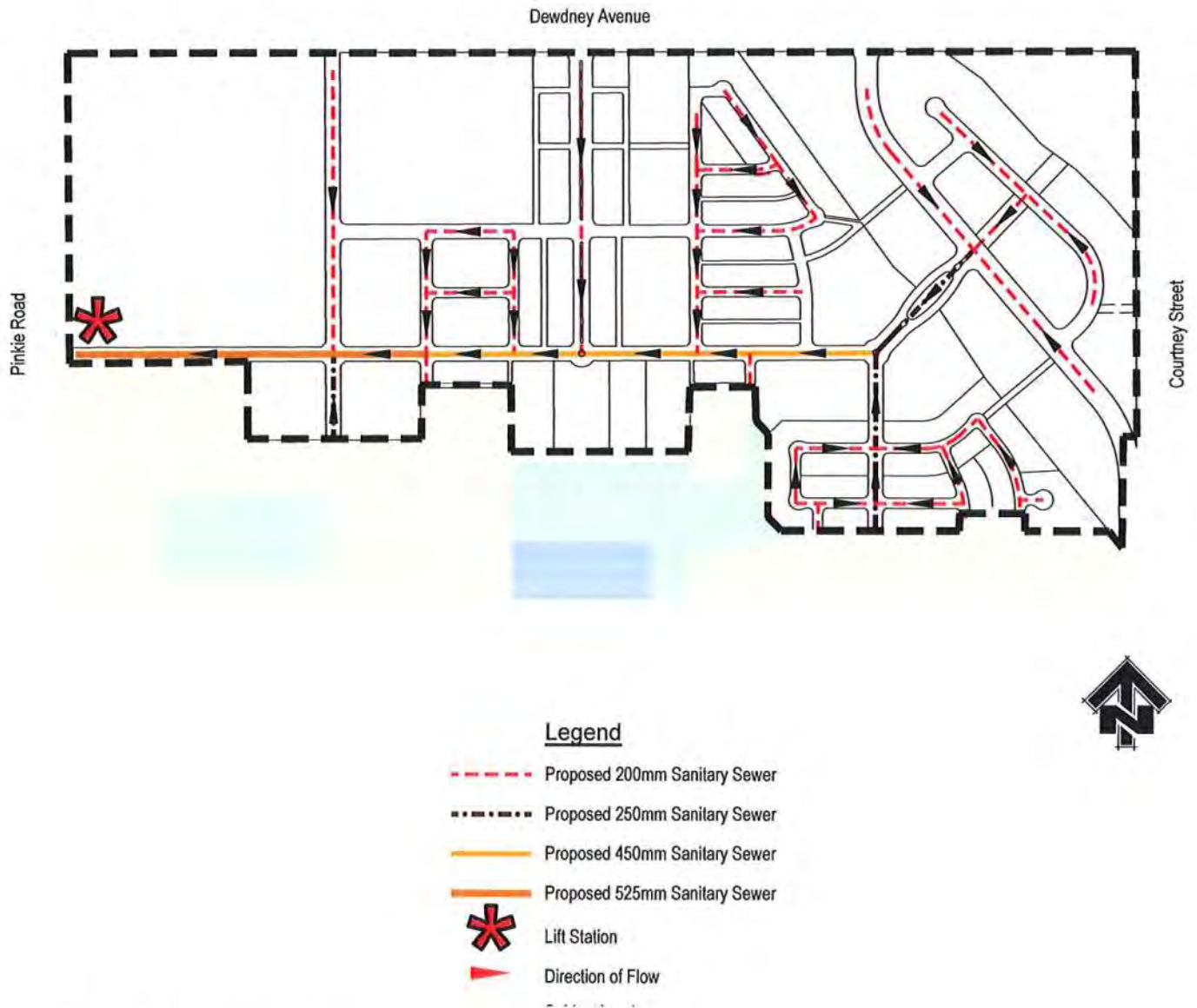


Figure 27 - Sanitary Servicing

5.4 Stormwater

Surface drainage generated within the CP area will be conveyed to the detention pond in the northeast corner of the CP. The design of the pond will include capacity to contain the 1:100 year storm event. Discharge will be limited to the pre-development flow rate of 5 m³/s. Based on the relatively flat grades and the lack of a deep storm trunk, the Westerra proposed detention pond will need to be drained mechanically and exit the CP area via the Courtney Street Drainage Ditch.

The proposed stormwater catchment area is shown on **Figure 28, Catchment Area Concept**. Stormwater management in the CP will be accommodated by drainage facilities constructed by the developer as conceptually illustrated in **Figure 29, Storm Servicing Concept**. The approach and preferred option to stormwater management is detailed by the Servicing Plan prepared by WSP/Genivar in the Westerra Neighbourhood Plan.

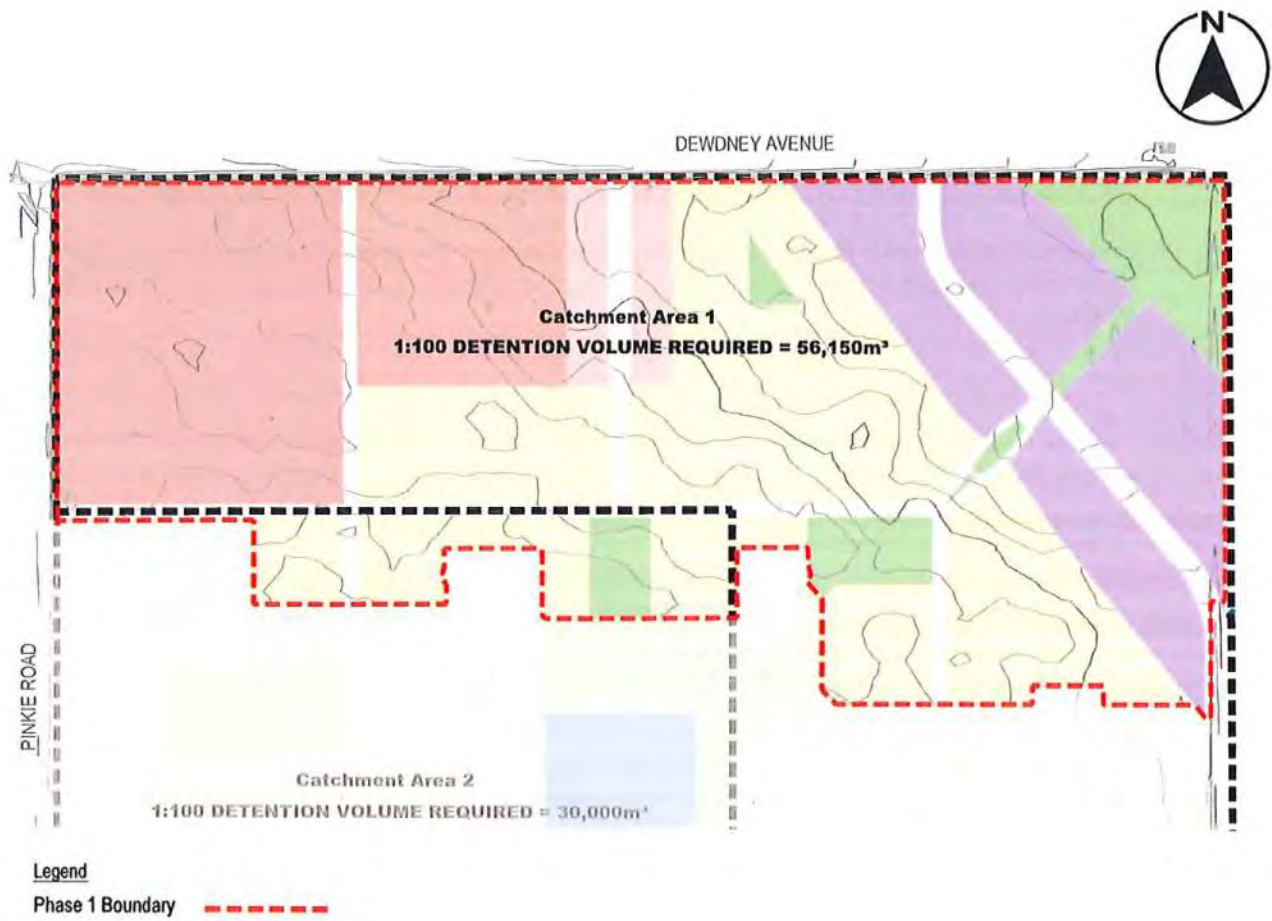


Figure 28 - Catchment Area Concept

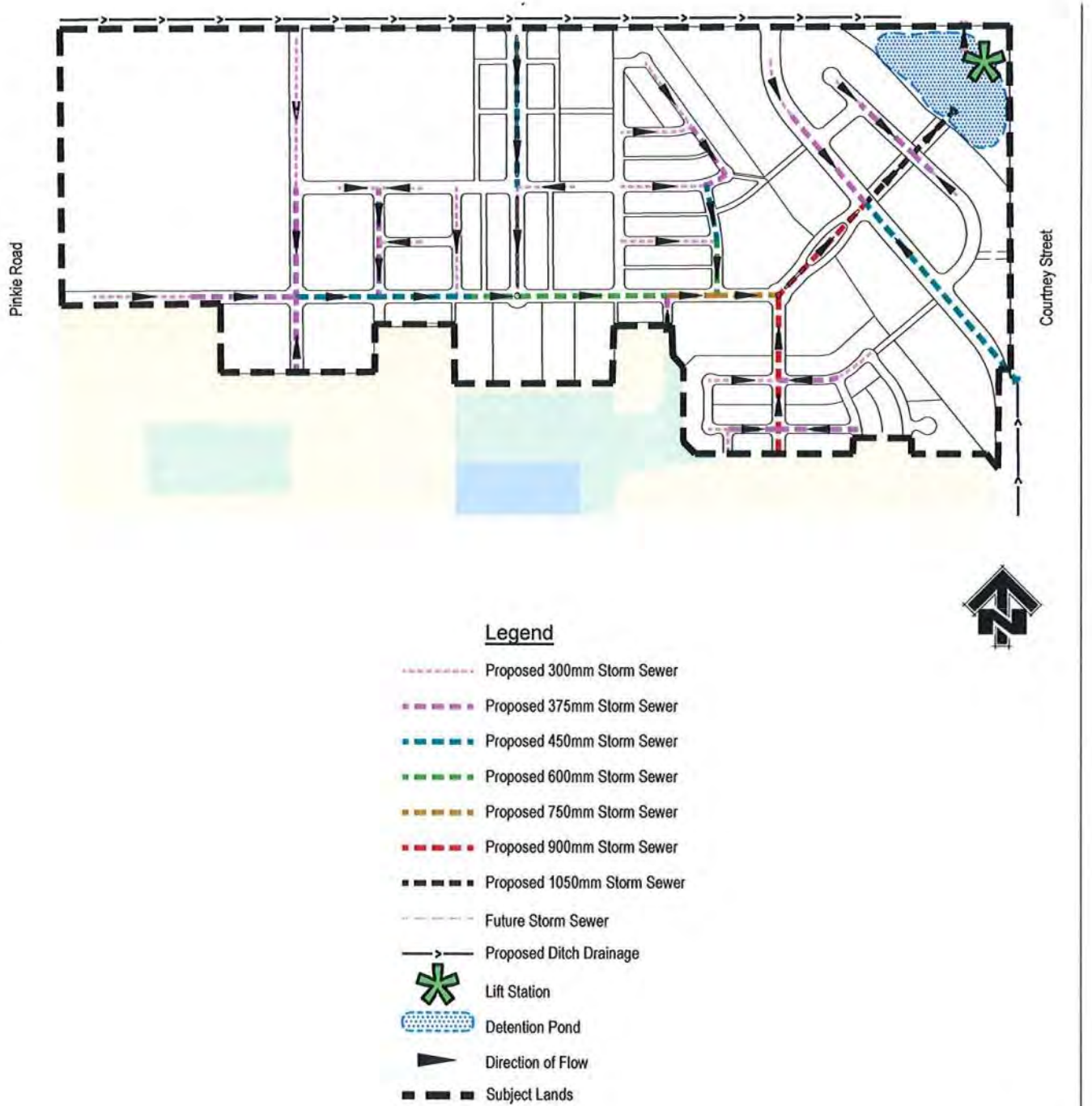


Figure 29 - Storm Servicing Concept

5.5 Shallow Utilities

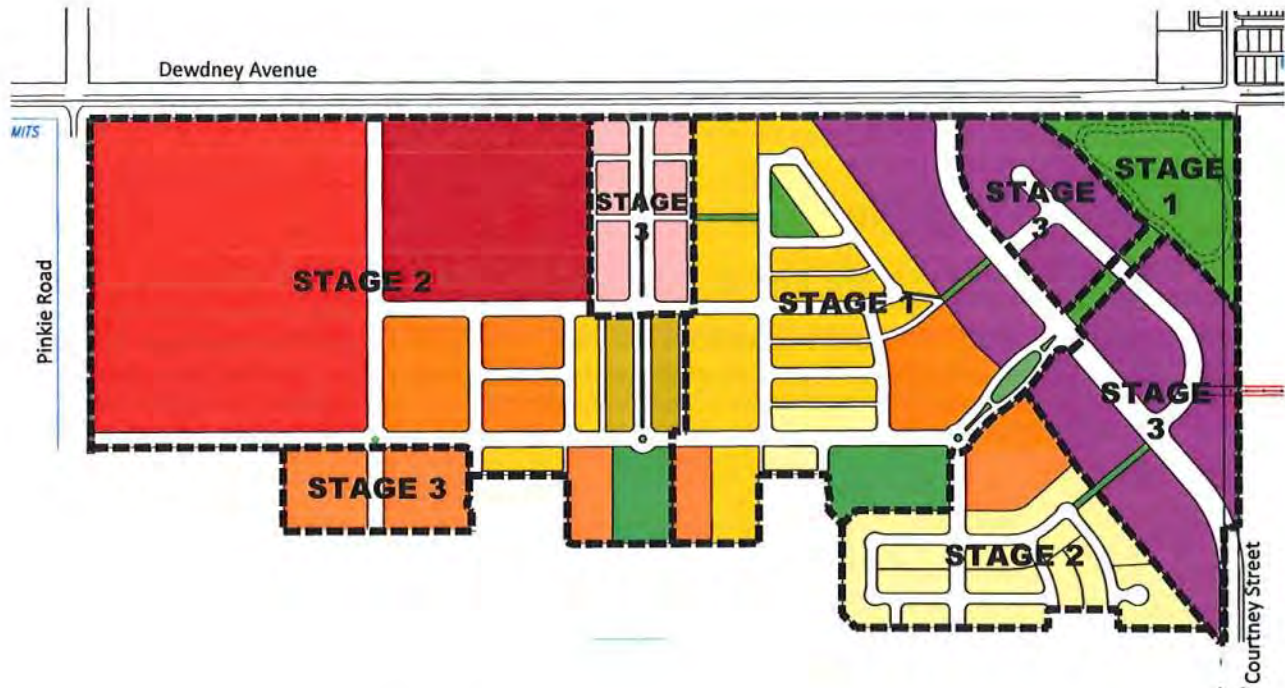
Shallow utility services including electric power, natural gas, telephone, cable and internet services will be provided by local utility companies. It is anticipated that underground utilities will be located within the road rights-of-way and private easements as required to serve all proposed development.

Stakeholder meetings held with the utility corporations have confirmed that adequate capacity exists within their systems to service the Westerra Neighbourhood Plan. The developer will work with the utility companies at the time of subdivision to provide all necessary services.

6.0 Implementation

6.1 Staging Plan

The Westerra CP consists of an area that will be developed in multiple stages. Residential development will occur from east to west. Commercial development in the retail areas will begin in the large format and community retail areas with the main street expected to be in the final stage of development. Business Park development will begin with the parcels on the west side of Courtney Street. The pace of development will be driven by market demand. An overview of the anticipated staging of development with the CP area is generally shown in **Figure 30: Staging Plan**.



Legend

■■■■■■ Stage Boundaries

STAGE 1 (2014-2015)	Net Residential Area	12.86 ha±	(31.78 ac±)
	Net Non-Residential Area	3.82 ha±	(9.45 ac±)
STAGE 2 (2015-2016)	Net Residential Area	14.12 ha±	(34.88 ac±)
	Net Non-Residential Area	24.80 ha±	(61.28 ac±)
STAGE 3 (2016-2018)	Net Residential Area	2.83 ha±	(6.99 ac±)
	Net Non-Residential Area	13.25 ha±	(32.74 ac±)

 Large Format Retail	 Low Density Residential
 Mixed-Use Community Retail	 Live Work Residential
 Main Street Retail	 Business Park
 High Density Residential	 Municipal Reserve
 Medium Density Residential	



Figure 30 - Staging Plan

6.2 Capital Improvement Plan

Major infrastructure work required to implement Westerra has been addressed as part of the Westerra Neighbourhood Plan Servicing Strategy. The specific details of infrastructure design and improvements required to support a particular phase of development shall form part of detailed engineering plans and specifications prepared in support of conditional subdivision approvals and forming part of future servicing agreements with the City of Regina.

In terms of major infrastructure work, the CP will require construction of the sanitary lift station and forecmain within the southwest corner of the large format retail area, the northeast stormpond and a stormwater lift station. According to the Traffic Impact Assessment (TIA) prepared in support of the NP, Dewdney Avenue must be twinned in the first phase. Initially, access to the Devonian Pathway will be provided via an existing walkway on the north side of Dewdney Avenue.

6.3 Anticipated Zoning

Prior to subdivision and development, the lands will be subject to a redesignation application. Proposed zones will be reviewed through the zoning application process and in accordance with the Land Use Bylaw. Where required, direct control districts may be developed to outline and establish specific use regulations and development standards necessary to support the implementation of the CP. It is expected that the entire CP will be redesignated in accordance with a single land use amendment application.

6.4 Subdivision

Subdivision of the CP is expected to proceed in a number of stages which will remain contingent on market demand, and the implementation of required municipal infrastructure necessary to support development. Future plans of subdivision shall be in accordance with the City of Regina land use bylaw and zoning standards.

As a condition of subdivision approval, all required transportation, sanitary, water, stormwater, shallow utility servicing, and required park improvements shall be outlined in a development agreement negotiated between the City and developer. Upon execution of such agreement, all required infrastructure shall be implemented by the developer in accordance with the terms of such agreement.

6.5 Master Site Development Plan

Some areas of the CP such as the Mixed -Use Community Retail, and Main Street Retail areas contemplate potential residential development in addition to retail land uses. In these cases, a Master Site Development Plan (MSDP) may be required at the discretion of the City to support a land use redesignation, subdivision and/or development permit application. The MSDP provides a development rationale in accordance with statutory and non-statutory policy to support implementation of land use, subdivision and development within the MSDP area. The MSDP is also intended to establish a strategy to implement the transportation and servicing infrastructure required to facilitate the proposed development in the MSDP area.



Westerra

Phase 1 Concept Plan

MAY 2014

Circulation Draft - Version 2.0





Westerra

Neighbourhood Plan

October 2014

*Version 3.0
Submitted for RPC Consideration*





Westerra

Where life finds balance



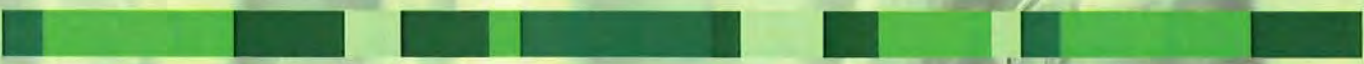


Executive Summary

Westerra is located in the west area of the City of Regina on lands recently 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 7,335 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* and has been informed by the City's sustainability and smart growth 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, which will be used to direct the preparation of subsequent concept plans, land use and subdivision applications.



EXECUTIVE SUMMARY

The following information is provided for your information only and should not be used as a basis for investment decisions. It is intended to provide a general overview of the project and is not intended to constitute an offer of securities. The information is based on the information provided to us by the project sponsor and is not intended to be a substitute for a prospectus or other offering materials. The information is provided for your information only and should not be used as a basis for investment decisions. It is intended to provide a general overview of the project and is not intended to constitute an offer of securities. The information is based on the information provided to us by the project sponsor and is not intended to be a substitute for a prospectus or other offering materials.

David Milliken

From: Halliday, Jeffrey <Jeffrey.Halliday@wspgroup.com>
Sent: Friday, November 07, 2014 9:53 AM
To: Rob Jollimore
Cc: David Milliken
Subject: Your Voicemail re: Westerra Water Deamands

Rob,

Further to the information I sent yesterday, the node with the greatest deficiency is Junction 6660 which, during peak day demand and full buildout of Westerra is short of 90L/s by 0.8017 L/s. Calculating back from the peak day demand of 871.5 L/capita/day, this works out to a demand equivalent to 79.5 people. As such, these failures do not occur until the final stage of development. Also, please note that these three nodes are at dead ends in the system. Therefore, several factors beyond system demand contribute to these model results.

I hope this helps. Feel free to call me if you would like to discuss further.

Regards,
Jeff



Jeffrey L. Halliday, P.Eng.
Senior Engineer, Municipal Infrastructure

WSP Canada Inc.
395 Maxwell Crescent
Regina, Saskatchewan S4N 5X9 Canada
T +1 306-585-1990 EXT 138
F +1 306-586-9113

www.wspgroup.com

We were GENIVAR. We are now WSP.

Please consider the environment before printing...

If you wish to stop receiving electronic commercial communications from us, please send an empty email to unsubscribecanada@wspgroup.com. Please refer to our Privacy Policy at www.wspgroup.com/privacy and our Anti-Spam Commitment at www.wspgroup.com/casl

CONFIDENTIALITY WARNING

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information which is privileged, confidential, proprietary or exempt from disclosure under applicable law. If you are not the intended recipient or the person responsible for delivering the message to the intended recipient, you are strictly prohibited from disclosing, distributing, copying or in any way using this message. If you have received this communication in error, please notify the sender, and destroy and delete any copies you may have received.

Westerra Subdivision
 WaterCAD Simulation - November 6, 2014
 90 L/s Fire Flow With Peak Day Demand - Failure Comparison

Label	ZONE	Fire Flow Iterations	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (L/s)	Fire Flow (Available) (L/s)	Flow (Total Needed) (L/s)	Flow (Total Available) (L/s)	Pressure (Residual Lower Limit) (kPa)	Pressure (Calculated Residual) (kPa)	Pressure (Zone Lower Limit) (kPa)	Pressure Calculated Zone Lower Limit (kPa)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (kPa)	Pressure (Calculated System Lower Limit) (kPa)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced?
J-7390	1	16	FALSE	90	89.8242	90.7142	90.5384	140	140.8	140	209.2	J-14520	140	209.2	J-14520	TRUE
J-6660	1	16	FALSE	90	89.1983	90.1434	89.3417	140	140.9	140	210.6	J-14520	140	210.6	J-14520	TRUE
J-2120	1	16	FALSE	90	89.8242	90.5703	90.3946	140	140.3	140	212	J-14520	140	212	J-14520	TRUE



Neighbourhood Plan

October 2014 - Version 3.0

Submitted for RPC Consideration

Prepared for:
Westerra Development Corp.

Contact: Chad Jedlic, Residential Land Manager,
Harvard Developments Inc., 306.777.0679

Contact: Blair Forster, President,
Forster Projects Inc., 306.533.1193

Prepared by: Brown & Associates Planning Group
Contact: Nathan Petherick 403.692.4356

Project Team:

Project Engineers

WSP

Contact: Jeff Halliday 306.585.1990

Transportation Consultants

MMM Group

Contact: Bruce Belmore 306.522.7158

Risk Assessment and Analysis

Bercha Group Limited

Contact: Frank Bercha 403.270.2221

Retail Impact Assessment

MXD Development Strategists

Contact: 403.272.6937

Geotechnical Investigation &
Environmental Site Assessment

Ground Engineering

Contact: 306-569-9075

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	8
2.1 Topography	8
2.2 Natural Features & Existing Conditions	8
2.3 Development Constraints	13
2.3.1 Wells, pipelines and utilities	13
2.3.2 Regina International Airport	13
2.3.3 Canadian Pacific Railway Line	14
2.3.4 Adjacent Industrial Uses	14
3.0 Community Design & Land Use	20
3.1 Westerra Vision	20
3.2 Alignment with Design Regina: The Official Community Plan Bylaw No. 2013-48	21
3.3 Design Principles	22
3.4 Land Use Overview	23
3.5 Residential	25
3.5.1 Low-Density Residential	26
3.5.2 Medium-Density Residential	27
3.5.3 Live Work Residential	27
3.5.4 High-Density Residential	28
3.6 Urban Centre	28
3.7 Main Street Retail	29
3.8 Community Retail	29
3.9 Large Format Retail	30
3.10 Business Park	31
3.11 Civic Uses	31
3.11.1 Potential School Site	31
3.11.2 Emergency Services Facility	33
3.12 Parks and Open Space	33
3.12.1 Pathways and Trails	37
3.12.2 Municipal Reserve	37
3.12.3 Municipal Buffer	38
3.12.4 Municipal Utility Parcel(s)	38
3.12.5 Environmental Reserve	38
4.0 Transportation	41
4.1 Overview	41
4.2 Road Network Hierarchy	43
4.3 Public Transit	44

5.0 Servicing Strategy	47
5.1 Wastewater Collection System	47
5.1.1 Existing Conditions	47
5.1.2 Proposed Development	47
5.1.3 Timing of Capital Improvements	48
5.2 Water Servicing	50
5.2.1 Existing Conditions	50
5.2.2 Proposed Development	50
5.2.3 Timing of Capital Improvements	53
5.3 Stormwater Management	53
5.3.1 Existing Conditions	53
5.3.2 Proposed Development	55
5.3.3 Timing of Capital Improvements	57
5.4 Shallow Utilities	57
6.0 Implementation	59
6.1 Phasing	59
6.2 Concept Plans	59

Figures

Figure 1: Location and Context Plan	1
Figure 2: Legal Description and Ownership	3
Figure 3: Design Regina: The Official Community Plan Bylaw No. 2013-48 - Policy Context	5
Figure 4: Existing Zoning	6
Figure 5: Site Context and Natural Features	9
Figure 6: Local and Regional Transportation Network	11
Figure 7: Community Infrastructure	12
Figure 8a: Land Use and Development Constraints	15
Figure 8b: NEF Contours and Height Limitations	16
Figure 9: Light Industrial & CPR Residential Interface	19
Figure 10: General Land Use Concept	24
Figure 11: Business Park - Residential Interface	32
Figure 12: Parks, Pathway and Open Space Network	35
Figure 13: Transportation Network	42
Figure 14: Transit Coverage and Mobility Assessment	45
Figure 15: Sanitary Servicing Concept	49
Figure 16: Water Servicing Concept	51
Figure 17: Catchment Area Concept	51
Figure 18: Storm Servicing Concept	53
Figure 19: Shallow and 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	23
Table 3: Residential Density and Population Projections	25
Table 4: Residential Density and Population Intensity	26
Table 5: Open Space System and Potential Facilities	36
Table 6: Municipal Reserve Requirements and Proposed Dedication	39
Table 7: Peak Wastewater Flows Based on Land Use and Anticipated Density	47
Table 8: Wastewater from Outside Sources	48

Appendices

Appendix A: Approved Concept Plan	61
Appendix B: Overall Detailed Land Use Plan	63
Appendix C: Road Network Cross Sections	64
Appendix D: Capital Improvement Plan	69
Appendix E: Potential Facility Requirements	70

1.0 Introduction

1.1 Background

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

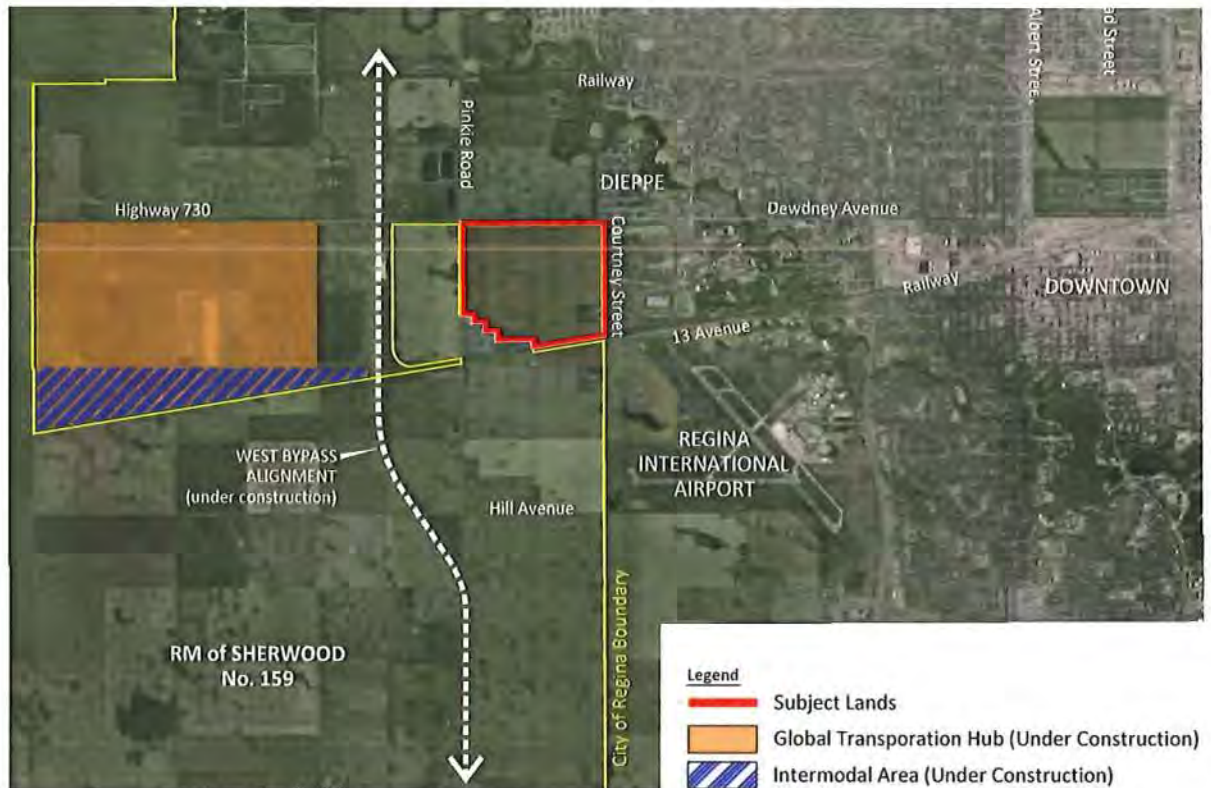
- To implement the policies contained in *Design Regina: The Official Community Plan Bylaw No. 2013-48* and, in doing so, provide a framework for future development of the plan area that reflects the City's aspiration to be a sustainable, vibrant, inclusive and attractive community
- To guide and direct the preparation and the approval of subsequent Concept Plans, Land Use Amendment and Subdivision applications in Westerra.

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

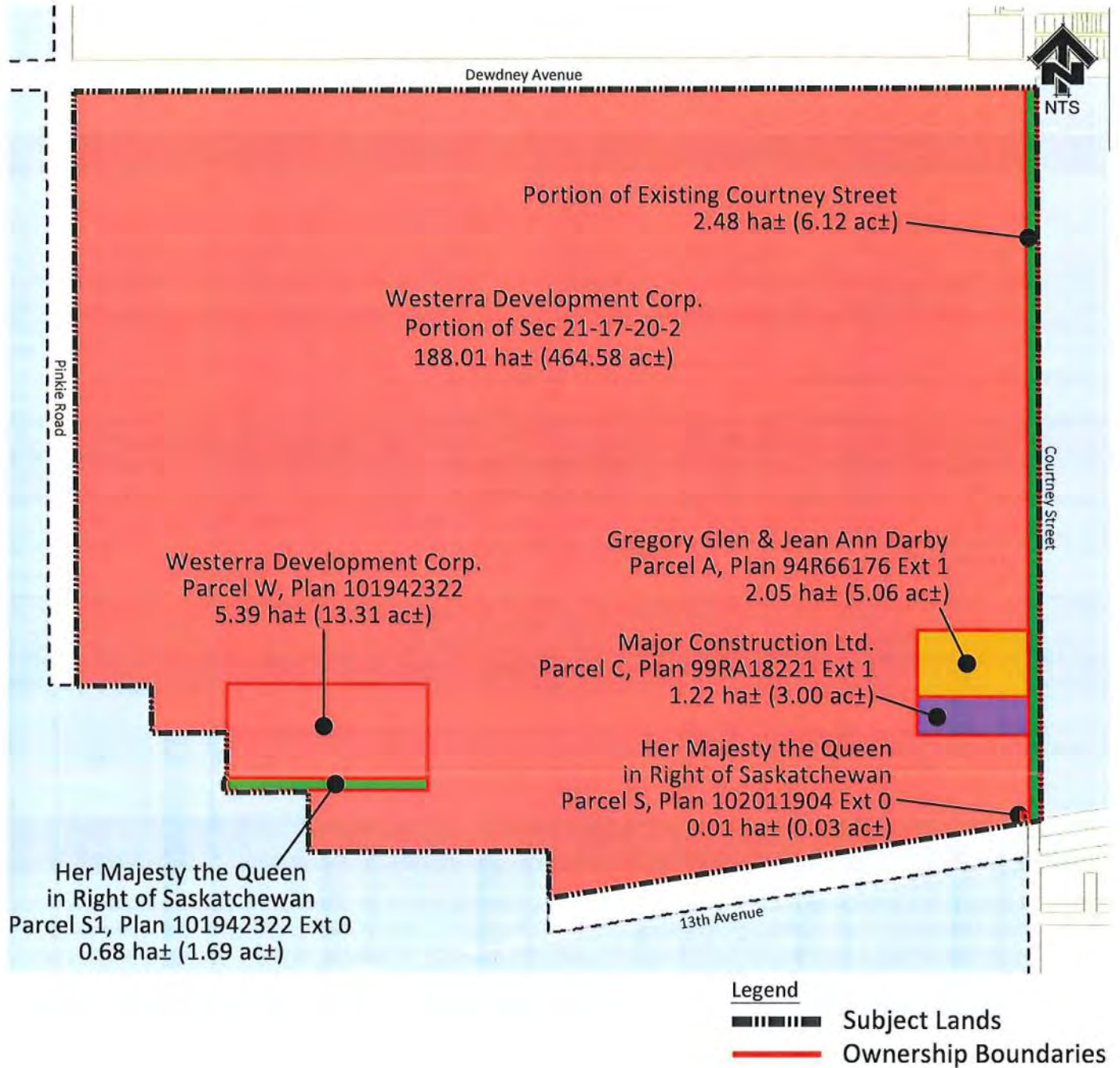
The NP area is comprised of approximately +/- 199.84 hectares (+/- 493.79 acres) consisting of a variety of legal parcels of land. The majority of the plan area is owned by Westerra Development Corp. A summary of the legal land holdings and ownership of the plan area is outlined in **Table 1: Plan Area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

Table 1 - Plan Area Ownership

LANDOWNER	LEGAL DESCRIPTIONS	AREA (AC)	% OF PLAN AREA
Westerra Development Corp.	Pt. Sec. 21-17-20-2	464.58	94.08%
Westerra Development Corp.	Parcel W Plan 101942322	13.31	2.70%
Gregory Glen and Jean Ann Darby	Parcel A Plan 94R66176 Ext 1	5.06	1.02%
Major Construction Ltd	Parcel C Plan 99RA182221 Ext 1	3.00	0.61%
Her Majesty the Queen in Right of Saskatchewan	Parcel S Plan 102011904 Ext 0	.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	1.69	0.34%
Her Majesty the Queen in Right of Saskatchewan	Existing Legal Roadway - Courtney Street-- Partial Closure and Consolidation Assumed	6.12	1.24%
	Total	493.79	100%

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. *Design Regina: The Official Community Plan Bylaw No. 2013-48* 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: The Official Community Plan Bylaw No. 2013-48

The NP must be consistent with other policy documents approved by Council, including but not limited to *Design Regina: The Official Community Plan Bylaw No. 2013-48* in accordance with section 44(3) of the *Planning and Development Act, 2007*.

This NP has been prepared in accordance with the policy direction contained in *Design Regina: The Official Community Plan Bylaw No. 2013-48*. *Design Regina: The Official Community Plan Bylaw No. 2013-48* 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 *Design Regina: The Official Community Plan Bylaw No. 2013-48*.

Westerra contains approximately +/- 199.84 hectares (+/- 493.79 acres) of land and consists of a new mixed – use area. Therefore a Neighbourhood Plan (NP) is required to be prepared in accordance with *Design Regina: The Official Community Plan Bylaw No. 2013-48*. 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. Upon approval, concept plans shall be appended to this Neighbourhood Plan.

Under the *Design Regina: The Official Community Plan Bylaw No. 2013-48*, the Westerra lands have been designated as a priority growth area and a "New Mixed-Use Neighbourhood." As shown on **Figure 3: Design Regina: The Official Community Plan Bylaw No. 2013-48 Policy Context**, Dewdney Avenue to the north is identified as an 'Express Transit Corridor.' *Design Regina: The Official Community Plan Bylaw No. 2013-48* also shows an 'Urban Centre' straddling Dewdney Avenue with lands to the north of Westerra. Under *Design Regina: The Official Community Plan Bylaw No. 2013-48*, 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 gross developable residential hectare (pph). A concept plan is required for all new neighbourhoods and the Guidelines for Complete Neighbourhoods as contained in *Design Regina: The Official Community Plan Bylaw No. 2013-48* must be observed.

This Neighbourhood Plan has been prepared in accordance with *Design Regina: The Official Community Plan Bylaw No. 2013-48* requirements for a secondary plan for new or mixed-use neighbourhood areas and demonstrates overall conformity with *Design Regina*. 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.

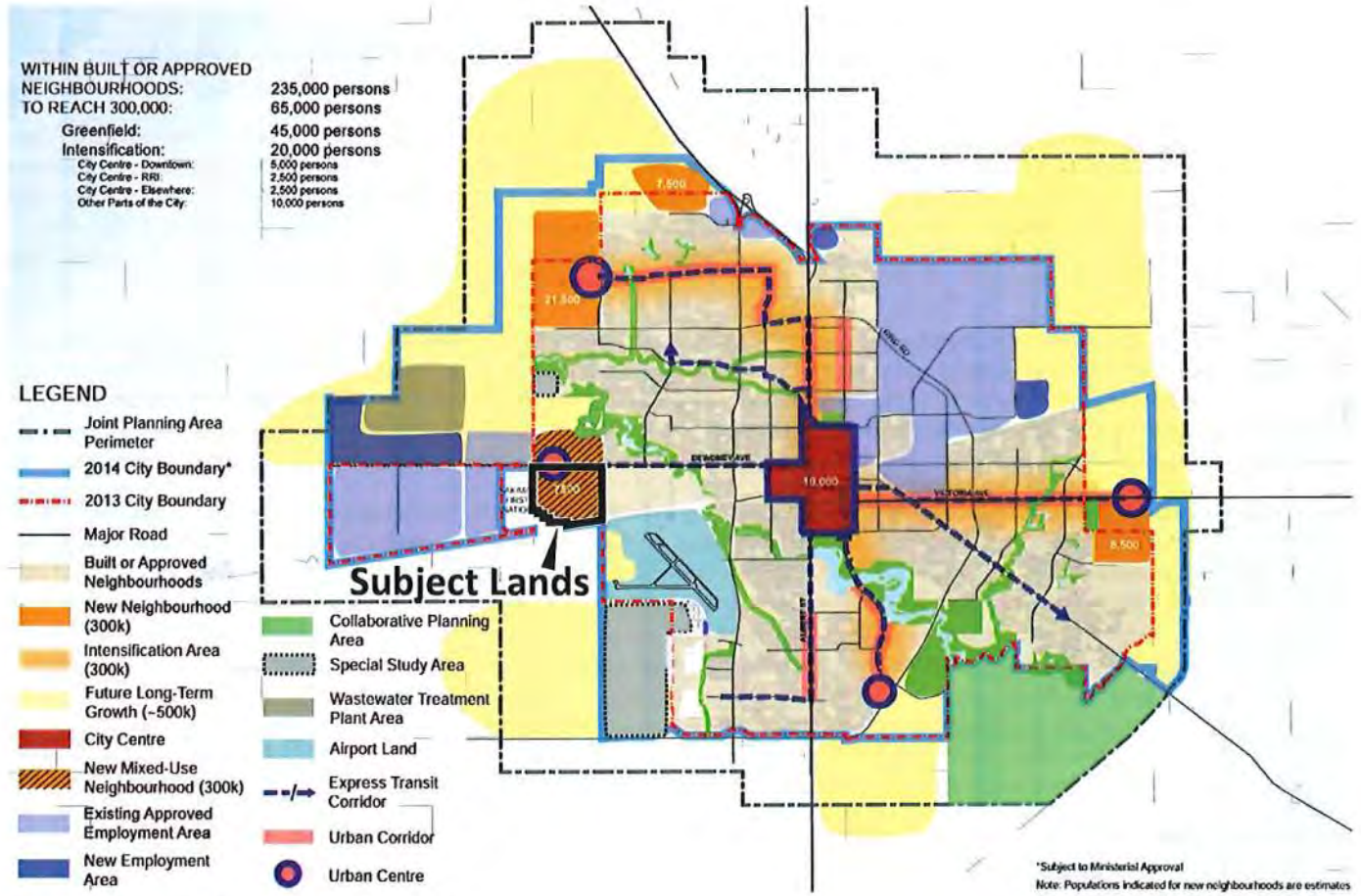
City of Regina Zoning Bylaw No. 9250

Lands within the proposed neighbourhood are currently zoned Urban Holding District under the current Zoning Bylaw as shown on **Figure 4: Existing Zoning**. 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 *Design Regina: The Official Community Plan Bylaw No. 2013-48*.

Regina Airport Zoning Regulations (Aeronautics Act)

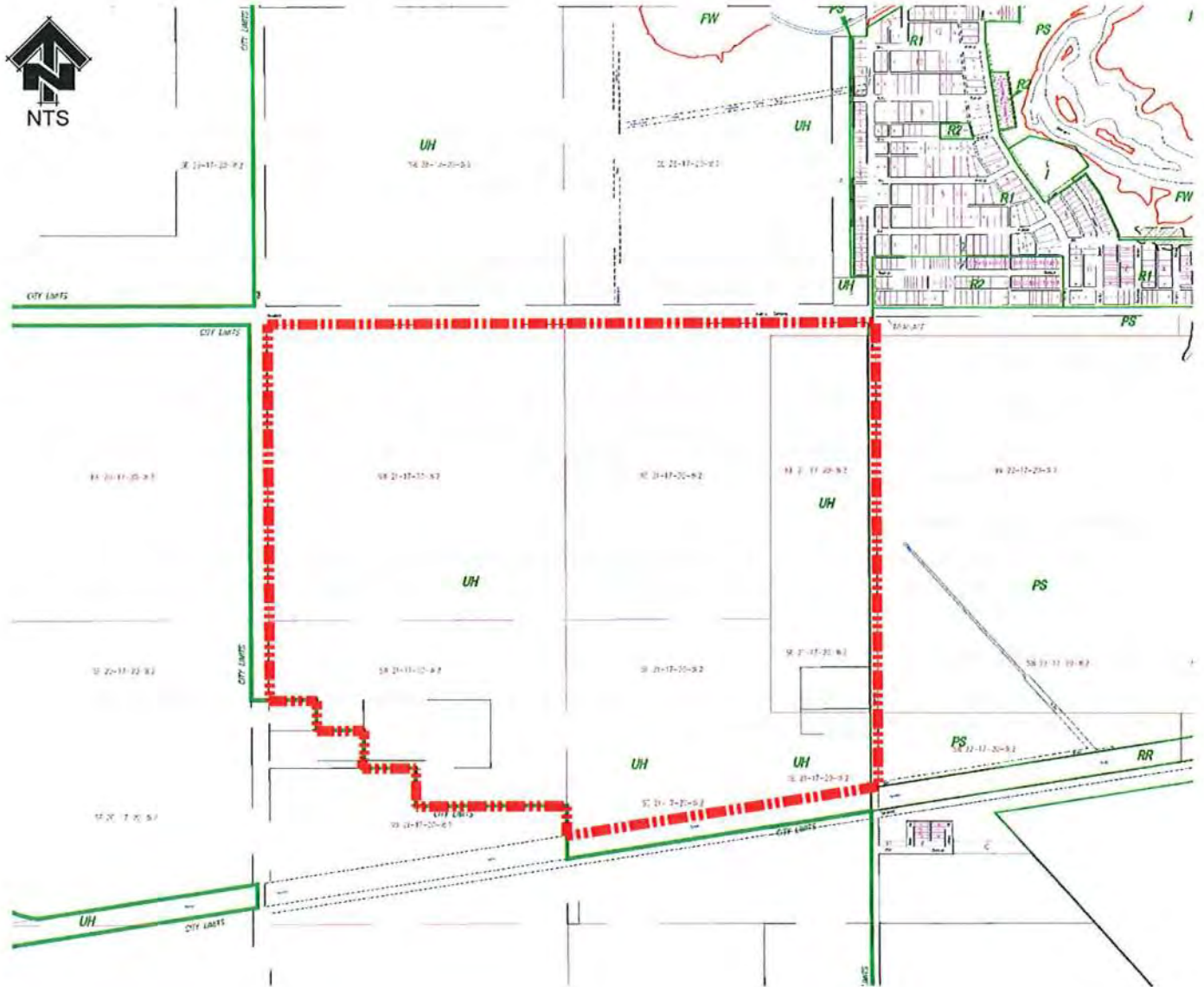
Under the Government of Canada Aeronautics Act, the Westerra lands are within the boundaries of the *Regina Airport Zoning Regulations* administered by Transport Canada. These Regulations are under Federal jurisdiction. These Regulations apply certain height and other building restrictions to structures 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.

Figure 3 - Design Regina: The Official Community Plan Bylaw No. 2013-48 Policy Context



Source: Design Regina - Official Community Plan 2013

Figure 4 - Existing Zoning



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.

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 5: 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 5: Site Context and Natural Features**, there is little to no tree cover or natural habitat present. 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 5: 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

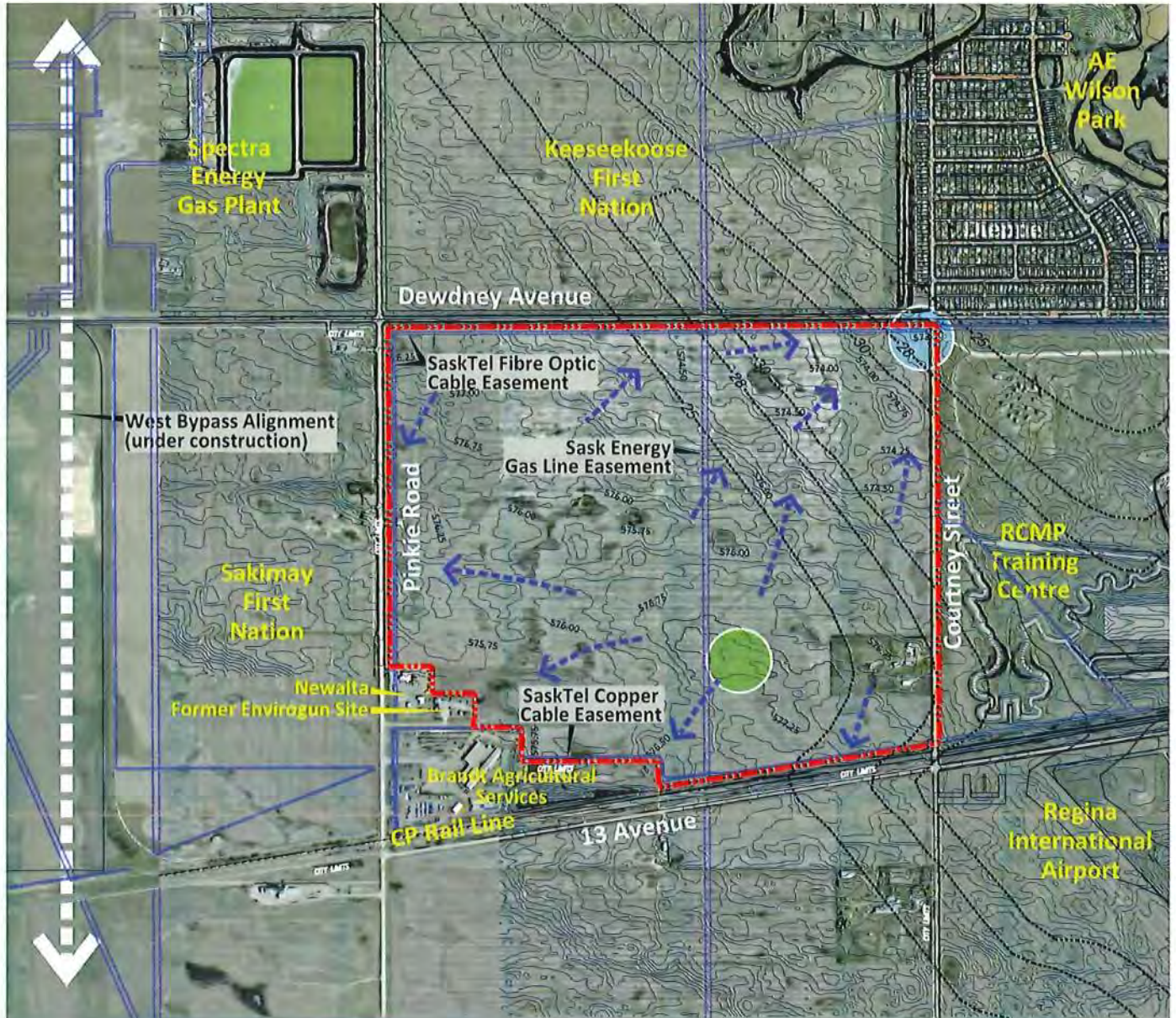
As part of the due diligence process in acquiring lands within the plan area, two (2) phase one environmental site assessments were commissioned by Westerra Development Corp. and completed by Ground Engineering Consultants Ltd in September 2013. Based on the results of these initial Phase one assessments, 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 by Ground Engineering Consultants Ltd. 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 5 - 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 6: Local and Regional Transportation Network**, existing transportation infrastructure consists of the bounding roads -- Dewdney Avenue, Pinkie Road and Courtney Street. *Design Regina: The Official Community Plan Bylaw No. 2013-48* has identified the Westerra lands as a potential transit node. Courtney Street and Pinkie Road are shown as potential future arterial roads under *Design Regina: The Official Community Plan Bylaw No. 2013-48*. 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. Highway 11 (the 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 *Design Regina: The Official Community Plan Bylaw No. 2013-48*.

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

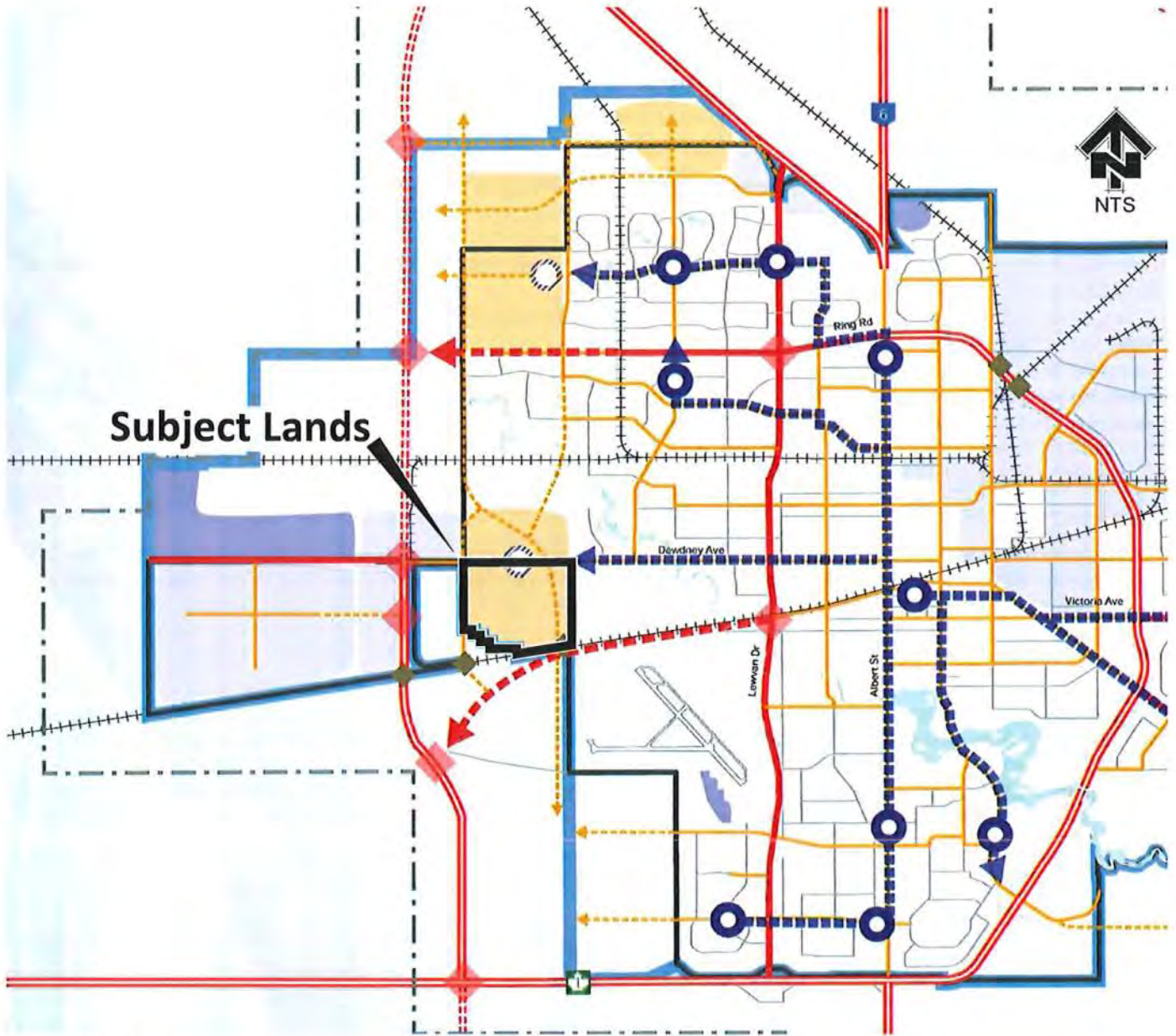
The Plan area has been subject to a prolonged history of agricultural disturbances. In support of this Neighbourhood Plan, an application for Historical Resource Clearance was submitted to the Province. Historical Resource Clearance was obtained and no Historical Resource Impact Assessment is required.

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 firehall 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. The hospital and library are located in the North Central neighbourhood. Aside from a public elementary school in the Dieppe neighborhood 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 firehall to Westerra is outlined in **Figure 7: Community Infrastructure**.

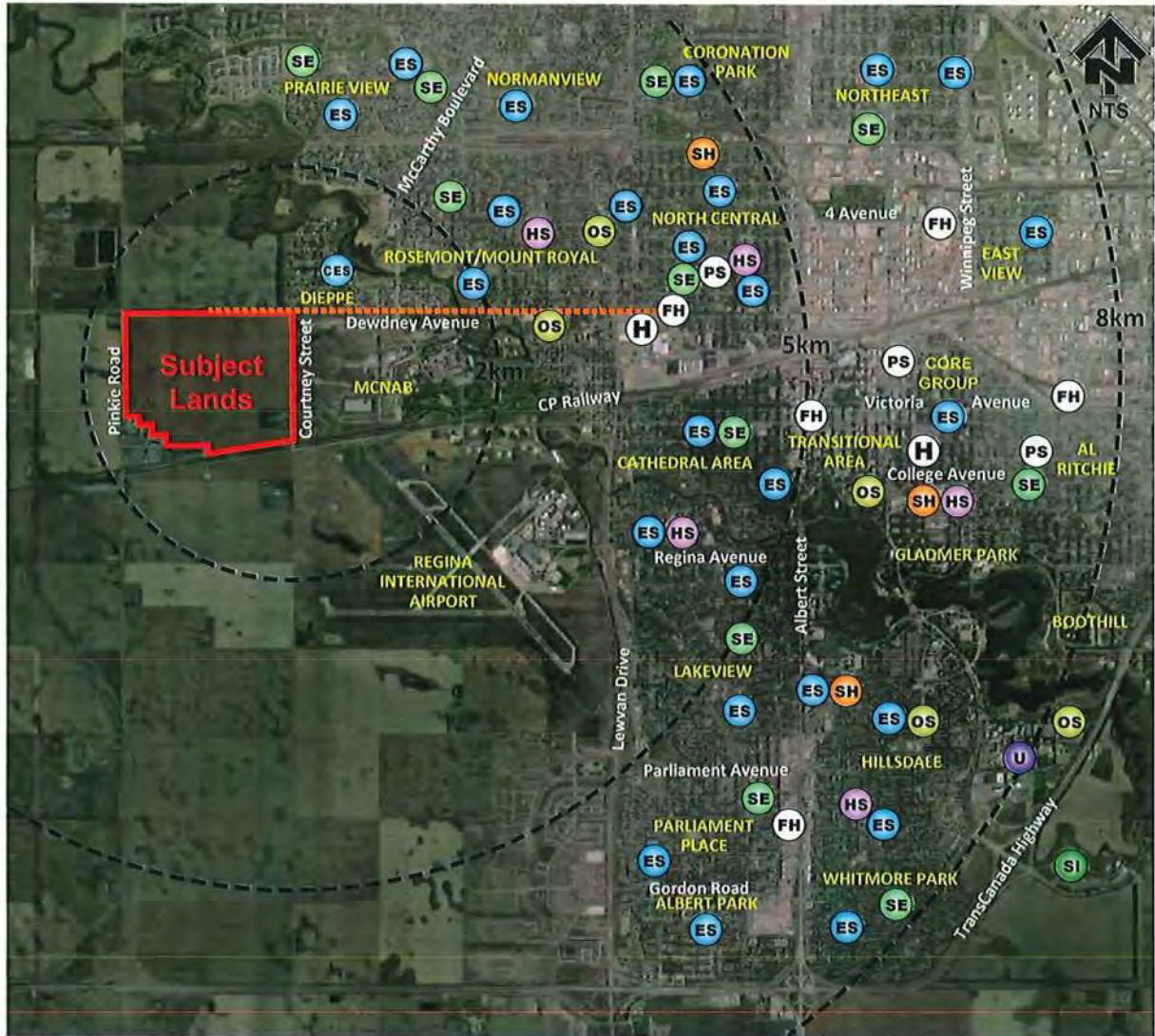
Figure 6 - Local and Regional Transportation Network



Legend

- | | | |
|----------------------------|------------------------------------|-----------------------------------|
| Highway | Railway | New Neighbourhoods (300k) |
| Potential Highway | Express Transit Corridor | Existing Approved Employment Area |
| Urban Expressway | Transit Node | New Employment Area |
| Potential Urban Expressway | Potential Transit Node | Waterbody |
| Arterial Road | Potential Interchange | 2013 City Boundary |
| Potential Arterial Road | Potential Railway Grade Separation | 2014 City Boundary* |
| Collector | | Joint Planning Area Perimeter |

Figure 7 - Community Infrastructure



- | | | | |
|-----|-----------------------------------|----|--|
| FH | Fire Hall | SE | Separate Elementary School |
| PS | Police Station | SH | Separate High School |
| H | Hospital | OS | Other School |
| ES | Public Elementary School | U | University of Regina |
| CES | Public Elementary School - Closed | SI | SIAST |
| HS | Public High School | | Emergency Response Route
±4.5km / ±7 Minute |

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 6: Site Context and Natural Features**, the Regina Airport is located adjacent to the southeast portion of the site and presents some development constraints primarily for the northeast corner of the site. 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 First Nations lands and to the east by the RCMP training centre.

The subject lands are bordered to the south by the Canadian Pacific Railway (CPR) lands. The Plan has responded by establishing an appropriate interface for the existing industrial area and the CPR railway. 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 8a: Land Use and Development Constraints** and **Figure 8b: 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 8a: 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

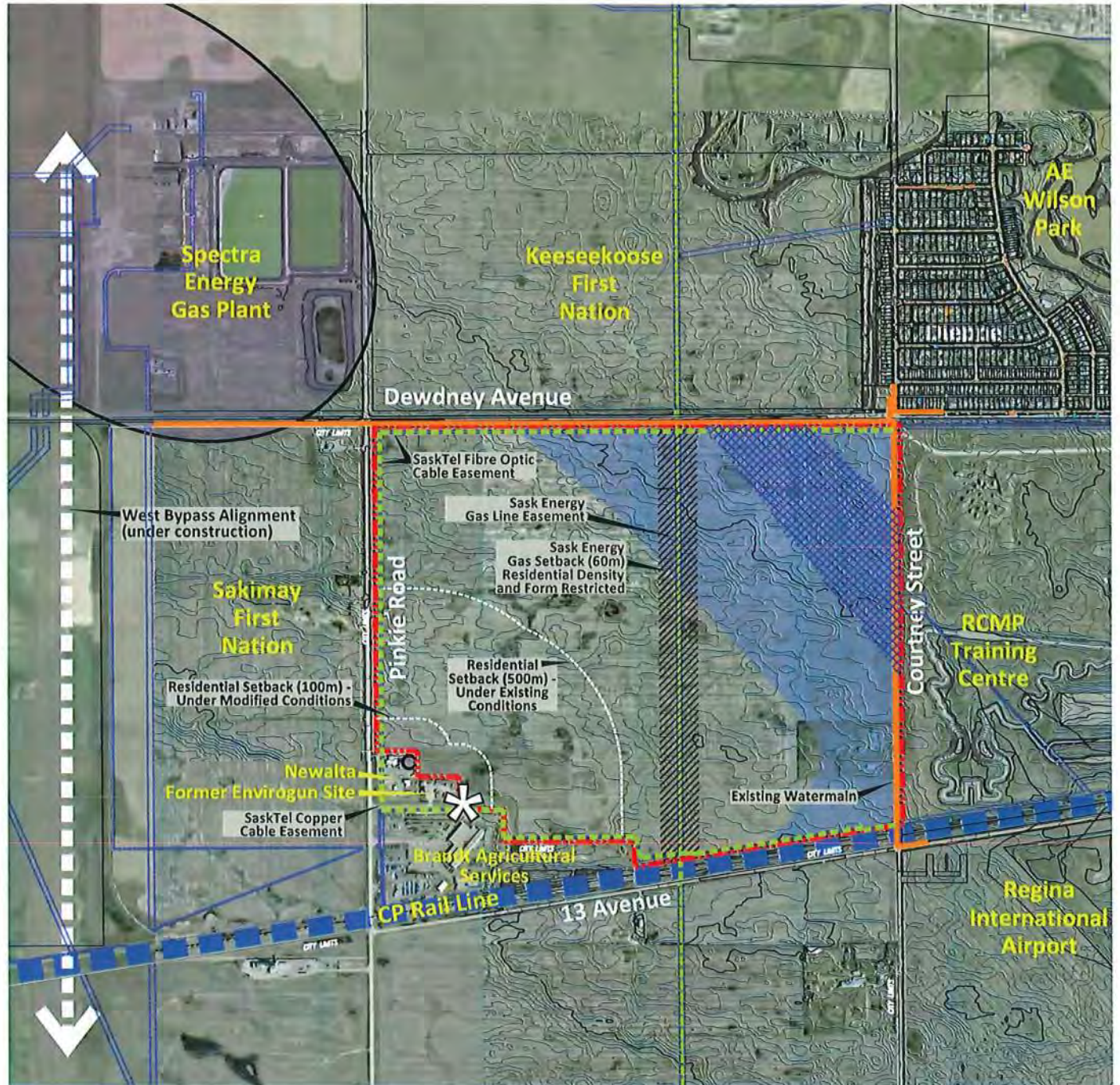
These constraints have been considered in the development of this Neighbourhood Plan. Lands situated within 60 metres of the SaskEnergy pipeline have been identified as a "Special Development Area" and policy has been identified to help ensure that future development within the special development area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

2.3.2 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 at the federal, provincial and municipal jurisdictional level have been established to restrict development and activity so as not to interfere with the safe operation of the airport.

Figure 8a - Land Use and Development Constraints



- | | | | |
|--------------------|--------------------------|---|---|
| Legend | Subject Lands | CP Rail Line | Airport Area of Influence (See Figure 8B) |
| Existing Easement | Future Cell Tower | NEF 30 Contour (Residential Uses Not Permitted) | |
| Existing Watermain | 1:1,000,000 Risk Contour | | |

Land uses are regulated mainly through height and locational restrictions related to the flight path of the airport as stated in *Design Regina: The Official Community Plan Bylaw No. 2013-48*. Map 10 of the *Design Regina: The Official Community Plan Bylaw No. 2013-48* delineates Noise Exposure Forecast (NEF) contour boundaries and the areas where height restrictions apply. These boundaries have been incorporated into the land use areas of Westerra. Federal, provincial and municipal height restrictions and other development standards shall be enforced throughout the planning and land development process.

As such, the proximity of the plan area to the Regina International Airport presents some development constraints for the subject lands in the northeast corner and the restrictions are related mainly to noise impacts and potential height restrictions. The northeast corner of the site is 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. 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 8b: NEF Contours and Height Limitations**.

2.3.3 Canadian Pacific Railway Line

The Canadian Pacific Railway (CPR) Line borders the site from east to west on 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 have been setback approximately 40-60 metres 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 interface is outlined in **Figure 9 - Adjacent Land Use Transition and CPR Area - Residential Land Interface**. It is anticipated that the proposed municipal buffer would include a berm, landscaping treatment and local pathway system.

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.

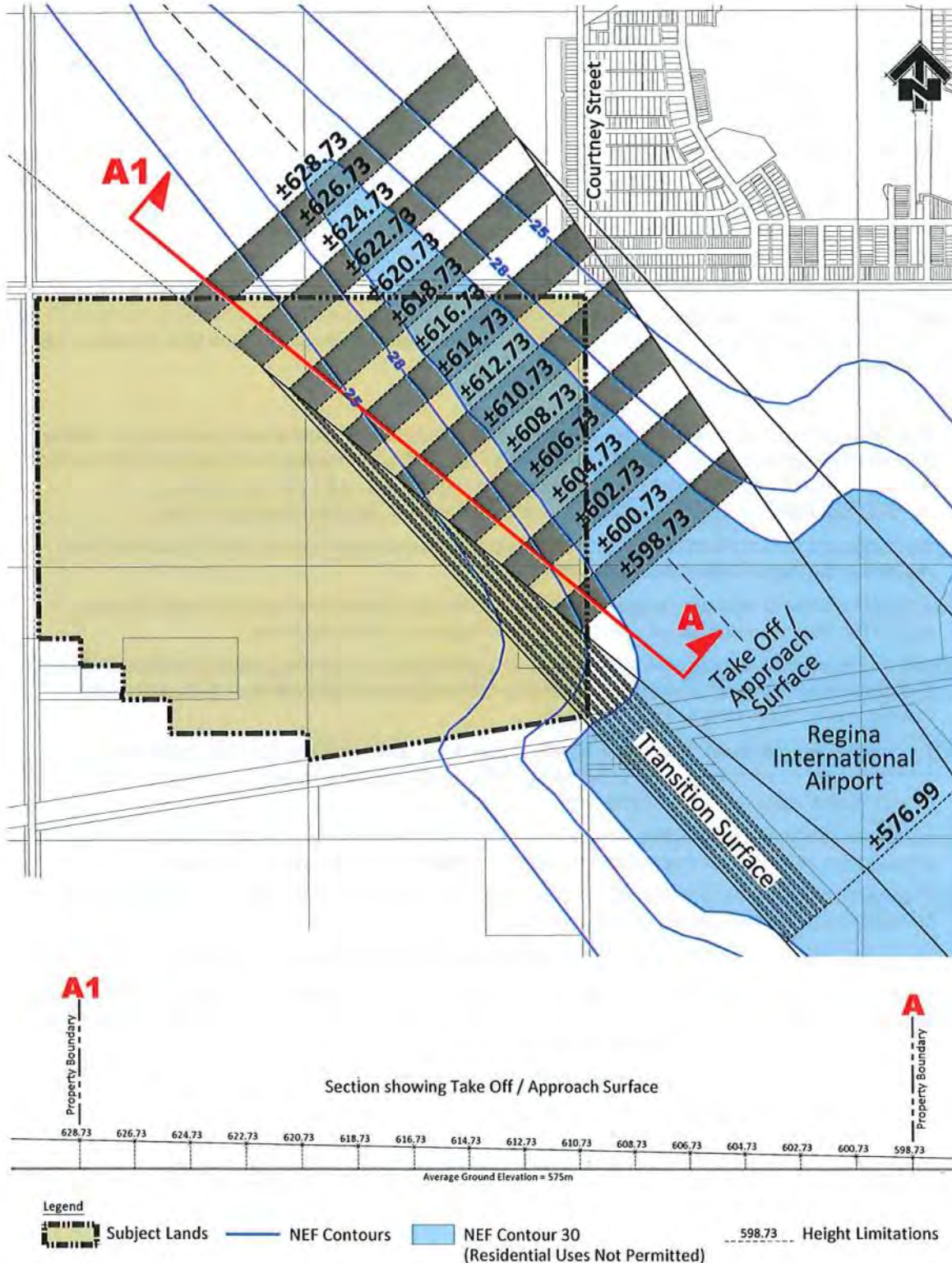
Newalta is located immediately adjacent to the southwest boundary of the plan area. Based on discussions with the City and operator of the Newalta Site, it is understood that Newalta operation is involved in the management and processing of oil field waste and associated by-products. The other site adjacent to Newalta contains a facility which is now closed but was previously operated by Envirogun and was 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 and the 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 8a: 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 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

Figure 8b - NEF Contours and Height Limitations

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



activities to indoor processing activities or the complete decommissioning of the storage facilities. Should existing operations cease, provincial approvals relative to decommissioning and reclamation of both sites will be required. This provincial process involves decontamination, reclamation, monitoring and management of the affected area.

It is important to note, that at the time of drafting this document, the RM of Sherwood No. 159 has recently forwarded its Official Community Plan and Land Use Bylaw (LUB) to the Province for Ministerial approval. The OCP has identified this area for future agricultural uses and agricultural district zoning. The proposed agricultural district zoning for the area does not allow for heavy industrial uses. Further, *Design Regina: The Official Community Plan Bylaw No. 2013-48* recognizes the future transition of land within the City to urban uses and that development in the joint planning area must be compatible and mutually beneficial.

Figure 8a: 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 Envirogun site that future residential land uses in the setback area cannot be realized until such time as the operations within the Newalta and Envirogun site are modified (i.e. conversion to indoor storage) or terminate (i.e. facilities are no longer in operation).

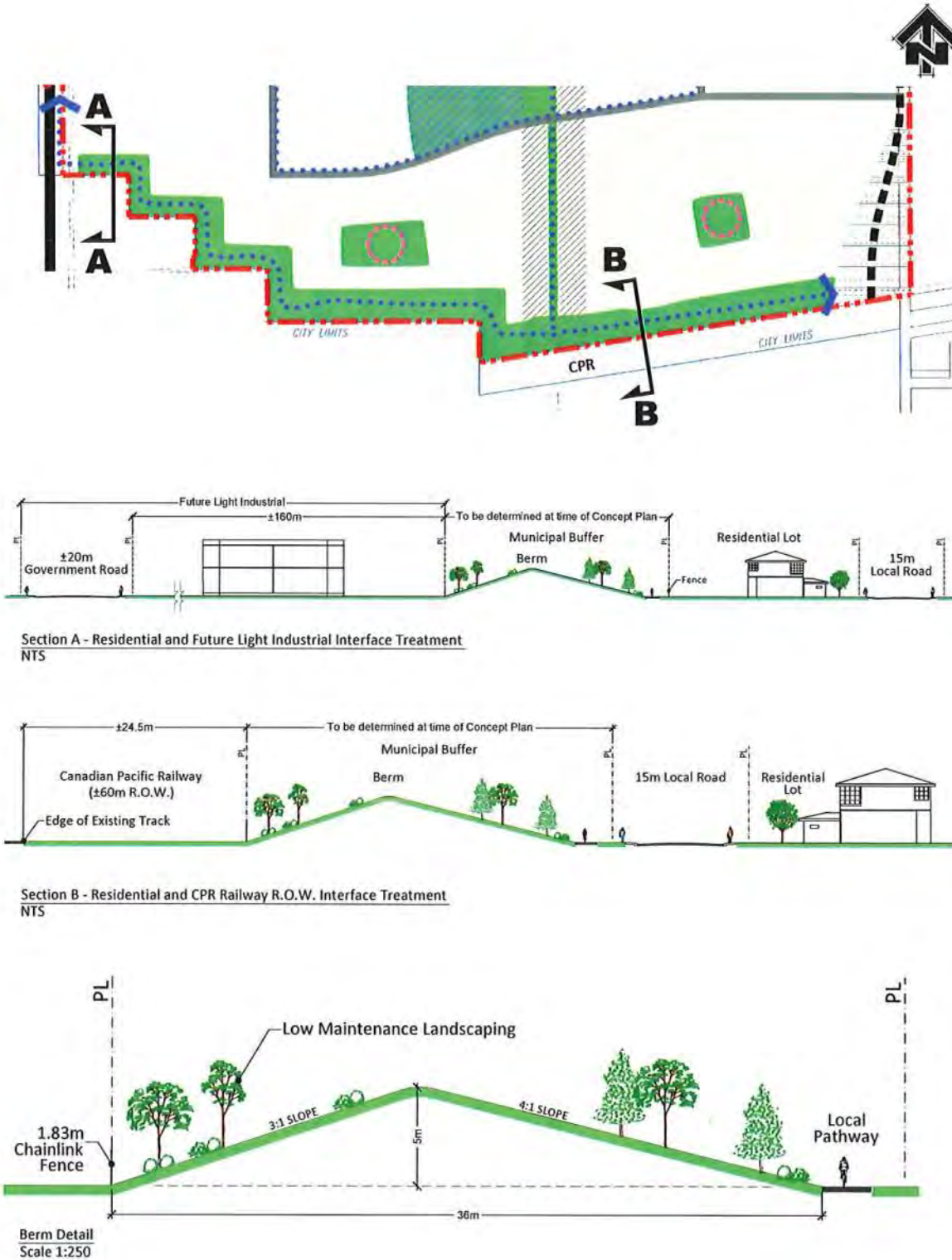
When residential development within this portion of the plan area is able to proceed, to ensure the compatibility of future agricultural, light industrial and urban uses, the Plan responds with a 40-60 metre municipal buffer with a 5 metre high berm along the southern boundary of the Neighbourhood Plan as shown in **Figure 9 – Adjacent Land Use Transition and CPR Area - Residential Land Interface**.

POLICIES:

- 2.3 (a) Lands situated within 60 metres of the centerline of the SaskEnergy pipeline facility as shown on **Figure 8a** 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.
- 2.3 (b) Development of lands in Westerra shall adhere to all Federal, Provincial and Municipal legislation regarding the Regina International Airport.
- 2.3 (c) 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 (d) 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.
- 2.3 (e) Residential development shall not be permitted on those lands contained within the Noise Exposure Forecast contour of 30 or greater as outlined on **Figure 8b: Regina International Airport - NEF Contours and Obstacle Height Limitations**.
- 2.3 (f) Residential building construction within the 25 - 30 Noise Exposure Forecast (NEF) contours must comply with all applicable Federal and Provincial regulation regarding noise attenuation.
- 2.3 (g) In order to support the safe operations of aircraft, retention stormwater ponds or channels shall be prohibited within the neighbourhood plan area.
- 2.3 (h) Residential Land uses shall be setback a minimum of 40-60 metres from the existing rail line right of way.
- 2.3(i) The City shall require the dedication and construction of a municipal buffer abutting the CPR corridor and adjacent industrial lands that is in general accordance with the conceptual illustration outlined in **Figure 9**, 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 (j) 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 (k) No applications for a concept plan, redesignation, subdivision or MSDP for residential purposes within 500 m of the existing Newalta and former Envirogun site as shown in Figure 8a: Land Use and Development Constraints shall be considered by the City until such time as the Newalta and former Envirogun sites are altered (i.e. conversion of operations to indoor storage) in such a fashion as to reduce the setback requirements or operations are terminated (i.e. cessation of operations and provincial approvals obtained) as such that no residential setback would apply.
- 2.3 (l) Once residential development is able to proceed within the current residential setback area a municipal buffer separating residential development from light industrial development shall be designed and implemented in general accordance with Figure 9 – Light Industrial and CPR Line - Residential Interface.

Figure 9 - Light Industrial and CPR - Residential Interface



3.0 Community Design & Land Use

3.1 Westerra Vision

Building on the recent success and completion of *Design Regina: The Official Community Plan Bylaw No. 2013-48* 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 *Design Regina: The Official Community Plan Bylaw No. 2013-48* 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 Metropolitan 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 has emerged as a preferred community in Regina.

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: The Official Community Plan Bylaw No. 2013-48 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	• Create better, more active ways of getting around
• Embrace built heritage and invest in arts, culture, sport and recreation	• Promote conservation, stewardship and environmental sustainability
• Support the availability of diverse housing options	• Achieve long term financial viability
• Foster Economic Prosperity	• Optimize Regional Cooperation



3.3 Design Principles

In accordance with the approved priorities of *Design Regina: The Official Community Plan Bylaw No. 2013-48*, 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 lifecycle. 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, multi-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 shall 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**.

An overview of the detailed land use concept envisioned for the Neighbourhood Plan area is contained within **Appendix B.1 - Detailed Land Use Concept - Non Binding Information**. **Table 2 - Land Use Statistics** provides an overview of the land use statistics for the Neighbourhood Plan. These statistics have been calculated and based on the detailed land use concept in order to provide clarity and direction with regards to anticipated land use yields, residential density and population projections.

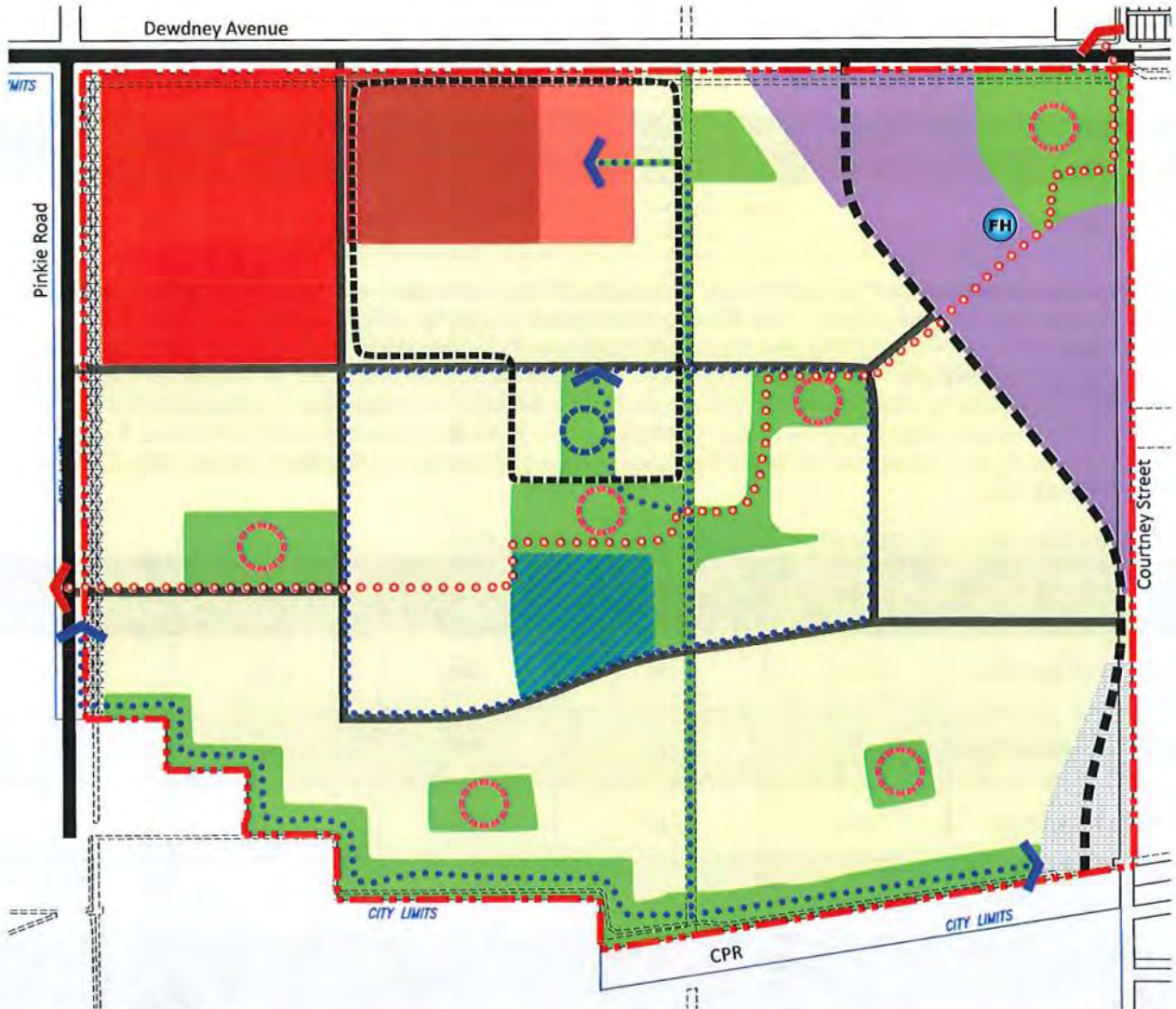
Table 2 - Neighbourhood Plan Land Use Statistics

LAND USE	AREA HECTARES	AREA ACRES	PERCENTAGE OF PLAN AREA
Low Density Residential	40.29	99.57	20.2 %
Medium Density Residential	20.39	50.38	10.2 %
High Density Residential	17.22	42.54	8.6 %
Live – Work Residential	1.33	3.28	0.7 %
Large Format Retail	15.98	39.48	8.0 %
Community Retail	7.50	18.52	3.75 %
Main Street Retail	2.76	6.83	1.38 %
Business Park	12.81	31.65	6.4 %
Potential School or Residential Area	3.60	8.89	1.80 %
Municipal Reserve (MR)	16.88	41.71	8.45 %
Municipal Buffer (MB)	8.89	21.97	4.45 %
Municipal Utility Parcel (MUP)	1.77	4.38	0.89 %
Municipal Walkway(s)	0.02	0.06	0.01
Courtney Overpass ROW Dedication	2.21	5.46	1.11 %
Pinkie Road Widening ROW Dedication	2.9	7.17	1.45
Roads (Minor Arterial, Collector, Local, Alleys)	45.29	111.90	22.66 %
Total	199.84	493.79	100%

POLICIES:

- 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.
- 3.4 (c) The minimum gross population density required to be achieved in the NP gross developable residential area and subsequent concept plan submissions shall be 50 persons per gross developable residential hectare (ppgh).

Figure 10 - General Land Use Concept



Legend

- | | |
|---|---|
|  Plan Area |  Arterial Roads |
|  Large Format Retail |  Minor Arterial Road |
|  Community Retail |  Collector Roads |
|  Main Street Retail |  Neighbourhood Park |
|  Residential |  Neighbourhood Park / Plaza |
|  Potential School or Residential |  Potential Fire Hall Site |
|  Business Park |  Existing Right of Way / Easements |
|  Parks & Open Space |  Devonian Pathway |
|  Overpass Dedication |  Local Pathway |
|  Road Widening | |
|  Urban Centre | |



3.5 Residential

Under *Design Regina: The Official Community Plan Bylaw No. 2013-48*, new residential areas are required to achieve a minimum gross population density of 50 persons per gross developable residential hectare. Based on the City requirements and the general land use concept, the minimum population target Westerra is summarized as follows:

GROSS DEVELOPABLE RESIDENTIAL AREA (HA)	CITY POPULATION INTENSITY TARGETS	MIN. POPULATION REQUIREMENTS
146.28 ha	50 persons per gross developable residential hectare	7,314

Figure 10 - General Land Use Concept has identified those portions of Westerra envisioned for future residential development. The detailed land use concept (**Appendix B.1 - Non Binding Information**) has further delineated the land use vision for Westerra and identified areas envisioned for low, medium and high density residential development. Based on the detailed land use concept (See **Appendix B.1 - Non Binding Information**), at full build out, the population of Westerra is estimated to be approximately 7,426 persons based on project land use yields, density targets and population per household estimates. This population projections equates to approximately 50.77 persons per gross developable residential hectare. A summary of anticipated residential density and population projections based on the generalized and detailed land use concept for Westerra is outlined in **Table 3** below:

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	40.29	25	1,007	3.0	3,022
Medium Density Residential	20.39	42	856	2.1	1,798
Live Work Residential	1.33	42	56	2.1	117
High Density Residential	17.22	85	1,464	1.7	2,488
Total	79.23	n/a	3,383	n/a	7,426
<i>Population of 7,426 equates to 50.77 persons per gross developable residential hectare</i>					

Based on the forecast number of housing units and population for Westerra, **Table 4** provides an overall assessment of the level of density and population intensity for the proposed Neighbourhood Plan.

Table 4 - Residential Density and Population Intensity

DENSITY AND INTENSITY SUMMARY	Number
Residential Density - Units per net hectare	42.70
Residential Density - Units per net acre	17.28
Population Intensity of Residential Area (ppnh)	93.72
Population Intensity of Residential Area (ppna)	37.93

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 mixed 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; 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. The street network has been designed to limit and slow down traffic in these areas while allowing for emergency access and a variety of entry and exit points. Laned product will be made available in appropriate locations along with a variety in lot sizes and dimensions. Low-density development will incorporate appropriate interface and transitional areas with adjacent medium and high – density residential areas creating a mixed – use community with choice in housing form and affordability.

POLICIES:

- 3.5.1 (a) The predominant use of land within the low density residential area shall be single-detached residential uses.
- 3.5.1 (b) The anticipated density target for low-density residential development shall 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) Laneway housing may be permitted within the Low Density Residential Area where identified in an approved concept plan and determined to be compatible and appropriate.
- 3.5.1 (e) 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, row – housing style and certain 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 anticipated density target for medium-density development shall 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.

POLICIES:

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

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 (five 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 (five stories and less) and mixed – use developments where appropriate.
- 3.5.4 (c) Notwithstanding policy 3.5.4 (b) higher density buildings greater than five 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 anticipated density target for high density development shall 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 portion of the mixed use 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.

POLICIES:

- 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 above 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 City of Regina Official Community Plan.
- 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 at the terminus of the proposed Main Street, 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 (especially the main street area).

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 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 stories 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.

POLICIES:

- 3.7 (a) The use of land in the Main Street Retail area may include: civic and recreational uses; Main Street 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 above 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 smaller 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 mixed use 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, 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, 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 design should support synergy between the transit hub and the adjacent community retail area.
- 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 above 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 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 direct access along Dewdney Avenue as well as 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 this 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 above 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 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 higher end non-manufacturing, 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 an 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 and detailed land use concept, provisions have been made to establish municipal reserve connections through the business park area to connect with the parks and open space system proposed for Westerra. It is anticipated that this reserve dedication, coupled with a greenway will provide passive and active recreational opportunities for future employees of end users who choose to construct and operate out of the business park.

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.

POLICIES:

- 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 Figure 11 - Business Park - Residential Interface and any other policy herein, the requirement by the developer of the lands to construct the proposed landscape buffer shall remain at the discretion of the City. If constructed, all future obligations regarding maintenance will remain the responsibility of individual lot owners.

3.11 Civic Uses

Civic uses are addressed by Policies D8, D9 and D11 of the Official Community Plan 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 residential land use integrated with the surrounding area.

Figure 11 - Business Park - Residential Interface



Residential and Business Park Area Interface Treatment Cross Section
Scale 1:250



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, and may consider providing municipal reserve space for joint (school and community) recreational purposes.
- 3.11.1 (b) The concept plan that includes the proposed school site shall provide a shadow plan for the potential school site should a school not be required. The plan shall include a street, open space, and block pattern that will allow the proposed school site to readily transition to an alternate land - use (e.g. residential).
- 3.11.1 (b) 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 (e) 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 residential land uses without an amendment to this 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 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.

In addition to a series of neighbourhood level parks, a significant dedication of park space is proposed for the central portion of the plan area to work in conjunction with the proposed potential school site. Given the size and location of this central park dedication, it is anticipated that this park area will serve both local and regional recreational needs.

POLICIES:

- 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
 - Involve due effort to co-locate recreation facilities where possible as per the Design Regina: The Official Community Plan Bylaw No. 2013 - 48. In the case of co-location, specific attention will be given to street front parking to accommodate the programmed facilities.
- 3.12 (d) The configuration of the Westerra Open Space Network is generally shown on Figure 12: Parks 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 endorsement 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.

Figure 12 - Parks, Pathway and Open Space Network

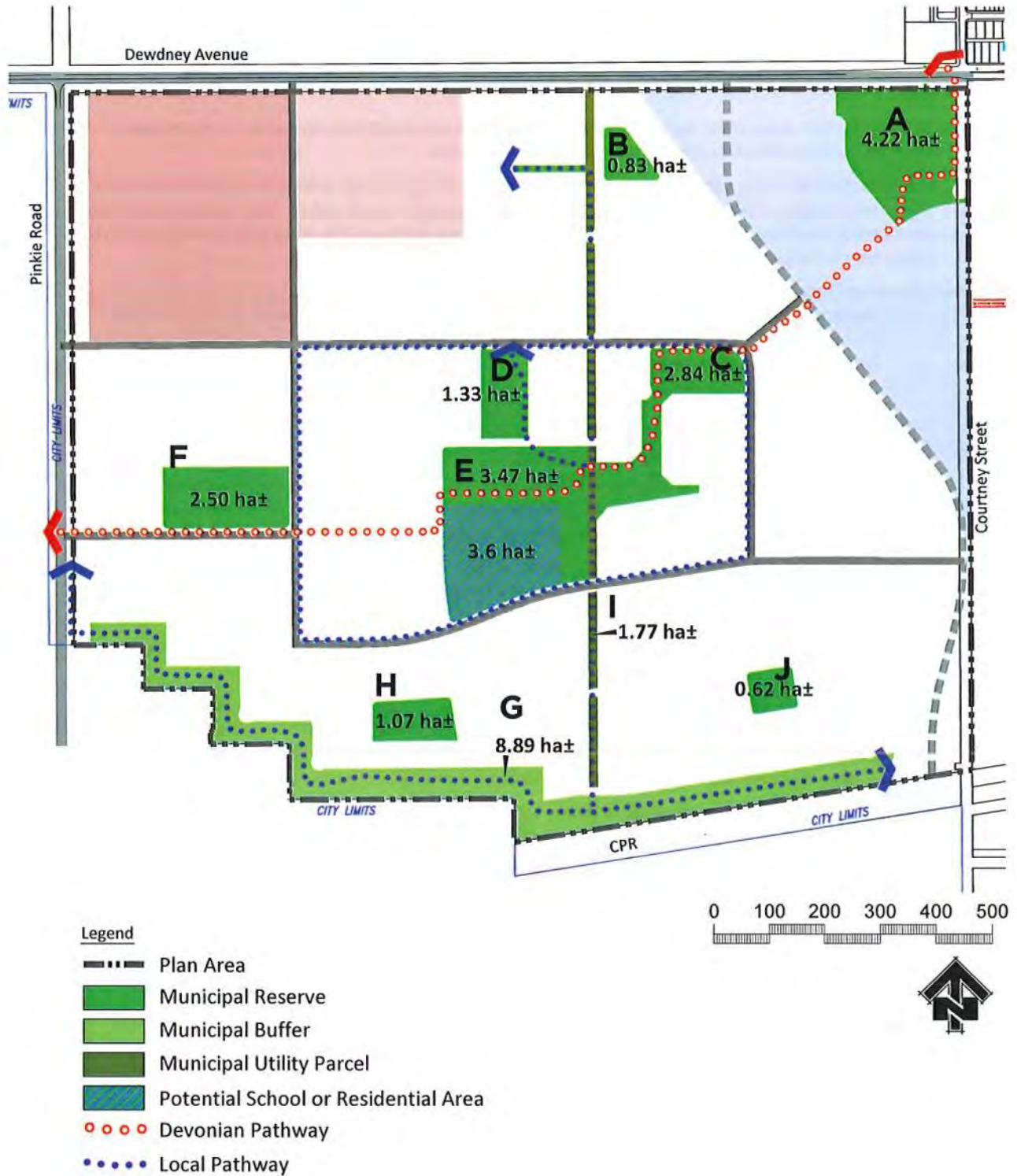


Table 5 - Open Space System and Potential Facilities

OPEN SPACE AREA	CLASSIFICATION TYPE	POTENTIAL FACILITIES	AREA (HECTARES)
A	Municipal Reserve	Entry Park, Stormwater Facility, pathway connection, enhanced landscaping	4.22
B	Municipal Reserve	Neighbourhood Park, Playfield, and Playground	.83
C	Municipal Reserve	Neighbourhood Park, Playfield, and Playground	2.84
D	Municipal Reserve	Urban Park/Plaza, soft and hard landscaping improvements, local pathway	1.33
E	Municipal Reserve	Potential school site playfields, playground and pathway improvements	7.07
F	Municipal Reserve	Neighbourhood Park, Stormwater Management Facility, Playfield, and Playground	2.50
G	Municipal Buffer	Landscaped Berm, Fencing, Local Pathway	8.89
H	Municipal Reserve	Neighbourhood park, playfield, and playground	1.07
I	Municipal Utility Parcel	Linear Park, Pathway	1.77
J	Municipal Reserve	Neighbourhood Park, playfield and playground	.62

POLICIES:

3.13.3 (a) Municipal reserve (MR) parcels shall be dedicated within the Plan area as generally illustrated by Appendix B.1 Detailed Land Use Concept and Figure 12: Parks, Pathway and Open Space Network however, the specific location, type and size of parks shall be determined through an approved concept plan and determined at the time of the zoning and subdivision process.

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**. Linear open spaces incorporating pathways and dry ponds will augment the circulation system within Westerra and encourage more healthy and sustainable alternative modes of transportation. 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) Identified pathways and open space may qualify as municipal reserve and shall be constructed by the developer to City standards.
- 3.12.1 (d) As shown on **Figure 13: Transportation Network**, greenways 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 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 +/- 16.58 hectares. The total amount of municipal reserve proposed is +/- 16.88 hectares (residential and non-residential) resulting in an approximate over dedication of approximately +/- 0.30 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 6** below.

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- Light Industrial and CPR Line - Residential Interface. 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.

POLICIES:

- 3.12.3 (a) Municipal buffer (MB) parcels shall be dedicated within the Plan area as generally illustrated by Figure 12: Parks, Pathway and Open Space Network.
- 3.12.3 (b) The location and amount of municipal buffer dedication shall be detailed at the time of a concept plan, zoning and subdivision application.
- 3.12.3 (c) The design and configuration of the proposed municipal buffer should be in general accordance with Figure 9- Adjacent Land Use Transition and CPR Area - Residential Land Interface.

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) Municipal utility parcel(s) (MUP) parcels shall be dedicated within the Plan area as generally illustrated by Figure 12: Parks, Pathway and Open Space Network.
- 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 (Development Standards Manual (DSM) sec. 12, 3.13.4), underground services should 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.

Table 6 - Municipal Reserve Requirements and Proposed Dedication

	± ACRES	± HECTARES
Total Plan Area	493.79	199.84
Less Courtney Overpass Right of Way Dedication and Purchase	5.46	2.21
Less Regional Roadways (Courtney Street as Minor Arterial)	11.31	4.58
Less Pinkie Road Right of Way Dedication and Purchase	7.17	2.9
Less Municipal Utility Parcel lands	4.38	1.77
Gross Developable Area (for municipal reserve calculation purposes)	465.47	188.38
Gross Residential Area of GDA	353.87	143.21
MR outstanding (10 % Gross Residential Area)	35.39	14.32
Gross Non - Residential Area of GDA	111.60	45.16
MR outstanding (5 % Gross Non - Residential Area)	5.58	2.26
Total Municipal Reserve Requirement (Residential and Non - Residential)	40.97	16.58
Total Municipal Reserve Proposed	41.71	16.88
MR OVER - DEDICATION (PDA Sec. 186)	0.74	0.30

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 5 - Open Space System and Proposed 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.

[The following text is extremely faint and illegible due to low contrast and blurring. It appears to be a multi-paragraph document.]



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.

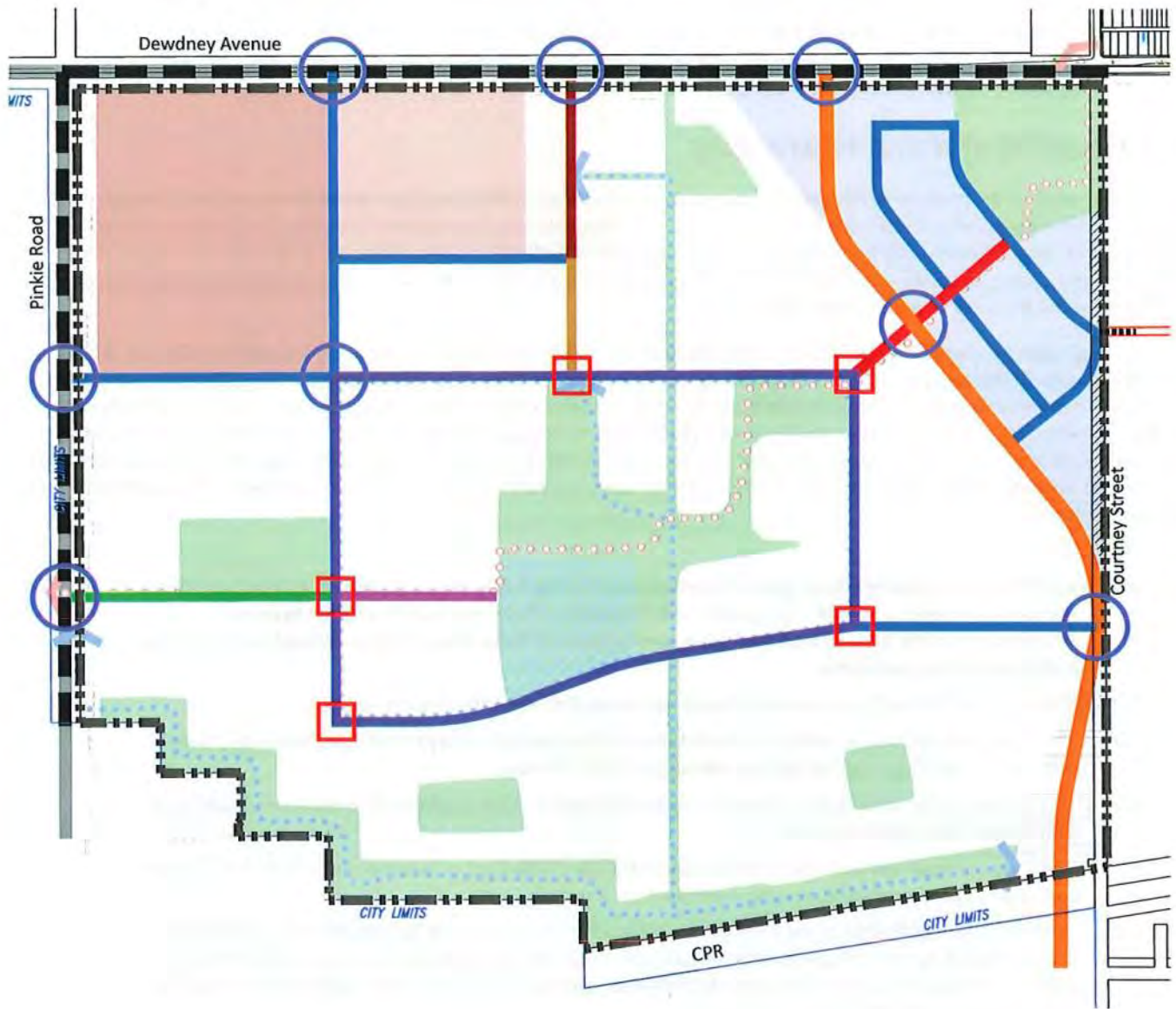
Key findings and recommendations of the traffic impact assessment are as follows:

- 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.

POLICIES:

- 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 design and configuration of roadways to support the development of the NP area should be in general accordance with Figure 13 Transportation Network. The final configuration and design of roadways shall be confirmed at the time of concept plan submission.
- 4.1 (c) Land dedication for potential road widening overpass requirements shall be in accordance with Figure 10 - General Land Use concept and Appendix B.1 - Detailed Land Use Concept - Non Binding Information. Land dedication requirements shall be confirmed at time of concept plan, redesignation and subdivision.
- 4.1 (d) Roadway and intersectional improvements shall be undertaken in a phased and staged manner as warranted by traffic impact assessments accompanying concept plan submissions.
- 4.1 (e) Noise Studies shall 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.

Figure 13 - Transportation Network



Legend

- Subject Lands
- Arterial
- 33.0m Minor Arterial
- 33.0m Main Street Collector
- ±31m Main Entrance Collector w/ Varying Greenway
- 25.0m Collector with Greenway
- 25.0m Live-Work Collector
- 23.5m Collector - Inner Loop with Pathway
- 22.0m Collector
- 21.0m Local with Greenway
- Tie-in to RCMP Training Centre
- Signalized Intersection
- Roundabout Location
- Portion of Existing Courtney Street to be closed 0.93 ha± (2.31 ac±)

- 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.
- 4.1 (j) Through the concept plan process, the City may require, at its discretion, the submission of a noise impact study in order to determine appropriate setbacks from adjacent land uses associated with potential noise impacts (i.e. railways, RCMP operations, industrial operations).

4.2 Road Network Hierarchy

Section drawings of the proposed road network hierarchy are outlined in **Appendix B.2 - Road Network Cross Sections - Non - Binding Information** and 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.

POLICIES:

- 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.
- 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 'pods' 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 fused or traditional grid development pattern.
- 4.2 (f) Preliminary road design cross sections for all roadways envisioned for the NP area are shown in Appendix B.2, however, the final configuration and design of roadways 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 shall be subject to design and classification through the concept plan process, and 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.
- 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) Other traffic calming measures that encourage slow and deliberate traffic flows within a community may be introduced, as determined appropriate.

- 4.2 (i) Wherever pathways intersect with the road network, curb extensions and other traffic calming measures should be employed to reduce crossing times and establish pedestrian/cyclist safety and priority at these locations.
- 4.2 (j) Where appropriate, City roadway design standards may be adjusted or modified to accommodate the provision of a green-way or bike-way.
- 4.2 (k) The City shall ensure that municipal infrastructure (e.g. roadway overpasses) does not exceed airport related height restrictions.

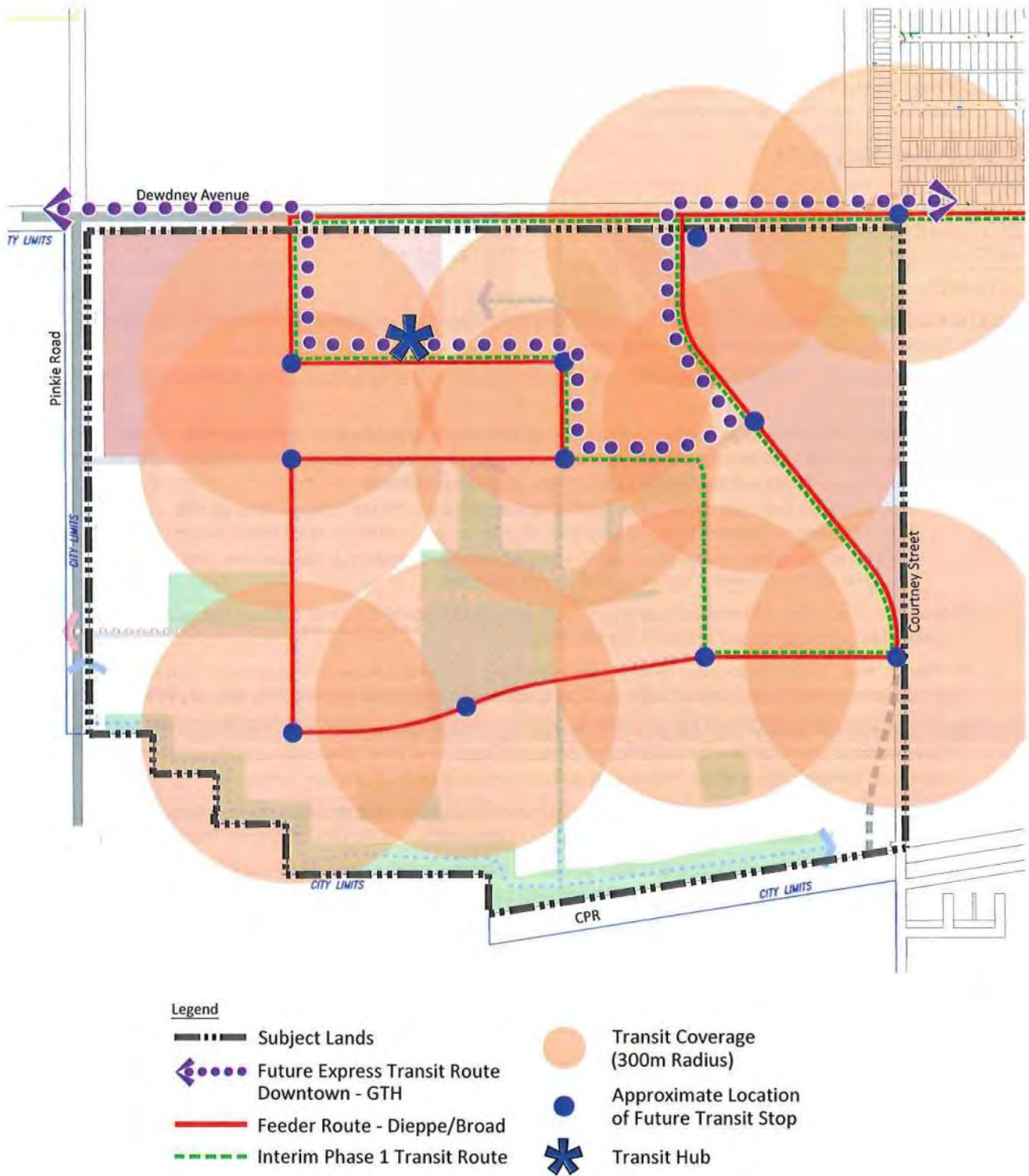
4.3 Public Transit

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. Transit routes and stops have been identified within the community and marked on Figure 14: Transit Coverage and Mobility Assessment.

POLICIES:

- 4.3 (a) Public bus transit shall be accommodated along collector roads in general accordance with Figure 14: Transit Coverage and Mobility Assessment.
- 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 commercial area, and high density residential;
 - II. The transit hub may include the following elements, which are funded through the City's service agreement fees: 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.
- 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. 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 (f) 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 City of Regina Transit Services.
- 4.3 (g) Should changes take place to the transit servicing strategy for the Westerra Neighbourhood Plan in the future; an amendment to this neighbourhood plan shall not be required.

Figure 14 - Transit Coverage and Mobility Assessment



5.0 Servicing Strategy

As part of the preparation of the Westerra Neighbourhood Plan, WSP was commissioned to complete an analysis of servicing requirements to support the phased development of Westerra. 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 7 - Peak Wastewater Flows Based on Land Use and Anticipated Density**).

Table 7 - Peak Wastewater Flows Based on Land Use and Anticipated Density

	SUMMARY OF LAND USE			SANITARY SEWER DEMANDS		
	Area		Pop Density	Pop	Av Flow	Peak Flow
	ac	ha	ppl/ha	ppl	L/cd	L/s
Low Density Residential	99.57	40.29	75.01	3022	225	36.86
Medium Density Residential	50.38	20.39	84.01	1713	225	21.18
Live/Work Residential	3.28	1.33	84.21	112	225	1.56
High Density Residential	42.54	17.22	144.48	2488	225	26.93
Commercial	64.83	26.24	70	1837	454	41.26
Business Park	31.65	12.81	35	448	454	12.53
					Total:	140.32

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.

Table 8 - Wastewater Flows from Outside Sources

	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

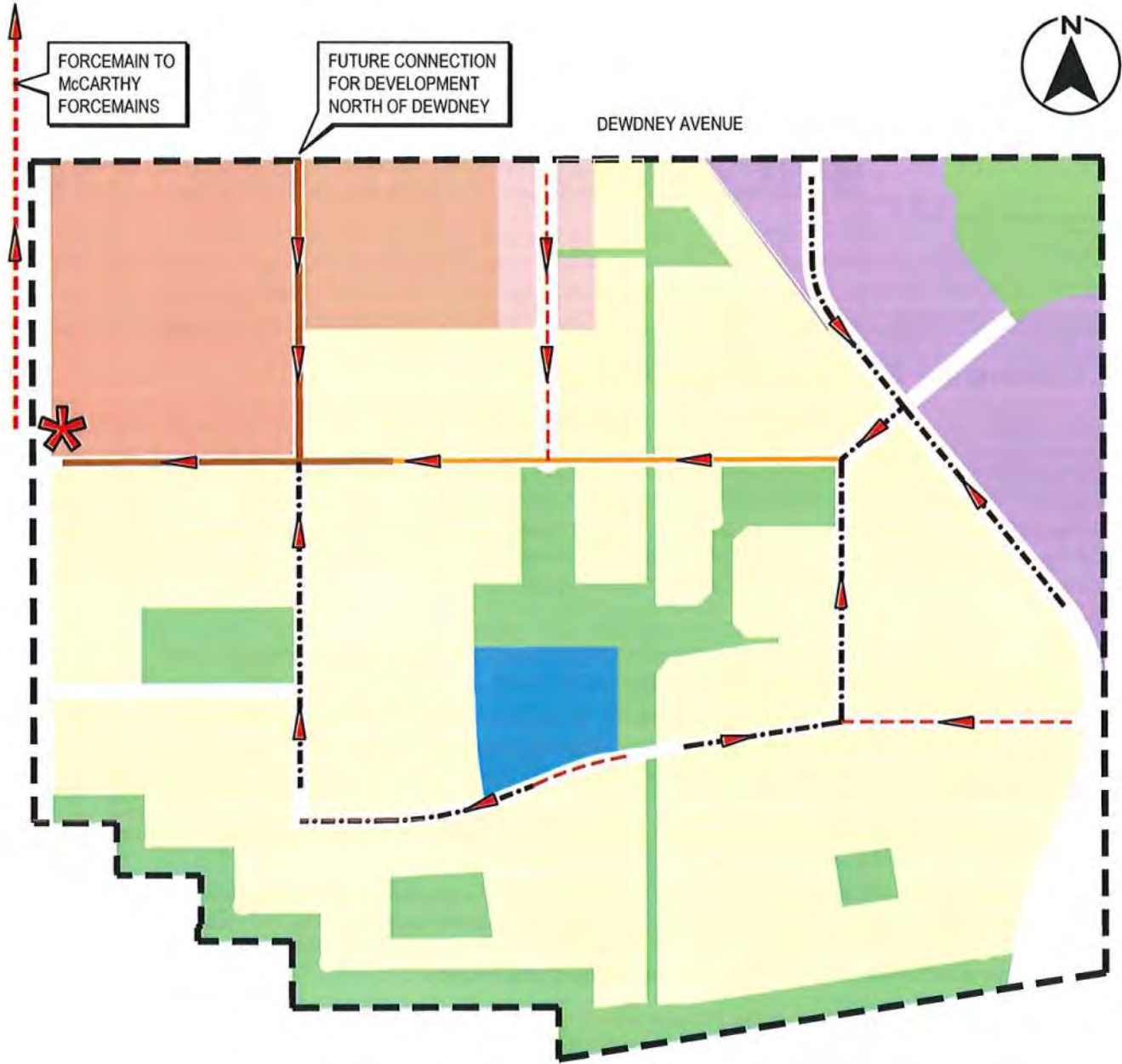
5.1.3 Timing of Capital Improvements

As there are currently no sanitary sewer mains 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.

POLICIES:

- 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. Refinements to the sanitary servicing concept may take place at the time of detailed engineering design concurrently with the rezoning and subdivision process without amendments 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 lift station and/or forcemain requirements.
- 5.1.3 (d) The developer shall 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.

Figure 15 - Sanitary Servicing Concept



Legend

- | | | |
|-------------------------------|-----------|-------------------|
| Proposed 200mm Sanitary Sewer | - - - - - | |
| Proposed 250mm Sanitary Sewer | | Lift Station |
| Proposed 450mm Sanitary Sewer | ————— | Direction of Flow |
| Proposed 600mm Sanitary Sewer | ————— | Subject Lands |



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 600mm diameter main and follows Dewdney Avenue east 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 the 750mm trunk at Courtney Street and the 600mm trunk at Dewdney Avenue
2. 250mm distribution loop to provide Level 3 service to prestige industrial lands connected to the 750mm trunk at Courtney Street and the 600mm trunk at Dewdney Avenue
3. 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

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. Results of the various simulations have been forwarded to the City of Regina for review.

The fire flow analysis for full buildout 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 276 node failures. Further analysis using Peak Hour demand shows 402 of 4188 (9.6% of the system) nodes falling below the minimum pressure criteria of 269.4 kPa in the existing system compared to 654 failures post-development (15.6% of the system). The average pressure drop after full-buildout of Westerra during Peak Hour demand is 5.7kPa.

5.2.3 Timing of Capital Improvements

The existing watermains 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 watermain will 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 Refinements to the water servicing concept may take place at the time of detailed engineering design concurrently with the rezoning and subdivision process without an amendments to this Neighbourhood Plan.
- 5.2.3 (c) The developer may 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.

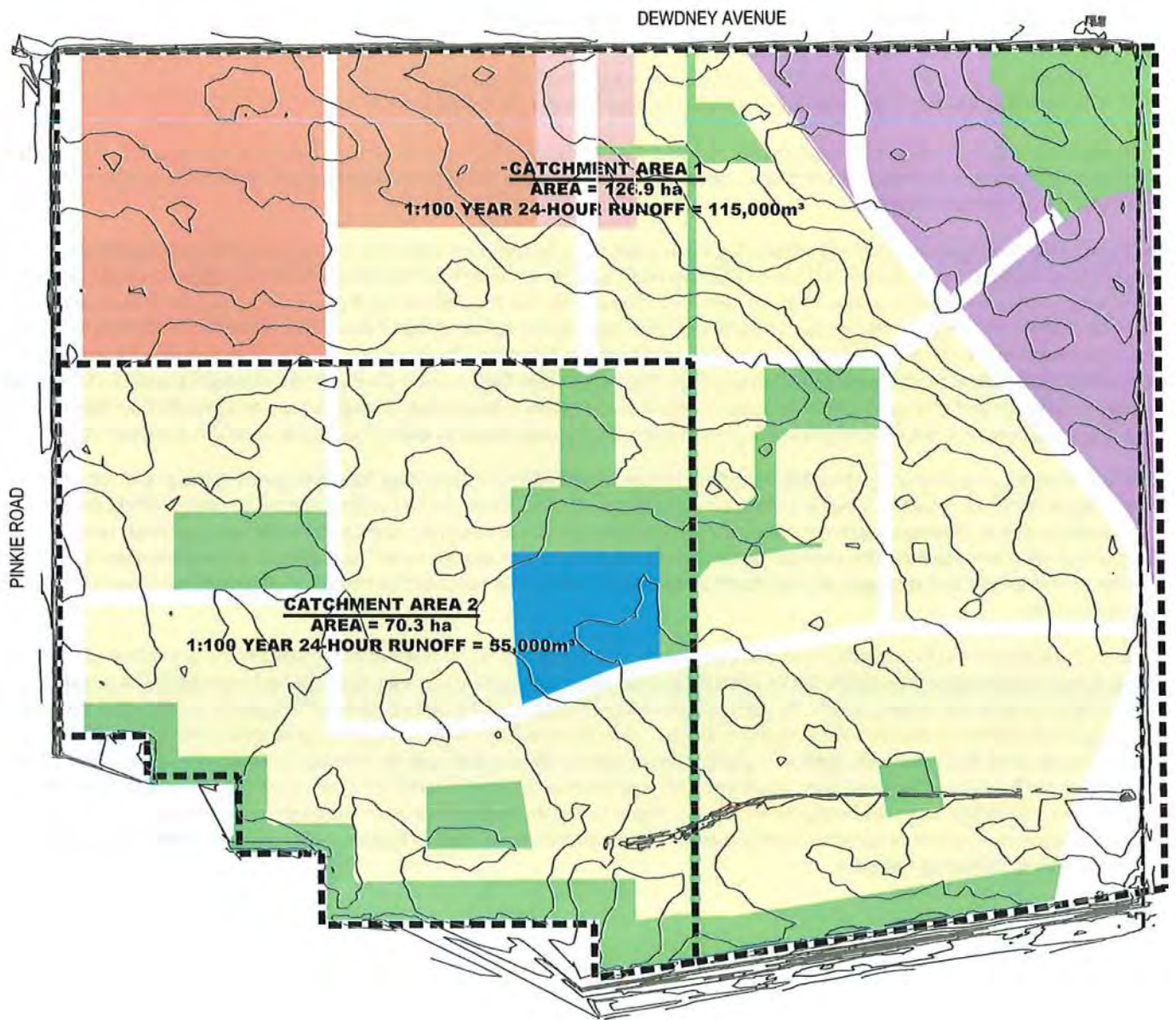
5.3 Stormwater Management

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.

Drainage from the Westerra property has been studied by the City of Regina on multiple occasions. In 1999 the City of Regina commissioned WSP (then Cochrane Engineering Ltd) to conduct the Master Plan Drainage Area #15 Study. One of the key recommendations of this study was that the City develop a means to manage external flows from areas to the west of Courtney Street. Subsequently, in 2001, WSP prepared the Predesign Report for Drainage Improvements: Courtney Street Ditch and proceeded to detailed design. Construction on this project was completed in 2009. As development opportunities evolved in west Regina, AECOM (then UMA) was commissioned in 2008 to prepare the Intermodal Facility and West Industrial Lands Servicing Study. In this study, AECOM proposed a west storm channel that would collect flows from the southwest catchment of Westerra, all of the proposed Sakimay development land and the GTH eventually discharging in the Grand Coulee Drainage Ditch. These studies have provided two viable development options for managing stormwater runoff from Westerra.

Figure 17 - Catchment Area Concept



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. Based on these simulations the 24 hour 1 in 100 year volume is 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

Discharge from this development will be limited to the pre-development flow rate of 5m³/s. Based on the relatively flat grades in this area and the lack of a deep storm trunk, the outlet for stormwater flows from Westerra will need to be pumped and exit the site by one of two strategies.

The stormwater management strategy introduced in the 2008 WIL Concept Plan called for discharge of the west catchment through Sakimay lands towards the GTH Storm Channel and the east catchment to drain through the Dewdney Avenue Culvert. This strategy was developed at a time when the assumed land use for the Westerra property was predominantly industrial and assumed a longer development schedule. The primary advantage of this option is that it minimizes the extent and overall depth of storm sewer required to provide minor system drainage to this subdivision. However, in conversations with the Sakimay First Nation and upon review of preliminary design drawings, it is evident that their current development plans will manage stormwater through rural roads and shallow ditches. As such, it is likely that a storm channel deep enough to support gravity flow from the west detention pond will not be constructed as part of the Sakimay subdivision as envisioned in the 2008 WIL Concept Plan.

Based on changes in the nature of the Westerra land use concept and intended timing for development, the preferred option for management of stormwater flows is to drain both catchment areas through the Courtney Street Drainage Ditch. During the 2001 Courtney Street Drainage Ditch Improvement project, this ditch was designed and upgraded to manage peak stormwater flows of 15m³/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 need to 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, a stormwater lift station had been proposed to convey stormwater flows to Wascana Creek via the Courtney Street Drainage Ditch. Upon proceeding with detailed design of this subdivision, alternatives to a lift station shall be evaluated. Sufficient grade exists to drain Westerra by gravity directly to Wascana Creek. This may be achieved either by deepening the Courtney Street Drainage Ditch or by construction of a new storm trunk sewer that follows the Courtney Street Drainage Ditch alignment and connects to the drop structure approximately 750m north of Dewdney Avenue. An overview of the proposed stormwater servicing concept is outlined in **Figure 17- Catchment Area Concept** and **Figure 18 - Storm Servicing Concept**.

Figure 18 - Storm Servicing Concept



Legend

Proposed 300mm Storm Sewer		Proposed 900mm Storm Sewer	
Proposed 375mm Storm Sewer		Proposed 1050mm Storm Sewer	
Proposed 450mm Storm Sewer		Proposed Ditch Drainage	
Proposed 600mm Storm Sewer		Detention Pond	
Proposed 750mm Storm Sewer		Direction of Flow	
		Subject Lands	



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. This discharge method allows the City to make use of existing stormwater infrastructure via the upgraded Courtney Street drainage ditch and allows development to proceed without any significant capital improvements west of Pinkie Road.

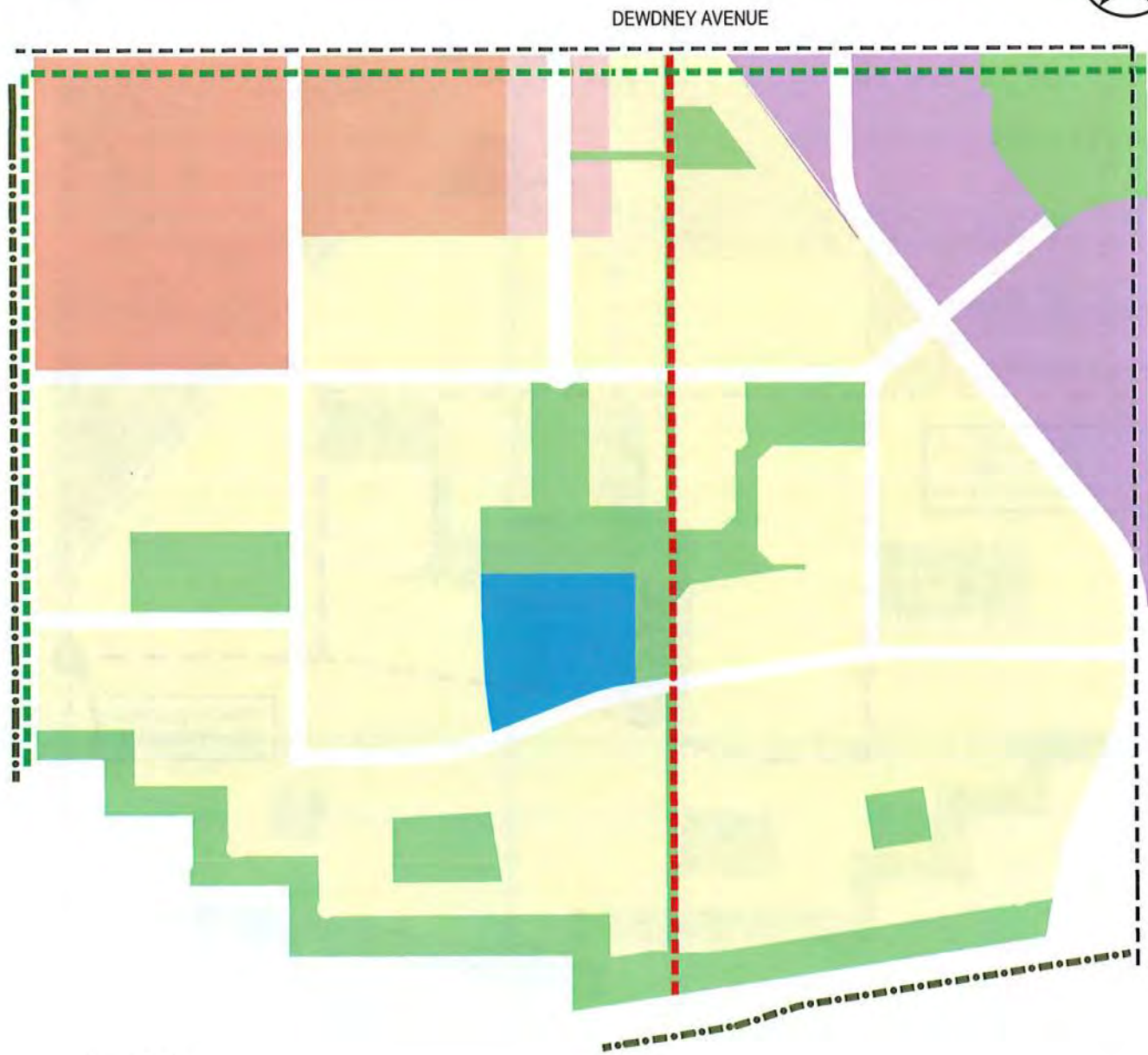
POLICIES:

- 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 18: Catchment Area Concept and Figure 18: Storm Servicing Concept. Refinements to the stormwater management plan may take place at the time of detailed engineering design concurrently with the rezoning and subdivision process without an amendment to this NP.
- 5.3.3 (c) Stormwater discharge from Catchment Area # 2 should be directed to the outlet at the northeast corner of the property.
- 5.3.3 (d) The developer may 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.

5.4 Shallow and Above-Ground Utility Servicing

Existing power, gas, and telecommunications infrastructure in the vicinity of Westerra is shown on the Existing Utility Diagram included in Figure 19 - Shallow and Above-Ground Existing Utilities. During preparation of the proposed subdivision layout, all existing shallow utilities were exposed with hydrovac 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



Legend

- Existing SaskTel Line
- Existing Gas Line
- Overhead Power Lines
- Existing Watermain



[The following text is extremely faint and illegible due to low contrast and blurring. It appears to be a multi-paragraph document.]



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), Concept Plan boundaries may be adjusted based on market demand and requirements.
- 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.
- 6.1 (d) Infrastructure upgrades may be in accordance with the capital improvement plan outlined in Appendix D.1 of this Plan; however, the City shall determine exact infrastructure requirements through the subdivision and development process. Appendix D.1: Capital Improvements Plan shall be considered non-binding.

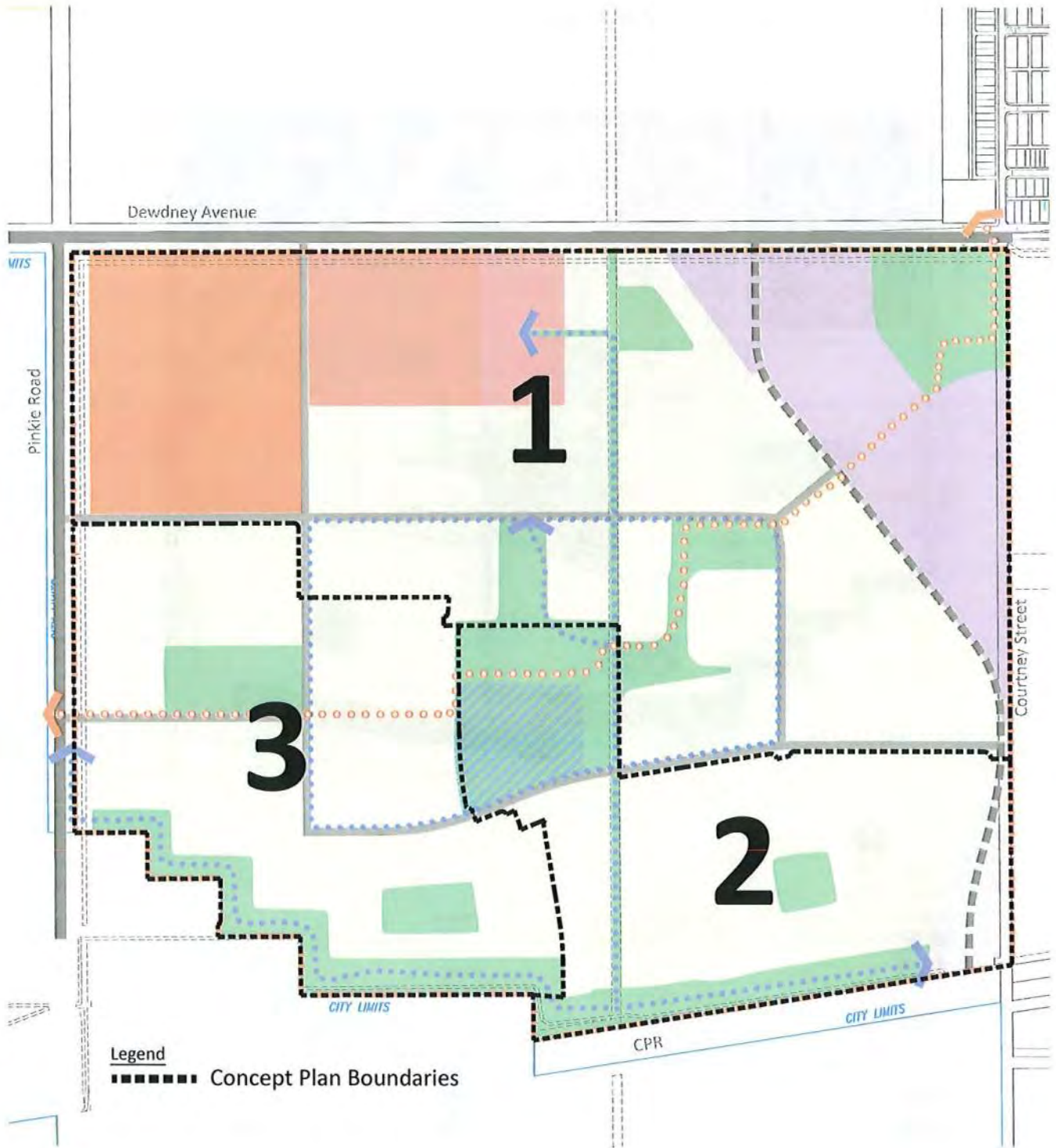
6.2 Concept Plans

To advance development on the subject lands, a Concept Plan must first be prepared in accordance with *Design Regina: The Official Community Plan Bylaw No. 2013-48* to bridge the gap between the planning and servicing considerations for the full build out of the plan area in relation to the City 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**.

POLICIES:

- 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) 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:
 - 1) The variation is deemed by the City to be minor in nature;
 - 2) The variation does not directly conflict with a particular policy statement; and
 - 3) The proposed concept plan substantially conforms with this Neighbourhood Plan.
- 6.2 (d) Concept plans may be adopted or amended by resolution, in accordance with the Planning and Development Act, 2007 and shall be appended to this Neighbourhood Plan and binding upon applicable rezoning and subdivision applications.
- 6.2 (e) Concept plans which form part of this Neighbourhood Plan, 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).

Figure 20 - Concept Plan Boundaries



Appendix A

Approved Concept Plans

A.1 - Phase 1 Concept Plan - Land Use Plan

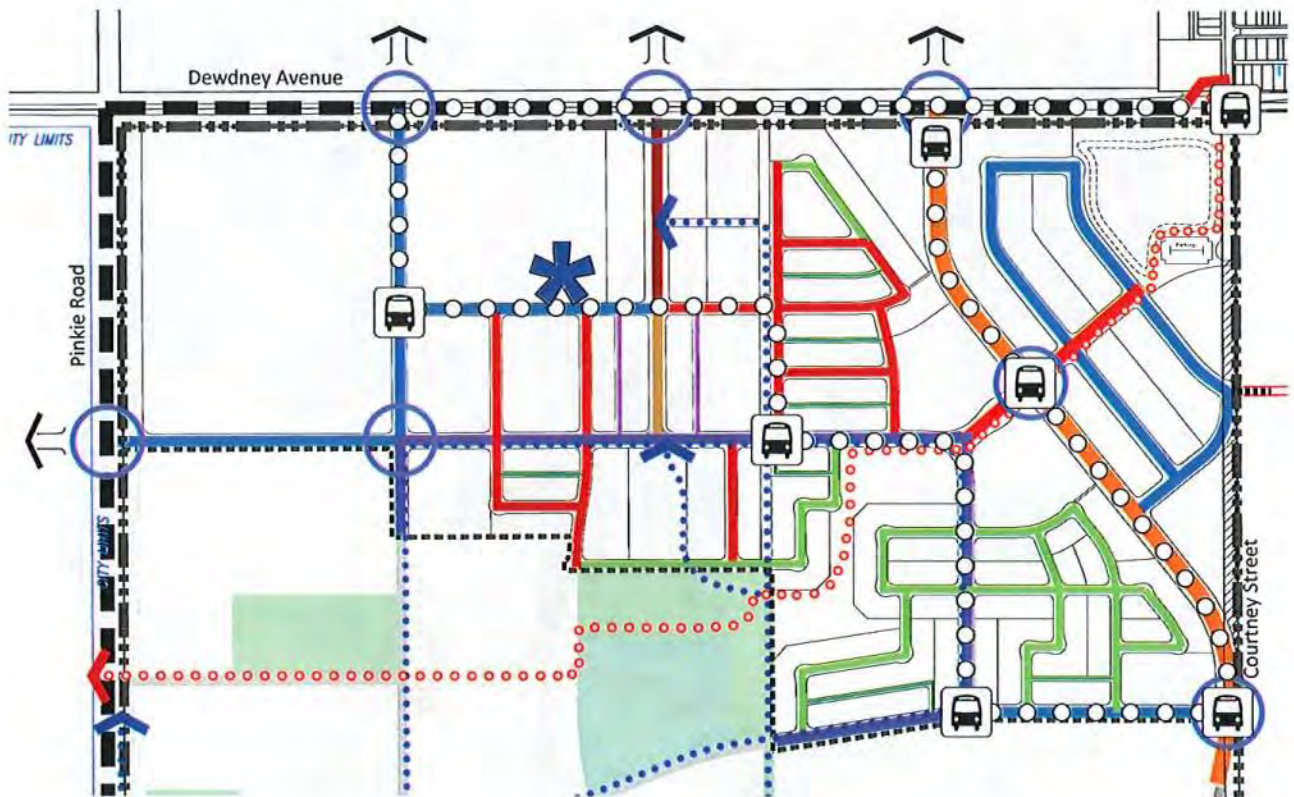


Legend 1:3000

Plan Area	Area	Percentage
Ph 1 Concept Plan Boundary	111.0 ha (274.28 ac)	100.0%
Large Format Retail	15.98 ha (39.48 ac)	14.4%
Community Retail	7.50 ha (18.52 ac)	6.7%
Main Street Retail	2.76 ha (6.83 ac)	2.5%
High Density Residential	11.50 ha (28.41 ac)	10.3%
Medium Density Residential	11.09 ha (27.41 ac)	10.0%
Low Density Residential	11.57 ha (28.60 ac)	10.4%
Live Work Residential	1.33 ha (3.28 ac)	1.2%
Business Park	12.81 ha (31.65 ac)	11.5%
Parks & Open Space		
Municipal Reserve	9.21 ha (22.77 ac)	8.3%
Municipal Utility Parcel	0.89 ha (2.20 ac)	1.0%

Walkways	Area	Percentage
Road Widening	1.36 ha (3.36 ac)	1.2%
Roads	24.98 ha (61.71 ac)	22.5%
Special Development Area (60m Setback)		
Potential Laneway Housing		
Existing Right of Way Easement		
Neighbourhood Park (NP)		
Neighbourhood Park / Plaza (P)		
Potential Fire Hall Site (FH)		
Stormwater Facility		
Entry Feature		
Devonian Pathway		
Local Pathway		

A.2 - Phase 1 Concept Plan - Circulation Plan



- Legend**
- Phase 1 Boundary
 - ▬ Arterial
 - ▬ 33.0m Minor Arterial
 - ▬ 33.0m Main Street Collector
 - ▬ ±31m Main Entrance Collector w/ Varying Greenway
 - ▬ 25.0m Live-Work Collector
 - ▬ 23.5m Collector - Inner Loop
 - ▬ 22.0m Collector
 - ▬ 18.0m Local Road
 - ▬ 15.0m Local Road
 - ▬ 9.15m Lane
 - ▬ 7.5m Lane
 - ▬ Tie-in to RCMP Training Centre
 - ○ ○ Transit Route
 - ○ ○ Devonian Pathway
 - ● ● Local Pathway
 - ☎ Transit Stop
 - ☎ Transit Hub
 - Signalized Intersection
 - ▨ Portion of Existing Courtney Street to be closed 0.93 ha± (2.31 ac±)

Appendix B

Non - Binding Information

B.1 - Overall Detailed Land Use Plan



Legend 1:3000

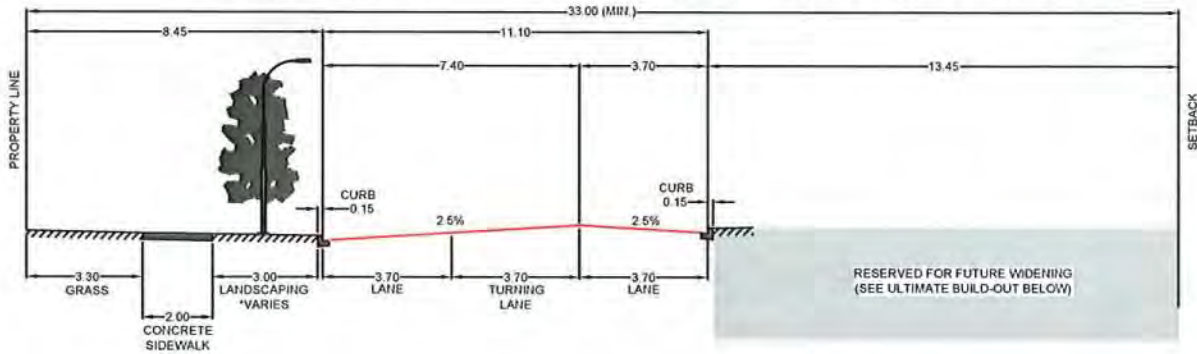
	Plan Area	199.84 has (493.79 acs) (100.0%)			
	Large Format Retail	15.98 has (39.48 acs) (8.0%)			
	Community Retail	7.50 has (18.52 acs) (3.8%)			
	Main Street Retail	2.76 has (6.83 acs) (1.4%)			
	High Density Residential	17.22 has (42.54 acs) (8.6%)			
	Medium Density Residential	20.39 has (50.38 acs) (10.2%)			
	Low Density Residential	40.29 has (99.57 acs) (20.2%)			
	Live Work Residential	1.33 has (3.28 acs) (0.7%)			
	Business Park	12.81 has (31.65 acs) (6.4%)			
	Potential School or Residential	3.60 has (8.89 acs) (1.8%)			
Parks & Open Space					
	Municipal Reserve	16.88 has (41.71 acs) (8.4%)			
	Municipal Buffer	8.89 has (21.97 acs) (4.4%)			
	Municipal Utility Parcel	1.77 has (4.38 acs) (0.9%)			
	Walkways	0.02 has (0.06 acs)			
	Overpass Dedication	2.21 has (5.48 acs) (1.1%)			
	Road Widening	2.90 has (7.17 acs) (1.5%)			
	Roads	45.29 has (111.90 acs) (22.6%)			
	Special Development Area (60m Setback)				
	Existing Right of Way Easement				
	Neighbourhood Park				Stormwater Facility
	Neighbourhood Park / Plaza				Entry Feature
	Potential Fire Hall Site				Devonian Pathway
					Local Pathway
	Phase 1 Concept Plan Boundary	111.0 has (274.28 acs)			

Appendix C

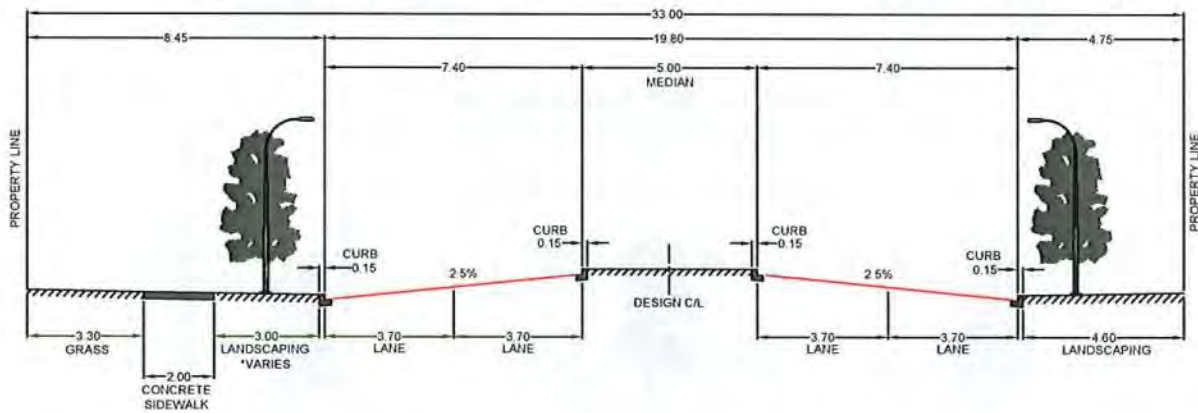
Non - Binding Information

C.1 - Road Network Cross Sections

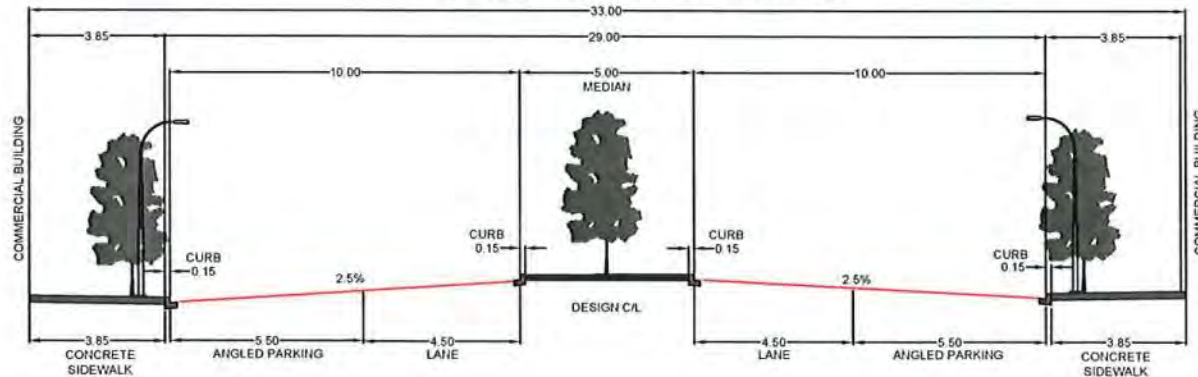
33.0 m MINOR ARTERIAL - INITIAL STAGE (COURTNEY STREET TYPICAL)



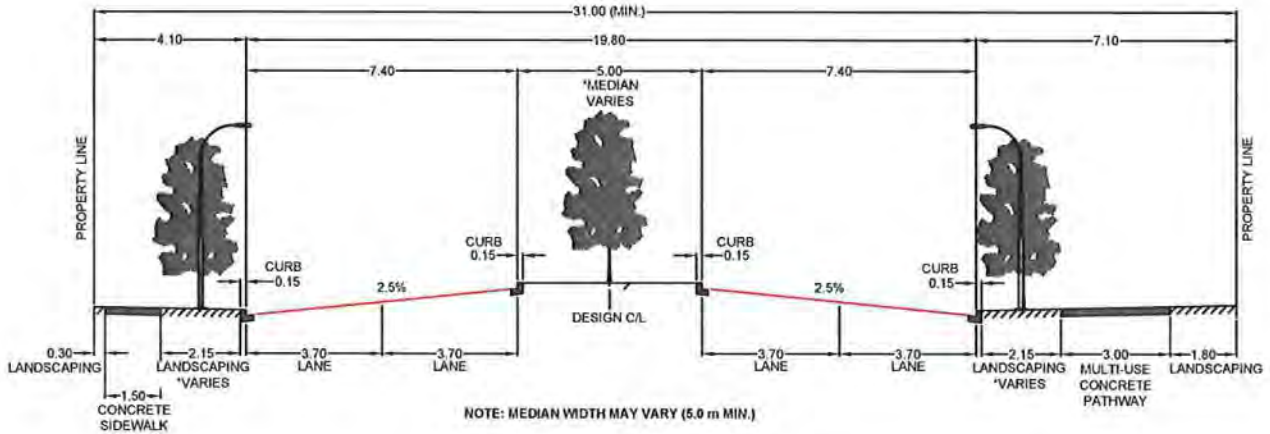
33.0 m MINOR ARTERIAL - ULTIMATE BUILD-OUT (COURTNEY STREET TYPICAL)



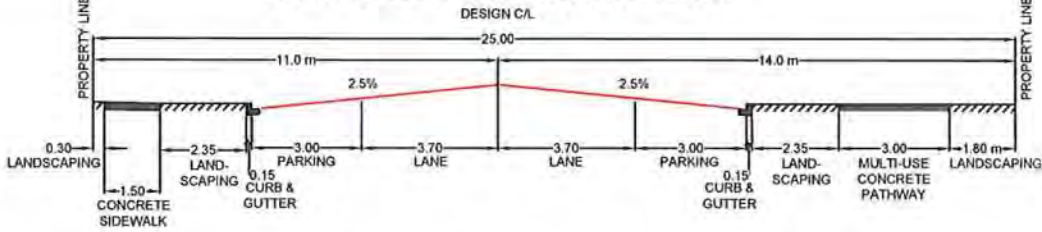
33.0 m MAIN STREET COLLECTOR



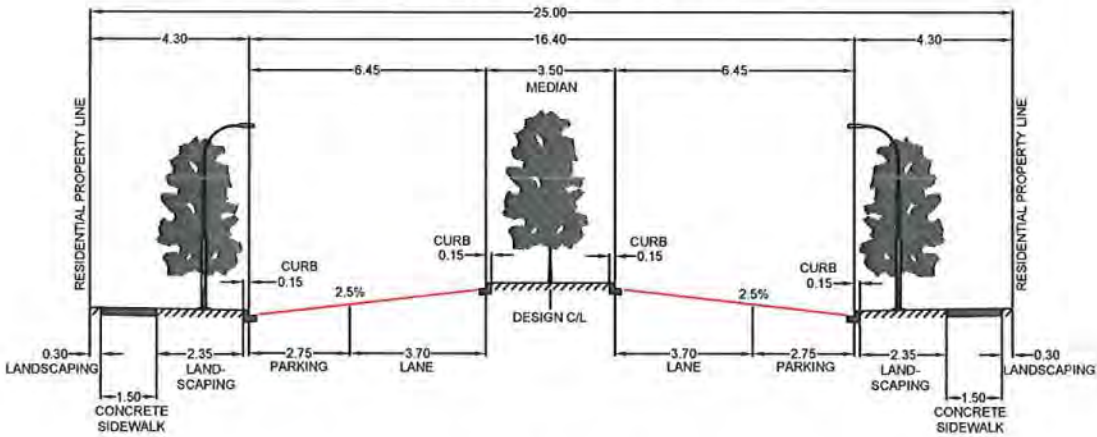
31.0 m MAIN ENTRANCE COLLECTOR (DIAGONAL SECTION NEAR COURTNEY STREET)



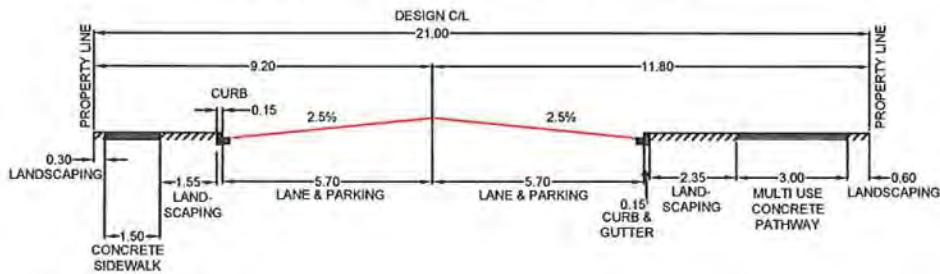
25.0 m COLLECTOR WITH GREENWAY



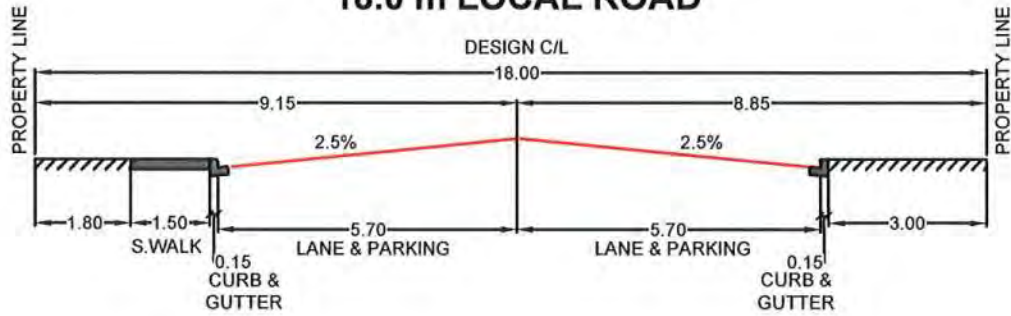
25.0 m LIVE WORK COLLECTOR



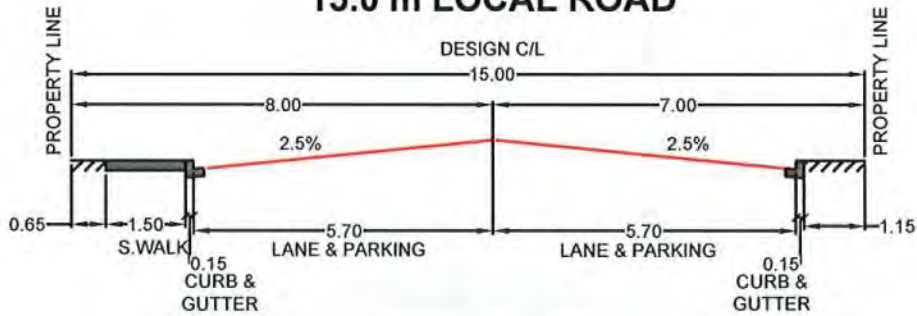
21.0 m LOCAL ROAD WITH GREENWAY



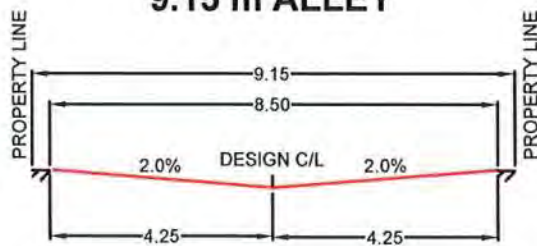
18.0 m LOCAL ROAD



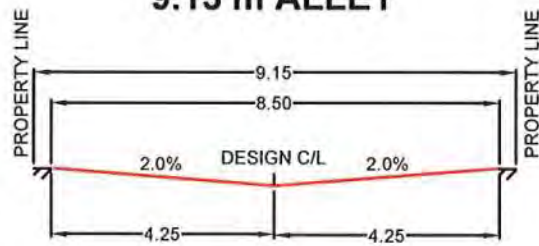
15.0 m LOCAL ROAD



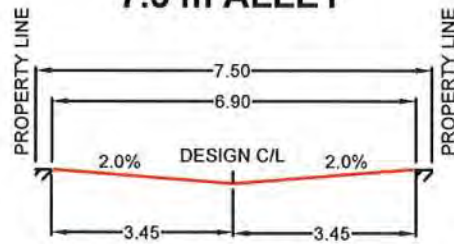
9.15 m ALLEY



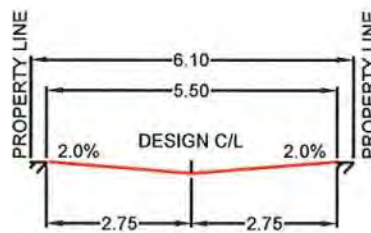
9.15 m ALLEY



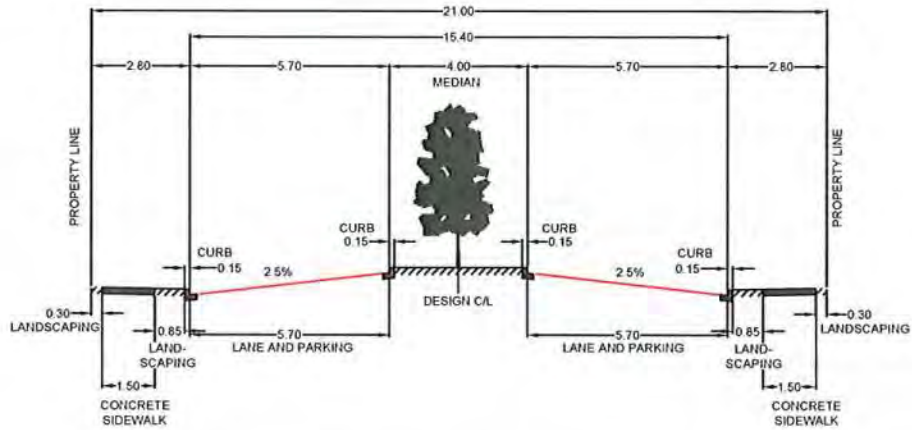
7.5 m ALLEY



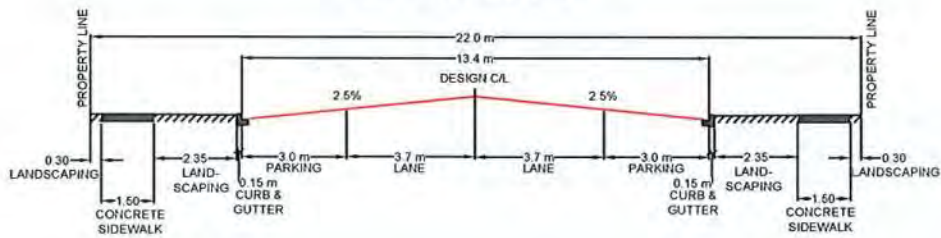
6.1 m ALLEY



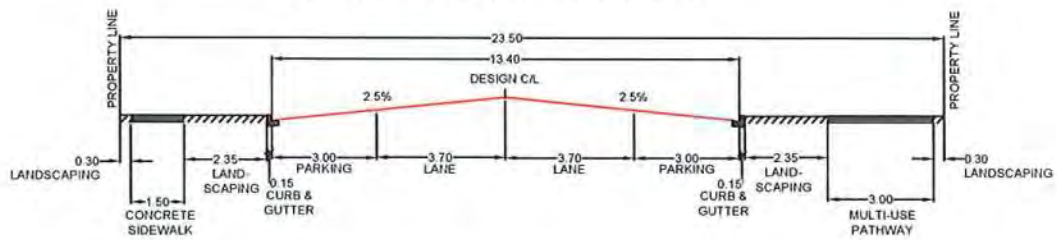
21 m LOCAL ROAD WITH MEDIAN



22.0 m COLLECTOR



23.5 m COLLECTOR - INNER LOOP



Appendix D

Non - Binding Information

D.1 - Capital Improvement Plan

Capital Improvement Plan

The Official Community Plan emphasizes financial sustainability in terms of urban growth. Major infrastructure work required has been addressed as part of the Neighbourhood Plan and detailed infrastructure work would be identified at the Concept Plan stage and subsequently the subdivision and development stage. This work will be coordinated with the City's development of capital plans and the developer's financing obligations for infrastructure will be determined via the subdivision and development agreement. The Capital Improvement Plan is generally as follows:

Start of development / Phase 1 Concept Plan

1. Widening of Dewdney Ave
2. Construction of 1st and 3rd intersections west of current Courtney alignment
3. Construction of realigned Courtney from Dewdney to throat road into residential area
4. Construction of sanitary lift station & force main
5. Construction of NE storm water detention pond
6. Construction of NE storm water conveyance system
7. Construction of water main loop

Near end of Phase 1 Concept Plan

1. Construction of intersection on Dewdney midway between Courtney & Pinkie (main street)
2. Construction of realigned Courtney from throat road to original alignment of Courtney
3. Improvement of Courtney along original alignment to train tracks
4. Construction of Pinkie intersection south of large format retail

At start of Phase 2 & 3 Concepts Plan

1. Construction of sound berm adjacent to railroad line
2. Construction of 2nd intersection on Pinkie Road
3. Widening of Pinkie Road
4. Construction of municipal buffer and berm adjacent to light industrial area

Near end of Phase 2 & 3 Concepts Plan

1. Potential flyover at tracks at Pinkie Road
2. Potential flyover of tracks at Courtney Road
3. Widening of Courtney Street
4. Potential realignment of the Courtney Street watermain to move of the potential overpass

Appendix E

Non - Binding Information

E.1 - Potential Facility Requirements

A summary of facility requirements for Westerra based on the forecast population of the neighbourhood is summarized in Table B.4.1 - Potential Westerra Facility Requirements.

Table E.1.1 - Potential Westerra Facility Requirements

FACILITY TYPE	STANDARD	NUMBER REQUIRED FOR WESTERRA
Multi - Purpose field/soccer pitch	1 per 2,500 people	2 - 4
Ball diamond	Only required if trends change	None at this time
Spray Pad	1 per 40,000 people	None at this time
Outdoor Skateboard Park	1 per zone level park	None at this time as zone park not required
Outdoor rink	1 within 3 km of households	None as rink located in Dieppe
Playgrounds	1 within 800 metres of households	4 - 5
Fully accessible playground	1 per 20-25,000 people	None
Dog Parks	1 dog park per new greenfield area	1
Tennis Courts	1 3-4 court site per 50,000 residents	None
Community Centres	None required due to growth	None
Community Gardens	Not specified	2 proposed



Westerra

Neighbourhood Plan

OCTOBER 2014

Version 3.0 - Submitted for RPC Consideration





MEMO

TO: Veronica Eno, Vice President, Commercial Development, Forster Harvard Development Corp.

FROM: Kerra Mruss, Manager, Transportation Planning MB/SK

SUBJECT: Dewdney Avenue Access for Proposed Development at Horizon – Supplementary Document

DATE: March 21, 2022

This memorandum is a supplementary document to address the City of Regina’s (City) comments on the Dewdney Avenue Access for Proposed Development at Horizon report, submitted by WSP on September 24, 2021. This memorandum focuses on the design standards for a proposed right-in / right-out access, as requested by the City’s representative on February 15, 2022.

1. PROPOSED SITE

The proposed driveway on Dewdney Avenue will provide direct access to the new Horizons Retail Centre in Regina, as illustrated in **Figure 1**. The proposed driveway will be located approximately 165m east of Horizon Way and 185m west of West Market Street.

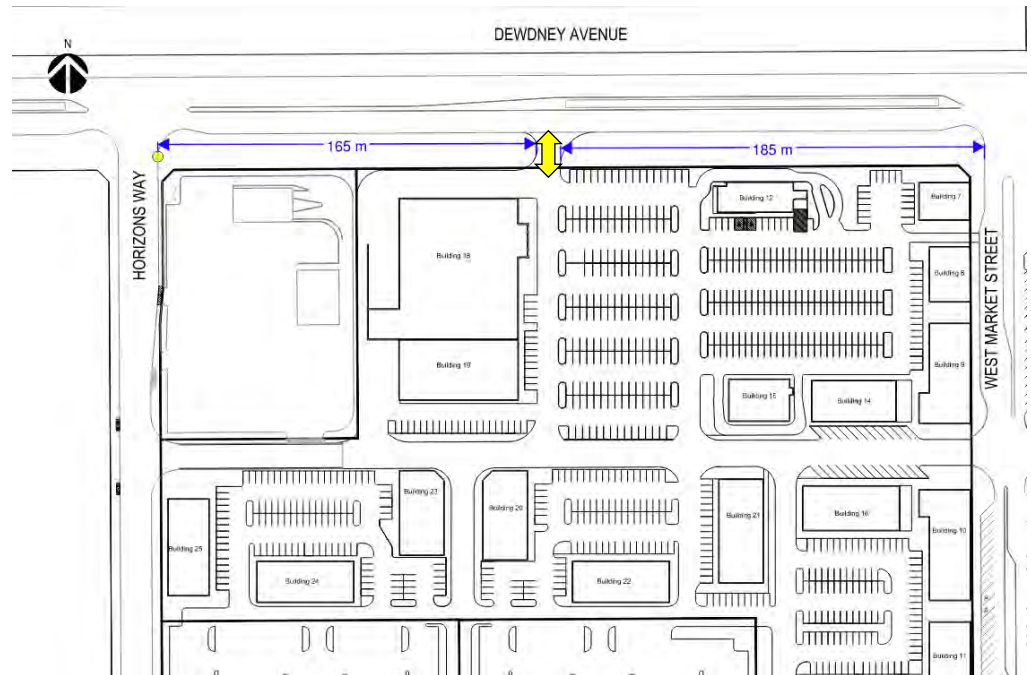


Figure 1 – Proposed Site and Driveway Location

203 Wellman Crescent
Saskatoon, SK
Canada S7T 0J1

T: +1 306 665-6223
F: +1 306 665-8589
wsp.com

A review of the City’s Official Community Plan (OCP) and Transportation Master Plan (TMP) indicates that Dewdney Avenue is intended to serve as an arterial roadway in the future as adjacent developments continue to grow.

2. CITY OF REGINA STANDARDS

WSP reviewed the City’s Design Standard Transportation. Section 2.12.5 notes that:

“Commercial and industrial driveways and private road access may be permitted on arterials if the primary frontage is commercial and meets the City’s requirements for intersection design and spacing.”

In Section 2.5 of the Design Standard Transportation, Table 2 Road Classification notes that the minimum intersection spacing for arterial roadways is 400 m.

WSP also reviewed the City’s Development Standards Manual – Section 07 Transportation Design. Section 3.7 – Intersection Spacing of Transportation Design indicates that:

“The Geometric Design Guide for Canadian Roads by TAC presents the desired spacing between intersections. All proposed design should comply with these standards in cases when City standards do not apply.”

The City standards refer to all-directional intersections and do not specifically address right-in / right-out access considerations. Therefore, the TAC Geometric Design Guide for Canadian Roads was investigated in the following section.

3. TAC DESIGN STANDARDS

With the OCP and TMP identifying Dewdney Avenue as an arterial roadway in the future, the City representative indicated that the proposed right-in/right-out access may be assessed assuming Dewdney Avenue is an arterial road.

Section 9.4.2.1 – Arterials of the TAC Geometric Design Guide indicates that:

“On divided arterial roads, a right-in, right-out intersection without a median opening may be permitted at least 100 m from an adjacent all-directional intersection. The distance is measured between the closest edges of the pavement of the adjacent intersection roads.”

While direct access is permitted to adjacent land uses on high-speed arterial roadways, an auxiliary lane or turning lane is desirable to minimize potential safety conflicts (i.e., rear-end collisions) and safely accommodate traffic entering / exiting the adjacent developments.

Section 8.5 – Continuous Right-turn Auxiliary Lanes on Divided Arterials of the TAC Geometric Design Guide states that:

“Where accesses are more than about 200 m apart, a continuous turn lane may not be required. In these cases, it may be possible to utilize right-turn bays in advance of the access, and, of less importance, acceleration lanes beyond the access, rather than a continuous turn lane, as shown on Figure 8.5.2.”

Figure 2 illustrates the auxiliary lane at a mid-block access on a median divided arterial road from the TAC Geometric Design Guide. Based on this figure, the deceleration lane on Dewdney Avenue should be designed as follows:

- For 80 kph Design Speed (70 kph Posted Speed), the deceleration lane should be 130m minimum; or

- For 70 kph Design Speed (60 kph Posted Speed), the deceleration lane should be is 110m minimum.

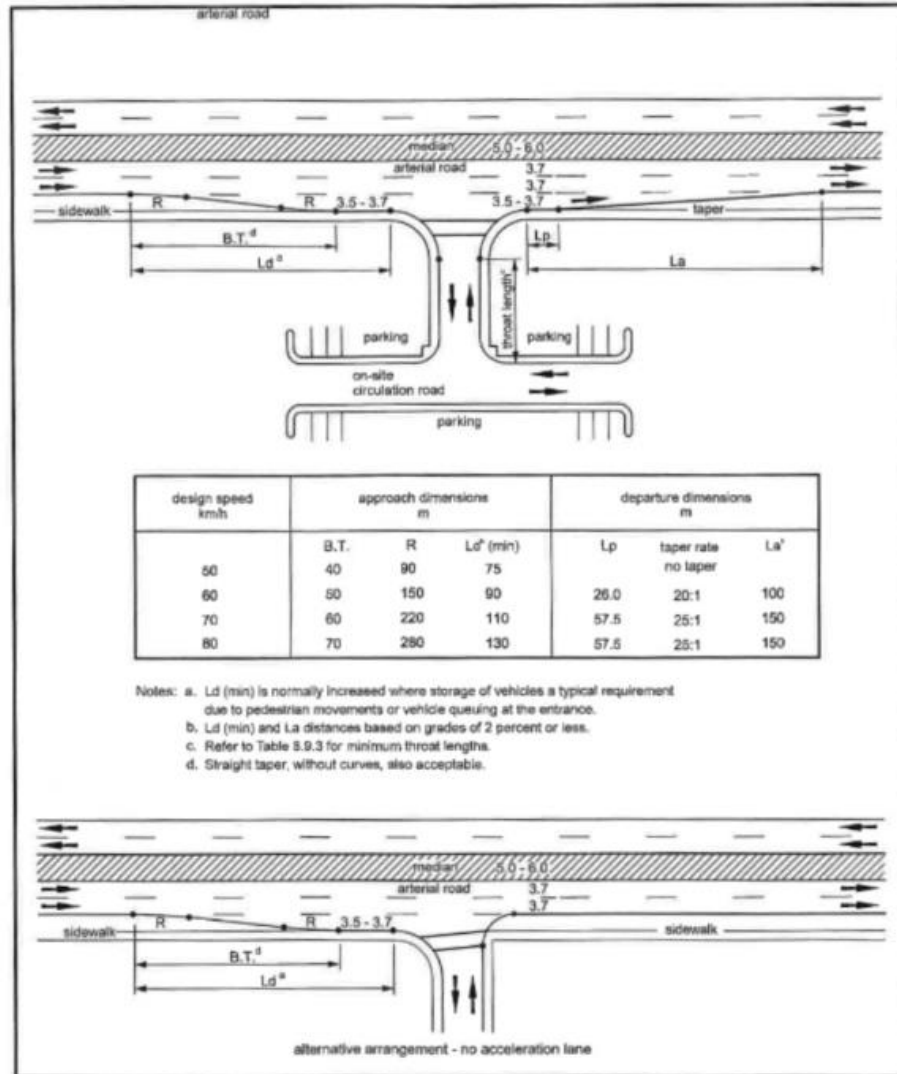


Figure 2 – Auxiliary Lane on Divided Arterials (source: 2017 TAC Geometric Design Guide, Figure 8.5.2)

4. CONCLUSION

While the TAC design standards do not require an auxiliary lane for a right-in / right-out access on a median divided arterial roadway, it is recommended that a deceleration lane be provided to minimize potential safety conflicts, particularly rear-end collisions. Depending on the future posted speed on Dewdney Avenue, the length of the deceleration lane for the proposed right-in / right-out access to the Horizons Retail Centre will be determined in the future at the time of development as part of the development permit / building permit stage.



September 24, 2021

Confidential

Mr. Chad Jedlic
Vice-President, Development
Horizons Retail Corp.
200 – 2100 Dewdney Avenue
Regina, SK S4R 1H2
Canada

Dear Sir,

Subject: Dewdney Avenue Access for Proposed Development at Horizons

The following report is an Access Review for your proposed Horizons retail development in the Westerra neighbourhood of Regina, SK. WSP is pleased to provide you with this technical review of

1. Alignment to City of Regina policy;
2. Recommended design approach for the driveway;
3. A projection of changes to the traffic pattern as a result of the access;
4. An evaluation of the impacts to the adjacent intersections as a result of the traffic pattern changes.

We have prepared the attached report to be suitable for your submission to The City of Regina. WSP will be available to the City to clarify or respond to any questions regarding this work. I can be reached at (403) 827-1577 or email me at Mac.Logan@wsp.com as well as my colleague who also worked in the report, Amy Thai at Amy.Thai@wsp.com.

Yours sincerely,

Malcolm Logan, P.Eng. (SK)
Transportation Planning Manager

Encl. Report + Attachments 1,2, and 3



DEWDNEY AVENUE RIGHT-IN/ RIGHT-OUT DRIVEWAY

**HORIZONS RETAIL IN WESTERRA
REGINA, SK**

2021 SEPTEMBER 24

INTRODUCTION

The following report investigates the policy, design and traffic issues associated with adding a right-in/right-out driveway on Dewdney Avenue in Regina, Saskatchewan. The driveway proposed is on the south side of Dewdney Avenue, between Horizons Way and West Market Street. See the general site location in Figure 1.



Figure 1 - Site Location

WESTERRA NEIGHBOURHOOD

The Westerra is a new mixed used neighbour by Forster Harvard Development Corporation on the west side of Regina. The new community is designed to be a complete neighbourhood. This will be achieved through a mixture of high-, medium-, and low-density housing combined with employment, retail and service commercial uses. The proposed Horizons Retail Centre is the commercial hub of the neighbourhood.

HORIZONS RETAIL CENTRE

The proposed driveway will provide direct access to the new Horizons Retail centre (see Figure 2). The driveway will align with a drive aisle adjacent to a planned grocery store. This drive aisle will connect to the remainder of the shopping centre via the private internal circulation network. The shopping centre's internal circulation network has access/egress on the west, south and east sides to the Westerra neighbourhood. The existing Co-Op gas bar will not be directly accessible from the proposed driveway.

The Horizons retail centre will be developed in phases. The next phase is proposed to include the grocery store and the driveway.

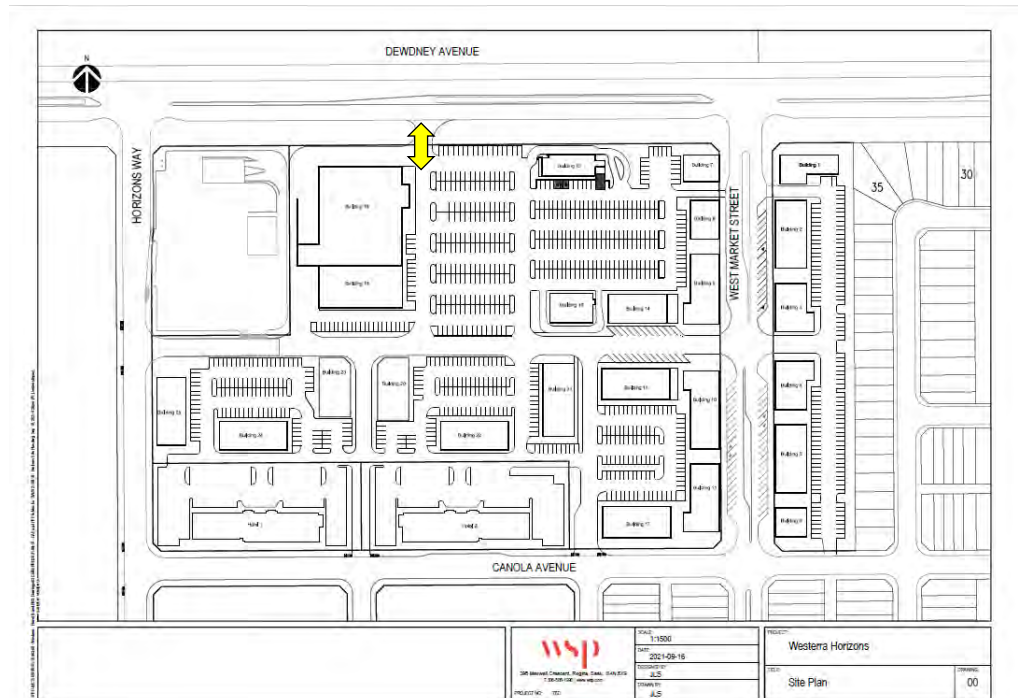


Figure 2 – Horizons Retail Centre

TRAFFIC IMPACT ASSESSMENT

In January 2014, the MMM Group (now part of WSP), prepared a traffic impact study (TIS) for the land use application for the Westerra development. The study was reviewed and approved by the City of Regina (The City). Information from that 2014 TIS was referenced for this report.

This report does not revisit the TIS. No change in land use is being contemplated and therefore the projected site traffic generated by the build out of Westerra, in the 2014 study, is used in this report.

POLICY CONSISTENCY OF DIRECT ACCESS

WSP reviewed City of Regina policies to assess if the proposed driveway was consistent with municipal policy. We took key direction from two documents:

REGINA OFFICIAL COMMUNITY PLAN

The Regina Official Community Plan (OCP) identifies Dewdney Avenue as an Arterial Roadway. The road is planned as an Urban Corridor including Neighbourhood Commercial. The policy states that an arterial road is a suitable edge condition for Neighbourhood Commercial as per OCP Table 1, Page 101.

REGINA TRANSPORTATION MASTER PLAN (C. 2017)

This is the portion of the OCP that speaks to the role of a specific typology of roadway. The Regina Transportation Master Plan (TMP) identified the subject section of Dewdney Avenue as a goods movement route, rapid bus corridor and identified it for capacity improvements. The TMP stated combination of characteristics indicates that moving traffic is key. Any changes should minimize or avoid impacting the movement of people and goods.

The City's road classification system is summarised in TMP Table 6 on Page 48. For arterial roads the table states *“Serve travel in conjunction with other roads. Direct access to and from abutting properties is permitted, under rigid controls. Connect highways and expressways to local networks.*

Based on these two City of Regina policy documents we can confirm that:

- The subject section of Dewdney Avenue is an Arterial road;
- Arterials roads are contemplated adjacent to neighbourhood commercial, and;
- Direct access to abutting properties is permitted subject to controls.

DESIGN RECOMMENDATIONS

This proposal includes a high level design review of the proposed right-in & right-out driveway to/from the Horizons commercial site to eastbound Dewdney Avenue. WSP believe that the “controls” included in the TMP policy include; the operational context, defining a suitable design and impact to the flow of traffic.

DEWDNEY AVENUE

Dewdney Avenue is an Arterial classification road. Adjacent to the subject site the road is a 4-lane divided road. The proposed driveway would access only the eastbound lanes of Dewdney Avenue. There is a paved shoulder along Dewdney Avenue and a grassy ditch separates the road from the shopping centre. No sidewalk or pathway is present although they are identified in planning documents as a future objective.

WSP reviewed the available collision data for this section of Dewdney Avenue looking for patterns that might suggest a new driveway could increase an existing problem. In the 2011 to 2021 period there were seven document collisions along this area of Dewdney Avenue. One of the collisions was a rear-end at Courtney Street where an eastbound pick-up truck rear ended a car. This single collision does not indicate a pattern of collisions where eastbound traffic slowing is resulting in frequent collisions.

OPERATING SPEED

Dewdney Avenue's current posted speed limit at the subject segment is 70 kilometres per hour. The design and topography permit comfortably operation at 70-80 kph. The road is flat and straight with no significant sight line obstructions. The landowner, Horizons Retail Corp, made an application to the City of Regina to decrease the speed limit in this section of roadway from 70 kph to 60 kph. We understand that this application was rejected at an internal City meeting on September 23, 2021. In spite of this decision on the speed limit, both scenarios were investigated.

The Transportation Association of Canada (TAC) design manual provides guidelines concerning speeds on urban arterial roadways. TAC recommend that municipalities consider multiple factors when determining the speed limit. TAC discusses this in Section 2.3.6.3, which states:

“The speed (design speed, target speed, etc.) selected should be consistent with all road users expectations along that particular roadway. Prevailing conditions that should be considered in this regard include adjacent land-use, intersection spacing, access conditions, and vulnerable road user activity”

This section of Dewdney Avenue represents a transition from what is now effectively a rural highway, to an urban arterial roadway. Eastbound drivers will find that intersection spacing east of Pinkie Road decrease to 400 metres, which is consistent with urban arterials. The Ring Road interchange to the west, has intersection spacing of 250 metres. This interchange design is very different in design to the 9 Avenue interchange to the north, indicating Dewdney was contemplated as a slower speed road. As Dewdney Avenue continues eastward past Courtney Street, direct residential frontage with driveways appear, and the speed limit drops to 50 kph.

The intersection designs at the new intersections of Horizons Way, and West Market Street, indicate a lower operating speed than 70 kph. Garbage trucks, buses and the occasional semi tractor-trailer, entering Westerra, will need to slow to 15 to 20 kph to make their existing turns.

Vulnerable Road Users (cyclists and pedestrians) will be increasingly present as the Westerra community grows. This is the first segment of Dewdney Avenue east of the Ring Road where sidewalk, pathways and crosswalks will appear.

The site street design of West Market Street is slow speed environment. This is a complete street designed to be vibrant and slow speed. A reduction to 60 kph will help to reduce traffic speed entering onto Market Street.

Safety of all road users is the final consideration. TAC research has clearly demonstrated the correlation between travel speed and severity of collision. This is even more significant for vulnerable road users. A 10 kph reduction is a modest travel time increase relative to the positive outcomes for collision severity.

There are numerous factors that support a reduction to 60 kilometres per hour operating speed for this segment of Dewdney Avenue including;

- the transition from a rural to an urban environment,
- adjacent mixed-use adjacent development with direct access,
- closer intersection spacing, and
- the introduction on pedestrians, and pathway networks that cross the roadway
- side streets of a slow design environment,
- road user safety and accident severity



Figure 3 – Dewdney Avenue East of Westerra

Following are high level design approach comments based on the two speed limits investigated.

60 KPH

Throughout Regina, there are numerous examples of commercial driveways on 60 kph arterials. Most examples have designs that include single radius curves from the through lanes. These driveways do not typically have acceleration and deceleration lanes or tapers. The tighter radius at the driveways turns, help to slow traffic entering the commercial sites. Slower speeds also reduce the risks to pedestrians move through the parking lot areas these driveways are feeding into.

70 KPH

If the existing speed limit is maintained, other examples of commercial property right-in/right-outs, on a 70 kph arterial road, exist in Regina to provide guidance. The image below illustrates two examples and is also relevant as it is near an interchange on the Luis Riel Trail (Hwy 11). These driveways are south of the Ring Road and north of Rochdale Blvd. The driveway from the southbound lanes, exits from a 3rd lane. That 3rd lane continues and becomes a dedicated right turn lane at Rochdale Blvd. The driveway from northbound Pasqua Street exits from a two lane arterial with a paved shoulder. The entry onto northbound Pasqua Street goes into an introduced 3rd northbound lane. That 3rd lane continues up to Big Bear Boulevard where it becomes a dedicated right turn lane. Both driveways have what appears to be a single radius curves with no deceleration taper.

Drivers in Regina should not be surprised to see driveways along arterials, even ones posted at 70 kph, however some consideration should be made in the design for the higher speeds such as larger turn radius tapers exiting the through lane.

Another example of a right-in/right-out access is on Ross Avenue East between Park Street and McDonald Street. There are multiple accesses to local businesses on the south side of Ross Avenue.



Figure 4 – Commercial Driveways on 70 KPH Arterials

TRAFFIC OPERATIONS IMPACTS

The future traffic movements, forecast in the 2014 TIS, were analyzed to see how their pattern might change as a result of the new driveway, and what impact that change might have on the adjacent intersections. WSP have omitted the Dewdney Avenue intersections with Pinkie Road as well as Courtney Street. The proposed change in the access should have minimal, to no, change whatsoever at those more remote upstream and downstream intersections.

WSP compared the development assumed in 2014 TIS to the type and volume of development currently under review by The City. We found that the type of development proposed in the new commercial retail plan (Figure 2) is generally consistent with the land-use assumed in the Westerra neighbourhood concept plan. The trip generation and distribution assumption should therefore be substantially unchanged. WSP feel that the previous traffic study can be relied on for the purposes of this investigation.

TRAFFIC ASSIGNMENT

The traffic movements were evaluated to see how the new driveway would shift driver's routing. The traffic volumes used for background traffic, represent full buildout of Westerra at the 2040 horizon year. The new driveway will have an impact on three movements:

1. Eastbound traffic entering and exiting to continue onto eastbound Dewdney Avenue.
2. Eastbound traffic entering and exiting to return westbound Dewdney Avenue
3. Westbound traffic entering at Market Street and exiting to return to eastbound Dewdney Avenue

The change in traffic patterns was tested with a high (25%) and low (10%) scenario.



Figure 5 – Driveways traffic with a 10% diversion



INTERSECTION ANALYSIS

Intersection capacity analysis was completed using Synchro 10.0. The two adjacent study intersections are; Dewdney Avenue & Horizons Way, and Dewdney Avenue & Horizons Way. All analysis was of the weekday PM peak hour scenarios with full development.

Using the 2040 future horizon, three scenarios were analyzed:

- Existing conditions without the driveway
- With the driveway, 10% of traffic entering this section of development reassigned
- With the driveway, 10% of traffic entering this section of development reassigned

The results of the intersection analysis found a slight change in the performance of specific intersection turn movements but no substantive difference to the overall level of service

Table 1 – Intersection performance with and without the proposed driveway

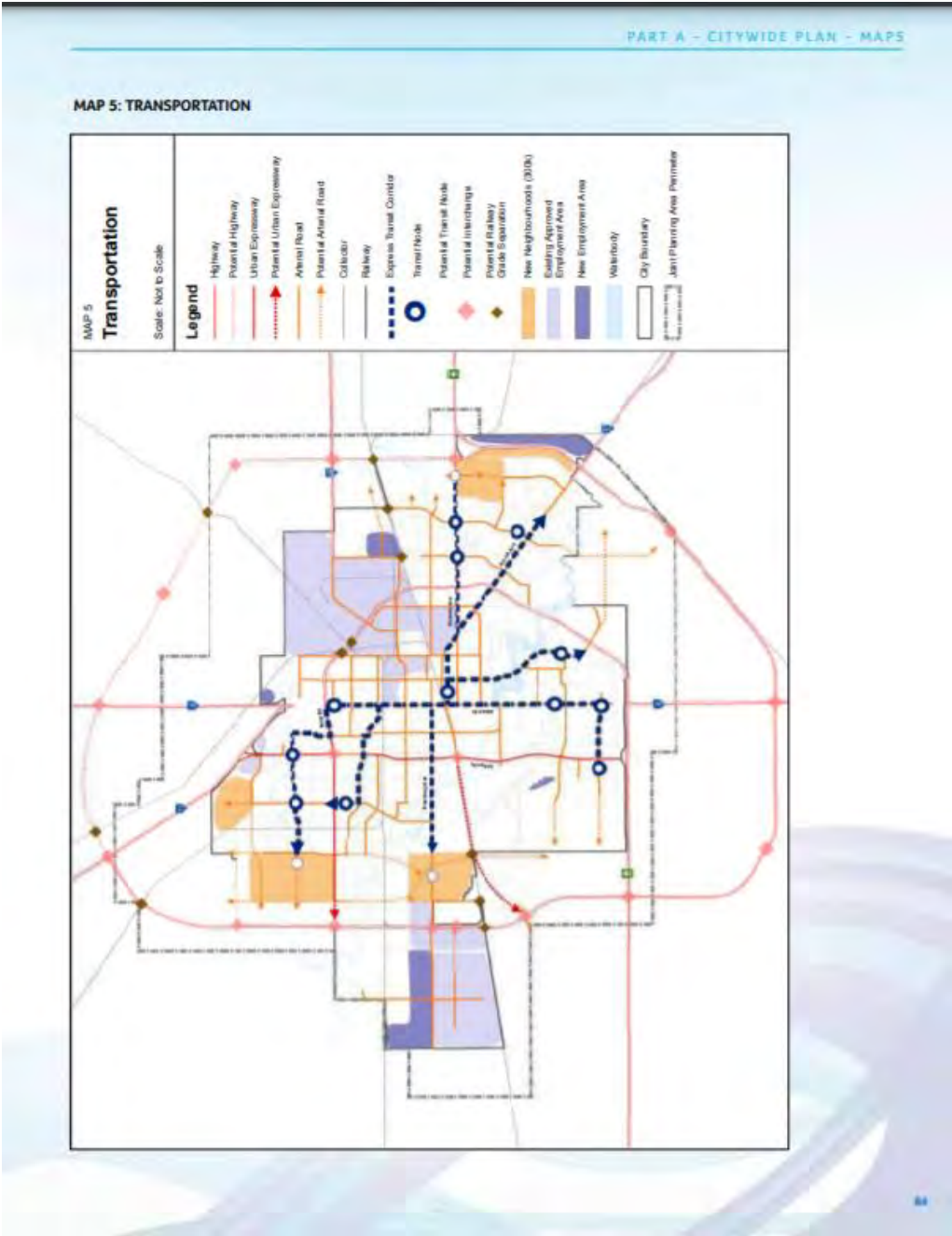
	HORIZONS WAY & DEWDNEY AVE	MARKET ST & DEWDNEY AVE
2040 Total Development without RIRO	LOS D Avg. Delay 39 Seconds/Veh	LOS C Avg. Delay 28 Seconds/Veh
2040 Total Development with RIRO and 10% Traffic Reassignment	LOS D Avg. Delay 39 Seconds/Veh	LOS C Avg. Delay 27 Seconds/Veh
2040 Total Development with RIRO and 25% Traffic Reassignment	LOS D Avg. Delay 42 Seconds/Veh	LOS C Avg. Delay 30 Seconds/Veh

CONCLUSION

In summary, WSP found the following points to **support** the approval of a driveway:

- City of Regina policy permits the inclusion of a driveway to an Arterial road provided guidelines are met.
- Existing examples are available to provide design guidance.
- Traffic volumes are not increasing overall.
- The changes in traffic patterns have no substantive negative impact on the adjacent intersections.

Regina Official Community Plan – Part A – Citywide Plan
 Map 5 - Transportation



Regina Transportation
 Master Plan
 Table 6 – Road Network
 Classification System

Table 6: Road Network Classification System

Classification	Primary Function
Provincial Highway	Under the jurisdiction of the province; intended to serve regional and provincial travel.
Expressway	Carry relatively high volumes of traffic in conjunction with other types of roads. Direct access to and from abutting properties is prohibited.
Arterial	Serve travel in conjunction with other roads. Direct access to and from abutting properties is permitted, under rigid controls. Connect highways and expressways to local networks.
Collector	Provide circulation within neighbourhoods and connectivity between local and arterial roadways. Direct access to abutting properties is generally permitted with some access controls.
Local	Provide direct access to adjacent lands
Alley	Provide secondary access from a public road to an abutting lot

MEMO

TO: Veronica Eno, Vice President, Commercial Development – Forster Harvard Development Corp.

FROM: Malcolm Logan, P.Eng.

SUBJECT: Dewdney Avenue Access for Proposed Development at Horizon – Supplementary Document

DATE: March 04, 2022

The following memorandum is an Access Review for the proposed Horizons Retail Centre development in the Westerra neighbourhood of Regina, Saskatchewan. WSP is pleased to provide this technical review of the following:

1. Alignment to policy;
2. Recommended design approach for the driveway;
3. A projection of changes to the traffic pattern as a result of the access; and
4. An evaluation of the impacts to the adjacent intersections as a result of the traffic pattern changes.

This memorandum investigates the policy, design and traffic issues associated with adding a right-in/right-out driveway for the proposed Horizons Retail Centre on Dewdney Avenue in Regina, Saskatchewan.

1. INTRODUCTION

The driveway proposed is on the south side of Dewdney Avenue, between Horizons Way and West Market Street. See the general site location in Figure 1.



Figure 1 – Site Location

1.1. WESTERRA NEIGHBOURHOOD

Westerra is a mixed-use neighbourhood being developed by Forster Harvard Development Corporation on the west side of Regina. The community is designed to be a complete neighbourhood. This will be achieved through a mixture of high-, medium-, and low-density housing combined with employment, retail and service commercial uses. The proposed Horizons Retail Centre is the commercial hub of the neighbourhood.

1.2. HORIZONS RETAIL CENTRE

The proposed driveway on Dewdney Avenue will provide direct access to the new Horizons Retail Centre, as illustrated in Figure 2. The driveway will align with a drive aisle adjacent to the neighborhood’s grocery store. This drive aisle will connect to the remainder of the shopping centre via the private internal circulation network. The shopping centre’s internal circulation network has access/egress on the west, south and east sides to the Westerra neighbourhood. The existing Co-Op gas bar will not be directly accessible from the proposed driveway.

The retail centre will be developed in phases. The next phase will include the grocery store and the proposed driveway.

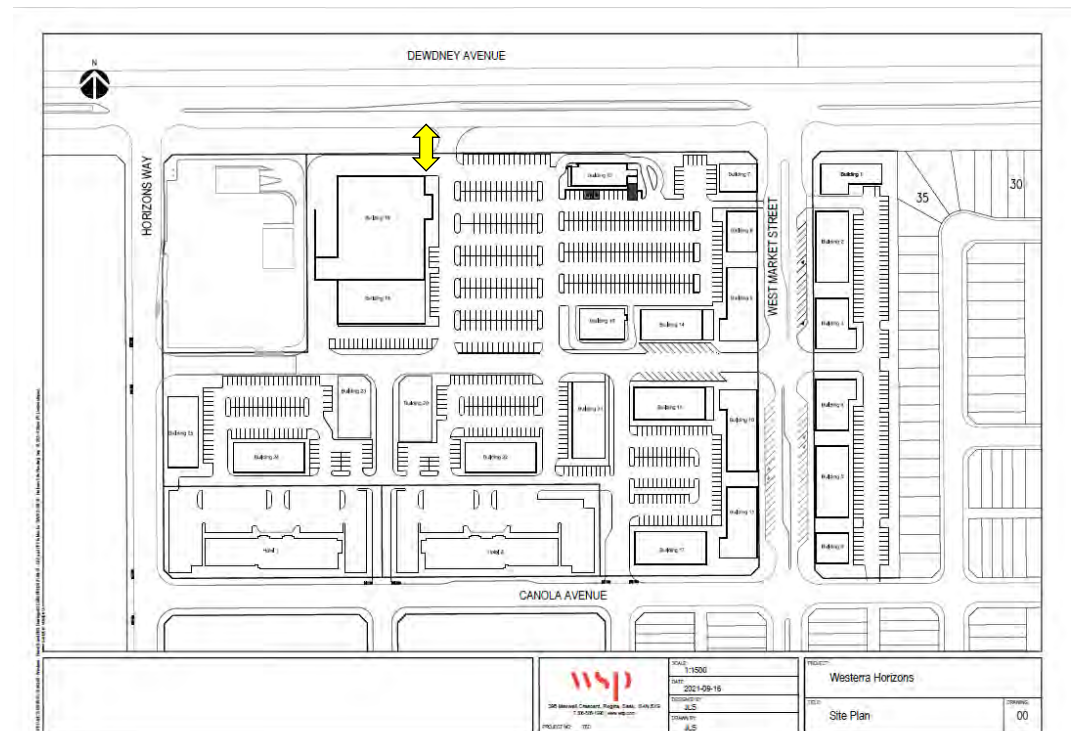


Figure 2 – Horizons Retail Centre

2. POLICY CONSISTENCY OF DIRECT ACCESS

WSP reviewed the City’s policies to assess whether the proposed driveway is consistent with municipal policy. We took key directions from the following two documents:



2.1. REGINA OFFICIAL COMMUNITY PLAN

The Regina Official Community Plan (OCP) identifies Dewdney Avenue as an Arterial Roadway (see Attachment 1). The road is planned as an Urban Corridor including Neighbourhood Commercial. An arterial road is a suitable edge condition for Neighbourhood Commercial as per Table 1, Page 101.

2.2. REGINA TRANSPORTATION MASTER PLAN (C. 2017)

The Regina Transportation Master Plan (TMP) identified the subject section of Dewdney Avenue as a goods movement route, rapid bus corridor and identified it for capacity improvements. The TMP stated a combination of characteristics indicating that moving traffic is key. Any changes should minimize or avoid impacting the movement of people and goods.

The City’s road classification system, identified in the TMP, is summarised in Table 1. For arterial roads the table states “*Serve travel in conjunction with other roads. Direct access to and from abutting properties is permitted, under rigid controls. Connect highways and expressways to local networks.*”

Table 1 – City of Regina TMP Road Network Classification System

Classification	Primary Function
Provincial Highway	Under the jurisdiction of the province; intended to serve regional and provincial travel.
Expressway	Carry relatively high volumes of traffic in conjunction with other types of roads. Direct access to and from abutting properties is prohibited.
Arterial	Serve travel in conjunction with other roads. Direct access to and from abutting properties is permitted, under rigid controls. Connect highways and expressways to local networks.
Collector	Provide circulation within neighbourhoods and connectivity between local and arterial roadways. Direct access to abutting properties is generally permitted with some access controls.
Local	Provide direct access to adjacent lands
Alley	Provide secondary access from a public road to an abutting lot

Based on these two City of Regina policy documents we can confirm that:

- The subject section of Dewdney Avenue is an Arterial road;
- Arterials roads are contemplated adjacent to neighbourhood commercial, and;
- Direct access to abutting properties is permitted subject to controls.

3. DESIGN CONSIDERATION

The following includes a high level design review of the proposed right-in & right-out driveway to/from the Horizons commercial site to eastbound Dewdney Avenue. WSP believe that the “controls” included in the TMP policy include; the operational context, defining a suitable design and impact to the flow of traffic.

3.1. DEWDNEY AVENUE

Dewdney Avenue is an arterial road. Adjacent to the subject site the road is a 4-lane divided road. The proposed driveway would access only the eastbound lanes of Dewdney Avenue. There

is a paved shoulder along Dewdney Avenue and a grassy ditch separates the road from the subject site. No sidewalk or pathway is present although they are identified in planning documents as a future objective.

WSP reviewed the available collision data for this section of Dewdney Avenue to identify patterns that might suggest a new driveway could increase an existing problem. In the 2011 to 2021 period there were seven documented collisions. One of the collisions was a rear-end collision at Courtney Street where an eastbound pick-up truck rear-ended a car. This single collision does not indicate a pattern of collisions where eastbound traffic slowing down is resulting in frequent collisions.

3.2. OPERATING SPEED

Dewdney Avenue current posted speed limit at the subject segment is 70 kilometres per hour (kph). The design and topography comfortably allow operation at 70 to 80 kph. The road is flat and straight with no significant sight line obstructions. The landowner, Horizons Retail Corp, has an application with the City requesting a reduction in the posted speed limit in this section of roadway from 70 kph to 60 kph. Although this application was rejected at an internal City meeting on September 23, 2021, both scenarios were investigated.

The Transportation Association of Canada (TAC) design manual provides guidelines about speeds on urban arterial roadways. TAC recommends that municipalities consider multiple factors when determining the speed limit. TAC discusses this in Section 2.3.6.3 of the Geometric Design Guide, which states:

“The speed (design speed, target speed, etc.) selected should be consistent with all road users’ expectations along that particular roadway. Prevailing conditions that should be considered in this regard include adjacent land-use, intersection spacing, access conditions, and vulnerable road user activity.”

This section of Dewdney Avenue represents a transition from what is now effectively a rural roadway to the west of the Regina Bypass, to an urban arterial roadway to the east. Eastbound drivers will find that intersection spacing east of Pinkie Road decreases to 400m, which is consistent with urban arterials. The interchange to the west has an intersection spacing of 250m. This interchange is very different in design to the 9th Avenue interchange to the north, indicating Dewdney Avenue was envisioned as a lower speed road. As Dewdney Avenue continues eastward past Courtney Street, direct residential frontage with driveways are present and the speed limit drops to 50 kph.

The intersection designs at the new Dewdney Avenue intersections of Horizons Way and West Market Street indicate a lower operating speed than 70kph. Garbage trucks, buses and the occasional semi tractor-trailers entering Westerra will need to slow to 15 to 20 kph to make their turns.

Vulnerable Road Users (cyclists and pedestrians) will be increasingly present as the Westerra community grows. This is the first segment of Dewdney Avenue east of the Ring Road where sidewalk, pathways and crosswalks will appear.

The site street design of West Market Street is a slow speed environment. This is a complete street designed to be vibrant and slow speed. A reduction to a 60 kph speed limit on Dewdney Avenue will help to reduce vehicle speed entering onto Market Street.

Safety of all road users is the final consideration. TAC research has clearly demonstrated the correlation between travel speed and severity of collision. This is even more severe for vulnerable road users. A 10 kph reduction is a modest travel time increase relative to the positive outcomes for collision severity.

There are numerous factors that support a reduction to 60 kph operating speed for this segment of Dewdney Avenue including:

- The transition from a rural to an urban environment;
- Adjacent mixed-use development with direct accesses (Figure 3);
- Closer intersection spacing;
- The introduction of pedestrian pathway networks that cross the roadway;
- Side streets of a low speed design environment; and,
- Road user’s safety and accident severity.



Figure 3 – Dewdney Avenue East of Westerra

The following presents a high-level discussion based on the two speed limits investigated.

60 KPH

Throughout Regina, there are numerous examples of commercial driveways on 60 kph arterials. Most examples have designs that include single radius curves from the through lanes. These driveways do not typically have acceleration and deceleration lanes or tapers. The tighter radius at the driveways turns help to slow down vehicles entering the commercial sites. Lower speeds also reduce the risks to pedestrians moving through the parking lot areas these driveways are feeding into.

70 KPH

If the existing speed limit is maintained, other examples of commercial property with right-in/right-outs on a 70 kph road exist in Regina to provide guidance. Figure 4 illustrates two examples and is also relevant as it is near an interchange on Highway 11. Pasqua Street is posted at 70 kph south of the interchange with traffic volumes of approximately 12,000 vehicles per day based on the City of Regina 2018-2019 Traffic Flow Map. These driveways along Pasqua Street are south of Ring Road and north of Rochdale Boulevard. The west driveway is approximately 100m north of Rochdale Boulevard and the east driveway is approximately 110m south of Big Bear Boulevard. When traveling southbound on Pasqua Street, a driveway to the commercial developments on the west is presented within the length of the southbound right-turn lane. Vehicles to/from the commercial site would enter/exit through the right-turn lane. The driveway from Pasqua Street northbound exits from a two-lane roadway with a paved shoulder. Vehicles exiting the commercial site onto northbound Pasqua Street go into an introduced third

northbound lane. That third lane continues up to Big Bear Boulevard where it becomes a dedicated right turn lane. Both driveways have what appear to be single radius curves with no deceleration taper.

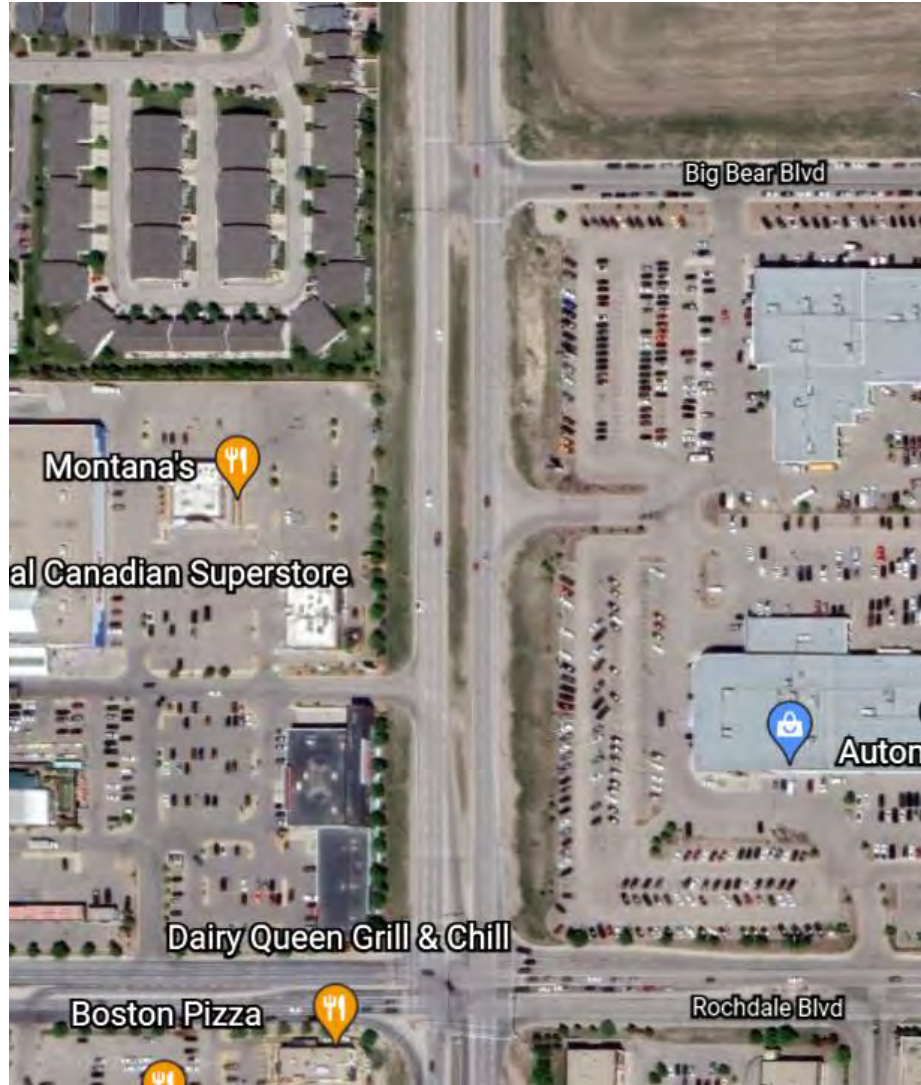


Figure 4 – Commercial Driveways on 70 KPH Arterials

Another example of a right-in/right-out access is on Ross Avenue East between Park Street and McDonald Street. This segment of Ross Avenue is posted at 70 kph with 13,000 vehicles per day traffic volumes based on the City’s 2018-2019 Traffic Flow Map. There are multiple accesses to local businesses on the south side of Ross Avenue.

As such, drivers in Regina are familiar with driveways along high volumes high speed roadways, even ones posted at 70 kph. However, some consideration should be made in the design for the higher speeds such as larger turn radius tapers exiting the through lane.

4. TRAFFIC OPERATIONS IMPACTS

In January 2014, the MMM Group (now part of WSP), prepared a traffic impact assessment (TIA) for the land use application for the Westerra development. The study was reviewed and

approved by the City of Regina (The City). Information from that 2014 TIA was referenced for this memorandum.

This memorandum does not revisit the TIA. No change in land use is being contemplated and therefore the projected site traffic generated by the build out of Westerra, in the 2014 study, is used in this memorandum.

Future traffic movements, estimated in the 2014 TIA, were analyzed to see how their patterns might change as a result of the new driveway and identify any potential impacts that change might have on the adjacent intersections. We have not included the Dewdney Avenue intersections with Pinkie Road or Courtney Street in this memorandum as the proposed change in the access is expected to have minimal changes at those more remote upstream and downstream intersections.

A comparison was completed between the development assumed in the 2014 TIS to the types and volumes of development currently under review by the City. It was identified that the type of development proposed in the new commercial retail plan (Figure 2) is generally consistent with the land-use assumed in the Westerra neighbourhood concept plan. The trip generation and distribution assumption should therefore be substantially unchanged. As such, the previous traffic study can be relied on for the purposes of this investigation. See Attachment 2 for details of the traffic reassignment and results of the Synchro analysis.

4.1. TRAFFIC ASSIGNMENT

The traffic movements were evaluated to see how the proposed driveway might shift driver's routing. The new driveway is expected to have an impact on three movements:

1. Eastbound traffic entering and exiting to continue onto eastbound Dewdney Avenue;
2. Eastbound traffic entering and exiting to return to westbound Dewdney Avenue; and
3. Westbound traffic entering at Market Street and exiting to return to eastbound Dewdney Avenue.

The changes in traffic patterns were tested with high (25%) and low (10%) scenarios. Figures 5 and 6 illustrate the full build-out phase (2040 horizon year) with 10% and 25% traffic diversion, respectively.



Figure 5 – Driveway Traffic with a 10% Diversion



Figure 6 – Driveway Traffic with a 25% Diversion

4.2. INTERSECTION ANALYSIS

Intersection capacity analysis was completed using Synchro 10.0. The two adjacent study intersections are Dewdney Avenue & Horizons Way, and Dewdney Avenue & Market Street. Detailed trip reassignments and capacity analysis is provided in Attachment 2. All analysis was completed for the weekday PM peak hour scenario with full development. Using the 2040 future horizon, three scenarios were analyzed:

- Existing conditions without the proposed driveway;
- With the proposed driveway and 10% of traffic entering this section of development reassigned; and
- With the proposed driveway and 25% of traffic entering this section of development reassigned.

The results of the intersection analysis, summarized in Table 2, found a slight change in the performance of specific intersection turning movements but no substantive difference to the overall level of service.

Table 2 – LOS Results Summary for 2040 Total Development Scenarios

SCENARIOS	DEWDNEY AVE & HORIZONS WAY	DEWDNEY AVE & MARKET ST
Without RIRO	LOS D Avg. Delay 39 Seconds/Veh	LOS C Avg. Delay 28 Seconds/Veh
With RIRO and 10% Traffic Diversion	LOS D Avg. Delay 39 Seconds/Veh	LOS C Avg. Delay 27 Seconds/Veh
With RIRO and 25% Traffic Diversion	LOS D Avg. Delay 42 Seconds/Veh	LOS C Avg. Delay 30 Seconds/Veh

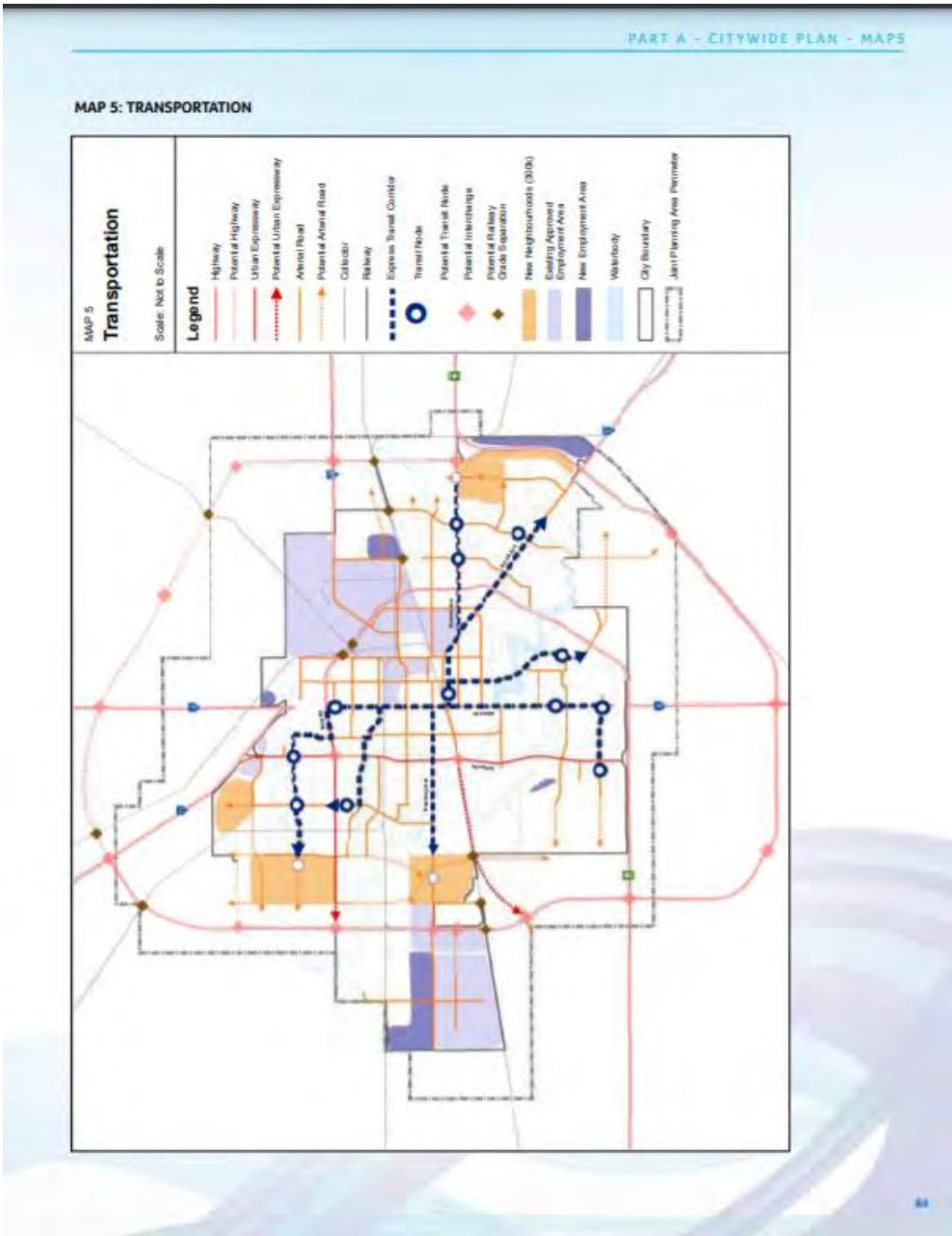


5. CONCLUSION

In summary, WSP found the following points to support the approval of a proposed driveway on Dewdney Avenue:

- City of Regina policy permits the inclusion of a driveway on an arterial road provided guidelines are met.
- Existing driveway examples are available to provide design guidance.
- Traffic volumes are not increasing overall.
- The changes in traffic patterns have no substantive negative impact on the adjacent intersections.

Regina Official Community Plan – Part A – Citywide Plan
 Map 5 - Transportation





Traffic Reassignment									
	Intersection 2			Intersection 3			RIRO Access		
	EB RT	EB TH	NB RT	EB RT	EB TH	NB RT	EB RT	EB TH	NB RT
Existing 2040 Build Out	260	1425	225	155	1485	170	0	1655	0
10% Scenario Reassignment	-10%		-10%	-10%		-10%			
Change In Volumes	-26	26	-23	-16	16	-17	42	-42	40
Total Volumes	234	1451	203	140	1501	153	42	1614	40
25% Scenario Reassignment	-25%		-25%	-25%		-25%			
Change In Volumes	-65	65	-56	-39	39	-43	104	-104	99
Total Volumes	195	1490	169	116	1524	128	104	1551	99

Intersection Signal Analysis													
		Intersection 2: Dewdney Ave and Horizon Way											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2040 Total Development with RIRO and 10% Traffic Reassignment	V/C	0.04	0.96	0.3	0.92	0.53	0.53	0.96	0.53	0.53	0.05	0.23	0.23
	Delay	48	43	6	72	14	14	72	17	17	49	44	44
	LOS	D	D	A	E	B	B	E	B	B	D	D	D
	Intersection LOS	D											
2040 Total Development with RIRO and 25% Traffic Reassignment	V/C	0.04	0.99	0.25	0.92	0.53	0.53	0.96	0.47	0.47	0.05	0.23	0.23
	Delay	47	66	5	66	15	15	57	16	16	47	43	43
	LOS	D	D	A	E	B	B	E	B	B	D	D	D
	Intersection LOS	D											
2040 Total Development without RIRO	V/C	0.04	1	0.35	0.89	0.55	0.55	0.89	0.53	0.53	0.04	0.23	0.23
	Delay	47	53	8	66	15	15	57	16	16	47	43	43
	LOS	D	D	A	E	B	B	E	B	B	D	D	D
	Intersection LOS	D											
		Intersection 3: Dewdney Ave and Market St											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2040 Total Development with RIRO and 10% Traffic Reassignment	V/C	0.13	0.85	0.17	0.56	0.52	0.52	0.88	0.42	0.42	0.02	0.21	0.21
	Delay	50	26	6	56	14	14	63	11	11	40	33	33
	LOS	D	C	A	E	B	B	E	B	B	D	C	C
	Intersection LOS	C											
2040 Total Development with RIRO and 25% Traffic Reassignment	V/C	0.12	0.93	0.15	0.41	0.53	0.53	0.82	0.4	0.4	0.04	0.21	0.21
	Delay	46	35	5	45	14	14	55	15	15	45	33	33
	LOS	D	C	A	D	B	B	E	B	B	D	C	C
	Intersection LOS	C											
2040 Total Development without RIRO	V/C	0.12	0.91	0.2	0.41	0.53	0.53	0.82	0.47	0.47	0.04	0.21	0.21
	Delay	46	46	7	45	14	14	55	15	15	45	33	33
	LOS	D	C	A	D	B	B	E	B	B	D	C	C
	Intersection LOS	C											



OFFICIAL COMMUNITY PLAN

PART B.14 Westerra Neighbourhood Plan





Westerra

Where life finds balance

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

Prepared for:

Westerra Development Corp.

Harvard Developments Inc.

Forster Projects Inc.



Prepared by: Brown & Associates Planning Group



Project Team:

Project Engineers
WSP



Transportation Consultants
MMM Group



Risk Assessment and Analysis
Bercha Group Limited

Retail Impact Assessment
MXD Development Strategists

Geotechnical Investigation &
Environmental Site Assessment
Ground Engineering

Table of Contents

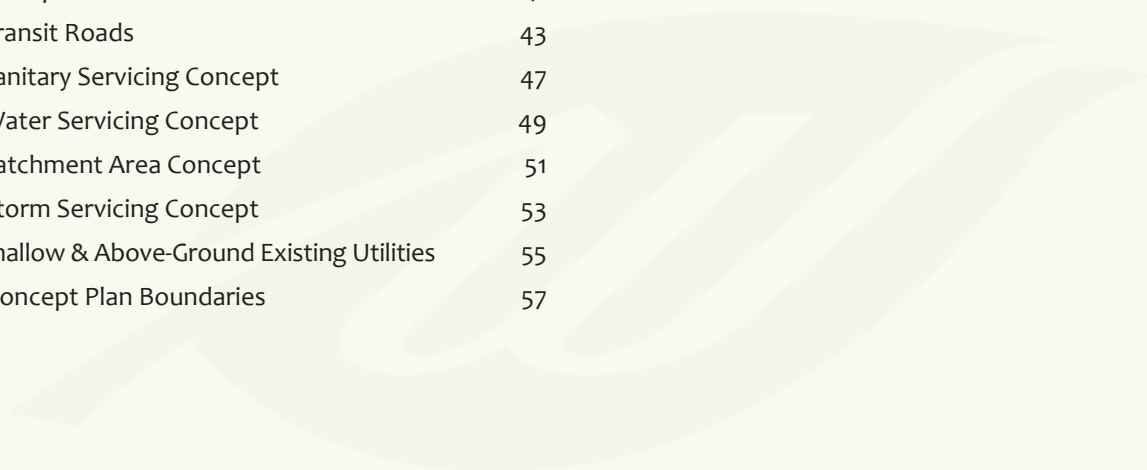
1.0 Introduction	1	4.0 Transportation	39
1.1 Background	1	4.1 Overview	39
1.2 Site Context	1	4.2 Road Network Hierarchy	42
1.3 Plan Area Ownership	2	4.3 Public Transit	44
1.4 Regulatory Framework and Compliance	4	5.0 Servicing Strategy	45
2.0 Site Inventory & Analysis	7	5.1 Wastewater Collection System	45
2.1 Topography	7	5.1.1 Existing Conditions	45
2.2 Natural Features and Existing Conditions	7	5.1.2 Proposed Development	45
2.3 Development Constraints	12	5.1.3 Timing of Capital Improvements	46
2.3.1 Wells, pipelines and utilities	12	5.2 Water Servicing	48
2.3.2 Regina International Airport	14	5.2.1 Existing Conditions	48
2.3.3 Canadian Pacific Railway Line	16	5.2.2 Proposed Development	48
2.3.4 Adjacent Industrial Uses	16	5.2.3 Timing of Capital Improvements	50
3.0 Community Design & Land Use	19	5.3 Stormwater Management	50
3.1 Westerra Vision	19	5.3.1 Existing Conditions	50
3.2 Alignment with Design Regina: The Official Community Plan Bylaw No. 2013-48	20	5.3.2 Proposed Development	52
3.3 Design Principles	21	5.3.3 Timing of Capital Improvements	54
3.4 Land Use Overview	22	5.4 Shallow and Above-Ground Utility Servicing	54
3.5 Residential	24	6.0 Implementation	56
3.5.1 Low-Density Residential	25	6.1 Phasing	56
3.5.2 Medium-Density Residential	26	6.2 Concept Plans	56
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		

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:

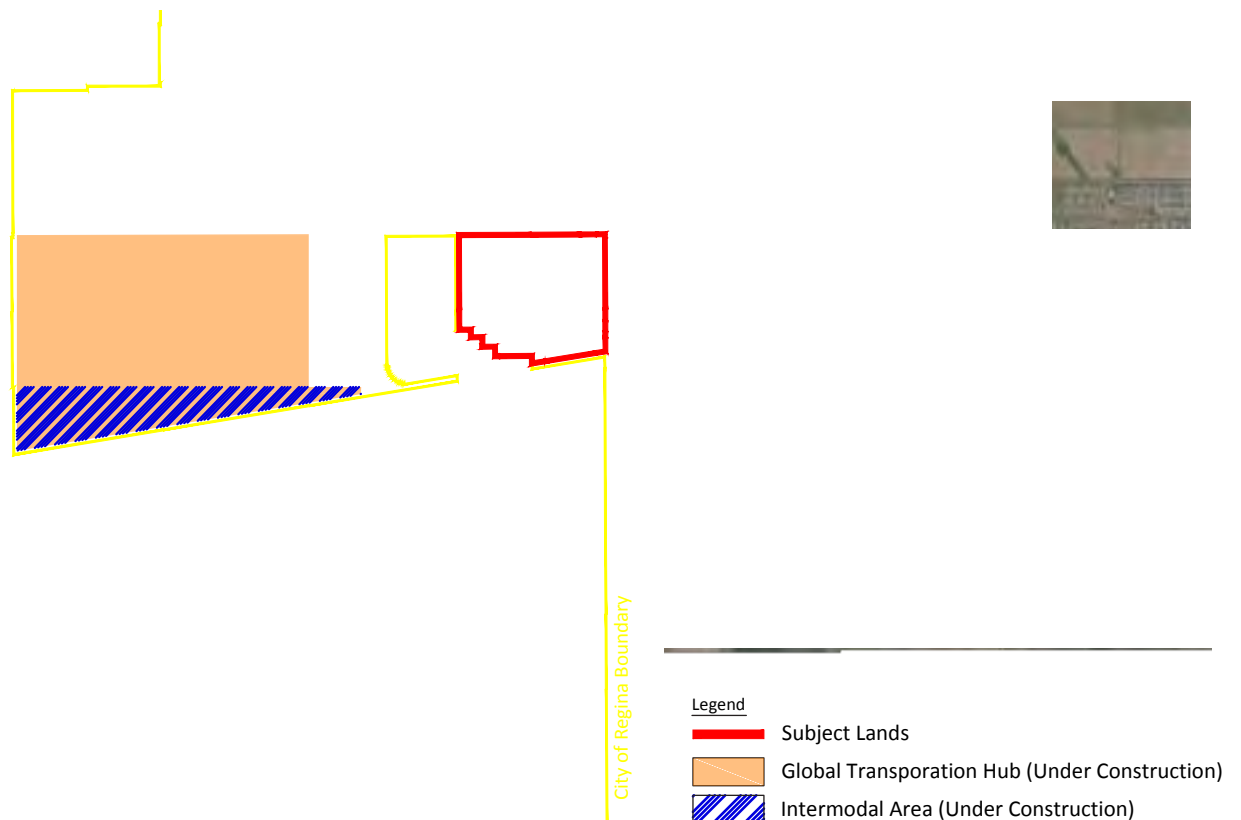
- To implement the policies contained in the *Design Regina OCP* and, in doing so, provide a framework for future development of the plan area that reflects the City's aspiration to be a sustainable, vibrant, inclusive and attractive community
- To guide and direct the preparation and the approval of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

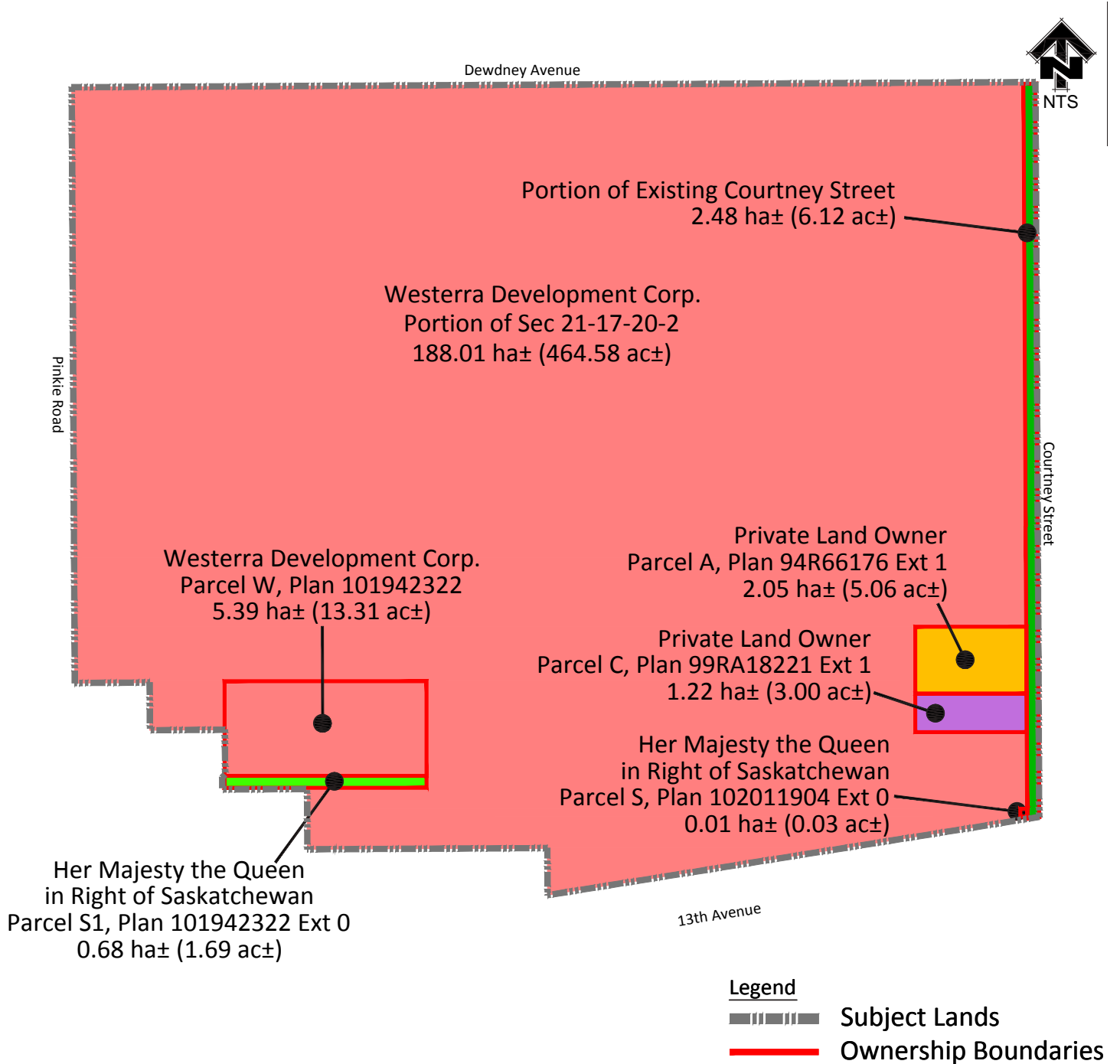
The NP area is comprised of approximately +/- 199.84 hectares (+/- 493.79 acres) consisting of a variety of legal parcels of land. The majority of the plan area is owned by Westerra Development Corp. A summary of the legal land holdings and ownership of the plan area is outlined in **Table 1: Plan Area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

Table 1 - Plan Area Ownership

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 0	.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%

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*.

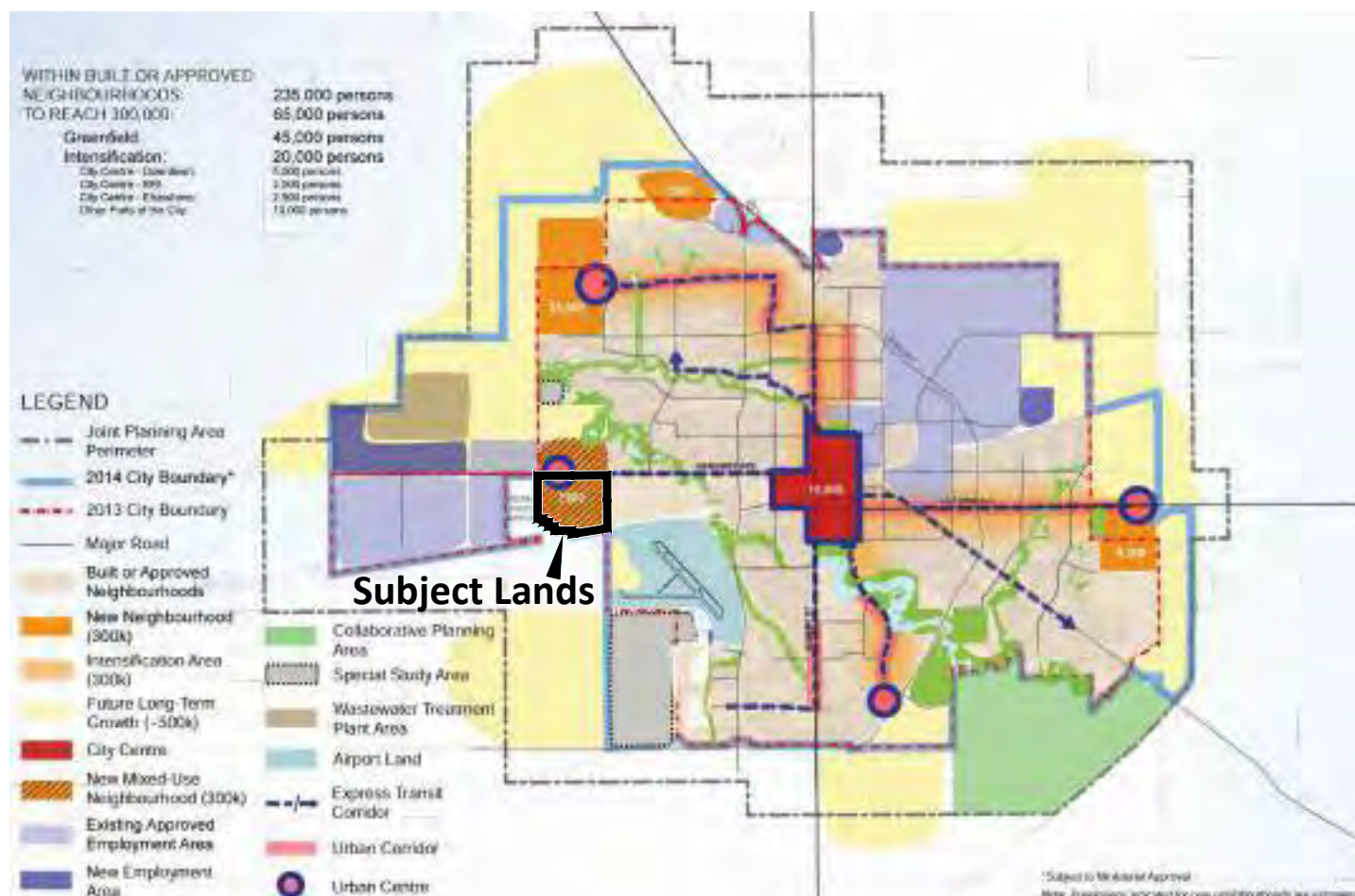
Regina Airport Zoning Regulations (Aeronautics Act)

Under the Government of Canada Aeronautics 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 Vicinity 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.

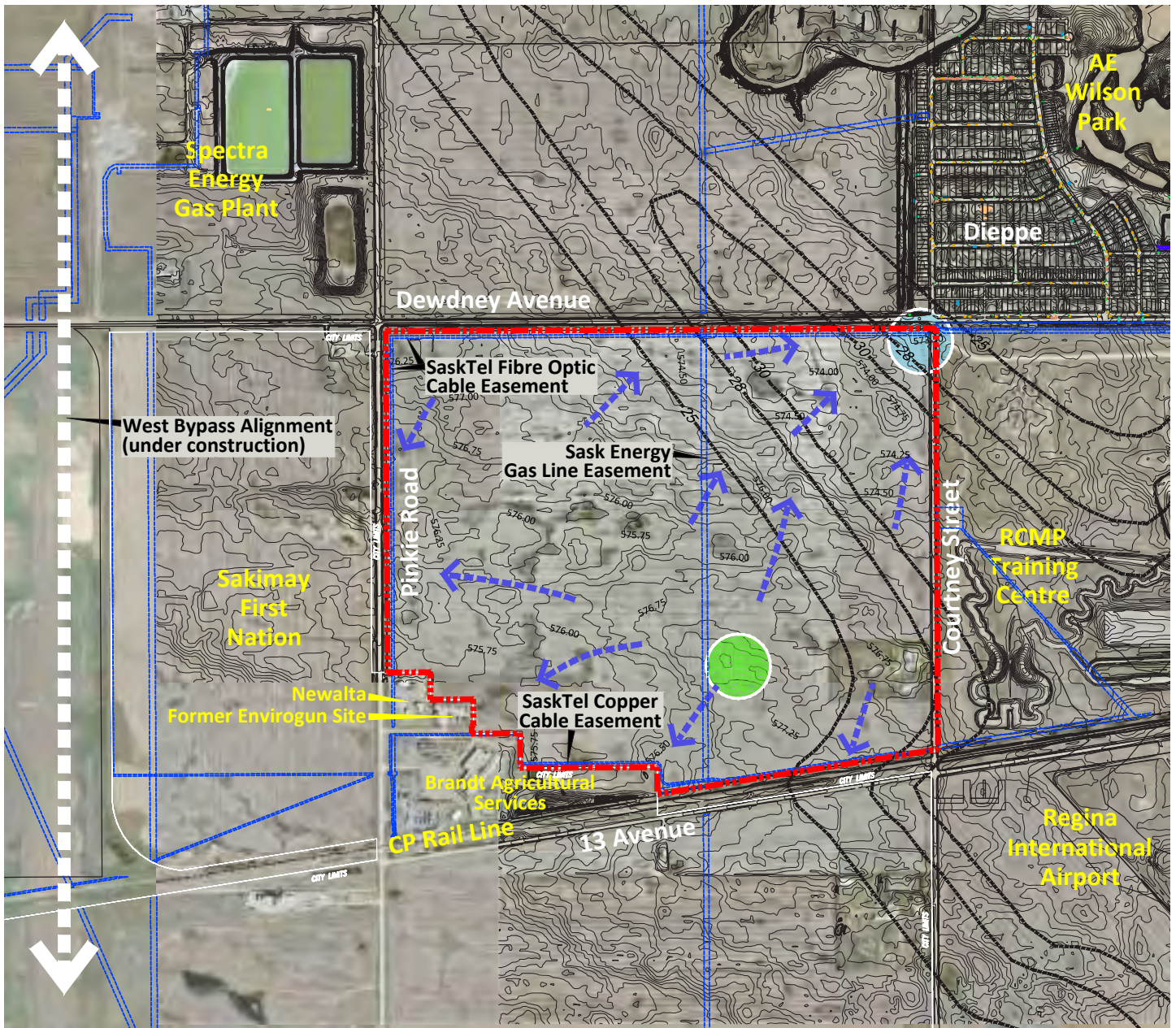
Environmental Site Assessment

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

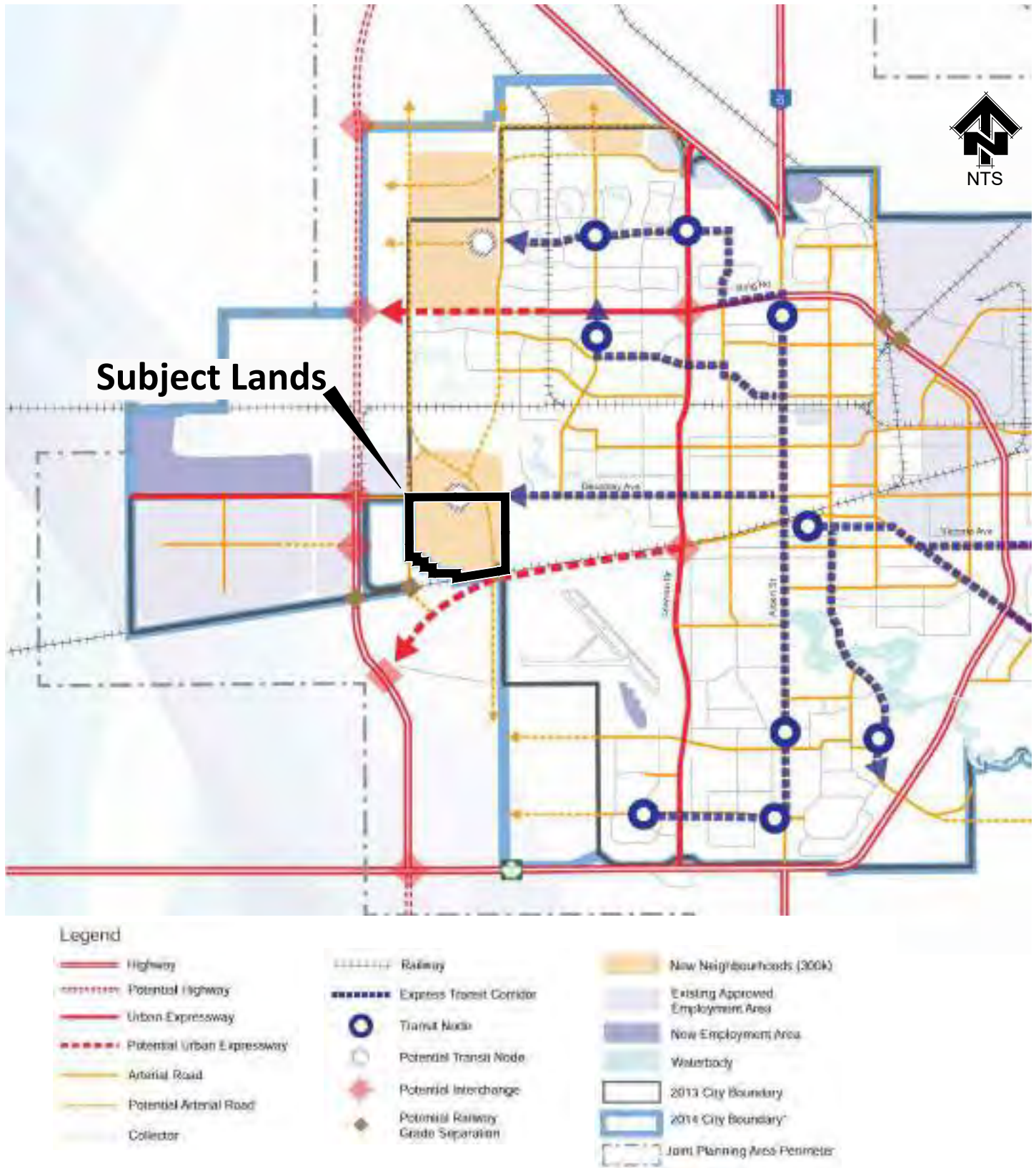
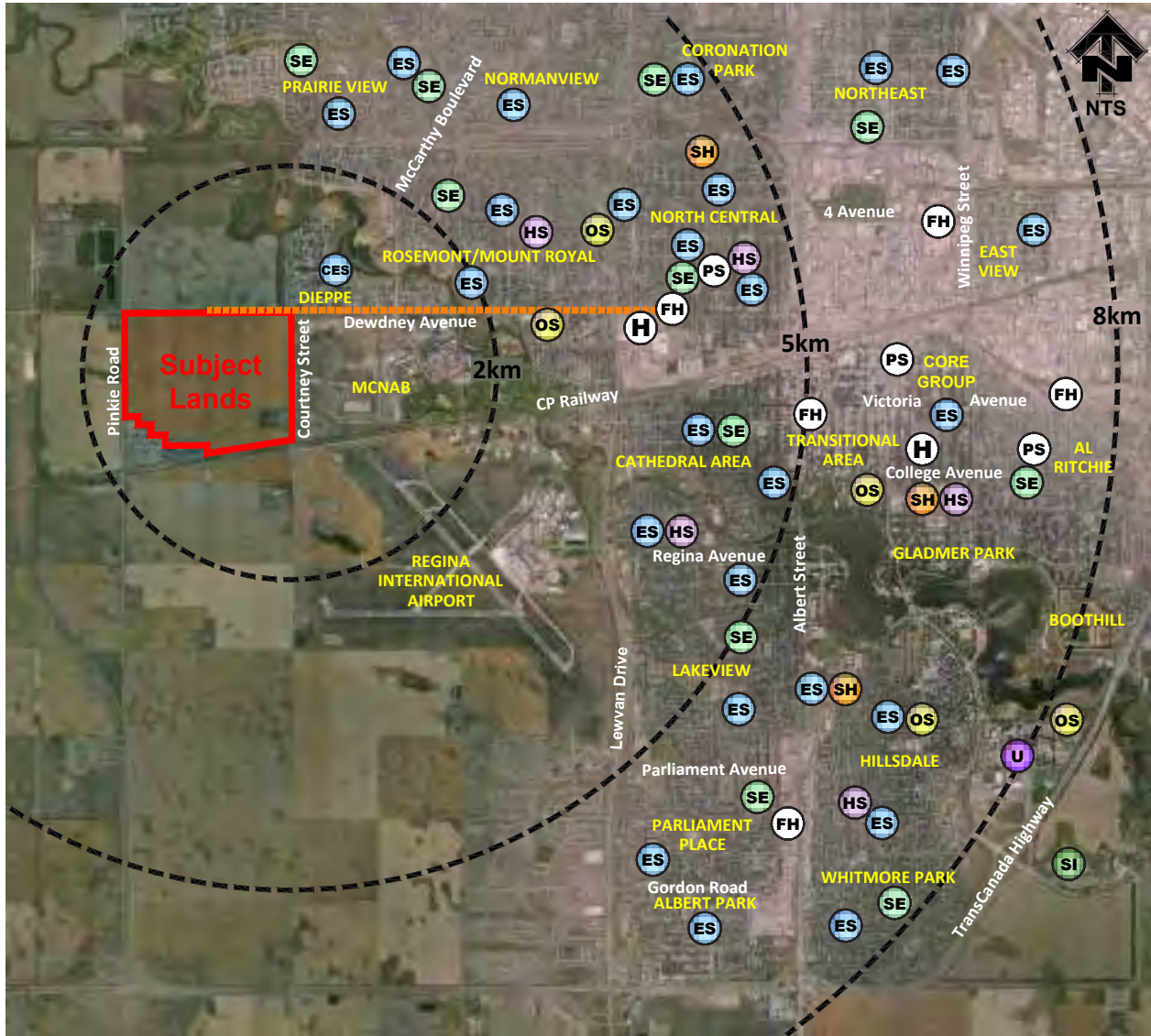














Figure 6 - Community Infrastructure



- | | |
|---|--|
|  Fire Hall |  Separate Elementary School |
|  Police Station |  Separate High School |
|  Hospital |  Other School |
|  Public Elementary School |  University of Regina |
|  Public Elementary School - Closed |  SIAST |
|  Public High School |  Emergency Response Route
±4.5km / ±7 Minute |

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.

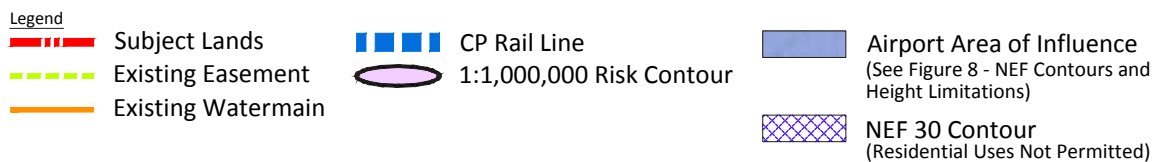
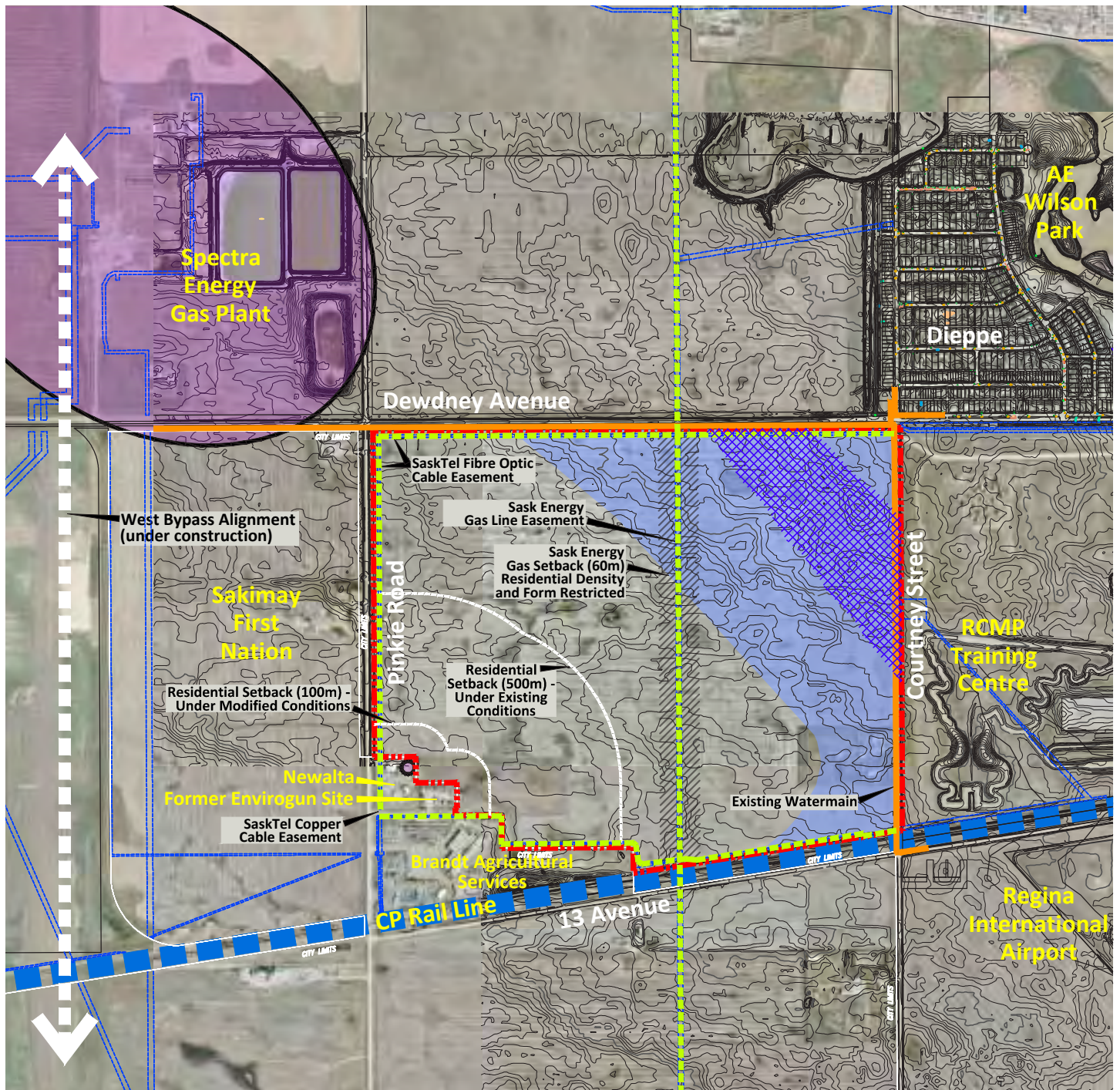
Other utility considerations include an easement for an electrical distribution line along the west side of the plan area that is no longer required and is being discharged. Buried telecommunication lines run along the north, west and south borders of the Plan area and are contained within 7.5 metre 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.

POLICIES:

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



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.

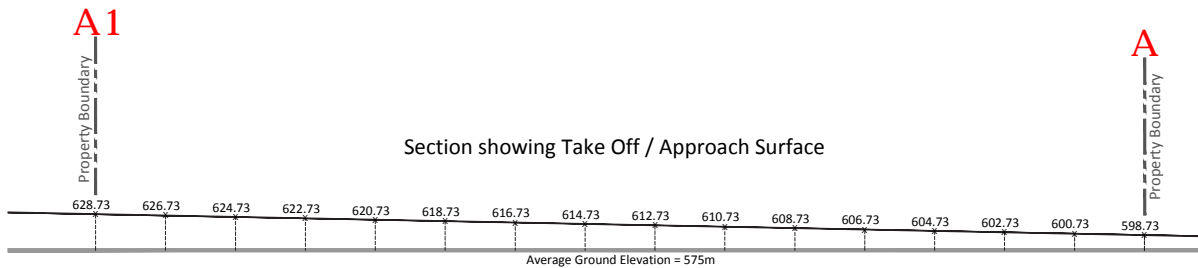
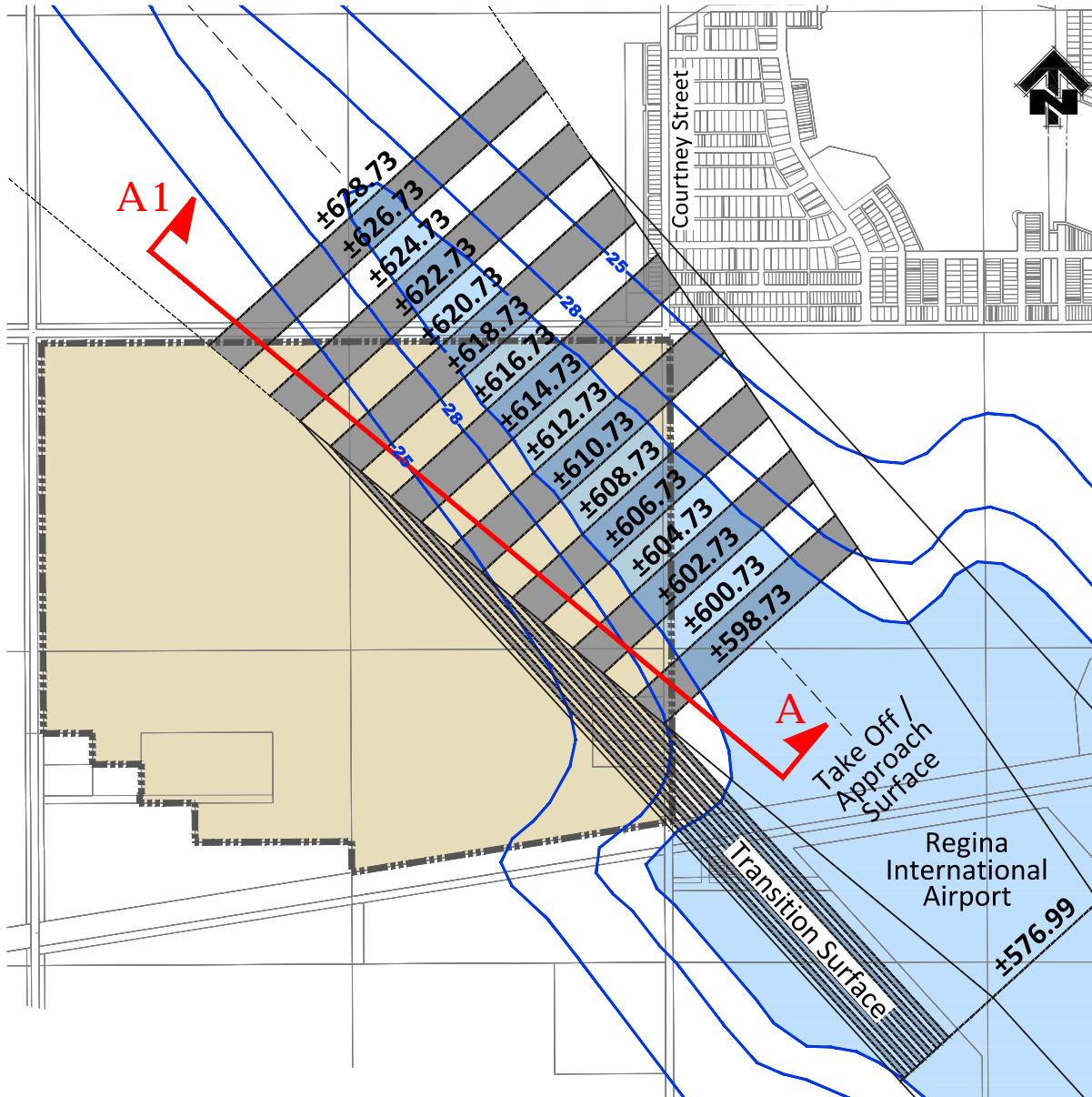
The proximity of the plan area to the Regina International Airport presents some development constraints for portions of the plan area. These development constraints are primarily situated in the northeast corner of the plan area and relate to potential noise impacts and height restrictions. Portions 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**.

POLICIES:

- 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



- Legend**
- Subject Lands
 - NEF Contours
 - NEF Contour 30 (Residential Uses Not Permitted)
 - Height Limitations

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:

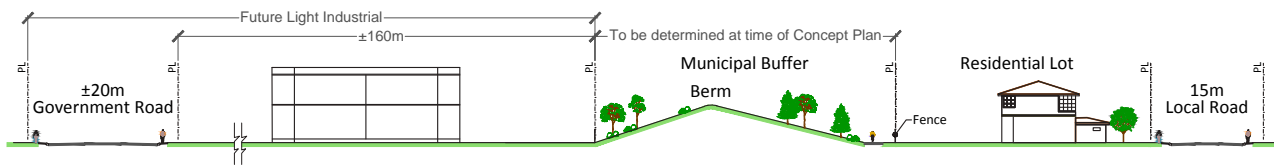
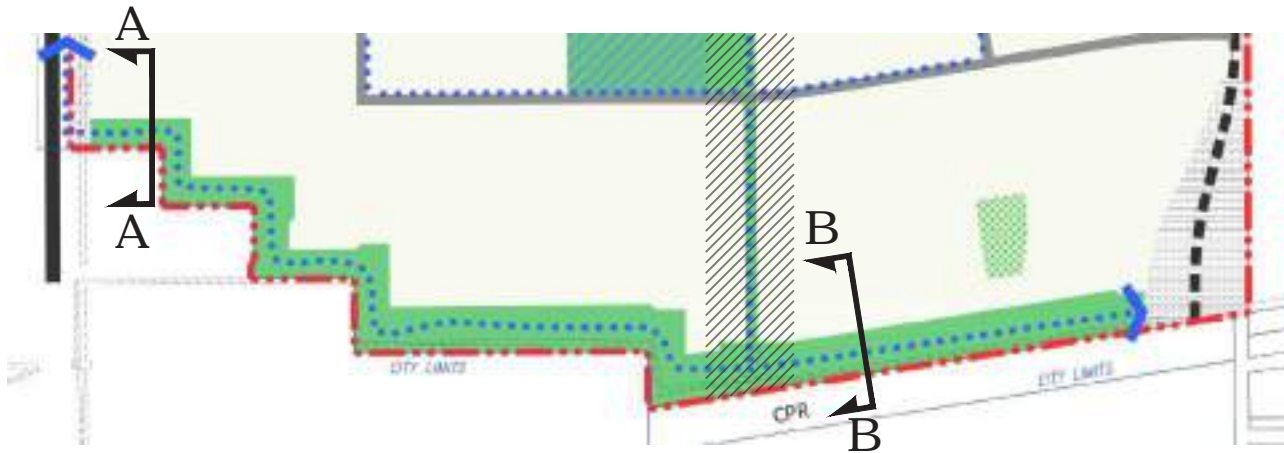
2.3.4 (a) Where residential is proposed adjacent to existing industrial lands, the City, at its discretion, may require:

- 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.**

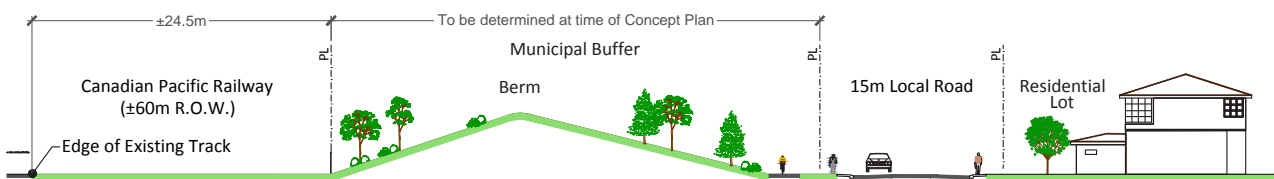
2.3.4 (b) Notwithstanding any other policy of this Plan, the City will not approve a concept plan or rezoning of the Phase III lands, as identified on Figure 20 - Concept Plan Boundaries, unless it can be demonstrated, to the City's satisfaction, that there are no adjacent land-uses or operations (e.g. 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.

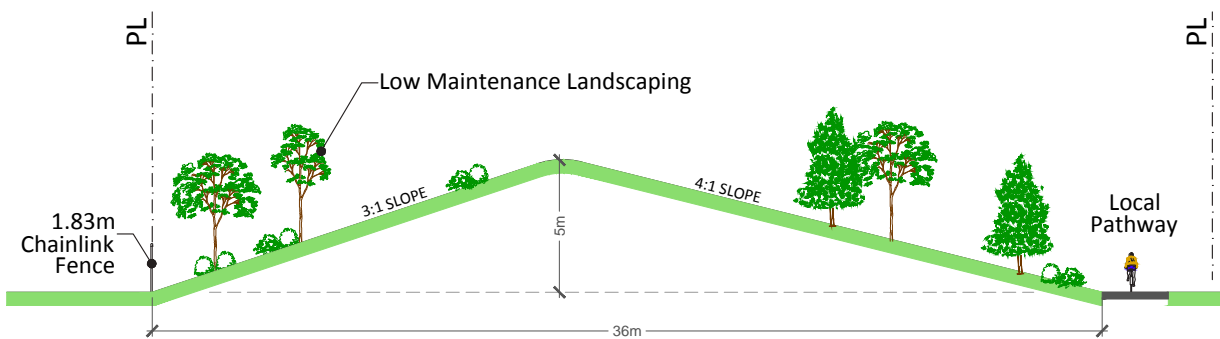
Figure 9 - Land Use Transition Buffer



Section A - Residential and Future Light Industrial Interface Treatment
NTS



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



Berm Detail
Scale 1:250

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	• Create better, more active ways of getting around
• Embrace built heritage and invest in arts, culture, sport and recreation	• Promote conservation, stewardship and environmental sustainability
• Support the availability of diverse housing options	• Achieve long term financial viability
• 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, multi-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.

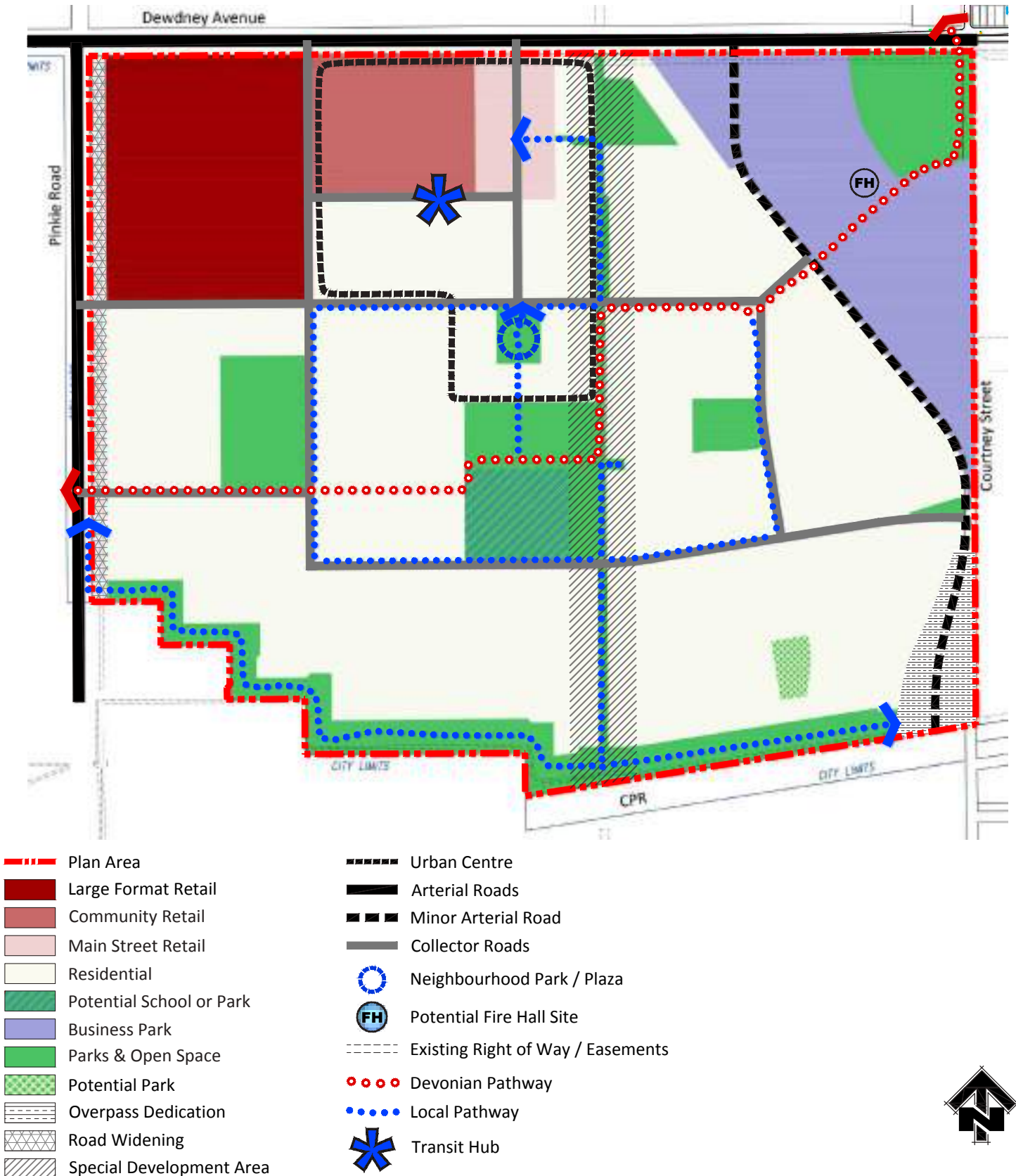
Table 2 - Neighbourhood Plan Land Use Statistics

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%

POLICIES:

- 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 RESIDENTIAL AREA (HA)	CITY POPULATION INTENSITY TARGETS	MIN. POPULATION 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 **. 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
<i>Population of 7,464 equates to 51.05 persons per gross hectare **</i>					

** 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.

POLICIES:

- 3.5.1 (a) The predominant use of land within the low density residential area shall be single-detached 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.

POLICIES:

- 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.

POLICIES:

- 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.

POLICIES:

- 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.

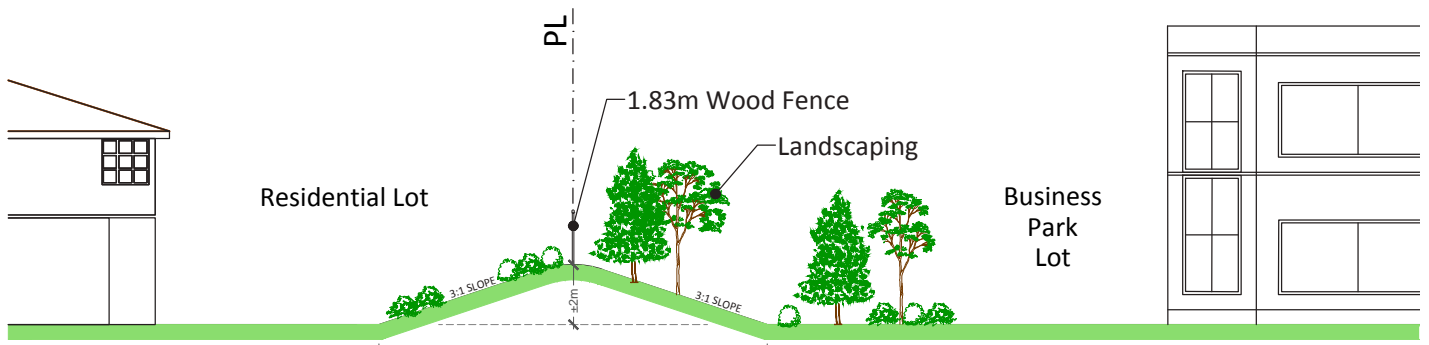
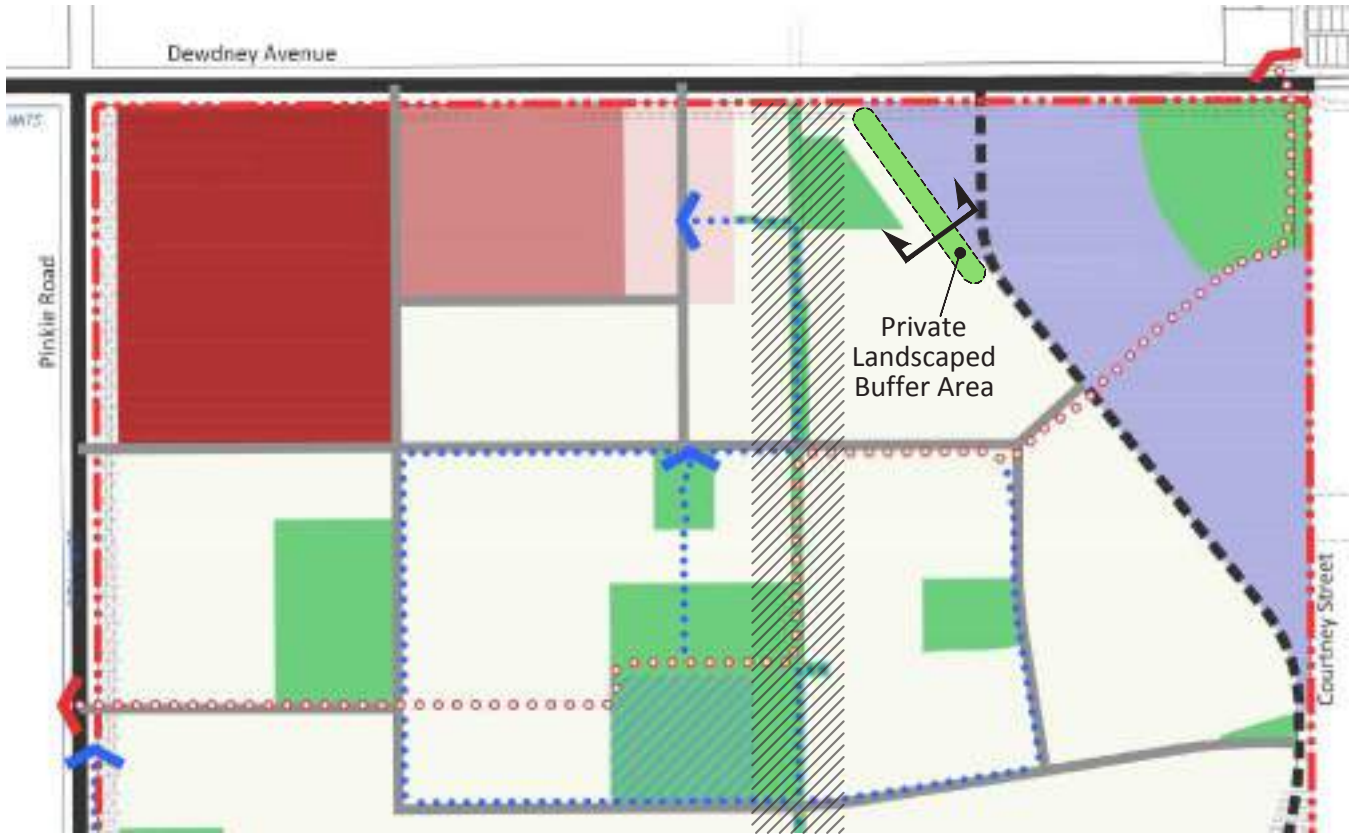
The business park area is situated between residential uses to the southwest and municipal reserve uses to the northeast. As part of the generalized land use concept, provisions have been made to establish a greenway connection through the business park area to connect with the parks and open space system 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.

POLICIES:

- 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 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.

POLICIES:

- 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:

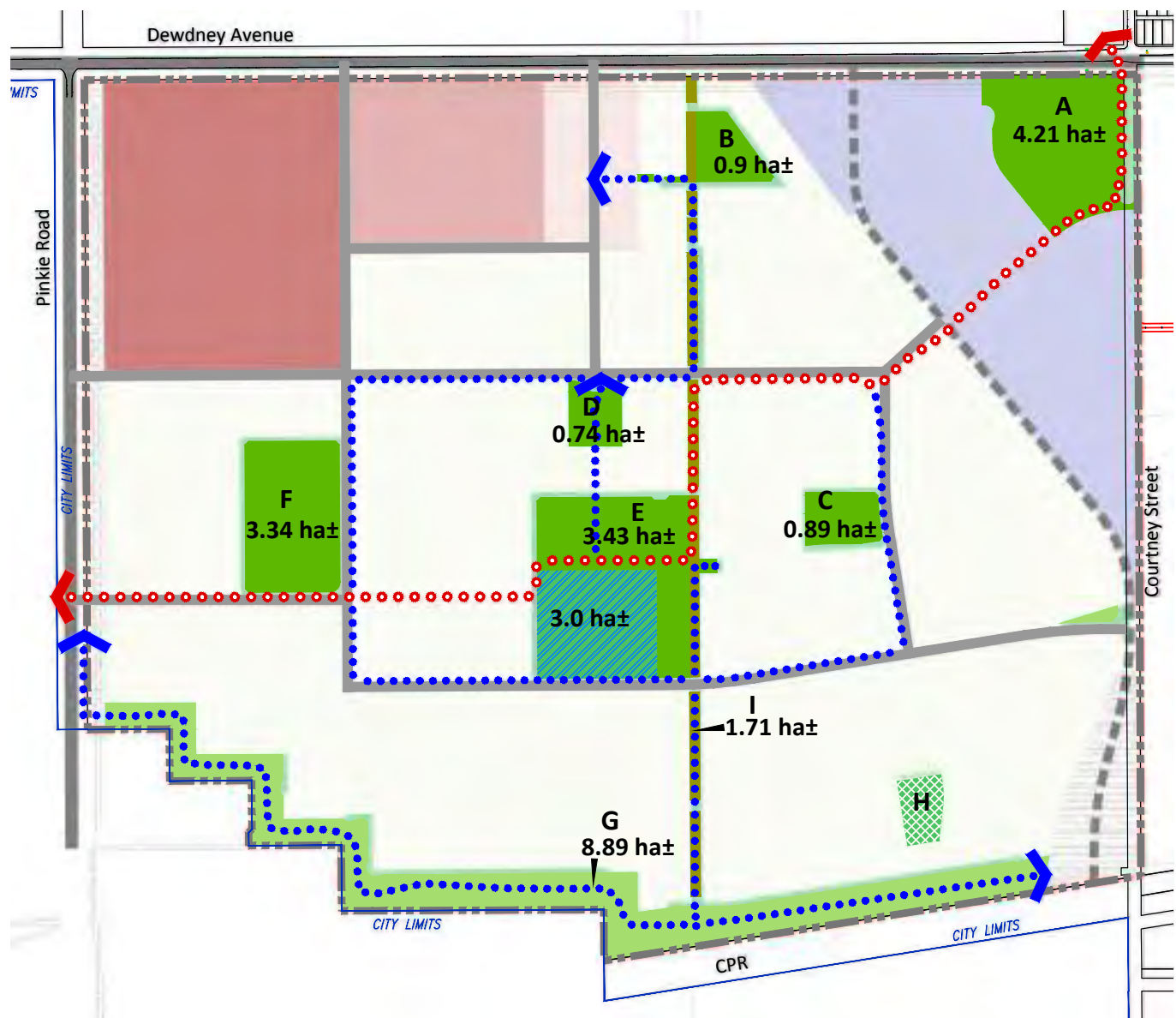
- I. The parks shall be designed to support active recreation as the primary use;
- II. A design solution and drainage study shall be submitted by the developer, at the subdivision stage, demonstrating to the City’s satisfaction how stormwater can be accommodated without detracting from the viability of the park as an active recreation space.

Table 4 - Open Space System and Potential Facilities

AREA	TYPE	POTENTIAL FACILITIES	AREA (HECTARES)	AREA (ACRES)
A	Municipal Reserve	Neighbourhood Park that supports multi-purpose sports fields and play areas.	4.21	10.40
B	Municipal Reserve	Neighbourhood Park, Playfield, and Playground	0.90	2.22
C	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
H	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

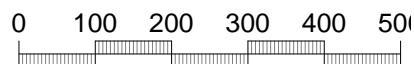
An overview of the proposed municipal reserve network is outlined in **Figure 12: Parks, Pathway and Open Space Network**. A summary of the major open space areas within the Neighbourhood Plan, classification type and intended programming is outlined in **Table 4 - Open Space System and Potential Facilities**. 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



Legend

- Plan Area
- Municipal Reserve
- Municipal Buffer
- Municipal Utility Parcel
- Potential School on MR
- Potential MR
- ○ ○ ○ Devonian Pathway
- ● ● ● Local Pathway



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.**

Table 5 - Municipal Reserve Requirements and Proposed Dedication

	± 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

*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.

POLICIES:

- 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:

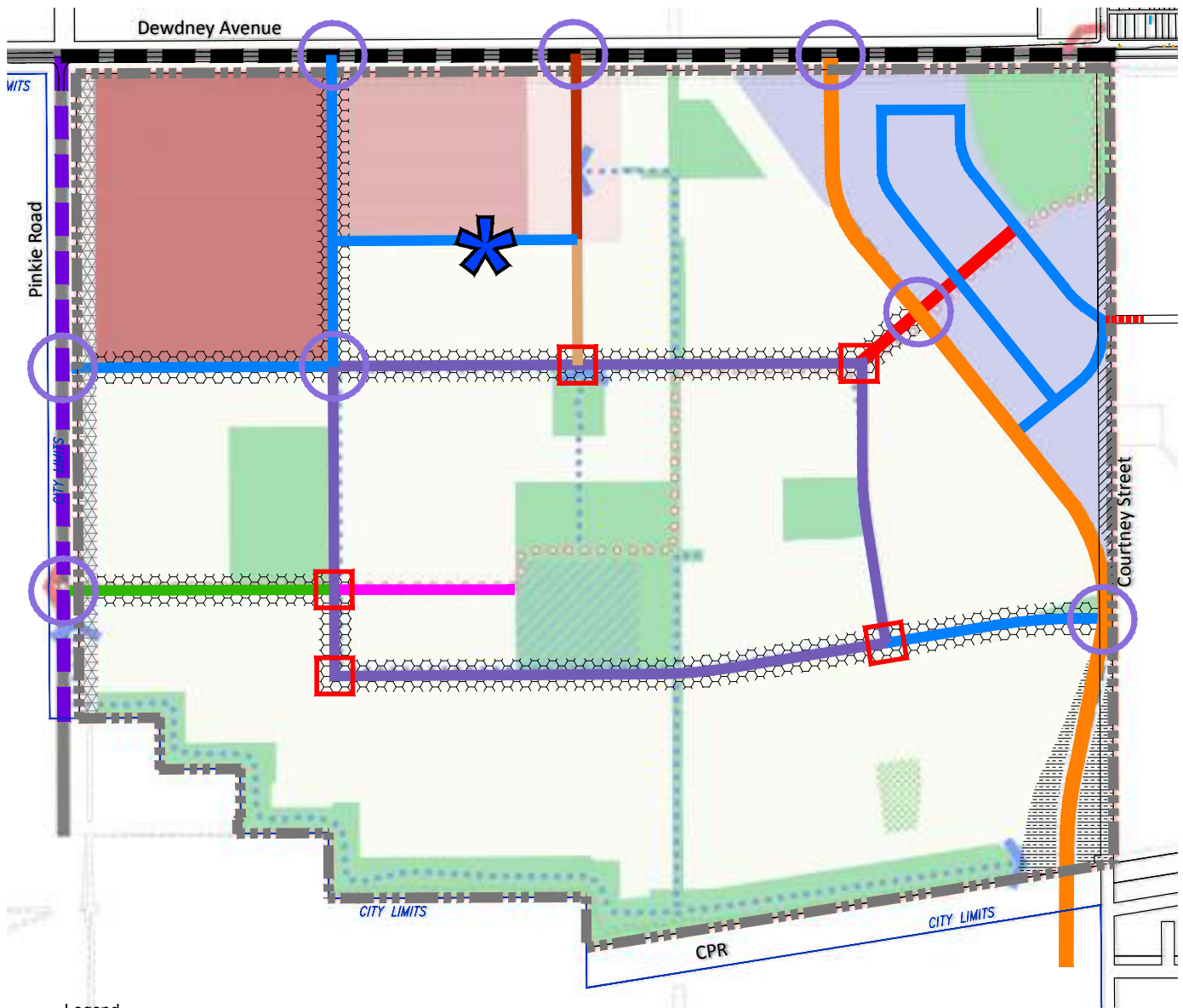
- Dewdney Avenue will require a four-lane cross-section as part of the first phase of development.
- Several intersection treatments, particularly left-turn bays entering and exiting the development will be required along Dewdney Avenue in order to efficiently service the site.
- Pinkie Road and Courtney 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.

POLICIES:

- 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



Legend

- Subject Lands
- Arterial
- Expressway Arterial
- 33.0m Minor Arterial
- 33.0m Main Street Collector
- ±31m Main Entrance Collector w/ Varying Greenway
- 25.0m Collector with Greenway
- 25.0m Live-Work Collector
- 23.5m Collector - Inner Loop with Pathway
- 22.0m Collector
- 21.0m Local with Greenway

- Signalized Intersection
- Potential Roundabout Location
- Transit Hub
- Portion of Existing Courtney Street to be closed 0.93 ha± (2.31 ac±)
- Overpass Dedication
- Road Widening
- Portions of Collector Roadways requiring 14.8m Travel Width

Note: The City, at its discretion, may allow variations to the ROW widths without an amendment to the Neighbourhood Plan being required.

4.2 Road Network Hierarchy

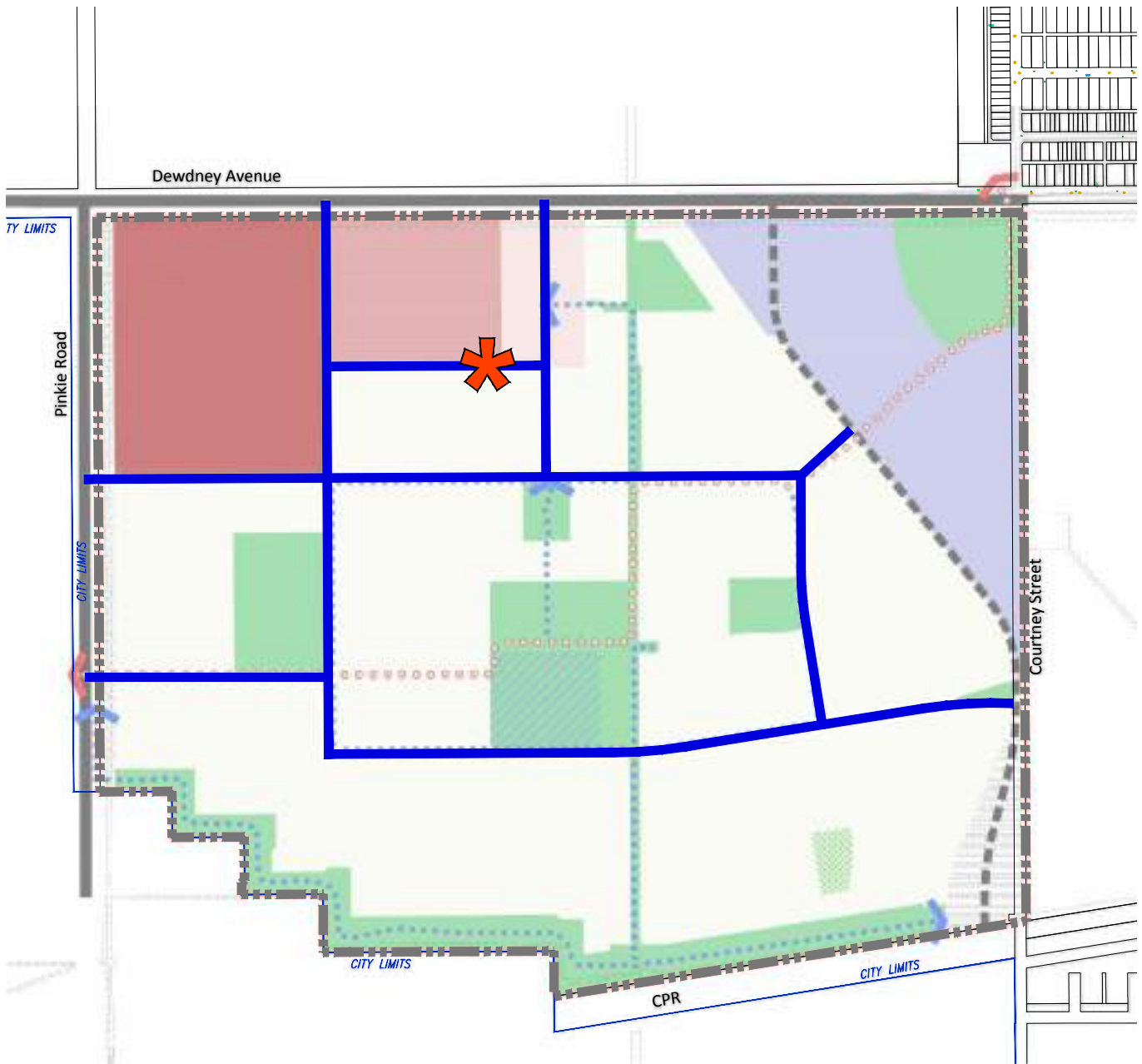
Section drawings of the proposed road network hierarchy shall be confirmed at the time of a concept plan, zoning and subdivision application submission. Roadway sections proposed have been designed to accommodate pedestrian and cyclists requirements to support efficient pedestrian and cycling circulation 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.

POLICIES:

- 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



- Legend**
-  Subject Lands
 -  Roads accommodating potential future transit routes
 -  Transit Hub

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**.

POLICIES:

- 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**).

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

	SUMMARY OF LAND USE			SANITARY SEWER DEMANDS		
	Area		Pop Density	Pop	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

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.

Table 7 - Wastewater Flows from Outside Sources

	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

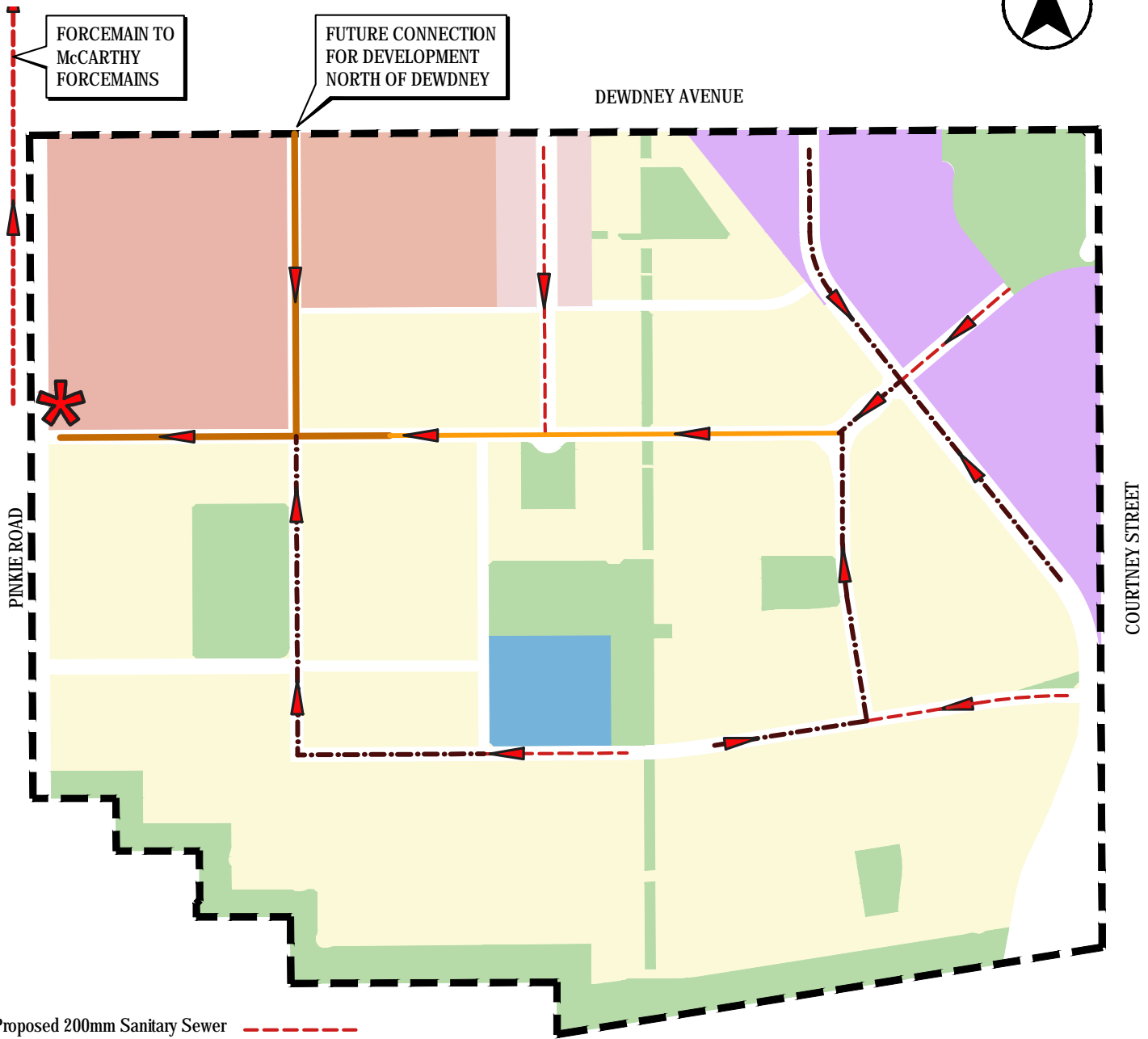
5.1.3 Timing of Capital Improvements

As there are currently no sanitary sewer mains 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.

POLICIES:

- 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.

Figure 15 - Sanitary Servicing Concept



- Proposed 200mm Sanitary Sewer - - - - -
- Proposed 250mm Sanitary Sewer - · - · -
- Proposed 450mm Sanitary Sewer —————
- Proposed 600mm Sanitary Sewer —————
- Lift Station ✱
- Direction of Flow ▶
- Subject Lands
- Potential School or Park

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 600mm diameter main and follows Dewdney Avenue west towards the GTH.

5.2.2 Proposed Development

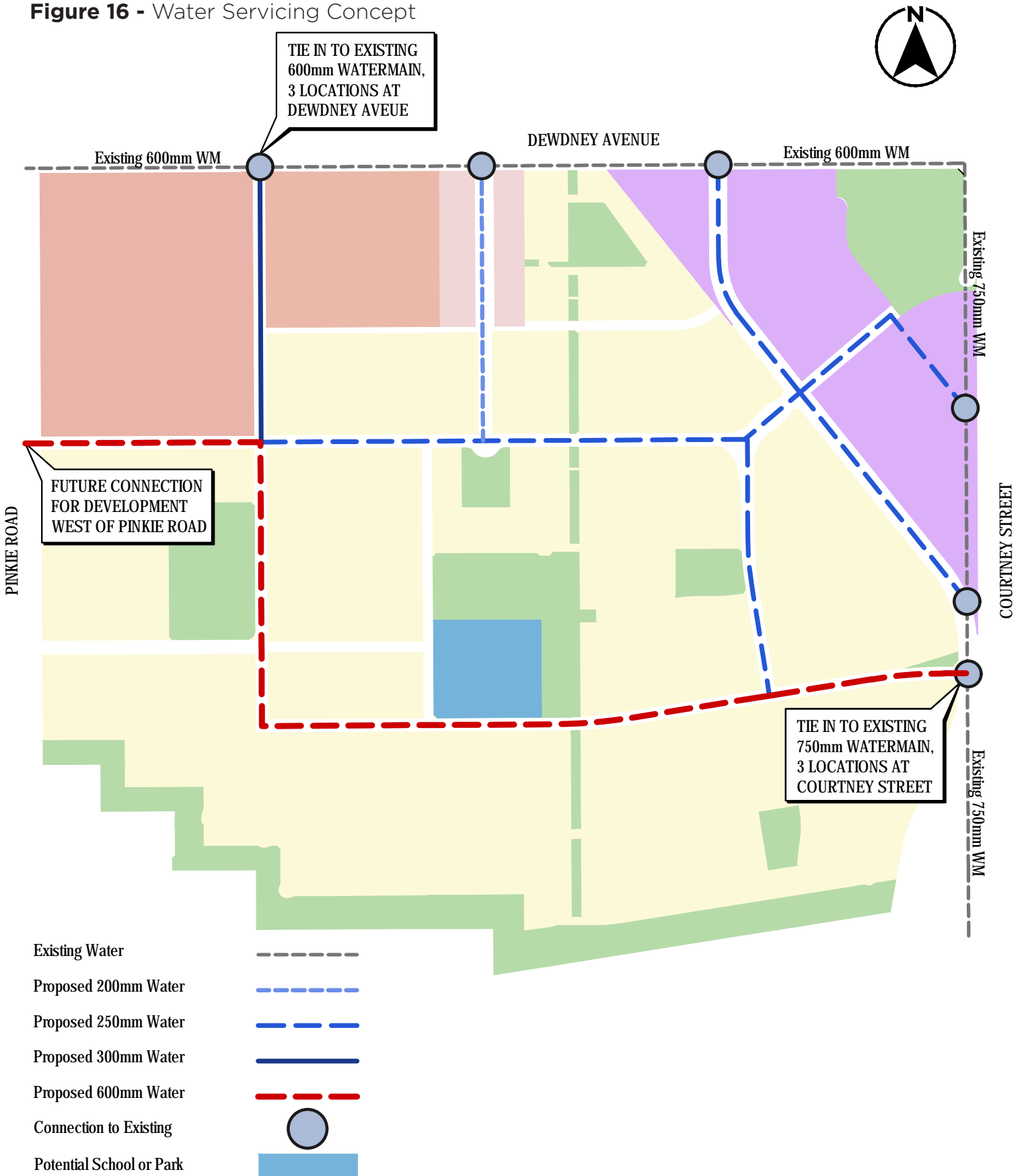
Water service will be provided to this development as shown in the water servicing concept that is included in **Figure 16: Water Servicing Concept**. The following connections to the existing trunk main are proposed:

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
1. **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.

Figure 16 - Water Servicing Concept



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:

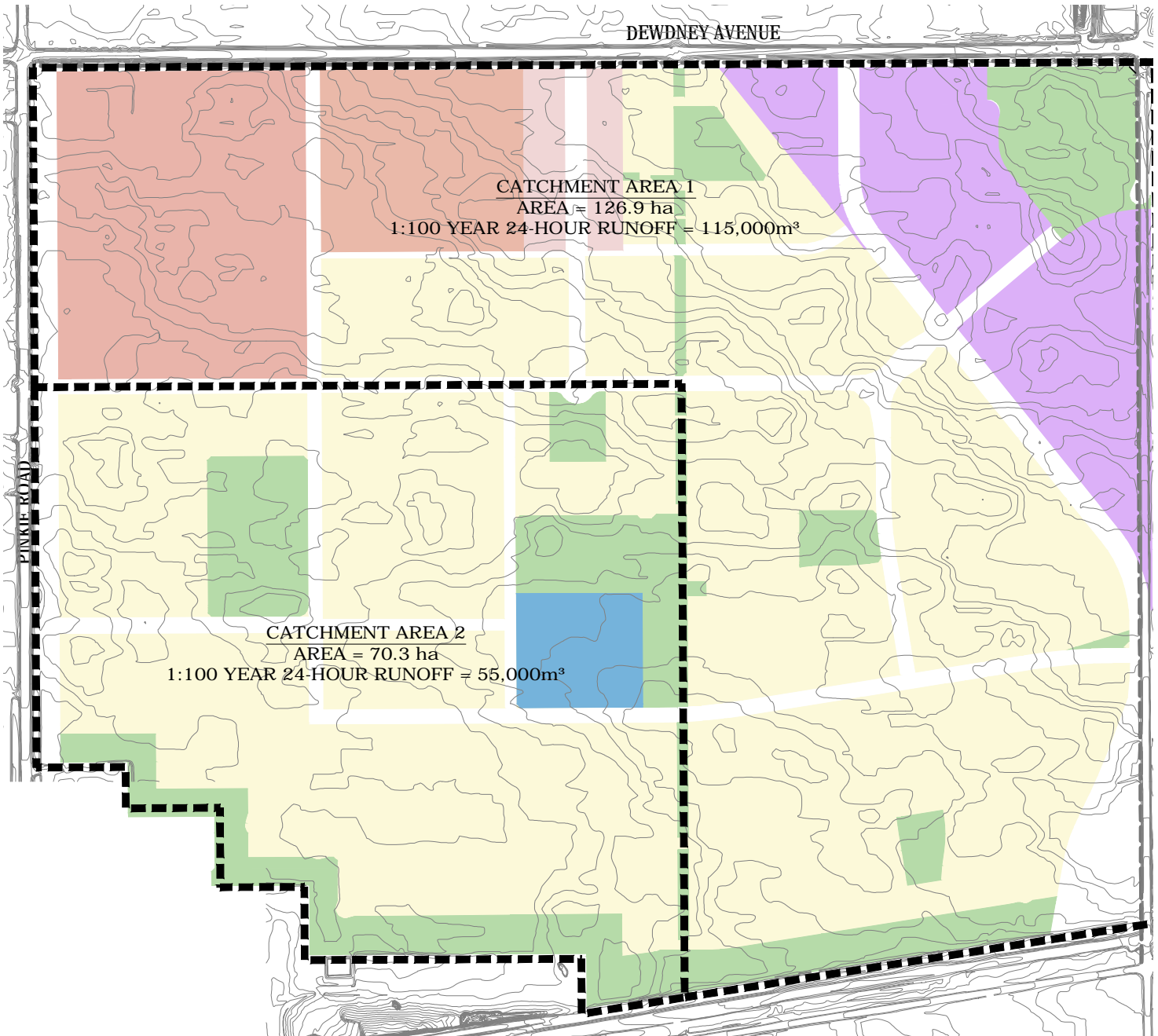
- 5.2.3 (a) The water system to service the plan area shall be designed adequately and efficiently to address water servicing and fire flow requirements.**
- 5.2.3 (b) The water system should be in general accordance with Figure 16: Water Servicing Concept; however, refinements to the water servicing 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 (pipelined) 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.

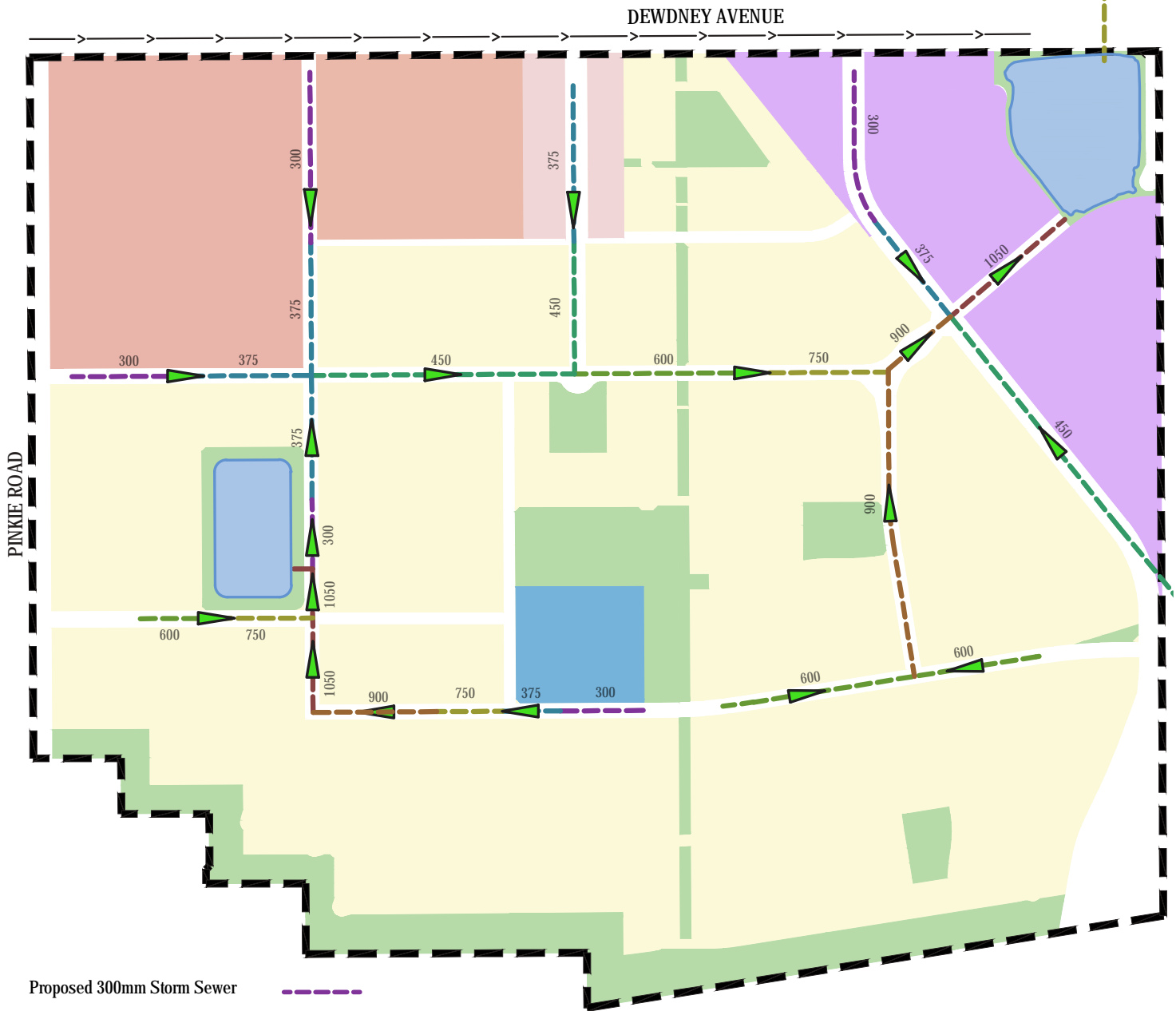
Option #3 – Construct a new gravity sewer in the right of way for the Courtney Street drainage ditch that connects to the existing drop structure at Wascana Creek.

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.**

Figure 18 - Storm Servicing Concept



NEW 750mm PIPE TO COURTNEY STREET DITCH DROP STRUCTURE AT WASCANA CREEK



- Proposed 300mm Storm Sewer - - - - -
- Proposed 375mm Storm Sewer - - - - -
- Proposed 450mm Storm Sewer - - - - -
- Proposed 600mm Storm Sewer - - - - -
- Proposed 750mm Storm Sewer - - - - -
- Proposed 900mm Storm Sewer - - - - -
- Proposed 1050mm Storm Sewer - - - - -

- Proposed Ditch Drainage - > -
- Detention Pond ▭
- Direction of Flow ▶
- Subject Lands - - - - -
- Potential School or Park ▭

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.**

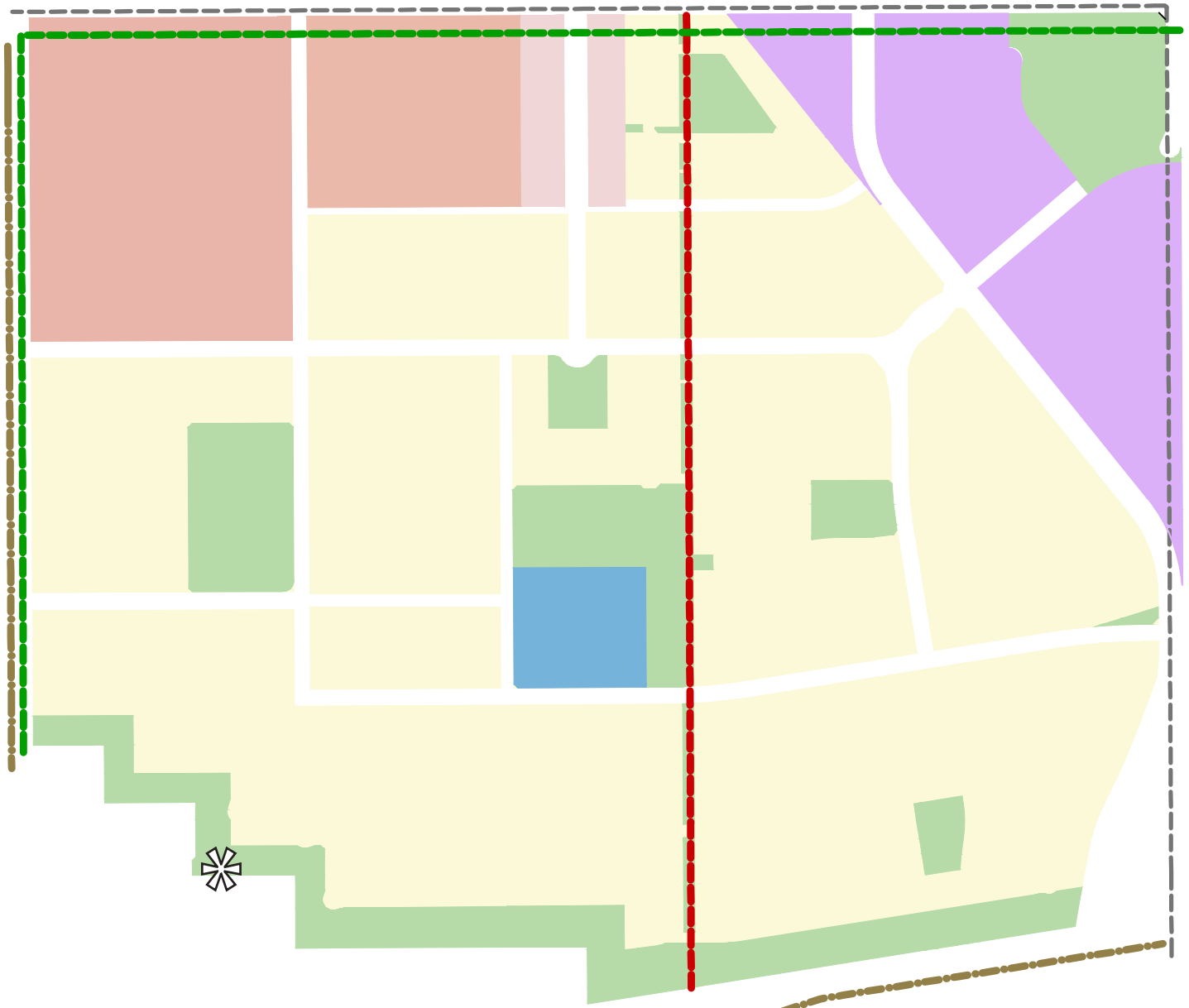
5.4 Shallow and Above-Ground Utility Servicing

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



DEWDNEY AVENUE



- Existing SaskTel Line
- Existing Gas Line
- Overhead Power Lines
- Existing Watermain
- Potential School or Park
- Potential Future Cell Tower ✱

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.**

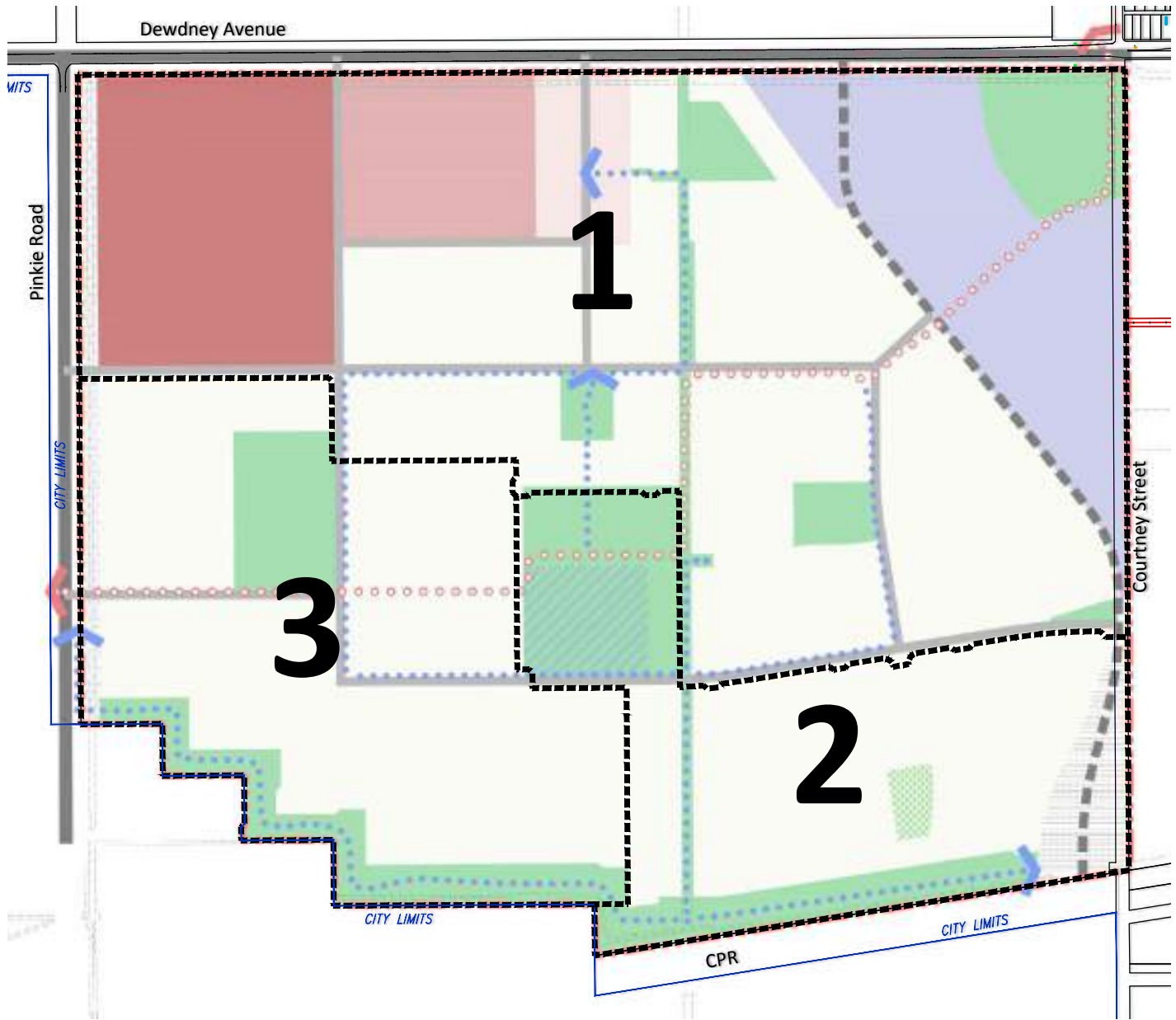
6.2 Concept Plans

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**.

POLICIES:

- 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).**

Figure 20 - Concept Plan Boundaries



Legend

■■■■■■ Concept Plan Boundaries



Westerra

Neighbourhood Plan