

Schedule "A": River's Gate (formerly 'Quail Ridge') Outline Plan



River's Gate

Outline Plan

Sturgeon County • August 2016



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1 Introduction

This section describes the purpose and context of the River's Gate Outline Plan.

The original Quail Ridge Outline Plan was approved as Bylaw 1279/12 in 2012. Quail Ridge was changed to River's Gate by the landowners to reflect the existing neighbourhood marketing.

1.1 Plan Purpose and Location

The purpose of this Outline Plan (OP) is to describe the land use framework, infrastructure servicing concept and development objectives for the future development of River's Gate. The first stage of development been constructed in the northeast portion of the plan, with subsequent stages to be developed within the future parameters of the Sturgeon Valley Area Structure Plan (ASP). The amendment to the OP will allow for smaller sized country residential lots, which will increase the housing diversity and affordability for residents of Sturgeon County, while maintaining the country residential character of the development.

The River's Gate OP is located within the Sturgeon Valley ASP and has been prepared within the context of the following:

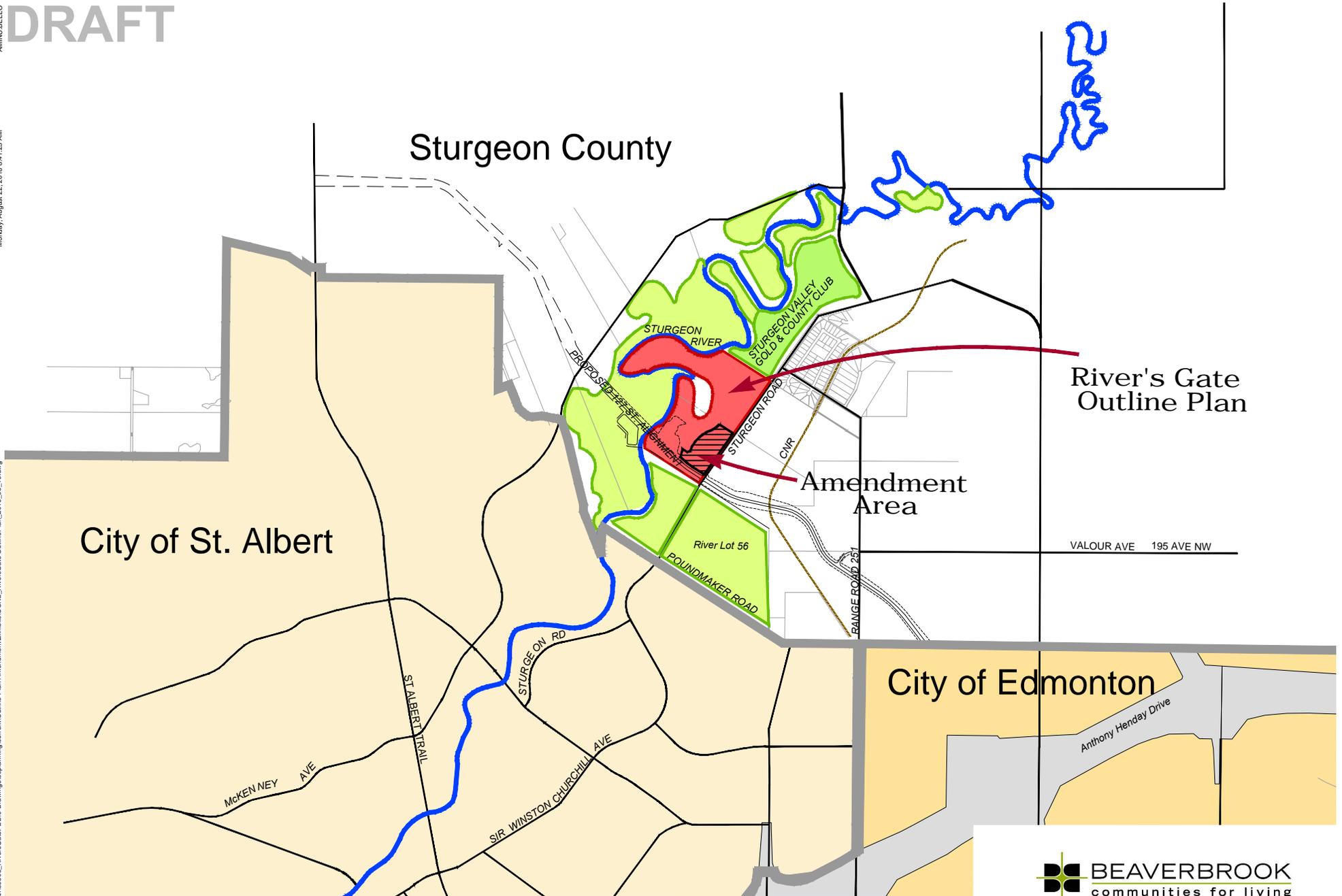
- The natural features of the site and surrounding area;
- The type, size and location of various land uses;
- The transportation network as it relates to the plan area;
- An open space concept and pedestrian connectivity framework;
- Conceptual servicing schemes and provision of utility services and infrastructure;
- Implementation and phasing of development.

The plan area is located in the southwest portion of the Sturgeon Valley area adjacent to the Sturgeon River. **Figure 1: Location Plan** shows the Plan area relative to the context of the Sturgeon Valley and the City of St. Albert.

The plan area is located west of Sturgeon Road, with development planned and designed so that future development opportunities are not compromised. The lands are immediately serviceable and will ensure a continuous supply of land for residential development in the Sturgeon Valley. The overall concept for the study area gives direction and guidance for the future development of the balance of River's Gate, while ensuring flexibility on the detailed design and land uses, which can be incorporated into the future review of the Sturgeon Valley ASP.

Specific plan area boundaries are shown on **Figure 1: Location Plan**. These are:

- The Sturgeon Golf & Country Club to the north;
- The southerly limit of the proposed 127 Street Road alignment;
- The Sturgeon River to the west; and
- Sturgeon Road to the east.



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RIVER'S GATE OUTLINE PLAN

Figure 1. - Location Plan



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1.2 Site Characteristics and Context

The characteristics and context of River's Gate as described below are shown on **Figure 2: Existing Conditions/Contours**. Information in this section is derived from aerial photos, topographical survey data and information provided in Phase I Environmental Site Assessments prepared by Hoggan Engineering & Testing Ltd., 2006 and geotechnical reports prepared by JR Paine and Associates, 2006 for the subject lands.

1.2.1 Existing Land Uses

The northeast section of the plan area is undergoing construction, which includes a fully constructed stormwater management facility and the top-of-bank walkway system linking the two park sites with several country residential lots under construction. The area encompassing the southeast half of River's Gate is currently vacant and is intended for future development.

1.2.2 Surrounding Land Uses

The area north of River's Gate contains the country residential subdivisions of Manor Estates II, Sturgeon Heights and Upper and Lower Viscount Estates; and the Sturgeon Valley Golf and Country Club. The areas to the east and west (across the Sturgeon River) of the plan area are predominantly agricultural with associated farm buildings. South of the neighbourhood is River Lot 56, an Environmental Protection Area identified within the Sturgeon Valley ASP and the Sturgeon County MDP. Located to the south beyond River Lot 56 are the City of St. Albert residential communities of Erin Ridge, Oakmont, Kingswood and commercial/light industrial development in the Campbell Business Park (**Figure 1: Location Plan**).

The proposed Outline Plan area represents a logical extension and progression of development along Sturgeon Road. Essentially, the area "fills in" the development pattern between the existing communities of Manor Estates II and Sturgeon Heights to the north; and existing communities of Erin Ridge, Oakmont and Kingswood in the City of St. Albert.

1.2.3 Topography & Vegetation

The topography of the lands within River's Gate is generally flat and low areas in the west and high areas in the east. Elevations throughout the plan slope downwards from the east towards Sturgeon River. At the west boundary along the Sturgeon River, the elevation is 652 m moving upwards to approximately 665 m at Sturgeon Road. (**Figure 2: Existing Conditions/Contours**). Surface drainage throughout the plan area flows westward towards the Sturgeon River. The southeast portion of River's Gate was graded for residential uses from the existing Sturgeon Road towards the Sturgeon River in 2013.

Generous setbacks between the Sturgeon River Valley and residential lots are provided to ensure minimal impact and disturbance to the ecosystem and vegetation within the valley. Lands within the setback area are dedicated as Environmental Reserve (ER), ensuring the ongoing environmental protection of these lands.

The placement of a stormwater management facility adjacent to the Sturgeon River allows the opportunity to enhance the biodiversity in this location by creating an extension of the ecological communities contained within the Sturgeon Valley. Areas of vegetation and heightened environmental sensitivity are preserved and protected through the implementation of this Plan.

1.2.4 Subsurface Conditions

The general soil stratigraphy is characterized by topsoil followed by high plastic clay overlying a silt deposit. The soil conditions do not present impediments to country residential development.

The groundwater table within the plan area is reported to be high at approximately 2 - 2.5 m below ground surface in the western portion of the plan area in the vicinity of the Sturgeon River

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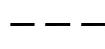
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Legend

-  Minor Drainage Route
-  Direction of Drainage
-  Abandoned Oil Well
-  Proposed 127 St Alignment
-  Outline Plan Area Boundary
-  Contour Lines



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RIVER'S GATE OUTLINE PLAN
 Figure 2. - Existing Conditions/Contour Plan

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and low in the balance of the plan area where dry conditions are present at approximately 6.9 m below ground level.

1.2.5 Environmental Site Assessments

An Environmental Site Assessment (ESA) was conducted for the subject property in February 2007. The purpose of a Phase 1 ESA is to identify potential and actual contamination of land by record reviews, visual site inspection, evaluations, and reporting.

A Phase 1 ESA, conducted by Hoggan Engineering & Testing (1980) Ltd. has been previously submitted to Sturgeon County in support of the amendment to the Sturgeon Valley ASP.

1.3 Summary of Public Consultation

Sturgeon County administration has advised that additional public consultation will not be required for this proposed amendment. Public consultation activities for the original Outline Plan is described below.

On July 7, 2008, all interested stakeholders and residents of the adjacent area were invited to attend a public open house at the Sturgeon Valley Golf & Country Club to discuss the proposed Quail Ridge OP application (including the related amendment to the Sturgeon County Municipal Development Plan, the Sturgeon Valley Area Structure Plan and a rezoning application for the plan area). 85 persons provided their names on the sign-in-sheet, and approximately 100 - 110 persons attended the open house.

Below is a brief summary of some of the comments and feedback received at the open house. These are generally stated in order of frequency, with the first item being the most prevalent.

- The future alignment of the 127 Street arterial roadway extension.
- Any impacts on existing residences and River Lot 56 resulting from the alignment of the 127 Street arterial roadway extension (suggestions to locate the roadway along the north portion of the site).
- The potential impact from the proposed development on vegetation and wildlife in River Lot 56.
- The possibility of increased traffic and more homes in the area.
- Support for the proposed development as-is.
- The availability of servicing and the potential for pressure on the existing servicing system as a result of the development.
- Desire to leave the land for agriculture, nature reserve or park space.
- Pleased with the proposed trail system.

The above noted comments were taken into consideration when Sturgeon County processed and approved amendments to the MDP and Sturgeon Valley ASP.

2 Policy Context

2.1 Sturgeon County Municipal Development Plan

The River's Gate OP meets the intent of the following sections of the Sturgeon County Municipal Development Plan (Bylaw 1313/13):

Section G 1.2 *"Reducing the amount of land consumed by residential development in the Capital Region through concentration of growth in the CCRA-O area."*

The River's Gate development reduces the amount of land consumed by residential development in other areas of the County by concentrating growth in the Cluster Country Residential Area O (CCRA-O). The clustering of country residential uses encourages the preservation of lands outside priority growth areas in the County.

Section G.12.1 *"Shall conform to the total number of residential units in the CCRA-O through the application of the CRGP's Country Cluster Residential policies."*

The Capital Region Growth Plan specifies a maximum density target of 2 units per gross hectare for country residential developments in CCRA-O area. The River's Gate development remains below the CRB density maximum of 1.47 units per gross hectare.

Section G 1.2.4 *"Should protect the current character and built-form of the Sturgeon Valley and apply increasingly higher densities progressively to urban built-up areas in Edmonton and St. Albert."*

The River's Gate neighbourhood is within close proximity to the Edmonton and St. Albert municipal boundaries. The proposed smaller form of lots provides a transition of density from the urban built forms of the municipalities to the existing character and the built-form of the Sturgeon Valley.

2.2 Sturgeon Valley Area Structure Plan

To be in general conformance with the Sturgeon Valley Area Structure (Bylaw 882/99), Section 6.4.2 (a) of the ASP will be amended by administration to state that "a range of a lot sizes with 0.5 acres being the minimum, with exception to the area identified by Bylaw 2016/XX within River's Gate – which allows for a minimum lot area of 0.25 acres."

The Country Residential definition located within Appendix A – Glossary of Terms of the ASP will also be amended by administration to include semi-detached dwellings.

3 Neighbourhood Design Principles

The development concept presented in this plan is established on the basis of the opportunities and constraints present in the Plan area, in conformance with applicable statutory requirements, and the key planning principles as outlined below.

Re-establishing our roots ... our roots with nature

3.1 Sustainability and Ecological Stewardship

- Consider the three foundations of sustainability: economy, society and ecology in decision making regarding land use and building form.

- Extend the "green" atmosphere of the Sturgeon River into River's Gate by providing a 30 m Environmental Reserve buffer along the top-of-bank.
- Use existing landscape elements as the basis for new landscape infrastructure.
- Ensure sustainable and cost effective landscape development of the open space areas over the long term with the use of native plant species and the added benefit of the re-establishment of natural habitat.
- Ensure existing and proposed vegetation enhances and creates new habitat corridors and improves the ecological value of the site.
- Minimize the impacts of development on the Sturgeon River.
- Develop a buffer zone for environmental protection adjacent to the Sturgeon River.
- Maximize the benefits gained from the land resource by having the land accommodate numerous functions where possible.
- Consider ways to lower consumption and demand in the development of infrastructure for River's Gate on all applicable resources, both inputs and outputs.
- Conserve and recycle whenever possible onsite.
- Provide flexibility for the introduction of new technologies, as they emerge over time, especially with respect to energy inputs and waste outputs.
- Improve the quality of water run-off into the Sturgeon River by providing stormwater management facilities that clean and enhance water quality prior to discharge.
- Improve efficiency of land use and infrastructure through the classification of residential uses.

Re-establish our roots ... building community ... recreating the forgotten past of what neighbourhoods are all about ...

3.2 Place Making

- Create a cluster country residential neighbourhood with an identifiable focal point.
- Through careful design and planning, encourage the development of active community gathering places which are alive and utilized and promote community interaction.
- Provide publicly accessible interpretive nodes detailing the natural and cultural history of the land.
- Encourage a variety of architectural styles, focusing on compatible integration.
- Establish a gateway into the neighbourhood that identifies a sense of arrival.

3.3 Open Space

- Create a pedestrian friendly environment.
- Provide a simple and understandable pattern of open space nodes, greenways, school/park sites and walkway connections.
- Ensure that park spaces are accessible to all members of the community.
- Provide a variety of opportunities for passive and active recreation experiences, incorporating a variety of activities to encourage community interaction.
- Design different types of park spaces to meet the needs of all users within the community.
- Design safe park spaces.
- Provide public access to the Sturgeon River Valley and Environmental Reserves.
- Include landmarks or visual points of reference within the open space system to provide local context and assist in wayfinding.
- Design a connected and integrated open space system that encourages non-vehicular movement (e.g. pedestrians and bicycles).
- Consider streets as an extension of the park system.

3.4 Neighbourhood Movement and Circulation

- Implement a road hierarchy system of integrated collector and local roadway network.
- Establish sufficient locations for neighbourhood access by a variety of modes, such as automobiles, transit, bicycle and pedestrian connections.
- Integrate land use and circulation patterns considering safety of automobiles, pedestrians and cyclists.
- Provide traffic calming at appropriate locations to moderate vehicular speeds.
- Ensure that pedestrian/bicycle connections to River Lot 56 and the Sturgeon River Valley are highly integrated, direct and legible as part of the open space network.
- Accommodate safe pedestrian movement on all roadways through the neighbourhood using the sidewalk network.
- Accommodate the future extension of 127 Street north of Anthony Henday Drive.

3.5 Implementation

- Ensure that future development incorporates the detailed design and planning of 127 Street.
- Determine the extension and upgrading of services by responding to the market schedule for providing serviced sites.

- Develop park/open areas concurrently with the development of housing.
- Dedicate Environmental Reserve along the Sturgeon Valley ravine to provide a buffer and protect the integrity of the slope.

4 Residential Uses

The River's Gate OP has been prepared in response to an analysis of current and anticipated residential and commercial market demands in Sturgeon County, as well as, the aspirations of the landowners in the plan area. The development enables the logical extension of contiguous residential uses in the Sturgeon Valley. The plan is based on the neighbourhood design principles outlined in the previous section that encourage community connectivity, health and vibrancy through the location and integration of compatible land uses.

Analysis of all of these principles and an assessment of their implications shapes the land use patterns within the OP. In accordance with the development objectives, the River's Gate Neighbourhood has been designed to:

- Be consistent with the general intent and purpose of the cluster country residential development described within the Sturgeon County ASP.
- Provide a framework to deliver a high quality, comprehensively planned community by defining the general pattern and composition of land uses, linkages, servicing designs and development staging.
- Ensure implementation of the plan on an orderly, efficient basis.
- Proceed independently of other development in the Sturgeon Valley area.
- Promote a responsible, efficient growth pattern through logical continuation of development along Sturgeon Road which is adjacent to existing communities (i.e. cluster country residential infill).

The River's Gate OP has been planned and designed to ensure that it can proceed without compromising future development in the surrounding Sturgeon Valley. River's Gate is planned to accommodate future development that is connected, complimentary and integrated.

The proposed land use concept is shown on **Figure 3: Development Concept**. Updated land use and population statistics relating to the Development Concept are contained in **Table 1 Land Use Statistics**.

4.1 Cluster Country Residential Uses

All lots within the neighbourhood are planned as cluster country residential land uses. Most of the lots are a minimum size of 0.5 acres, while this amendment shall allow for a diversification of lot sizes for the remaining lands ranging from 0.25 to 0.5 acres or larger. Implementation of lot sizes will be based on market conditions and consumer preferences at the time of development. The proposed density is in keeping with the intent of providing cluster country residential development as described by the Sturgeon Valley ASP, yet supporting the provision of both hard and soft municipal services.

The proposed OP amendment does not substantially change the residential densities proposed in the original Quail Ridge OP. However, the original plan falls short of the Capital Region Board (CRB) target of 2 dwelling units per gross hectare (du/gross ha) with a density of 1.31 du/gross ha. This plan proposes to increase the density to 1.47 du/gross ha. This brings the plan closer to the Capital Region Board density target of 2 units per gross hectare for Cluster Country Residential Areas.

Legend

-  Country Residential
-  Stormwater Management Facility (SWMF)
-  Buffer Park (MR)
-  Linear Park (MR)
-  Viewpoint Park (MR)
-  Environmental Reserve (ER)
(Below top-of-bank)
-  Environmental Reserve (ER)
(Above top-of-bank - Conservation Setback)
-  Public Utility Lot
-  Top of Bank
-  Urban Development Line
-  Foundation Setback Line
-  Proposed 127 Street Alignment
-  Outline Plan Area Boundary



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RIVER'S GATE OUTLINE PLAN

Figure 3. - Development Concept

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Table 1: River's Gate Outline Plan Amendment - Land Use Statistics

| Land Use | | | |
|---|---------------------|------------------|---------------------|
| | Area (acres) | Area (ha) | % Gross Area |
| Gross Area | 179.52 | 72.65 | 100% |
| Total Environmental Reserve | 70.99 | 28.73 | 40% |
| ER (below top-of-bank) | 65.04 | 26.32 | |
| ER (above top-of-bank - conservation setback) | 5.96 | 2.41 | |
| 127 Street Arterial Roadway Dedication | 28.29 | 11.45 | 16% |
| Total Deductions | 99.28 | 40.18 | |
| | | | % GDA |
| Gross Developable Area | 80.23 | 32.47 | 100% |
| *Total Parks (MR) | 6.71 | 2.72 | 8.4% |
| Buffer Park | 3.56 | 1.44 | |
| Viewpoint Park | 1.09 | 0.44 | |
| Linear Park (MR in SWMF) | 2.07 | 0.84 | |
| Stormwater Management Facility (excludes MR in SWMF) | 7.82 | 3.17 | 10% |
| Circulation Total | 10.42 | 4.22 | 13% |
| Local Roads | 9.90 | 4.01 | |
| Walkways | 0.52 | 0.21 | |
| Total Non-Residential Area | 24.95 | 10.10 | 31% |
| Net Residential Area (NRA) | 55.29 | 22.37 | 69% |
| (portion of 20 m Conservation Easement included in NRA) | | | |
| Residential Land Use | | | |
| Cluster Country Residential | 55.29 | 22.37 | 69% |

* Exact area of Municipal Reserve will be determined at the subdivision stage of development in conjunction with Sturgeon County

| Projected Units and Population | |
|--|------|
| Approximate number of units | 107 |
| Persons per household | 2.50 |
| Projected population at build-out | 268 |
| Units Per Gross Hectare (u/GRha) | 1.47 |
| Units Per Net Residential Hectare (u/NRha) | 4.78 |

The cluster country residential uses are carefully planned clusters or cells of development that provide residential sub-areas. These residential uses are well served by pedestrian linkages and open spaces as proposed in **Figure 4: Open Space Network**. Emphasis on the creation of pedestrian connections to destination and focal points within the neighbourhood will enhance place-making opportunities and the community's sense of place. Furthermore, design guidelines will be implemented within residential areas to ensure human scale, aesthetically pleasing entrances, streetscapes pedestrian nodes, and to address land use transitioning.

5 Parks and Open Space

An integrated open space and pedestrian trail system is proposed for River's Gate as shown on **Figure 4: Open Space Network**. This system continues the trail system in accordance with the County's *Sturgeon Valley Trails Plan* (2004). The east-west pedestrian system connects the park site, top-of-bank walkway, and environmental reserve lands surrounding the Sturgeon River Valley to create a comprehensive open space network. The park and open space concept minimizes the impact of the development on the surrounding area by providing over 50% of the land within the plan area for green space.

A series of interconnected parks are located within the plan area. A viewpoint park is located in the western portion of the Plan area, with frontage along a roadway. The location of this park at the T-intersection provides a vista into the Sturgeon River Valley and a sense of arrival upon entry. A linear park running the length of the site provides recreation and access to the river valley. A buffer park located on the northernmost boundary of the site offers views into the subdivision, and provides a link to existing trails across the river. This park system provides everyday opportunities for active and passive recreation.

The stormwater management facility (SWMF) is also considered an amenity area and part of the open space system. Besides its storm servicing functions, additional open space beyond the wet areas will be included within the SWMF facility. The stormwater management pond provides a visual amenity and is a key component of the attractive character of River's Gate. The SWMF is linked to the pedestrian network and complements the open space system by providing additional areas for passive recreation.

The planted landscape design of the SWMF and walkway system within the plan area is encouraged to be of native plant material in order to extend and support the ecology of the Sturgeon Valley and to connect biologically with this vegetative network.

The open space concept facilitates the development of a more walkable community, encourages a healthy community lifestyle and better quality of life. Combined, the total open space and amenity space area within the plan including Environmental Reserve and Municipal Reserves totals 34.62 hectares or close to 50% of the gross area.

5.1 Parks and Pedestrian Linkages

A major feature of the plan is the extension of the "green" atmosphere from the Sturgeon Valley into River's Gate to build a connected open space concept. The entrance into the community provides a vista into the Sturgeon Valley and a sense of arrival.

The major pedestrian connection integrates residential clusters together and connects with the Sturgeon River Valley, River Lot 56 and the St. Albert Red Willow Park trail system.

Legend

-  Stormwater Management Facility (SWMF)
-  Buffer Park (MR)
-  Linear Park (MR)
-  Viewpoint Park (MR)
-  Environmental Reserve (ER)
(Below top-of-bank)
-  Environmental Reserve (ER)
(Above top-of-bank - Conservation Setback)
-  Public Utility Lot
-  Major Pedestrian Linkage
-  Top of Bank
-  Top of Bank Walkway
-  Urban Development Line
-  Foundation Setback Line
-  Proposed 127 Street Alignment
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RIVER'S GATE OUTLINE PLAN

Figure 4. - Open Space Network

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5.2 Environmental Reserve

Lands below the top-of-bank and 100-year floodplain have been dedicated as Environmental Reserve (ER). Further, pursuant to the policies within the Sturgeon Valley ASP, a 30 m wide buffer zone along the top-of-bank/100-year floodplain line is also designated as ER. The area of ER dedicated within the plan area totals 28.73 hectares or 70.99 acres, accounting for 40% of the gross plan area.

An additional 20 m setback from the urban development line will also be considered for all residential lots backing onto the Sturgeon River. Combined, these measures total a 50 m setback from the top-of-bank/100-year floodplain line to ensure the protection and integrity of the slope of the Sturgeon River Valley and any environmentally sensitive features of this area. The 50 m setback also preserves a major portion of the existing vegetation along the top-of-bank/100-year floodplain.

6 Transportation

The transportation network bordering and within River's Gate consists of a system of arterial, collector and local roadways, pedestrian connections, walkways and corridors to accommodate the movement of vehicles, goods and people. The proposed road connections are shown on **Figure 5: Transportation Network**.

This hierarchy of roads will provide the necessary interconnections appropriate to efficiently and effectively accommodate vehicle traffic flows at the arterial, collector and local roadway levels. The transportation network has been designed to meet both the internal and external traffic flow requirements generated by the neighbourhood, in accordance with Sturgeon County guidelines and standards.

A Transportation Study was undertaken by Bunt and Associates, which demonstrates the proposed road network will accommodate additional residential density. This study was submitted to County administration under a separate cover.

6.1 Regional Network Accessibility

Development within River's Gate will benefit from a high level of accessibility to Sturgeon County, the City of St. Albert and the City of Edmonton by virtue of its close proximity to a number of major existing and proposed arterial and express roadways. These include:

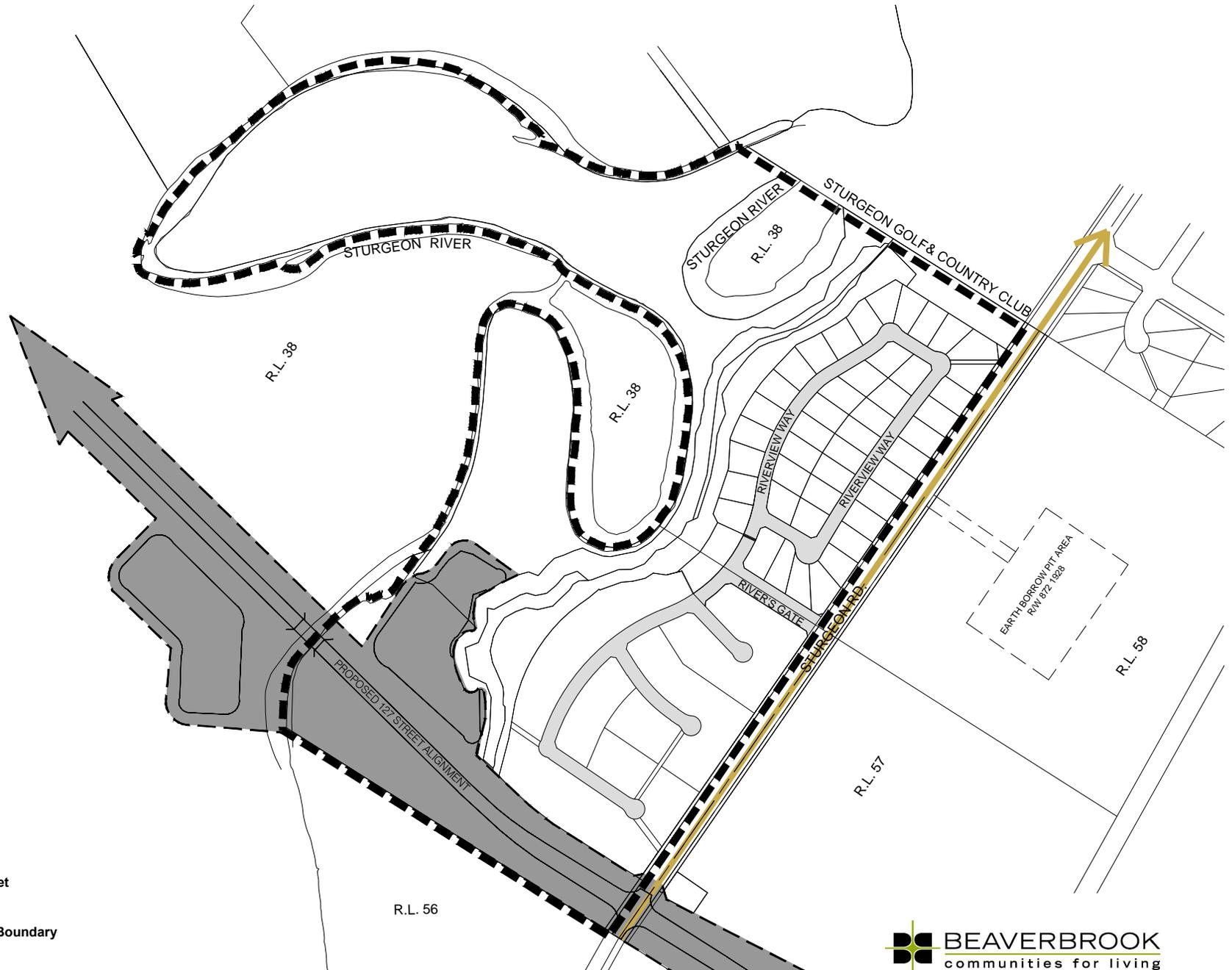
- Sturgeon Road
- Range Road 251
- 195 Avenue
- Poundmaker Road
- Future arterial extension of 127 Street from Anthony Henday Drive
- Anthony Henday Drive

The northeast portion of Anthony Henday Drive is complete. The development of this facility provides a high level of accessibility to the greater Metropolitan Edmonton region for residents of the St. Albert and the Sturgeon Valley.

Sturgeon Road is the existing arterial roadway connection to the City of St. Albert, the City of Edmonton and through the Sturgeon Valley. Sturgeon Road will provide direct access to River's Gate.

6.1.1 Future 127 Street Extension

An arterial roadway connection from Anthony Henday Drive to the Sturgeon Valley is a logical extension of the regional transportation network and has been reflected in a number of planning documents within the region. Detailed design measures such as landscaping and berming can be discussed with the County at the subdivision stage. The goal of any such design measures would be to mitigate perceived or potential impacts from the future arterial roadway, in accordance with the functional and detailed planning for the roadway. The connecting arterial roadway as identified by the Functional Planning Study (ISL Engineering, 2012) is incorporated into the design of River's Gate (**Figure 5: Transportation Network**). A noise attenuation study will be conducted in conjunction with the detailed subdivision planned and engineering design for River's Gate.



Legend

-  Arterial Road
-  Local Road
-  Proposed 127 Street Alignment
-  Outline Plan Area Boundary



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RIVER'S GATE OUTLINE PLAN

Figure 5. - Transportation Network

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6.2 Internal Roadway System

Sturgeon Road serves to accommodate the neighbourhood's primary internal and external traffic flows. Access to Sturgeon Road will be provided through a collector roadway connecting into the plan area.

Future traffic impacts have been considered in the design of the roadway system. The River's Gate subdivision access has been designed to a single entry lane and 2 exit lanes. An east bound to north bound left turn lane on Sturgeon Road will be accommodated.

The local roadway network will connect the plan sub-areas and provide convenient access/egress within River's Gate. These connections will prevent traffic shortcutting and facilitate pedestrian movement to park spaces in conjunction with the pedestrian pathway system.

7 Engineering and Servicing

Details regarding servicing for the River's Gate OP are provided in the associated Servicing Report submitted under separate cover by IBI Group. Interim servicing solutions may be reviewed and accepted by the County in order to accommodate development on a phased basis. The following section provides an overview of the neighbourhood servicing scheme. The proposed servicing schemes are depicted on **Figure 6: Sanitary Servicing**; **Figure 7: Storm Servicing**; and **Figure 8: Water Servicing**.

7.1 Sanitary Servicing

7.1.1 Background

Developed lands to the northeast along Sturgeon Road drain to a Sturgeon County lift station northeast of the site and east of Sturgeon Road, located in the Manor Estates subdivision. The lift station discharges into a 200 mm forcemain running south along the west side of Sturgeon Road, connecting to Alberta Capital Region Wastewater Commission (ACRWC) Lift Station in St. Albert at Sir Winston Churchill Avenue and Sturgeon Road. There is another 250 mm forcemain from a Sturgeon County lift station which carries flow from further west across Sturgeon River, and heads east then south along the east side of Sturgeon Road to the ACRWC lift station. The ACRWC lift station discharges to the east towards the Alberta Capital Region Wastewater Treatment Plant.

ACRWC accepts flows from Sturgeon County, thereby providing another opportunity to accommodate the sanitary system flows generated from the subject lands directly into the ACRWC lift station located in St. Albert. Currently, the ACRWC lift station has 4 incoming lines. The capacity of both the lift station and downstream pipe to accommodate the sanitary flows generated from the proposed development needs to be confirmed with ACRWC through the detailed design process.

7.1.2 Proposed Sanitary Scheme

The Sturgeon Valley Utility Servicing Update - Draft Report prepared by Sameng Inc. in September, 2008, outlines the ultimate sanitary servicing scheme for these lands. A sanitary trunk sewer will service the lands north of the Sturgeon River and will discharge into a sanitary lift station to be located in the River's Gate lands. This lift station will ultimately discharge through a new forcemain which will run south to connect into the SCRWC START line on 195 Avenue. The River's Gate development utilizes an interim lift station to handle to smaller flows

Legend

- Existing Lift Station
- Existing 250mm forcemain
- Future Sanitary Lift Station
- ← Existing Sanitary Pipe and Flow Direction
- - - Future Sanitary Service Connection and Flow Direction
- Proposed 127 Street Alignment
- Outline Plan Area Boundary



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RIVER'S GATE OUTLINE PLAN

Figure 6. - Sanitary Servicing

DATE: August 22, 2016
DESIGNED BY: GS/AB
DRAWN BY: MM
CHECKED BY: AB
SCALE: NTS
JOB NUMBER: 38503.100



Legend

-  Stormwater Management Facility (SWMF)
-  Linear Park (MR)
-  Viewpoint Park (MR)
-  Environmental Reserve (ER)
-  Buffer Park (MR)
-  Existing Storm Connection
-  Existing Storm Sewer
-  Future Storm Sewer
-  Proposed Storm Sewer Manhole
-  Direction of Surface Flow
-  Top of Bank
-  Proposed 127 Street Alignment
-  Outline Plan Area Boundary



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RIVER'S GATE OUTLINE PLAN

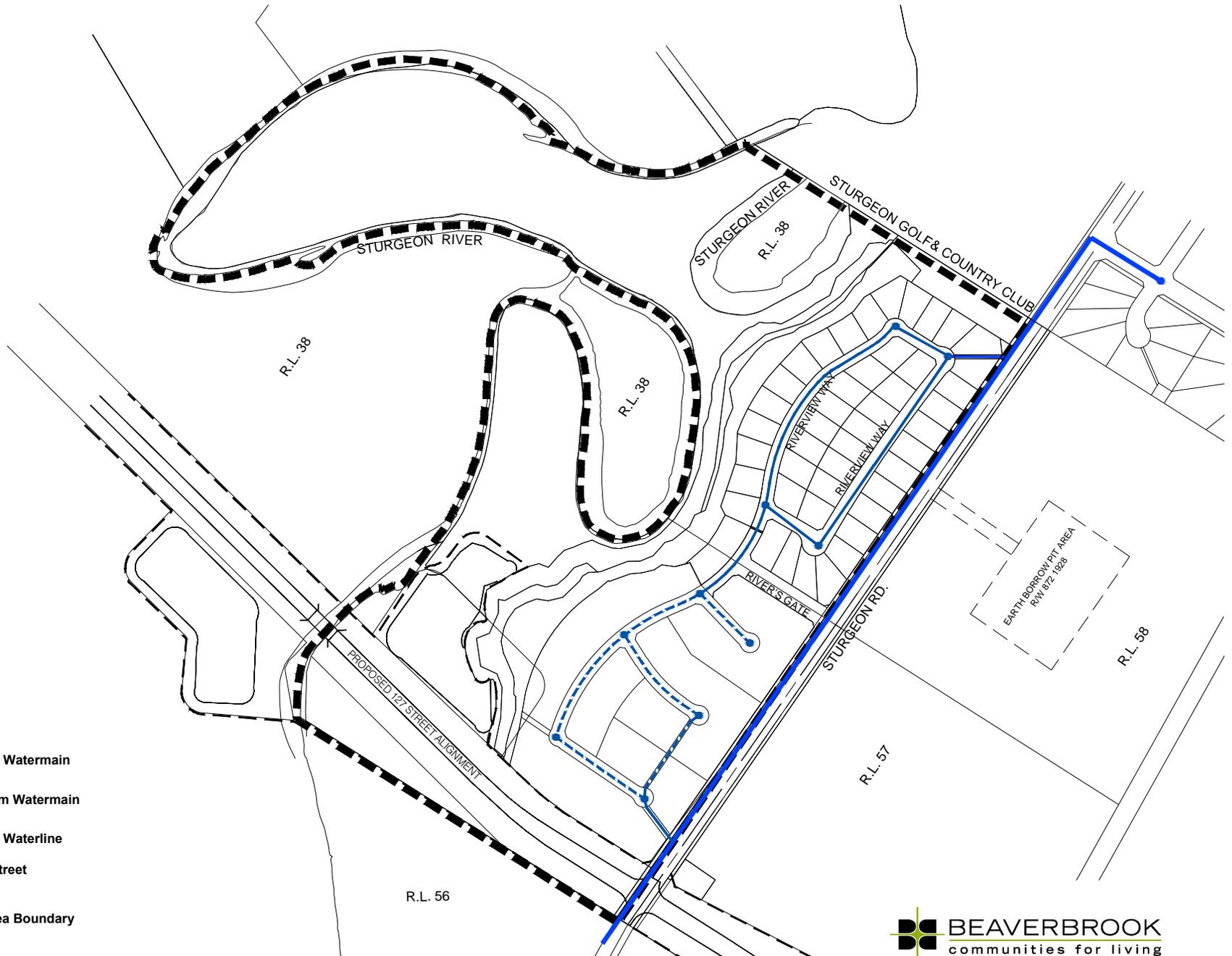
Figure 7. - Storm Servicing

DATE: August 22, 2016
DESIGNED BY: GS/AB
DRAWN BY: MM
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SCALE: NTS
JOB NUMBER: 38503.100



Legend

-  Existing 200mm Watermain
-  Proposed 200mm Watermain
-  Existing 150mm Waterline
-  Proposed 127 Street Alignment
-  Outline Plan Area Boundary



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RIVER'S GATE OUTLINE PLAN

Figure 8. - Water Servicing

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associated with the initial stages of development. Once development north of the river is advanced the river crossing and ultimate lift station can be constructed.

The River's Gate development as currently constructed, has sanitary flows via gravity to a collection manhole located on the south side of River's Gate road. Warning signals are communicated electronically to the County, consultants, and the developer when it is time to drain the sanitary system.

The proposed sanitary scheme for the River's Gate lands will conform to the suggested configuration of the Sameng report. The sanitary will flow via gravity southeast to the future lift station currently under construction adjacent to Sturgeon Road and the future 127 Street. This forcemain will be connected to the existing forcemain along Sturgeon Road via an injection point, and sanitary flow from the River's Gate would continue on to the ACRWC lift station in St. Albert at Sir Winston Churchill Avenue and Sturgeon Road. Storage will be provided at the lift station so that the sanitary flows can be stored for short periods and injected into the existing forcemain in off-peak periods. This concept is illustrated on **Figure 6: Sanitary Servicing**.

7.2 Stormwater Servicing

The slope of the lands facilitates stormwater drainage by pipe or surface as required towards the Sturgeon River, and integration of stormwater management facilities with natural areas may provide natural and aesthetic benefits.

The existing stormwater management for the plan area incorporates natural drainage techniques and bioswales, as appropriate, in conjunction with underground piping, wetlands and other stormwater management facilities (SWMF) to provide a functional and aesthetically pleasing system. Naturalized planting is used to aid in stormwater management. For the proposed River's Gate OP, pipes and surface drainage collect the stormwater from the area and drain into the SWMF located in the western portion of the plan area for retention and cleansing. Stormwater flows are directed to outfall into the Sturgeon River the stormwater management system, and particularly the controlled discharge to the Sturgeon River is designed to mimic the existing natural overland drainage from the lands. The objective is to maintain the moisture regime for the oxbows and the natural habitat in the floodplain. This concept has been reviewed and approved by Alberta Environment. The existing stormwater servicing concept is illustrated on **Figure 7: Storm Servicing**.

7.3 Water Servicing

The closest connection to existing water lines is just north of the plan area to existing 150 mm pipes in Manor Estates II. Connection to these pipes with a line running south along Sturgeon Road will provide a water connection to the plan area. The Allin Ridge Reservoir and distribution system provides water to this source node. The County has indicated that the system will require upgrading to service the area.

River's Gate has an existing 200 mm watermain connection through a public utility lot located in the north east. It is proposed that the watermain will loop through the neighbourhood and into a watermain along Sturgeon Road.

The Sameng Report indicates that the County may consider upgrading the water network to provide fire fighting pressures. In that event it would be necessary to oversize the proposed watermain extensions for River's Gate in order to accommodate the upgraded pressure requirements. The water servicing proposed for the area is illustrated in **Figure 8: Water Servicing**.

7.4 Shallow Utilities

Shallow utilities including power, gas and telecommunication services are all located within close proximity to the OP. Shallow utilities have been extended to service the northeast area of River's Gate, and will be extended as required to the southeast area intended for future development.

8 Implementation

8.1 Zoning and Subdivision

Sturgeon Valley has a unique character, with the blend of agricultural and country residential uses in a natural river valley setting. In order to maintain this character, the majority of the lands in the River's Gate plan area has been designated for cluster country residential uses. The green space and/or proposed public lands designated as Environmental Reserve, Municipal Reserve and Stormwater Management Facility have been dedicated to the County at the time of subdivision. The north portion of the plan area is currently zoned CR-2 (Country Residential - Two) Land Use district, which allows for 0.5 acre country residential lots. This plan amendment provides the opportunity for the creation of semi-detached and smaller county residential uses under a Site Specific Direct Control District, submitted to the County under a separate cover with this plan amendment.

8.2 Staging of Development

Development in River's Gate represents a logical and contiguous extension of the existing country residential land use pattern within the Sturgeon Valley. The development will be initiated in response to market conditions.

8.3 Rationale

- The Outline Plan will establish a land use framework, infrastructure servicing concept and development objectives for the future development of River's Gate Neighbourhood.
- The proposed development represents a logical extension and progression of development along Sturgeon Road.
- By virtue of its location between existing communities, the plan area is a suburban or cluster country residential infill site located in between the existing communities of Manor Estates II and Sturgeon Heights immediately to the north; and existing communities of Erin Ridge, Oakmont and Kingswood in the City of St. Albert.
- The total open space area within the plan including Environmental Reserve, Municipal Reserve and stormwater management facilities totals 34.62 hectares or 47% of the gross area.
- The River's Gate OP proposes a land use and servicing concept that can be developed in conjunction with the overall review of the Sturgeon Valley Area Structure Plan, without prejudicing opportunities for future development, and incorporates the overall vision for the future Sturgeon Valley.
- The design of River's Gate incorporates the planned alignment of the future 127 Street extension.
- The development is immediately serviceable and will ensure a continuous supply of land for residential development in the Sturgeon Valley.
- It is essential that the planning and land development process be initiated in a timely manner.