



FUNCTIONAL SERVICING BRIEF

South Niagara Falls Redevelopment City of Niagara Falls July 2021

INTRODUCTION

Upper Canada Consultants has been retained to undertake and provide a Functional Servicing Brief pertaining to a proposed redevelopment of lands located in south Niagara Falls. This report has been prepared in support of an application for Official Plan Amendment that seeks to change the land use designation of the subject lands from Resort Commercial and Open Space to Residential, Commercial and Environmental Protection Area to facilitate a future, comprehensive redevelopment of the property.

The intent of this Brief is to provide an overview of existing municipal services in the general area, as well as provide an overview of projected servicing requirements to support the redevelopment of the properties as a new, primarily residential neighbourhood.

This brief will:

1. Identify domestic and fire protection water service needs for the site;
2. Identify sanitary servicing needs for the site; and,
3. Identify stormwater management needs for the site.

SUBJECT LANDS

The subject lands are comprised of multiple parcels of urban land that are generally bounded by the Welland River to the north, a Provincially Significant Wetland to the west, Lyon's Creek to the south and the Niagara Boating Club to the east. The site has existing legal frontage along Stanley Avenue (Regional Road 102) and Lyons Creek Road (Regional Road 47).

The subject lands are approximately 82.7 hectares in size and have contained several different land uses historically. Most recently, the lands west of Stanley Avenue were operating as the King Waldorf Trailer Park, while the lands east of Stanley Avenue were operating as the Oakland's Golf Course until 2019. The additional lands to the south of Lyon's Creek Road have remained vacant.



A conceptual development plan has been prepared by Upper Canada Consultants for these lands and has been used to inform the recommendations in this Brief. A copy of the conceptual plan is provided as Appendix A.

WATER SERVICING

The proposed development will be serviced by the existing 300mm diameter PVC municipal watermain located on the east side of Stanley Avenue (Regional Road 102), and on the south side of Lyons Creek Road (Regional Road 47), east of Stanley Avenue. The internal watermain design will be based on a future Draft Plan of Subdivision to be filed after the approval of the Official Plan Amendment.

Fire protection will be provided to the proposed development with municipal fire hydrants located within the development block. The spacing and location shall be identified as part of future detailed design.

SANITARY SERVICING

There is an existing 825mm diameter Regional trunk sanitary sewer located on the north side of the Welland River on Stanley Avenue (Regional Road 102), approximately 240m north of the intersection with Chippawa Parkway. The existing 825mm diameter sewer ultimately conveys sanitary flows east to the South Side Low Lift Sanitary Pumping Station on the Chippawa Parkway. It is proposed to convey sanitary flows from the proposed development to the existing 825mm diameter Regional trunk sanitary sewer on Stanley Avenue (Regional Road 102). Sanitary flows from the proposed development will be conveyed to a proposed sanitary pumping station located within the development before being conveyed via forcemain to the existing Regional trunk sanitary sewer.

The Region of Niagara has implemented plans to construct a wastewater treatment plant within the south Niagara Falls area to accommodate future projected development in the Region. It is expected the facility will be located north of Rexinger Road, adjacent to Baden-Powell (Grassy Brook) Park, west of the proposed development. Per discussions with the City of Niagara Falls and Region of Niagara, future plans for the wastewater treatment plant would include a sanitary sewer being constructed on Lyons Creek Road (Regional Road 47) to service the Chippewa area. At that time, it is expected the sanitary pumping station and forcemain conveying sanitary flows to the existing Regional trunk sanitary sewer would be decommissioned, and sanitary flows would be diverted to the new sanitary sewer.



STORMWATER MANAGEMENT PLAN

The following is a summary of the stormwater management plan for the proposed development. The design criteria, which has been provided by the City of Niagara Falls and Region of Niagara includes the requirement to improve stormwater quality to MECP Enhanced Protection levels (80% TSS removal) before discharging to Lyons Creek. Quantity controls are not considered necessary for this development as the site outlets at the absolute lower end of the watershed of Lyons Creek and the Welland River.

It is intended to convey the peak stormwater flows generated within the site to a proposed stormwater management facility shown on the Conceptual Plan (Appendix A) to provide the required quality controls before ultimately outletting to Lyons Creek. Future detailed design of the proposed storm sewer system and stormwater management facility will be provided as part of the future Draft Plan of Subdivision application process.

CONCLUSIONS AND RECOMMENDATIONS

Therefore, based on the above comments provided for this site, the following summarizes the servicing for this site.

1. The existing 300mm diameter watermain on Lyons Creek Road (Regional Road 47) and Stanley Avenue (Regional Road 102) will provide both domestic and fire protection water supply to the proposed development.
2. Sanitary flows will outlet to the existing 825mm diameter Regional trunk sanitary sewer on Stanley Avenue (Regional Road 102).
3. The construction of the new South Niagara Falls Regional wastewater treatment facility will provide the necessary capacity to support the development of the subject lands in their entirety.
4. Quality controls will be provided by a stormwater management facility and meet the required design criteria of MECP Enhanced Protection (80% TSS removal) before outletting to Lyons Creek.



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ENGINEERS / PLANNERS

Based on the above and the accompanying Conceptual Plan there exists adequate municipal servicing for this development. We trust the above comments are satisfactory for approval. If you have any questions or require additional information, please do not hesitate to contact our office.

Yours very truly,
Prepared By:

Kurt Tiessen, E.I.T.

Encl.



Reviewed By:

Jason Schooley, P.Eng.
July 7, 2021



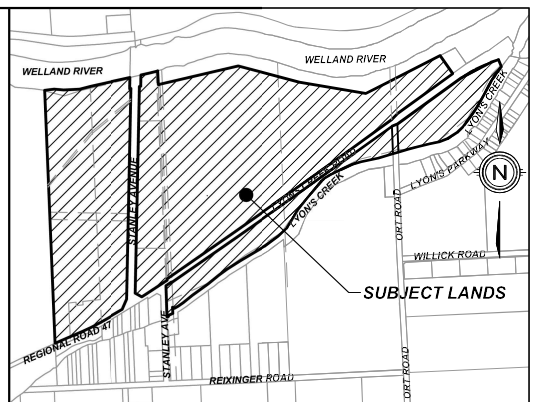
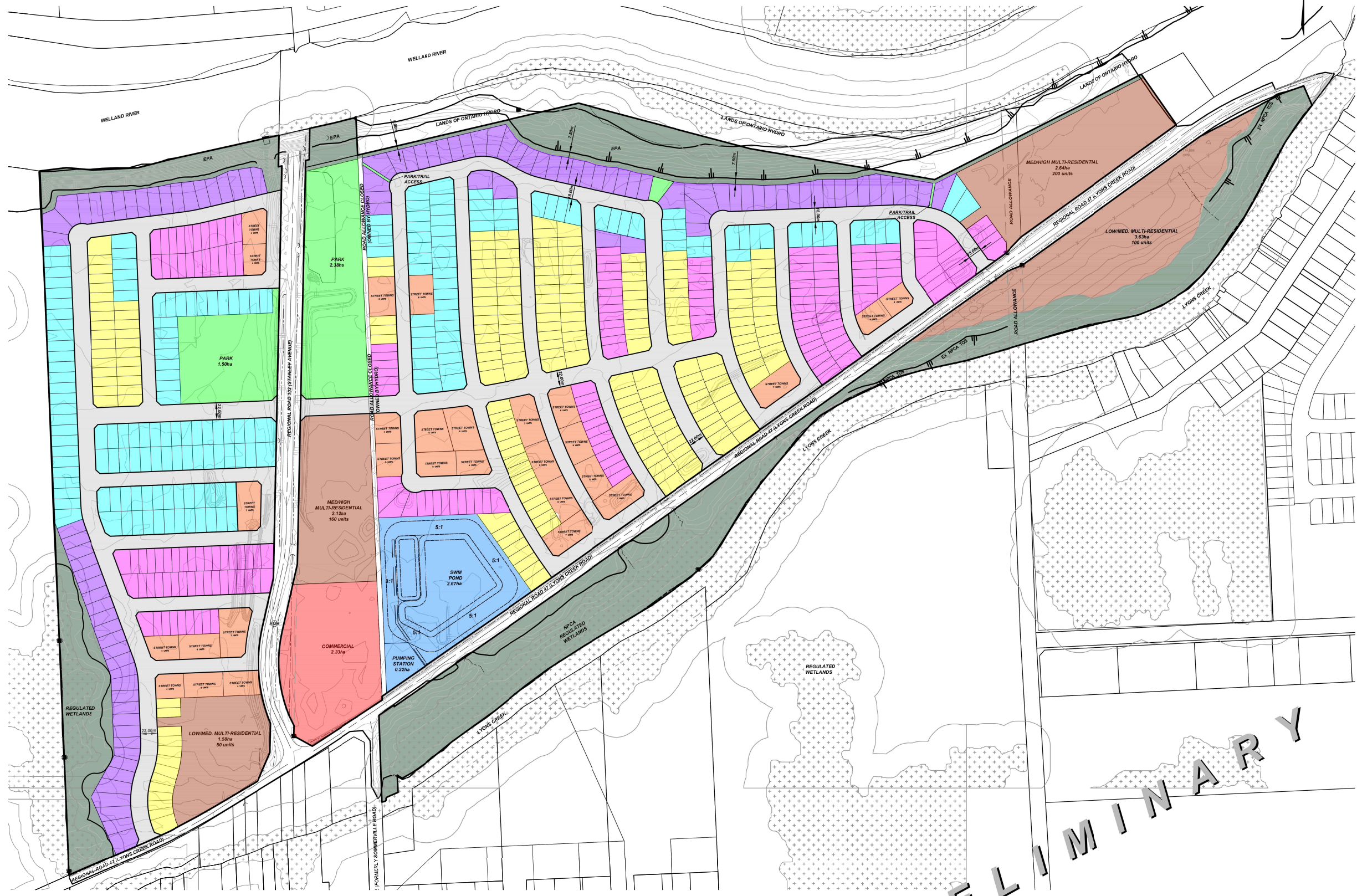
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APPENDIX A

Conceptual Development Plan (17105-CDP)

CONCEPTUAL DEVELOPMENT PLAN

SOUTH NIAGARA FALLS REDEVELOPMENT



KEY PLAN
N.T.S.

CONCEPT PLAN OF SUBDIVISION

LEGAL DESCRIPTION

PART OF LOTS 1, 2 & 3
BROKEN FRONT CONCESSION WELLAND RIVER
and
PART OF THE ROAD ALLOWANCE BETWEEN
LOTS 2 & 3 (CLOSED BY BY-LAW)
BROKEN FRONT CONCESSION WELLAND RIVER
and
PART OF LOTS 19 & 20 - CONCESSION 3
all being in the former Township of Willoughby,
now the
CITY OF NIAGARA FALLS
REGIONAL MUNICIPALITY OF NIAGARA

- STREET TOWNS
- SINGLE RESIDENTIAL - 10.67m (35')
- SINGLE RESIDENTIAL - 12.20m (40')
- SINGLE RESIDENTIAL - 13.72m (45')
- SINGLE RESIDENTIAL - 15.24m (50')
- MULTI-RESIDENTIAL
- COMMERCIAL
- PARK
- EPA LANDS

LAND USE SCHEDULE

LAND USE	LOT/BLOCK	# OF UNITS	AREA(ha)	AREA(%)
SINGLE RESIDENTIAL 10.67m		180	6.84	8.27
SINGLE RESIDENTIAL 12.20m		217	9.01	10.90
SINGLE RESIDENTIAL 13.72m		182	8.67	10.48
SINGLE RESIDENTIAL 15.24m		100	5.91	7.15
STREET TOWNS		155	4.68	5.66
MULTI-RESIDENTIAL		510	10.02	12.12
STORMWATER MGMT FACILITY			2.89	3.50
PARKS/TRAILS			4.60	5.56
NEIGHBOURHOOD COMMERCIAL			2.33	2.82
ROADWAY			13.92	16.83
ENVIRONMENTAL PROTECTION			13.83	16.72
TOTAL		1344	82.88	100.00

DEVELOPABLE AREA = 69.05ha
DEVELOPABLE DENSITY = 19.46 units/ha

#	ISSUED FOR REVIEW / REVISION	DATE	TA	INIT
0		2021-07-06		



DRAWING TITLE CONCEPTUAL DEVELOPMENT PLAN OF SUBDIVISION	DRAFTING	MK/TA
	DATE	JULY 6, 2021
	PRINTED	JULY 7, 2021
	SCALE	1:2500
	DWG. No.	17105-CDP
	REV	0

PRELIMINARY