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375 DIDSBURY ROAD

Serviceability Report

Prepared for: FCRI PROPERTIES LP

Engineering excellence. Planning progress. Liveable landscapes.

375 DIDSBURY ROAD
OTTAWA, ONTARIO

SERVICEABILITY REPORT

Prepared By:

NOVATECH
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario
K2M 1P6

Issued: July 13, 2026

Novatech File: 125105
Report Ref: R-2026-061

NOVATECH
Engineers, Planners & Landscape Architects

July 13, 2026

City of Ottawa
Planning, Real Estate and Economic Development Department
Development Review – West Branch
110 Laurier Avenue West
Ottawa, ON
K1P 1J1

Attention: **Jocelyn Cadieux**
Planner

Reference: **Serviceability Report**
Proposed re-zoning
375 Didsbury Road, Ottawa, Ontario
Novatech File No.: 125105

Enclosed is a copy of the 'Serviceability Report' for the proposed re-zoning located at 375 Didsbury Road, in the City of Ottawa. This report addresses the approach to site servicing and conceptual stormwater management to support re-zoning.

Please contact the undersigned, should you have any questions or require additional information.

Yours truly,

NOVATECH

Alex McAuley, P.Eng.
Senior Project Manager | Land Development Engineering

cc: **Fel Petti, FCRI PROPERTIES LP**

Suite 200, 240 Michael Cowpland Drive, Ottawa ON K2M 1P6 Tel: 613.254.9643 Fax: 613.254.5867 www.novatech-eng.com

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LIST OF APPENDICIES

1.0 INTRODUCTION

Novatech has been retained to prepare the serviceability report in support of proposed re-zoning for the property located at 375 Didsbury Road, in the City of Ottawa.

1.1 Purpose

This report outlines the conceptual servicing design for the subject property with the respect to water, sanitary, and storm servicing and a conceptual approach to stormwater management.

1.2 Site Description and Location

The subject site, approximately 7.30 hectares (18.03 acres) in size, is part of the Kanata West Business Park and is located on the west side of Didsbury Road, north of Campeau Drive and south of Terry Fox Drive.

The site is relatively flat, and it is covered by natural green features including grass, bushes, and trees. The legal description of the subject site is designated as Part of Lot 3, Concession 1 Geographic Township of March, City of Ottawa. **Figure 1** provides an aerial view of the site.

Figure 1 – Aerial View of the Site

1.2.1 Grading Constraints

Based on the Geotechnical report (PG7751-1) prepared by Paterson group, the subject site has a grade raise restriction of 0.5m to 1.2m above the existing grade. Part of the site is currently

located within the Carp River floodplain and would be raised above the existing floodplain, per the Carp River Restoration Project.

1.3 Potential Development

The subject site re-zoning could include a variety of commercial uses, including paved parking area. In addition to the existing Campeau Drive access, it is anticipated that additional access would be provided from the Didsbury Road.

The proposed development would be serviced by connecting to the existing municipal sanitary sewer on Didsbury Road, and watermain on Didsbury Road and Campeau Drive. The storm drainage from the site would be pumped into the existing storm stub on Campeau Drive.

1.4 Background Documents

The following documents were reviewed in preparation of the report:

- Geotechnical Investigation Proposed Commercial Development, 375 Didsbury Road, prepared by Paterson Group (PG7751-1, January 15, 2026)
- Taggart – Loblaws Subdivision, Kanata West Servicing Report, prepared by Stantec (1604-00402, June 11,2013)
- Taggart – Loblaws Subdivision, Stormwater Management Facility Design Report, prepared by Stantec (1604-00402/83, June 11, 2013)
- City of Ottawa Sewer Design Guidelines (December 2025)
- City of Ottawa Water Distribution Design Guidelines (December 8, 2025)
- Stormwater Management Planning and Design Manual, Ministry of the Environment, Ontario (March 2003)

2.0 STORM SEWERS

2.1 Existing Stormwater Servicing

The existing undeveloped site currently sheet drains overland to the existing Didsbury Stormwater Facility (SWMF-1208) adjacent to the site. As part of the Taggart-Loblaws Subdivision stormwater management design, the proposed site is intended to drain to Campeau Drive and the Taggart-Loblaws SWM Facility. An existing 1200mm storm sewer was provided at the existing site entrance on the Campeau Drive to service the site as a part of the subdivision servicing works.

2.2 Proposed Stormwater Servicing

The Taggart-Loblaws SWM report provided the required stormwater criteria for the site. Based on the existing elevations and grade raise restrictions on the subject site, stormwater from the site is intended to be pumped.

The Subdivision Stormwater criteria limit the subject site to a pumped release rate of 150L/s for all storm events up to and including the 100-year event.

Quality control of stormwater runoff is provided downstream in the Taggart-Loblaws SWM facility.

2.2.1 Stormwater Pumping

The proposed development would be serviced by onsite storm sewers outletting to the onsite pump station. The onsite pump station would outlet to the existing storm sewers on Campeau Drive via a stormwater forcemain. Details would be provided at the detailed design stage.

2.2.2 Stormwater Storage

Onsite stormwater storage would be required to attenuate runoff to the allowable pumped release rate. Preliminary calculations result in approximately 4000 cubic meters of storage that would be required for events up to and including the 100-year event.

Due to the requirement for a pump station, some underground storage would be required, with the balance of stormwater storage being provided via surface and rooftop ponding. Storm water storage memorandum is included in **Appendix A.**

3.0 SANITARY SEWERS

3.1 Signature Ridge Sanitary Pump Station

The Signature Ridge Sanitary Pump Station (SRPS) is located on the northeast corner of the site and services approximately 577ha of area, including the subject site. The SRPS has an emergency overflow to the adjacent Didsbury Stormwater Management Facility.

3.2 Sanitary Hydraulic Grade Line

Due to the emergency overflow elevation from the SRPS to the Disbury SWMF, the sanitary sewers in proximity to the SRPS have a surcharged HGL. This results in the HGL of the Didsbury sanitary sewer being approximately 94.14 and 94.42 in Campeau sanitary sewers.

3.3 Sanitary Sewer Design

There is a 675mm diameter sanitary trunk sewer in Campeau Drive and a 750mm diameter sanitary trunk sewer in Didsbury Road. A sanitary stub was provided at the existing Campeau site entrance for the subject site. However, due to the HGL being lower in the Disbury sewer, and the grade raise restriction, the proposed development could be better serviced by a connection to the Didsbury trunk sewer.

The trunk sewer ultimately conveys the flow to the Signature Ridge sanitary pump station. Details about onsite sanitary sewer system would be provided at the detailed design stage.

3.3.1 Peak Sanitary Flows

The theoretical peak sanitary flow for the proposed development was calculated based on the following criteria from the City of Ottawa Sewer Design guidelines:

- Commercial Average Flow = 28,000 L/ha/day
- Commercial peak Factor = 1.5
- Infiltration Rate = 0.33 L/s/ha

The peak sanitary flow calculations are summarized below in **Table 3.1**. Detailed calculations are included in **Appendix B.**

Table 3.1: Peak Sanitary Flow Summary

Proposed Development	Peak Flow (L/s)	Infiltration Flow (L/s)	Total Peak Flow (L/s)
Commercial Store	3.55	2.41	5.96

3.3.2 Taggart-Loblaws Subdivision, Kanata West Sanitary Flow Allotment

The Taggart-Loblaws Subdivision, Kanata West Servicing Report, provides design criteria which was used to calculate the sanitary flow allotment for the subject site. A copy of the sanitary drainage area plan and sanitary sewer design sheet from the Taggart-Loblaws Subdivision Servicing Report are provided in **Appendix B** for reference.

The existing Didsbury Road sanitary trunk sewer was sized based on the following design criteria provided in the design brief:

- Commercial Sanitary Flow = 50,000 L/ha/day
- Commercial Peaking Factor =1.5
- Infiltration Rate = 0.28 L/s/ha

The peak sanitary flow was calculated to be 8.68 L/s.

Therefore, there is adequate capacity within the existing sanitary infrastructure to service the proposed development.

4 WATER SERVICING

4.1 Master Servicing

The proposed site is located within the Taggart-Loblaws Subdivision, and a 203mm service was provided at the existing site entrance on the Campeau Drive from the existing 610mm trunk watermain.

4.2 Watermain Design

Based on the anticipated water demands from the subject site, two watermain connections would be required to service an onsite watermain loop. The proposed onsite watermain would be looped through the site from the existing connection on the Campeau Drive to a new connection to the existing 203mm diameter municipal watermain in Didsbury Road. Details about the size of onsite watermain including building services, hydrants and fire flows would be provided at the detailed design stage.

4.2.1 Domestic Water Demand

The water demands for the proposed development were calculated based on the following criteria of the City of Ottawa Water Design Guidelines and the peaking factors as per the City of Ottawa Water Distribution Design Guidelines:

- Commercial Average Day Demand = 28,000 L/ha/day
- Commercial Peak Factors
    - Max Day = 1.5 x avg. day
    - Peak Hour = 2.7 x max. day

The calculated water demands are summarized in **Table 4.1** below. Calculations are included in **Appendix C**.

Table 4.1: Domestic Water Demand Summary

Proposed Development	Average Day Demand	Maximum Day Demand	Peak Hour Demand
Commercial Store	2.4 L/s	3.5 L/s	6.4 L/s

4.2.2 Fire Flow Demand

Water supply for fire protection would be provided from onsite hydrants. Details for the required fire flow and hydrant locations would be provided at the detailed design stage.

4.2.3 Boundary Conditions

Preliminary water demands and preliminary fire flow calculations were prepared by Novatech and provided to the City to obtain boundary conditions. Refer to the **Appendix C** for details.

The summary of the information provided by the City for two watermain connections is shown below in **Tabel 4.2** and **Table 4.3**.

Table 4.2: Connection 1 – Campeau Drive

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	162.8	95.1
Peak Hour	155.5	84.8
Max Day + Fire Flow (7,000 L/min)	155.5	84.8
Max Day + Fire Flow (16,000 L/min)	155.5	84.8

[1]Ground Elevation = 95.9m

Table 4.3: Connection 1 – Didsbury Road

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	162.8	94.9
Peak Hour	155.5	84.6
Max Day + Fire Flow (7,000 L/min)	155.5	84.6
Max Day + Fire Flow (16,000 L/min)	155.5	84.6

[1]Ground Elevation = 96.1m

Depending on the ultimate uses, pressure reducing valves may be required, consistent with the subdivision master report. The information provided above demonstrates that the proposed watermain would provide adequate system pressures and flows for the subject site.

5 EROSION AND SEDIMENT CONTROL

Temporary erosion and sediment control measures would be implemented on-site during construction in accordance with the Best Management Practices for Erosion and Sediment Control. This includes the following temporary measures:

- Filter socks (catch basin inserts) would be placed in existing and proposed catch basins and catch basin manholes, and will remain in place until vegetation has been established and construction is completed,
- Silt fencing would be placed along the surrounding construction limits,
- Mud mat would be installed at the site entrance,
- The contractor would be required to perform regular street sweeping and cleaning as required, to suppress dust and to provide safe and clean roadways adjacent to the construction site.

Erosion and sediment control measures should be inspected daily and after every rain event to determine maintenance, repair, or replacement requirements. These measures would be implemented prior to the commencement of construction and maintained in good order until vegetation has been established.

6 CONCLUSIONS AND RECOMMENDATIONS

This report has been prepared in support of an application for re-zoning for the subject site.

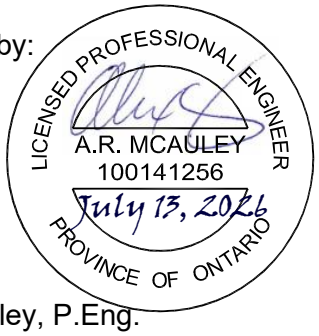
- The subject site has been accounted in the Taggart-Loblaws Servicing report (June 11,2013) and Taggart Loblaws Stormwater Management Facility Report (June 11,2013).
- Stormwater runoff from the site would be captured by an onsite storm sewer system. Stormwater would be pumped to the existing connection on the Campeau Drive at 150L/s release rate.
- The onsite sanitary sewer system would outlet to the existing sanitary sewer on the Didsbury Road.
- The subject site would be serviced by onsite watermains that would be looped from existing connection on the Campeau Drive to the Didsbury Road. The system capacity has been confirmed by the City.
- Temporary and permanent erosion and sediment control measures would be provided.

NOVATECH

Prepared by:

Deepkumar Mendapara
M.Eng. (Civil Engineering), EIT

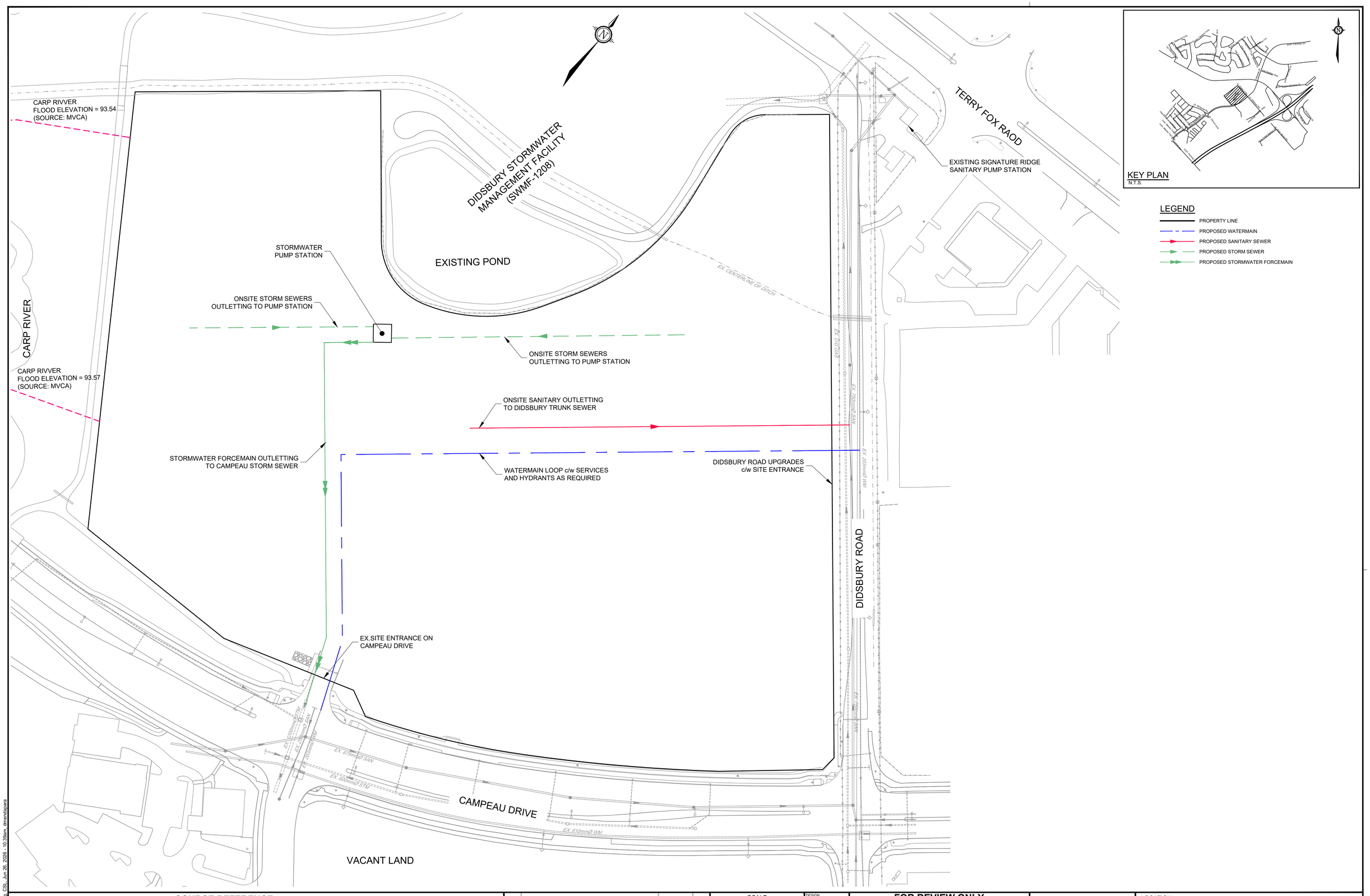
Reviewed by:



Alex McAuley, P.Eng.
Senior Project Manager | Land Development Engineering

Reviewed by:

J. Lee Sheets, CET
Director, Land Development & Public Sector Engineering



KEY PLAN
N.T.S.

LEGEND
- PROPERTY LINE
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED STORMWATER FORCEMAIN

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

SOURCE REFERENCE:
Legal Information: *26160-25 FirstCapitalRealtyInc.PtLt3 C1 March O F- NOV 12 2025*
Topographic Information: *1:2000 City of Ottawa / 2015 / MTM Zone 9, NAD83 CSRS City of Ottawa / Interactive map, GeoOttawa, UCC Novatech Survey - SEP & DEC 2025*
Other: *GEMTEC TCR (102857.005)*

No.	REVISION	DATE	BY
2.	PREPARED FOR COORDINATION	JUL 06/26	ARM
1.	PREPARED FOR COORDINATION	JUN 26/26	ARM

SCALE
1:750
1:750
0 10 20 30

DESIGN DKM
CHECKED ARM
DRAWN DKM
CHECKED ARM
APPROVED ARM

FOR REVIEW ONLY

NOVATECH
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Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
375 DIDSBURY ROAD

DRAWING NAME
CONCEPTUAL SERVICING LAYOUT - FIGURE 2

PROJECT No. 125105
REV REV #2
DRAWING No. 125105-CSL

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PLANIT.DWG - 8x11template

APPENDIX A

SWM Calculations

NOVATECH
Engineers, Planners & Landscape Architects

M E M O R A N D U M

DATE: **JUNE 19, 2026**

TO: **ALEX MCAULEY, P.ENG.**

FROM: **KALLIE AULD, P.ENG.**

RE: **375 DIDSBURY ROAD**
PRELIMINARY STORMWATER MANAGEMENT
CALCULATIONS & STORAGE REQUIREMENTS
125150

CC: **J. LEE SHEETS, C.E.T.**

To determine the approximate storage requirements for the proposed site plan at 375 Didsbury Road, preliminary stormwater management modeling and calculations were completed. This memorandum serves as a summary of the site criteria, existing conditions, and proposed post-development parameters.

Background

The 375 Didsbury site is located within the Taggart-Loblaws subdivision which was designed to consist of mainly commercial developments and associated parking areas. Minor system runoff for the site is to be limited to 150 L/s during all storm events and pumped to the existing stormwater facility adjacent to the Carp River at 305 Roger Neilson Way. As such, significant on-site storage will be required.

The subject site is located within the Carp River Subwatershed is therefore subject to infiltration requirements. Per the Carp River Subwatershed Study, infiltration requirements for the site are 70mm/year. For the site area of approximately 7.6 ha, this equates to 4,900 m^3 of additional infiltration per year.

Storage Calculations

Under proposed conditions, it was assumed that the 7.6 ha site would have a runoff coefficient of 0.83, which equates to 90% impervious area. Using these parameters, a simple OTTHYMO model was created to determine the amount of storage required to control peak flows from the site to 150 L/s. Approximately 4,000m^3 of storage is required to store runoff during the 100-year storm event. To control peak flows to the allowable release rate for the 100-year+20% storm (climate change event), a total of 4,900m^3 is required.

Given the infiltration requirements for the site, a portion of the required storage could consist of underground storage chambers and granular base, which would allow for infiltration to occur.

Suite 200, 240 Michael Cowpland Drive, Ottawa ON K2M 1P6 Tel: 613.254.9643 www.novatech-eng.com

APPENDIX B

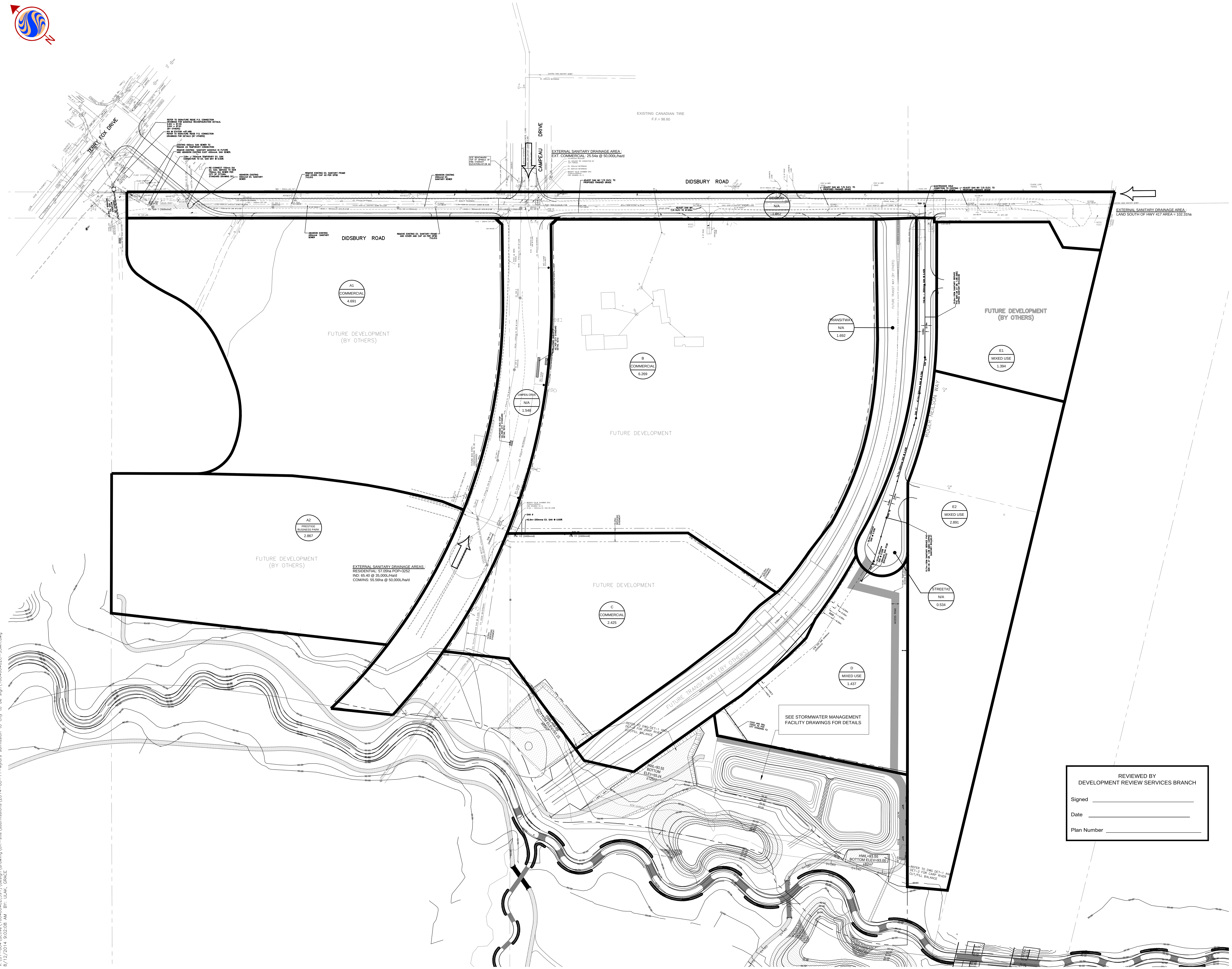
Sanitary Flow Calculations

SANITARY FLOWS FROM PROPOSED DEVELOPMENT

Engineers, Planners & Landscape Architects

Novatech Project #: 125105
Project Name: 375 Didsbury Road
Date: June 2026
Input By: DKM
Reviewed By: ARM
Drawing Reference: N/A

Location	Demand								
	Industrial / Commercial / Institutional (ICI) Flow						Extraneous Flow Area Method		Total Design Flow
Area ID	Commercial / Institutional Area (ha.)	Cumulative Commercial / Institutional Area (ha.)	Average Design Commercial / Institutional Flow (L/s)	Commercial / Institutional Peaking Factor	Cumulative ICI Area (ha.)	Peak Design ICI Flow Q (ici) (L/s)	Cumulative Extraneous Drainage Area (ha.)	Design Extraneous Flow Q(e) (L/s)	Total Peak Design Flow Q(D) (L/s)
Commercial Development	7.3	7.3	2.4	1.5	7.3	3.5	7.3	2.4	6.0



REVIEWED BY
DEVELOPMENT REVIEW SERVICES BRANCH

Signed ______________________

Date ______________________

Plan Number ______________________

ORIGINAL SHEET: ARCH FULL BLEED D (36.00 X 24.00 INCHES)

V:\01-604\active\160400402\(5911)\design\drawing\off-site\submissions\2014-08-11-Mylars sumission to City to be sign\160400402C-SSWR.dwg
8/12/2014 9:02:08 AM BY: ULAK, GRACE

Stantec

Stantec Consulting Ltd.
1505 Laperriere Avenue
Ottawa ON Canada
K1Z 7T1
Tel. 613.722.4420
Fax. 613.722.2799
www.stantec.com

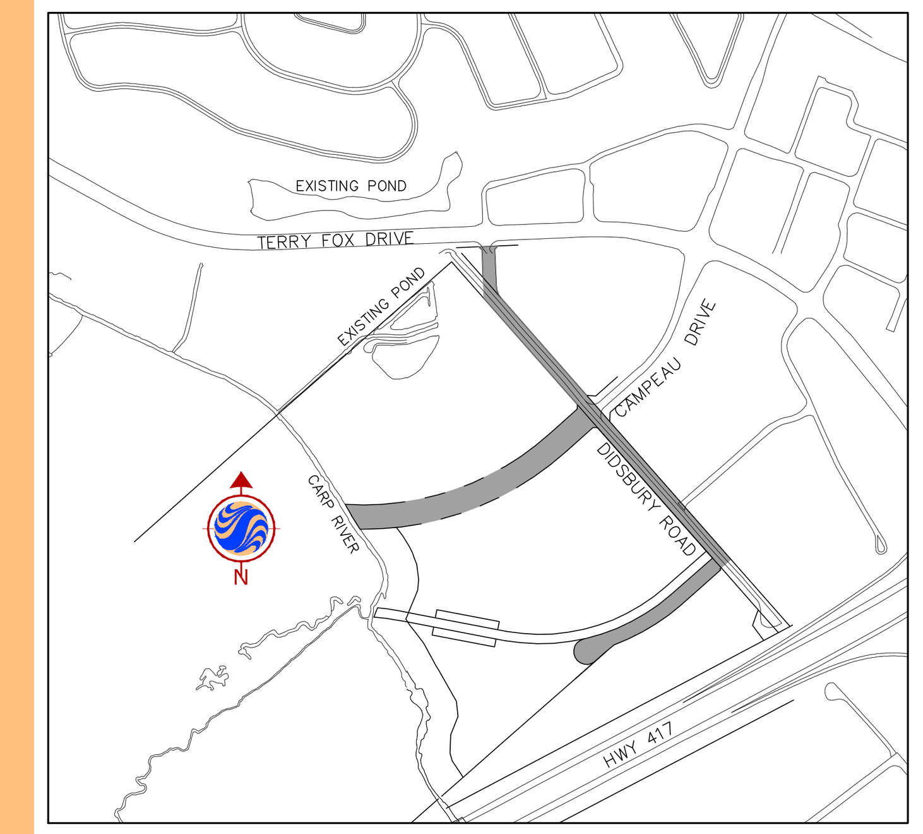
Legend

E1 / MIXED USE / 1.394	AREA ID LAND USE TYPE AREA (HA)
	DRAINAGE DIVIDE BOUNDARY
	PROPOSED SANITARY SEWER
	EXISTING SANITARY SEWER

Community Group Elements

SANITARY
(TO SIGNATURE RIDGE PUMP STATION)

Key Plan



		By	Appd.	YY.MM.DD
17	REVISED STORM SEWER ON DIDSBURY ROAD	SGG	TJW	13.11.14
16	ISSUED FOR TENDER	SGG	TJW	13.09.03
15	REVISED TRANSITWAY SEWER AND ALIGNMENT	MJS	TJW	13.06.03
14	REVISED FOR MOE SUBMISSION	AML/SGG	TJW	13.05.15
13	REVISED AS PER THIRD PARTY COMMENTS	AML/DCT	TJW	13.01.17
12	REVISED AS PER CITY COMMENTS	DCT/GBU	TJW	12.12.17
11	REVISED BRANCH VALVE CHAMBER DETAILS	DCT	TJW	12.12.06
10	REVISED BRANCH VALVE CHAMBER DETAILS	DCT	TJW	12.11.15
9	REVISED PER IBI DESIGN	DCT	TJW	12.11.05
8	REVISED PER TEMPORARY ACCESS ROAD	DCT	TJW	12.10.30
7	REVISED PER TEMPORARY SAN CONNECTION	DCT	TJW	12.10.03
6	REVISED AS PER CITY COMMENTS	DCT	TJW	12.06.22
5	REVISED AS PER CITY COMMENTS	GBU	TJW	12.04.27
4	RESUBMISSION TO CITY (2011)	NPC	TW	11.11.11
3	ADDRESS CITY AND PEER REVIEW COMMENTS	ADF	RMW	07.12.12
2	REVISION TO PHASING	ADF	RMW	07.06.27
1	ISSUED FOR CITY REVIEW	ADF	RMW	06.12.20

Revision

File Name: 160400402C–OFF–SITE	ADF	RMW	ADF	06.12.18
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Seal

Issued for Construction - 2015 01 19

Digitally signed by Geoff Ross
DN: cn=Geoff Ross, o=Urban Land, ou=1604, email=Geoff.Ross@stantec.com, c=CA
Date: 2015.01.19 09:46:45 -05'00'

Client/Project

TAGGART - LOBLAWS SUBDIVISION

KANATA WEST

Ottawa ON Canada

Title

OVERALL SANITARY DRAINAGE PLAN

Project No. 160400402

Scale 1:1250 (0 12.5 37.5 62.5m)

Drawing No. SAN-1

Sheet 17 of 24

Revision 17

Stantec

SUBDIVISION:

Taggart / LPL

KW - North of 417

DATE: 11-Nov-11
REV: 6-Jun-13
DESIGNED BY: aml
CHECKED BY: tw

SANITARY SEWER DESIGN SHEET

(City of Ottawa)

FILE NUMBER: 1604-00402/20

DESIGN PARAMETERS

AVG. DAILY FLOW / PERSON =	350.00	l/p/day	COMMERCIAL	50,000	L/d/Ha
MINIMUM VELOCITY =	0.60	m/s	MIXED USE	50,000	L/d/Ha
MANNINGS n =	0.013		INSTITUTIONAL	35,000	L/d/Ha
MAX PEAK FACTOR =	4.0		INFILTRATION	0.28	l/s/Ha
MIN PEAK FACTOR =	2.4		RESIDENTIAL HARMON PEAKING FACTOR PERSONS/UNIT =		4.0
Peaking Factor Industrial:	1.5				
Peaking Factor Comm. / Inst.:	1.5				

LOCATION				RESIDENTIAL AREA AND POPULATION					COMM		MIXED		INDUST.		C+M+I	INFILTRATION				PIPE					
STREET / LOCATION		FROM M.H.	TO M.H.	AREA (ha)	UNITS	POP.	CUMULATIVE AREA (ha)	CUMULATIVE POP.	PEAK FACT.	PEAK FLOW (l/s)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	PEAK FLOW (l/s)	TOTAL AREA (ha)	ACCU. AREA (ha)	INFILT. FLOW (l/s)	**TOTAL FLOW (l/s)**	DIST (m)	DIA (mm)	SLOPE (%)	CAP. (FULL) (l/s)	VEL. (FULL) (m/s)	VEL. (ACT.) (m/s)
Exist. Didsbury Sewer [1]		Exist	SAN15	102.31											**54.44**			**58.650**	**113.09**	103.0	450	0.25	149.24	0.91	0.88
Roger Neilson	Transitway/S T-2/D	SAN19	SAN18	2.23			2.23	0			1.44	1.44			1.25	3.67	3.67	1.028	**2.28**	35.0	250	0.40	39.78	0.78	0.35
Roger Neilson	E2	SAN18	SAN17				2.23	0			2.89	4.33			3.76	2.89	6.56	1.837	**5.60**	79.7	250	0.40	39.78	0.78	0.45
Roger Neilson		SAN17	SAN16				2.23	0				4.33			3.76	0.00	6.56	1.837	**5.60**	47.1	300	0.40	63.51	0.87	0.44
Roger Neilson	E1	SAN16	SAN15				2.23	0			1.39	5.72			4.97	1.39	7.95	2.226	**7.20**	116.1	300	0.40	63.51	0.87	0.48
Didsbury		SAN15	EX.SAN7	1.66			3.89	0				5.72			59.41	1.66	9.61	61.341	**120.75**	100.0	450	0.25	149.24	0.91	0.90
		EX.SAN7	EX.SAN6				3.89					5.72			59.41		9.61	61.341	**120.75**	100.0	450	0.25	149.24	0.91	0.90
		EX.SAN6	EX.SAN5				3.89					5.72			59.41		9.61	61.341	**120.75**	95.0	450	0.25	149.24	0.91	0.90
		EX.SAN5	EX.SAN4				3.89					5.72			**59.41**		9.61	**61.341**	**120.75**	38.0	450	0.25	149.24	0.91	0.90
Exist. Campeau Sewer [2]		Exist	EX.SAN4								25.54	25.54			22.17	25.54	25.54	7.151	**29.32**		250	0.38	38.76	0.76	0.74
		EX.SAN4	SAN4				3.89					31.26			**81.58**		35.15	**68.492**	**150.07**	6.5	450	0.25	149.24	0.91	0.96
Campeau West of Carp [3]		FUT	SAN8	57.05		3252	57.05	3252	3.412	45.54	55.56	55.56			65.40	65.40	87.99	178.01	178.01	49.843	**183.37**	35.8	675	0.20	391.14	1.06	0.89
On-site	C	SAN10	SAN9				0.00	0			2.43	2.43			2.11	2.43	2.43	0.680	**2.79**	42.9	250	0.65	50.49	0.99	0.44
On-site		SAN9	SAN8				0.00	0				2.43			2.11	0.00	2.43	0.680	**2.79**	31.0	250	0.40	39.78	0.78	0.38
Campeau	A2/Campeau Drive	SAN8	SAN7	1.55			58.60	3252	3.412	45.54		57.99	2.87	2.87	65.40		92.60	4.42	184.86	51.761	**189.90**	47.8	675	0.20	391.14	1.06	0.90
Campeau		SAN7	SAN6				58.60	3252	3.412	45.54		57.99		2.87	65.40		92.60	0.00	184.86	51.761	**189.90**	70.8	675	0.20	391.14	1.06	0.90
Campeau		SAN6	SAN5				58.60	3252	3.412	45.54		57.99		2.87	65.40		92.60	0.00	184.86	51.761	**189.90**	55.3	675	0.20	391.14	1.06	0.90
Campeau	B	SAN5	SAN4				58.60	3252	3.412	45.54	6.27	64.26		2.87	65.40		98.04	6.27	191.13	53.516	**197.10**	68.8	675	0.20	391.14	1.06	0.91
Didsbury		SAN4	SAN3				62.49	3252	3.412	45.54		64.26		34.13	65.40		179.62	0.00	226.28	122.008	**347.17**	94.2	750	0.16	465.12	1.02	0.99
Didsbury	A1	SAN3	SAN2				62.49	3252	3.412	45.54	4.69	68.95		34.13	65.40		183.69	4.69	230.97	123.322	**352.55**	96.0	750	0.16	465.12	1.02	0.99
Didsbury		SAN2	SAN1				62.49	3252	3.412	45.54		68.95		34.13	65.40		183.69	0.00	230.97	123.322	**352.55**	92.1	750	0.16	465.12	1.02	0.99
Didsbury		SAN1	SANMH				62.49	3252	3.412	45.54		68.95		34.13	65.40		183.69	0.00	230.97	123.322	**352.55**	35.2	750	0.55	861.84	1.89	1.52

1 Existing Didsbury sanitary sewer currently conveys wastewater flow from existing developed areas south of Hwy 417. See the Kanata West Master Servicing Study's Fig. 4.2-2 and drawing S-1.

2 Existing Ddisbury sanitary sewer north of Campeau Drive currently conveys wastewater flow from existing developed areas east of Ddisbury Rd. See the Kanata West Master Servicing Study's Fig. 4.2-2 and drawing S-1.

3 Future wastewater flows from development west of Carp River per Kanata West Master Servicing Study's Fig. 4.2-1 and drawing S-1.

4 Missing drainage area information for SANMH north and west inlet pipes (375mm dia. SAN @ 0.30% and 375mm dia. SAN @ 0.15% respectively). Pipes assumed to be flowing at full capacity. Flows (100.32L/s and 70.68L/s) added to total flow column.

APPENDIX C

Water Demands

Water Demand Design Sheet

Engineers, Planners & Landscape Architects

Novatech Project #: 125105
Project Name: 375 Didsbury road
Date: June 2026
Input By: DKM
Reviewed By: ARM
Drawing Reference:

Legend: Input by User | No Input Required | Calculated Cells →

Reference: Ottawa Design Guidelines - Water Distribution (2010 and TBs)
MOE Design Guidelines for Drinking-Water Systems (2008)
Fire Underwriter's Survey Guideline (2020)
Ontario Building Code, Part 3 (2012)

Small System = NO

	# of Dwellings	Area (ha.)	Pop. Equiv.	Average Day Demand (L/s)	Maximum Day Demand (L/s)	Peak Hour Demand (L/s)
Industrial / Commercial / Institutional (ICI) Input						
Commercial Area		7.30		2.37	3.55	6.39
Totals	**0**	**7.30**	**0.00**	**2.37**	**3.55**	**6.39**

Summary

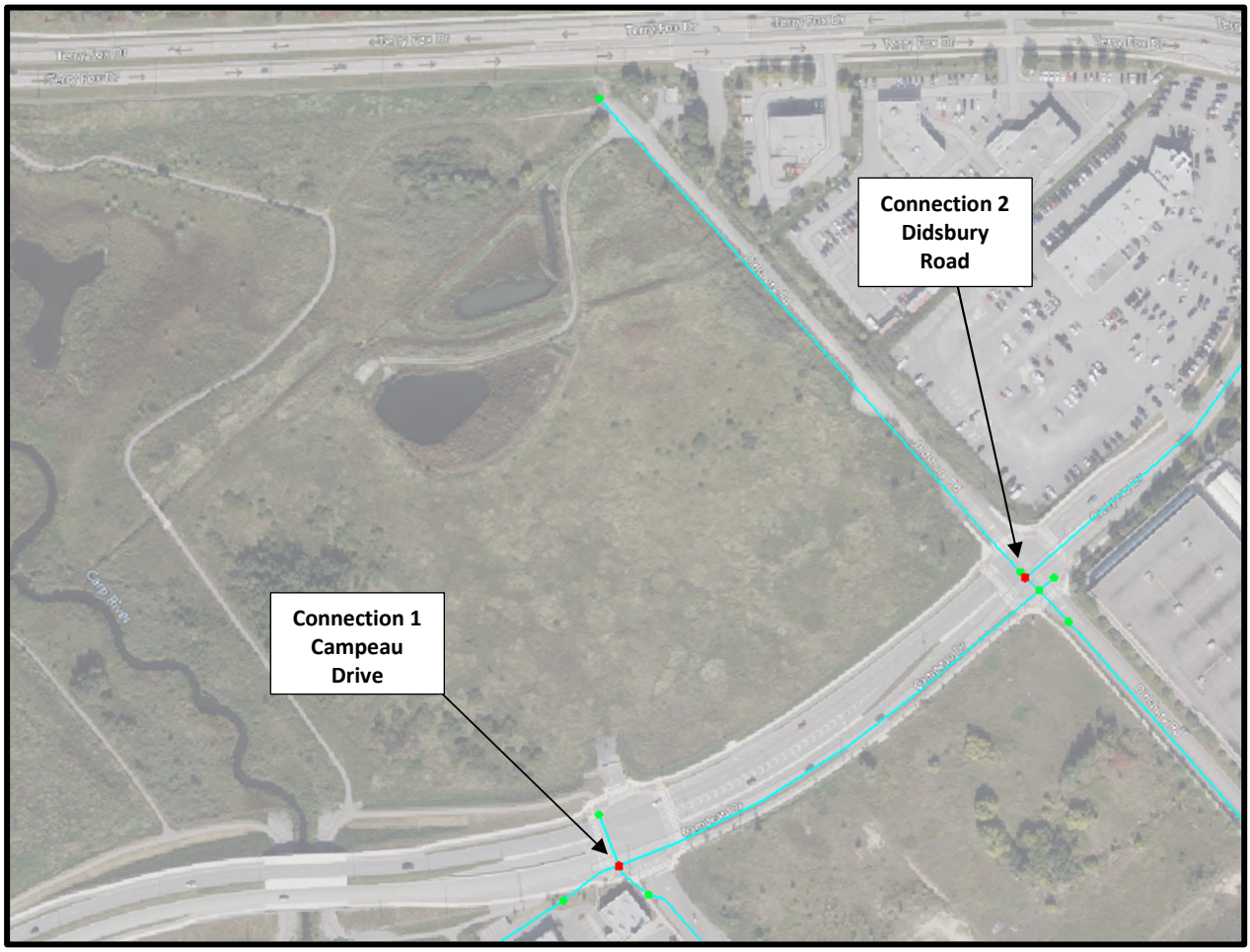
i. Type of Development and Units:	Commercial Development		
ii. Proposed Water Service Connection Location(s):	Refer to Figure 2 for Conceptual Servicing Layout.		
iii. Average Day Flow Demand:		2.4	L/s
iv. Peak Hour Flow Demand:		6.4	L/s
v. Maximum Day Flow Demand:		3.5	L/s
vi. Required Fire Flow #1 (Sprinklered):		7000	L/min
vii. Required Fire Flow #2 (Unsprinklered):		16000	L/min

Boundary Conditions
375 Didsbury Road

Provided Information

Scenario	Demand	
	L/min	L/s
Average Daily Demand	149	2.48
Maximum Daily Demand	223	3.72
Peak Hour	401	6.69
Fire Flow Demand #1	7,000	116.67
Fire Flow Demand #2	16,000	266.67

Location



Results

Connection 1 – Campeau Drive

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	162.8	95.1
Peak Hour	155.5	84.8
Max Day plus Fire Flow #1	155.5	84.8
Max Day plus Fire Flow #2	155.5	84.8

[1] Ground Elevation = 95.9 m

Connection 2 – Didsbury Road

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	162.8	94.9
Peak Hour	155.5	84.6
Max Day plus Fire Flow #1	155.5	84.6
Max Day plus Fire Flow #2	155.5	84.6

[1] Ground Elevation = 96.1 m

Notes

1. Demands for proposed Connection 1 off existing watermain stub were assigned to upstream junction at Campeau Drive off the public looped watermains. The engineer must calculate headloss off the dead-end main.
2. Demands for proposed Connection 2 off existing watermain along Didsbury Road were assigned to upstream junction at Campeau Drive & Didsbury Road off the public looped watermains. The engineer must calculate headloss off the dead-end main.
3. Any connection to a watermain 400 mm or larger should be approved by DWS as per the Water Design Guidelines Section 2.4 Review by Drinking Water Services.
4. As per the Ontario Building Code in areas that may be occupied, the static pressure at any fixture shall not exceed 552 kPa (80 psi.) Pressure control measures to be considered are as follows, in order of preference:
    - If possible, systems to be designed to residual pressures of 345 to 552 kPa (50 to 80 psi) in all occupied areas outside of the public right-of-way without special pressure control equipment.
    - Pressure reducing valves to be installed immediately downstream of the isolation valve in the home/ building, located downstream of the meter so it is owner maintained.

Disclaimer

The boundary condition information is based on current operation of the city water distribution system. The computer model simulation is based on the best information available at the time. The operation of the water distribution system can change on a regular basis, resulting in a variation in boundary conditions. The physical properties of watermains deteriorate over time, as such must be assumed in the absence of actual field test data. The variation in physical watermain properties can therefore alter the results of the computer model simulation. Fire Flow analysis is a reflection of available flow in the watermain; there may be additional restrictions that occur between the watermain and the hydrant that the model cannot take into account.

APPENDIX D

Taggart Loblaws Servicing Report *(under separate cover)*
Taggart Loblaws Stormwater Management Facility Report *(under separate cover)*