CROZIER
CONSULTING ENGINEERS

2800 High Point Drive | T. 905.875.0026
Suite 100, Milton, ON | F. 905.875.4915
L9T 6P4 | cfcrozier.ca

MEMO

DATE	July 29, 2021	**PROJECT NO.**	1967-5752
RE	71 Main Street South Town of Halton Hills		

TO	Planning and Development, Town of Halton Hills
FROM	Daniel Doherty, P.Eng & Nick Constantin, P.Eng.
CC	Cindy Prince, Vice President, Amico Affiliates

This memo was prepared as an update to the previously approved Functional Servicing & Stormwater Management Report prepared by C.F. Crozier & Associates Inc. (Crozier) on August 15, 2017 for the development located at 69-79 Main Street South and 94-98 Mill Street, in the Town of Halton Hills. This memo was previously issued to address comments provided in the document titled Regional Comments – Zoning By-Law Amendment Applicant Amico Ltd. 69-79 Main Street South & 94-98 Mill Street, Town of Halton Hills, File: ZBA20.010H, dated December 7, 2020.

This memo has now been updated to include the results of an updated hydrant flow test requested by the Region and completed on May 7, 2021.

The proposed development concept has been modified slightly from the previous design. The number of residential units has been increased to 169 from 125. The commercial area has been reduced from 1,667 m^2 to 361 m^2, with the residential area increasing from 13,412 m^2 to 14,692 m^2. The total gross floor area (GFA) of 15,053 m^2 of the proposed development concept has decreased slightly from the previous design which had a GFA of 18,194 m^2. The equivalent population was calculated based on 1.68 people per unit, which was provided by the Region in 2015.

Table 1: Equivalent Population Calculation for Residential Use

Scenario	Number of Units	Equivalent Population
Proposed Concept – Approved FSR August 15, 2017	125	210
Proposed Site Statistics July 29, 2021	169	287[1]

1. Includes equivalent commercial population (284 residential + 3 commercial)

The servicing calculations for water demand and sanitary flow, as well as the Fire Flow calculations have been updated to reflect the latest Site Statistics as provided on the Site Plan prepared by IBI Group Architects, dated December 11, 2020. The design calculations, as well as an updated Water Usage and Sanitary Discharge Report have been provided with this memo.

Water Servicing

The water demand calculations were updated based on the revised development concept plan. The increase in number of units results in an increase in the water demand compared to the previously approved calculations. The maximum daily domestic water demand increased 0.45 L/s as seen below in Table 2. The existing demand scenario presented is from the FSR (August 2017) and is based on the current use of the building.

Table 2: Water Demand Calculations

Scenario	Land Use	Average Daily Demand (L/s)	Maximum Daily Demand (L/s)	Maximum Hourly Demand (L/s)
Existing Demand August 15, 2017	Residential	0.24	0.55	0.97
	Commercial	0.04	0.10	0.10
	Combined	**0.28**	**0.64**	**1.07**
Proposed Demand – Approved FSR August 15, 2017	Residential	0.67	1.50	2.67
	Commercial	0.05	0.11	0.11
	Combined	**0.72**	**1.61**	**2.78**
Proposed Site Statistics July 29, 2021	Residential	0.90	2.03	3.61
	Commercial	0.01	0.02	0.02
	Combined	**0.91**	**2.06**	**3.64**

The fire flow calculations were updated for the new development concept using the Fire Underwriter's Survey. We confirmed the type of construction (non-combustible), occupancy reduction (low hazard) and the type of sprinkler system (NFPA) with the Client. The fire flow decreased slightly from the previous approved design with a new requirement of 13,423 L/min (223.7 L/s) for a duration of 3.0 hours.

Please note that the Fire Underwriters Survey calculated value for the estimated fire flow is a conservative estimate. The Mechanical Engineer should review and prepare detailed fire calculations for the proposed building concept.

A hydrant flow test was completed for the property by Classic Fire Protection Inc. on May 7, 2021. Results from the test indicated that at 20 psi residual pressure in the municipal watermain on Main Street, 6,631.1 US GPM (418.4 L/s) is projected to be available within the municipal system. At 20 psi residual pressure in the municipal watermain on Mill Street, 7,529.7 US GPM (475.1 L/s) is projected to be available within the municipal system.

The Region completed water modeling to see if the proposed development could be accommodated by their system. Email correspondence from Enzo Florio, dated February 25, 2021 regarding the modeling review confirms that the proposed development can be accommodated in their water distribution system. The email correspondence has been included as an attachment to this memo.

Sanitary Servicing

The sanitary servicing calculations were updated based on the proposed development concept and the Region of Halton Water and Wastewater Linear Design Manual, dated April 2019. The commercial area in the proposed development concept is smaller than the previously approved design. The additional residential units and reduced commercial area result in an increase of 0.79 L/s for the sanitary design flow. The existing condition presented is from the FSR (August 2017) and is based on the current use of the building.

Table 3: Sanitary Flow Calculations

Condition	Land Use	Average Flow (L/s)	Peaking Factor	Peak Flow (L/s)	Infiltration Flow (L/s)	Total Flow (L/s)
Existing August 15, 2017	Residential	0.24	3.85	0.93	0.08	**1.18**
	Commercial	0.04		0.17		
	Combined	**0.29**		**1.10**		
Proposed Approved FSR August 15, 2017	Residential	0.67	4.14	2.77	0.08	**3.01**
	Commercial	0.05	3.52	0.17		
	Combined	**0.72**	-	**2.94**		
Proposed Site Statistics July 29, 2021	Residential	0.90	4.07	**3.72**	0.08	**3.80**
	Commercial	0.01				
	Combined	**0.91**				

Halton Region staff was contacted about their comments dated December 7, 2020. As requested, we have prepared Figure 1 – Sanitary Area Drainage Plan for the development site.

The Region completed wastewater modeling to see if the proposed development could be accommodated by their system. Email correspondence from Enzo Florio, dated March 12, 2021 confirms that System Services reviewed the development, and it can be accommodated. The email correspondence has been included as an attachment to this memo.

Conclusions & Recommendations

Based on the information contained in this memo, we offer the following conclusions:

- The revised building concept results in a marginal increase in water demand. The proposed development, with a maximum hourly demand of 3.64 L/s can be serviced by the existing municipal watermain infrastructure. Region modelling confirmed that the development can be accommodated in their water distribution system.

- The revised building concept results in a design sanitary flow of 3.80 L/s, which is also a slight increase in flows from the previously approved design. Region modelling and System Services confirmed that the development can be accommodated in their system.

Based on the conclusions and recommendations, we suggest the approval of the planning applications from the perspective of functional servicing.

Sincerely,

C.F. CROZIER & ASSOCIATES INC.

Daniel Doherty, P.Eng.
Land Development

C.F. CROZIER & ASSOCIATES INC.

Nick Constantin, P.Eng.
Senior Project Manager

DD/cj

Encl.

- Water Demand Calculations – Revised July 2021
- Fire Flow Calculations – Revised July 2021
- Hydrant Flow Test Results – May 2021
- Sanitary Flow Calculations – Revised July 2021
- Figure 1 – Sanitary Area Drainage Plan
- Water Usage and Sanitary Discharge Report
- Email Correspondence (Crozier and Halton Region)

I:\1900\1967 - Amico Affiliates\5752 - 79 Main St. Georgetown\Memos\4th Submission\2021.07.29 5752_McGibbonOnMain_Servicing-Memo.docx

CF CROZIER & ASSOCIATES

REVISED - Domestic Water Demand

Project: McGibbon Development 71 - 79 Main Street South
Job No.: 1967-5752 **Revised: 29-Jul-21**

Proposed Site Conditions

A. **Proposed Units**

One Bedroom	49
Two Bedroom	108
Three Bedroom	12
TOTAL	**169**

B. **Area's** (m^2)

Total Residential Units GFA	14,692
Commercial and Amenities GFA	361
Site Area	2,773.0

C. **Design Criteria**

Population per Hectare[1] = $\frac{1.68 \text{ ppu} * (\#\text{ units})}{\text{area}}$

Population per Hectare = 1,024 p/ha
Total Population = 284
Note 1: Apartment population density Population density per email confirmation from Tim Skrins - Region of Halton, dated September 29, 2015

Residential Average Consumption Rate[2]= 275.0 L/cap/d
Apartments Max Day Factor[2] = 2.25
Apartments Peak Hour Factor[2] = 4.0

Average Day Demand	275	x	284	=			78,078	L/day	=	0.90	L/s
Maximum Day Demand	275	x	284	x	2.25	=	175,676	L/day	=	2.03	L/s
Peak Hour Demand	275	x	284	x	4.0	=	312,312	L/day	=	3.61	L/s

Note 3: Average Consumption Rate, Max day Factor and Peak Hour Factor each determined from Section 2.4, Halton Water Wastewater Linear Design Manual

D. **Commercial**

Approximate floor area of the proposed commercial Total = 361.00 sq.m

Commercial Average Consuption Rate[3]= 24,750.0 L/ha/day

Retail population density			90.00		persons/ha			
Equivalent population			90.00	*	0.0361	=	3	people

Commercial Max Day Factor[3] = 2.25
Commercial Peak Hour Factor[3] = 2.25
Note 4: Average Consumption Rate, Max day Factor and Peak Hour Factor each determined from Section 2.4, Halton Water Wastewater Linear Design Manual

E. **Commercial Demands**

Average Day Demand	24,750	x	0.04			=	900	L/day	=	0.01	L/s
Maximum Day Demand	24,750	x	0.04	x	2.25	=	2,000	L/day	=	0.02	L/s
Peak Hour Demand	24,750	x	0.04	x	2.25	=	2,000	L/day	=	0.02	L/s

F. **Total Domestic Demand (Residential + Retail)**

Average Day Demand	78,078.00			+	900	=	79,000	L/day	=	**0.91**	**L/s**
Maximum Day Demand	175,675.50			+	2,000	=	177,700	L/day	=	**2.06**	**L/s**
Peak Hour Demand	312,312.00			+	2,000	=	314,300	L/day	=	**3.64**	**L/s**

Note 5: Average consumption rate, max day factor and peak hour factor per Section 2.4, Halton Water Wastewater Linear Design Manual

CF CROZIER & ASSOCIATES

FIRE FLOW CALCULATIONS
PRELIMINARY ESTIMATES FOR CONFIRMATION OF CAPACITY STATEMENT

Project: **McGibbon Development 71 - 79 Main Street South** **Date: 07/29/2021**
Job No.: **1967-5752**

Fire flow required for a given area based on Fire Underwriters Survey (FUS) Water Supply for Public Fire Protection (1999)

$$F = 220\ C\sqrt{A}$$

where

F = Fire flow in Litres per minute (Lpm)
C = coefficient related to the type of construction
= 1.5 for wood frame construction (structure essentially all combustible)
= 1.0 for ordinary construction (brick or other masonry walls, combustible floor and interior)
= 0.8 for non-combustible construction (unprotected metal structural components)
= 0.6 for fire-resistive construction (fully protected frame, floors, roof)
A = total floor area in square metres

Calculations per FUS

1. *Estimate of Fire Flow*

C = 0.8 for non-combustible construction Per email with Amico dated October 15, 2020

Largest Podium GFA

Level	GFA	Applied GFA
P1	2,431	608
1	2,445	2445
2	2,103	526
Total		3579

Note:
Assumed P1 more than 50% above ground.

A = 3610 m^2 (largest GFA plus 25% of GFA for two immediately adjoining floors)[1]

F = 10,528 Lpm

2. *Occupancy Reduction*

15% reduction based on low hazard occupancy ('apartments, Office Buildings, Public Buildings')
Limited Combustibility Per email with Amico dated October 15, 2020
15% reduction of 10528 Lpm = 1,579 Lpm
F = 10528 - 1579 = 8,949 Lpm

3. *Sprinkler Reduction*

30% reduction for NFPA Sprinkler System[2] Per email with Amico dated October 15, 2020
30% reduction of 8949 Lpm = 2,685 Lpm
F = 8949 - 2685 = 6,264 Lpm

4. *Separation Charge*

Face	Distance (m)	Charge
West Side	20.00	15%
East Side	0.00	25%
North Side	0.00	25%
South Side	15.00	15%

Total 80% of 8,949 = 7,159 Lpm

F = 6264 + 7159
F = 13,423 Lpm 223.72 L/s (2,000 Lpm < F < 45,000 Lpm; OK)
F = 3,542 US GPM

Notes

1. GFA based on data provided by IBI Group Architects Site Stats dated December 11, 2020. Assumed vertical openings and exterior vertical communications are properly protected (one hour rating).
2. Assumed to have sprinkler protection.

CF CROZIER & ASSOCIATES

FIRE FLOW CALCULATIONS
PRELIMINARY ESTIMATES FOR CONFIRMATION OF CAPACITY STATEMENT

Project: **McGibbon Development 71 - 79 Main Street South** **Date: 07/29/2021**
Job No.: **1967-5752**

5. *Duration*

Required Duration of Fire Flow	
Flow Required L/min	Duration (hours)
2,000 or less	1.0
3,000	1.25
4,000	1.5
5,000	1.75
6,000	2.0
8,000	2.0
10,000	2.0
12,000	2.5
14,000	**3.0**
16,000	3.5
18,000	4.0
20,000	4.5
22,000	5.0
24,000	5.5
26,000	6.0
28,000	6.5
30,000	7.0
32,000	7.5
34,000	8.0
36,000	8.5
38,000	9.0
40,000 and over	9.5

L/s	Duration
223.72	3.0

DEDICATED SERVICE SINCE 1988
CLASSIC FIRE PROTECTION INC.
www.classicfire.com

West Office
4380 South Service Rd.
Unit #13
Burlington, ON L7L 5Y6
Tel (905) 631-6100

Head Office
645 Garyray Drive
North York, ON M9L 1P9
Tel (416) 740-3000
Fax (416) 740-2039
Toll Free: 1-888-842-6862

East Office
331 Frankcom Street
Ajax, ON L1S 5Y6
Tel (905) 426-6000

May 11, 2021

HALTON REGION
1151 Bronte Rd
Oakville, ON

Attn: ENZO FLORIO

Re: City Hydrant Flow Test – NFPA 291 Certification
79 Main Street South, Georgetown

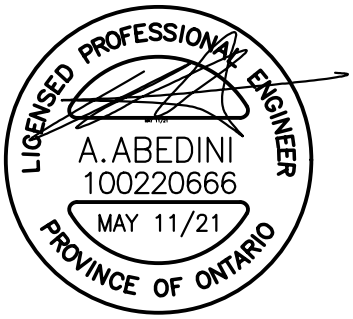
Hi Enzo,

As per your request, this letter hereby certifies that the hydrant flow test conducted by Classic Fire Protect Inc. (CFP) on Friday, May 7th/21, at the intersection of Main Street South and Mill Street in Georgetown (see attached flow test report) was conducted in accordance to and in full compliance with recommended practices outlined in the NFPA 291 (2013 edition) "Recommended Practice for Fire Flow Testing and Marking of Hydrants." Based on the flow test results obtained, the following are the calculated "theoretical flowrates" available at 20 psi residual pressure.

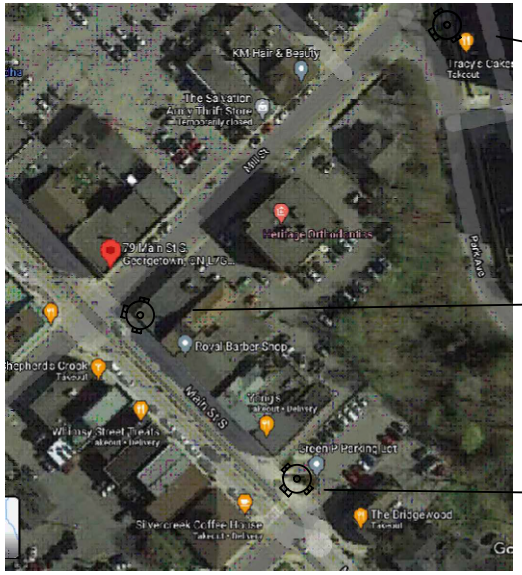
1. Main street test – 20 psi at 6631.1 gpm
2. Mill Street test – 20 psi at 7529.7 gpm

I trust the above mentioned and the attached flow test reports are satisfactory. Please feel free to contact us should you have any questions or concerns.

Yours truly,



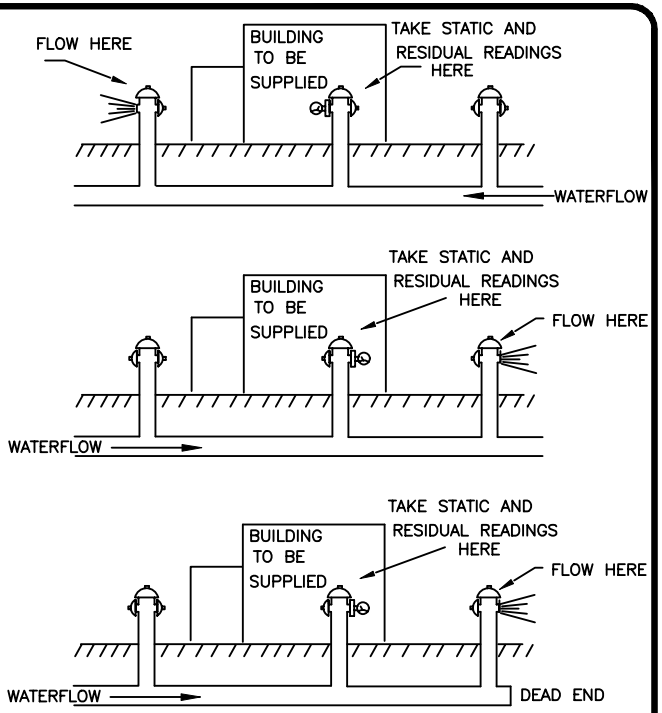
Ali Abedini, P.Eng., M.A.Sc.
647- 963-6685



FIRE HYDRANT (GPM)
- T3 & T4

FIRE HYDRANT (PSI)
-T1, T2, T3 & T4

FIRE HYDRANT (GPM)
- T1 & T2



TEST:	PLAY PIPE	C=	STATIC(PSI)	RESIDUAL(PSI)	PITOT(PSI)	FLOW(USGPM)
	1x1 1/8					
	2x1 1/8					
	3x1 1/8					
	4x1 1/8					
	1x1 3/4					
	2x1 3/4					
	3x1 3/4					
	4x1 3/4					
	PITOTLESS NOZZLE (ALONG MAIN ST.)					
1	1x1 3/4		70	69	38	645
2	2x1 3/4		70	68	31	1166
	PITOTLESS NOZZLE (ALONG MILL ST.)					
3	1x1 3/4		70	69	46	710
4	2x1 3/4		70	68	40	1324

OUTLET TYPE

- ☐ COEF.=0.90 OUTLET SMOOTH AND WELL ROUNDED
- ☐ COEF.=0.80 OUTLET SQUARE AND SHARP
- ☐ COEF.=0.70 OUTLET SQUARE AND PROJECTING INTO BARREL
- ☒ HOSE MONSTER LITTLE HOSE MONSTER 1 3/4"
- ☐ HOSE MONSTER OPEN ATMOSPHERE 1 3/4"

Client:

Location:

79 Main St South,

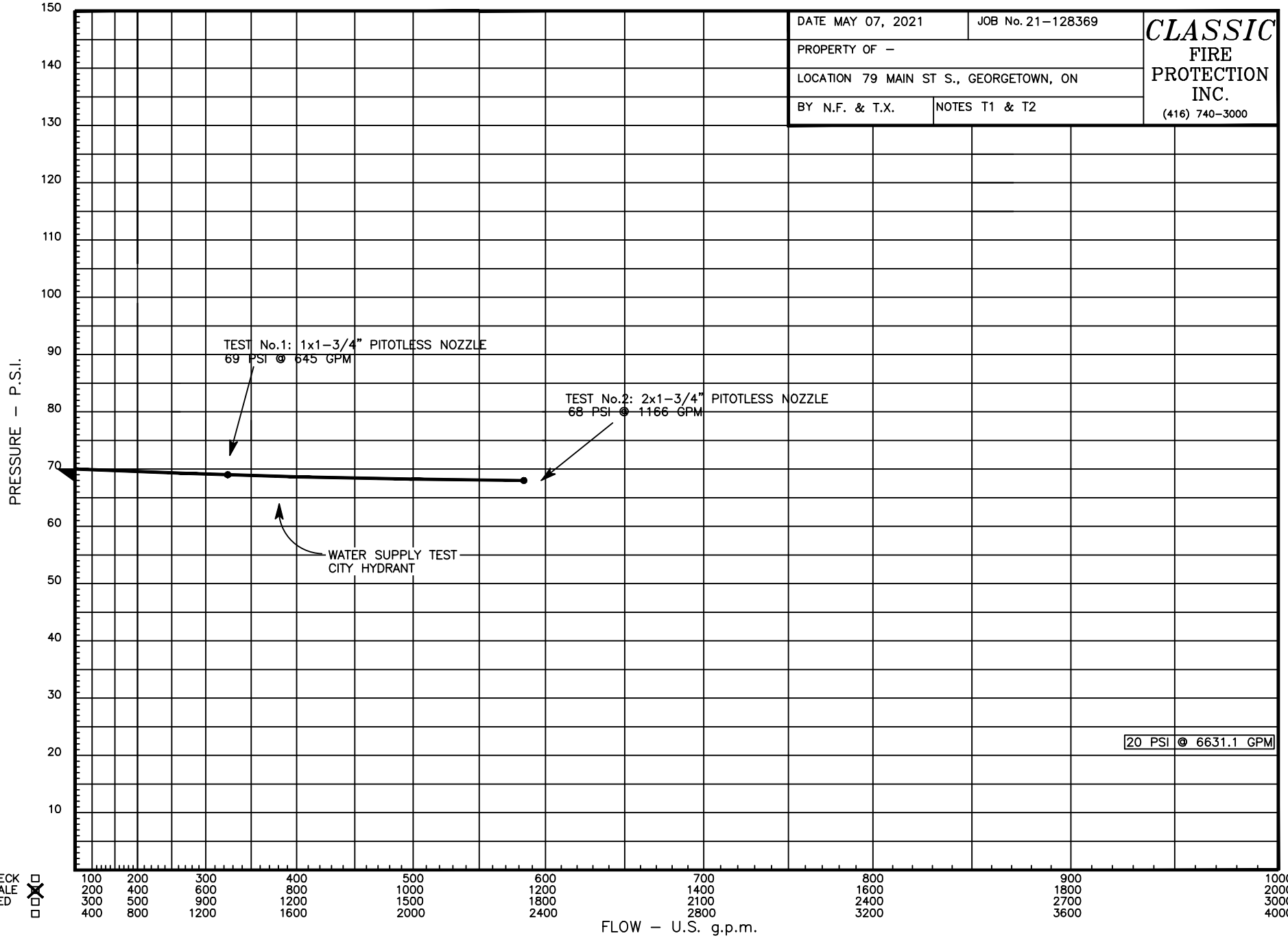
Georgetown, ON

DEDICATED SERVICE SINCE 1988
CLASSIC FIRE PROTECTION INC.
645 GARYRAY DR.
North York, ON
M9L 1P9
(416) 740-3000
Web: www.classicfire.com

WATER SUPPLY GRAPH

DATE MAY 07, 2021	JOB No. 21–128369
PROPERTY OF –	
LOCATION 79 MAIN ST S., GEORGETOWN, ON	
BY N.F. & T.X.	NOTES T1 & T2

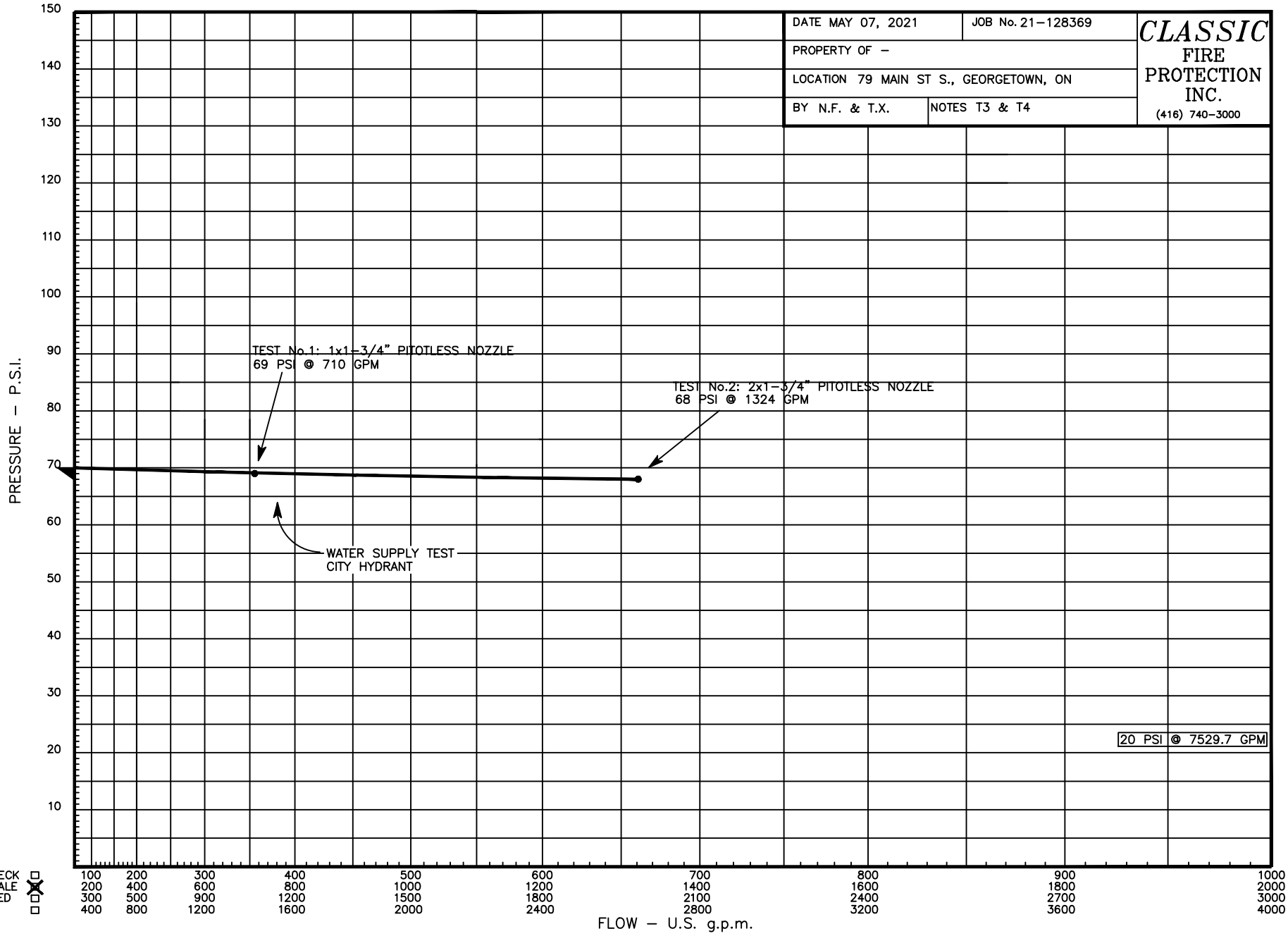
CLASSIC FIRE PROTECTION INC.
(416) 740–3000



WATER SUPPLY GRAPH

DATE MAY 07, 2021	JOB No. 21–128369
PROPERTY OF –	
LOCATION 79 MAIN ST S., GEORGETOWN, ON	
BY N.F. & T.X.	NOTES T3 & T4

CLASSIC FIRE PROTECTION INC.
(416) 740–3000



CF CROZIER & ASSOCIATES

REVISED SANITARY FLOW

Project: **McGibbon Development 71 - 79 Main Street South**
Job No.: **1967-5752** **Revised:** **29-Jul-21**

A. Proposed Development

Residential Unit Type	Total Res. Units
One Bedroom	49
Two Bedroom	108
Three Bedroom	12
Totals	**169**

Site area = **0.2773** **ha**

Population per Hectare = $\frac{1.68 \text{ ppu} * (\# \text{ units})}{\text{area}}$

Population per Hectare = 1024 p/ha
Total Population 284 capita

Note 1: Population density per email confirmation from Tim Skrins - Region of Halton, dated September 29, 2015

B. Proposed Flow

Unit Type	Gross Floor Area (m^2)	Site Area (ha)	Population[2]	Average Sanitary Flow (L/s)	Average Sanitary Flow (m^3/day)	Harmon Peaking Factor[3]	Peak Flow L/s
Residential	14,692	0.277	284	0.90	78.08	4.07	3.72
Commercial and Amenities	361		3	0.01	0.89		
			Total	0.91	78.97		

Note 2: Commercial flows designed using 90 person per Hectare. Table 3-2, Halton Water Wastewater Linear Design Manual
Note 3: Peaking Factor = Harmon Formula, Updated per Halton Region Design Guidelines Version 4.0, April 2019

C. Infiltration

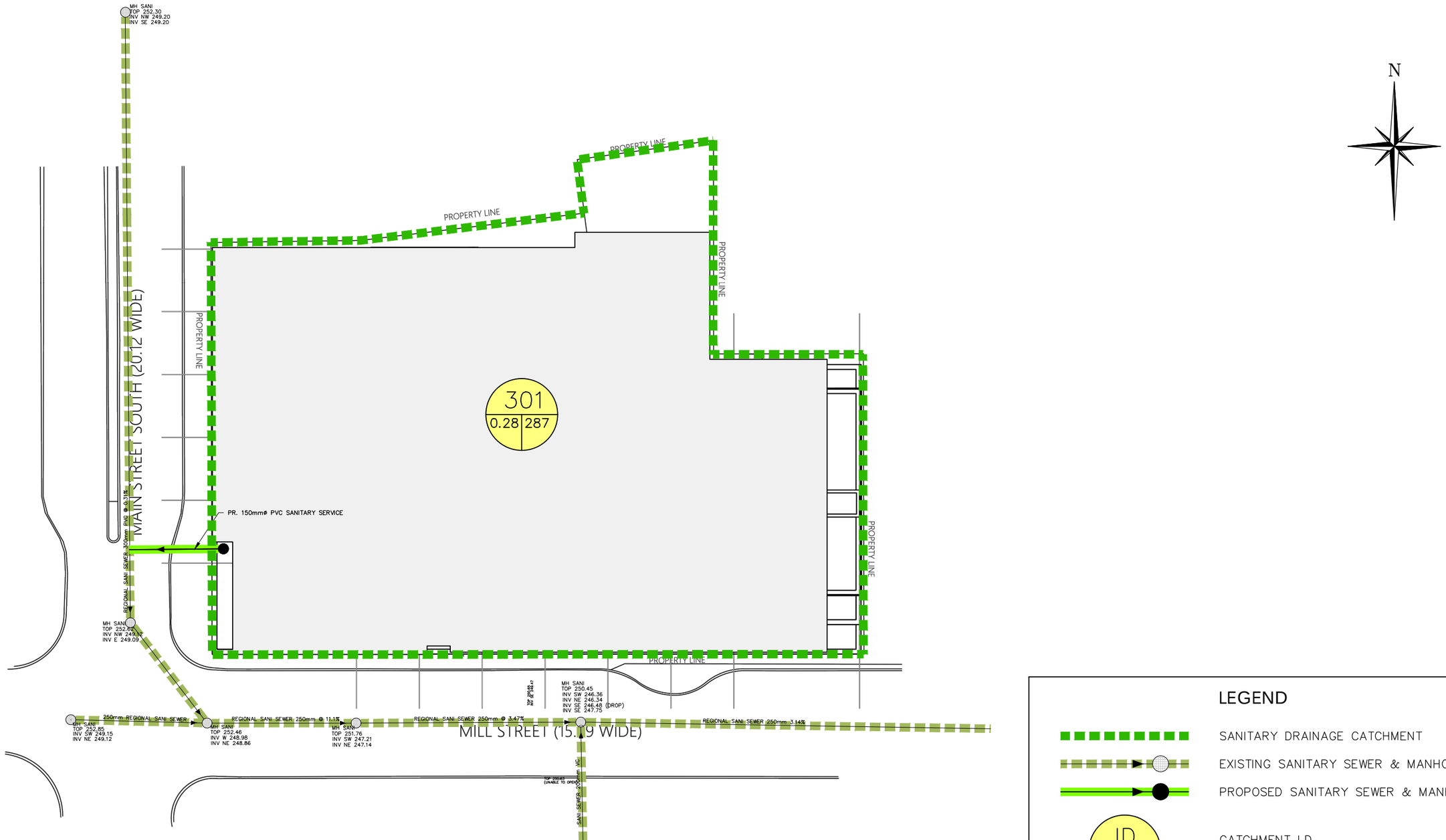
Site Area (ha)	Infiltration Rate[4] (L/ha/s)	Total Infiltration (L/s)
0.2773	0.286	0.08

Note 4: Infiltration = 0.286 L/ha/s Section 3.2.4, Halton Water Wastewater Linear Design Manual

D. Total Proposed Site Flow

	Peak Flow (L/s)
Proposed Flow	3.72
Infiltration	0.08
Total	**3.80**

Proposed Design Flow
The sewage design flow from the proposed development is: **3.80 L/s**



LEGEND

- SANITARY DRAINAGE CATCHMENT
- EXISTING SANITARY SEWER & MANHOLE
- PROPOSED SANITARY SEWER & MANHOLE
- ID / A | POP. — CATCHMENT I.D. / AREA (ha) | EQUIV. POPULATION

NOT FOR CONSTRUCTION

Project: 71 MAIN STREET SOUTH
GEORGETOWN, HALTON REGION

Drawing: SANITARY DRAINAGE AREA PLAN

CROZIER CONSULTING ENGINEERS
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Suite 100
Milton, ON L9T 6P4
905-875-0026 T
905-875-4915 F
www.cfcrozier.ca

Drawn By	Design By	Project
D.D.	D.D.	1967-5752

Scale	Date	Check By	Drawing
1: 400	JULY 29, 2021	N.C.	FIG 1

The Regional Municipality of Halton
1151 Bronte Road
Oakville ON L6M 3L1

Dear Sir/Madam:

Re: Water Usage and Sanitary Discharge Report for 69-79 Main Street South and 94-98 Mill Street, Town of Halton Hills, ON

Background

Amico Affiliates proposes to construct a commercial/residential building with a footprint of 2,468 m^2 at 69-79 Main Street South and 94-98 Mill Street, Part of Lot 18, Con.9 in the Town of Halton Hills (Georgetown). The Site is currently occupied by commercial/residential properties. The Site has an area of 0.28 ha and no landscaping is proposed.

The Region of Halton Water and Wastewater Linear Design Manual (April 2019) has been used to calculate the water usage and sanitary discharge for occupant loadings. The proposed development does not require process or cooling water.

Water Usage

Residential/Commercial Building

- Occupant Load — 275 L/cap/d x 284 occupants (Residential)
  = 78.1 m^3/d
  24, 750 L/ha/day x 0.036 ha (Commercial)
  = 0.92 m^3/d

Total water usage = 79.02 m^3/d (0.91 L/s)

Sanitary Discharge

Residential/Commercial Building

- Occupant Load — 275 L/cap/d x 284 occupants (Residential)
  = 78.1 m^3/d
  24, 750 L/ha/day x 0.036 ha (Commercial)
  = 0.92 m^3/d

Total sanitary discharge = 79.02 m^3/d (0.91 L/s)

Sincerely,

C.F. CROZIER & ASSOCIATES INC.

Nick Constantin, P.Eng.
Senior Project Manager

NC/cj

Daniel Doherty

From: Florio, Enzo <Enzo.Florio@halton.ca>
Sent: Friday, March 12, 2021 3:13 PM
To: Daniel Doherty
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis
Attachments: McGibbon Condominium 69-79 Main St S & 94-98 Mill St_Georgetown .xlsx

Hello Daniel,

System Services has reviewed this development and it can be accommodated. The location of the observed surcharge in the Silvercreek trunk occurs where there are no services connected and therefore there is no risk of basement flooding.

Thank you

Enzo

From: Daniel Doherty <ddoherty@cfcrozier.ca>
Sent: Wednesday, March 10, 2021 9:43 AM
To: Florio, Enzo <Enzo.Florio@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Thanks for the update. I will let update the project team at my weekly meeting tomorrow.

Look forward to hearing from you at the end of the week. Have a great rest of the day.

Daniel Doherty | Land Development
2800 High Point Drive, Suite 100 | Milton, ON L9T 6P4
T: 905.875.0026

Crozier Connections:

Read our latest news and announcements here.

From: Florio, Enzo <Enzo.Florio@halton.ca>
Sent: Wednesday, March 10, 2021 9:40 AM

To: Daniel Doherty <ddoherty@cfcrozier.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hello Daniel,

System Services is looking to provide comments back to me by the end of the week.

Enzo

From: Daniel Doherty <ddoherty@cfcrozier.ca>
Sent: Wednesday, March 10, 2021 9:36 AM
To: Florio, Enzo <Enzo.Florio@halton.ca>; Cindy Prince <cprince@triamico.com>
Cc: Najak, Zahir <Zahir.Najak@halton.ca>; Nick Constantin <nconstantin@cfcrozier.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Enzo,

Any updates on this? Looking to provide the team an update tomorrow, Thursday March 11.

Thanks,
Dan

Daniel Doherty | Land Development
2800 High Point Drive, Suite 100 | Milton, ON L9T 6P4
T: 905.875.0026

CROZIER
CONSULTING ENGINEERS

Crozier Connections:

Read our latest news and announcements here.

From: Daniel Doherty
Sent: Friday, March 5, 2021 9:23 AM
To: Florio, Enzo <Enzo.Florio@halton.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Zahir Najak <Zahir.Najak@halton.ca>; Nick Constantin <nconstantin@cfcrozier.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Enzo,

Thanks for the call yesterday. As discussed, I look forward to hearing from you by Tuesday regarding an update from System Services.

Please don't hesitate to give me a call if needed. Have a great weekend.

Dan

From: Daniel Doherty
Sent: Thursday, February 25, 2021 4:42 PM
To: Florio, Enzo <Enzo.Florio@halton.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Zahir Najak <Zahir.Najak@halton.ca>; Nick Constantin <nconstantin@cfcrozier.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Enzo,

Thank you very much for providing the results of the modeling. I will follow up with System Services per your email below to confirm the development can be accommodated. Can you please provide me with the contact information for someone in this department?

Have a great evening. Looking forward to hearing from you.

Dan

From: Florio, Enzo <Enzo.Florio@halton.ca>
Sent: Thursday, February 25, 2021 3:35 PM
To: Daniel Doherty <ddoherty@cfcrozier.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Zahir Najak <Zahir.Najak@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hello Daniel,

Please see below with the evaluation from our modeling group:

The modelling results for this development are attached and see below for additional comments. From the modelling perspective, the development can be accommodated in the water system. However, System Services should be consulted to confirm whether it can be accommodated in the wastewater system due to the existing surcharge issues along the Silvercreek Trunk.

Magda: This development was previously reviewed in 2016 found no issues with the development application from the modelling perspective. See Appendix C in the attached FSR (page 24 of the PDF document) for the past correspondence.

Modelling Review:
The proposed development is located at 69-79 Main St S & 94-98 Mill St in Georgetown, Ontario. The development proposes a 10-storey condominium with a commercial area.

WATER
The InfoWater-16June2020 model was used under the 2031 Maximum Day Demands (MDD) scenario for the analysis. The property is located in Georgetown pressure zone G6G.

- Based on the attached water demand calculation, the development will have an estimated net additional MDD of 1.08 L/s. This demand was applied to junction WCV120484.
- Service pressures around the development range between 60 to 88 psi and are within Halton's normal operating pressure range criteria.
- AFF at the development site is well above the estimated RFF of 383 L/s.

Based on the above modelling results, the proposed development can be accommodated in the water distribution system.

WASTEWATER
The InfoWorks ICM Georgetown_Halton_Base model was used with the SCS Type II – 24h – 10yr storm for wet weather flow (WWF) simulations. The development site flows to the Georgetown WWTP.

- The development proposes to drain to the existing 300mm along Main St S (SMN38382), located within existing subcatchment ID 38382.
- The model shows that the proposed development contributes an additional 0.58 L/s to the wastewater system.
- Under existing conditions (pre-development), 25 sewers along the flow route are surcharging (9 sewers have surcharge state = 1 and 16 sewers have surcharge state = 2).
- Under existing conditions (pre-development), 5 sewers pose a flooding risk (max unfilled depth >= -1.8m), which are mostly located along Main St S just south of Maple Ave.
- The proposed development resulted in negligible impacts to the system.

Due to the existing surcharge issues along the flow route (including along the Silvercreek trunk), System Services should be consulted to confirm if the proposed development can be accommodated.

If you have any questions or concerns please feel free to contact me.

Thank you,

Enzo

From: Daniel Doherty <ddoherty@cfcrozier.ca>
Sent: Thursday, February 25, 2021 1:18 PM
To: Florio, Enzo <Enzo.Florio@halton.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Najak, Zahir <Zahir.Najak@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Enzo,

Following up on the status of this analysis. Hoping you have heard back from the modeling group at this time. Can you please provide us an update by tomorrow (Friday February 26)?

Thanks,
Dan

Daniel Doherty | Land Development
2800 High Point Drive, Suite 100 | Milton, ON L9T 6P4
T: 905.875.0026

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From: Florio, Enzo <Enzo.Florio@halton.ca>
Sent: Tuesday, February 16, 2021 10:42 AM
To: Daniel Doherty <ddoherty@cfcrozier.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Zahir Najak <Zahir.Najak@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hello Daniel,

I am expecting comments by the end of the week.

Thank you

Enzo

From: Daniel Doherty <ddoherty@cfcrozier.ca>
Sent: Tuesday, February 16, 2021 10:17 AM
To: Florio, Enzo <Enzo.Florio@halton.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Najak, Zahir <Zahir.Najak@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Enzo,

Hope you had a great long weekend. Any update from the Modeling Group on this analysis?

Thanks,
Dan

Daniel Doherty | Land Development
2800 High Point Drive, Suite 100 | Milton, ON L9T 6P4
T: 905.875.0026

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From: Florio, Enzo <Enzo.Florio@halton.ca>
Sent: Monday, February 8, 2021 2:23 PM
To: Daniel Doherty <ddoherty@cfcrozier.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Zahir Najak <Zahir.Najak@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

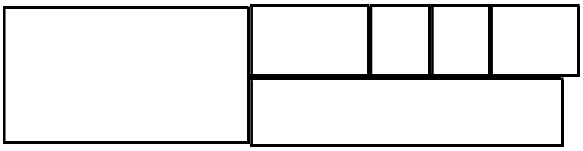
Hello Daniel,

I will follow up with our Modeling Group and respond once I receive a status from them.

Thank you

Enzo

Enzo Florio
Development Project Manager
Planning Services
Legislative & Planning Services
Halton Region
905-825-6000, ext. 7161 | 1-866-442-5866



From: Daniel Doherty <ddoherty@cfcrozier.ca>
Sent: Monday, February 8, 2021 10:57 AM
To: Florio, Enzo <Enzo.Florio@halton.ca>; Cindy Prince <cprince@triamico.com>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Najak, Zahir <Zahir.Najak@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Enzo,

Can you provide us an update on the sanitary analysis for the former McGibbon Hotel? I just called and left a voicemail, but perhaps an email is more accessible at this time.

Feel free to give me a call to discuss. 905-875-0026.

Thanks,

Daniel Doherty | Land Development
2800 High Point Drive, Suite 100 | Milton, ON L9T 6P4
T: 905.875.0026

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From: Cindy Prince <cprince@triamico.com>
Sent: Saturday, February 6, 2021 12:29 PM
To: Daniel Doherty <ddoherty@cfcrozier.ca>; Zahir Najak <Zahir.Najak@halton.ca>
Cc: Janet Bherer <jbherer@cfcrozier.ca>; Enzo Florio <enzo.florio@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Daniel:
Can you kindly update me as to status of this work? Thanks,
Cindy

Cindy Prince
AMICO AFFILIATES
VICE PRESIDENT
O:519-737-1577
C:519-796-6400

From: Daniel Doherty <ddoherty@cfcrozier.ca>
Sent: Friday, January 15, 2021 3:50 PM
To: Najak, Zahir <Zahir.Najak@halton.ca>
Cc: Cindy Prince <cprince@triamico.com>; Madeline Carter <mcarter@cfcrozier.ca>; Enzo Florio <enzo.florio@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Zahir,

We need some clarification from the Region on the sanitary sewer analysis work. On two occasions Region staff told us that the Region could undertake the sanitary sewer analysis work for this development as previously done for the 2017 FSR (analysis completed in 2016). The Region comments we received, dated December 7, 2020 state that the Region can undertake the analysis for us as previously done for in the 2017 FSR upon request, comments attached. We also spoke with Enzo this past Monday January 11, he had mentioned that this analysis had to be requested through the Region and coordinated through Public Works. No design sheets were required if the Region was to undertake the analysis. We have prepared the isolated Sanitary Drainage Area Plan as requested.

We have previous correspondence dated April 20, 2016 from the 2017 FSR from Tim Skrins from the Region, who had previously mentioned there was no issues with the previous development application in relation to modelling any system constraints within Region infrastructure. The previous sanitary flow used was 3.81 L/s as shown in the 2017 FSR, and the new sanitary flow is 3.80 L/s so the proposed flows are decreasing.

I spoke with Enzo again today, following receipt of your email, and he informed me that this Region comment from December 7, 2020 was made in error.

We have already finalized our resubmission based on the previous correspondence and the understanding that the Region would be undertaking the analysis, and will now have to push back our timeline. For the sake of timing on this application, we ask that the Region honour their original comment and earlier conversation and undertake the sanitary model analysis. We are happy to coordinate with Tim Skrins directly, as our office had previously done in 2016.

Thanks,
Dan

Daniel Doherty | Land Development
2800 High Point Drive, Suite 100 | Milton, ON L9T 6P4
T: 905.875.0026

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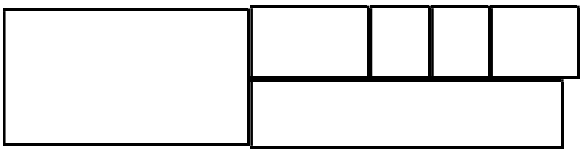
From: Najak, Zahir <Zahir.Najak@halton.ca>
Sent: Friday, January 15, 2021 11:19 AM
To: Daniel Doherty <ddoherty@cfcrozier.ca>
Cc: Cindy Prince <cprince@triamico.com>; Madeline Carter <mcarter@cfcrozier.ca>; Enzo Florio <enzo.florio@halton.ca>
Subject: RE: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Daniel,

I thought you were working with Enzo to complete the analysis yourself.

Zahir

Zahir Najak
Development Engineer
Planning Services
Legislative & Planning Services
Halton Region
905-825-6000, ext. 7183 | 1-866-442-5866



From: Daniel Doherty <ddoherty@cfcrozier.ca>
Sent: Friday, January 15, 2021 9:20 AM
To: Najak, Zahir <Zahir.Najak@halton.ca>
Cc: Cindy Prince <cprince@triamico.com>; Madeline Carter <mcarter@cfcrozier.ca>
Subject: Former McGibbon Hotel, Georgetown - Sanitary Analysis

Hi Zahir,

Following up on your correspondence with Cindy, we are requesting that the Region undertake the sanitary analysis for the Former McGibbon Hotel site in Georgetown.

Attached please find:

- Fig 1 – Sanitary Area Drainage Plan
- Halton Region Water Usage & Sanitary Discharge Report
- Correspondence between Crozier and Halton Region from 2016 from when the modeling was previously completed for this site (previous owner).

Let us know if you require any additional information. Please feel free to call me with any questions.

Thanks,

Daniel Doherty | Land Development
2800 High Point Drive, Suite 100 | Milton, ON L9T 6P4
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