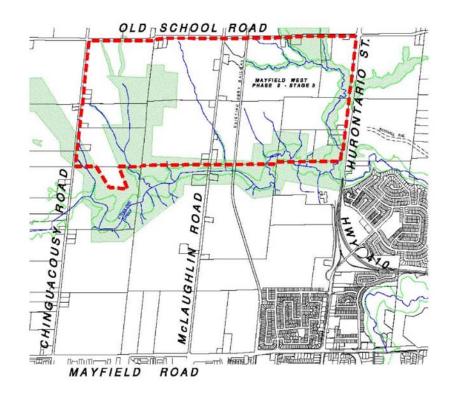
## MAYFIELD WEST PHASE 2 - STAGE 3 LANDS TOWN OF CALEDON

TOWN OF CALEDON PLANNING RECEIVED June 7, 2024



## PRELIMINARY FUNCTIONAL SERVICING STUDY

PREPARED FOR
CALEDON DEVELOPMENT GENERAL PARTNER LTD.
SCHOOL WEST INVESTMENTS INC.
SCHOOL VALLEY DEVELOPMENTS INC.
SCHOOL VALLEY SOUTH LTD
BROOKVALLEY DEVELOPMENTS (HWY 10) LTD.
(C/O BROOKVALLEY PROJECT MANAGEMENT INC.)

**MAY 2024** 





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Urbantech Consulting Drawing No. 801...Sanitary Trunk Sewers (Functional Servicing Study, dated August 2017)

## **APPENDICES**

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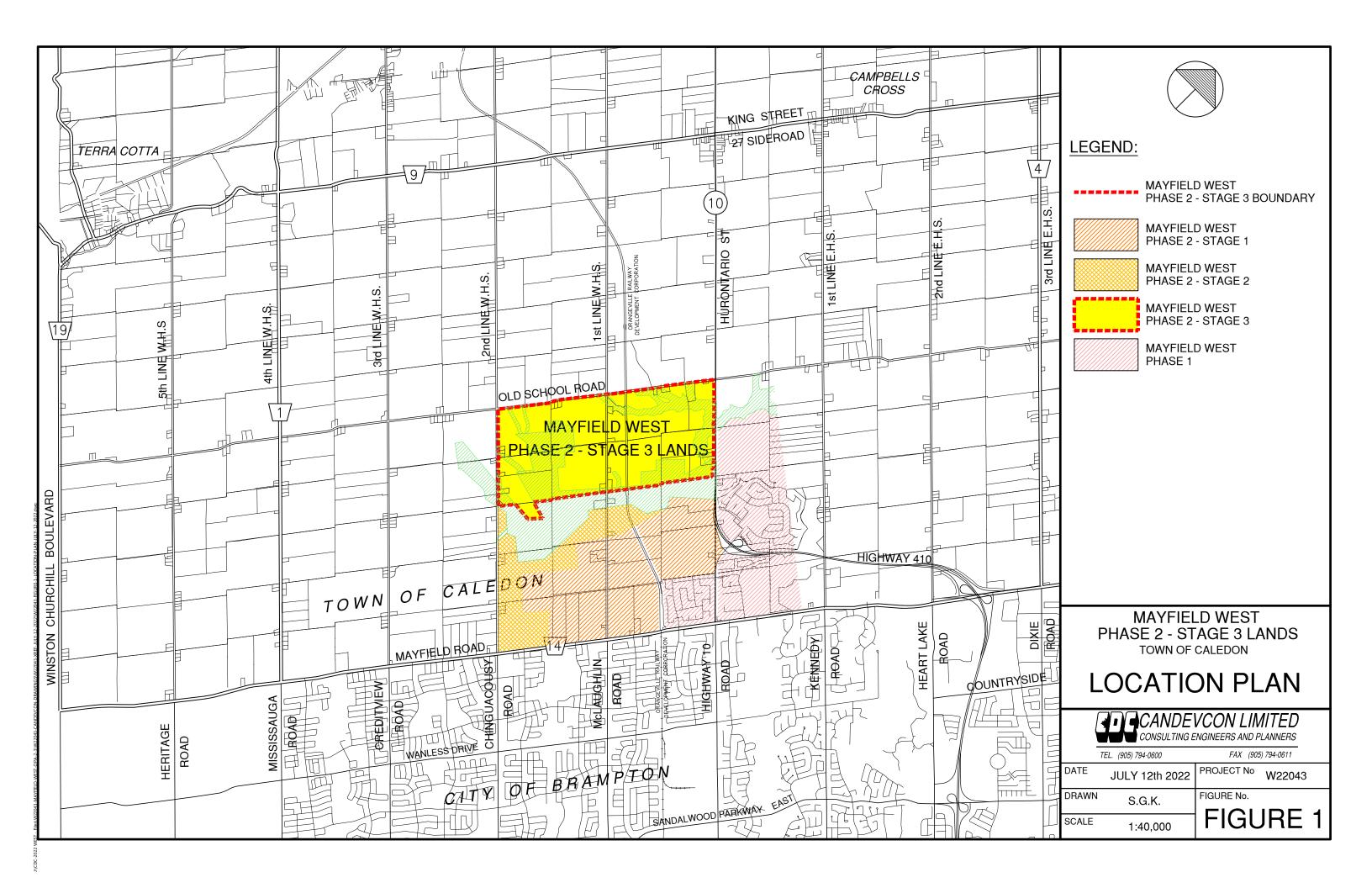
APPENDIX "B" Urbantech Consulting, Sanitary Sewer Design Sheets 1 and 2 of Appendix 8 of FSR dated August 2017

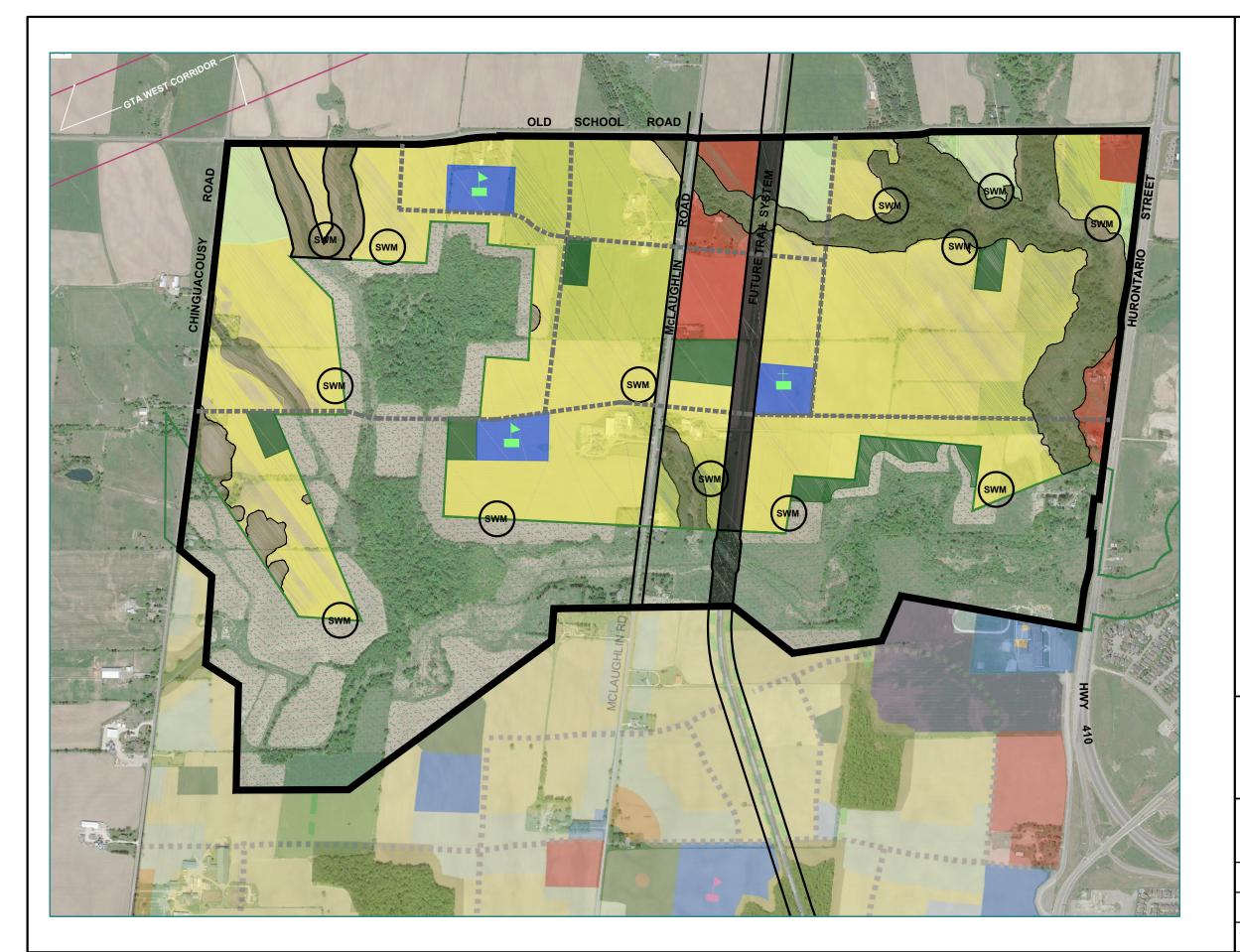
## 1. INTRODUCTION

Brookvalley is proposing an Official Plan Amendment to the Town of Caledon Official Plan to include the Mayfield West Phase 2 Stage 3 Lands (which are the residual lands in the Mayfield West Study Area west of Hurontario Street) within the Mayfield West Rural Service Centre boundary and re-designate them for urban land uses within the Mayfield West Phase 2 Secondary Plan. The Official Plan Amendment application is required to determine land use designations, along with population, employment, and density targets for the Mayfield West Phase 2 Stage 3 Lands prior to the submission of development applications. The proposed amendment will designate the lands for a range of uses, including low and medium density residential, commercial, institutional, parks and open space uses and a public road network.

The Mayfield West Phase 2 Stage 3 Lands are shown on Figure 1 and comprise a total area of approximately 270 hectares generally bounded by Chinguacousy Road to the west, Old School Road to the north, Hurontario Street (Highway 10) to the east and the Etobicoke Creek to the south

This study, which addresses water, wastewater and storm water management servicing, is one of several Technical Studies that have been prepared to fulfil the Growth Plan requirements for a Settlement Boundary expansion northerly to Old School Road. The purpose of the Study is to provide a high-level evaluation and identification of the sanitary, water and storm water management servicing infrastructure that will be required to accommodate the urban development of the subject lands, and to facilitate the Region of Peel to include the required infrastructure improvements in its Capital Works Planning Process.







## LAND USE

Mayfield West Phase 2 - Stage 3 Secondary Plan Boundary

Low Density Residential

Medium Density Residential

General Commercial

Institutional

Open Space Policy Area

Stormwater Pond Facility

---- Collector Roads

Future Trail System

Environmental Policy Area

Boundary of Greenbelt Plan Area

Elementary School

## NOTE:

PROPOSED LAND USES BASED ON MALONE GIVEN PARSONS FILE No. 21-3130 MAYFIELD WEST - URBAN STRUCTURE PLAN 2022 06 30 Land Use Plan-FINAL.dwg DATED JUNE 30 2022

MAYFIELD WEST
PHASE 2 - STAGE 3 LANDS
TOWN OF CALEDON
URBAN STRUCTURE
CONCEPTUAL PLAN



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 DATE
 JUNE 2024
 PROJECT No. W23093

DRAWN S.D.L. FIGURE No.

E 0m 100 200 300 FIGURE 2

## 2. RELATED TECHNICAL STUDIES

The following Water and Wastewater Studies have been completed over the last ten years which relate to the servicing of the subject lands.

## 2.1 R.J. Burnside & Associates Limited

Mayfield West Phase 2 Secondary Plan Water and Wastewater Servicing Study Town of Caledon

- Part A Report dated May 2009
- Part B Report dated October 8<sup>th</sup> 2010

The Study, which was commissioned by the Town of Caledon, was one of several component studies prepared in support of the Mayfield West Phase 2 (MW2) Secondary Plan.

The Study Area comprised the lands bounded by Chinguacousy Road to the west, Old School Road to the north, Dixie Road to the east and Mayfield Road to the south.

The Part B report evaluated water and wastewater servicing for three (3) Community Development Scenarios that were under consideration and also identified potential external regional servicing improvements that would be required to service the Community Development Scenarios.

## 2.2 The Municipal Infrastructure Group Ltd.

Mayfield West - Phase 2 Secondary Plan Water and Wastewater Servicing Study, January 2014

The Study, which was commissioned by the Mayfield Station Landowners Group, was prepared in support of the Mayfield West Phase 2 Secondary Plan, and was undertaken to address servicing requirements as a result of changes to the MW2 Plan through OPA 226 (dated September 11<sup>th</sup> 2012) and the Planning Report DP-2013-092 dated September 3<sup>rd</sup> 2013.

The purpose of the study was to:

- Identify existing and planned water and wastewater infrastructure;
- Provide a summary of proposed water and wastewater demands;
- Identify proposed water and wastewater infrastructure to support the Study Area;
- Identify possible interim servicing opportunities utilizing existing water and wastewater infrastructure, and
- Identify potential development planning limits based on planned and proposed Infrastructure timing.

The proposed water and wastewater network/routing design addressed the servicing requirements for three (3) areas as follows:

- Stage 1:Lands within the Town of Caledon Council Endorsed Framework Plan;
- Stage 2:Potential development lands beyond the Council Endorsed Framework

  Plan and south of the Etobicoke Creek
- North Lands: Potential development lands north of Etobicoke Creek having an approximate gross area of 325 ha.

Note: The ANorth Lands@ are the subject lands in this (Candevcon=s) report i.e. AStage 3 Lands@.

Copies of Figures 4, 6 and 7 of the report showing the Servicing Areas and the Recommended Water and Wastewater Servicing Plans are included in Appendix AA@ for reference.

## 2.3 Urbantech Consulting

Functional Servicing Reports - Mayfield West Phase 2

- May 2016 and August 2017

The Town of Caledon Council adopted the Mayfield West Phase 2 Secondary Plan (MW2) Official Plan Amendment OPA 222 on November 10<sup>th</sup> 2015. The approved MW2 Secondary Plan included the Stage 1 Area only.

The Study, which was prepared for the Mayfield West Landowners Group, along with companion reports (EIR, Transportation) was intended to support the individual Draft Plans of Subdivision within the MW2 Phase 2 Stage 1 lands and to demonstrate how the Stage 2 lands would be integrated into the Stage 1 development.

The Study report (August 2017) includes the preliminary design of the sanitary sewer system which included the MW2 Phase 2 Stage 1 and Stage 2 lands as well as future development north of the Etobicoke Creek/Green Belt to Old School Road (i.e. Mayfield West Phase 2 Stage 3 Lands). The relevant Sanitary Sewer Design Sheets are included in Appendix AB@ and a print of the Sanitary Sewer Plan (Drawing 801) is included as a Reference Drawing to this report. As shown on the Sanitary Sewer Design Sheets, the sanitary sewers in the Stage 1 and Stage lands are designed to accommodate the future development of the Stage 3 lands at a population density of 80 persons/ha.

The Study report (August 2017) also included the future/planned trunk watermain infrastructure on Chinguacousy Road (600mm diameter) and on McLaughlin Road (400mm diameter) which will accommodate development of the Stage 3 lands.

## 2.4 **GM Blueplan**

Settlement Area boundary expansion (SABE)

Water and wastewater servicing Analysis.

August 12, 2021

The Region of Peel commissioned the SABE as a follow-up to the Region's 2020 Water and Wastewater Master Plan to review the servicing needs in the Caledon area including future growth north of Mayfield Road beyond the "2041 servicing boundary". The study confirmed the water and wastewater upgrades, required for the area, identified in the 2020 Water and Wastewater Masterplan

## 3. URBAN STRUCTURE CONCEPTUAL PLAN

The Urban Structure Conceptual Plan for the Phase 2 Stage 3 lands is illustrated on Figure 2 and identifies a range of residential densities as well as Commercial Nodes at key locations and employment uses. Community uses such as Schools and Parks, as well as infrastructure facilities such as stormwater management ponds, have been located.

## 4. EXISTING AND PLANNED WATER AND WASTEWATER INFRASTRUCTURE

## 4.1 Water

## **4.1.1** Existing Water Services

The subject Stage 3 lands are located in Region of Peel Pressure Zone 7W. At present the noted lands are unserviced. The existing water services in the area consist of the following

- 600mm diameter main on Chinguacousy Road at Tim Manley Avenue
- 400mm diameter main on McLaughlin Road that terminates north of Lippa Drive
- 300mm diameter main on Hurontario Street that terminates north of Snelcrest Drive

## 4.1.2 Proposed Water Services

The Region has proposed the following watermain upgrades to service the subject area

- 600mm diameter main on Chinguacousy Road from the current terminus point to Old School Road
- 400mm diameter main on McLaughlin Road Old School Road
- 600mm diameter watermain on Hurontario Street
- 750mm diameter watermain on Old School Road
- 10ML west Caledon elevated Tank on Chinguacousy Road

The anticipated water demands for the area are as follows;

## East side

Area (ha)	181.5
Population (80 people /ha)	14520
Average day (l/s)	47.06
Max day (l/s)	94.11

Peak hour (1/s)	141.17
Fire plus max day (l/s)	194.11

## West side

Area (ha)	95.7
Population (80 people /ha)	7656
Average day (l/s)	24.81
Max day (l/s)	49.62
Peak hour (l/s)	74.43
Fire plus max day (l/s)	149.62

## 4.2 Wastewater

## **4.2.1 Existing Wastewater Services**

At present there are no existing municipal sanitary sewers servicing the area. The existing sanitary sewers in the area are as follows;

- 450mm diameter sanitary sewer at Tim Manley Avenue and Chinguacousy Road
- 525mm diameter sanitary sewer on Mclaughlin Road at Lippa drive

## 4.2.2 Proposed Wastewater Services

The Region has proposed the following municipal wastewater services to service the subject lands

- 450mm diameter trunk sanitary sewer on Chinguacousy Road from Tim Manley
- 525mm diameter trunk sanitary sewer on McLaughlin Road from Lippa Drive
- 375mm diameter sanitary sewer serving the lands west of McLaughlin Road between Etobicoke Creek and Old School Road, to the 450mm sanitary sewer on Chinguacousy Road

- 525mm diameter sanitary sewer serving the lands east of McLaughlin Road between Old School Road and Etobicoke Creek to the 525mm sanitary sewer on Mclaughlin Road
- A Sewage Pumping Station located north of Etobicoke Creek on Mclaughlin Road that would outlet to the existing sanitary sewer on McLaughlin Road

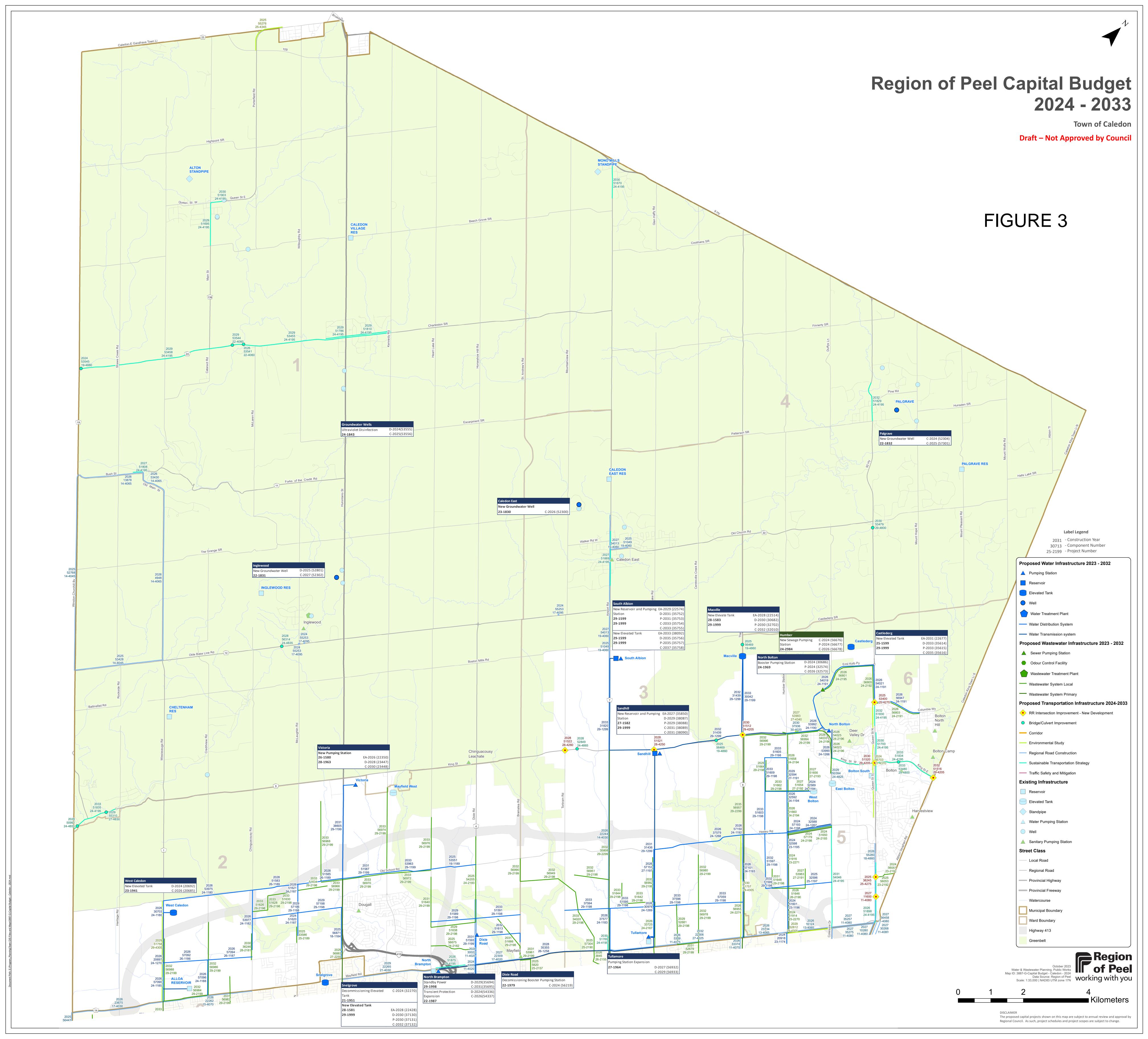
The anticipated wastewater demands for the area as follows:

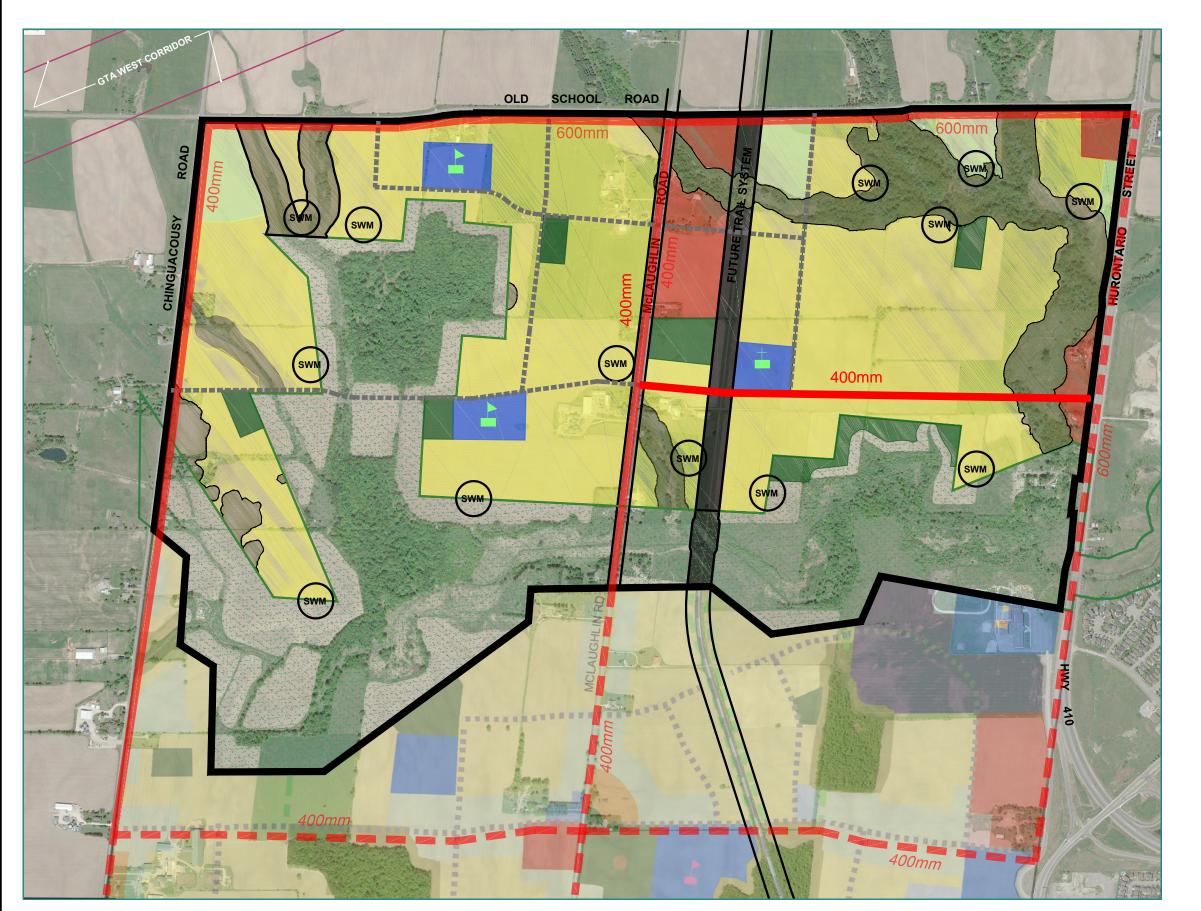
## East side

Area (ha)	181.5
Population (80 people /ha)	14520
Average day (l/s)	50.89
Peak factor	2.79
Infiltration (l/s)	36.30
Peak flow (l/s)	178.4

## West side

Area (ha)	95.7
Population (80 people/ha)	7656
Average day (l/s)	26.83
Peak factor	3.07
Infiltration (l/s)	16.00
Peak flow (l/s)	98.3







## **LAND USE**

Mayfield West Phase 2 - Stage 3 Secondary Plan Boundary

Low Density Residential

Medium Density Residential

General Commercial

Institutional

Open Space Policy Area

Stormwater Pond Facility

---- Collector Roads

Future Trail System

Environmental Policy Area

Boundary of Greenbelt Plan Area

Elementary School

EXISTING WATERMAIN

PROPOSED WATERMAIN

## NOTE:

PROPOSED LAND USES BASED ON MALONE GIVEN PARSONS FILE No. 21-3130 MAYFIELD WEST - URBAN STRUCTURE PLAN 2022 06 30 Land Use Plan-FINAL.dwg DATED JUNE 30 2022

MAYFIELD WEST PHASE 2 - STAGE 3 LANDS TOWN OF CALEDON

EXISTING AND PLANNED WATER INFRASTRUCTURE PLAN

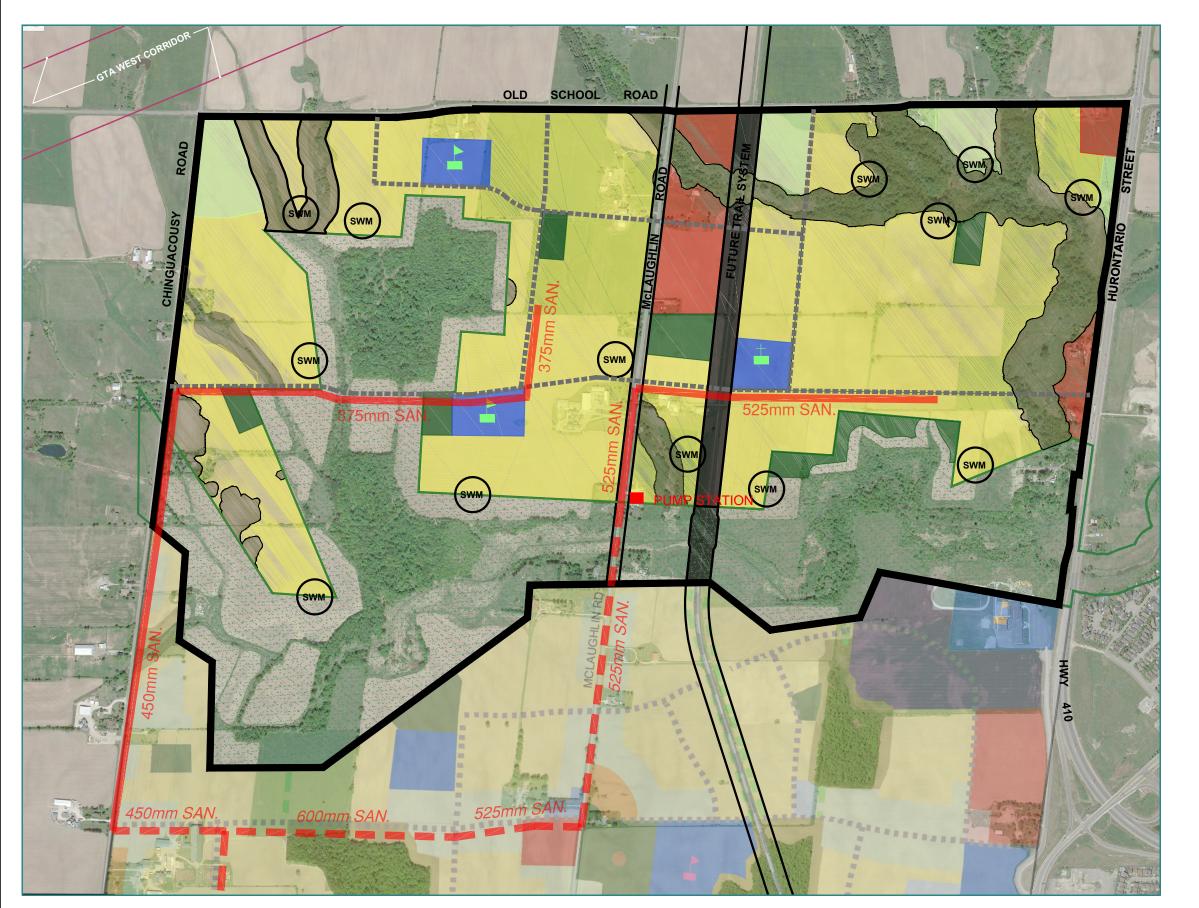


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DRAWN S.D.L. FIGURE No.

SCALE Om 100 200 300 FIGURE 4





## **LAND USE**

Mayfield West Phase 2 - Stage 3 Secondary Plan Boundary

Low Density Residential

Medium Density Residential

General Commercial

Institutional

Open Space Policy Area

Stormwater Pond Facility

---- Collector Roads

Future Trail System

Environmental Policy Area

Boundary of Greenbelt Plan Area

Elementary School

EXISTING SANITARY

PROPOSED SANITARY

## NOTE:

PROPOSED LAND USES BASED ON MALONE GIVEN PARSONS FILE No. 21-3130 MAYFIELD WEST - URBAN STRUCTURE PLAN 2022 06 30 Land Use Plan-FINAL.dwg DATED JUNE 30 2022

> MAYFIELD WEST PHASE 2 - STAGE 3 LANDS TOWN OF CALEDON

EXISTING AND PLANNED WASTEWATER INFRASTRUCTURE PLAN



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DATE JUNE 2024 PROJECT No. W23093

DRAWN S.D.L. FIGURE No.

SCALE Om 100 200 300 FIGURE 5

## 5 STORM WATER MANAGEMENT

The configuration of the proposed storm water management concept is show on figure 7. The preliminary pond locations were determined based on existing contours and maintaining existing drainage boundaries. A total of 13 storm water management facilities are proposed to service Phase 2, Stage 3.

The location and preliminary drainage boundaries of the Storm Water Management facilities is shown on figure 7 and are summarized below

Pond Number	Drainage Area (ha)
1	19.4
2	19.4
3	3.6
4	11.7
5	38.4
6	20.3
7	15.3
8	19.3
9	30.7
10	17.5
11	8.8
12	3.5
13	6.6

The SWM facilities will be designed as part of a future Functional Servicing Study for the Phase 2, Stage 3 lands.

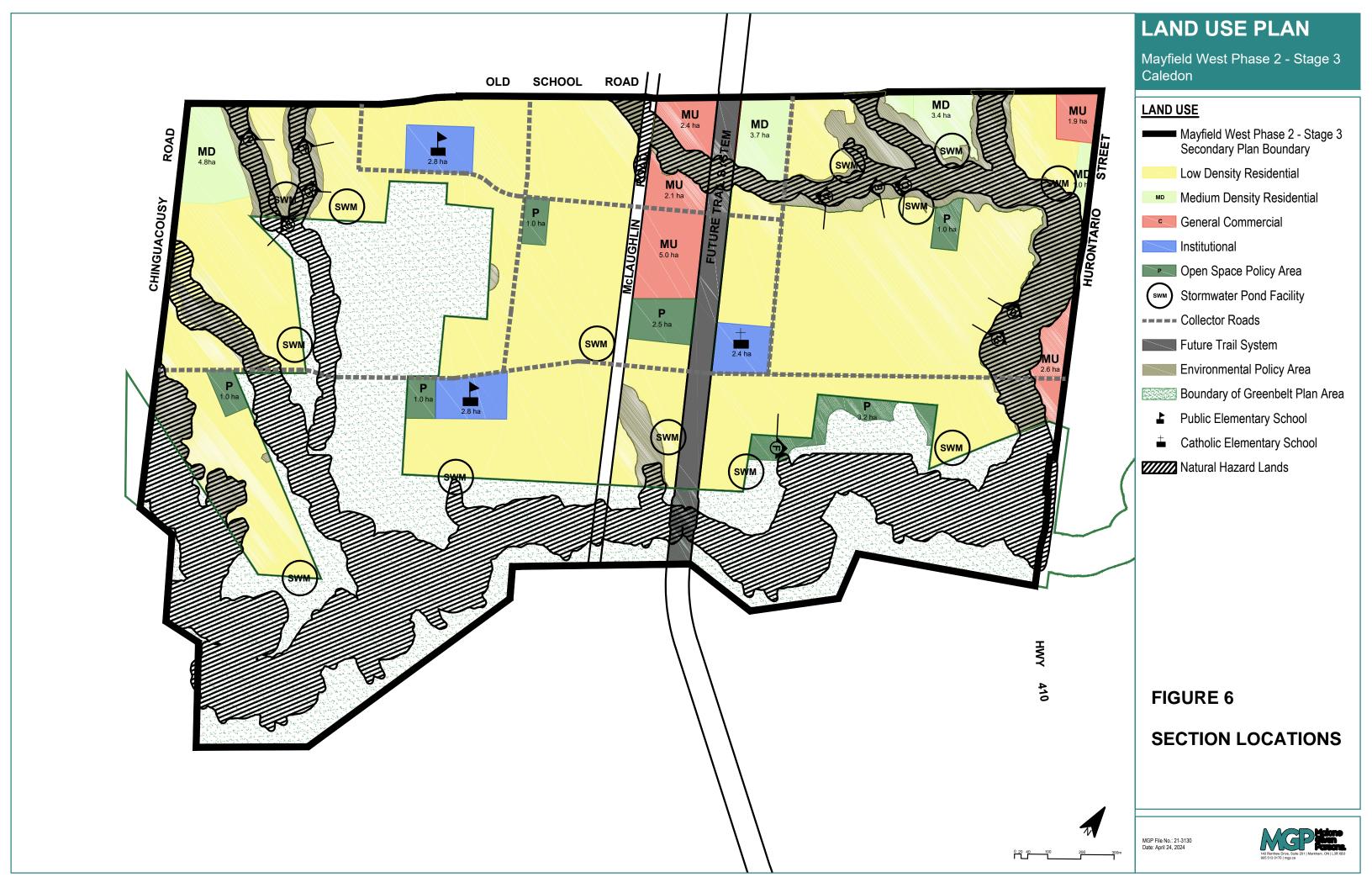
## **5.1** Climate Change

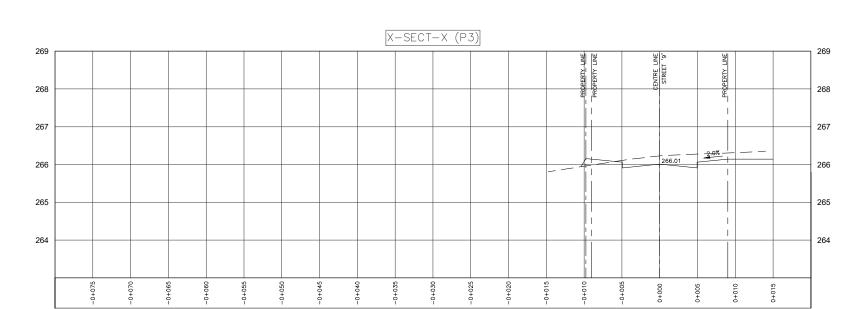
The realization that climate change may have an impact on future rainfall events it will be critical to address this in any Storm Water Management and drainage design.

At the FSR stage for each development, the reports shall identify possible climate change impacts related to SWM. The FSR shall identify possible adaptation and / or mitigation methods such as LID measures, system resiliency, home owner awareness and other possible adaptation and / or mitigation methods, which will then be further refined at the detailed design stage.

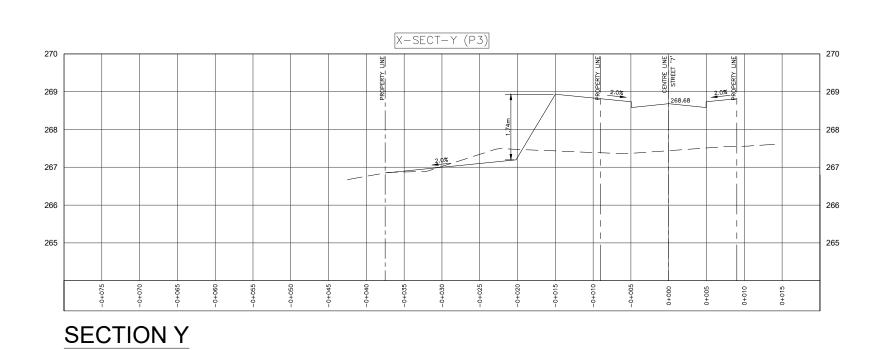
## 6. SITE GRADING

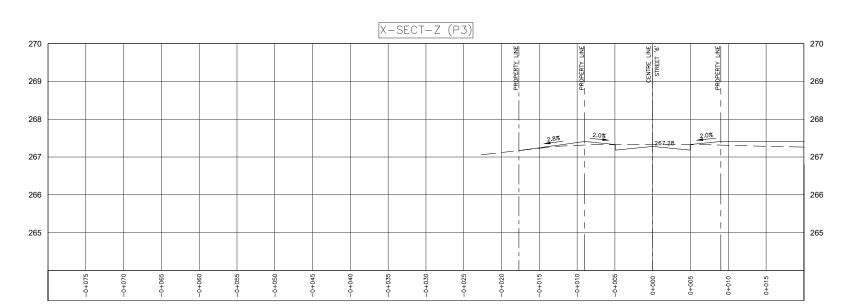
The area shall be graded to avoid any grading within the NHS boundary. Typical sections along the boundary of the site showing how grading can be contained within the developable boundary are shown on figures 6 and 7





SECTION X
SCALE: H 1:500
V 1:100



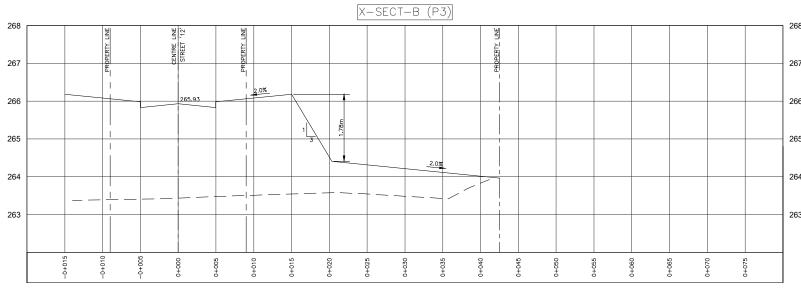


SECTION Z

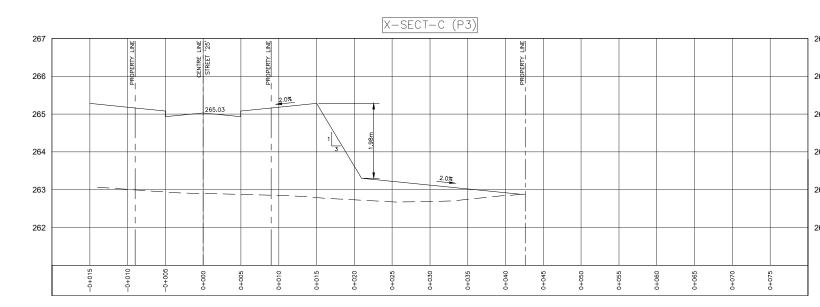
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SCALE: H 1:500 V 1:100 SECTION A

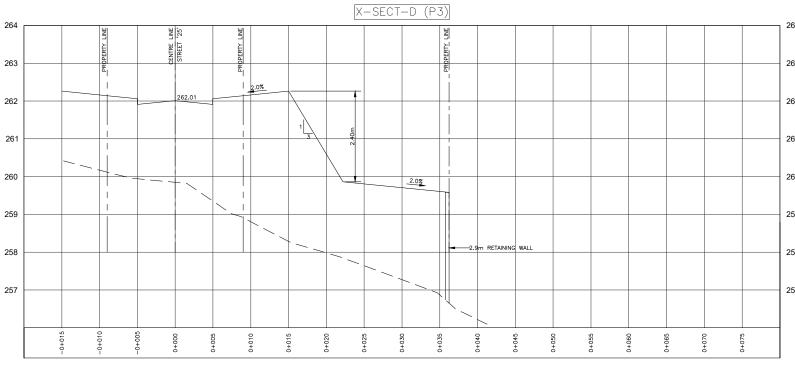
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SECTION B
SCALE: H 1:500
V 1:100



SECTION C
SCALE: H 1:500
V 1:100



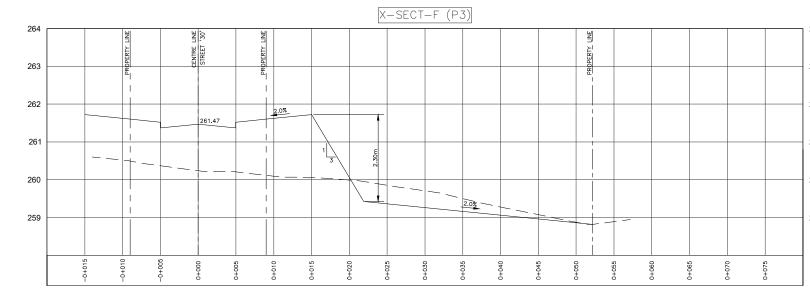
SECTION D

SCALE: H 1:500
V 1:100



SECTION E

SCALE: H 1:500
V 1:100



SECTION F
SCALE: H 1:500
V 1:100

OLD SCHOOL ROAD

SITE

WCTABGHLIN ROAD

MAYFIELD ROAD

KEY PLAN

LEGEND:

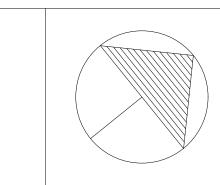
REFERENCE DRAWINGS:

REFER TO DRAFT PLAN PREPARED BY MGP DATED NOVEMBER 28, 2023
 REFER TO DRAWING PS-1 FOR INFORMATION ON STORM, SANITARY & FDC
 REFER TO DRAWING EXT-SA DRAWINGS FOR INFORMATION ON EXTERNAL SANITARY DRAINAGE AREAS.

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REVISIONS





RESIDENTIAL SUBDIVISION

CITY OF BRAMPTON
REGIONAL MUNICIPALITY OF PEEL

SHEET TITLE:

**CROSS-SECTIONS** 

DRAWN BY:	S.C.	PROJECT No.	W23093
CHECKED B	S.L	DRAWING No.	
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J:\CDC-2023 WEST - Files\W23093- Mayfield west Ph2 ST3\OPA\FIGURES\FIGURE 8.dwg ( May 23, 2024 -

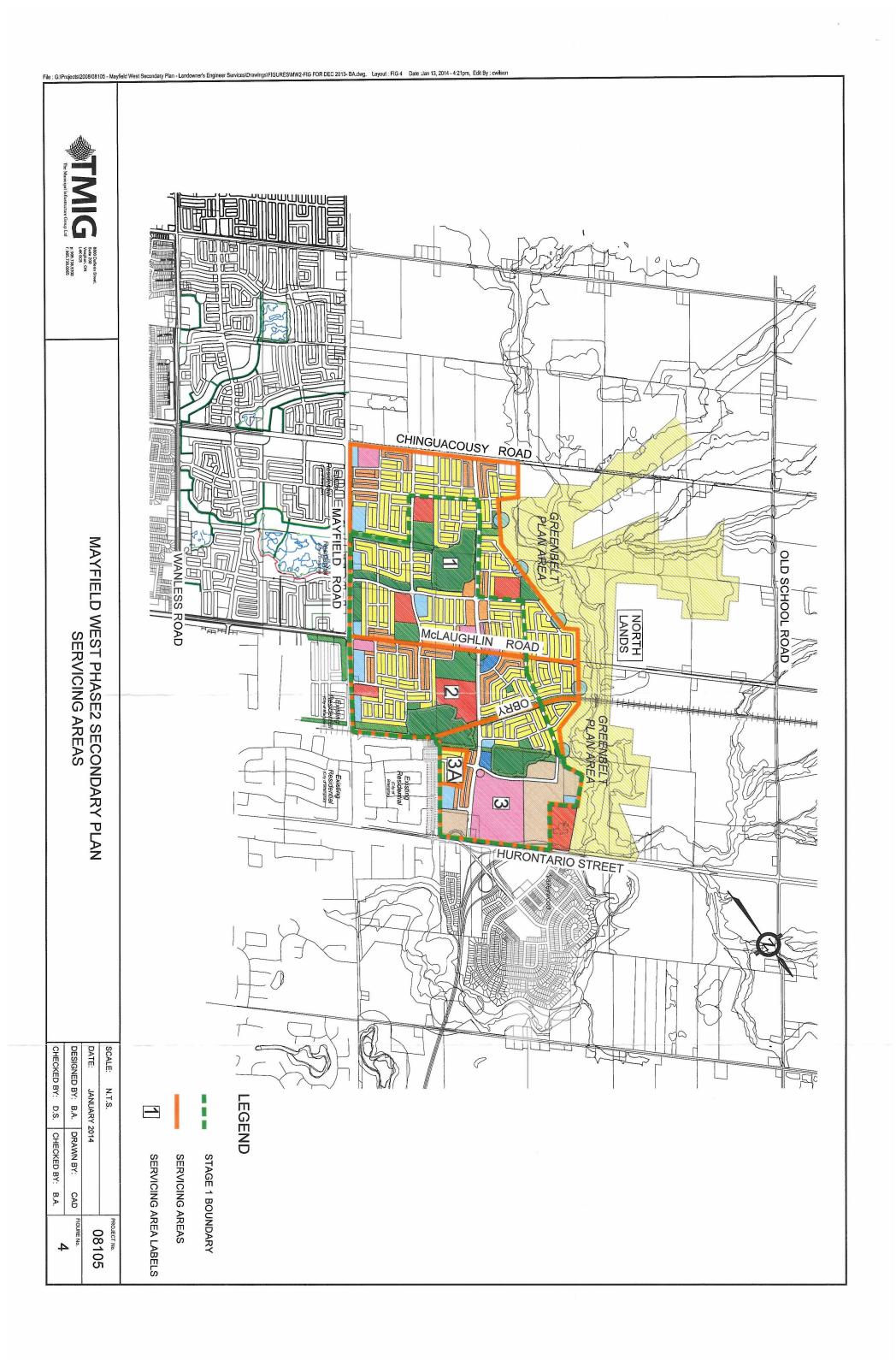
## 7. SUMMARY AND CONCLUSIONS

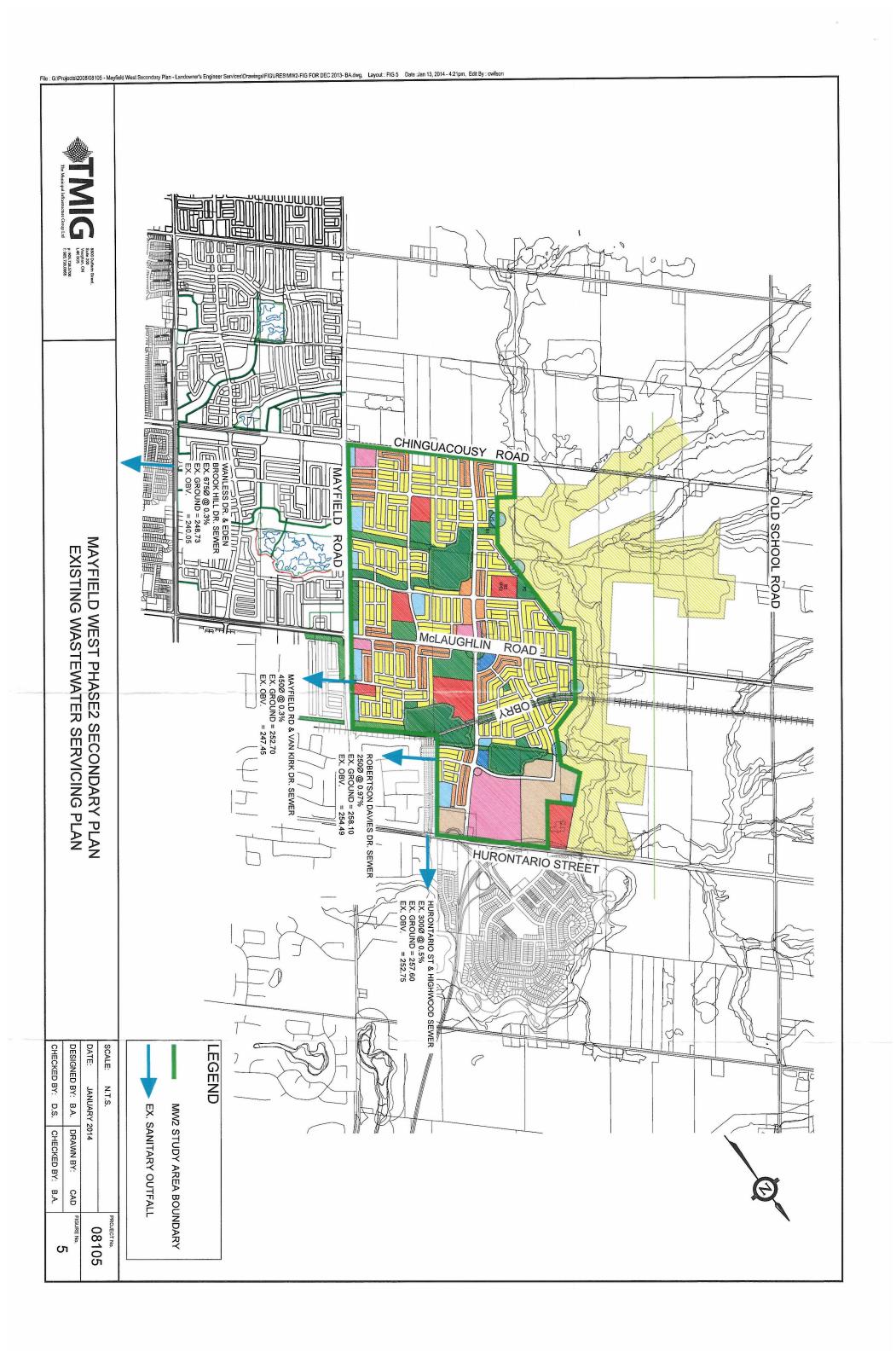
As summarized in Section 2 of this report, the Technical Studies (Water and Wastewater Servicing Studies and Functional Servicing Reports) which have been completed for the Mayfield West Phase 2 Secondary Plan as well as for the Mayfield West Phase 2 Stage 1/2 lands have consistently included for the future development of the Phase 2 Stage 3 (north) lands. The Region of Peel Water and Wastewater DC Maps have also identified the trunk services in the Mayfield West Phase 2 Secondary Plan area that will accommodate the future development of the Phase 2 Stage 3 lands.

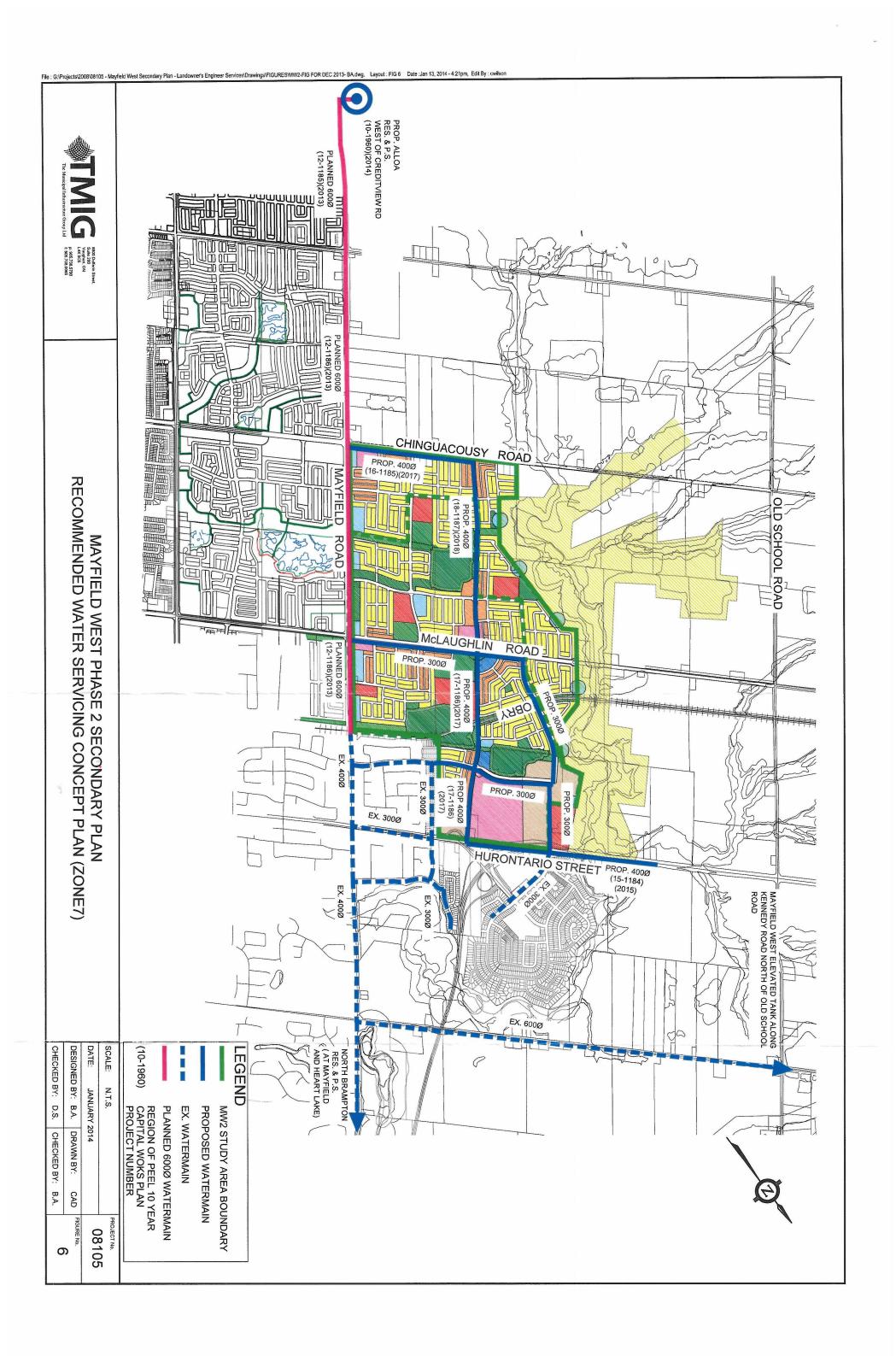
Accordingly, the development of the Phase 2 Stage 3 Lands will utilize trunk water and wastewater infrastructure that will have been constructed and sized to accommodate the Phase 2 Stage 3 Lands.

## APPENDIX "A"

Figures 4, 6 and 7 of The Municipal Infrastructure Group Water and Wastewater Servicing Study dated January 2016







# APPENDIX "B" Urbantech Consulting, Sanitary Sewer Design Sheets 1 and 2 of Appendix 8 o9f FSR dated August 2017



Spine Road Spine Road Spine Road	Spine Road Spine Road	Spine Road	McLaughlin Road McLaughlin Road McLaughlin Road McLaughlin Road	Spine Road Spine Road Spine Road Spine Road Spine Road	Local Local Local Local Local Local Local	Spine Road Spine Road	Local Local Local Local Local Local Local Local	Spine Road Spine Road Spine Road Spine Road	Local Local Local Spine Road	Local Local Local	Collector Road 'A'	OUTLET 1 - EDENBROOK HILL DRIVE OUTFALL McLaughlin Road 100A McLaughlin Road 101A McLaughlin Road 101A McLaughlin Road 102A McLaughlin Road 103A McLaughlin Road 104A McLaughlin Road 105A McLaughlin Road 105A	STREET	SANIT
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	181.6 181.6	56.1	5,8	26.3 3.0 2.5 14.5 52.0		26.3 26.3	9.1 9.1 9.1 9.1	3.5 18.6 18.6	4.6 4.6	4.6 4.6 4.6	4,6	142.1 142.1 142.1 142.1 142.1 142.1 142.1 142.1 142.1	FLOW CALCULATIONS G RES. MIN. R FLOW FLC (I/s) (I/	
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								d contract of the contract of					COMM. ACCUM. FLOW COMM. FLOW (I/s) (I/s)	Avg. Domestic Flow = 302.8  Avg. Infiltration = 0.200  Max. Peaking Factor = 4.00  Min. Peaking Factor = 1.50  Domestic Sewage flow for <  (Region of Peel Std. 2-5-2)
	226.5 226.5	94.5	13.5	31.2 13.9 13.5 15.8 59.9		31.2 31.2	14.7 14.7 14.7 14.7 14.7 14.7	++++	13.8 13.8 14.0			178.4 178.4 178.4 178.6 178.6 178.6 178.6 178.6	TOTAL FLOW (I/s)	
1.00	0.30	0.30	1.00 0.50	0.30 0.30 0.30 0.30	1.00 0.50 0.50 0.50	0.35	1.00 0.50 0.50 0.50	0.35 0.35 0.35	0.50	0.50 0.50 0.50	1.00 0.50 0.50	0.30 0.30 0.30 0.30 0.30	SLOPE DI	n i
250 250	600	375	250 250 250 250	375	250 250 250 250 250 250	300 300	250 250 250 250 250	300 300	250 250 250	250 250 250 250 250	250 250 250 250 250	525 525 525 525 525 525 525	PIPE PIPE DIAMETER LENGTH (mm) (m)	0.013m³/s
59.5 42.0	336,3 336,3	96.0	59,5 42.0 42.0	96.0 96.0	59.5 42.0 42.0 42.0 42.0	57.2 57.2	59.5 42.0 42.0 42.0 42.0 42.0	57.2 57.2 57.2	42.0 42.0 42.0	42.0 42.0 42.0 42.0	59.5 42.0 42.0 42.0	235.6 235.6 235.6 235.6 235.6 235.6 235.6	FULL FLOW CAPACITY (I/s)	
1.21 0.86	1.19	0.87	1.21 0.86 0.86	0.87	1.21 0.86 0.86 0.86	0.81	1.21 0.86 0.86 0.86	0.81		0.86 0.86 0.86		1.09 1.09 1.09 1.09 1.09	FULL FLOW AV VELOCITY VEI	MALL OF ONLY OF STATE
0.31 0.22	1.25 67% 1.25 67%	0.91 67%	0.31 0.22 0.75 32%	0.76 32%	0.31 0.22 0.22 0.22 0.22 0.22	0.82 55% 0.82 55%	0.98 25% 0.77 35% 0.77 35% 0.77 35% 0.77 35% 0.77 35%	0.73 38% 0.73 38% 0.73 38%		0.75 33% 0.75 33% 0.75 33% 0.75 33%	0.31 0.22 0.22 0.22 0.75 33%	1.19 76% 1.19 76% 1.19 76% 1.19 76% 1.19 76% 1.19 76% 1.19 76%	ACTUAL PERCENT VELOCITY FULL (m/s) (%)	OMINAL PIPE SIZE USED

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Local Consider Road Spine Road Chinguacousy Road	Spine Road	Local Local Local Local Local Local Local Local Local Collector Road 'D' Collector Road 'D' Collector Road 'D' Spine Road	Collector Road 'A' Collector Road 'A' Collector Road 'A' Collector Road 'A' Collector Road 'D'	Spine Road Spine Road Spine Road Collector Road 'A' Collector Road 'A'	STREET	SAN
1248 1258 1268 116A 116A 117A 117A 200A 201A 202A 203A 204A 205A 206A 206A	122B 123B 111A 111A 112A 113A 113A 114A 115A	116B 117B 118B 119B 120B 120B	1098 11098 1098 1098 1098 1109 1118 1118	102B 108A 109A	FROM	SANITARY SEWER DESIGN SHEET  Mayfield West Phase 2 FSR  Town of Caledon, Region of Peel
1248 1258 1268 1268 116A 1116A 1117A 300A 201A 201A 201A 202A 202A 203A 203A 205A 205A 206A 206A 206A 206A 206A 206A 206A 206	123B 111A 112A 113A 114A 115A 116A	1178 1188 1198 1208 1208 1218 1218 1218 1218 110A 1110A	1058 1068 1068 1088 1128 1128 11298 11098 11198 11118 1128 1128	108A 109A 110A 103B	MH H	VER DESI
2.54 273.50 2.57 2.33 2.59 270.96 2.59 273.50 95.70 95.70 95.70 99.25 99.25 99.25 99.25 99.25 99.26 105.04 105.04 105.04 105.04	257,02 257,02 257,02 266,44 268,43 2.19 268,63	6.47 6.47 2.32 2.32 5.16 30.12 2.36 257.02	16.17 16.17 16.17 16.17 16.17 16.17 16.17 16.17 16.17 16.17	224.54 224.54	ACC. AREA AREA (ha) (ha) (ha)	Z FSR 1 of Peel
50 70 70 80 80 80	80	50 70 175	80		RESIDENTIAL UNITS DENSITY (#) (P/ha)	
88 40 204 7656 284 464	754	324 163 903	1299		DENSITY POP	
23603 23603 23807 23807 7656 7656 7656 7940 7940 7940 7940 8404 8404 8404	22545 22545 22545 23299 23299 23475	324 3 163 3 2694 3 22545	1294 1294 1294 1294 1294 1294 1294 1294	19448 19448	ACCUM.  POP.	PROJECT DETA: Project No: 15-483 Date: 13-Jul- Designed by: T.L. Checked by: J.O.
		1.92			AREA (ha)	PROJECT DETAILS ect No: 15-483 Date: 13-Jul-17 hed by: J.O.
1.92	1.92 1.92 1.92 1.92 1.92	1.92 50			COMMERCIAL/INDUST	
					IAL/INDUSTRIAL/INSTITUTIONAL EQUIV, FLOW EQUIV POP. RATE POP. (p/ha) (l/s/ha)	
96	96 96 96 96	96 96			EQUIV. ACCUM. POP. EQUIV. POP. POP.	
0.4 0.5 54.6 55.1 19.1 19.1 19.9 19.9 21.0 21.0 21.0 21.0	51.8 51.8 53.7 53.7 54.1	1.3 0.5 6.0	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	44.9	JM. INFILTRATION IV. (1/5)	Min. Flow = Min Diameter = Mannings 'n' = Min. Velocity = Max. Velocity = Factor of Safety =
23699 23699 23903 23903 7656 7656 7656 7940 7940 8404 8404 8404 8404	22641 22641 22641 23395 23395 23571	324 163 2694 22641	1294 1294 1294 1294 1294 1294 1294 1294	19448 19448	ION TOTAL ACCUM. POP.	low = 13 eter = 250 gs 'n' = 0.013 ccity = 0.75 ccity = 3.50 fety = 20
4,00 4,00 4,00 4,00 2,58 2,57 3,07 3,07 3,05 3,05 3,03 3,03 3,03 3,03 3,03	2.60 2.60 2.58 2.58 2.58	4.00 4.00 3.48 3.250	3,73 3,73 3,73 3,73 3,73 3,73 3,73 3,73	8 2.66 8 2.66	PEAKIN	
1.2 1.8 1.8 214.2 215.7 82.3 82.3 82.3 85.0 85.0 85.0 85.0 89.2 89.2 89.2 89.2	206.2 206.2 206.2 211.9 211.9 213.2	4.5 2.3 32.8 206.2	16.9 16.9 16.9 16.9 16.9 16.9	181.6	FLOW CALCULATIONS G RES, MIN. R FLOW FLO	
13.0 13.0 13.0 214.2 215,7 215,7 82.3 82.3 82.3 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0	206.2 206.2 206.2 211.9 211.9 213.2	13.0 13.0 32.8 206.2	16.9 16.9 16.9 16.9 16.9 16.9	181.6 181.6	MIN. RES. FLOW (1/s)	7
				; ; ; ; ; ;	COMM. CO	Avg. Domestic Flow = 302.4  Avg. Domestic Flow = 0.200  Infiltration = 0.200  Max. Peaking Factor = 4.00  Min. Peaking Factor = 1.50  Domestic Sewage flow for < (Region of Peel Std. 2-5-2)
26 27 27 27 27 27 27 27 27 27 27 27 27 27	25 25 26 26	11			ACCUM. TO COMM. FLOW F	1. <
1.00 1.3.4 0.50 13.4 0.50 13.5 0.50 13.5 0.50 13.5 0.30 101.5 101.5 0.30 104.8 0.30 104.8 0.30 104.8 0.30 1104.8 0.30 1104.8 0.30 1104.8 0.30 1104.8 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.	1.00 0.50 0.50 258.0 0.30 258.0 0.30 265.6 0.30 267.3 0.30	1.00 0.50 0.50 0.50 0.50 0.50 0.50 14.3 0.50 13.5 0.50 38.8 0.50 38.8 0.50	1.00 0.50 0.50 0.50 0.50 0.50 20.1 1.00 20.1 0.50 20.1 0.50 20.1 0.50 20.1 0.50 20.1 0.50	<del>                                     </del>	TOTAL SLOPE FLOW (1/5) (%)	1A 302.8  /c/d 0.200  /s/ha 4.00 1.50 for < 1000 ppi =
250 250 250 600 600 600 450 450 450 450 450 450 450 450 450	250 250 600 600 600 600	250 250 250 250 250 250 250 250 250 250	0 250 0 250		PIPE DIAMETER	ia bi = 0.013m³/s
					PIPE LENGTH	
59.5 42.0 42.0 42.0 42.0 336.3 336.3 336.3 336.3 156.2 156.2 156.2 156.2 156.2 156.2 156.2 156.2 156.2 156.2 156.2 156.2 156.2	59.5 42.0 336.3 336.3 336.3 336.3 336.3	59.5 42.0 42.0 42.0 42.0 42.0 42.0 42.0 68.4	59.5 42.0 42.0 42.0 42.0 42.0 42.0 59.5 59.5 42.0 42.0 42.0 42.0 42.0	42.0 336.3 336.3	PIPE DATA FULL FLOW CAPACITY (I/s)	
1.21 0.86 0.86 0.86 1.19 1.19 0.98 0.98 0.98 0.98	1.21 0.86 1.19 1.19 1.19 1.19 1.19	1.21 0.86 0.86 0.86 0.86 0.86 0.86 0.97	1.21 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86	0.86 1.19 1.19	FULL FLOW VELOCITY (m/s)	SIGNATURA SIGNATURA
0.31 0.22 0.25 3 1.31 8 1.31 8 1.31 8 1.31 8 1.31 8 1.31 1.03 6 1.03 6 1.03 6 7 1.05 1.05	0.31 0.22 1.30 1.30 7 1.30 7 1.30 7 1.30 7	0.31 0.22 0.22 0.22 0.22 0.22 0.22 0.22 0.2	0.31 0.22 0.22 0.22 0.22 0.22 0.22 0.82 0.82		W ACTUAL PERCENT Y VELOCITY FULL (m/s) (%)	Section of the sectio
32% 80% 81% 81% 65% 65% 67% 67% 71% 71%	77% 77% 79% 79% 79%	57%	34% 48% 48% 48% 48% 48%	67% 67%	PERCENT FULL (%)	

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