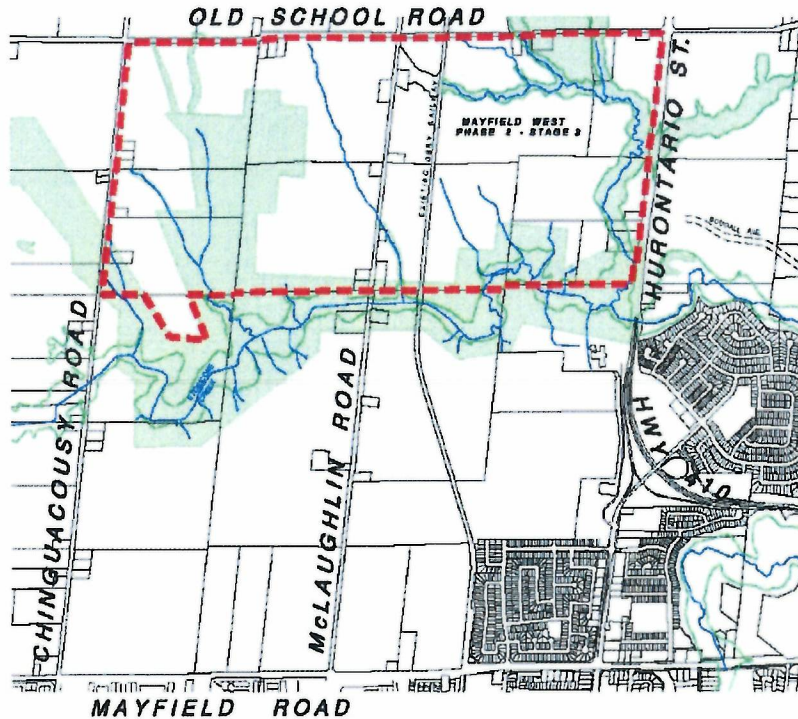


**MAYFIELD WEST
PHASE 2 - STAGE 3 LANDS
TOWN OF CALEDON**

TOWN OF CALEDON
PLANNING
RECEIVED
July 15, 2022



WATER AND WASTEWATER SERVICING STUDY

PREPARED FOR

BROOKVALLEY PROJECT MANAGEMENT INC.

FEBRUARY 19TH 2019

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APPENDICES

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 of FSR dated August 2017

1. INTRODUCTION

The Mayfield West Phase 2 - Stage 3 Lands are graphically illustrated 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. The subject lands are located in the *Mayfield West Study Area* as delineated in the Region of Peel and Town of Caledon Official Plans.

This study, which addresses water and wastewater servicing, is one of several Technical Studies that have been prepared to fulfill 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 and water 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.

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.

- **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 8th 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.

- **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 11th 2012) and the Planning Report DP-2013-092 dated September 3rd 2013.

2. RELATED TECHNICAL STUDIES (CONT'D)

- **The Municipal Infrastructure Group Ltd. (Cont'd)**

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 "North Lands" are the subject lands in this (Candevcon's) report i.e. "Stage 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 "A" for reference.

2. RELATED TECHNICAL STUDIES (CONT'D)

- **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 10th 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 "B" 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.

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, would be identified and located as part of a later Secondary Plan/Block Plan process.

4. EXISTING AND PLANNED WATER AND WASTEWATER INFRASTRUCTURE

4.1 Water

The subject Stage 3 lands are located in Region of Peel Pressure Zone 7. The planned watermain infrastructure, based on the Region of Peel Water DC Map 2017, is shown on Figure 3 and includes the following trunk watermains which will service the Stage 3 lands

- 600mm diameter main on Chinguacousy Road extending northerly to the proposed East-West Collector Road in the Phase 2 Stage 1/2 lands;
- 400mm diameter main on McLaughlin Road extending northerly to the proposed East-West Collector Road in the Phase 2 Stage 1/2 lands;
- 600mm diameter main on Hurontario Street extending northerly to the future East-West Collector Road in the Phase 2 Stage 3 lands;
- 400mm diameter main on the proposed East-West Collector Road in the Phase 2 Stage 1/2 lands.

4.2 Wastewater

The planned wastewater infrastructure, based on the Region of Peel Wastewater DC Map 2018, is shown on Figure 4 and includes the following infrastructure which will service the Phase 2 Stage 3 lands:

- 750mm diameter trunk sanitary sewer on the future North-South Collector Road extending northerly from Mayfield Road to the planned East-West Collector Road in the MW Phase 2 Stage 1/2 lands;
- 450mm diameter trunk sanitary sewer on Chinguacousy Road extending northerly from the planned East-West Collector Road in the MW Phase 2 Stage 1/2 lands to the north side of the Etobicoke Creek crossing. *Note: Based on the Urbantech Functional Servicing Report (August 2017), this sewer is designed to accommodate a drainage area of 95.70 ha (at 80 p/ha) in the Phase 2 Stage 3 lands.*
- 525mm diameter trunk sanitary sewer on McLaughlin Road extending northerly on McLaughlin Road from the planned East-West Collector Road in the MW Phase 2 Stage 1/2 lands to the south side of the Etobicoke Creek Greenland. *Note: Based on the Urbantech Functional Servicing Report (August 2017), this sewer is designed to accommodate a drainage area of 151.5 ha (at 80 p/ha) in the Stage 3 lands. A pumping station (and forcemain) will be required to service the Stage 3 lands.*

5. FUTURE/REQUIRED WATER AND WASTEWATER INFRASTRUCTURE

5.1 Water

The conceptual configuration of the required water infrastructure to service the Phase 2 Stage 3 lands is shown on Figure 5 and generally will comprise:

- 400mm diameter main on a future East-West Collector Road from Chinguacousy Road to Hurontario Street;
- 300mm diameter watermain loop either on the boundary roads (Chinguacousy Road, Old School Road, McLaughlin Road and Hurontario Street) or on internal Community roads.

The configuration of the trunk and sub-trunk mains, as well as the internal watermain network, will be determined as part of a future Functional Servicing Study for the Phase 2 Stage 3 lands.

5.2 Wastewater

The configuration of the sub-trunk and local sanitary sewers to service the Phase 2 Stage 3 lands will be determined as part of a future Functional Servicing Study for the Stage 3 lands. The conceptual configuration of the required wastewater infrastructure is shown on Figure 6 and generally will comprise:

- Sub-trunk (375mm to 450mm diameter) sanitary sewers on a future East-West Collector Road connecting to the planned 450mm diameter trunk sewer on Chinguacousy Road, and to a future pumping station on McLaughlin Road;
- A pumping station to be located to the north of the Etobicoke Creek Greenland at McLaughlin Road, with a forcemain on McLaughlin Road draining to the planned 525mm diameter sanitary sewer on McLaughlin Road.

6. 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.

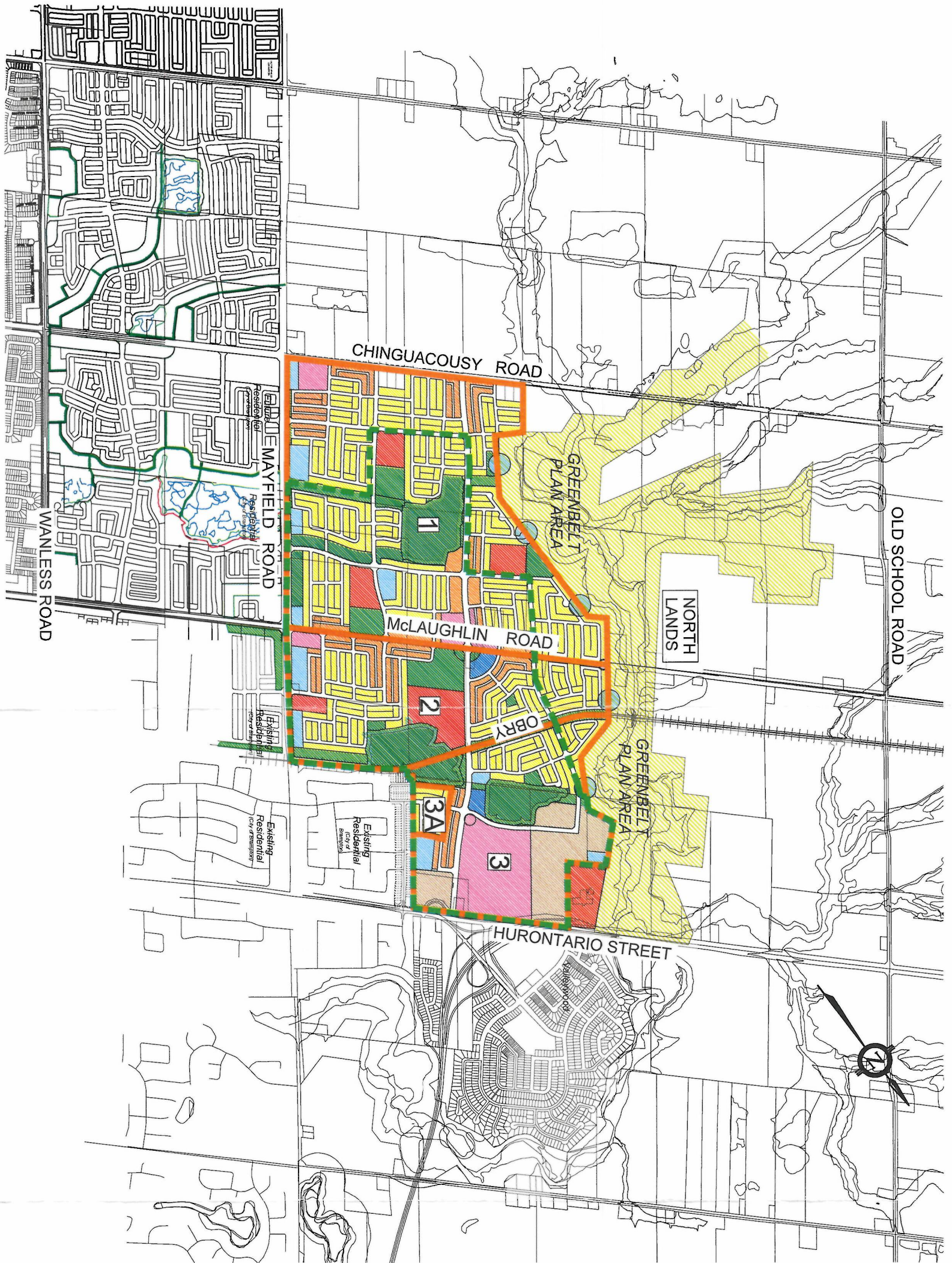
Accordingly, the development of the Phase 2 Stage 3 Lands will utilize trunk water and wastewater infrastructure that will have been constructed and sized to accommodate the Phase 2 Stage 3 Lands.

APPENDIX "A"

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



8800 Dufferin Street
 Suite 200
 Markham, ON
 L3R 9W2
 P: 905.738.5700
 F: 905.738.0095



MAYFIELD WEST PHASE2 SECONDARY PLAN
 SERVICING AREAS

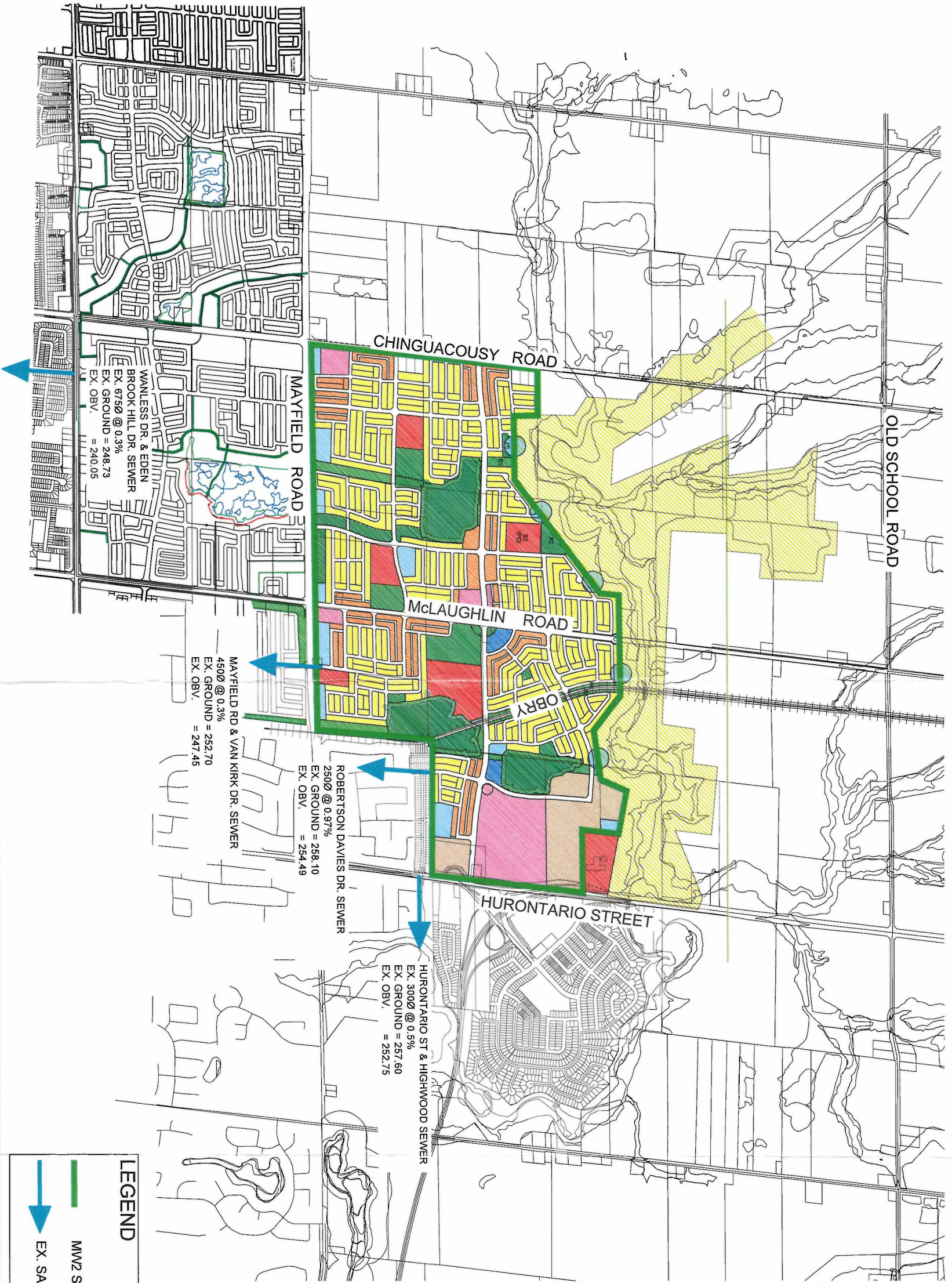
- LEGEND**
- STAGE 1 BOUNDARY
 - SERVICING AREAS
 - SERVICING AREA LABELS

SCALE: N.T.S.	PROJECT No.
DATE: JANUARY 2014	08105
DESIGNED BY: B.A.	DRAWN BY: CAD
CHECKED BY: D.S.	CHECKED BY: B.A.
	FIGURE No. 4



8822 Dufferin Street,
Suite 200
Vaughan, ON
L4K 0C5
P: 905.738.5700
F: 905.738.9898

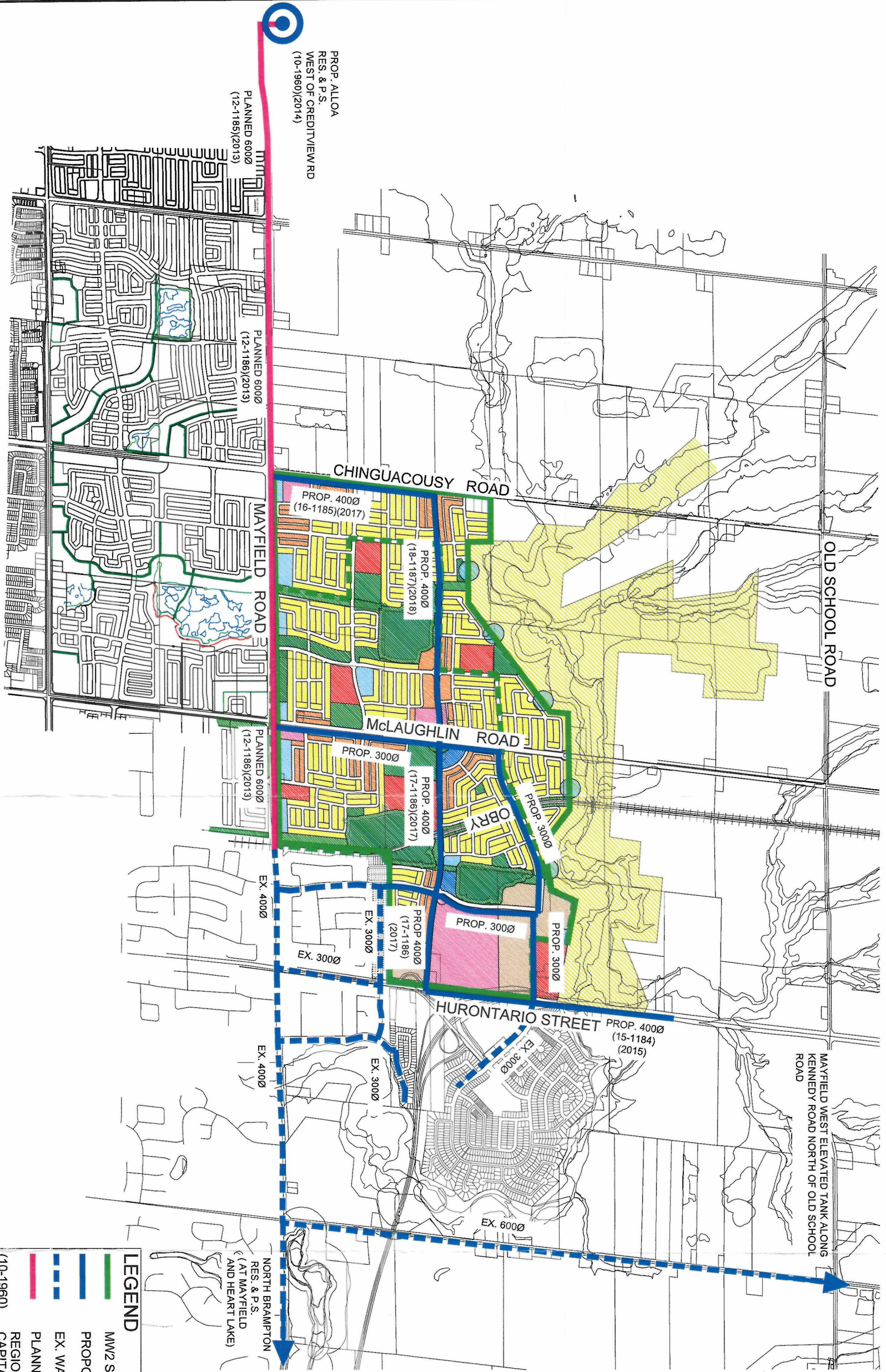
**MAYFIELD WEST PHASE2 SECONDARY PLAN
EXISTING WASTEWATER SERVICING PLAN**



LEGEND

- MW2 STUDY AREA BOUNDARY
- EX. SANITARY OUTFALL

SCALE:	N.T.S.	PROJECT No.	08105
DATE:	JANUARY 2014	DESIGNED BY:	B.A.
DESIGNED BY:	B.A.	DRAWN BY:	CAD
CHECKED BY:	D.S.	CHECKED BY:	B.A.
		FIGURE No.	5



PROP. ALLOA
RES. & P.S.
WEST OF CREDITVIEW RD
(10-1960)(2014)

PLANNED 600Ø
(12-1185)(2013)

PLANNED 600Ø
(12-1186)(2013)

PLANNED 600Ø
(12-1186)(2013)

EX. 400Ø

EX. 400Ø

EX. 400Ø

NORTH BRAMPTON
RES. & P.S.
(AT MAYFIELD
AND HEART LAKE)

LEGEND

	MW2 STUDY AREA BOUNDARY
	PROPOSED WATERMAIN
	EX. WATERMAIN
	PLANNED 600Ø WATERMAIN
	REGION OF PEEL 10 YEAR CAPITAL WORKS PLAN PROJECT NUMBER (10-1960)

SCALE: N.T.S.

DATE: JANUARY 2014

DESIGNED BY: B.A. DRAWN BY: CAD

CHECKED BY: D.S. CHECKED BY: B.A.

PROJECT No. 08105

FIGURE No. 6

**MAYFIELD WEST PHASE 2 SECONDARY PLAN
RECOMMENDED WATER SERVICING CONCEPT PLAN (ZONE7)**



APPENDIX "B"

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

