



Appendix C





City of Toronto

Laird Focus Study

**Functional
Servicing Report**

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Submitted by:

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1.0 INTRODUCTION

SCS Consulting Group Ltd. has been retained by the Planning Partnership to prepare a servicing analysis as part of the Laird Focus Area Study, in support of future densification within the areas described below.

1.1 Purpose of the Report

This study is an assessment of the adequacy of the existing Toronto Water infrastructure with respect to the capacity of watermains, sanitary, storm and combined sewers within the study area. It will provide a description of each component of the existing infrastructure, the information reviewed, methodology, key assumptions, constraints identified and summary recommendations for improvements to properly support long term growth.

Having reported on the existing conditions of the Study Areas' infrastructure and based on the assessment of massing of the preferred alternative, this Phase 3 report outlines the servicing strategy for long-term growth within the Lair Focus Area Study.

Anticipated contributions to the municipal infrastructure from the proposed densification (preferred alternative) was modeled into the various systems reviewed to determine infrastructure recommendations to support future development.

A recent push for development in the area has resulted in the need to study local infrastructure for future intensification planning.

1.2 Study Area

The study area can generally be described as the west side of Lair Drive from Vanderhoof Avenue to Southvale Drive and the employment lands north of Vanderhoof Avenue from Laird Drive to Aerodrome Crescent. Please refer to **Figure 6.1** found in **Appendix C-1**.

1.3 Objectives

This study is an assessment of the impact of densification on the existing Toronto Water infrastructure with respect to the capacity of watermains, sanitary, storm and combined sewers within the study area. It provides a description of each component of the existing infrastructure, the information reviewed, methodology, key assumptions, constraints identified and summary recommendations for improvements to properly support long term growth.

Specifically, the goals and objectives of the Phase 3 report is to:

- Build on the existing identified conditions and assess the future impacts of the proposed densification on Toronto Water infrastructure;
- Provide recommendations on infrastructure improvements to address previously identified deficiencies; and,
- Provide recommendations on infrastructure improvements necessary to implement growth plan.

1.4 Preferred Alternative

The Focus Study includes two separate areas each representing different built-forms of densification. Area 'A', located along Eglinton Avenue East is roughly 9.7 hectares and is expected to yield a total unit count of 3,765 or an equivalent population count of 8,335 when factoring employment. Area 'B', located on the west side of Laird Drive is roughly 3.8 hectares and is expected to yield a total unit count of 815 or an equivalent population count of 1,975 when factoring employment. Please refer to the summary yields found in the planning study **Section 5.3 and 5.4** respectively, and **Appendix A**.

1.5 Applicable Standards, Design Criteria and Documents Reviewed

The following applicable standards, design criteria and public documents were considered and reviewed in the preparation of this Phase 3 report:

- Design Criteria for Sewers and Watermains, City of Toronto, November 2009.
- Wet Weather Flow Management Guidelines, City of Toronto, November 2006.
- Toronto Municipal Code, §681 Sewers, May 2016.
- Procedure F-5-5 of Guideline F-5: levels of treatment for municipal and private sewage treatment works discharging to surface waters, Ontario Water Resources Act, RSO 1990, Section 53.
- Building Code Act 1992
- Development applications as noted in Section 2.2.7 Recent Development Applications of the RFP.
- Sewer Atlas Maps (for information purposes only), City of Toronto, September 2010.
- Report on Municipal Services in the Leaside Area, Borough of East York, October 1973.
- 2017 Capital Works Program, City of Toronto.
- City of Toronto digital water model.
- City of Toronto digital sewer model
- Basement Flooding Study, Area 2, XCG Consultants Ltd., November 2014.
- Metrolinx Laird Station plans

2.0 PHASE 1 REPORT SUMMARY

In order to put the contents of this report into the proper context, we offer below a brief summary of the objectives and recommendations of the Phase 1 report.

2.1 Phase 1 Goals and Objectives

The Phase 1 report was an assessment of the existing Toronto Water infrastructure with respect to the capacity of watermains, sanitary, storm and combined sewers within the study area shown on **Figure 6.1**. It provided a description of each component of the existing infrastructure, the information reviewed, methodology, key assumptions, constraints identified and summary recommendations for improvements to properly support long term growth.

Specifically, the goals and objectives of the Phase 1 report were to:

- a) Document existing conditions;
- b) Provide an opinion as to the adequacy of the existing infrastructure to service future development; and,
- c) Provide recommendations on immediate measures that can be taken to better document existing conditions and to address any identified infrastructure deficiencies.

2.2 Phase 1 Conclusions

Based on our review of the existing information, meetings with the City of Toronto staff, our field program and observations, the Phase 1 report concluded the following:

- Future densification along the Eglinton Avenue East frontage will require more in-depth study of the downstream impacts and will require municipal sanitary upgrades. Water demands and fire protection requirements will be studied in greater depths once the massing plan is finalized.
- Densification along Laird Drive is feasible based on dry-weather flow impacts only. As future development along this stretch of road is serviced by combined sewers, a ‘net reduction’ in combined flows (sanitary effluent + storm run-off) will be required for all storm events in order to improve downstream conditions.
- It is recommended to explore the feasibility of constructing new fully separated storm sewers through the study area and within the upstream catchment area to alleviate surcharging conditions.
- It is likely that watermain upgrades may be required in order to intensify the area, but this will be determined once intensification nodes have been determined.

3.0 EXISTING INFRASTRUCTURE

The following information is a summary of the existing infrastructure within the study area boundary depicted in **Figure 6.1** included in **Appendix C-1**.

3.1 Sanitary Sewer

There are few dedicated sanitary sewers located within the study area. Generally, these consist of 250-300 mm diameter sanitary pipes located on Vanderhoof Ave., Brentcliffe Rd., Aerodromme Cr. and on the south boulevard of Eglinton Ave. W. These sewers drain eastwards to the Metrolinx in-line storage pipe and ultimately discharges to the Don River West Branch trunk sewer.

There are no other sanitary sewers within the study area. There are some local sanitary sewers located east of the study area, within the industrial lands draining to the study area combined sewers, however these sewers were not studied as part of this report.

3.2 Storm Sewers

There are few storm sewers located within the study area. Generally, they consist of local sewers up to 1,200 mm diameter pipes located on Vanderhoof Ave., Brentcliffe Rd., Aerodromme Cr. These sewers outlet to a 1,200 diameter sewer outside of the study area and ultimately discharges into the Don River West tributary.

There are no other storm sewers within the study area. There are some local storm sewers located east of the study area, within the industrial lands draining to the study area combined sewers, however these sewers were not studied as part of this report.

According to the November 5, 2014 Basement Flooding Study, Figures 6.6 and 6.8, the depth of water in the overland flow system for the 5-year and 100-year storm respectively are reported to be between 0 – 150 mm in depth and thus was not flagged as problematic in the report.

3.3 Combined Sewers

The study area is mostly serviced by combined sewers ranging in size from 300 mm diameter sewers to 1,200 mm diameter sewer. Laird Drive has a dual combined sewer system. The east side mostly consists of small diameter local sewers, servicing the east side of Laird Drive which typically outlets the large diameter combined sewer located on the west side of Laird Drive. The west portion of Laird Drive consists of large diameter sewers serving both a local and trunk function.

There is one Combined Sewer Overflow (CSO) location along the downstream reach of sewers on Laird Drive, at Wicksteed Avenue. At this location, surcharging within the combined sewer is relieved by overflowing to a 975 mm storm sewer running eastward along Wicksteed to the Don River (just south of Eglinton Avenue).

Please refer to **Figure 6.2** found in **Appendix C-1** for a general layout of the sewer infrastructure located within the study area.

3.4 Watermains

The study area forms part of Pressure District 3E generally bounded by Bayview Avenue to the West, Kilgour Road to the north and the Don Valley Parkway to the east and south. Generally, the pressure district is fed from a 600mm diameter watermain along Don Mills Avenue via a 400 mm diameter main along Overlea Boulevard.

Water within the study area, and the larger pressure district, is locally supplied by small-diameter watermains, ranging in size from 150 mm to 400 mm. The infrastructure material vary throughout the pressure district, but typically consist of ductile iron and PVC pipes.

Study area ‘A’ bound by Vanderhoof Avenue and Eglinton Avenue East is generally serviced by local watermains ranging in size from 150 mm to 300 mm. These provide water services to development flanking Vanderhoof Avenue, Eglinton Avenue East, Brentcliffe Road and Aerodrome Crescent.

There are two watermain on Laird Drive (Study Area ‘B’), a 400 mm diameter main feeding the pressure district from Don Mills Avenue, across Overlea Boulevard to Parkhurst Boulevard and 250 mm to 300 mm diameters local watermain providing water services to development flanking Laird Drive.

Please refer to **Figure 6.3** found in **Appendix C-1** for a general layout of the water infrastructure located within the study area.

4.0 IMPLEMENTATION

Each applicant will be responsible to clearly document how the proposed servicing strategy of the applicant will satisfy the Toronto Wet Weather Flow Management Guidelines.

In addition, each applicant will be responsible for the preparation of a detailed servicing report that must demonstrate to which sanitary/combined sewers the proposed flows will be directed to and demonstrate consistency with the contents of this report. Additional modeling work may be necessary to assess the impact of each individual application once exact population counts are established.

It is recommended that the City continue to follow its standard practice of requiring hydrant flow tests to support individual development applications. The results from these tests should be used by the City to confirm that the performance of the system when tested is consistent with the basis upon which this study was prepared, and also to confirm the suitability of the system to support the application.

Furthermore, proponents will be responsible for the preparation and submission of all technical documents related to applying for (if necessary) a Private Water Discharge Approval and obtaining approvals from Toronto Water.

4.1 Storm Sewer and Stormwater Management

4.1.1 Existing Drainage

The existing site consists of mostly hard surfaces, either roof or pavement. As shown on **Figure 6.4** found in **Appendix C-1**, Area A conveys runoff to Eglinton Ave while Area B conveys it to Laird Drive. It has been assumed that Area A may have some on-site controls, but is not currently in compliance with the TWWFMG. In addition it is expected that no controls are provided within Area B. As noted previously, runoff from Area A is conveyed east while runoff from Area B is ultimately conveyed to the south.

According to the November 5, 2014 Basement Flooding Study, Figures 6.5 and 6.7, surface flooding was identified during the 5-year storm event and the 100-year storm event along Eglinton Avenue between Laird Drive and Brentcliffe Road. This is schematically represented on Figure 6.7 in Appendix C-1.

4.1.2 Proposed Drainage

It is anticipated that both study areas will continue to convey runoff to the existing outlets upon redevelopment as illustrated on **Figure 6.5** found in **Appendix C-1**. Each applicant will need to demonstrate how existing drainage patterns are to be maintained.

4.1.3 Design Criteria

Based on the TWWFMG, the design criteria for the study areas are as follows:

Quantity Control

The release rate to the municipal storm infrastructure will be limited to the allowable discharge rate to be determined as the lesser of:

- The existing peak flow rate from a 2 year storm event (with a maximum runoff coefficient of 0.50); and
- The existing capacity of the receiving sewer.

It must be demonstrated that the existing downstream system has capacity to convey the proposed peak flow rates up to the 100 year design storm event to an existing outfall, or provide on-site detention to control the 100 year peak flow rate to the municipal system to the allowable discharge rate.

As noted in this report Area B outlets to a combined sewer, therefore a reduction of existing flows from any one development with respect to stormwater and sanitary combined will need to be less than existing so as to not adversely affect upstream and downstream conditions within the City's infrastructure.

Quality Control

- Provide an Enhanced (Level 1) quality control per Ministry of the Environment guidelines (i.e., 80% TSS removal).

Water Balance

- The 1991 precipitation data from the Pearson International Airport rainfall gauge is to be used for the analysis;
- Stormwater is to be retained on-site (to the extent practical) to achieve the same level of annual volume of overland runoff allowable from the development site under existing conditions;
- The maximum allowable annual runoff volume leaving a proposed development is 50% of the total average annual rainfall depth; and
- The minimum on-site runoff retention requires the proponent to retain all runoff from a small design rainfall event - typically 5 mm (on average, the total rainfall from all small events with daily rainfall amounts, less than or equal to 5 mm, is equivalent to about 50% volume of the total average annual rainfall in Toronto) through infiltration, evapotranspiration and rainwater re-use.

Erosion Control

- No erosion control is necessary, as the study area does not discharge directly to or within 100 m of a natural watercourse, and provided that the on-site retention of the 5 mm rainfall event will be achieved under the Water Balance Criteria.

4.1.4 Expected Release Rate

In accordance with the TWWFMG, the allowable release rate to the existing municipal infrastructure was assumed to be the 2 year runoff rate under existing conditions with a maximum runoff coefficient of 0.5. It is noted that future applications will be required to assess any downstream constraints to confirm the allowable release rate.

The rational method was used to determine the target release rate from the study areas based on Intensity-Duration-Frequency (IDF) rainfall curves from the City of Toronto Design Standards.

The 2 year runoff rate under existing conditions to the existing storm sewer infrastructure for Area A is approximately 2,225 L/s. The 2 year runoff rate under existing conditions with a runoff coefficient of 0.50 as per TWWFMG is approximately 1,236 L/s. Therefore, the total expected release rate from all developments within this area to the existing City of Toronto infrastructure is approximately 1,200 L/s, a reduction of nearly 1000 L/s in the 2 year storm event alone.

The 2 year runoff rate under existing conditions to the existing storm sewer infrastructure for Area B is approximately 858 L/s. The 2 year runoff rate under existing conditions with a runoff coefficient of 0.50 as per TWWFMG is approximately 477 L/s. Therefore, the total expected release rate from all developments within this area to the existing City of Toronto infrastructure is approximately 477 L/s, a reduction of 44% in the 2 year storm event.

4.1.5 Quantity Control

Quantity control can be achieved through a combination of above and below ground storage located within each individual site plan block. As a method of guidance, a cubic metre of storage per hectare was developed based on the allowable release rates and a proposed runoff coefficient of 0.9. A storage volume of approximately 300 cu.m/ha is required to provide adequate 100 year control for both study areas. As noted previously, the required quantity controls will assist to alleviate existing strain on the stormwater infrastructure.

4.1.6 Quality Control

To achieve the required MOECC Enhanced Level quality treatment, a variety of practices will be required to form a treatment train, focusing on above and below grade infiltration or filtration based LID's (permeable pavement, bioswales, rain gardens, green roofs, etc.) or end of pipe treatment (oil/grit separator (OGS), etc.) to provide 80% TSS removal.

4.1.7 Water Balance

Runoff from a 5 mm rainfall event will be required to be retained on each individual site plan. It will be up to the applicant to determine an appropriate method by which to reuse this rainfall volume

4.2 Watermains

The preferred development provided by the consulting team was used in the assessment of servicing requirements and opportunities. The Study Area focuses on two distinct development areas consisting of:

- Area “A” consists of three major blocks fronting on Eglinton Avenue East which generally includes high-density mixed-use developments. The flow generation design criteria used for this area is 191 L/c/D for residential units and 180,000 L/Ha/D for ICI development.
- Area “B” consists of seven smaller blocks along the west side of Laird Drive which generally includes medium density mixed use developments. The flow generation design criteria used for this area is 320 L/c/D for residential units and 180,000 L/Ha/D for ICI development

Based on the above, preliminary water demand calculations for the two areas were prepared and are summarized in **Table 1** below:

Table 1 Summary of Proposed Development Water Demands

Study Area	ICI Area (m ²)	Residential Units	Residential Population	Avg Day Demands		Max Day Demands		Peak Hour Demands	
				ICI (L/s)	RES (L/s)	ICI (L/s)	RES (L/s)	ICI (L/s)	RES (L/s)
Area “A”	44,670	3,771	7,372	9.31	14.78	10.24	19.21	11.17	36.94
Area “B”	21,090	1,017	2,094	4.39	7.78	4.83	12.84	5.27	19.30

The model was updated to reflect the preliminary development conditions. The existing meter-based demands for the proposed redevelopment addresses were removed from the appropriate nodes and the preliminary future design demands were assigned to new nodes. The model was thus modified to revise average day, Max day and Peak hour demand scenario for the preferred alternative conditions. Post Development conditions. The preliminary post development conditions were simulated with the modified calibrated model to establish the residual pressures under several demand scenarios throughout the Study Area. The model was simulated for the following scenarios and the pressure / head loss in system was evaluated to understand the impact of the preliminary development on the existing system capacity. The model output for the post development condition analysis is summarized in **Table 2**:

Table 2 Post Development Condition Modelling Scenario Results

Water Demand Modeling Scenario	Minimum Water System Requirements	Modelling Results
Average Day Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 43.4 psi to 93.1 psi (Ref Fig 8)
Maximum Day Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 30.6 psi to 87 psi (Ref Fig 9)
Peak Hour Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 19.4 psi to 81.8 psi (Ref Fig 10)
Required Fire Flow to be provided at a residual pressure of no less than 20 psi		
Maximum Day Demand plus Fire Flow	Residential Fire flow requirements per City of Toronto Standards, $Q_f > 64 \text{ L/s}$ to 189 L/s	Model Residential Available Fire flow = 50.2 L/s to 269.5 L/s (Ref Fig 7)
	Employment Fire flow requirements per City of Toronto Standards, $Q_f = 189 \text{ L/s}$ to 317 L/s	Model Employment / High Rise Available Fire flow 75.3 L/s to 742.9 L/s (Ref Fig 7)

The model was run again to confirm the magnitude of the system upgrades required to mitigate the impacts of the proposed developments on the level-of-service provided throughout the service area. A series of system upgrades is given in **Table 3** below:

Table 3 Recommended Watermain Upgrades

Road	From	To	Length (m)	Type of Upgrade	Ex. Diam (mm)	Prop. Dia. (mm)
Overlea Blvd.	West of Don River	Thorncliffe Park	490.3	Rehab	400	400
Beth Nealson Dr	Thorncliffe Park Dr	Wicksteed Ave	500.4	Upsize	300	400
Wicksteed Ave	Beth Nealson Dr	Leslie St	350.1	Upsize	300	400
Leslie St	Wicksteed Ave	Research Rd	97.0	Upsize	200	300
Leonard Linton Park Easement	Wicksteed Ave	Vanderhoof Ave	184.9	Upsizing	150	200
Aerodrome Cres	Vanderhoof Ave	Thomas Elgie Dr	222.4	Upsizing	200	300
Brentcliffe Rd	Vanderhoof Ave	Eglinton Ave	184.5	Upsizing	200	300
Vanderhoof Ave	Brentcliffe Rd	Fut Block A1/A2 Easement	235.3	Upsizing	150	200
Vanderhoof Ave	Fut Block A1/A2 easement	Laird Dr	197.2	Upsizing	200	300

The impacts of the increased densities can be mitigated through approximately 2.5 km of local system improvements. The detailed modeling memorandum is found in **Appendix C-2**.

4.3 Sanitary and Combined Sewers

The sanitary flow rates for the revised models were based on the City of Toronto's criteria as noted in the following **Table 4**:

Table 4 – Sanitary Flow Rate Design Criteria

	Generation Rate	Peaking Factor
Residential	240 Lpcd	Harmon
Commercial, Office, Retail, Community Centre	180,000 L/ha/day	None

Using the provided densities and generation flow rates noted above, peak sanitary flows for each proposed development were calculated and are summarized in **Table 5** below:

Table 5 – Eglinton Development Statistics and Sanitary Flow

Address	Building No.	Population	Res. Flow (L/s)	Peak Res. Flow (L/s)	Office Area (m ²)	Office Flow (L/s)
815-845 Eglinton Ave	1	375	1.04	4.20	3,200	0.67
	2	1,056	2.93	11.10	6,950	1.45
	3	565	1.57	6.20	0	0
	4	0	0	0	8,990	1.87
	5	636	1.77	6.93	0	0
	6	198	0.55	2.28	5,340	1.11
849 Eglinton Ave	1	508	1.41	5.61	4,370	0.91
	2	475	1.32	5.26	0	0
	3	307	0.85	3.47	8,250	1.73
939 Eglinton Ave	1	638	1.77	6.94	1,285	0.27
	2	327	0.91	3.69	555	0.12
	3	671	1.86	7.27	0	0
	4	0	0	0	4,300	0.90
943-957 Eglinton Ave	1	596	1.66	6.51	1,400	0.29
	2	203	0.56	2.33	0	0
	3	552	1.53	6.06	0	0
	4	641	1.78	6.97	0	0

In total, the proposed densification in Area “A” will likely generate approximately 85 L/s to the existing infrastructure on Eglinton Avenue East.

The hydraulic grade line (HGL) profiles from the existing conditions were reviewed and analyzed for both main reaches (Eglinton Avenue East and Laird Drive) and for all four

of the modelling scenarios. The branch along Eglinton Avenue East is part of the foul system and the branch along Laird Drive is part of the combined system.

- Under the “Baseline DWF (dry weather flow)” scenario, the Eglinton Avenue East HGL is completely eliminated, suggesting that the HGL is largely produced from the inflow and infiltration (I/I) along this branch. Similarly, the Laird Drive is largely contained within the pipes, equally suggesting that the surcharging conditions are a direct result of storm flows within the combined system.
- Under “Baseline 2-year” scenario, the Eglinton Avenue East HGL shows significantly less surcharging while the backwater condition is still occurring along the end of this branch. The Laird Drive HGL shows some surcharging along the northern part of the branch and near the limit of the study area however, the surcharging is below the 1.8m limit.
- Under the “Baseline 100-year” scenario, the Eglinton Avenue East HGL shows surcharging to ground on Eglinton Avenue, and a backwater condition within the valley. The Laird Drive HGL shows slight surcharging along the entire branch however the surcharging conditions meet the requirements of the City of Toronto and does not reach the 1.8 m limit below existing road centerline grades.
- Under the “Baseline May 12, 2000” scenario, the Eglinton Avenue East HGL shows surcharging at or below the surface along Eglinton Avenue, while the Laird HGL indicates surcharging near the upstream portion of the study area. The surcharging conditions remain below the 1.8m threshold.

The simulations were reviewed on two branches – along Laird Drive and along Eglinton Avenue East. The HGL for both branches were reviewed for the 2-year and 100-year events, and it was observed that both show similar results when existing conditions and post-development conditions are compared. Additional discussions for each run follows.

Laird Drive: The results of the combined system modelling along Laird Drive indicates no adverse impacts to redeveloping the various sites along the west side of Laird Area “B”. The 2-year storm HGL is similar under existing conditions and post-development conditions; that is to suggest that the development flow was similar to the existing flow removed. Similarly the 100-year storm HGL also looks comparable under existing conditions and post-development condition, suggesting that the development flow was similar to the existing flow removed. In terms of risk of basement flooding, the freeboard is lower than 1.8m on the first two pipe segments for both existing and future conditions. Therefore development within Area “B” does not adversely affect existing conditions.

Eglinton Avenue East: The 2-year storm HGL looks very similar under existing conditions and post-development conditions. The flow at the study boundary is slightly lower in post-development conditions than existing conditions, suggesting that the development flow added was less than existing conditions. This is likely due to replacement of inflow and infiltration flows with sanitary effluent. The 100-year storm HGL very similar under existing conditions and post-development conditions. The flow at the study boundary is approximately the same as existing conditions, suggesting that the development flow added was similar to the existing flows removed. Under the 100-

year storm, the surcharging on Eglinton Ave reaches surface and exceeds the 1.8m limit. Please refer to **Figures 6.5 and 6.6** found in **Appendix C-1** and **Sewer Profiles** found in **Appendix C-2**. Based on the modelling results, the following sewer segment, noted in **Table 6** do not meet the level of service expected by the City of Toronto:

Table 6 – Area “A” Sewer Upgrades

From MH	To MH	Length(m)	Existing diameter (mm)	Slope (m/m)
4119116042	4120716094	54.4	250	0.01151
4120716094	4122116139	46.8	250	0.00115
4122116139	4122816139	7.8	250	0.20218
4122816139	4131016115	84.6	250	0.00401
4131016115	4131516117	5.4	250	0.04259
4131516117	4138516096	73.4	250	0.00107

4.4 Hydrogeology and Groundwater

City of Toronto staff have advised of high groundwater levels within the study area, as identified through active development projects in the area. Should groundwater need to be discharged to the combined/sanitary system, as identified through the preparation of future development applications within the study area, the proponent will need to satisfy Toronto Water that sufficient capacity exists within the system to handle any potential discharge of groundwater.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the modeling and the expected local growth, we recommend the following:

5.1 Sanitary Sewers

- New development shall demonstrate that sufficient capacity is available to service future intensification. Where new/upgraded infrastructure has been identified as per Table 6 of this report, development proponents will have to make satisfactory arrangements with the City of Toronto to design/construct/fund the identified upgrades to attain a level of service acceptable to the City of Toronto.
- An inflow/infiltration study for infrastructure within this water should be conducted to identify the source of the unusually high inflow identified in the model. Remove the source of I/I would further improve sewer capacity.

5.2 Storm Sewers

- New developments shall comply with the TWWMFG and must achieve a minimum peak flow reduction of 50% or greater.

5.3 Combined Sewers

- New developments shall comply with the TWWMFG and must achieve a minimum net combined (storm plus sanitary) peak flow reduction of 50%.
- As future development along this stretch of road is serviced by combined sewers, a ‘net reduction’ in combined flows (sanitary effluent + storm run-off) is expected due to reduction in storm runoff from implemented lot-level controls. Since a net reduction is expected, no improvements to the combined sewers are recommended.
- The City of Toronto should undertake a feasibility study for providing separated storm and sanitary sewers on Laird Drive. This should be coordinated with the recommended streetscape improvements of this plan.

5.4 Water

- Watermain upgrades identified in this report are to be scheduled in the city’s capital works budget to ensure an adequate water supply for long term growth in the area. Alternatively the city may choose to have developers upfront the cost of the identified infrastructure which could partially offset DC credits.

6.0 COST ESTIMATE FOR RECOMMENDED IMPROVEMENTS

Please refer to **Appendix C-4** for a complete estimate of probable cost to implement the recommendations outlined in this report.

Respectfully Submitted:

SCS Consulting Group Ltd.

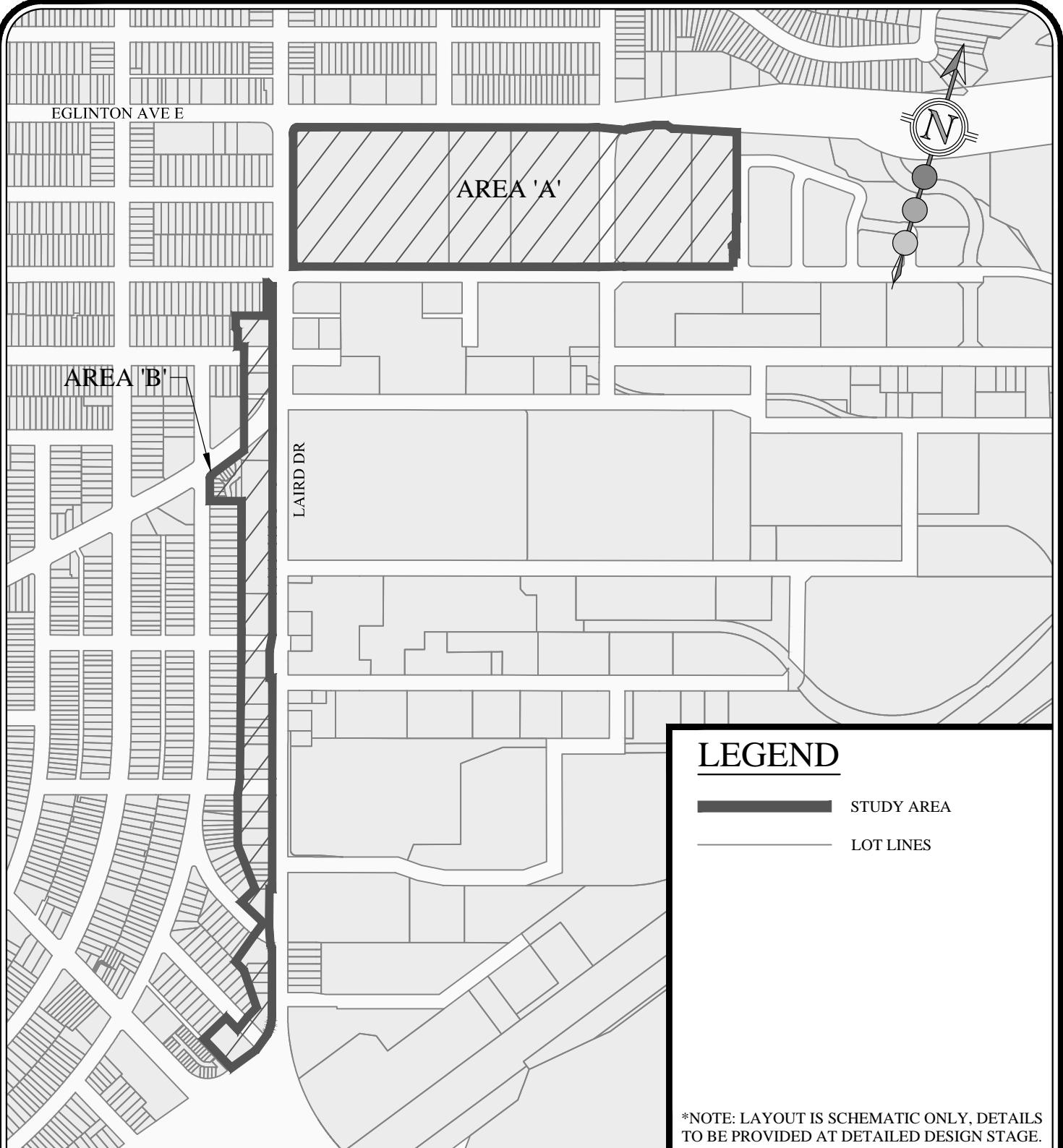
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APPENDIX C-1

FIGURES





LAIRD FOCUS AREA STUDY



100 QUEEN STREET WEST
TORONTO, ONTARIO M5H 2N2
TEL: (416) 392-2489
FAX: (416) 338-0685



30 CENTURIAN DRIVE, SUITE 100
MARKHAM, ONTARIO L3R 8B8
TEL: (905) 475-1900
FAX: (905) 475-8335

LAIRD STUDY AREA

DRAWN BY: M.L.M.

CHECKED BY: L.P.M.

SCALE: N.T.S.

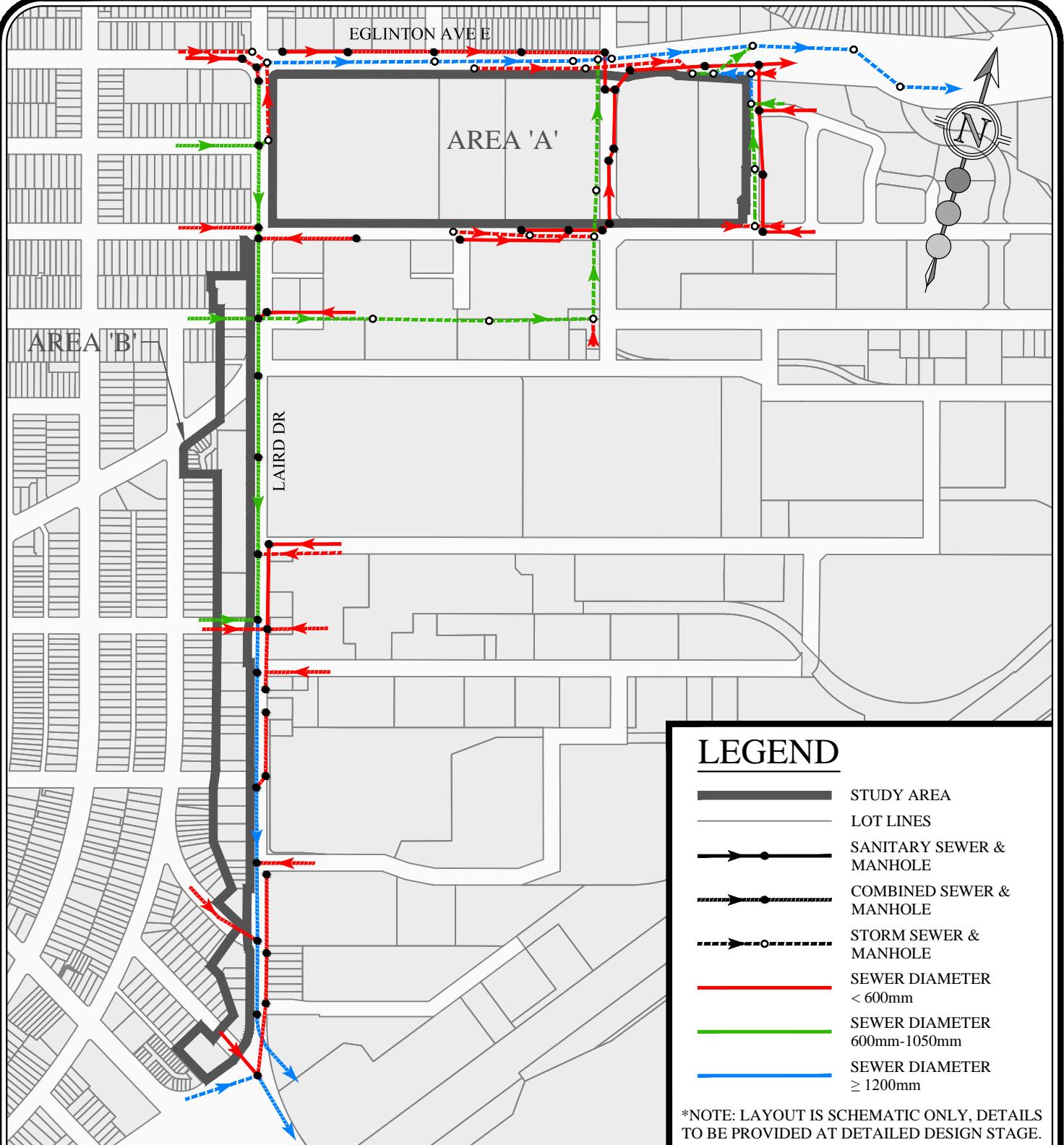
DATE: JANUARY 2018

PROJECT No:

1896

FIGURE No:

6.1



LAIRD FOCUS AREA STUDY



100 QUEEN STREET WEST
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30 CENTURIAN DRIVE, SUITE 100
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FAX: (905) 475-8335

EXISTING SEWERS

DRAWN BY: M.L.M.

CHECKED BY: L.P.M.

SCALE: N.T.S.

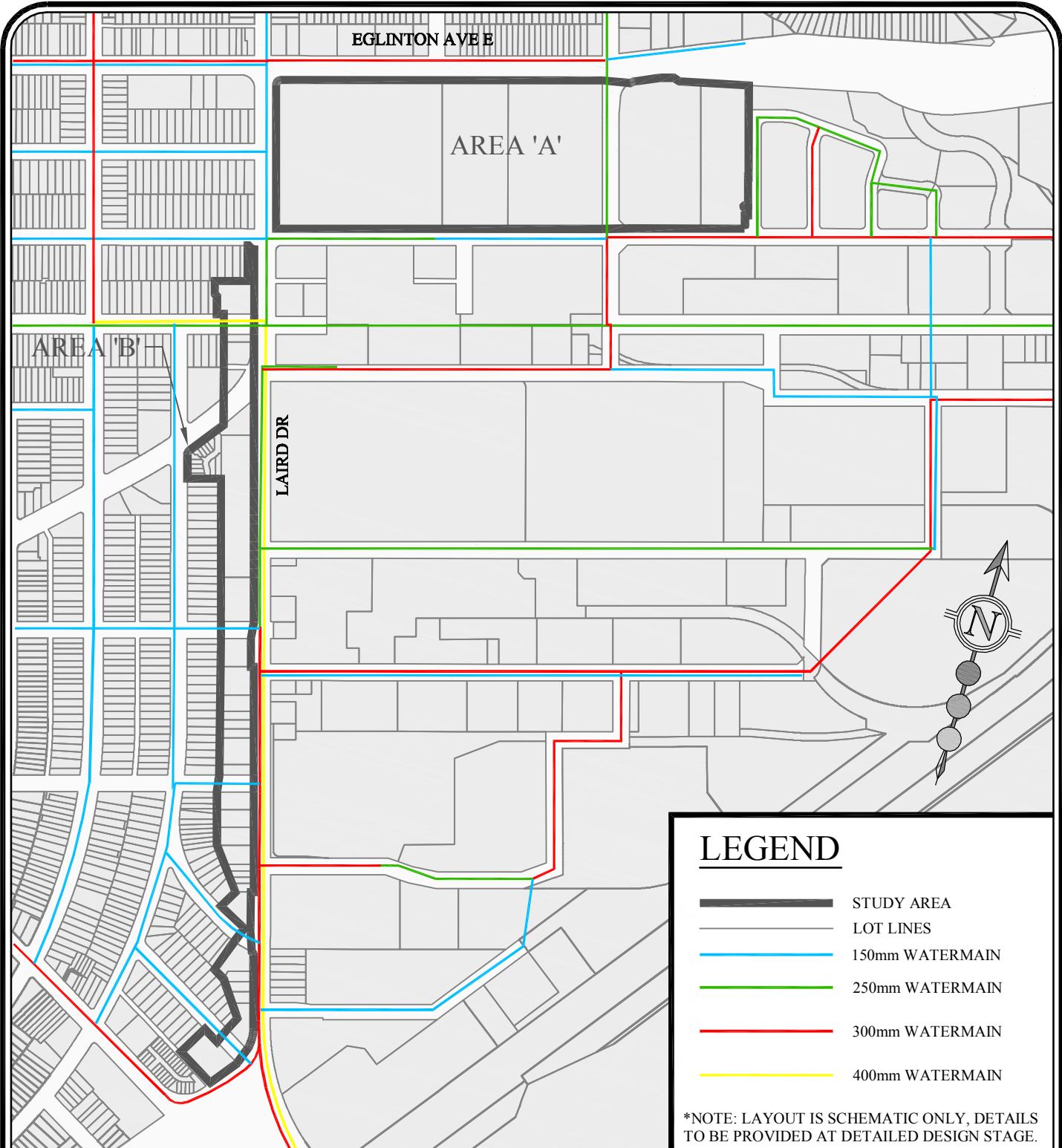
DATE: JANUARY 2018

PROJECT No:

1896

FIGURE No:

6.2



LAIRD FOCUS AREA STUDY



100 QUEEN STREET WEST
TORONTO, ONTARIO M5H 2N2
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30 CENTURIAN DRIVE, SUITE 100
MARKHAM, ONTARIO L3R 8B8
TEL: (905) 475-1900
FAX: (905) 475-8335

EXISTING WATERMAIN

DRAWN BY: J.R.L

CHECKED BY: L.P.M.

SCALE: N.T.S

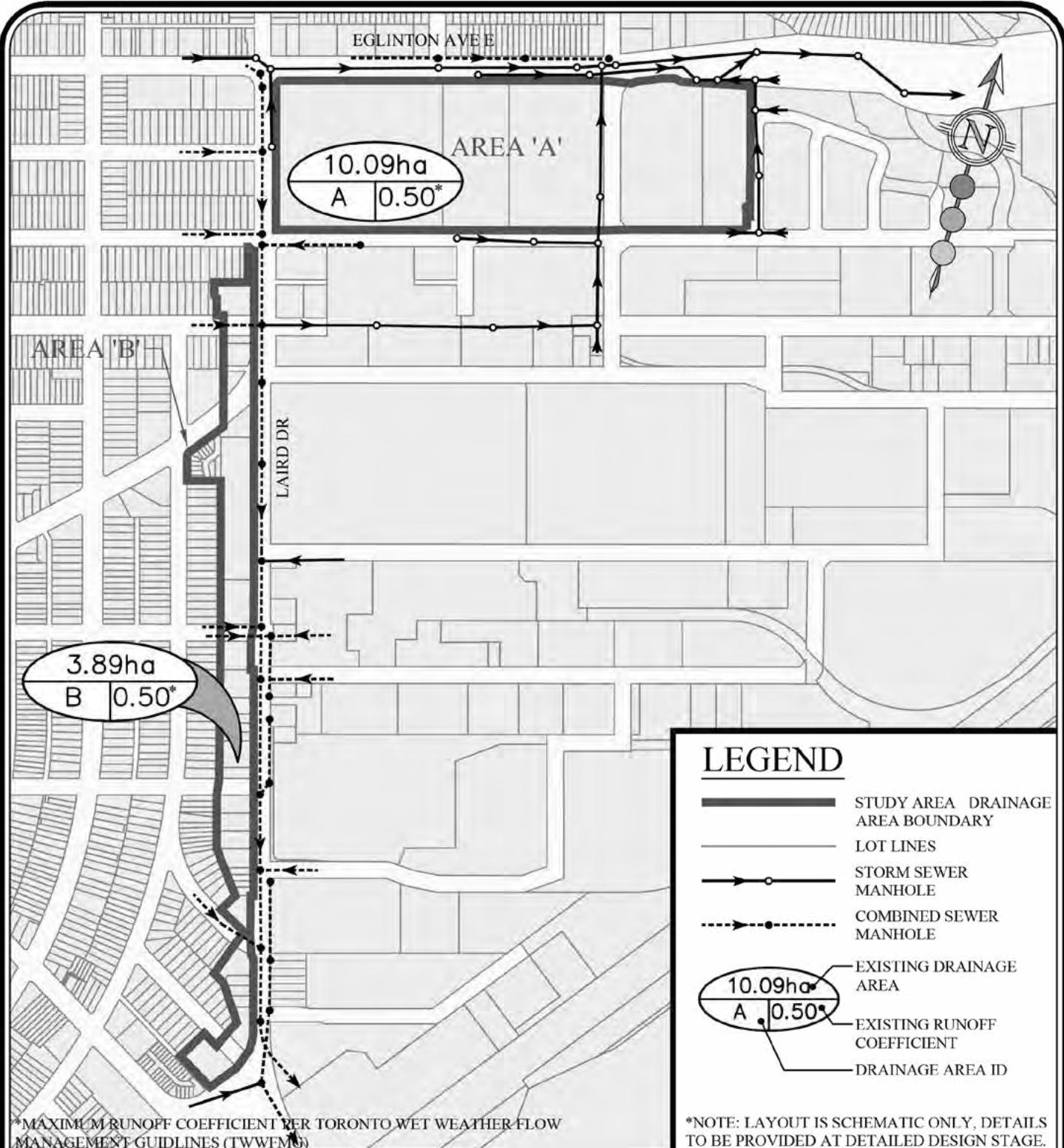
DATE: JANUARY 2018

PROJECT No:

1896

FIGURE No:

6.3



LAIRD FOCUS AREA STUDY



100 QUEEN STREET WEST
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30 CENTURIAN DRIVE, SUITE 100
MARKHAM, ONTARIO L3R 8B8
TEL: (905) 475-1900
FAX: (905) 475-8335

EXISTING STORM DRAINAGE PLAN

DRAWN BY: M.L.M.

CHECKED BY: L.P.M.

SCALE: N.T.S.

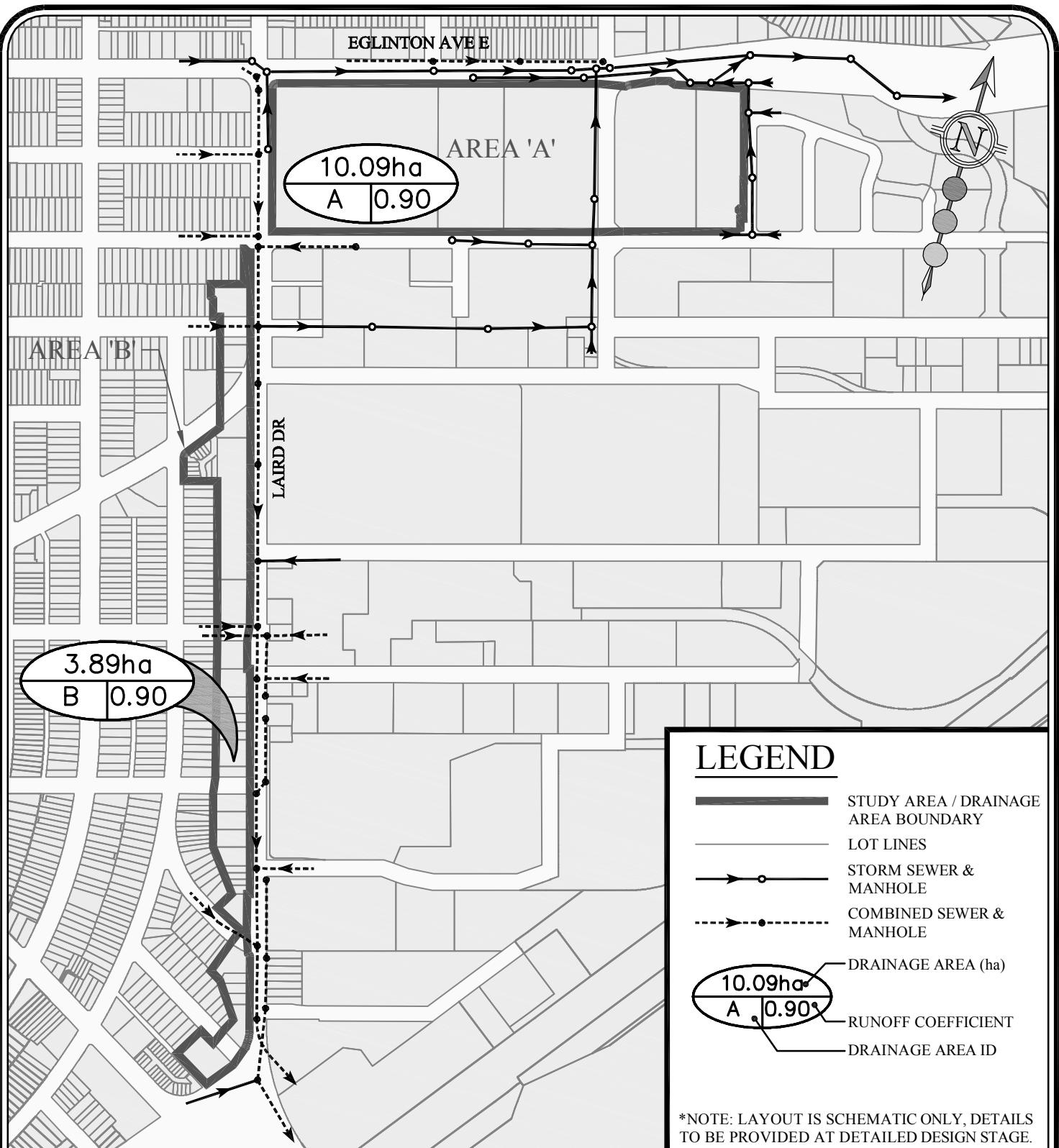
DATE: APRIL 2018

PROJECT No:

FIGURE No:

1896

6.4



LAIRD FOCUS AREA STUDY



100 QUEEN STREET WEST
TORONTO, ONTARIO M5H 2N2
TEL: (416) 392-2489
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30 CENTURIAN DRIVE, SUITE 100
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TEL: (905) 475-1900
FAX: (905) 475-8335

PROPOSED STORM DRAINAGE PLAN

DRAWN BY: M.L.M.

CHECKED BY: L.P.M.

SCALE: N.T.S.

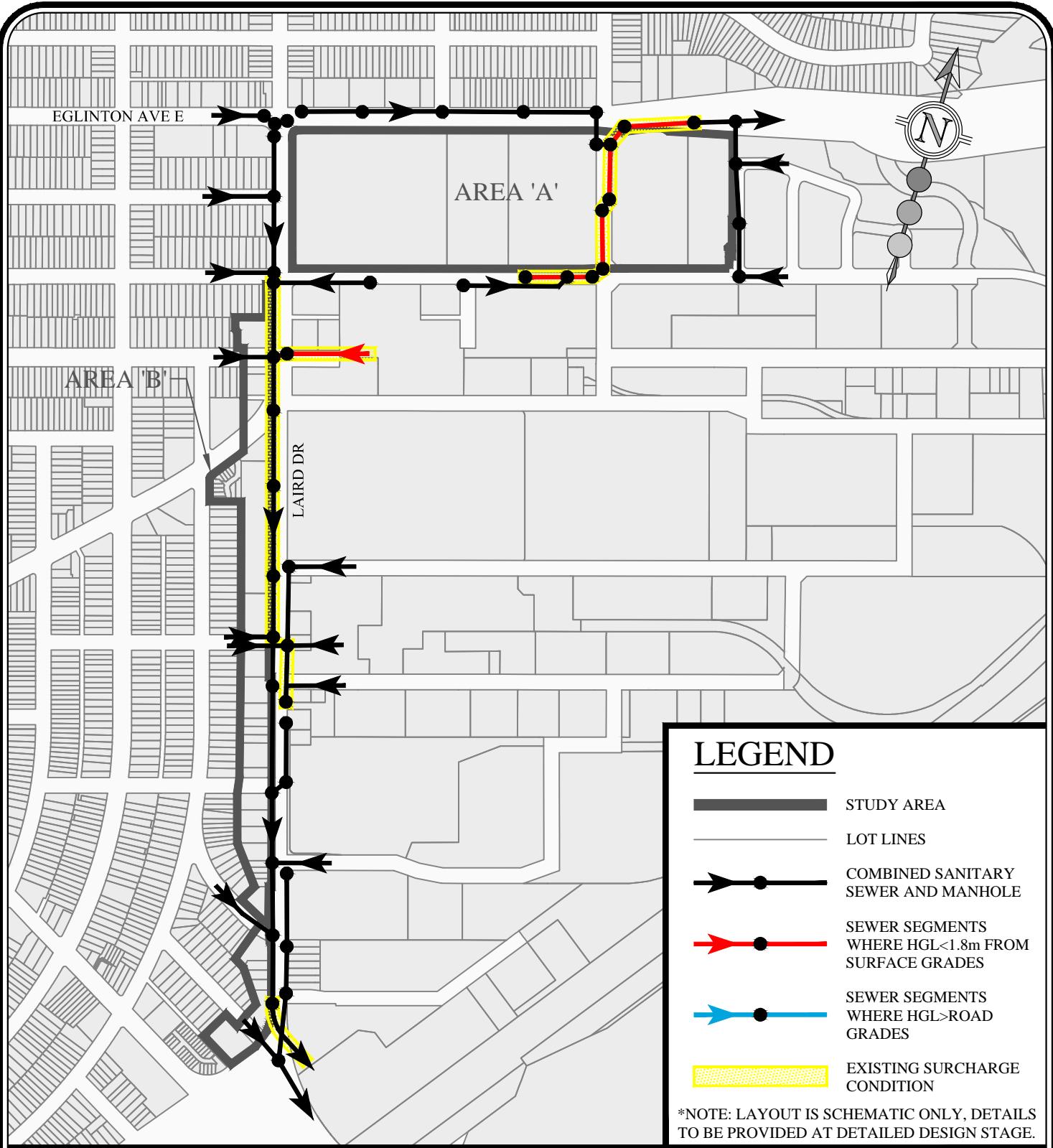
DATE: APRIL 2018

PROJECT No:

1896

FIGURE No:

6.5



LAIRD FOCUS AREA STUDY



100 QUEEN STREET WEST
TORONTO, ONTARIO M5H 2N2
TEL: (416) 392-2489
FAX: (416) 338-0685



30 CENTURIAN DRIVE, SUITE 100
MARKHAM, ONTARIO L3R 8B8
TEL: (905) 475-1900
FAX: (905) 475-8335

2-YEAR WET WEATHER FLOW

DRAWN BY: M.L.M.

CHECKED BY: L.P.M.

SCALE: N.T.S.

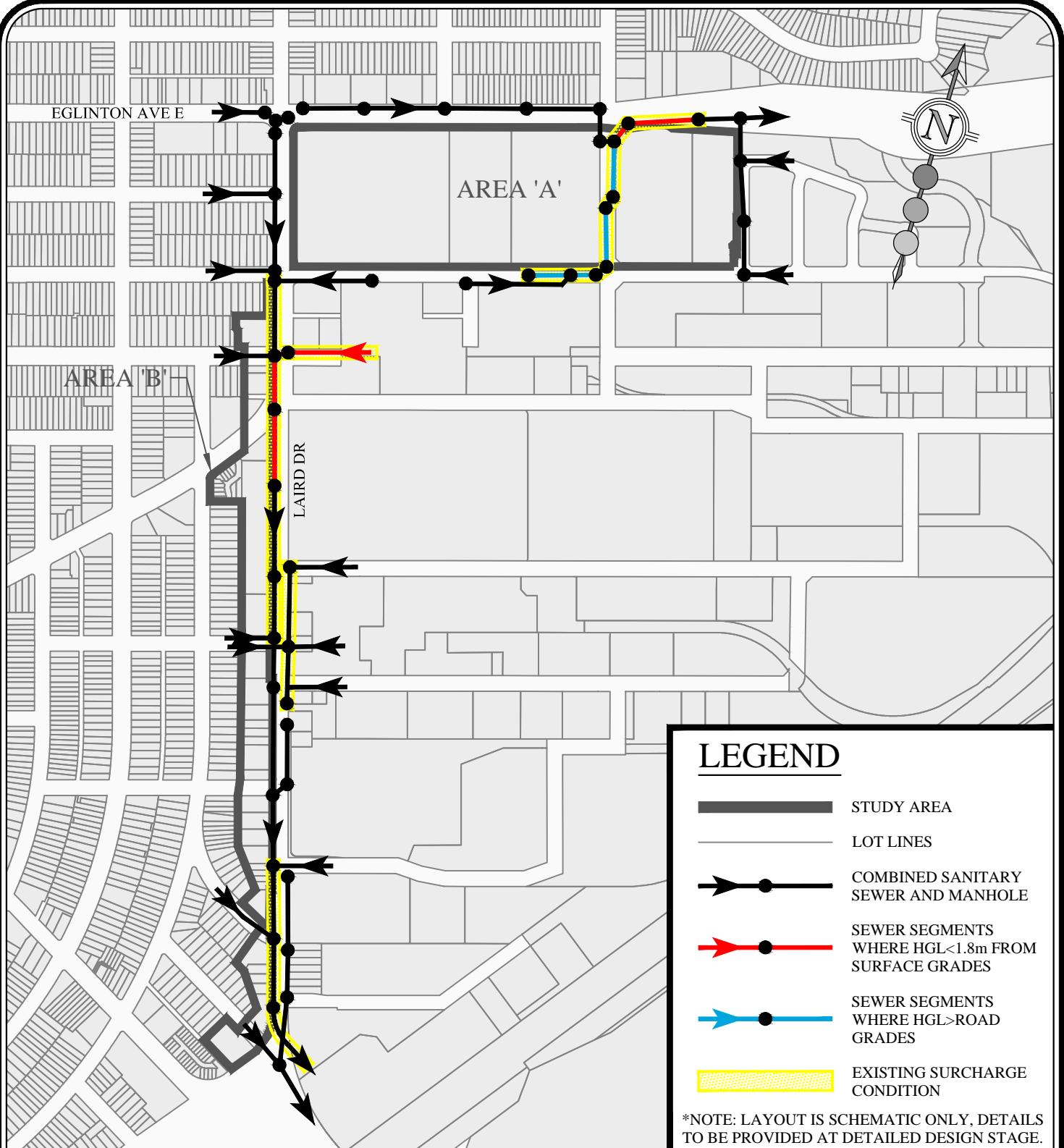
DATE: JANUARY 2018

PROJECT No:

1896

FIGURE No:

6.6



LAIRD FOCUS AREA STUDY



100 QUEEN STREET WEST
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MARKHAM, ONTARIO L3R 8B8
TEL: (905) 475-1900
FAX: (905) 475-8335

100-YEAR WET WEATHER FLOW

DRAWN BY: M.L.M.

CHECKED BY: L.P.M.

SCALE: N.T.S.

DATE: JANUARY 2018

PROJECT No:

FIGURE No:

1896

6.7

APPENDIX C-2

SERVICING MEMOS AND MODELS



TECHNICAL MEMORANDUM TM1

DATE	April 27, 2018
TO	Pascal Monat, SCS Consulting
SUBJECT	Eglinton and Laird Planning Study Review of Wastewater Servicing Impacts
FROM	Kevin Brown, P.Eng
PROJECT NUMBER	17103

1 Background

The Municipal Infrastructure Group Ltd. (TMIG) has been retained by SCS Consulting Limited (SCS) to conduct a servicing analysis to understand the existing water system in the study area and the capacity for the potential re-development of the Eglinton/Laird Development Area.

The recommended preferred Development Densities were developed by The Planning Partnership, and have been used in the assessment of servicing requirements and opportunities.

The Eglinton-Laird Focus Area consists of two distinct development areas, as follows:

- Three major blocks that front onto Eglinton Avenue. These will generally consist of high-density mixed use developments in the range of 11-55 storeys high
- Seven smaller blocks along the west side of Laird Ave. These will generally consist of medium-density units, up to approximately 6 storeys in height.

The development density Statistics are provided in **Appendix A**.

2 Existing Sanitary Servicing

2.1 Model Review

The City provided a copy of their InfoWorks model for "Basement Flooding Study Area 2", which fully contains the Study Area.

The properties being reviewed as part of this planning study are tributary to one of two main sewer reaches:

1. Properties along Eglinton are generally connected to the Eglinton sanitary sewer, which flows east towards the Don Valley Trunk Sewer, outletting in the vicinity of Don Mills Road and Overlea Boulevard.
2. Properties along Laird Drive are connected to the Laird Drive combined sewer, which flows south along Laird Drive and Millwood Road to the Don Valley Trunk Sewer, outletting in the vicinity of Broadview Avenue and O'Connor Drive.

The model contained the following scenarios:

- a) Area 2 - Baseline 100 Year (EC + Super Pipe MetroLinx)
- b) Area 2 - Baseline 2-year storm (EC + Super Pipe MetroLinx)
- c) Area 2 - Baseline DWF (EC + Super Pipe MetroLinx)
- d) Area 2 - Baseline May 12,2000 (EC + Super Pipe MetroLinx)

The provided model considers the following rainfall scenarios:

- 2-Year
- 100-Year
- May 12, 2000 (Extreme)

The model contains various subcatchments. The sanitary subcatchments contain population, base flow and trade flow. The foul flow is calculated using the population within a subcatchment and the Wastewater Profile assigned to the subcatchment. The Wastewater Profile identifies the generation rate as well as the diurnal pattern for that subcatchment. The trade flow is entered in m³/s and is not peaked with the diurnal pattern.

The storm subcatchments have a variety of parameters related to runoff and each storm subcatchment loosely represents different runoff areas (roof, eavestroughs, disconnected roofs, etc).

The City provided the *Basement Flooding Study – Area 2 Project File Report* (Nov 2014), as well as the Technical Memorandum's. These reports helped to understand the intricacies of the model and how it was first developed. From these reports, this is what was understood:

- The initial City calibration was accomplished by fixing the runoff surface parameters and adjusting the contributing areas. City documentation on how and where areas were adjusted was not available or discussed in the reports.
- Storm Subcatchments are set up as follows:
 - Subcatchment 1: Overland flow generated from pervious and impervious surfaces (grass, driveways, road, parking, etc.)
 - Subcatchment 2: Roof connected and disconnected areas.
 - This seems to be represented by two subcatchments in the model.
 - Subcatchment 3: Runoff from overflowing building roofs during large storm events to pervious or impervious systems.
- Six rainfall profiles:
 - Rainfall 1: Total rainfall profile and used for Subcatchment 1.
 - Rainfall 2: Lower portion of the total rainfall that reflects the connected roof area downspout capacity (rainfall that is intercepted by downspouts/eavestroughs)
 - Rainfall 3: The difference between Rainfall 1 and Rainfall 2 (the roof overflow)
 - Rainfall 4: ICI Roof rainfall on the commercial area east of Laird Drive and south of Eglinton Avenue.
 - Rainfall 5: ICI roof spill (not used)
 - Rainfall 6: Rainfall for external areas contributing to the sanitary trunk system and is equal to profile 1 for assessment events
- Each Subcatchment has a Land Use ID:

Land Use ID	Runoff Area 1	Runoff Area 2	Runoff Area 3	Description	Note
1	10	20	30	SS	Sanitary Parameters
2	11		31	TT	Storm Surface Parameters
3			22	TB	Storm Roof Parameters
4		21		TC	Storm Roof Parameters
5	23		24	TV	Storm Roof Spillage Parameters

The Land Use ID translates into a Runoff Area ID listed based on what Runoff Area is used (i.e. if the Land Use ID is 1, the area listed under "Runoff Area 1" would correlate to Runoff Surface ID 10).

- Also included in the Subcatchment Grid, the Runoff Surface ID translates into runoff parameters for that ID.

Runoff Surface ID	Description	Runoff Routing Value	Runoff Volume Type	Surface Type	Initial Loss Type	Initial Loss Value (m)	Initial Abs. Factor	Routing Model	Fixed Runoff Coeff.
10	Sanitary Impervious	0.012	Fixed	Impervious	Slope	0.000071	0	SWM	1
11	Storm Impervious	0.013	Fixed	Impervious	Abs	0.00188	0	SWMM	1
20	Sanitary Roof	0.012	Fixed	Impervious	Abs	0	0	SWMM	1
21	Storm Connected Roof	0.013	Fixed	Impervious	Abs	0	0	SWMM	1
22	Storm Disconnected Roof	0.073	Horton	Pervious	Abs	0.002	0	SWMM	1
23	Storm Impervious Roof OVF	0.013	Fixed	Impervious	Abs	0	0	SWMM	1
24	Storm Pervious Roof OVF	0.200	Fixed	Pervious	Abs	0	0	SWMM	1
30	Sanitary Pervious	0.200	Horton	Pervious	Abs	0.002	0	SWMM	1
31	Storm Pervious	0.410	Horton	Pervious	Abs	0.005	0	SWMM	1

2.2 Model Results – Existing Conditions

The Hydraulic Grade Line (HGL) profiles from the existing conditions model runs are provided for both main reaches (Eglinton Ave and Laird Drive) and for all four of the modelling scenarios provided. The branch along Eglinton is part of the foul system and the branch along Laird Dr is part of the combined system.

- a) Area 2 - Baseline 100 Year (EC + Super Pipe MetroLinx)

Under this scenario, the Eglinton HGL shows surcharging to ground on Eglinton Avenue, and a backwater condition within the valley. This may be affected by the changing pipe sizes within the valley.

Under this scenario, the Laird HGL shows slight surcharging along the entire branch. The surcharging does not reach the 1.8 m limit.

- b) Area 2 - Baseline 2-year storm (EC + Super Pipe MetroLinx)

Under this scenario, the Eglinton HGL shows significantly less surcharging than under the 100 Year storm along Eglinton. The backwater condition is still occurring along the end of this branch.

Under this scenario, the Laird HGL shows some surcharging along the northern part of the branch and some surcharging near the outfall. The surcharging appears to be below the 1.8m limit.

- c) Area 2 - Baseline DWF (EC + Super Pipe MetroLinx)

Under this scenario, the Eglinton HGL is not visible either, suggesting that the HGL is largely produced from the inflow and infiltration along this branch.

Under this scenario, the Laird HGL is very low and not truly visible on the HGL, suggesting that the HGL is largely influenced from the storm flows within the combined system.

- d) Area 2 - Baseline May 12,2000 (EC + Super Pipe MetroLinx)

Under this scenario, the Eglinton HGL shows surcharging below the surface along Eglinton and backwater condition within the valley.

Under this scenario, the Laird HGL shows surcharging along Laird, with the largest amount of surcharging occurring near Eglinton Ave. The surcharging remains below the 1.8m limit.

2.3 Modifications to Reflect Post-Development Conditions (Area A)

There are three existing “Foul” subcatchments in the vicinity of the Eglinton development. These subcatchments have the ID’s of SAC06, SAC09 and SP2S25. All three have no population and some baseflow or “Additional Foul Flow”. There is no visible relationship with the baseflow or “additional foul flow” and the area of the subcatchment. SAC06 and SAC09 had runoff areas (Areas 1, 2 and 3 on both subcatchments) with a Land Use ID of 1.

Subcatchment ID SP2S25 drained to the combined system on Laird Dr. Subcatchment ID SAC06 and SAC09 drain to the foul system on Eglinton Ave.

The existing subcatchments were removed entirely in advance of the Proposed “Area A” (Eglinton) development addition.

The Eglinton Development consists of 16 different buildings over four addresses along Eglinton Avenue. To accommodate these new buildings in the model, new foul subcatchments were created:

Subcatchment ID	Address	Building Numbers Included
A1-1	815-845 Eglinton Ave	1-3
A1-2	815-845 Eglinton Ave	4
A1-3	815-845 Eglinton Ave	5
A2-1	849 Eglinton Ave	1-2
A2-2	849 Eglinton Ave	3
A3-1	939 Eglinton Ave	1-4
A4-1	943-957 Eglinton Ave	1-2
A4-2	943-957 Eglinton Ave	3
A4-3	943-957 Eglinton Ave	4

The sanitary flow calculations used the following design criteria:

	Generation Rate	Peaking Factor
Residential	240 Lpcd	Harmon
Commercial, Office, Retail, Community Centre	180,000 L/ha/day	None

The development statistics and estimated sanitary flow is shown in Appendix B and summarized in Table 1.

TABLE 1 – EGLINTON DEVELOPMENT STATISTICS AND SANITARY FLOW

Address	Building No.	Population	Res. Flow (L/s)	Peak Res. Flow (L/s)	Office Area (m ²)	Office Flow (L/s)
815-845 Eglinton Ave	1	391	1.09	4.37	3,170	0.66
	2	1,093	3.04	11.46	3,020	0.63
	3	0	0	0	10,890	2.27
	4	1,163	3.23	12.14	850	0.18
	5	0	0	0	2,080	0.43
849 Eglinton Ave	1	520	1.44	5.73	1,410	0.29
	2	463	1.29	5.13	690	0.14
	3	0	0	0	1,350	0.28
939 Eglinton Ave	1	638	1.77	6.94	1,285	0.27
	2	327	0.91	3.69	555	0.12
	3	671	1.86	7.27	0	0
	4	0	0	0	4,300	0.9
943-957 Eglinton Ave	1	635	1.76	6.91	2,230	0.46
	2	194	0.54	2.24	0	0
	3	544	1.51	5.98	0	0
	4	596	1.66	6.51	0	0

Overall, approximately 85 L/s will be added to the sanitary or combined systems for the Eglinton Ave development.

2.4 Model Results – Post-Development Conditions

The simulations were reviewed on two branches – Run 1 is the combined sewer along Laird and Run 2 is the foul sewer along Eglinton.

The HGL for both branches under the 2-year and 100-year, show similar results under existing conditions and post-development.

Run 1 (Laird Dr): The results of the combined system modelling along Laird Dr indicates no adverse impacts to redeveloping the site. The 2-year storm HGL looks very similar under existing conditions and post-development conditions. This suggests that the development flow was similar to the existing flow removed. In terms of risk of basement flooding, the freeboard is lower than 1.8m on the first two pipes, under existing and future conditions.

The 100-year storm HGL also looks similar under existing conditions and post-development conditions. This suggests that the development flow was similar to the existing flow removed. In terms of risk of basement flooding, the freeboard is lower than 1.8m on the first two pipes, under existing and future conditions.

Run 2 (Eglinton Ave): The 2-year storm HGL looks very similar under existing conditions and post-development conditions. The flow at the end is slightly lower in post-development conditions than existing conditions, suggesting that the development flow added was less than existing conditions.

The 100-year storm HGL very similar under existing conditions and post-development conditions. The flow at the end is approximately the same as existing conditions, suggesting that the development flow added was similar to the existing flows removed. Under the 100-year storm, the surcharging on Eglinton Ave reaches surface and exceeds the 1.8m limit.

Run 1 (Laird Dr), Pre-development:

From MH	To MH	Length(m)	Diameter (mm)	U/S Inv (m)	D/S Inv (m)	Slope (m/m)	Full Capacity (m ³ /s)	DWF Peak Flow (m ³ /s)	DWF + 2-yr Storm Peak Flow (m ³ /s)	DWF + 100-yr Storm Peak Flow (m ³ /s)
4113215853	4109815736	121.7	300	128.382	127.876	0.00416	0.058	0.00107	0.02551	0.04934
4109815736	4100215764	99.9	600	127.38	126.98	0.004	0.361	0.04486	0.62134	0.73341
4100215764	4093615783	69	675	126.42	126.15	0.00391	0.488	0.05508	0.55117	0.51781
4093615783	4084215811	97.7	675	126.15	125.75	0.00409	0.5	0.05507	0.52449	0.51734
4084215811	4074115841	106.1	675	125.75	125.33	0.00396	0.491	0.05515	0.51896	0.52631
4074115841	4073415843	6.6	675	125.33	125.25	0.01212	0.86	0.05515	0.53482	0.58158
4073415843	4065215867	85.5	675	125.25	124.96	0.00339	0.455	0.05514	0.65294	0.79818
4065215867	4059515883	59.5	1200	123.673	123.328	0.0058	2.757	0.10299	1.96778	2.66781
4059515883	4046215921	138.2	1200	123.327	122.435	0.00645	2.909	0.10928	2.03153	2.71125
4046215921	4037615947	89.9	1200	122.435	121.802	0.00704	3.038	0.11003	2.06492	2.75266
4037615947	4028715974	93.4	1200	121.802	121.146	0.00702	3.034	0.11383	2.34054	3.07064
4028715974	4014316063	178.8	1200	121.146	120	0.00641	2.899	0.11535	2.52559	3.38082
4014316063	4007316119	89.4	1200	115.73	115.46	0.00302	1.99	0.11737	2.59961	3.31796
4007316119	3998516199	119.1	1200	115.46	115.053	0.00342	2.117	0.12056	2.76749	3.59068
3998516199	3996116180	30.4	1500	114.796	114.683	0.00372	5.539	0.12057	2.94617	4.04177
3996116180	3992016148	52.1	1500	114.683	114.447	0.00453	6.114	0.15091	3.92206	5.64623
3992016148	3985216125	78.8	1500	114.447	114.141	0.00388	5.661	0.15091	3.91692	5.6428
3985216125	3979116151	65.8	1500	114.141	113.401	0.01125	9.634	0.15091	3.91173	5.64172
3979116151	3977616158	16.7	1500	113.401	113.257	0.00862	8.436	0.1509	3.91177	5.64143
3977616158	3975316202	49.3	3658	90.096	89.767	0.00668	57.793	1.03583	29.15681	81.76344

MH ID	Ground Level (m)	DWF Max Water Level (HGL,m)	DWF + 2-yr Storm Max Water Level (HGL,m)	DWF + 100-yr Storm Max Water Level (HGL,m)	DWF Min Freeboard (m)	DWF + 2-yr Storm Min Freeboard (m)	DWF + 100-yr Storm Min Freeboard (m)
4113215853	130.4	128.417	128.835	129.659	1.983	1.565	0.741
4109815736	131.1	127.525	128.733	129.301	3.575	2.367	1.799
4100215764	130.5	126.575	127.381	127.844	3.925	3.119	2.656
4093615783	130.4	126.303	127.079	127.52	4.097	3.321	2.88
4084215811	130.3	125.905	126.663	127.068	4.395	3.637	3.232
4074115841	130	125.469	126.199	126.559	4.531	3.801	3.441
4073415843	130	125.411	126.145	126.491	4.589	3.855	3.509
4065215867	130.1	123.841	124.443	125.193	6.259	5.657	4.907
4059515883	130.6	123.495	124.089	124.828	7.105	6.511	5.772
4046215921	131.6	122.601	123.195	124.004	8.999	8.405	7.596
4037615947	132.1	121.97	122.633	123.428	10.13	9.467	8.672
4028715974	132.5	121.318	122.031	122.676	11.182	10.469	9.824
4014316063	131	115.935	117.296	118.298	15.065	13.704	12.702
4007316119	131.2	115.661	116.775	117.467	15.539	14.425	13.733
3998516199	126.4	114.951	115.795	116.139	11.449	10.605	10.261
3996116180	127	114.845	115.719	116.062	12.155	11.281	10.938
3992016148	119.2	114.615	115.486	115.786	4.585	3.714	3.414
3985216125	125.9	114.357	114.922	115.166	11.543	10.978	10.734
3979116151	120.2	113.545	114.208	114.46	6.655	5.992	5.74
3977616158	117.9	90.477	91.941	94.178	27.423	25.959	23.722

Run 1 (Laird Dr), Post-Development:

From MH	To MH	Length(m)	Diameter (mm)	U/S Inv (m)	D/S Inv (m)	Slope (m/m)	Full Capacity (m³/s)	DWF Peak Flow (m³/s)	DWF + 2-yr Storm Peak Flow (m³/s)	DWF + 100-yr Storm Peak Flow (m³/s)
4113215853	4109815736	121.7	300	128.382	127.876	0.00416	0.058	0.01853	0.03968	0.06075
4109815736	4100215764	99.9	600	127.38	126.98	0.004	0.361	0.06233	0.62872	0.73783
4100215764	4093615783	69	675	126.42	126.15	0.00391	0.488	0.07254	0.5501	0.51938
4093615783	4084215811	97.7	675	126.15	125.75	0.00409	0.5	0.07253	0.52446	0.51896
4084215811	4074115841	106.1	675	125.75	125.33	0.00396	0.491	0.0726	0.51938	0.52795
4074115841	4073415843	6.6	675	125.33	125.25	0.01212	0.86	0.0726	0.53513	0.58337
4073415843	4065215867	85.5	675	125.25	124.96	0.00339	0.455	0.0726	0.65327	0.79987
4065215867	4059515883	59.5	1200	123.673	123.328	0.0058	2.757	0.12048	1.96815	2.66987
4059515883	4046215921	138.2	1200	123.327	122.435	0.00645	2.909	0.12676	2.03221	2.7119
4046215921	4037615947	89.9	1200	122.435	121.802	0.00704	3.038	0.12752	2.06549	2.75347
4037615947	4028715974	93.4	1200	121.802	121.146	0.00702	3.034	0.13132	2.34117	3.0713
4028715974	4014316063	178.8	1200	121.146	120	0.00641	2.899	0.13284	2.52624	3.38067
4014316063	4007316119	89.4	1200	115.73	115.46	0.00302	1.99	0.13487	2.60053	3.31806
4007316119	3998516199	119.1	1200	115.46	115.053	0.00342	2.117	0.13805	2.76862	3.58984
3998516199	3996116180	30.4	1500	114.796	114.683	0.00372	5.539	0.13806	2.94744	4.04101
3996116180	3992016148	52.1	1500	114.683	114.447	0.00453	6.114	0.16839	3.92362	5.64463
3992016148	3985216125	78.8	1500	114.447	114.141	0.00388	5.661	0.16839	3.91845	5.64121
3985216125	3979116151	65.8	1500	114.141	113.401	0.01125	9.634	0.16839	3.913	5.63981
3979116151	3977616158	16.7	1500	113.401	113.257	0.00862	8.436	0.16839	3.91312	5.63951
3977616158	3975316202	49.3	3658	90.096	89.767	0.00668	57.793	1.05251	29.16056	81.74126

MH ID	Ground Level (m)	DWF Max Water Level (HGL,m)	DWF + 2-yr Storm Max Water Level (HGL,m)	DWF + 100-yr Storm Max Water Level (HGL,m)	DWF Min Freeboard (m)	DWF + 2-yr Storm Min Freeboard (m)	DWF + 100-yr Storm Min Freeboard (m)
4113215853	130.4	128.501	129.007	129.87	1.899	1.393	0.53
4109815736	131.1	127.551	128.764	129.323	3.549	2.336	1.777
4100215764	130.5	126.6	127.383	127.856	3.9	3.117	2.644
4093615783	130.4	126.328	127.081	127.53	4.072	3.319	2.87
4084215811	130.3	125.93	126.664	127.075	4.37	3.636	3.225
4074115841	130	125.487	126.2	126.564	4.513	3.8	3.436
4073415843	130	125.436	126.146	126.495	4.564	3.854	3.505
4065215867	130.1	123.851	124.443	125.195	6.249	5.657	4.905
4059515883	130.6	123.505	124.089	124.83	7.095	6.511	5.77
4046215921	131.6	122.61	123.195	124.004	8.99	8.405	7.596
4037615947	132.1	121.979	122.634	123.428	10.121	9.466	8.672
4028715974	132.5	121.327	122.031	122.676	11.173	10.469	9.824
4014316063	131	115.95	117.298	118.297	15.05	13.702	12.703
4007316119	131.2	115.676	116.776	117.466	15.524	14.424	13.734
3998516199	126.4	114.96	115.795	116.139	11.44	10.605	10.261
3996116180	127	114.853	115.719	116.062	12.147	11.281	10.938
3992016148	119.2	114.623	115.486	115.786	4.577	3.714	3.414
3985216125	125.9	114.361	114.922	115.166	11.539	10.978	10.734
3979116151	120.2	113.55	114.208	114.46	6.65	5.992	5.74
3977616158	117.9	90.48	91.941	94.178	27.42	25.959	23.722

Run 2 (Eglinton Ave), Pre-Development:

From MH	To MH	Length(m)	Diameter (mm)	U/S Inv (m)	D/S Inv (m)	Slope (m/m)	Full Capacity (m³/s)	DWF Peak Flow (m³/s)	DWF + 2-yr Storm Peak Flow (m³/s)	DWF + 100-yr Storm Peak Flow (m³/s)
4119116042	4120716094	54.4	250	127.102	126.476	0.01151	0.059	0.0001	0.01983	0.03829
4120716094	4122116139	46.8	250	126.476	126.422	0.00115	0.019	0.00085	0.02806	0.05522
4122116139	4122816139	7.8	250	126.422	124.845	0.20218	0.248	0.00097	0.04286	0.06122
4122816139	413016115	84.6	250	124.795	124.456	0.00401	0.035	0.00097	0.03083	0.05261
413016115	4131516117	5.4	250	124.506	124.276	0.04259	0.114	0.00097	0.02938	0.05304
4131516117	4138516096	73.4	250	124.246	124.002	0.00332	0.032	0.00107	0.03763	0.06875
4138516096	4141316109	30.5	250	123.952	123.864	0.00289	0.03	0.00533	0.08705	0.10489
4141316109	4144416194	90.3	250	123.814	122.923	0.00987	0.055	0.00605	0.0889	0.10821
4144416194	NewLRT1	44.2	250	122.923	120.836	0.04724	0.12	0.00605	0.0889	0.1082
NewLRT1	NewLRT2	16	300	120.776	119.928	0.053	0.207	0.00605	0.0889	0.1082
NewLRT2	NewLRT4	131.5	300	119.868	112.896	0.05302	0.207	0.00793	0.10939	0.15916
NewLRT4	NewLRT5	45.4	525	111.94	111.144	0.01753	0.529	0.0181	0.19175	0.28511
NewLRT5	NewLRTstorage	199	2100	106.345	105.35	0.005	11.386	0.0181	0.1538	0.15209
NewLRTstorage	NewLRT6	3.5	600	103.735	103.7	0.01	0.57	0.0181	0.12154	0.12696
NewLRT6	4152316642	21.6	250	103.67	102.81	0.03973	0.11	0.01889	0.11709	0.12787
4152316642	4149316679	90.6	250	102.76	99.81	0.03255	0.1	0.01889	0.11705	0.12786
4149316679	4152416741	36.4	250	99.76	96.27	0.09598	0.171	0.01889	0.11705	0.12787
4152416741	4152816800	58.9	375	96.22	95.81	0.00697	0.136	0.01889	0.12527	0.13662
4152816800	4154316886	87.1	375	95.77	95.1	0.0077	0.143	0.01889	0.14367	0.16231
4154316886	4157416968	87.7	375	95.08	92.9	0.02487	0.257	0.01898	0.14813	0.1923
4157416968	4157716976	9.3	375	92.87	92.638	0.02495	0.257	0.01898	0.15131	0.21021
4157716976	4154017146	174.4	1500	91.968	91.285	0.00392	4.108	1.01364	4.59111	4.83038

MH ID	Ground Level (m)	DWF Max Water Level (HGL,m)	DWF + 2-yr Storm Max Water Level (HGL,m)	DWF + 100-yr Storm Max Water Level (HGL,m)	DWF Min Freeboard (m)	DWF + 2-yr Storm Min Freeboard (m)	DWF + 100-yr Storm Min Freeboard (m)
4119116042	129.7	127.128	127.209	129.84	2.572	2.491	-0.14
4120716094	129.4	126.517	127.019	129.666	2.883	2.381	-0.266
4122116139	129	126.449	126.967	129.281	2.551	2.033	-0.281
4122816139	129	124.83	126.936	129.22	4.17	2.064	-0.22
413016115	128.5	124.536	126.707	128.706	3.964	1.793	-0.206
4131516117	128.5	124.283	126.688	128.668	4.217	1.812	-0.168
4138516096	128.5	124.026	126.337	127.814	4.474	2.163	0.686
4141316109	128.3	123.873	125.543	126.683	4.427	2.757	1.617
4144416194	125.5	122.969	123.1	123.143	2.531	2.4	2.357
NewLRT1	123.6	120.821	120.918	120.936	2.779	2.682	2.664
NewLRT2	127.1	119.917	120.03	120.095	7.183	7.07	7.005
NewLRT4	119.2	112.023	112.166	112.224	7.177	7.034	6.976
NewLRT5	119.1	106.465	106.558	107.342	12.635	12.542	11.758
NewLRTstorage	109.7	103.83	106.18	107.342	5.87	3.52	2.358
NewLRT6	109.7	103.744	105.326	106.319	5.956	4.374	3.381
4152316642	105.06	102.838	104.281	105.082	2.222	0.779	-0.022
4149316679	103.31	99.821	99.952	99.976	3.489	3.358	3.334
4152416741	101.27	96.317	96.519	97.474	4.953	4.751	3.796
4152816800	101.11	95.864	96.204	97.098	5.246	4.906	4.012
4154316886	98.35	95.158	95.778	96.548	3.192	2.572	1.802
4157416968	98.24	92.948	95.323	95.958	5.292	2.917	2.282
4157716976	96.8	92.485	95.271	95.89	4.315	1.529	0.91

Run 2 (Eglinton Ave), Post-Development:

From MH	To MH	Length(m)	Diameter (mm)	U/S Inv (m)	D/S Inv (m)	Slope (m/m)	Full Capacity (m³/s)	DWF Peak Flow (m³/s)	DWF + 2-yr Storm Peak Flow (m³/s)	DWF + 100-yr Storm Peak Flow (m³/s)
4119116042	4120716094	54.4	250	127.102	126.476	0.01151	0.059	0.01616	0.01616	0.01616
4120716094	4122116139	46.8	250	126.476	126.422	0.00115	0.019	0.0169	0.02332	0.02535
4122116139	4122816139	7.8	250	126.422	124.845	0.20218	0.248	0.01703	0.04001	0.05507
4122816139	4131016115	84.6	250	124.795	124.456	0.00401	0.035	0.01703	0.03024	0.04965
4131016115	4131516117	5.4	250	124.506	124.276	0.04259	0.114	0.01703	0.02891	0.04801
4131516117	4138516096	73.4	250	124.246	124.002	0.00332	0.032	0.02811	0.04218	0.05341
4138516096	4141316109	30.5	250	123.952	123.864	0.00289	0.03	0.03236	0.08642	0.10266
4141316109	4144416194	90.3	250	123.814	122.923	0.00987	0.055	0.03308	0.08813	0.10582
4144416194	NewLRT1	44.2	250	122.923	120.836	0.04724	0.12	0.03308	0.08813	0.10581
NewLRT1	NewLRT2	16	300	120.776	119.928	0.053	0.207	0.03308	0.08813	0.10581
NewLRT2	NewLRT4	131.5	300	119.868	112.896	0.05302	0.207	0.03495	0.10885	0.15358
NewLRT4	NewLRT5	45.4	525	111.94	111.144	0.01753	0.529	0.04496	0.19015	0.27835
NewLRT5	NewLRTstorage	199	2100	106.345	105.35	0.005	11.386	0.04495	0.14991	0.14629
NewLRTstorage	NewLRT6	3.5	600	103.735	103.7	0.01	0.57	0.04494	0.12034	0.12621
NewLRT6	4152316642	21.6	250	103.67	102.81	0.03973	0.11	0.04572	0.11714	0.12716
4152316642	4149316679	90.6	250	102.76	99.81	0.03255	0.1	0.04572	0.11712	0.12715
4149316679	4152416741	36.4	250	99.76	96.27	0.09598	0.171	0.04572	0.11712	0.12715
4152416741	4152816800	58.9	375	96.22	95.81	0.00697	0.136	0.04572	0.1255	0.13855
4152816800	4154316886	87.1	375	95.77	95.1	0.0077	0.143	0.04572	0.1438	0.1651
4154316886	4157416968	87.7	375	95.08	92.9	0.02487	0.257	0.0458	0.14816	0.19335
4157416968	4157716976	9.3	375	92.87	92.638	0.02495	0.257	0.0458	0.15136	0.21142
4157716976	4154017146	174.4	1500	91.968	91.285	0.00392	4.108	1.03568	4.59384	4.83162

MH ID	Ground Level (m)	DWF Max Water Level (HGL,m)	DWF + 2-yr Storm Max Water Level (HGL,m)	DWF + 100-yr Storm Max Water Level (HGL,m)	DWF Min Freeboard (m)	DWF + 2-yr Storm Min Freeboard (m)	DWF + 100-yr Storm Min Freeboard (m)
4119116042	129.7	127.194	127.194	129.191	2.506	2.506	0.509
4120716094	129.4	126.643	126.93	129.169	2.757	2.47	0.231
4122116139	129	126.473	126.874	129.072	2.527	2.126	-0.072
4122816139	129	124.92	126.843	128.998	4.08	2.157	0.002
4131016115	128.5	124.577	126.623	128.368	3.923	1.877	0.132
4131516117	128.5	124.43	126.605	128.321	4.07	1.895	0.179
4138516096	128.5	124.158	126.285	127.621	4.342	2.215	0.879
4141316109	128.3	123.957	125.503	126.53	4.343	2.797	1.77
4144416194	125.5	123.016	123.099	123.133	2.484	2.401	2.367
NewLRT1	123.6	120.862	120.918	120.933	2.738	2.682	2.667
NewLRT2	127.1	119.956	120.029	120.086	7.144	7.071	7.014
NewLRT4	119.2	112.055	112.165	112.218	7.145	7.035	6.982
NewLRT5	119.1	106.482	106.557	107.263	12.618	12.543	11.837
NewLRTstorage	109.7	103.925	106.187	107.262	5.775	3.513	2.438
NewLRT6	109.7	103.786	105.332	106.251	5.914	4.368	3.449
4152316642	105.06	102.883	104.286	105.027	2.177	0.774	0.033
4149316679	103.31	99.852	99.953	99.974	3.458	3.357	3.336
4152416741	101.27	96.372	96.521	97.456	4.898	4.749	3.814
4152816800	101.11	95.918	96.208	97.085	5.192	4.902	4.025
4154316886	98.35	95.193	95.78	96.542	3.157	2.57	1.808
4157416968	98.24	92.983	95.325	95.958	5.257	2.915	2.282
4157716976	96.8	92.49	95.273	95.889	4.31	1.527	0.911

TECHNICAL MEMORANDUM TM1

DATE	February 16, 2018
TO	Pascal Monat, SCS Consulting
SUBJECT	Eglinton and Laird Planning Study Review of Water and Wastewater Servicing Opportunities
FROM	Kevin Brown, P. Eng
PROJECT NUMBER	17103

1 Background

The Municipal Infrastructure Group Ltd. (TMIG) has been retained by SCS Consulting Limited (SCS) to conduct a servicing analysis to understand the existing water system in the study area and the capacity for the potential re-development of the Eglinton/Laird Development Area.

The recommended preferred Development Densities were developed by The Planning Partnership and have been used in the assessment of servicing requirements and opportunities.

The Eglinton-Laird Focus Area consists of two distinct development areas, as follows:

- Three major blocks that front onto Eglinton Avenue. These will generally consist of high-density mixed-use developments in the range of 6 to 32 storeys high
- Seven smaller blocks along the west side of Laird Ave. These will generally consist of smaller 3 to 10 storey mixed-use developments.

The development density Statistics are provided in **Appendix A**.

Information about the water system provided by the City was reviewed, and a modelling methodology developed to be applied to the analysis was stated in the memo dated June 7, 2017.

As part of the modelling methodology, a model calibration was performed as per the memo dated August 8, 2017.

The Existing condition analysis with the calibrated model was described in the memo dated October 27, 2017.

2 Existing Servicing

From the City of Toronto Water Supply infrastructure map, we have identified that the study area falls under the Pressure District PD3E. The transmission main supplying this area is the 600 mm main located along Don Mills Road to the east. The study area borders the Pressure District PD4E along the Bayview Avenue. (Refer Fig 1. – Water System).

From a meeting with Toronto Water, we had been advised that PD3E is hydraulically connected to PD3 to the west, but that PD3E should be able to function alone.

We have also been advised that there are Pressure-Reducing Valves (PRVs) located along the PD4 watermain on Bayview Avenue which can supplement the water supply and maintain pressures in PD3E.

2.1 Model Development and Calibration

TMIG Developed an InfoWater model for this Study Area. The main components of the model are described below.

2.1.1 Pipe Network

The City provided GIS shapefiles for the Water system (water mains and valves), and these were used to generate the pipe network for the InfoWater model after clarifying the information gaps. (Refer Fig 1 – Water system)

2.1.2 Water Demands

The average consumption/billing data from the geocoded meter data provided has been used as the modelled average day demands for each parcel. Using the demand allocation tool in InfoWater, these demands have been assigned to closest node in the pipe network to create an average day demand set.

Based on City of Toronto guidelines, the Maximum Day peaking factor is 1.8 and the Peak Hour factor is 2.5. The average consumption from the meter data was multiplied by the peaking factors to create the Maximum Day and Peak Hour demand sets.

Fire demands have been assigned to junctions in the network based on the land use. (Refer Fig 2-Fire demand allocation)

2.1.3 Boundary Conditions

Since the model developed is for the local area only, additional system data was collected to provide a suitable boundary condition at the study area limits. A fixed head reservoir has been established west of Don River and east of Overlea Boulevard and Thorncliche Park Drive servicing the 400-mm transmission main along Overlea Boulevard.

The HGL elevation was established at 194 m through pressure logging.

2.1.4 Field Testing Program

A field testing program was developed to calibrate the model. These tests involved five hydrant flow tests along major water mains to calibrate the roughness coefficients along these primary feeds. Also, pressure loggers were installed at two locations (Overlea Blvd and Parkhurst Blvd) to track normal pressure variations over the course of a typical week. Fig.3 shows the details of the field testing program.

The fire flow test analysis was performed for all the five locations using NFPA 291 Extrapolation Methodology. Attachment A shows the fire flow analysis on all the five locations. Attachment B shows the pressure variations at those locations during hydrant test.

2.1.5 Model Calibration

The hydraulic information in model regarding pipe roughness (Hazen Williams Coefficient) and the boundary conditions (HGL for Fixed Head Reservoir) were initially assumed based on standard values. Model calibration involves the adjustment of the primary network model parameters (i.e. pipe roughness coefficients and Reservoir HGL) until the model results closely approximate actual observed conditions as measured from field data.

a. Boundary conditions

Using the pressure logger data at two locations and the static pressure data at the five-fire flow locations, the HGL for fixed head reservoir is adjusted to reasonable value.

b. Pipe Roughness Coefficient

The model was simulated for all five fire flow tests by assigning the maximum hydrant flow to "Demand 10" in model at the Fire flow node and the residual pressure at the nearby node is noted. The pipe roughness was adjusted along the mains such that to reduce the difference in residual head between model and field data. The adjusted pipe roughness coefficient is within the range specific by City of Toronto Standards.

The calibrated model head with observed field data is given in Attachment C. It is observed that the observed and simulated HGL differ in the range of +5 m to -5 m.

Overall, a good match between the model and the measured pressures was achieved. However, the area along Overlea Blvd (FF 1) where the model results varied from the other test locations. It is not clear why the modelled pressures do not match existing, but it is possibly related to a topographical elevation error, since an excellent calibration was obtained at the other fire flow test locations.

There are Pressure-Reducing Valves along Bayview Avenue, but it is not clear whether these are active on a regular basis. Our modelling and calibration exercise did not indicate that the PD3E system pressures would drop enough that the PRVs become active.

2.2 Model Results – Existing Conditions

The existing conditions were simulated with the calibrated model to establish the residual pressures under several demands scenarios throughout the Study Area. The model was simulated for the following scenarios and the pressure and head loss in system can be studied to understand the existing system capacity. Attachment D shows the model output for the existing condition analysis. Summary of results are provided in Table 1.

TABLE 1 EXISTING CONDITION MODELLING SCENARIO RESULTS

Water Demand Modeling Scenario	Minimum Water System Requirements	Modelling Results
Average Day Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 46.8 psi to 95.3 psi (Ref Fig 4)
Maximum Day Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 38.3 psi to 90.1 psi (Ref Fig 5)
Peak Hour Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 33 psi to 87.3 psi (Ref Fig 6)
Required Fire Flow to be provided at a residual pressure of no less than 20 psi		
Maximum Day Demand plus Fire Flow	Residential Fire flow requirements per City of Toronto Standards, $Q_f > 64 \text{ L/s to } 189 \text{ L/s}$	Model Residential Available Fire flow = 56.5 L/s to 318.3 L/s (Ref Fig 7)
	Employment Fire flow requirements per City of Toronto Standards, $Q_f = 189 \text{ L/s to } 317 \text{ L/s}$	Model Employment / High Rise Available Fire flow 80.6 L/s to 792.5 L/s (Ref Fig 7)

1. Refer Attachment D for detailed water modelling output table

The model simulation results show that the system pressures are within the recommended range of 40 psi to 100 psi (275 kpa to 690 kpa) in most of the area. However, under Max Day and Peak Hour demand scenario, there are areas with low pressures and these areas are at the higher elevation range of the current pressure district.

Fire flow analysis performed shows that generally there are suitable fire flows available in most areas, however, there are some areas with not adequate fire flows. It is not clear whether these areas would be supplemented by additional water supply (and therefore increased pressures) from PD4 via the PRVs along Bayview Avenue.

3 Modifications to Reflect Post-Development Conditions

The recommended preferred development densities provided in Appendix A have been used in the assessment of servicing requirements and opportunities.

The Eglinton-Laird Focus Area consists of two distinct development areas, as follows:

- Three major blocks that front onto Eglinton Avenue.
These will generally consist of high-density mixed-use developments. Therefore, following design criteria is used.
Residential = 191 Lpcd; ICI = 180,000 L/ha/Day
- Seven smaller blocks along the west side of Laird Ave.
These will generally consist of medium density mixed use developments. Therefore, following design criteria is used.
Residential = 320 Lpcd; ICI = 180,000 L/ha/Day

Attachment E shows the detailed water demand calculations for the proposed developments. A summary of demands is provided in Table 2.

TABLE 2 SUMMARY OF PROPOSED DEVELOPMENT WATER DEMANDS

Development Area	ICI Area (m ²)	Residential Units	Residential Population	Avg Day Demands		Max Day Demands		Peak Hour Demands	
				ICI (L/s)	RES (L/s)	ICI (L/s)	RES (L/s)	ICI (L/s)	RES (L/s)
Eglinton Avenue	44,670	3,755	6,684	9.31	14.78	10.24	19.21	11.17	36.94
Laird Drive	21,090	1,017	2,102	4.39	7.78	4.83	12.84	5.27	19.30

1. Refer Attachment E for detailed water demand calculations

The model was updated to reflect the post development conditions. The existing meter-based demands for the proposed redevelopment addresses were removed from the appropriate nodes, and the proposed future design demands were assigned to new nodes. The model was modified to add average day, Max day and Peak hour demand scenario for the Post Development conditions.

3.1 Model Results – Post-Development Conditions

The post development conditions were simulated with the modified calibrated model to establish the residual pressures under several demands scenarios throughout the Study Area. The model was simulated for the following scenarios and the pressure and head loss in system can be studied to understand the impact of the development existing system capacity. Attachment F shows the model output for the post development condition analysis. A summary of the results is provided in Table 3.

TABLE 3 POST DEVELOPMENT CONDITION MODELLING SCENARIO RESULTS

Water Demand Modeling Scenario	Minimum Water System Requirements	Modelling Results
Average Day Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 43.4 psi to 93.1 psi (Ref Fig 8)
Maximum Day Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 30.6 psi to 87 psi (Ref Fig 9)
Peak Hour Demand	Recommended System Pressures = 40 psi to 100 psi	Model System Pressure = 19.4 psi to 81.8 psi (Ref Fig 10)
Required Fire Flow to be provided at a residual pressure of no less than 20 psi		
Maximum Day Demand plus Fire Flow	Residential Fire flow requirements per City of Toronto Standards, $Q_f > 64 \text{ L/s to } 189 \text{ L/s}$	Model Residential Available Fire flow = 50.2 L/s to 269.5 L/s (Ref Fig 11)
	Employment Fire flow requirements per City of Toronto Standards, $Q_f = 189 \text{ L/s to } 317 \text{ L/s}$	Model Employment / High Rise Available Fire flow 75.3 L/s to 742.9 L/s (Ref Fig 11)

1. Refer Attachment F for detailed water modelling output table

The model simulation results show that the system pressures are within the recommended range of 40 psi to 100 psi (275 kpa to 690 kpa) in most of the area. However, under Max day and Peak Hour demand scenario, there are areas with pressures below the desired level-of service. While some of these areas experience low pressures under existing conditions, the extent of the low-pressure areas increases as a result if the increased demands associated with the proposed development.

The modelled fire flow analysis indicates that there are suitable fire flows available in most areas, however, there are areas with sub-standard fire flows (as in the existing conditions modelling). Due to the increased fire flow demands associated with the proposed land use changes, the proposed redevelopment areas will not be provided with the City's design fire flows without some system improvements.

Under the peak hour demand scenario, the low-pressure area generally falls between Hanna Road and Bayview Avenue.

Under the fire flow scenario, there are broadly two zones with sub-standard fire flows.

- West of Bessborough Dr and South of Eglinton Ave
- Central Part of study area along Laird Dr, along Eglinton Ave and Vanderhoof Ave

Head loss through the distribution system was reviewed to understand the potential hydraulic bottlenecks that are limiting the fire flow availability. From FIG 9 (Post Dev Peak Hour Demand Scenario), we can see very high head losses along watermains in the following areas:

- Overlea Blvd, west of Don River to Thorncliffe Park Dr
- Wicksteed Ave, from Beth Nealson Dr to Leslie St

It is anticipated that focussing system improvements in these areas will result in the most efficient opportunity to restore system pressures and mitigate any impacts from the proposed development.

3.2 Recommended System Upgrades

The model was run again to confirm the magnitude of the system upgrades required to mitigate the impacts of the proposed developments on the level-of-service provided throughout the service area.

A series of system upgrades in the locations identified above are shown in Fig 12. A summary of the proposed upgrades is given in Table 4 with complete details included in Attachment G.

TABLE 4 SUMMARY OF PROPOSED SYSTEM UPGRADES

Road	From	To	Length (m)	Type of Upgrade	Ex Dia (mm)	Prop Dia (mm)
Overlea Blvd	West of Don River	Thorncliffe Park Dr	490.3	Rehab	400	400
Beth Nealson Dr	Thorncliffe Park Dr	Wicksteed Ave	500.4	Upsizing	300	400
Wicksteed Ave	Beth Nealson Dr	Leslie St	350.1	Upsizing	300	400
Leslie St	Wicksteed Ave	Research Rd	97.0	Upsizing	200	300
Leonard Linton Park Easement	Wicksteed Ave	Vanderhoof Ave	184.9	Upsizing	150	200
Aerodrome Cres	Vanderhoof Ave	Thomas Elgie Dr	222.4	Upsizing	200	300
Brentcliffe Rd	Vanderhoof Ave	Eglinton Ave	184.5	Upsizing	200	300
Vanderhoof Ave	Brentcliffe Rd	Fut Block A1/A2 easement	235.3	Upsizing	150	200
Vanderhoof Ave	Fut Block A1/A2 easement	Laird Dr	197.2	Upsizing	200	300

1. Refer Attachment G for detailed upgrades identified for system improvements

3.2.1 Verification of Pressure Improvements

The Upgraded System Post Development conditions were simulated with the modified calibrated model to confirm whether the post-development residual pressures can be restored to pre-development conditions throughout the service area.

Attachment H shows the model output for the upgraded system post development condition analysis. Summary of results and comparison with other conditions are provided in Table 5. This demonstrates that the reduction in system pressures resulting from the proposed redevelopment densities can be mitigated through the system improvements identified above. There are still some areas where the modelling results indicate that the desired level-of-service will not be met, but these are consistent with the areas identified in the existing conditions analysis.

The areas with sub-standard pressures (according to the model results) are located along the western edge of the Service Area. The affected area is at the highest elevations within the service area, and adjacent to the PD-4 watermain along Bayview Avenue. The City has advised that there are PRVs along Bayview Avenue which can supplement PD-3E. As the modelling demonstrates that the proposed system upgrades will be successful in maintaining the existing conditions, we anticipate that there will be no overall adverse impacts resulting from the proposed development.

TABLE 5 MODELLING RESULTS WITH SYSTEM IMPROVEMENTS

Water Demand Modeling Scenario	Existing Condition Ex System Modelling Results	Post Development Ex System Modelling Results	Post Development Upgraded System Modelling Results
Average Day Demand	Model System Pressure = 46.8 psi to 95.3 psi (Ref Fig 4)	Model System Pressure = 43.4 psi to 93.1 psi (Ref Fig 8)	Model System Pressure = 47 psi to 95.4 psi
Maximum Day Demand	Model System Pressure = 38.3 psi to 90.1 psi (Ref Fig 5)	Model System Pressure = 30.6 psi to 87 psi (Ref Fig 9)	Model System Pressure = 40.3 psi to 92.1 psi
Peak Hour Demand	Model System Pressure = 33 psi to 87.3 psi (Ref Fig 6)	Model System Pressure = 19.4 psi to 81.8 psi (Ref Fig 10)	Model System Pressure = 34.5 psi to 89.6 psi (Ref Fig 13)
Required Fire Flow to be provided at a residual pressure of no less than 20 psi			
Maximum Day Demand plus Fire Flow	Model Residential Available Fire flow = 56.5 L/s to 318.3 L/s (Ref Fig 7)	Model Residential Available Fire flow = 50.2 L/s to 269.5 L/s (Ref Fig 11)	Model Residential Available Fire flow = 59.8 L/s to 473.3 L/s (Ref Fig 14)
	Model Employment / High Rise Available Fire flow = 80.6 L/s to 792.5 L/s (Ref Fig 7)	Model Employment / High Rise Available Fire flow = 75.3 L/s to 742.9 L/s (Ref Fig 11)	Model Employment / High Rise Available Fire flow = 84.0 L/s to 1432.2 L/s (Ref Fig 14)

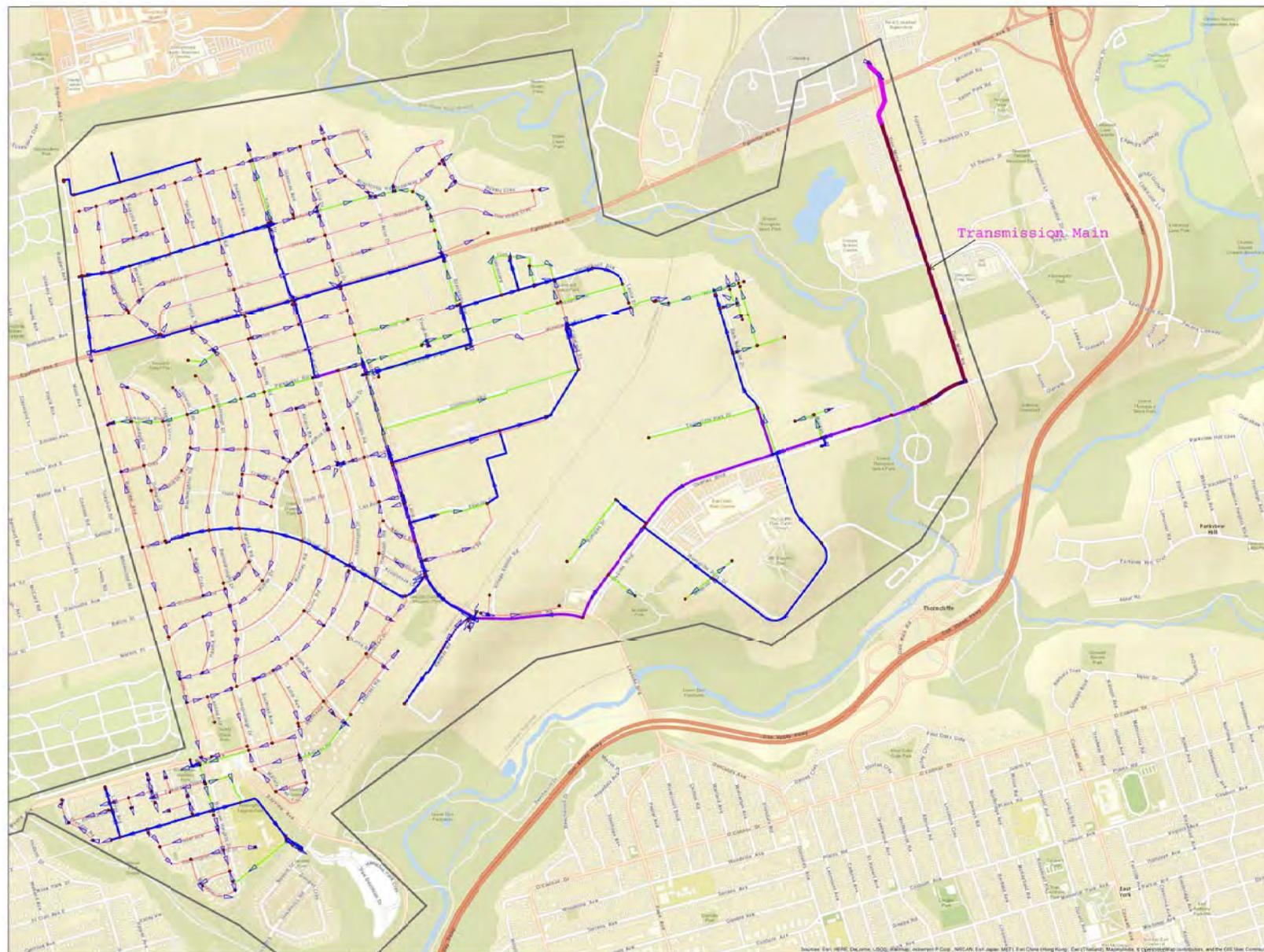
1. Refer Attachment D, F & H for detailed system water modelling output table

4 Conclusion

The proposed development will result in increased system demands (average day, maximum day, and peak hour). These increases will impact the residual pressures throughout the PD-3E service area.

The impacts of the increased densities can be mitigated through 2.5 km of local system improvements.

FIGURES

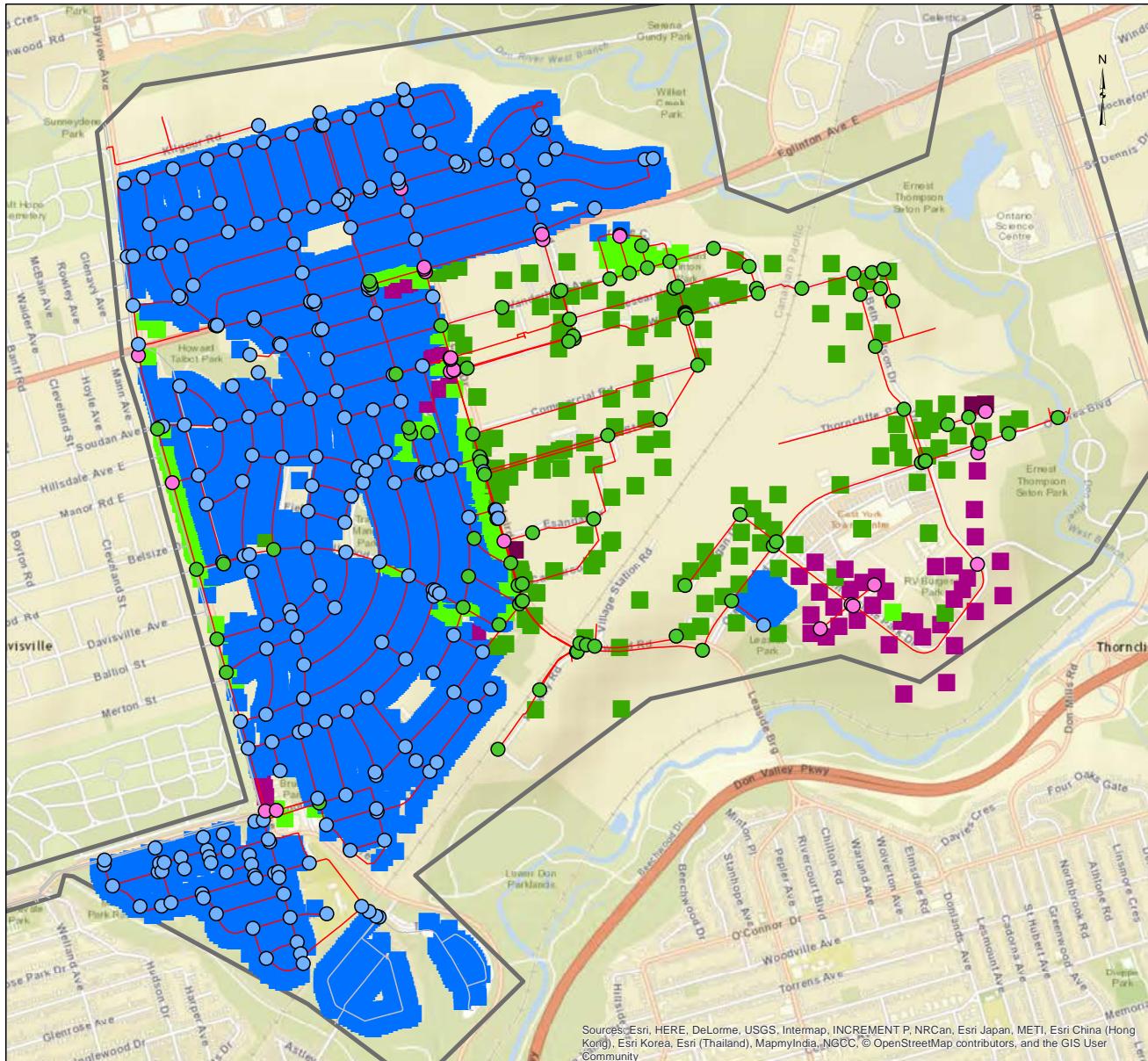


Legend

Pipe

RUN_DIAM

- $\leq 150 \text{ mm}$
- $\leq 250 \text{ mm}$
- 300 mm
- 400 mm
- 600 mm
- 750 mm



Legend

Junction

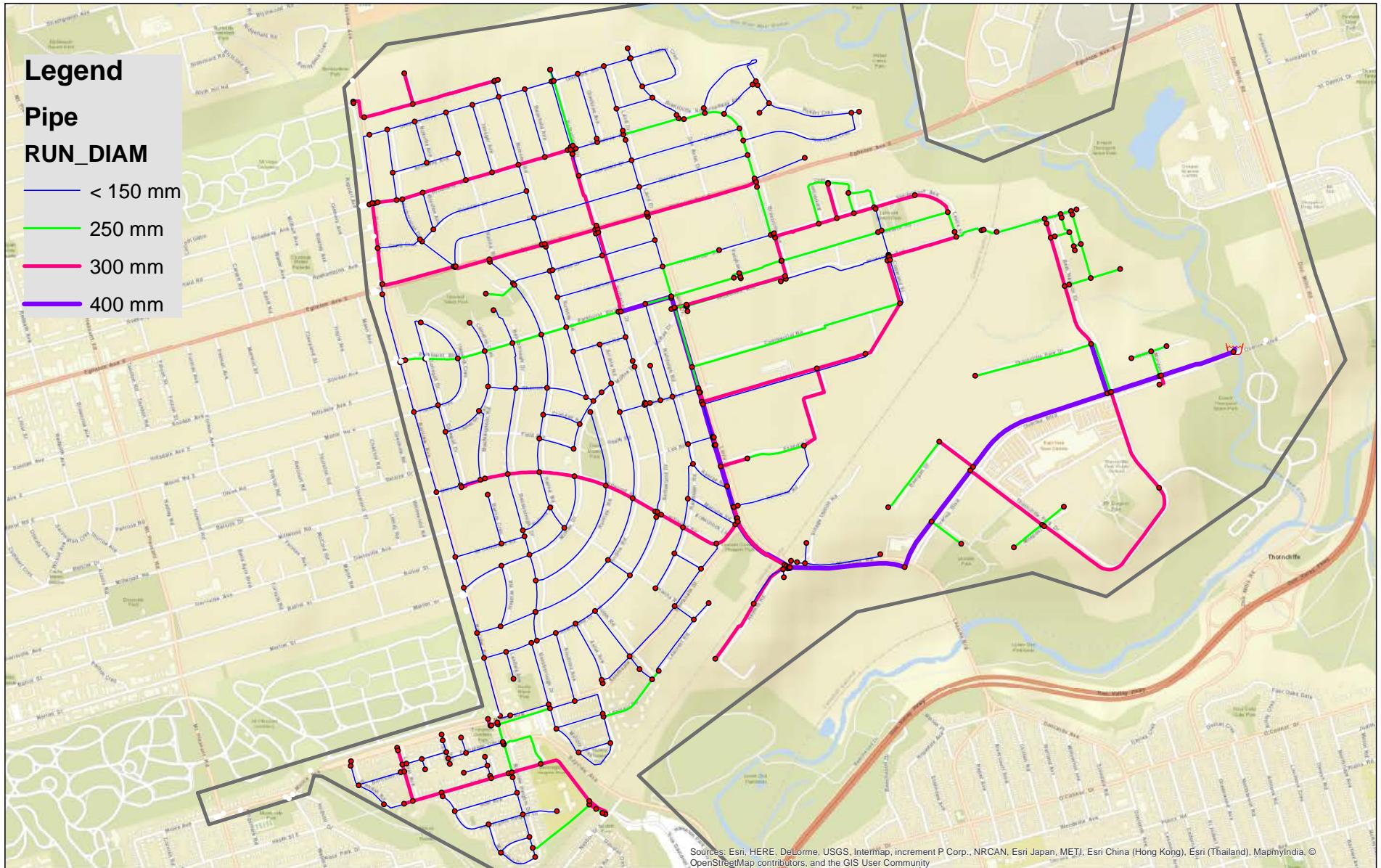
FIRE_DEM

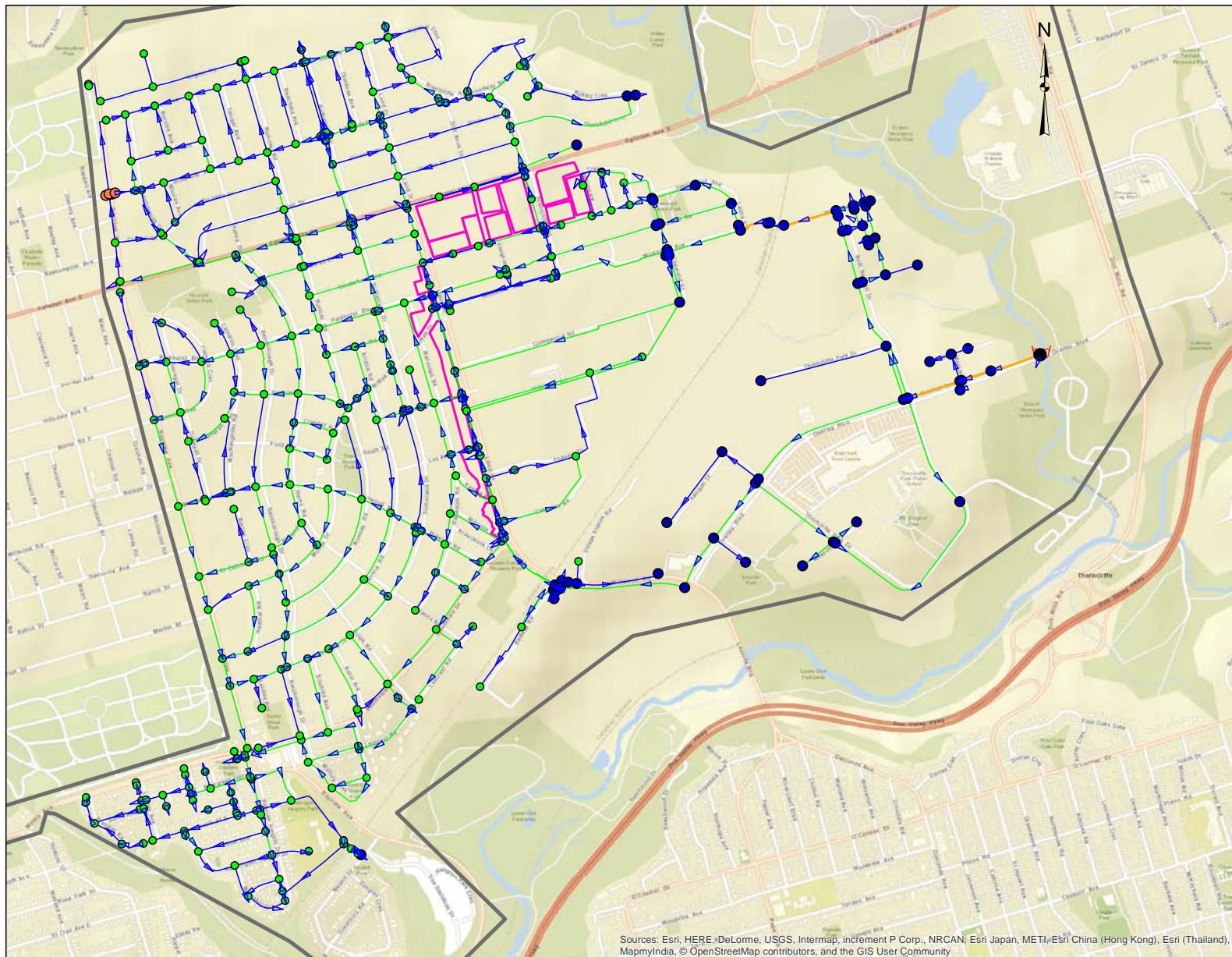
- 65 L/s
- 190 L/s
- 317 L/s

Meterdata_Landuse_Final

Land_Use

- RES, FF = 65 L/s
- ICI + RES , FF = 190 L/s
- ICI, FF = 190 L/s
- RES-HD, FF = 317 L/s
- ICI-HR, FF = 317 L/s





Legend

Junction

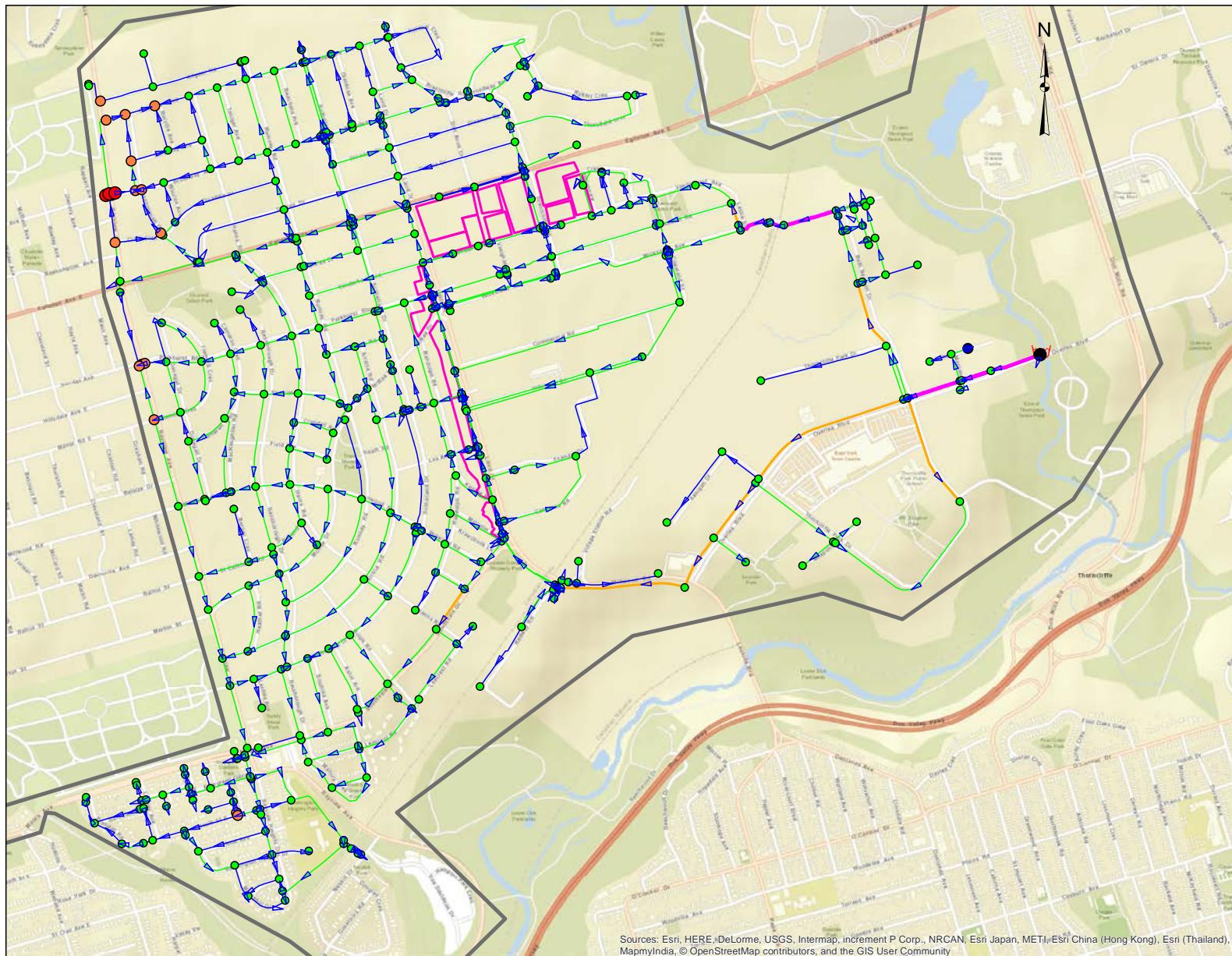
PRESSURE

- < 40 psi
- 40 - 50 psi
- 50 - 90 psi
- 90 - 100 psi
- > 100 psi

Pipe

HL1000

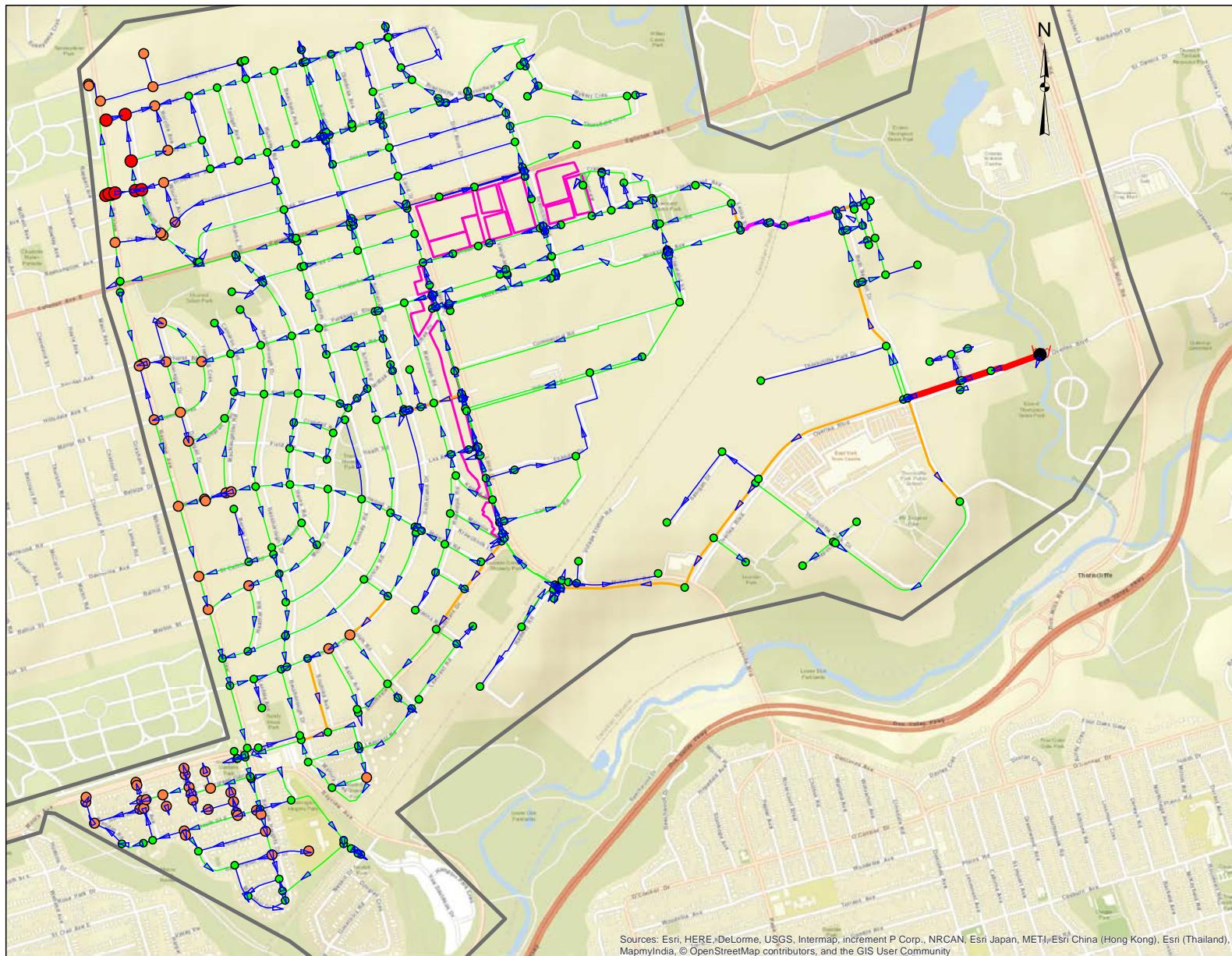
- less than 0.00
- 0.00 ~ 1.00
- 1.00 ~ 5.00
- 5.00 ~ 10.00
- 10.00 ~ 20.76



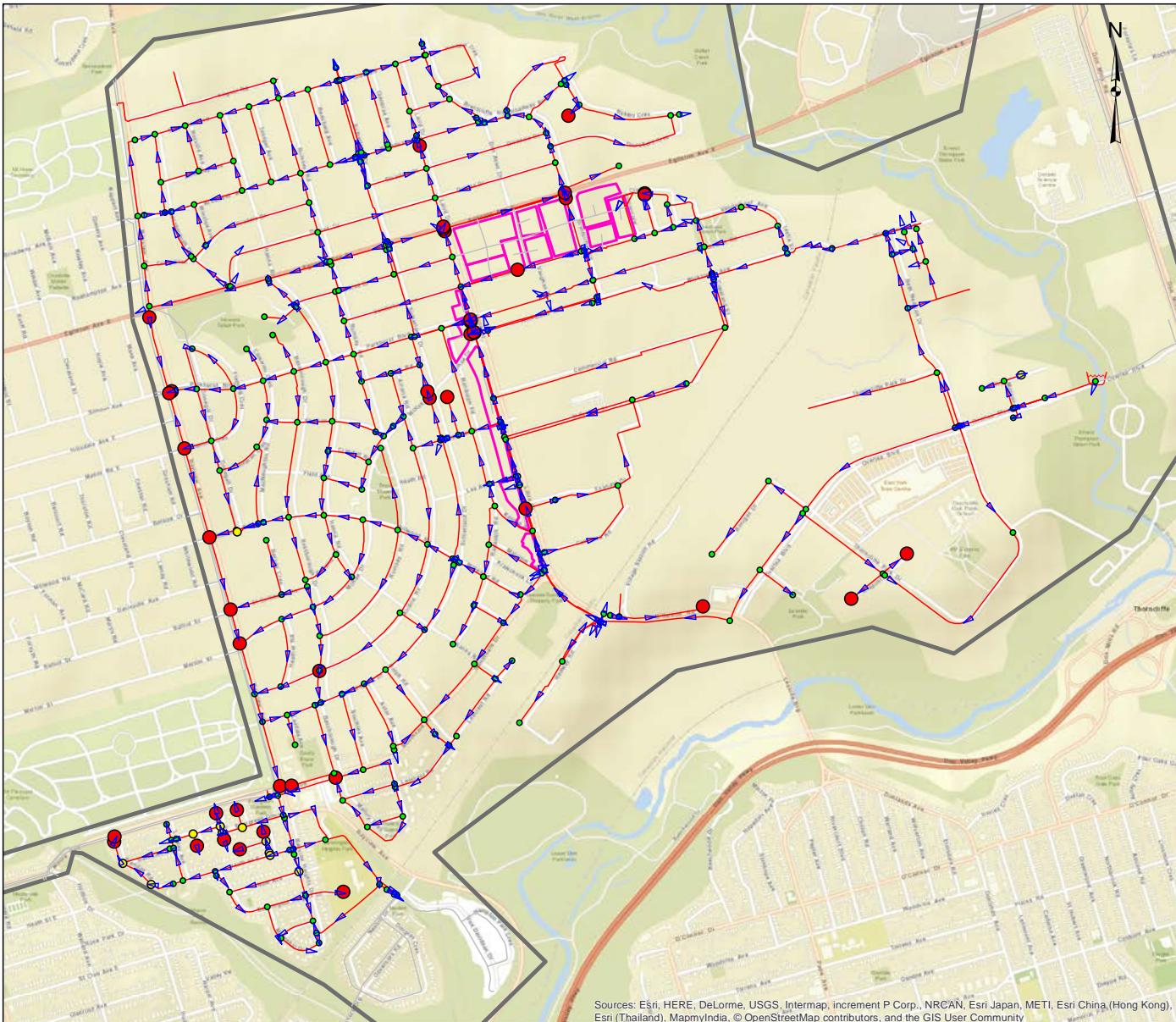
Legend
Junction
PRESSURE

- < 40 psi
- 40 - 50 psi
- 50 - 90 psi
- 90 - 100 psi
- > 100 psi

- Pipe**
HL1000
- less than 0.00
 - 0.00 ~ 1.00
 - 1.00 ~ 5.00
 - 5.00 ~ 10.00
 - 10.00 ~ 20.76



- Legend**
- Junction**
- PRESSURE**
- < 40 psi
 - 40 - 50 psi
 - 50 - 90 psi
 - 90 - 100 psi
 - > 100 psi
- Pipe**
- HL1000**
- less than 0.00
 - 0.00 ~ 1.00
 - 1.00 ~ 5.00
 - 5.00 ~ 10.00
 - 10.00 ~ 20.76

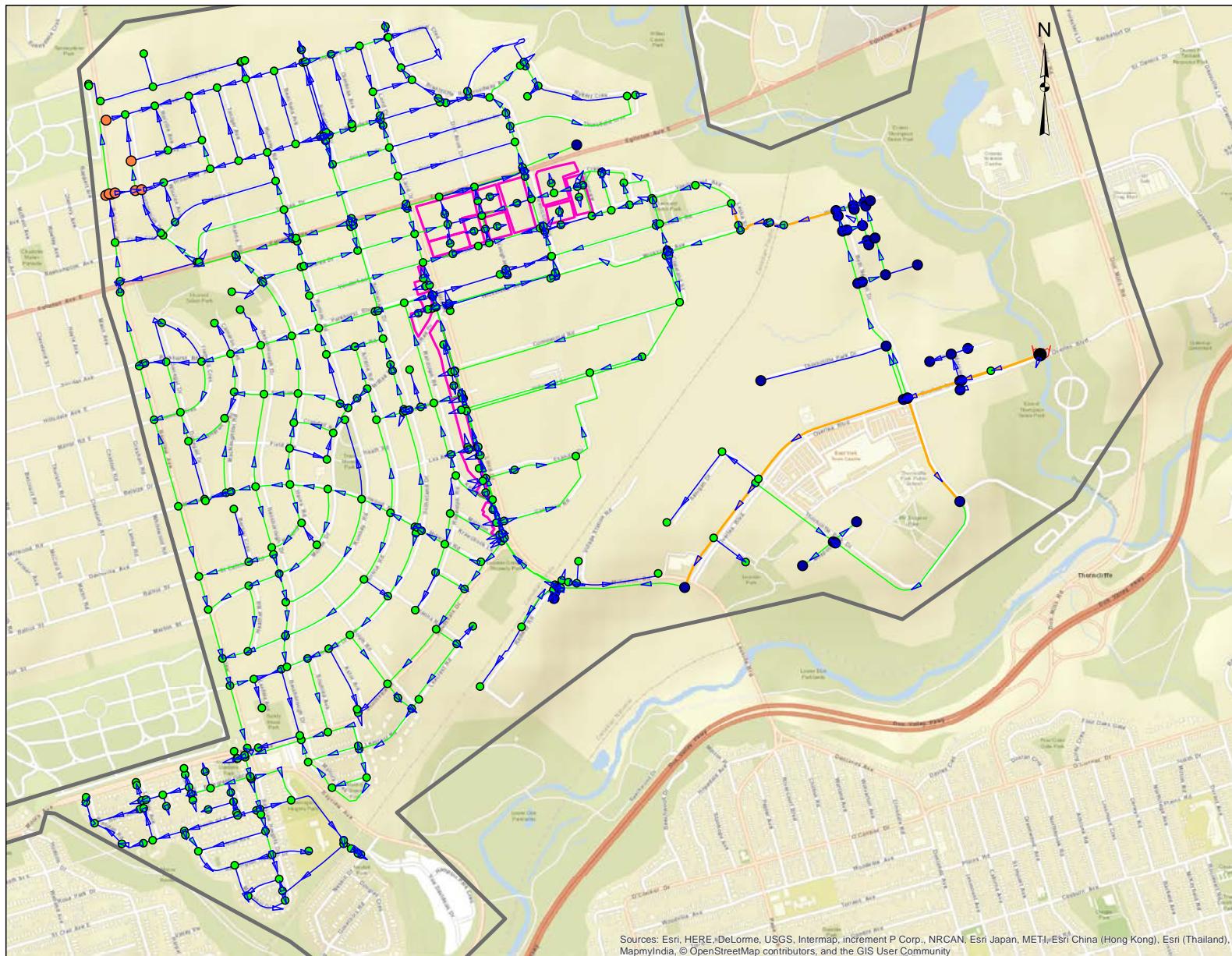


Legend

Junction

Junction.RES_FF

- Residual Fire Flow < 0 L/s
- Residual Fire Flow 0 - 5 L/s
- Residual Fire Flow > 5 L/s



Legend

Junction

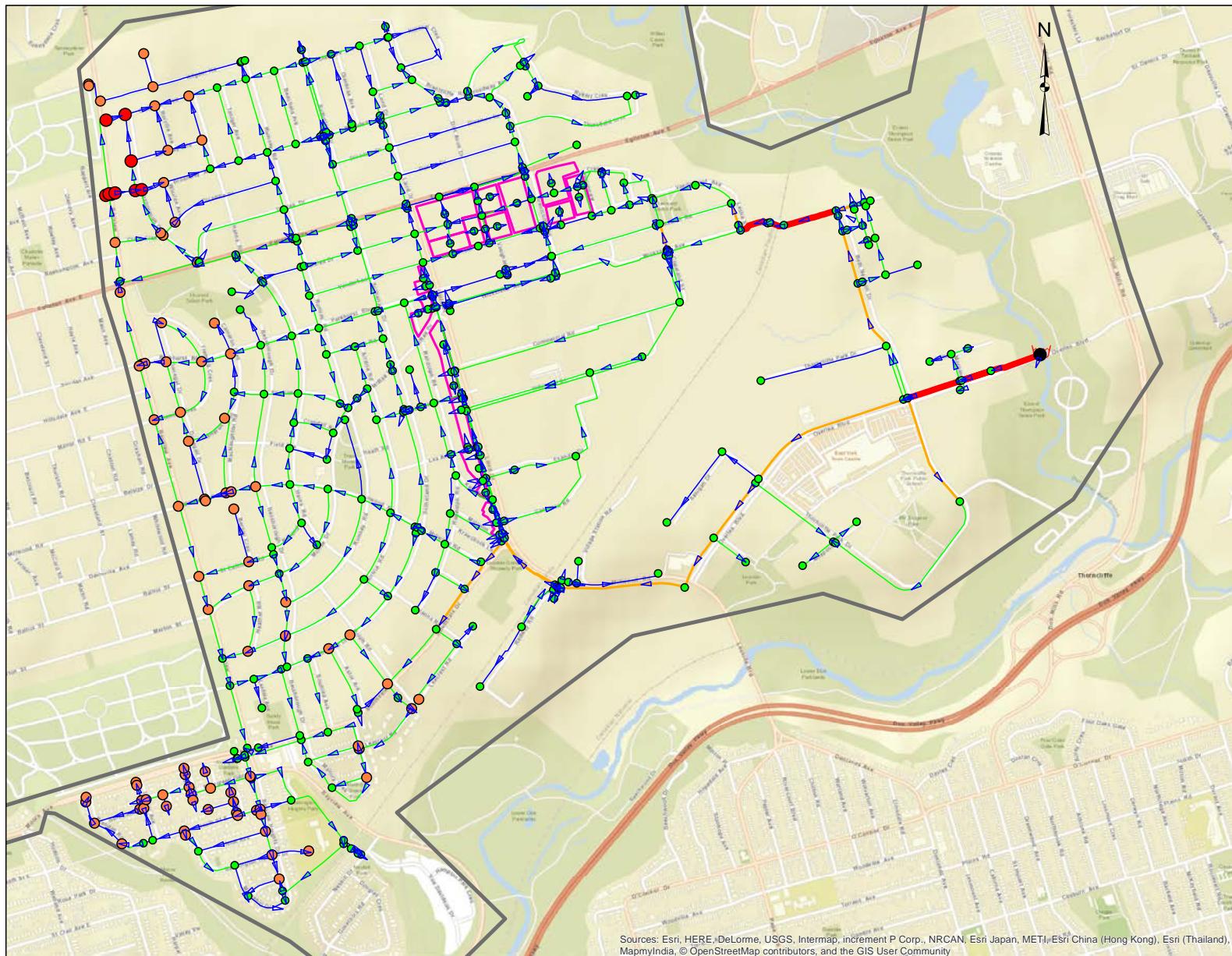
PRESSURE

- < 40 psi
- 40 - 50 psi
- 50 -90 psi
- 90 -100 psi
- > 100 psi

Pipe

HL1000

- less than 0.00
- 0.00 ~ 1.00
- 1.00 ~ 5.00
- 5.00 ~ 10.00
- 10.00 ~ 20.76



Legend

Junction

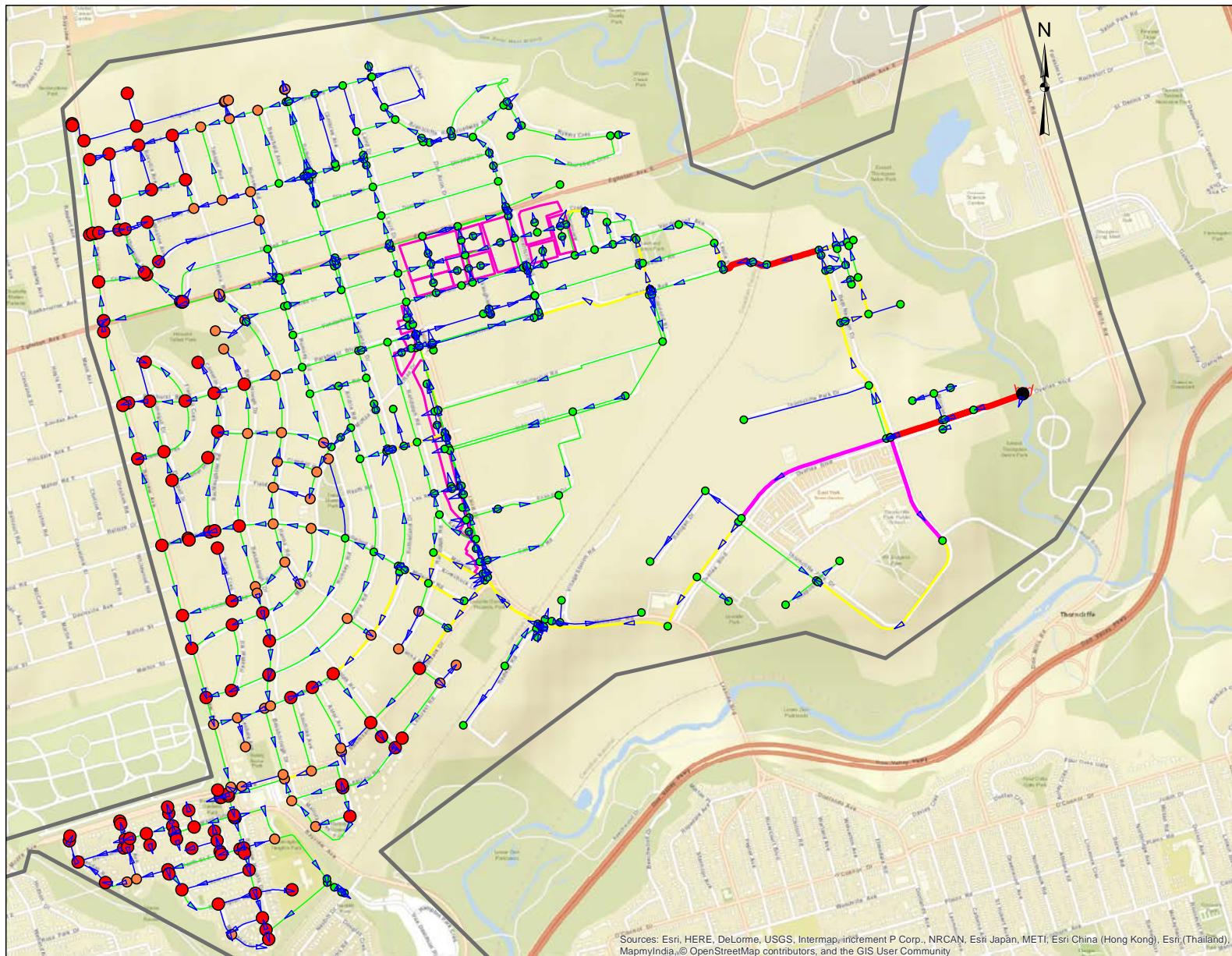
PRESSURE

- < 40 psi
- 40 - 50 psi
- 50 - 90 psi
- 90 - 100 psi
- > 100 psi

Pipe

HL1000

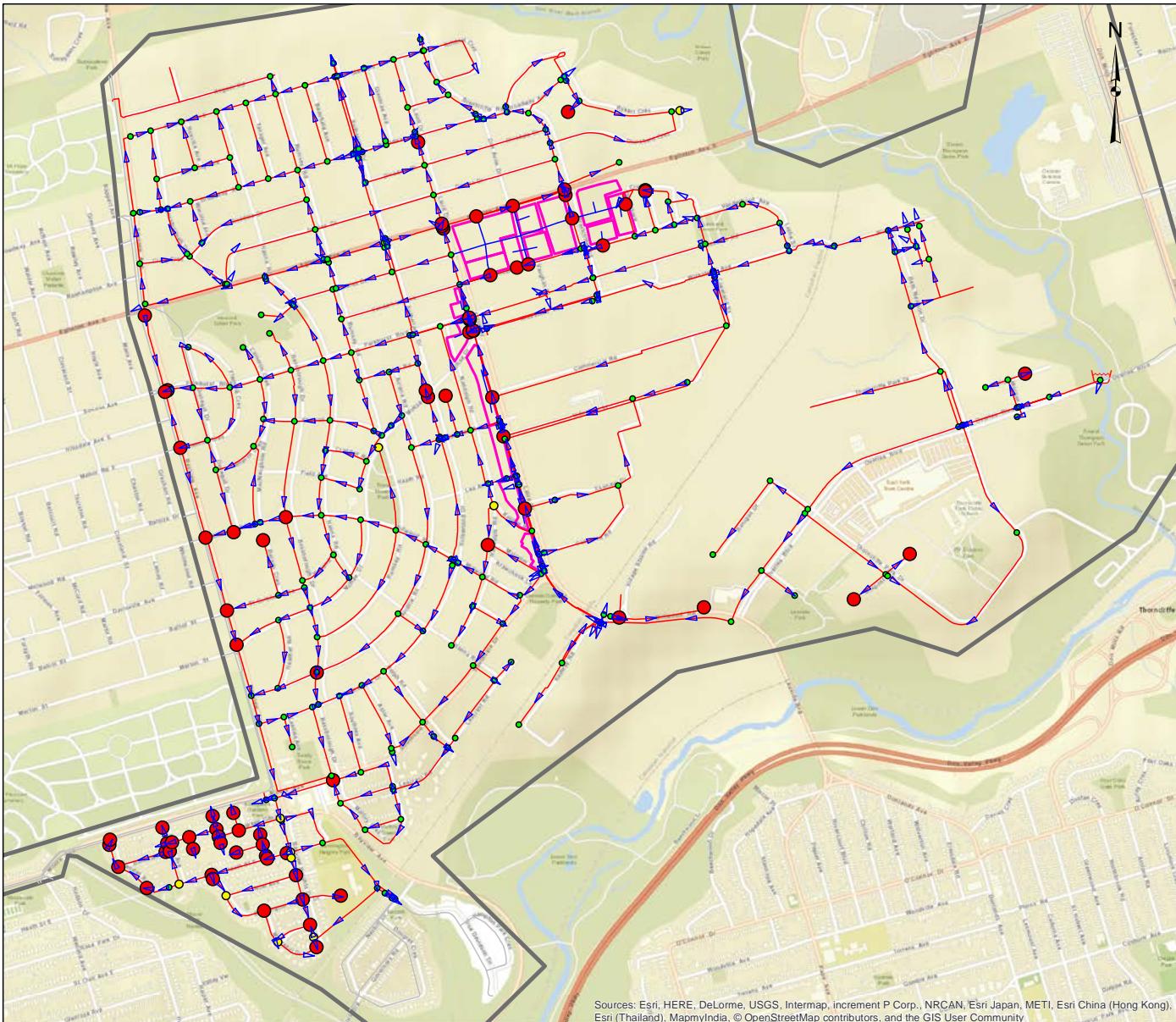
- less than 0.00
- 0.00 ~ 1.00
- 1.00 ~ 5.00
- 5.00 ~ 10.00
- 10.00 ~ 20.76



- Legend**
- Junction PRESSURE**
- < 40 psi
 - 40 - 50 psi
 - 50 - 90 psi
 - 90 - 100 psi
 - > 100 psi

- Pipe HL1000**
- less than 0.00
 - 0.00 ~ 1.00
 - 1.00 ~ 5.00
 - 5.00 ~ 10.00
 - 10.00 ~ 20.76

Sources: Esri, HERE, DeLorme, USGS, Intermap, incisive P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

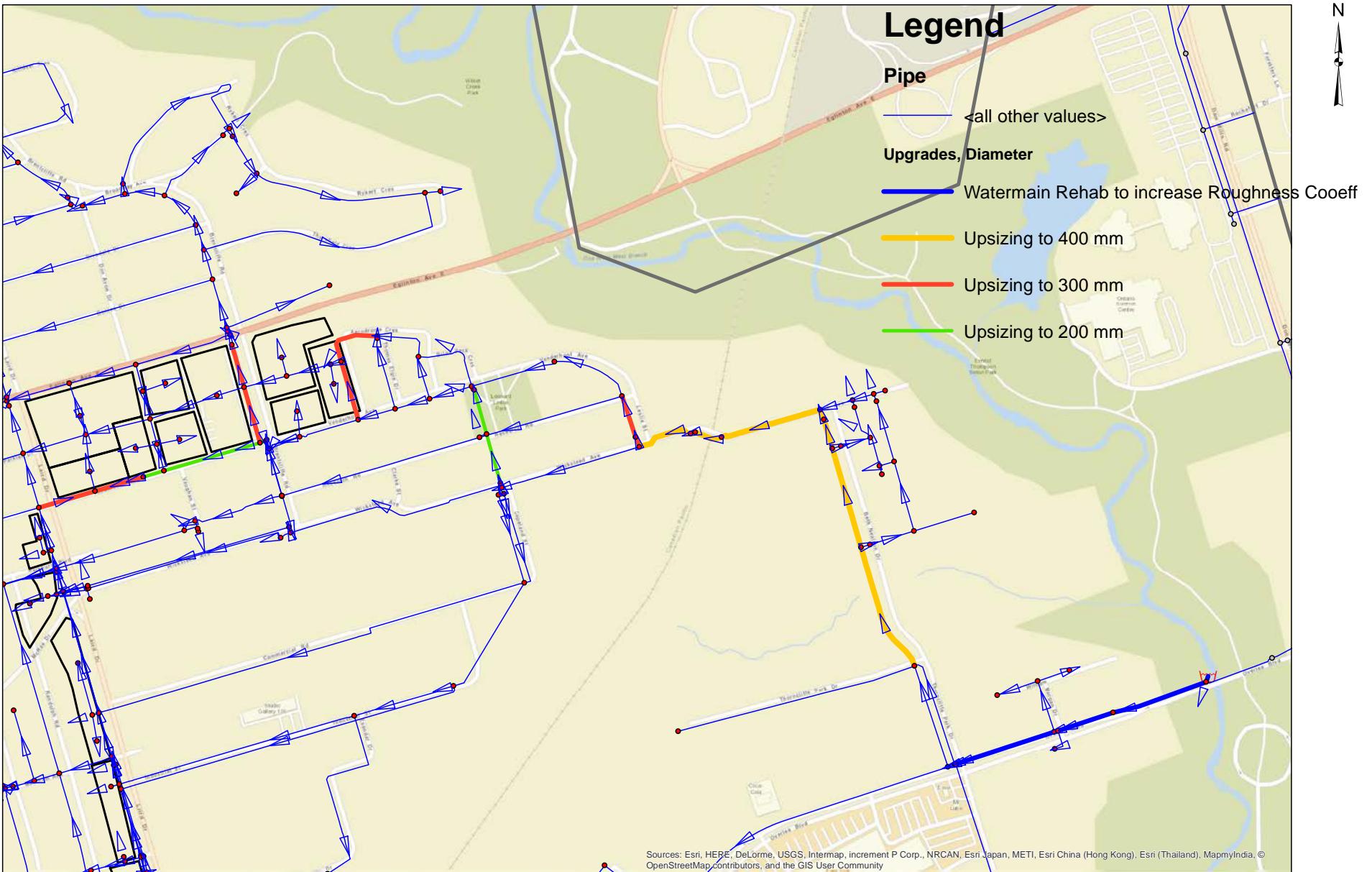


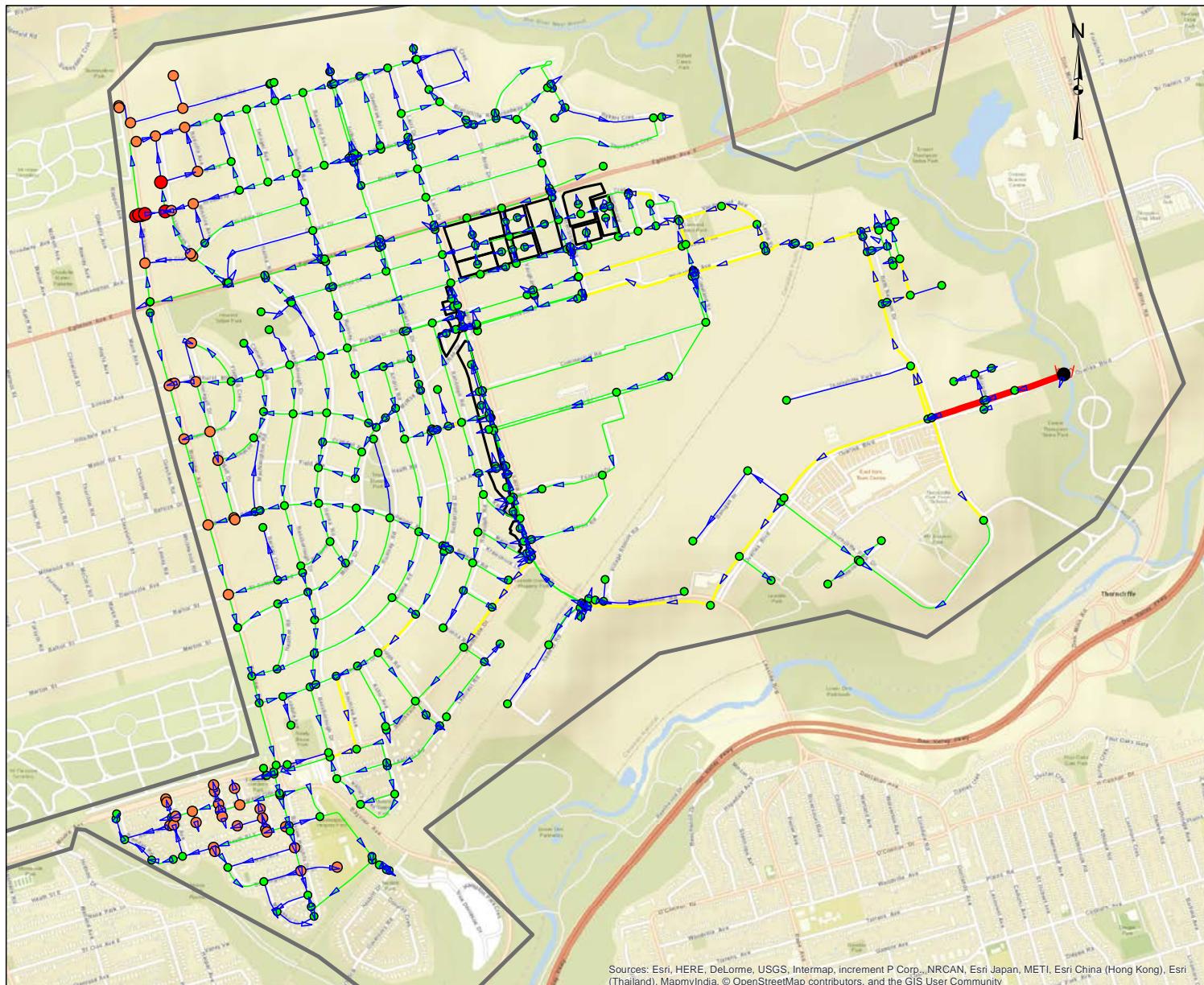
Legend

Junction

Junction.RES_FF

- Residual Fire Flow < 0 L/s
- Residual Fire Flow 0 - 5 L/s
- Residual Fire Flow > 5 L/s





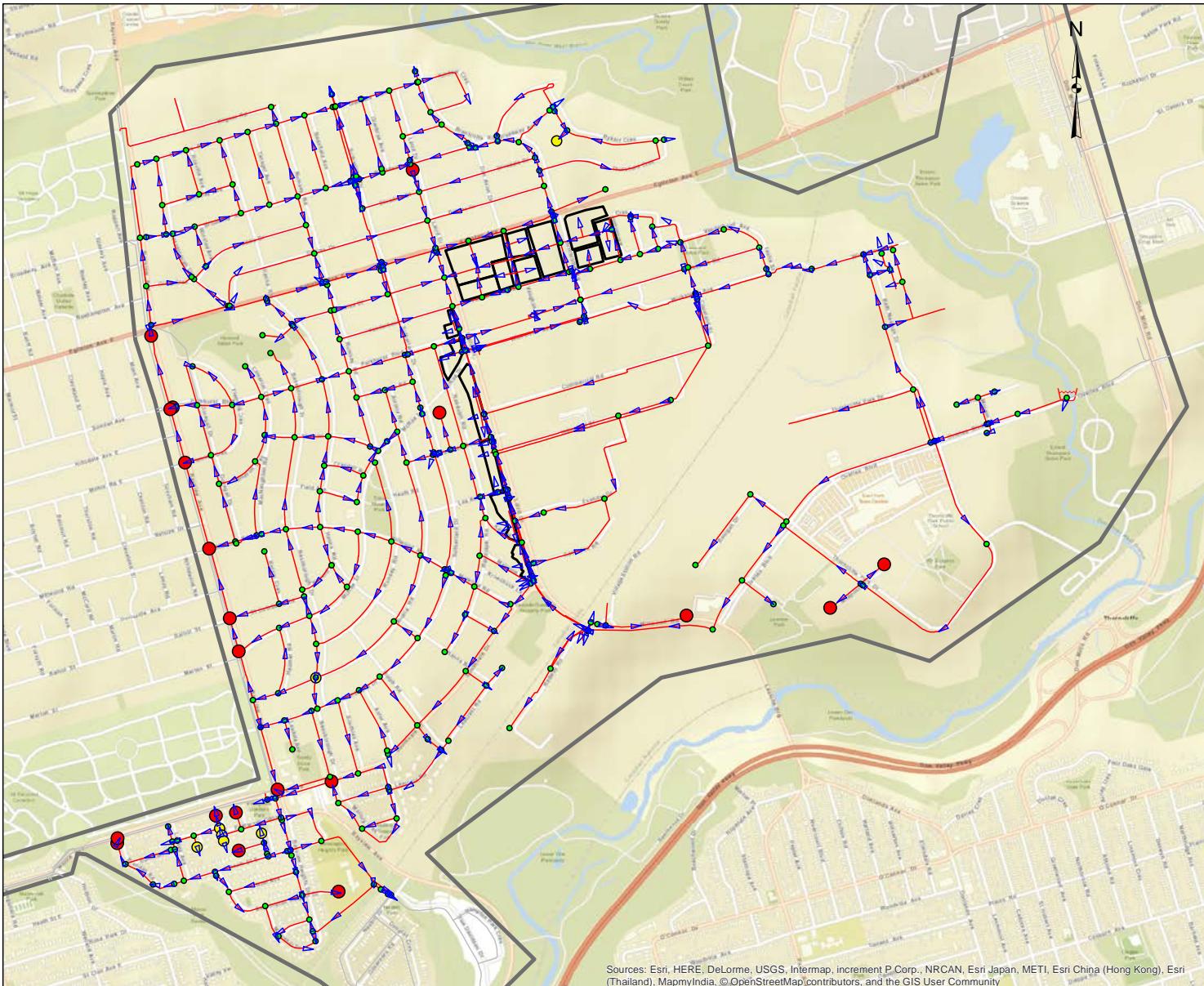
Legend

Junction PRESSURE

- < 40 psi
- 40 - 50 psi
- 50 - 90 psi
- 90 - 100 psi
- > 100 psi

Pipe HL1000

- less than 0.00
- 0.00 ~ 1.00
- 1.00 ~ 5.00
- 5.00 ~ 10.00
- 10.00 ~ 20.76



Legend

Junction

Junction.RES_FF

- Residual Fire Flow < 0 L/s
- Residual Fire Flow 0 - 5 L/s
- Residual Fire Flow > 5 L/s

Attachment A



Fire Flow Test Analysis
NFPA 291 Extrapolation Methodology
Eglinton & Laird
Hydrant Test #1; Leaside Park Dr
Project: 17103 Date: 3-Aug-17
By: VP Checked: KCB

Date of Hydrant Test: 27-Jul-17 8:10 AM

Contractor: Aquazition

Flow Hydrant: 5 Leaside Park Dr

Residual Hydrant: 1 Leaside Park Dr

Data Point	Hydrant Test	
	Flow L/s	Head psi
1	0	85
2	68	75
3	92	67



4.10.1.2 The formula that is generally used to compute the discharge at the specified residual pressure or for any desired pressure drop is Equation 4.10.1.2:

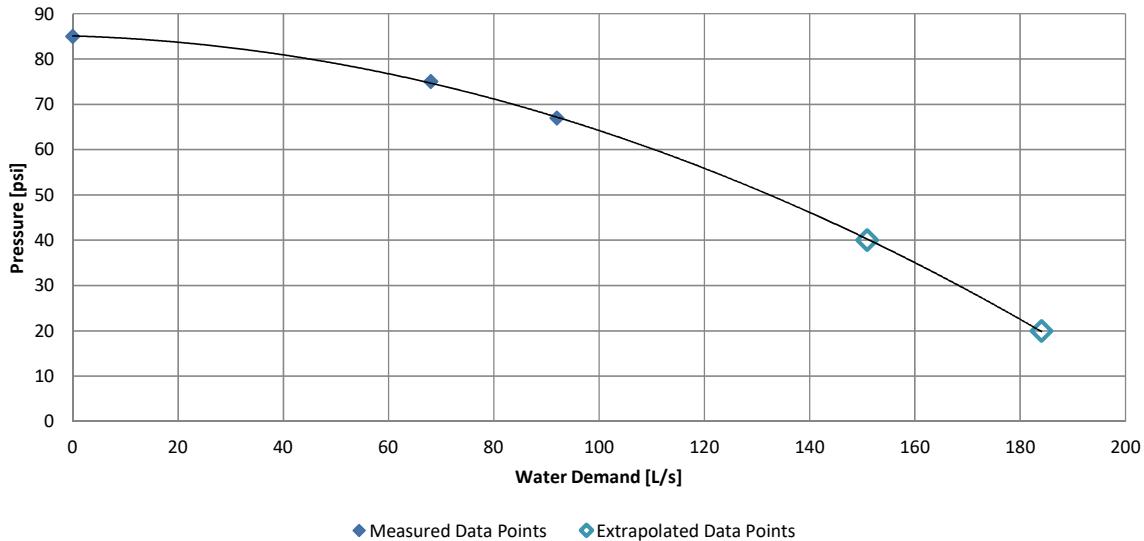
$$Q_R = Q_F \times \frac{h_r^{0.54}}{h_f^{0.54}} \quad (4.10.1.2)$$

where:
 Q_R = flow predicted at desired residual pressure
 Q_F = total flow measured during test
 h_r = pressure drop to desired residual pressure
 h_f = pressure drop measured during test

Based on Data Point 3

Desired Pressure psi	Q_F L/s	h_r psi	h_f psi	Q_R L/s
40	92	45	18	151
20	92	65	18	184

Hydrant Fire Flow Test - Overlea Blvd & Leaside Park Dr





Fire Flow Test Analysis
NFPA 291 Extrapolation Methodology
Eglinton & Laird
Hydrant Test #2; 45 Wicksteed Ave
Project: 17103 Date: 3-Aug-17
By: VP Checked: KCB

Date of Hydrant Test: 27-Jul-17 8:35 AM
Contractor: Aquazition
Flow Hydrant: 45 Wicksteed Ave (West)
Residual Hydrant: 45 Wicksteed Ave (East)

Data Point	Hydrant Test	
	Flow L/s	Head psi
1	0	80
2	72	74
3	121	70



4.10.1.2 The formula that is generally used to compute the discharge at the specified residual pressure or for any desired pressure drop is Equation 4.10.1.2:

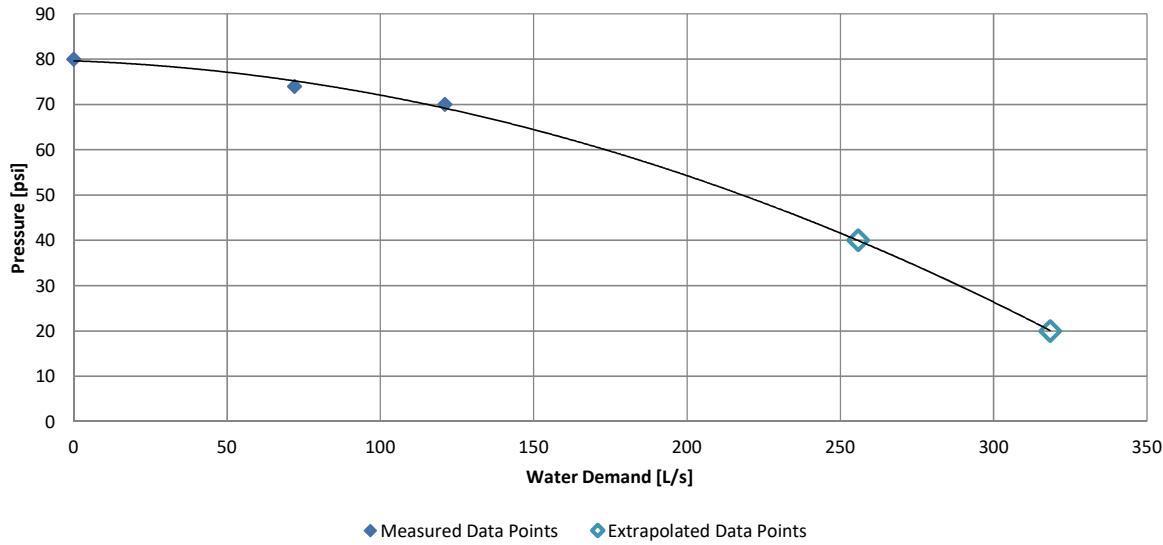
$$Q_R = Q_F \times \frac{h_r^{0.54}}{h_f^{0.54}} \quad (4.10.1.2)$$

where:
 Q_R = flow predicted at desired residual pressure
 Q_F = total flow measured during test
 h_r = pressure drop to desired residual pressure
 h_f = pressure drop measured during test

Based on Data Point 3

Desired Pressure psi	Q_F L/s	h_r psi	h_f psi	Q_R L/s
40	121.00	40	10	256
20	121.00	60	10	318

Hydrant Fire Flow Test - 45 Wicksteed Ave

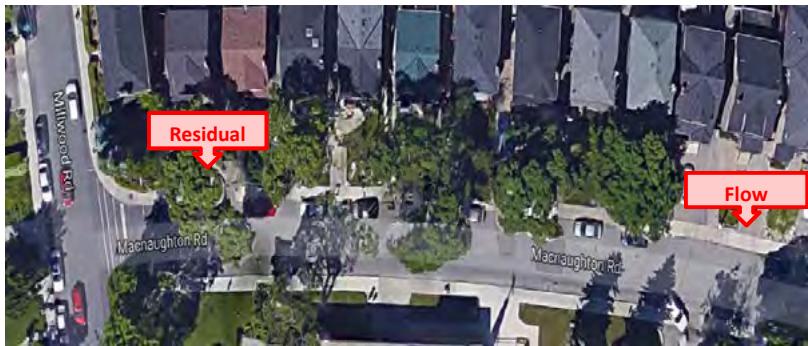




Fire Flow Test Analysis
NFPA 291 Extrapolation Methodology
Eglinton & Laird
Hydrant Test #3; Macnaughton Rd
Project: 17103 Date: 3-Aug-17
By: VP Checked: KCB

Date of Hydrant Test: 27-Jul-17 9:30 AM
Contractor: Aquazition
Flow Hydrant: 24 Macnaughton Rd
Residual Hydrant: 4 Maughnaughton Rd

Data Point	Hydrant Test	
	Flow L/s	Head psi
1	0	60
2	52	53
3	82	48



4.10.1.2 The formula that is generally used to compute the discharge at the specified residual pressure or for any desired pressure drop is Equation 4.10.1.2:

$$Q_R = Q_F \times \frac{h_r^{0.54}}{h_f^{0.54}} \quad (4.10.1.2)$$

where:

Q_R = flow predicted at desired residual pressure

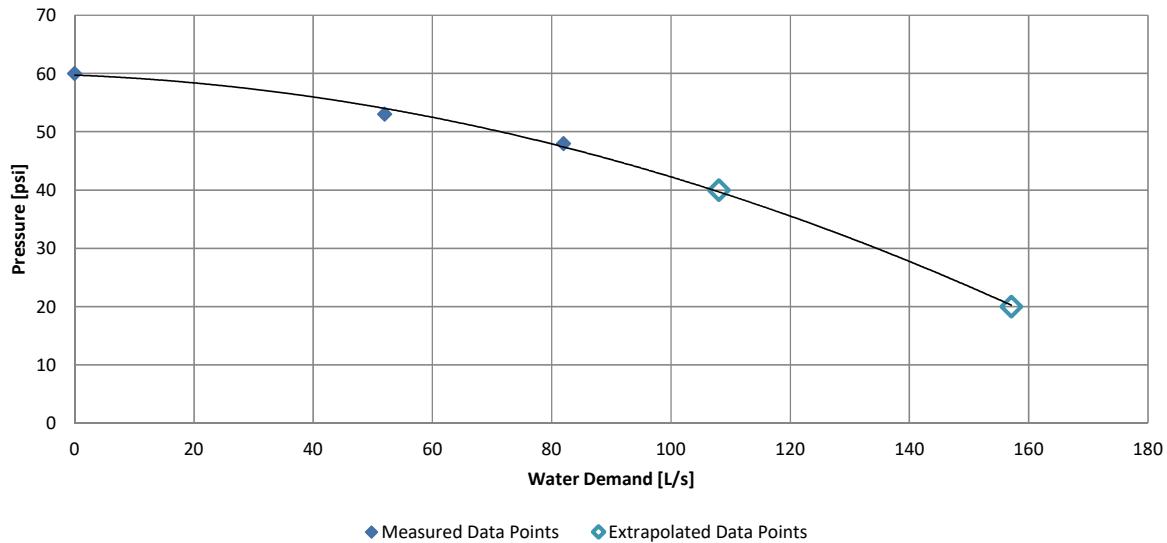
Q_F = total flow measured during test

h_r = pressure drop to desired residual pressure

h_f = pressure drop measured during test

Based on Data Point 3					
Desired Pressure psi	Q_F L/s	h_r psi	h_f psi	Q_R L/s	
40	82.00	20	12	108	
20	82.00	40	12	157	

Hydrant Fire Flow Test - 45 Wicksteed Ave





Fire Flow Test Analysis
NFPA 291 Extrapolation Methodology
Eglinton & Laird
Hydrant Test #4; 218 Wicksteed Ave
Project: 17103 Date: 3-Aug-17
By: VP Checked: KCB

Date of Hydrant Test: 27-Jul-17 8:55 AM

Contractor: Aquazition

Flow Hydrant: 210 Wicksteed ave

Residual Hydrant: 218 Wicksteed Ave

Data Point	Hydrant Test	
	Flow L/s	Head psi
1	0	86
2	69	76
3	114	71



4.10.1.2 The formula that is generally used to compute the discharge at the specified residual pressure or for any desired pressure drop is Equation 4.10.1.2:

$$Q_R = Q_F \times \frac{h_r^{0.54}}{h_f^{0.54}} \quad (4.10.1.2)$$

where:

Q_R = flow predicted at desired residual pressure

Q_F = total flow measured during test

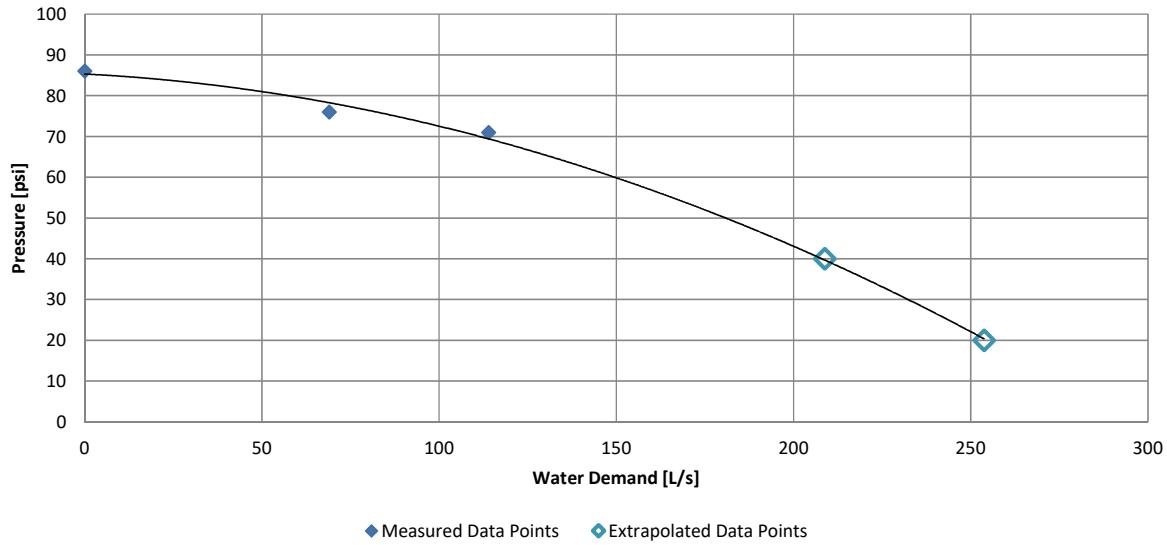
h_r = pressure drop to desired residual pressure

h_f = pressure drop measured during test

Based on Data Point 3

Desired Pressure psi	Q_F L/s	h_r psi	h_f psi	Q_R L/s
40	114.00	46	15	209
20	114.00	66	15	254

Hydrant Fire Flow Test - 45 Wicksteed Ave





Fire Flow Test Analysis
NFPA 291 Extrapolation Methodology
Eglinton & Laird
Hydrant Test #4; Bessborough Dr
Project: 17103 Date: 3-Aug-17
By: VP Checked: KCB

Date of Hydrant Test: 27-Jul-17 10:00 AM

Contractor: Aquazition

Flow Hydrant: 331 Bessborough Dr

Residual Hydrant: 297 Bessborough Dr

Data Point	Hydrant Test	
	Flow L/s	Head psi
1	0	51
2	38	44
3	42	43



4.10.1.2 The formula that is generally used to compute the discharge at the specified residual pressure or for any desired pressure drop is Equation 4.10.1.2:

$$Q_R = Q_F \times \frac{h_r^{0.54}}{h_f^{0.54}} \quad (4.10.1.2)$$

where:

Q_R = flow predicted at desired residual pressure

Q_F = total flow measured during test

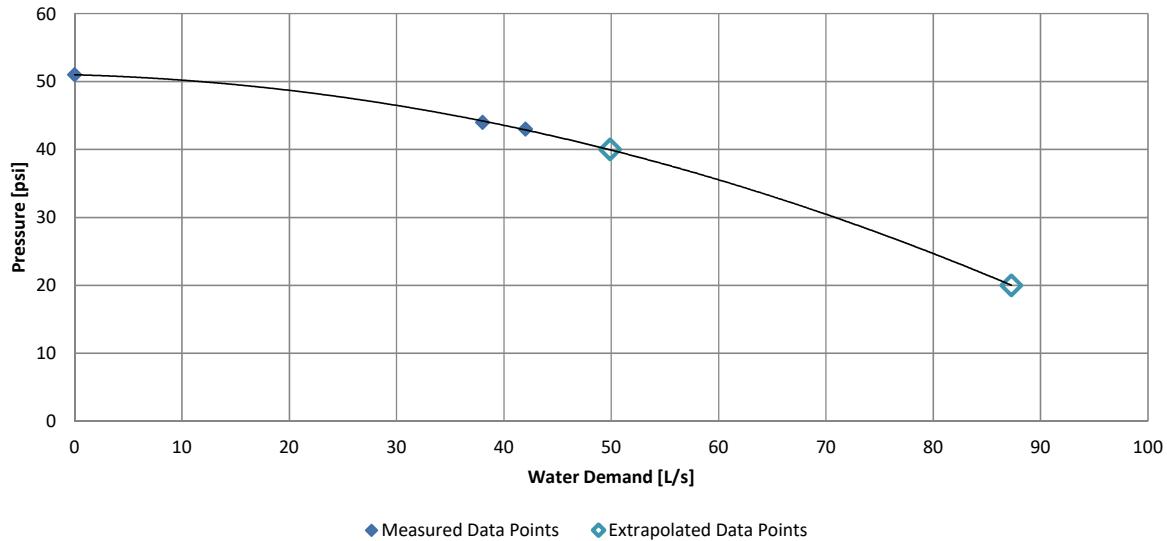
h_r = pressure drop to desired residual pressure

h_f = pressure drop measured during test

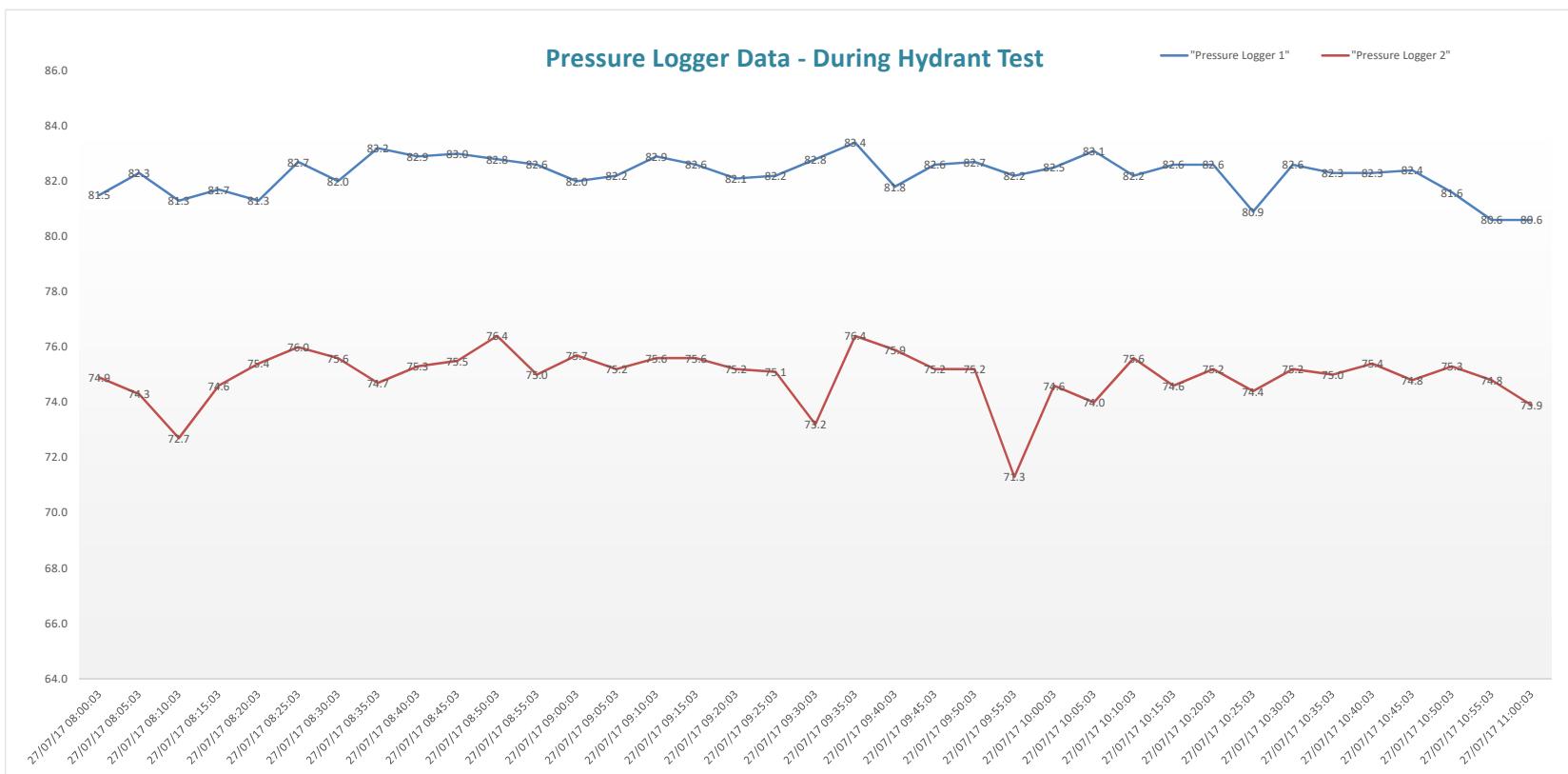
Based on Data Point 3

Desired Pressure psi	Q_F L/s	h_r psi	h_f psi	Q_R L/s
40	42.00	11	8	50
20	42.00	31	8	87

Hydrant Fire Flow Test - 45 Wicksteed Ave



Attachment B



Attachment C



EGLINTON & LAIRD INTENSIFICATION

Model Calibration Table

Project: 17103

By: VP

Date: 11-Aug-17

Checked: KCB

Pressure Logger 1	
ID	J16
Elevation (m)	128
Field Test Static Head (m)	186
Field Test Static Pressure (psi)	83
Calibrated Model Head (m)	192
Calibrated Model Pressure (psi)	90

Pressure Logger 2	
ID	J16
Elevation (m)	131
Field Test Static Head (m)	184
Field Test Static Pressure (psi)	75
Calibrated Model Head (m)	187
Calibrated Model Pressure (psi)	79

Fire Hydrant Test 1	
ID	WJ3000758
Elevation (m)	127
Field Test Max Flow (l/s)	92
Field Test Max flow Head (m)	174
Field Test Static Pressure (psi)	67
Calibrated Model Head (m)	180
Calibrated Model Pressure (psi)	75

Fire Hydrant Test 2	
ID	WJ3001072
Elevation (m)	130
Field Test Max Flow (l/s)	121
Field Test Max flow Head (m)	179
Field Test Static Pressure (psi)	70
Calibrated Model Head (m)	174
Calibrated Model Pressure (psi)	63

Fire Hydrant Test 3	
ID	WJ3000563
Elevation (m)	147
Field Test Max Flow (l/s)	82
Field Test Max flow Head (m)	180
Field Test Static Pressure (psi)	48
Calibrated Model Head (m)	177
Calibrated Model Pressure (psi)	44

Fire Hydrant Test 4	
ID	WJ38171
Elevation (m)	127
Field Test Max Flow (l/s)	114
Field Test Max flow Head (m)	177
Field Test Static Pressure (psi)	71
Calibrated Model Head (m)	177
Calibrated Model Pressure (psi)	70

Fire Hydrant Test 5	
ID	WJ3000097
Elevation (m)	154
Field Test Max Flow (l/s)	42
Field Test Max flow Head (m)	184
Field Test Static Pressure (psi)	43
Calibrated Model Head (m)	183
Calibrated Model Pressure (psi)	41

Refer Fig.1 For location of Loggers and fire flow test

Attachment D

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ4018275	0	158.22	188.72	43.36
WJ3000094	0.34	157.83	188.72	43.93
WJ31211	0	157.5	188.72	44.39
WJ3000095	0.02	157.31	188.72	44.66
WJ3000011	0.16	155.74	188.72	46.89
WJ3000096	0.06	155.02	188.72	47.91
WJ3000097	0.08	154.19	188.72	49.09
WJ3000432	0.25	154.11	188.72	49.21
WJ3000433	0.12	153.32	188.72	50.32
WJ3000030	0.31	150.95	188.74	53.73
WJ56006	0	150.93	188.72	53.73
WJ3000029	0.32	150.84	188.76	53.9
WJ3000434	0.19	150.76	188.72	53.97
WJ31228	0	150.5	188.77	54.4
WJ3000055	0.1	150.32	188.72	54.6
WJ52820	0	150	188.62	54.9
WJ3000791	0.03	150.12	188.77	54.95
WJ3000212	0.59	150.06	188.72	54.96
WJ52818	0.08	149.95	188.62	54.97
WJ3000278	0.07	149.86	188.72	55.26
WJ23834	0.26	149.81	188.77	55.38
WJ3000098	0.13	149.75	188.72	55.41
WJ14740	0.03	149.4	188.62	55.75
WJ23835	0.27	149.54	188.77	55.77
WJ55511	0	149.24	188.72	56.13
WJ3000028	0.28	148.91	188.76	56.65
WJ23838	0.24	148.74	188.77	56.91
WJ3000012	0.22	148.62	188.72	57.01
WJ3000350	0.03	148.06	188.62	57.65
WJ23837	0.21	148.18	188.77	57.7
WJ55513	0	148.12	188.72	57.72
WJ3000037	0.16	147.96	188.62	57.79
WJ52814	0.03	147.9	188.62	57.88
WJ52782	0.02	147.82	188.62	58
WJ3000289	0.19	147.96	188.77	58.01
WJ3000351	0.02	147.81	188.62	58.01
WJ52806	0.02	147.8	188.62	58.02
WJ52813	0.14	147.8	188.62	58.02
WJ52781	0	147.7	188.62	58.17
WJ52784	0	147.7	188.62	58.17
WJ3001142	0.05	147.68	188.62	58.19
WJ3000756	0.01	147.66	188.62	58.23

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ31227	0.05	147.81	188.78	58.24
WJ300002	0.45	147.77	188.76	58.26
WJ300049	0.03	147.57	188.62	58.35
WJ300035	0.07	147.48	188.62	58.48
WJ401823	0	147.52	188.72	58.57
WJ55837	0	147.4	188.72	58.74
WJ52804	0.02	147.2	188.62	58.88
WJ300004	0.04	147.19	188.62	58.89
WJ300109	0.05	147.14	188.62	58.96
WJ300049	0	147.08	188.62	59.05
WJ300034	0.07	147.02	188.62	59.14
WJ52807	0.08	147	188.62	59.16
WJ300079	0.31	147.05	188.77	59.31
WJ52809	0.05	146.8	188.62	59.45
WJ300057	0.27	146.9	188.76	59.51
WJ300039	0.03	146.64	188.62	59.67
WJ300027	0.26	146.66	188.72	59.8
WJ300003	0.12	146.45	188.62	59.95
WJ300097	0.24	146.57	188.74	59.96
WJ300056	0.14	146.55	188.78	60.03
WJ300057	0.21	146.48	188.76	60.1
WJ300062	0.05	146.46	188.78	60.15
WJ52803	0.02	146.18	188.62	60.33
WJ300097	0.19	146.18	188.74	60.5
WJ300000	0.23	146.1	188.76	60.64
WJ300124	0.07	146.06	188.76	60.7
WJ300056	0.16	145.98	188.69	60.71
WJ300088	0.39	146.06	188.76	60.71
WJ52787	0.01	145.8	188.62	60.87
WJ300005	0.13	145.74	188.62	60.95
WJ300079	0.22	145.89	188.77	60.96
WJ14604	0.03	145.6	188.62	61.15
WJ52786	0.05	145.6	188.62	61.15
WJ300004	0.04	145.42	188.76	61.61
WJ300005	0.29	145.43	188.78	61.63
WJ300011	0.27	145.4	188.77	61.66
WJ14724	0.07	145.2	188.62	61.72
WJ300053	0.19	145.25	188.69	61.76
WJ300011	0.09	145.22	188.77	61.91
WJ300087	0.3	145.1	188.74	62.04
WJ51871	0.25	145.01	188.73	62.15
WJ300002	0.02	144.89	188.62	62.16

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000531	0.13	144.93	188.69	62.2
WJ54892	0.23	144.91	188.72	62.27
WJ3000046	0.4	144.9	188.76	62.35
WJ3000435	0.16	144.83	188.72	62.4
WJ3000013	0.17	144.81	188.72	62.43
WJ14675	0.1	144.6	188.62	62.57
WJ3000054	0.1	144.7	188.73	62.59
WJ3000001	0.21	144.72	188.75	62.6
WJ3000539	0.13	144.65	188.72	62.64
WJ3000116	0.17	144.66	188.77	62.71
WJ3000035	0.09	144.43	188.62	62.82
WJ51882	0.03	144.5	188.73	62.87
WJ51883	0.24	144.5	188.73	62.87
WJ51947	0	144.5	188.73	62.87
WJ3000331	0.29	144.5	188.73	62.88
WJ3000874	0.05	144.48	188.73	62.9
WJ3000580	0.17	144.34	188.76	63.15
WJ57286	0.21	144	188.62	63.42
WJ17209	0	144	188.63	63.44
WJ17210	0.28	144	188.63	63.44
WJ52780	0	143.98	188.63	63.47
WJ3000043	0.19	143.95	188.62	63.49
WJ3000041	0.22	143.92	188.62	63.54
WJ1018244	0	143.93	188.63	63.55
WJ3000970	0.2	144.01	188.73	63.57
WJ3000001	0.24	144.02	188.75	63.59
WJ3000024	0.06	143.9	188.63	63.59
WJ3000478	0.25	143.99	188.76	63.66
WJ3000794	0.19	143.91	188.77	63.77
WJ3000851	0.11	143.97	188.86	63.81
WJ14729	0	143.6	188.62	64
WJ14744	0.09	143.6	188.62	64
WJ3000049	0.22	143.65	188.77	64.14
WJ3000034	0.16	143.47	188.62	64.18
WJ3000048	0.04	143.48	188.77	64.37
WJ52792	0.01	143.4	188.74	64.46
WJ3000099	0.15	143.34	188.72	64.52
WJ3000540	0.17	143.34	188.75	64.56
WJ3000479	0.28	143.32	188.78	64.63
WJ3000536	0.17	143.19	188.68	64.66
WJ3000568	0.08	143.18	188.68	64.68
WJ3000969	0.06	143.19	188.74	64.76

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000480	0.37	143.15	188.78	64.87
WJ3000968	0.19	143.07	188.74	64.93
WJ1018241	0.48	143.04	188.74	64.97
WJ3000051	0.26	143.06	188.77	64.99
WJ3000967	0.1	142.75	188.74	65.39
WJ3000015	0.19	142.65	188.74	65.52
WJ3000014	0.01	142.63	188.74	65.54
WJ52810	0.09	142.48	188.62	65.59
WJ3000643	0.21	142.35	188.69	65.87
WJ3000966	0.5	142.4	188.74	65.89
WJ3000625	0.23	141.99	188.78	66.52
WJ3000486	0.08	141.8	188.62	66.55
WJ3000481	0.37	141.88	188.77	66.66
WJ3000646	0.15	141.69	188.62	66.71
WJ3000542	0.06	141.65	188.74	66.94
WJ3000567	0.07	141.53	188.66	67.01
WJ3000541	0.08	141.47	188.75	67.21
WJ3000100	0.23	141.07	188.72	67.75
WJ3000645	0.17	141.07	188.74	67.76
WJ3000919	0.23	141.03	188.77	67.87
WJ3000482	0.14	140.92	188.78	68.03
WJ3000483	0.13	140.83	188.78	68.16
WJ3000581	0.23	140.66	188.77	68.4
WJ3000436	0.22	140.45	188.72	68.62
WJ51894	0.14	140.2	188.73	68.99
WJ51914	0.04	140.2	188.73	68.99
WJ14608	0.04	138.8	188.62	70.82
WJ3000101	0.24	138.56	188.72	71.31
WJ3000052	0.03	138.16	188.77	71.94
WJ3000802	0.21	137.93	188.74	72.23
WJ55845	0	137.9	188.72	72.25
WJ55851	0.01	137.9	188.72	72.25
WJ3000437	0.21	137.87	188.72	72.29
WJ3000582	0.23	137.94	188.79	72.29
WJ55852	0	137.8	188.72	72.39
WJ3000583	0.1	137.72	188.78	72.58
WJ3000795	0.28	137.56	188.77	72.81
WJ3000280	0.33	137.35	188.72	73.03
WJ3000372	0.06	137.19	188.78	73.33
WJ3000852	0.2	137.25	188.86	73.37
WJ3000884	0.09	137.15	188.8	73.43
WJ3000438	0.25	137	188.72	73.52

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000978	0	137.01	188.72	73.52
WJ3000804	0.11	136.93	188.74	73.64
WJ3000979	0	136.92	188.72	73.64
WJ3000920	0.16	136.9	188.78	73.74
WJ3000101	0.24	136.57	188.72	74.14
WJ3000803	0.08	136.47	188.74	74.3
WJ3000441	0.03	136.43	188.72	74.35
WJ3000923	0.15	136.54	188.86	74.39
WJ3000440	0.06	136.35	188.72	74.46
WJ3000439	0.12	136.33	188.72	74.48
WJ3000584	0.04	136.13	188.78	74.85
WJ3000334	0.03	135.9	188.73	75.1
WJ51898	0.13	135.9	188.73	75.1
WJ51908	0.09	135.9	188.73	75.1
WJ3000441	0.2	135.82	188.72	75.2
WJ56380	0.05	135.59	188.72	75.53
WJ56382	0.07	135.59	188.72	75.53
WJ3000315	0.5	135.59	188.72	75.54
WJ56384	0.03	135.57	188.72	75.56
WJ56385	0.04	135.57	188.72	75.56
WJ56387	0	135.57	188.72	75.56
WJ56388	0	135.57	188.72	75.56
WJ56389	0.08	135.57	188.72	75.56
WJ51892	0.04	135.5	188.73	75.67
WJ56391	0	135.41	188.72	75.79
WJ3000281	0.14	135.36	188.72	75.86
WJ56431	0.04	135.25	188.72	76.02
WJ3000886	0.34	135.26	188.75	76.03
WJ3000331	0.33	135.2	188.73	76.1
WJ3000796	0.21	135.19	188.77	76.17
WJ3000924	0.5	135.3	188.91	76.22
WJ51910	0.12	135.1	188.73	76.24
WJ51936	0.11	135.1	188.73	76.24
WJ51937	0.08	135.1	188.73	76.25
WJ3000853	0.61	135.22	188.87	76.26
WJ3000626	0.57	135.09	188.8	76.36
WJ3000805	0.11	135.01	188.74	76.37
WJ51893	0.01	135	188.73	76.38
WJ3000885	0.19	135.01	188.78	76.44
WJ3000443	0.13	134.94	188.72	76.45
WJ3000806	0.14	134.79	188.73	76.69
WJ3000585	0.02	134.8	188.78	76.74

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ56394	0.13	134.54	188.72	77.01
WJ56400	0.02	134.54	188.72	77.01
WJ56401	0.04	134.54	188.72	77.01
WJ53257	0.07	134.6	188.83	77.09
WJ53252	0.17	134.59	188.83	77.1
WJ53255	0.09	134.6	188.84	77.1
WJ3000354	0.17	134.42	188.72	77.19
WJ53253	0.27	134.5	188.83	77.24
WJ3000074	0.01	134.32	188.72	77.33
WJ3000444	0.07	134.28	188.72	77.39
WJ3000004	0.56	134.25	188.81	77.56
WJ3000445	0.2	134.16	188.72	77.56
WJ56393	0.08	134.15	188.72	77.57
WJ56421	0.13	134.15	188.72	77.57
WJ3000854	0.22	134.17	188.89	77.79
WJ3000005	0.15	133.89	188.79	78.03
WJ3000572	0.29	133.89	188.8	78.06
WJ3000073	0.65	133.61	188.72	78.34
WJ3000281	0.43	133.45	188.72	78.56
WJ22402	0.19	133.38	188.78	78.76
WJ3000316	0.54	133.26	188.72	78.84
WJ3000355	0.1	133.17	188.72	78.97
WJ3000801	0.21	132.93	188.73	79.33
WJ51918	0.74	132.9	188.73	79.36
WJ56395	0.11	132.82	188.72	79.46
WJ56397	0.04	132.82	188.72	79.46
WJ51919	0.04	132.8	188.73	79.5
WJ3000119	0	132.96	188.94	79.59
WJ3000118	0.01	132.93	188.94	79.63
WJ56399	0.05	132.65	188.72	79.71
WJ3000120	0.27	132.72	188.94	79.92
J18	6.24	132.5	188.72	79.93
J20	1.87	132.5	188.72	79.93
J22	2.43	132.5	188.72	79.93
J24	1.96	132.5	188.72	79.93
J26	2.71	132.5	188.72	79.93
J28	4.67	132.5	188.73	79.93
WJ51921	0.07	132.5	188.73	79.93
J30	1.94	132.5	188.73	79.94
WJ3000519	0.07	132.67	188.91	79.96
J32	0.92	132.5	188.79	80.02
WJ3000855	0.15	132.5	188.89	80.17

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000527	0	132.53	188.96	80.21
WJ3000531	0	132.53	188.95	80.22
WJ22421	0.12	132.24	188.79	80.39
WJ3001168	0.1	131.99	188.62	80.5
WJ3000525	0.17	132.32	188.96	80.52
WJ3000526	0	132.29	188.96	80.56
WJ3000925	0.16	132.24	188.95	80.61
WJ3000808	0.14	132	188.72	80.64
WJ3000345	0.93	132.15	188.9	80.68
WJ3000977	0.16	131.95	188.79	80.8
WJ3000797	0.16	131.93	188.79	80.83
WJ3000975	0.04	131.82	188.8	80.99
WJ3000976	0.03	131.75	188.8	81.09
WJ3000520	0.17	131.81	188.89	81.13
J96	0	131.5	188.72	81.35
WJ3000995	0.26	131.48	188.74	81.39
WJ53264	0.02	131.56	188.81	81.39
WJ53276	0.04	131.56	188.82	81.39
WJ53277	0.25	131.56	188.82	81.39
WJ53269	0.02	131.56	188.82	81.4
WJ3001068	0	131.5	188.8	81.46
WJ3000798	0.23	131.49	188.79	81.47
WJ26595	0.01	131.56	188.89	81.5
WJ26596	0	131.56	188.89	81.5
WJ3000535	0	131.56	188.89	81.5
WJ26597	0	131.56	188.9	81.51
WJ26598	0	131.56	188.9	81.51
J66	2.33	131.5	188.88	81.57
J68	0.07	131.5	188.89	81.58
J90	0.14	131.5	188.89	81.58
J80	0.08	131.5	188.9	81.6
J82	0.08	131.5	188.9	81.6
J84	1.46	131.5	188.9	81.6
J72	0.64	131.5	188.92	81.63
J74	0.14	131.5	188.92	81.63
J76	0.15	131.5	188.94	81.66
J78	0.08	131.5	188.94	81.66
J86	0.14	131.3	188.75	81.67
WJ3000346	0.47	131.29	188.9	81.9
WJ3001165	0.09	131.37	189.07	82.03
WJ3000573	0.04	130.95	188.83	82.28
J38	0.14	130.84	188.72	82.29

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000800	0.06	130.86	188.8	82.36
WJ3000799	0.01	130.85	188.8	82.37
WJ3000528	0.06	130.81	188.8	82.43
WJ3001181	0.14	130.85	188.83	82.43
WJ3001074	0	130.6	188.8	82.74
WJ3001069	0.31	130.59	188.8	82.75
J50	0.14	130.5	188.75	82.81
J52	0.76	130.5	188.75	82.81
J54	0.55	130.5	188.8	82.88
J56	0.49	130.5	188.8	82.88
WJ3001238	0.08	130.58	188.88	82.88
J58	0.11	130.5	188.82	82.9
J60	4.45	130.5	188.82	82.9
J62	0.82	130.5	188.82	82.9
WJ3000501	0.12	130.56	188.88	82.9
J64	0.14	130.44	188.82	82.98
J36	0.14	130.3	188.72	83.05
WJ3000341	0.33	130.42	188.89	83.13
WJ3000996	0	130.23	188.72	83.15
WJ3000574	0.5	130.34	188.84	83.17
WJ3001245	0	130.28	188.8	83.19
WJ55196	0.2	130.18	188.72	83.21
WJ3001169	0.01	130.01	188.62	83.31
WJ3001249	0	130.13	188.79	83.4
WJ3001071	0	130.12	188.8	83.42
WJ3001075	0	130.11	188.8	83.43
J92	0	130	188.72	83.48
J94	0	130	188.72	83.48
J98	0	130	188.72	83.48
J100	0	130	188.73	83.49
WJ3000530	0.01	130.13	188.87	83.5
J34	1.33	130	188.74	83.51
WJ3001251	0	130.04	188.79	83.52
WJ3000571	0.01	130.12	188.87	83.53
WJ3001071	0.02	130.04	188.8	83.53
WJ26594	0	130.09	188.87	83.57
WJ3000531	0.01	130.09	188.87	83.57
WJ14629	0	129.8	188.62	83.61
WJ3001248	0	129.96	188.79	83.63
WJ3000801	0	129.94	188.79	83.67
WJ3000071	0.05	129.85	188.72	83.69
J44	0.14	129.84	188.72	83.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000166	0.47	129.82	188.86	83.93
J102	0	129.61	188.74	84.06
WJ38309	0.31	129.6	188.8	84.15
WJ38310	0.15	129.58	188.8	84.18
WJ3000070	0.09	129.49	188.72	84.2
J40	0.14	129.44	188.72	84.28
WJ27674	0	129.38	188.79	84.46
WJ51927	0.32	129.3	188.72	84.47
WJ3000060	0	129.29	188.8	84.59
WJ3000069	0.32	129.08	188.72	84.77
WJ3000061	0	129.15	188.79	84.78
WJ3001156	0	129.44	189.08	84.78
WJ3000064	0.06	129.13	188.78	84.81
J42	0.14	129.03	188.73	84.86
WJ3000065	0.05	129.06	188.77	84.89
WJ51923	0	129	188.72	84.9
WJ51925	0	129	188.72	84.9
WJ3000283	0.31	128.88	188.72	85.07
WJ3000061	0.03	128.93	188.79	85.11
WJ3000851	0.07	128.92	188.79	85.11
WJ3001246	0	128.93	188.79	85.11
WJ3000061	0.31	128.8	188.72	85.19
WJ3000068	0.35	128.77	188.72	85.22
WJ3001164	0.03	129.02	189.07	85.37
WJ3000868	0.04	128.6	188.71	85.45
WJ3000508	0.79	128.75	188.89	85.49
WJ55201	0.05	128.42	188.72	85.72
WJ56502	0.15	128.41	188.72	85.72
J48	0.14	128.43	188.79	85.8
WJ55199	0.03	128.27	188.72	85.92
WJ27615	0.23	128.26	188.8	86.06
WJ3000869	0.24	128.13	188.71	86.12
WJ27574	0.29	128.18	188.79	86.16
WJ27614	0.06	128.09	188.8	86.3
J46	0.14	128.02	188.74	86.33
WJ3000511	0.11	128.15	188.89	86.35
WJ27575	0.34	128.02	188.79	86.39
WJ27595	0.28	128.02	188.79	86.39
WJ27596	0.17	128.02	188.79	86.39
WJ55058	0.01	127.78	188.62	86.48
WJ27634	0.2	127.88	188.81	86.61
WJ27694	0	127.88	188.81	86.61

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000859	0.01	127.54	188.83	87.14
WJ3000860	0.07	127.37	188.84	87.39
WJ38289	0.5	127.42	188.9	87.39
WJ3000890	0.52	127.21	188.71	87.44
WJ57290	1.09	127	188.62	87.59
WJ38269	0.08	127.27	188.9	87.61
WJ38270	0	127.27	188.9	87.61
WJ38271	0	127.27	188.9	87.61
WJ38272	0	127.27	188.9	87.61
WJ38273	0.02	127.27	188.9	87.61
WJ3000858	0.09	127.2	188.83	87.62
WJ3000628	0.23	127.29	189.08	87.83
WJ3000982	0.64	128.2	189.99	87.85
WJ3000889	0.05	126.88	188.71	87.9
WJ38249	0	127	188.92	88.03
WJ38229	0.07	127	188.95	88.06
WJ3001239	0	127.11	189.07	88.09
WJ3000016	0.2	127.79	189.99	88.42
WJ3000759	2.92	127.73	189.97	88.49
WJ38209	0	127.13	189.37	88.49
WJ3001083	0	127.13	189.39	88.52
WJ3000760	1.17	127.67	189.99	88.6
WJ3001155	0.01	126.75	189.08	88.6
WJ27654	0.03	126.48	188.82	88.63
WJ3000167	0.13	126.55	188.89	88.63
WJ3000758	1.37	127.23	189.72	88.83
WJ3000629	0.31	126.53	189.08	88.92
WJ38171	0.58	127.05	189.6	88.93
WJ24324	0	126.43	189.08	89.06
WJ24325	0.55	126.43	189.08	89.06
WJ24326	0	126.43	189.08	89.06
WJ3000627	0	126.43	189.08	89.06
WJ3000631	0.05	126.43	189.08	89.06
WJ3001254	0	126.43	189.08	89.06
WJ3001167	0	126.21	189.07	89.37
WJ3001166	0	126.1	189.07	89.51
WJ3000630	0.02	126	189.08	89.68
J16	0	129	192.1	89.7
WJ3000544	0.64	126.61	189.72	89.71
WJ38150	0.96	127.05	190.39	90.05
WJ38169	0	127.05	190.43	90.11
WJ50349	0	127.05	190.43	90.11

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ50362	0.01	127.05	190.43	90.11
WJ50350	0	127.05	190.45	90.13
WJ50348	0.21	127.05	190.45	90.14
WJ50351	0	127.05	190.45	90.14
WJ300098	0.13	127.16	190.69	90.32
WJ300046	1.19	126.32	189.97	90.48
WJ56518	12.23	126.18	189.97	90.67
WJ38149	0	126.43	190.44	90.99
WJ50356	0	126.43	190.44	90.99
WJ50353	0.09	126.43	190.44	91
WJ50354	0.01	126.43	190.45	91.02
WJ50359	0	126.43	190.45	91.02
WJ50360	0	126.43	190.45	91.02
WJ50355	0	126.43	190.5	91.08
WJ50357	0	126.43	190.5	91.08
WJ50361	0	126.43	190.52	91.12
WJ50358	0.78	126.43	190.53	91.13
WJ56519	2.86	125.85	189.97	91.15
WJ300098	0	126.57	190.69	91.16
WJ300076	0.17	126.59	190.76	91.22
WJ300076	1.23	126.59	190.77	91.23
WJ300076	1.15	126.43	190.73	91.42
WJ300124	0	124.64	189.07	91.6
WJ300062	2.19	125.46	189.96	91.69
WJ300033	0.39	124.15	188.72	91.8
WJ300063	0.39	124.91	189.52	91.84
WJ300108	0.11	126.78	191.56	92.1
WJ56492	20.22	125.32	190.19	92.23
WJ300108	0.4	126.51	191.56	92.47
WJ300076	0.19	126.39	191.56	92.65
WJ300076	6.13	126.37	191.59	92.71
WJ300076	0.09	126.26	191.59	92.87
WJ300108	0.4	126.08	191.56	93.08
WJ300076	0.08	91.22	193.95	146.04

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ4018275	0	158.22	179.76	30.62
WJ3000094	0.61	157.83	179.76	31.18
WJ31211	0	157.5	179.76	31.64
WJ3000095	0.03	157.31	179.76	31.92
WJ3000011	0.29	155.74	179.76	34.14
WJ3000096	0.11	155.02	179.76	35.17
WJ3000097	0.14	154.19	179.76	36.35
WJ3000432	0.46	154.11	179.76	36.46
WJ3000433	0.22	153.32	179.76	37.58
WJ56006	0	150.93	179.76	40.98
WJ3000030	0.59	150.95	179.79	41
WJ3000029	0.63	150.84	179.82	41.19
WJ3000434	0.34	150.76	179.76	41.23
WJ31228	0.01	150.5	179.84	41.72
WJ52820	0.01	150	179.37	41.75
WJ52818	0.15	149.95	179.37	41.82
WJ3000055	0.18	150.32	179.76	41.85
WJ3000212	1.1	150.06	179.76	42.22
WJ3000791	0.06	150.12	179.84	42.26
WJ3000278	0.12	149.86	179.76	42.51
WJ14740	0.05	149.4	179.37	42.6
WJ3000098	0.24	149.75	179.76	42.66
WJ23834	0.47	149.81	179.84	42.69
WJ23835	0.49	149.54	179.84	43.08
WJ55511	0	149.24	179.76	43.38
WJ3000028	0.55	148.91	179.82	43.94
WJ23838	0.43	148.74	179.84	44.22
WJ3000012	0.4	148.62	179.76	44.26
WJ3000350	0.05	148.06	179.37	44.5
WJ3000037	0.29	147.96	179.36	44.63
WJ52814	0.06	147.9	179.36	44.73
WJ52782	0.04	147.82	179.37	44.85
WJ3000351	0.03	147.81	179.37	44.86
WJ52806	0.04	147.8	179.36	44.87
WJ52813	0.25	147.8	179.36	44.87
WJ55513	0	148.12	179.76	44.97
WJ23837	0.38	148.18	179.84	45.01
WJ52784	0	147.7	179.36	45.01
WJ52781	0	147.7	179.37	45.02
WJ3001142	0.1	147.68	179.37	45.04
WJ3000756	0.02	147.66	179.37	45.08
WJ3000491	0.06	147.57	179.37	45.2
WJ3000289	0.35	147.96	179.84	45.31

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000352	0.12	147.48	179.37	45.33
WJ3000027	0.85	147.77	179.8	45.53
WJ31227	0.08	147.81	179.86	45.57
WJ52804	0.03	147.2	179.36	45.72
WJ3000044	0.07	147.19	179.36	45.73
WJ3001090	0.09	147.14	179.37	45.81
WJ4018230	0	147.52	179.76	45.83
WJ3000492	0.01	147.08	179.37	45.89
WJ3000349	0.12	147.02	179.36	45.99
WJ55837	0	147.4	179.76	46
WJ52807	0.15	147	179.36	46.01
WJ52809	0.09	146.8	179.36	46.29
WJ3000394	0.05	146.64	179.36	46.52
WJ3000792	0.56	147.05	179.85	46.63
WJ3000579	0.48	146.9	179.8	46.77
WJ3000036	0.22	146.45	179.36	46.79
WJ3000279	0.48	146.66	179.76	47.06
WJ3000972	0.44	146.57	179.74	47.16
WJ52803	0.04	146.18	179.36	47.17
WJ3000563	0.25	146.55	179.86	47.36
WJ3000578	0.38	146.48	179.79	47.36
WJ3000624	0.09	146.46	179.86	47.48
WJ3000971	0.34	146.18	179.73	47.69
WJ52787	0.02	145.8	179.36	47.71
WJ3000569	0.29	145.98	179.57	47.75
WJ3000058	0.24	145.74	179.36	47.80
WJ3000003	0.41	146.1	179.79	47.89
WJ3001242	0.12	146.06	179.79	47.95
WJ3000883	0.71	146.06	179.82	47.99
WJ14604	0.05	145.6	179.37	48.00
WJ52786	0.08	145.6	179.36	48
WJ3000793	0.4	145.89	179.85	48.28
WJ14724	0.12	145.2	179.37	48.57
WJ3000538	0.34	145.25	179.59	48.82
WJ3000047	0.08	145.42	179.81	48.89
WJ3000050	0.52	145.43	179.87	48.96
WJ3000115	0.48	145.4	179.85	48.97
WJ3000023	0.04	144.89	179.37	49.02
WJ3000875	0.54	145.1	179.72	49.22
WJ3000117	0.17	145.22	179.85	49.23
WJ3000537	0.24	144.93	179.58	49.26
WJ54892	0.42	144.91	179.66	49.4
WJ51871	0.48	145.01	179.77	49.41

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ14675	0.17	144.6	179.36	49.42
WJ3000046	0.73	144.9	179.81	49.63
WJ3000435	0.29	144.83	179.76	49.65
WJ3000035	0.16	144.43	179.36	49.66
WJ3000013	0.31	144.81	179.76	49.68
WJ3000539	0.23	144.65	179.66	49.77
WJ3000002	0.38	144.72	179.78	49.85
WJ3000054	0.19	144.7	179.77	49.85
WJ3000116	0.3	144.66	179.85	50.03
WJ3000874	0.09	144.48	179.69	50.05
WJ51947	0	144.5	179.76	50.13
WJ3000332	0.58	144.5	179.76	50.14
WJ51882	0.05	144.5	179.77	50.14
WJ51883	0.44	144.5	179.77	50.14
WJ57286	0.38	144	179.36	50.27
WJ17209	0	144	179.4	50.33
WJ17210	0.5	144	179.4	50.33
WJ3000043	0.35	143.95	179.36	50.34
WJ52780	0	143.98	179.4	50.36
WJ3000042	0.4	143.92	179.36	50.39
WJ1018244	0	143.93	179.4	50.43
WJ3000580	0.3	144.34	179.82	50.43
WJ3000024	0.12	143.9	179.4	50.47
WJ3000970	0.36	144.01	179.72	50.76
WJ3000001	0.44	144.02	179.78	50.83
WJ14729	0	143.6	179.37	50.85
WJ14744	0.16	143.6	179.37	50.85
WJ3000478	0.44	143.99	179.8	50.91
WJ3000034	0.29	143.47	179.36	51.03
WJ3000794	0.34	143.91	179.85	51.1
WJ3000851	0.19	143.97	180.08	51.33
WJ3000049	0.4	143.65	179.83	51.43
WJ3000048	0.07	143.48	179.82	51.66
WJ52792	0.03	143.4	179.74	51.66
WJ3000536	0.3	143.19	179.55	51.68
WJ3000568	0.14	143.18	179.56	51.72
WJ3000099	0.28	143.34	179.76	51.77
WJ3000540	0.3	143.34	179.76	51.77
WJ3000479	0.51	143.32	179.85	51.94
WJ3000969	0.11	143.19	179.75	51.97
WJ3000968	0.33	143.07	179.75	52.14
WJ3000480	0.67	143.15	179.85	52.17
WJ1018241	0.88	143.04	179.74	52.18

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000051	0.47	143.06	179.85	52.31
WJ52810	0.16	142.48	179.36	52.43
WJ3000967	0.18	142.75	179.75	52.6
WJ3000015	0.34	142.65	179.72	52.71
WJ3000014	0.02	142.63	179.72	52.73
WJ3000643	0.38	142.35	179.58	52.92
WJ3000966	0.9	142.4	179.75	53.1
WJ3000486	0.14	141.8	179.36	53.4
WJ3000646	0.26	141.69	179.36	53.55
WJ3000625	0.41	141.99	179.87	53.86
WJ3000481	0.66	141.88	179.85	53.97
WJ3000567	0.13	141.53	179.5	53.99
WJ3000542	0.11	141.65	179.75	54.15
WJ3000541	0.15	141.47	179.76	54.42
WJ3000645	0.31	141.07	179.74	54.97
WJ3000100	0.42	141.07	179.76	55
WJ3000919	0.41	141.03	179.86	55.2
WJ3000482	0.24	140.92	179.87	55.36
WJ3000483	0.23	140.83	179.87	55.49
WJ3000581	0.42	140.66	179.85	55.7
WJ3000436	0.4	140.45	179.76	55.87
WJ51894	0.26	140.2	179.77	56.26
WJ51914	0.08	140.2	179.77	56.26
WJ14608	0.07	138.8	179.37	57.67
WJ3000101	0.43	138.56	179.76	58.57
WJ3000052	0.06	138.16	179.85	59.26
WJ55845	0	137.9	179.76	59.5
WJ55851	0.01	137.9	179.76	59.5
WJ3000802	0.38	137.93	179.79	59.51
WJ3000437	0.37	137.87	179.76	59.54
WJ3000582	0.42	137.94	179.89	59.64
WJ55852	0	137.8	179.76	59.65
WJ3000583	0.18	137.72	179.87	59.92
WJ3000795	0.51	137.56	179.86	60.13
WJ3000280	0.59	137.35	179.76	60.29
WJ3000372	0.1	137.19	179.87	60.67
WJ3000438	0.44	137	179.76	60.78
WJ3000978	0	137.01	179.76	60.78
WJ3000884	0.16	137.15	179.92	60.80
WJ3000852	0.38	137.25	180.08	60.88
WJ3000979	0.01	136.92	179.76	60.9
WJ3000804	0.2	136.93	179.79	60.92
WJ3000920	0.28	136.9	179.87	61.08

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000102	0.43	136.57	179.76	61.4
WJ3000803	0.15	136.47	179.79	61.59
WJ3000441	0.06	136.43	179.76	61.60
WJ3000440	0.11	136.35	179.76	61.72
WJ3000439	0.22	136.33	179.76	61.74
WJ3000923	0.27	136.54	180.07	61.89
WJ3000584	0.07	136.13	179.87	62.19
WJ3000334	0.06	135.9	179.78	62.38
WJ51898	0.23	135.9	179.78	62.38
WJ51908	0.16	135.9	179.78	62.38
WJ3000442	0.36	135.82	179.75	62.45
WJ56380	0.09	135.59	179.76	62.79
WJ56382	0.13	135.59	179.76	62.79
WJ3000315	0.9	135.59	179.76	62.8
WJ56384	0.06	135.57	179.76	62.82
WJ56385	0.07	135.57	179.76	62.82
WJ56387	0	135.57	179.76	62.82
WJ56388	0	135.57	179.76	62.82
WJ56389	0.14	135.57	179.76	62.82
WJ51892	0.06	135.5	179.78	62.95
WJ56391	0	135.41	179.76	63.05
WJ3000281	0.24	135.36	179.76	63.11
WJ56431	0.07	135.25	179.76	63.28
WJ3000886	0.61	135.26	179.81	63.33
WJ3000337	0.61	135.2	179.78	63.38
WJ3000796	0.39	135.19	179.87	63.51
WJ51910	0.22	135.1	179.78	63.52
WJ51936	0.21	135.1	179.78	63.52
WJ51937	0.15	135.1	179.79	63.53
WJ3000805	0.19	135.01	179.79	63.66
WJ51893	0.02	135	179.78	63.66
WJ3000443	0.24	134.94	179.75	63.7
WJ3000626	1.04	135.09	179.92	63.73
WJ3000885	0.35	135.01	179.87	63.78
WJ3000853	1.16	135.22	180.1	63.79
WJ3000924	0.92	135.3	180.2	63.84
WJ3000806	0.25	134.79	179.79	63.97
WJ3000585	0.03	134.8	179.88	64.09
WJ56394	0.23	134.54	179.75	64.26
WJ56400	0.04	134.54	179.75	64.26
WJ56401	0.08	134.54	179.75	64.26
WJ3000354	0.31	134.42	179.75	64.43
WJ53257	0.12	134.6	180	64.53

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ53252	0.3	134.59	179.99	64.54
WJ53255	0.17	134.6	180.02	64.56
WJ3000074	0.01	134.32	179.74	64.57
WJ3000444	0.13	134.28	179.74	64.63
WJ53253	0.49	134.5	180	64.69
WJ3000445	0.36	134.16	179.74	64.8
WJ56393	0.15	134.15	179.75	64.83
WJ56421	0.23	134.15	179.75	64.83
WJ3000004	1.02	134.25	179.95	64.96
WJ3000005	0.26	133.89	179.89	65.39
WJ3000854	0.39	134.17	180.17	65.39
WJ3000572	0.53	133.89	179.94	65.45
WJ3000073	1.18	133.61	179.74	65.58
WJ3000282	0.77	133.45	179.75	65.82
WJ3000316	0.96	133.26	179.76	66.1
WJ22402	0.34	133.38	179.89	66.12
WJ3000355	0.18	133.17	179.74	66.21
WJ3000807	0.38	132.93	179.78	66.61
WJ51918	1.66	132.9	179.78	66.64
WJ56395	0.19	132.82	179.75	66.71
WJ56397	0.08	132.82	179.75	66.71
WJ51919	0.08	132.8	179.78	66.78
WJ56399	0.09	132.65	179.75	66.96
J18	9.3	132.5	179.77	67.21
J20	2.06	132.5	179.78	67.21
J22	2.94	132.5	179.78	67.21
J24	2.37	132.5	179.78	67.21
J26	3.18	132.5	179.78	67.21
WJ51921	0.14	132.5	179.78	67.21
J28	5.81	132.5	179.79	67.23
J30	2.46	132.5	179.8	67.25
WJ3000119	0	132.96	180.29	67.29
WJ3000118	0.03	132.93	180.29	67.33
WJ3001168	0.18	131.99	179.36	67.35
J32	1.2	132.5	179.93	67.42
WJ3000519	0.13	132.67	180.21	67.59
WJ3000120	0.54	132.72	180.29	67.63
WJ22421	0.22	132.24	179.91	67.76
WJ3000855	0.27	132.5	180.17	67.77
WJ3000808	0.25	132	179.78	67.92
WJ3000527	0	132.53	180.33	67.94
WJ3000531	0	132.53	180.32	67.95
WJ3000977	0.29	131.95	179.91	68.19

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000797	0.29	131.93	179.9	68.2
WJ3000525	0.33	132.32	180.34	68.26
WJ3000345	1.99	132.15	180.19	68.3
WJ3000526	0.01	132.29	180.34	68.3
WJ3000925	0.3	132.24	180.32	68.34
WJ3000975	0.07	131.82	179.93	68.39
WJ3000976	0.06	131.75	179.93	68.48
J96	0.14	131.5	179.78	68.63
WJ3000995	0.5	131.48	179.8	68.69
WJ3000520	0.31	131.81	180.15	68.72
WJ53264	0.04	131.56	179.96	68.81
WJ53276	0.07	131.56	179.97	68.81
WJ53277	0.44	131.56	179.97	68.81
WJ53269	0.04	131.56	179.98	68.83
WJ3000798	0.98	131.49	179.93	68.86
WJ3001068	0.27	131.5	179.95	68.88
J86	0	131.3	179.84	69
WJ26595	0.02	131.56	180.17	69.1
WJ26596	0	131.56	180.17	69.1
WJ3000535	0.08	131.56	180.17	69.1
WJ26597	0.24	131.56	180.18	69.11
WJ26598	0.01	131.56	180.18	69.11
J66	3.53	131.5	180.14	69.14
J68	0.09	131.5	180.16	69.18
J90	0	131.5	180.16	69.18
J80	0.09	131.5	180.19	69.22
J82	0.09	131.5	180.19	69.22
J84	2.21	131.5	180.19	69.22
J72	1.06	131.5	180.25	69.3
J74	0	131.5	180.25	69.3
J76	0.16	131.5	180.29	69.36
J78	0.12	131.5	180.29	69.36
WJ3000346	0.95	131.29	180.19	69.52
J38	0	130.84	179.78	69.57
WJ3000573	0.07	130.95	180.01	69.73
WJ3000800	0.13	130.86	179.94	69.77
WJ3000799	0.01	130.85	179.94	69.78
WJ3000528	0.15	130.81	179.94	69.83
WJ3001181	0.28	130.85	180	69.88
WJ3001165	0.19	131.37	180.62	70.01
J50	0.19	130.5	179.84	70.14
J52	1.14	130.5	179.84	70.14
WJ3001074	0.14	130.6	179.94	70.15

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3001169	0.02	130.01	179.36	70.15
WJ3001069	0.62	130.59	179.95	70.17
J54	0.91	130.5	179.95	70.30
J56	0.74	130.5	179.95	70.3
J36	0	130.3	179.77	70.33
J58	0.12	130.5	179.99	70.35
J60	6.03	130.5	179.99	70.35
J62	1.24	130.5	179.99	70.35
J64	0	130.44	179.99	70.43
WJ3000996	0.34	130.23	179.78	70.44
WJ14629	0	129.8	179.36	70.46
WJ3001238	0.17	130.58	180.14	70.46
WJ55196	0.36	130.18	179.75	70.46
WJ3000507	0.31	130.56	180.14	70.48
WJ3001245	0	130.28	179.94	70.6
WJ3000574	0.9	130.34	180.04	70.66
WJ3000347	0.66	130.42	180.18	70.74
J92	0.14	130	179.78	70.76
J94	0.14	130	179.78	70.76
J98	0.14	130	179.78	70.76
J100	0.14	130	179.8	70.8
WJ3001249	0	130.13	179.94	70.8
J34	1.73	130	179.82	70.83
WJ3001071	0	130.12	179.94	70.83
WJ3001075	0	130.11	179.94	70.84
WJ3001251	0	130.04	179.94	70.93
WJ3000071	0.09	129.85	179.75	70.94
WJ3001072	0.04	130.04	179.94	70.94
J44	0	129.84	179.77	70.98
WJ3001248	0	129.96	179.94	71.04
WJ3000530	0.01	130.13	180.12	71.06
WJ3000801	0	129.94	179.94	71.07
WJ3000575	0.02	130.12	180.12	71.09
WJ26594	0.27	130.09	180.13	71.13
WJ3000532	0.02	130.09	180.13	71.13
J102	0.14	129.61	179.82	71.38
WJ3000070	0.17	129.49	179.75	71.45
WJ3000166	0.94	129.82	180.09	71.46
J40	0	129.44	179.78	71.56
WJ38309	0.62	129.6	179.94	71.57
WJ38310	0.29	129.58	179.94	71.6
WJ51927	0.67	129.3	179.77	71.75
WJ27674	0	129.38	179.93	71.86

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000060	0.01	129.29	179.94	72
WJ3000069	0.57	129.08	179.75	72.03
J42	0	129.03	179.79	72.16
WJ3000061	0	129.15	179.93	72.18
WJ51923	0	129	179.77	72.18
WJ51925	0.61	129	179.77	72.18
WJ3000064	0.12	129.13	179.91	72.2
WJ3000065	0.69	129.06	179.87	72.24
WJ3000283	0.55	128.88	179.75	72.32
WJ3000067	0.57	128.8	179.77	72.47
WJ3000068	0.64	128.77	179.76	72.48
WJ3000062	0.05	128.93	179.94	72.52
WJ3000857	0.15	128.92	179.94	72.52
WJ3001246	0	128.93	179.94	72.52
WJ3000868	0.08	128.6	179.74	72.7
WJ3001156	0	129.44	180.64	72.78
WJ55201	0.1	128.42	179.74	72.97
WJ56502	0.28	128.41	179.74	72.97
WJ3000508	1.59	128.75	180.17	73.09
WJ55199	0.05	128.27	179.74	73.17
J48	0	128.43	179.93	73.21
WJ55058	0.02	127.78	179.36	73.33
WJ3001164	0.07	129.02	180.62	73.35
WJ3000869	0.43	128.13	179.74	73.37
WJ27615	0.47	128.26	179.95	73.48
WJ27574	0.58	128.18	179.93	73.57
J46	0	128.02	179.83	73.65
WJ27614	0.12	128.09	179.95	73.72
WJ27575	0.65	128.02	179.92	73.78
WJ27595	0.57	128.02	179.92	73.79
WJ27596	0.32	128.02	179.93	73.79
WJ3000511	0.22	128.15	180.17	73.95
WJ27634	0.4	127.88	179.97	74.05
WJ27694	0	127.88	179.97	74.05
WJ57290	1.96	127	179.36	74.44
WJ3000859	0.03	127.54	180.03	74.63
WJ3000890	0.94	127.21	179.74	74.68
WJ3000860	0.14	127.37	180.06	74.9
WJ38289	0.99	127.42	180.19	75.02
WJ3000858	0.18	127.2	180.03	75.1
WJ3000889	0.09	126.88	179.74	75.14
WJ38269	0.17	127.27	180.19	75.24
WJ38270	0	127.27	180.19	75.24

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ38271	0.01	127.27	180.19	75.24
WJ38272	0	127.27	180.19	75.24
WJ38273	0.04	127.27	180.19	75.24
WJ38249	0.01	127	180.26	75.72
WJ38229	0.14	127	180.32	75.79
WJ3000628	0.47	127.29	180.64	75.83
WJ3001239	0	127.11	180.63	76.08
WJ27654	0.05	126.48	180.01	76.1
WJ3000167	0.27	126.55	180.18	76.25
WJ3001155	0.01	126.75	180.64	76.6
WJ3000629	0.61	126.53	180.64	76.92
WJ24324	0	126.43	180.64	77.05
WJ3000627	0	126.43	180.64	77.05
WJ3001254	0	126.43	180.64	77.05
WJ24326	0	126.43	180.64	77.06
WJ3000631	0.1	126.43	180.64	77.06
WJ24325	1.11	126.43	180.65	77.07
WJ38209	0	127.13	181.42	77.19
WJ3001083	0	127.13	181.48	77.27
WJ3001167	0	126.21	180.63	77.36
WJ3001166	0	126.1	180.62	77.5
WJ3000630	0.03	126	180.64	77.68
WJ3000982	1.28	128.2	182.97	77.87
WJ38171	1.15	127.05	182.01	78.14
WJ3000758	2.59	127.23	182.26	78.24
WJ3000016	0.4	127.79	182.97	78.45
WJ3000759	5.37	127.73	182.92	78.46
WJ3000760	2.34	127.67	182.97	78.62
WJ3000339	0.7	124.15	179.77	79.07
WJ3000544	1.22	126.61	182.26	79.11
WJ3001241	0	124.64	180.63	79.59
WJ3000463	2.14	126.32	182.9	80.44
WJ56518	22.03	126.18	182.9	80.63
WJ3000632	0.79	124.91	181.75	80.81
WJ38150	1.92	127.05	184.09	81.09
WJ56519	5.17	125.85	182.9	81.1
WJ50349	0	127.05	184.18	81.23
WJ38169	0	127.05	184.19	81.24
WJ50362	0.02	127.05	184.19	81.24
WJ50350	0.01	127.05	184.23	81.29
WJ50351	0	127.05	184.24	81.3
WJ50348	0.42	127.05	184.24	81.31
WJ3000621	3.94	125.46	182.88	81.63

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000984	0.27	127.16	184.89	82.07
WJ38149	0	126.43	184.2	82.13
WJ50353	0.19	126.43	184.2	82.13
WJ50356	0	126.43	184.2	82.13
WJ50359	0	126.43	184.24	82.18
WJ50360	0	126.43	184.24	82.18
WJ50354	0.02	126.43	184.24	82.19
WJ50355	0	126.43	184.36	82.36
WJ50357	0	126.43	184.36	82.36
WJ50361	0	126.43	184.43	82.46
WJ50358	1.56	126.43	184.45	82.48
WJ56492	36.43	125.32	183.48	82.68
WJ3000985	0	126.57	184.89	82.91
WJ3000762	0.35	126.59	185.07	83.13
WJ3000763	2.27	126.59	185.08	83.15
WJ3000761	2.29	126.43	185	83.26
J16	0.14	129	188.75	84.95
WJ3001088	0.22	126.78	187.26	85.98
WJ3001087	0.81	126.51	187.26	86.36
WJ3000764	0.38	126.39	187.26	86.54
WJ3000767	11.04	126.37	187.33	86.67
WJ3000765	0.18	126.26	187.34	86.83
WJ3001089	0.79	126.08	187.26	86.97
WJ3000766	0.16	91.22	193.85	145.9

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ4018275	0	158.22	171.88	19.42
WJ3000094	0.85	157.83	171.88	19.99
WJ31211	0	157.5	171.88	20.44
WJ3000095	0.04	157.31	171.88	20.72
WJ3000011	0.41	155.74	171.88	22.94
WJ3000096	0.15	155.02	171.88	23.97
WJ3000097	0.19	154.19	171.88	25.15
WJ3000432	0.63	154.11	171.87	25.26
WJ3000433	0.3	153.32	171.87	26.37
WJ56006	0	150.93	171.88	29.78
WJ3000030	0.59	150.95	171.94	29.85
WJ3000434	0.47	150.76	171.87	30.02
WJ3000029	0.38	150.84	172	30.07
WJ52820	0.01	150	171.16	30.08
WJ52818	0.21	149.95	171.16	30.15
WJ31228	0	150.5	172.03	30.61
WJ3000055	0.25	150.32	171.88	30.65
WJ14740	0.07	149.4	171.16	30.93
WJ3000212	1.18	150.06	171.89	31.02
WJ3000791	0.07	150.12	172.03	31.15
WJ3000278	0.17	149.86	171.88	31.32
WJ3000098	0.34	149.75	171.88	31.46
WJ23834	0.65	149.81	172.03	31.58
WJ23835	0.67	149.54	172.02	31.97
WJ55511	0	149.24	171.88	32.18
WJ3000028	0.41	148.91	172	32.83
WJ3000350	0.07	148.06	171.16	32.83
WJ3000037	0.4	147.96	171.15	32.96
WJ3000012	0.55	148.62	171.87	33.06
WJ52814	0.09	147.9	171.15	33.06
WJ23838	0.59	148.74	172.03	33.11
WJ52782	0.06	147.82	171.16	33.18
WJ3000351	0.04	147.81	171.16	33.2
WJ52806	0.06	147.8	171.16	33.2
WJ52813	0.35	147.8	171.16	33.2
WJ52784	0	147.7	171.16	33.34
WJ52781	0	147.7	171.16	33.35
WJ3001142	0.13	147.68	171.16	33.37
WJ3000756	0.03	147.66	171.16	33.41
WJ3000491	0.09	147.57	171.16	33.53
WJ3000352	0.17	147.48	171.16	33.66
WJ55513	0	148.12	171.88	33.77
WJ23837	0.53	148.18	172.03	33.91

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ52804	0.04	147.2	171.16	34.05
WJ3000044	0.1	147.19	171.15	34.06
WJ3001090	0.12	147.14	171.16	34.15
WJ3000289	0.48	147.96	172.03	34.21
WJ3000492	0.01	147.08	171.16	34.23
WJ3000349	0.17	147.02	171.16	34.32
WJ52807	0.21	147	171.15	34.34
WJ3000027	0.91	147.77	171.96	34.39
WJ31227	0.12	147.81	172.06	34.48
WJ4018230	0	147.52	171.88	34.62
WJ52809	0.12	146.8	171.16	34.62
WJ55837	0	147.4	171.88	34.8
WJ3000394	0.07	146.64	171.16	34.85
WJ3000036	0.3	146.45	171.15	35.12
WJ52803	0.05	146.18	171.16	35.5
WJ3000792	0.78	147.05	172.03	35.52
WJ3000579	0.66	146.9	171.95	35.61
WJ3000279	0.66	146.66	171.88	35.86
WJ3000972	0.61	146.57	171.84	35.92
WJ52787	0.03	145.8	171.15	36.04
WJ3000058	0.33	145.74	171.15	36.13
WJ3000578	0.45	146.48	171.94	36.2
WJ3000563	0.35	146.55	172.06	36.27
WJ3000569	0.4	145.98	171.53	36.32
WJ14604	0.06	145.6	171.16	36.33
WJ52786	0.12	145.6	171.15	36.33
WJ3000624	0.13	146.46	172.06	36.39
WJ3000971	0.48	146.18	171.81	36.43
WJ3000003	0.56	146.1	171.93	36.71
WJ3001242	0.16	146.06	171.93	36.77
WJ3000883	0.98	146.06	171.98	36.85
WJ14724	0.17	145.2	171.16	36.9
WJ3000793	0.56	145.89	172.04	37.18
WJ3000023	0.06	144.89	171.17	37.36
WJ3000538	0.48	145.25	171.56	37.4
WJ14675	0.24	144.6	171.15	37.75
WJ3000047	0.11	145.42	171.97	37.75
WJ3000537	0.33	144.93	171.55	37.84
WJ3000050	0.7	145.43	172.07	37.87
WJ3000115	0.67	145.4	172.04	37.87
WJ3000875	0.76	145.1	171.8	37.96
WJ3000035	0.23	144.43	171.15	37.99
WJ54892	0.58	144.91	171.69	38.06

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000117	0.23	145.22	172.04	38.12
WJ51871	0.43	145.01	171.9	38.22
WJ3000539	0.32	144.65	171.69	38.44
WJ3000435	0.41	144.83	171.87	38.45
WJ3000013	0.43	144.81	171.88	38.48
WJ3000046	1.01	144.9	171.97	38.48
WJ57286	0.53	144	171.15	38.59
WJ3000043	0.48	143.95	171.15	38.66
WJ3000054	0.17	144.7	171.9	38.66
WJ3000002	0.53	144.72	171.92	38.67
WJ17209	0	144	171.23	38.7
WJ17210	0.7	144	171.23	38.7
WJ3000042	0.56	143.92	171.15	38.72
WJ52780	0	143.98	171.23	38.73
WJ3000874	0.12	144.48	171.74	38.75
WJ1018244	0	143.93	171.23	38.81
WJ3000024	0.07	143.9	171.23	38.85
WJ3000116	0.41	144.66	172.04	38.93
WJ3000332	0.35	144.5	171.89	38.94
WJ51947	0	144.5	171.89	38.94
WJ51882	0.06	144.5	171.9	38.95
WJ51883	0.61	144.5	171.9	38.95
WJ14729	0	143.6	171.17	39.19
WJ14744	0.22	143.6	171.17	39.19
WJ3000580	0.42	144.34	171.98	39.29
WJ3000034	0.4	143.47	171.15	39.35
WJ3000970	0.5	144.01	171.8	39.5
WJ3000001	0.6	144.02	171.91	39.64
WJ3000478	0.62	143.99	171.93	39.73
WJ3000794	0.47	143.91	172.05	40
WJ3000536	0.42	143.19	171.49	40.22
WJ3000568	0.19	143.18	171.51	40.27
WJ3000049	0.55	143.65	172.01	40.31
WJ52792	0.02	143.4	171.85	40.44
WJ3000851	0.27	143.97	172.43	40.45
WJ3000048	0.1	143.48	171.99	40.53
WJ3000540	0.42	143.34	171.86	40.54
WJ3000099	0.39	143.34	171.88	40.57
WJ3000969	0.16	143.19	171.85	40.75
WJ52810	0.22	142.48	171.16	40.76
WJ3000479	0.71	143.32	172.03	40.82
WJ3000968	0.46	143.07	171.85	40.91
WJ1018241	1.11	143.04	171.85	40.95

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000480	0.93	143.15	172.03	41.06
WJ3000051	0.65	143.06	172.05	41.21
WJ3000967	0.25	142.75	171.85	41.38
WJ3000015	0.47	142.65	171.8	41.45
WJ3000014	0.02	142.63	171.8	41.47
WJ3000643	0.52	142.35	171.54	41.49
WJ3000486	0.2	141.8	171.16	41.73
WJ3000646	0.37	141.69	171.15	41.88
WJ3000966	1.25	142.4	171.86	41.88
WJ3000567	0.1	141.53	171.41	42.48
WJ3000625	0.57	141.99	172.08	42.78
WJ3000481	0.92	141.88	172.03	42.86
WJ3000542	0.15	141.65	171.85	42.93
WJ3000541	0.21	141.47	171.86	43.19
WJ3000645	0.44	141.07	171.85	43.75
WJ3000100	0.58	141.07	171.88	43.8
WJ3000919	0.57	141.03	172.06	44.11
WJ3000482	0.34	140.92	172.07	44.28
WJ3000483	0.32	140.83	172.07	44.41
WJ3000581	0.59	140.66	172.03	44.59
WJ3000436	0.56	140.45	171.88	44.67
WJ51894	0.36	140.2	171.9	45.07
WJ51914	0.11	140.2	171.91	45.07
WJ14608	0.1	138.8	171.16	46
WJ3000101	0.6	138.56	171.88	47.36
WJ3000052	0.09	138.16	172.05	48.17
WJ55845	0	137.9	171.88	48.3
WJ55851	0.01	137.9	171.88	48.3
WJ3000437	0.52	137.87	171.88	48.34
WJ3000802	0.53	137.93	171.94	48.34
WJ55852	0	137.8	171.88	48.44
WJ3000582	0.58	137.94	172.11	48.58
WJ3000583	0.24	137.72	172.07	48.83
WJ3000795	0.71	137.56	172.05	49.04
WJ3000280	0.82	137.35	171.88	49.09
WJ3000438	0.62	137	171.88	49.57
WJ3000978	0	137.01	171.88	49.57
WJ3000372	0.14	137.19	172.07	49.59
WJ3000979	0.01	136.92	171.88	49.7
WJ3000804	0.28	136.93	171.93	49.75
WJ300084	0.22	137.15	172.15	49.76
WJ3000852	0.42	137.25	172.43	50
WJ3000920	0.39	136.9	172.08	50

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000102	0.6	136.57	171.88	50.19
WJ3000441	0.08	136.43	171.88	50.4
WJ3000803	0.2	136.47	171.94	50.42
WJ3000440	0.16	136.35	171.88	50.51
WJ3000439	0.3	136.33	171.88	50.53
WJ3000923	0.38	136.54	172.41	51
WJ3000584	0.1	136.13	172.08	51.11
WJ3000334	0.08	135.9	171.91	51.19
WJ51898	0.32	135.9	171.91	51.19
WJ51908	0.22	135.9	171.91	51.19
WJ3000442	0.5	135.82	171.86	51.24
WJ56380	0.12	135.59	171.88	51.59
WJ56382	0.19	135.59	171.88	51.59
WJ3000315	1.25	135.59	171.89	51.6
WJ56384	0.08	135.57	171.88	51.62
WJ56385	0.09	135.57	171.88	51.62
WJ56387	0	135.57	171.88	51.62
WJ56388	0	135.57	171.88	51.62
WJ56389	0.19	135.57	171.88	51.62
WJ51892	0.09	135.5	171.91	51.77
WJ56391	0	135.41	171.88	51.85
WJ3000281	0.34	135.36	171.87	51.91
WJ56431	0.1	135.25	171.88	52.08
WJ3000886	0.85	135.26	171.97	52.18
WJ3000337	0.76	135.2	171.92	52.2
WJ51936	0.2	135.1	171.92	52.34
WJ51910	0.31	135.1	171.92	52.35
WJ51937	0.21	135.1	171.93	52.36
WJ3000796	0.54	135.19	172.07	52.42
WJ3000443	0.33	134.94	171.85	52.47
WJ3000805	0.27	135.01	171.93	52.48
WJ51893	0.03	135	171.92	52.49
WJ3000626	1.35	135.09	172.15	52.69
WJ3000885	0.48	135.01	172.08	52.71
WJ3000806	0.35	134.79	171.93	52.8
WJ3000853	1.16	135.22	172.46	52.93
WJ3000585	0.04	134.8	172.1	53.02
WJ56394	0.32	134.54	171.86	53.04
WJ56400	0.05	134.54	171.86	53.04
WJ56401	0.11	134.54	171.86	53.04
WJ3000924	1.17	135.3	172.63	53.08
WJ3000354	0.43	134.42	171.85	53.21
WJ3000074	0.01	134.32	171.85	53.35

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000444	0.19	134.28	171.85	53.4
WJ53252	0.41	134.59	172.28	53.57
WJ3000445	0.49	134.16	171.85	53.58
WJ53257	0.17	134.6	172.29	53.58
WJ56393	0.21	134.15	171.87	53.61
WJ56421	0.32	134.15	171.87	53.61
WJ53255	0.14	134.6	172.33	53.63
WJ53253	0.68	134.5	172.3	53.74
WJ3000004	1.36	134.25	172.21	53.96
WJ3000005	0.36	133.89	172.12	54.34
WJ3000073	1.64	133.61	171.85	54.36
WJ3000572	0.74	133.89	172.19	54.44
WJ3000282	1.06	133.45	171.86	54.6
WJ3000854	0.53	134.17	172.58	54.61
WJ3000316	1.33	133.26	171.88	54.89
WJ3000355	0.25	133.17	171.85	54.99
WJ22402	0.47	133.38	172.11	55.06
WJ3000807	0.52	132.93	171.92	55.43
WJ51918	1.95	132.9	171.91	55.45
WJ56397	0.11	132.82	171.85	55.48
WJ56395	0.27	132.82	171.85	55.49
WJ51919	0.07	132.8	171.91	55.59
WJ3001168	0.25	131.99	171.15	55.68
WJ56399	0.12	132.65	171.85	55.74
J18	12.86	132.5	171.9	56.01
J22	4.63	132.5	171.9	56.01
J24	3.72	132.5	171.9	56.01
J26	4.53	132.5	171.9	56.01
J20	2.24	132.5	171.9	56.02
WJ51921	0.09	132.5	171.91	56.02
J28	10.01	132.5	171.92	56.04
J30	4.47	132.5	171.94	56.07
J32	2.3	132.5	172.18	56.4
WJ3000119	0	132.96	172.79	56.63
WJ3000118	0.02	132.93	172.79	56.67
WJ22421	0.3	132.24	172.14	56.72
WJ3000808	0.32	132	171.91	56.73
WJ3000519	0.18	132.67	172.66	56.86
WJ3000120	0.32	132.72	172.79	56.97
WJ3000855	0.38	132.5	172.59	56.99
WJ3000797	0.41	131.93	172.14	57.16
WJ3000977	0.39	131.95	172.16	57.16
WJ3000527	0	132.53	172.84	57.3

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000531	0	132.53	172.84	57.31
WJ3000975	0.07	131.82	172.18	57.37
J96	0	131.5	171.9	57.44
WJ3000976	0.08	131.75	172.17	57.46
WJ3000995	0.67	131.48	171.95	57.53
WJ3000345	1.19	132.15	172.63	57.55
WJ3000525	0.2	132.32	172.86	57.63
WJ3000526	0.01	132.29	172.86	57.67
WJ3000925	0.29	132.24	172.83	57.69
WJ53264	0.06	131.56	172.24	57.83
WJ53276	0.08	131.56	172.24	57.83
WJ53277	0.62	131.56	172.24	57.83
WJ3000798	1.36	131.49	172.17	57.84
WJ53269	0.05	131.56	172.26	57.86
J86	0	131.3	172.01	57.88
WJ3001068	0.27	131.5	172.22	57.89
WJ3000520	0.41	131.81	172.56	57.93
WJ26595	0.01	131.56	172.59	58.33
WJ26596	0	131.56	172.59	58.33
WJ3000535	0.05	131.56	172.59	58.33
J66	5.05	131.5	172.54	58.34
WJ26597	0.15	131.56	172.61	58.35
WJ26598	0	131.56	172.61	58.35
J38	0	130.84	171.9	58.38
J68	0.11	131.5	172.58	58.4
J90	0	131.5	172.58	58.4
J80	0.1	131.5	172.63	58.47
J82	0.1	131.5	172.63	58.47
J84	3.16	131.5	172.63	58.47
WJ3001169	0.02	130.01	171.15	58.48
J72	1.59	131.5	172.72	58.6
J74	0	131.5	172.72	58.6
J76	0.18	131.5	172.79	58.7
J78	0.17	131.5	172.79	58.7
WJ3000346	0.57	131.29	172.63	58.77
WJ3000799	0.01	130.85	172.2	58.77
WJ3000800	0.17	130.86	172.2	58.77
WJ14629	0	129.8	171.15	58.79
WJ3000573	0.1	130.95	172.31	58.79
WJ3000528	0.14	130.81	172.2	58.83
WJ3001181	0.23	130.85	172.31	58.95
J50	0.26	130.5	172.01	59.02
J52	1.63	130.5	172.01	59.02

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
J36	0	130.3	171.9	59.14
WJ3001074	0.09	130.6	172.21	59.15
WJ3001069	0.37	130.59	172.22	59.18
WJ3000996	0.2	130.23	171.9	59.24
WJ55196	0.5	130.18	171.85	59.24
J54	1.36	130.5	172.22	59.3
J56	1.05	130.5	172.22	59.3
J58	0.13	130.5	172.28	59.4
J60	7.98	130.5	172.28	59.4
J62	1.78	130.5	172.28	59.4
J64	0	130.44	172.28	59.48
J92	0	130	171.9	59.57
J94	0	130	171.9	59.57
J98	0	130	171.9	59.57
WJ3001245	0	130.28	172.21	59.61
WJ3001165	0.11	131.37	173.31	59.62
J100	0	130	171.94	59.63
WJ3001238	0.1	130.58	172.55	59.67
J34	3.32	130	171.98	59.68
WJ3000507	0.19	130.56	172.54	59.68
WJ3000071	0.13	129.85	171.85	59.72
WJ3000574	1.25	130.34	172.38	59.76
J44	0	129.84	171.9	59.79
WJ3001249	0	130.13	172.2	59.8
WJ3001071	0	130.12	172.21	59.83
WJ3001075	0	130.11	172.21	59.84
WJ3001251	0	130.04	172.2	59.92
WJ3001072	0.03	130.04	172.21	59.94
WJ3000347	0.4	130.42	172.61	59.98
WJ3001248	0	129.96	172.2	60.04
WJ3000801	0	129.94	172.2	60.07
J102	0	129.61	171.98	60.23
WJ3000070	0.24	129.49	171.85	60.23
WJ3000530	0.01	130.13	172.51	60.25
WJ3000575	0.02	130.12	172.51	60.27
WJ26594	0.16	130.09	172.52	60.32
WJ3000532	0.01	130.09	172.52	60.32
J40	0	129.44	171.9	60.37
WJ51927	0.86	129.3	171.9	60.56
WJ38309	0.37	129.6	172.21	60.57
WJ38310	0.18	129.58	172.21	60.6
WJ3000166	0.57	129.82	172.46	60.62
WJ3000069	0.79	129.08	171.86	60.81

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ27674	0	129.38	172.18	60.84
J42	0	129.03	171.92	60.97
WJ51923	0	129	171.9	60.98
WJ51925	0.37	129	171.9	60.98
WJ3000060	0.01	129.29	172.2	61
WJ3000283	0.77	128.88	171.86	61.1
WJ3000061	0	129.15	172.18	61.16
WJ3000064	0.07	129.13	172.15	61.17
WJ3000065	0.41	129.06	172.08	61.17
WJ3000067	0.79	128.8	171.89	61.27
WJ3000068	0.89	128.77	171.87	61.27
WJ3000868	0.11	128.6	171.84	61.47
WJ3000062	0.03	128.93	172.19	61.51
WJ3000857	0.09	128.92	172.19	61.51
WJ3001246	0	128.93	172.19	61.51
WJ55058	0.03	127.78	171.15	61.66
WJ55201	0.13	128.42	171.85	61.74
WJ56502	0.39	128.41	171.85	61.74
WJ55199	0.07	128.27	171.84	61.94
WJ3000869	0.59	128.13	171.84	62.14
J48	0	128.43	172.18	62.19
WJ3000508	0.95	128.75	172.6	62.33
WJ3001156	0	129.44	173.34	62.41
WJ27615	0.28	128.26	172.21	62.48
J46	0	128.02	171.99	62.51
WJ27574	0.35	128.18	172.19	62.56
WJ27614	0.07	128.09	172.21	62.73
WJ27575	0.61	128.02	172.17	62.77
WJ27595	0.34	128.02	172.17	62.77
WJ27596	0.26	128.02	172.18	62.77
WJ57290	2.72	127	171.15	62.77
WJ3001164	0.04	129.02	173.31	62.96
WJ27634	0.24	127.88	172.25	63.08
WJ27694	0	127.88	172.25	63.08
WJ3000511	0.13	128.15	172.6	63.19
WJ3000890	1.3	127.21	171.84	63.45
WJ3000859	0.02	127.54	172.36	63.73
WJ3000889	0.12	126.88	171.84	63.91
WJ3000860	0.08	127.37	172.4	64.02
WJ3000858	0.11	127.2	172.36	64.2
WJ38289	0.6	127.42	172.64	64.28
WJ38269	0.1	127.27	172.64	64.5
WJ38270	0	127.27	172.64	64.5

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ38271	0	127.27	172.64	64.5
WJ38272	0	127.27	172.64	64.5
WJ38273	0.02	127.27	172.64	64.5
WJ38249	0.01	127	172.75	65.03
WJ38229	0.08	127	172.83	65.15
WJ27654	0.03	126.48	172.33	65.18
WJ3000628	0.28	127.29	173.34	65.46
WJ3000167	0.16	126.55	172.62	65.5
WJ3001239	0	127.11	173.32	65.7
WJ3001155	0.01	126.75	173.34	66.23
WJ3000629	0.37	126.53	173.34	66.55
WJ24324	0	126.43	173.34	66.68
WJ3000627	0	126.43	173.34	66.68
WJ3001254	0	126.43	173.34	66.68
WJ24326	0	126.43	173.35	66.69
WJ3000631	0.06	126.43	173.35	66.69
WJ24325	0.67	126.43	173.36	66.71
WJ3001167	0	126.21	173.32	66.98
WJ3001166	0	126.1	173.31	67.11
WJ3000630	0.02	126	173.34	67.3
WJ38209	0	127.13	174.62	67.51
WJ3001083	0	127.13	174.71	67.64
WJ3000339	0.97	124.15	171.89	67.87
WJ38171	0.69	127.05	175.56	68.97
WJ3000758	2.66	127.23	175.87	69.15
WJ3001241	0	124.64	173.32	69.2
WJ3000982	0.77	128.2	176.95	69.31
WJ3000759	6.6	127.73	176.86	69.85
WJ3000016	0.24	127.79	176.95	69.89
WJ3000544	1.1	126.61	175.87	70.02
WJ3000760	1.4	127.67	176.95	70.06
WJ3000632	0.47	124.91	175.08	71.32
WJ3000463	2.98	126.32	176.79	71.75
WJ56518	30.5	126.18	176.8	71.95
WJ56519	7.04	125.85	176.8	72.43
WJ3000621	5.47	125.46	176.77	72.93
WJ38150	1.15	127.05	178.81	73.59
WJ50349	0	127.05	178.96	73.8
WJ50362	0.01	127.05	178.97	73.81
WJ38169	0	127.05	178.97	73.82
WJ50350	0.01	127.05	179.02	73.89
WJ50351	0	127.05	179.04	73.91
WJ50348	0.25	127.05	179.04	73.92

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ56492	50.34	125.32	177.62	74.36
WJ38149	0	126.43	178.98	74.71
WJ50356	0	126.43	178.98	74.71
WJ50353	0.11	126.43	178.98	74.72
WJ50359	0	126.43	179.04	74.79
WJ50360	0	126.43	179.04	74.79
WJ50354	0.01	126.43	179.04	74.8
WJ50355	0	126.43	179.22	75.05
WJ50357	0	126.43	179.22	75.05
WJ3000984	0.16	127.16	179.98	75.09
WJ50361	0	126.43	179.33	75.2
WJ50358	0.94	126.43	179.35	75.23
WJ3000985	0	126.57	179.98	75.93
WJ3000762	0.21	126.59	180.25	76.28
WJ3000763	2.65	126.59	180.27	76.3
WJ3000761	1.37	126.43	180.14	76.35
WJ3001088	0.13	126.78	183.62	80.81
J16	0	129	185.92	80.92
WJ3001087	0.49	126.51	183.62	81.18
WJ3000764	0.23	126.39	183.62	81.37
WJ3000767	15.34	126.37	183.73	81.55
WJ3000765	0.11	126.26	183.75	81.72
WJ3001089	0.48	126.08	183.62	81.79
WJ3000766	0.1	91.22	193.77	145.79

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ52792	0.03	51.66	179.74	317	-403.83	85.86	0	-231.17
WJ1018241	0.88	52.18	179.74	317	-391.53	88.36	0	-229.52
WJ3000029	0.63	41.19	179.82	317	-152.15	116.13	0	-201.5
WJ51871	0.48	49.41	179.77	317	-132.1	135.73	0	-181.75
WJ56400	0.04	64.26	179.75	317	-94.49	173.97	0	-143.07
J38	0	69.57	179.78	317	-31.73	187.15	20	-129.85
WJ3000996	0.34	70.44	179.78	317	-85.78	187.74	0	-129.6
WJ56400	0.04	68.06	182.42	317	-84.31	188	0	-129.04
J40	0	71.56	179.78	317	-33.04	189.21	20	-127.79
J36	0	70.33	179.77	317	-29.55	190.88	20	-126.12
J44	0	70.98	179.77	317	-29.38	192.24	20	-124.76
J42	0	72.16	179.79	317	-27.33	196.81	20	-120.19
J46	0	73.65	179.83	317	-28.3	198.41	20	-118.59
J48	0	73.21	179.93	317	-25.19	201.83	20	-115.17
WJ3000630	0.03	77.68	180.64	190	-318.38	75.25	0	-114.78
WJ3000621	3.94	81.63	182.88	317	-80.37	211.02	0	-109.92
WJ51921	0.14	67.21	179.78	317	-50.72	214.25	0	-102.89
WJ51919	0.08	66.78	179.78	317	-48.36	216.31	0	-100.77
WJ3000567	0.13	53.99	179.5	190	-122.69	89.4	0	-100.73
WJ3000030	0.59	41	179.79	190	-91.1	91.3	0	-99.29
WJ3000463	2.14	80.44	182.9	317	-61.46	224.07	0	-95.07
WJ3001181	0.28	69.88	180	190	-146.27	97.73	0	-92.55
WJ51918	1.66	66.64	179.78	317	-36.06	233.59	0	-85.07
WJ3001068	0.27	68.88	179.95	317	-33.72	238.78	0	-78.49
WJ51927	0.67	71.75	179.77	317	-32.18	243.6	0	-74.07
WJ51925	0.61	72.18	179.77	317	-32.31	243.77	0	-73.84
WJ3000027	0.85	45.53	179.8	190	-45.21	120.67	0	-70.18
WJ3000028	0.55	43.94	179.82	190	-40.33	123.02	0	-67.53
WJ3000578	0.38	47.36	179.79	190	-43.61	123.18	0	-67.2
WJ27575	0.65	73.78	179.92	317	-28.15	252.28	0	-65.37
WJ27595	0.57	73.79	179.92	317	-27.98	252.47	0	-65.1
WJ31228	0.01	41.72	179.84	190	-32.99	127	0	-63.01
WJ3001069	0.62	70.17	179.95	317	-23.47	257.37	0	-60.25
WJ3000800	0.13	69.77	179.94	317	-22.11	259	0	-58.13
WJ3000799	0.01	69.78	179.94	317	-21.99	259.12	0	-57.89
WJ3000528	0.15	69.83	179.94	317	-21.91	259.46	0	-57.69
WJ3001074	0.14	70.15	179.94	317	-21.5	260.53	0	-56.61
J64	0	70.43	179.99	317	-21.55	260.63	0	-56.37
WJ3000345	1.99	68.3	180.19	317	-19.67	264.95	0	-54.04
WJ3001242	0.12	47.95	179.79	190	-29.44	136.54	0	-53.58
WJ3000507	0.31	70.48	180.14	317	-18.02	268.29	0	-49.02
WJ3000975	0.07	68.39	179.93	190	-27.49	152.94	0	-37.13
WJ3000976	0.06	68.48	179.93	190	-26.03	154.41	0	-35.65

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ31227	0.08	45.57	179.86	190	-13.23	157.84	0	-32.24
WJ3000044	0.07	45.73	179.36	65	-23.52	50.19	0	-14.88
WJ3001142	0.1	45.04	179.37	65	-22.51	50.48	0	-14.62
WJ52787	0.02	47.71	179.36	65	-22.33	51.16	0	-13.86
WJ3001089	0.79	86.97	187.26	317	-6.48	304.33	0	-13.46
WJ3000050	0.52	48.96	179.87	190	-4.77	177.78	0	-12.74
WJ52786	0.08	48	179.36	65	-19.27	52.67	0	-12.41
WJ3001090	0.09	45.81	179.37	65	-16.78	53.42	0	-11.67
WJ52782	0.04	44.85	179.37	65	-16.15	53.48	0	-11.56
WJ3000492	0.01	45.89	179.37	65	-12.87	55.5	0	-9.51
WJ3000756	0.02	45.08	179.37	65	-12.41	55.63	0	-9.39
WJ3000394	0.05	46.52	179.36	65	-11.66	56.37	0	-8.68
WJ3000350	0.05	44.5	179.37	65	-9.62	57.3	0	-7.75
WJ3000351	0.03	44.86	179.37	65	-9.33	57.54	0	-7.49
WJ3001155	0.01	76.6	180.64	190	-4.86	182.58	0	-7.43
WJ3000491	0.06	45.2	179.37	65	-8.57	58.14	0	-6.92
WJ3000352	0.12	45.33	179.37	65	-8.08	58.55	0	-6.57
WJ3000058	0.24	47.8	179.36	65	-7.31	59.53	0	-5.71
WJ3000868	0.08	72.7	179.74	65	-12.15	59.5	0	-5.58
WJ52820	0.01	41.75	179.37	65	-6	59.46	0	-5.55
WJ3000349	0.12	45.99	179.36	65	-6.07	60.08	0	-5.04
WJ52818	0.15	41.82	179.37	65	-4.42	60.93	0	-4.22
WJ3000037	0.29	44.63	179.36	65	-4.06	61.65	0	-3.64
WJ14740	0.05	42.6	179.37	65	-3.43	61.78	0	-3.27
WJ14675	0.17	49.42	179.36	65	-3.56	62.31	0	-2.86
WJ52814	0.06	44.73	179.36	65	-3.09	62.24	0	-2.82
WJ3000036	0.22	46.79	179.36	65	-3.18	62.47	0	-2.75
WJ52804	0.03	45.72	179.36	65	-3.09	62.29	0	-2.74
WJ52806	0.04	44.87	179.36	65	-2.89	62.41	0	-2.63
WJ52807	0.15	46.01	179.36	65	-2.87	62.61	0	-2.54
WJ3000854	0.39	65.39	180.17	190	-1.21	188.03	0	-2.36
WJ52813	0.25	44.87	179.36	65	-1.82	63.56	0	-1.69
WJ57286	0.38	50.27	179.36	65	-1.58	64.09	0	-1.29
WJ52809	0.09	46.29	179.36	65	-1.1	64.09	0	-1
WJ3000047	0.08	48.89	179.81	65	-0.88	64.38	0	-0.7
WJ3000043	0.35	50.34	179.36	65	-0.58	64.86	0	-0.49
WJ3000035	0.16	49.66	179.36	65	-0.51	64.73	0	-0.43
WJ52803	0.04	47.17	179.36	65	-0.3	64.76	0	-0.28
WJ3000042	0.4	50.39	179.36	65	0.77	66.06	0	0.66
WJ3000034	0.29	51.03	179.36	65	1.48	66.55	0	1.26
WJ3000646	0.26	53.55	179.36	65	2.09	66.97	0	1.71
WJ14604	0.05	48	179.37	65	1.89	66.8	0	1.75
WJ14724	0.12	48.57	179.37	65	2.65	67.59	0	2.47

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000855	0.27	67.77	180.17	190	1.31	192.83	0	2.56
WJ3000884	0.16	60.8	179.92	65	4.7	68.34	0	3.18
WJ57286	0.38	54.2	182.13	65	4.33	68.94	0	3.56
WJ3000023	0.04	49.02	179.37	65	3.89	68.72	0	3.68
WJ3000889	0.09	75.14	179.74	65	7.78	69.42	0	4.33
WJ52810	0.16	52.43	179.36	65	5.36	69.95	0	4.79
WJ14744	0.16	50.85	179.37	65	5.42	70.21	0	5.05
WJ3000486	0.14	53.4	179.36	65	6.16	70.61	0	5.47
WJ3000519	0.13	67.59	180.21	190	3.18	196.53	0	6.4
WJ17210	0.5	50.33	179.4	65	7.87	73.32	0	7.82
WJ3000024	0.12	50.47	179.4	65	8.16	73.25	0	8.13
WJ3000851	0.19	51.33	180.08	65	10.46	75.01	0	9.82
WJ14608	0.07	57.67	179.37	65	11.67	75.52	0	10.45
WJ3001238	0.17	70.46	180.14	190	6.53	203.33	0	13.16
WJ3000542	0.11	54.15	179.75	65	14.61	79.29	0	14.18
WJ3000541	0.15	54.42	179.76	65	14.84	79.69	0	14.54
WJ3000569	0.29	47.75	179.57	65	13.72	81.91	0	16.62
WJ3001168	0.18	67.35	179.36	65	20.37	82.42	0	17.24
J90	0	69.18	180.16	190	8.8	208.95	0	18.95
WJ3000117	0.17	49.23	179.85	65	16.47	84.34	0	19.17
WJ3001169	0.02	70.15	179.36	65	23.08	84.34	0	19.32
WJ3000568	0.14	51.72	179.56	65	17.05	85.06	0	19.92
WJ56518	22.03	80.63	182.9	317	7.1	360.23	0	21.2
WJ55058	0.02	73.33	179.36	65	26.09	86.56	0	21.54
WJ3000052	0.06	59.26	179.85	65	22.46	87.4	0	22.34
WJ57290	1.96	74.44	179.36	65	27.27	89.42	0	22.46
WJ56519	5.17	81.11	182.9	317	7.76	345.35	0	23.18
WJ3000536	0.3	51.68	179.55	65	19.32	89.74	0	24.44
WJ3000645	0.31	54.97	179.74	65	22	90.77	0	25.46
WJ3000339	0.7	79.07	179.77	65	34.01	92.18	0	26.48
WJ57290	1.96	78.37	182.13	65	33.17	94.47	0	27.51
WJ3000432	0.46	36.46	179.76	65	14.46	93	0	27.54
J86	0	69	179.84	190	11.9	217.7	0	27.7
WJ3000016	0.4	78.45	182.97	190	15.22	218.54	0	28.14
WJ3000537	0.24	49.26	179.58	65	20.46	94.6	0	29.36
WJ3000014	0.02	52.73	179.72	65	23.02	95.14	0	30.12
WJ3000538	0.34	48.82	179.59	65	20.54	95.47	0	30.13
WJ3000643	0.38	52.92	179.58	65	23.09	96.85	0	31.47
WJ3001164	0.07	73.35	180.62	190	15.76	224.95	0	34.88
WJ3000015	0.34	52.71	179.72	65	24.92	100.35	0	35.01
WJ3000540	0.3	51.77	179.76	65	24.59	101	0	35.7
WJ3000890	0.94	74.68	179.74	65	38.21	102.82	0	36.88
WJ3000995	0.5	68.69	179.8	190	14.94	227.99	0	37.49

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ51936	0.21	63.52	179.78	190	13.49	227.87	0	37.66
WJ23837	0.38	45.01	179.84	65	22.14	103.46	0	38.08
WJ3000539	0.23	49.77	179.66	65	24	103.4	0	38.17
WJ3000337	0.61	63.38	179.78	190	13.67	229.07	0	38.46
WJ56492	36.43	82.68	183.48	317	12.68	392.29	0	38.86
WJ54892	0.42	49.4	179.66	65	24.07	104.64	0	39.22
WJ3000011	0.29	34.14	179.76	65	16.06	104.62	0	39.33
WJ3000433	0.22	37.58	179.76	65	18.22	105.33	0	40.11
WJ38310	0.29	71.6	179.94	190	16.77	230.64	0	40.35
WJ3000874	0.09	50.05	179.69	65	25.23	106.48	0	41.39
WJ55851	0.01	59.5	179.76	65	32.71	109.57	0	44.56
WJ3000859	0.03	74.63	180.03	190	19.39	235.71	0	45.68
WJ3000074	0.01	64.57	179.74	65	36.1	110.7	0	45.69
WJ3000853	1.16	63.79	180.1	190	16.02	237.69	0	46.53
WJ3000065	0.69	72.24	179.87	190	18.77	237.41	0	46.72
WJ3000967	0.18	52.6	179.75	65	28.7	112.04	0	46.86
WJ38309	0.62	71.57	179.94	190	18.89	238.27	0	47.65
WJ3000119	0	67.29	180.29	190	17.64	237.67	0	47.67
WJ3000858	0.18	75.1	180.03	190	20.22	238.24	0	48.06
WJ3000971	0.34	47.69	179.73	65	25.8	113.93	0	48.59
WJ3000972	0.44	47.16	179.74	65	25.72	114.84	0	49.4
WJ3000478	0.44	50.91	179.8	65	28.14	114.96	0	49.52
WJ3000875	0.54	49.22	179.72	65	26.9	115.11	0	49.57
WJ3000434	0.34	41.23	179.76	65	22.32	114.92	0	49.58
WJ3000347	0.66	70.74	180.18	190	19.59	241.42	0	50.76
WJ3000924	0.92	63.84	180.2	190	17.38	243	0	52.08
WJ3000046	0.73	49.63	179.81	65	28.35	118.06	0	52.33
WJ3000869	0.43	73.37	179.74	65	44.27	118.72	0	53.29
WJ27615	0.47	73.48	179.95	190	21.18	244.25	0	53.78
WJ3000966	0.9	53.1	179.75	65	30.8	120.17	0	54.27
WJ3000094	0.61	31.18	179.76	65	16.42	120.06	0	54.45
WJ3000012	0.4	44.26	179.76	65	25.37	120.84	0	55.44
WJ3000095	0.03	31.92	179.76	65	17.17	121.86	0	56.83
WJ3000579	0.48	46.77	179.8	65	27.43	123.49	0	58.01
WJ3000064	0.12	72.2	179.91	190	21.79	248.34	0	58.22
WJ3000970	0.36	50.76	179.72	65	29.76	123.65	0	58.29
WJ3000977	0.29	68.19	179.91	190	20.42	249.3	0	59.01
WJ3001165	0.19	70.01	180.62	190	21.88	250.45	0	60.26
WJ23834	0.47	42.69	179.84	65	25.3	126.65	0	61.18
WJ3000968	0.33	52.14	179.75	65	31.57	127.1	0	61.77
WJ3000002	0.38	49.85	179.78	65	30.18	127.4	0	62.02
WJ3000535	0.08	69.1	180.17	190	21.69	252.22	0	62.14
WJ3000001	0.44	50.83	179.78	65	30.92	127.91	0	62.47

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000346	0.95	69.52	180.19	190	22.21	254.63	0	63.68
WJ3000791	0.06	42.26	179.84	65	25.64	131.06	0	66
WJ3000979	0.01	60.9	179.76	65	39.16	131.37	0	66.36
WJ27614	0.12	73.72	179.95	190	24.36	256.54	0	66.42
WJ3000883	0.71	47.99	179.82	65	29.71	132.43	0	66.72
WJ3000860	0.14	74.9	180.06	190	25.08	257.02	0	66.88
WJ27574	0.58	73.57	179.93	190	24.39	257.49	0	66.91
WJ27596	0.32	73.79	179.93	190	24.5	257.32	0	67
WJ3000802	0.38	59.51	179.79	65	38.37	132.46	0	67.08
WJ3000060	0.01	72	179.94	190	23.84	257.25	0	67.24
WJ27634	0.4	74.05	179.97	190	24.71	257.65	0	67.25
WJ3000096	0.11	35.17	179.76	65	20.53	132.65	0	67.54
WJ3000166	0.94	71.46	180.09	190	23.83	258.57	0	67.63
WJ3001072	0.04	70.94	179.94	190	23.56	258.05	0	68.01
WJ3000445	0.36	64.8	179.74	65	42.18	133.68	0	68.32
WJ3000969	0.11	51.97	179.75	65	32.54	133.64	0	68.53
WJ27654	0.05	76.1	180.01	190	26.03	258.97	0	68.92
WJ3000372	0.1	60.67	179.87	65	39.65	134.22	0	69.12
WJ3000857	0.15	72.52	179.94	190	24.49	259.46	0	69.31
WJ3000435	0.29	49.65	179.76	65	31.34	134.61	0	69.32
WJ3000444	0.13	64.63	179.74	65	42.3	134.7	0	69.57
WJ3000480	0.67	52.17	179.85	65	33.23	135.37	0	69.7
WJ3000120	0.54	67.63	180.29	190	22.77	260.41	0	69.87
WJ3000055	0.18	41.85	179.76	65	25.75	135.48	0	70.3
WJ3000479	0.51	51.94	179.85	65	33.15	136.19	0	70.68
WJ3000118	0.03	67.33	180.29	190	22.85	260.97	0	70.94
WJ55199	0.05	73.17	179.74	65	48.9	136.05	0	71
WJ3000097	0.14	36.35	179.76	65	21.73	136.34	0	71.2
WJ3000003	0.41	47.89	179.79	65	30.13	136.75	0	71.34
WJ23835	0.49	43.08	179.84	65	26.87	136.97	0	71.48
WJ3000511	0.22	73.95	180.17	190	25.84	261.77	0	71.55
WJ3000629	0.61	76.92	180.64	190	27.59	262.94	0	72.33
WJ3000508	1.59	73.09	180.17	190	25.6	263.92	0	72.33
WJ3000013	0.31	49.68	179.76	65	31.82	137.96	0	72.65
WJ3000289	0.35	45.31	179.84	65	28.69	138.01	0	72.66
WJ3000278	0.12	42.51	179.76	65	26.5	137.79	0	72.67
WJ3000279	0.48	47.06	179.76	65	29.92	138.32	0	72.84
WJ3000073	1.18	65.58	179.74	65	43.72	139.69	0	73.51
WJ38249	0.01	75.72	180.26	190	27.13	263.65	0	73.64
WJ3000115	0.48	48.97	179.85	65	31.58	139.17	0	73.69
WJ38171	1.15	78.14	182.01	190	29.27	265.65	0	74.5
WJ26597	0.24	69.11	180.18	190	24.42	265.83	0	75.59
WJ3000925	0.3	68.34	180.32	190	24.18	266.04	0	75.74

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J74	0	69.3	180.25	190	24.66	265.98	0	75.98
WJ56502	0.28	72.97	179.74	65	49.9	141.89	0	76.61
WJ55201	0.1	72.97	179.74	65	49.92	141.76	0	76.66
WJ38271	0.01	75.24	180.19	190	27.5	266.8	0	76.79
WJ3000575	0.02	71.09	180.12	190	25.6	267.16	0	77.14
WJ3000530	0.01	71.06	180.12	190	25.64	267.45	0	77.44
WJ38289	0.99	75.02	180.19	190	27.61	268.81	0	77.82
WJ38273	0.04	75.24	180.19	190	27.73	267.94	0	77.9
WJ23838	0.43	44.22	179.84	65	28.46	143.66	0	78.23
WJ3000525	0.33	68.26	180.34	190	24.67	268.66	0	78.33
WJ3000526	0.01	68.3	180.34	190	24.7	268.39	0	78.38
WJ38269	0.17	75.24	180.19	190	27.92	269.02	0	78.85
WJ3000167	0.27	76.25	180.18	190	28.52	269.52	0	79.25
WJ26594	0.27	71.13	180.13	190	26.08	269.95	0	79.68
WJ3000281	0.24	63.11	179.76	65	43.12	145.17	0	79.93
WJ38229	0.14	75.79	180.32	190	28.99	272.25	0	82.11
WJ56518	22.03	84.55	185.66	317	24.32	421.74	0	82.71
WJ3000436	0.4	55.87	179.76	65	37.98	149.37	0	83.97
WJ3000116	0.3	50.03	179.85	65	33.58	149.32	0	84.02
WJ56502	0.28	76.74	182.4	65	54.85	149.31	0	84.03
WJ3000482	0.24	55.36	179.87	65	37.88	150.06	0	84.82
WJ3000049	0.4	51.43	179.83	65	34.63	150.27	0	84.87
WJ56519	5.17	85.03	185.66	317	24.97	407.25	0	85.08
WJ3000048	0.07	51.66	179.82	65	34.83	150.41	0	85.34
WJ3000852	0.38	60.88	180.08	65	42.29	151.28	0	85.9
WJ3000483	0.23	55.49	179.87	65	38.14	151.44	0	86.21
WJ3000443	0.24	63.7	179.75	65	44.33	151.65	0	86.41
WJ3000580	0.3	50.43	179.82	65	33.92	151.75	0	86.45
WJ3000581	0.42	55.7	179.85	65	38.26	152.28	0	86.86
WJ3000481	0.66	53.97	179.85	65	36.94	153.04	0	87.38
WJ3000212	1.1	42.22	179.76	65	27.62	153.86	0	87.76
WJ3000583	0.18	59.92	179.87	65	41.96	153.97	0	88.79
WJ3000355	0.18	66.21	179.74	65	46.69	154.62	0	89.44
WJ3000098	0.24	42.66	179.76	65	28.09	154.74	0	89.5
WJ3000354	0.31	64.43	179.75	65	45.45	155.84	0	90.53
WJ3000792	0.56	46.63	179.85	65	31.52	156.89	0	91.33
WJ3000437	0.37	59.54	179.76	65	41.85	157.71	0	92.34
WJ3000051	0.47	52.31	179.85	65	36.73	163.7	0	98.23
WJ3000438	0.44	60.78	179.76	65	43.48	163.76	0	98.32
WJ3000442	0.36	62.45	179.75	65	44.8	163.72	0	98.36
WJ3000280	0.59	60.29	179.76	65	43.18	164.72	0	99.13
WJ3000628	0.47	75.83	180.64	190	32.28	289.76	0	99.29
WJ56421	0.23	64.83	179.75	65	47.04	166.17	0	100.94

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000923	0.27	61.89	180.07	65	44.66	166.33	0	101.06
WJ3000803	0.15	61.59	179.79	65	44.64	167.03	0	101.88
WJ3000793	0.4	48.28	179.85	65	33.71	167.9	0	102.5
WJ50353	0.19	82.13	184.2	190	38.22	293.74	0	103.55
WJ3000585	0.03	64.09	179.88	65	47.01	168.98	0	103.95
WJ3000563	0.25	47.36	179.86	65	33.06	169.38	0	104.13
WJ3000804	0.2	60.92	179.79	65	44.32	169.56	0	104.36
WJ55196	0.36	70.46	179.75	65	51.97	169.85	0	104.49
WJ56492	36.43	86.6	186.23	317	29.88	458.24	0	104.81
WJ3000919	0.41	55.2	179.86	65	39.67	170.27	0	104.86
WJ3000624	0.09	47.48	179.86	65	33.22	170.13	0	105.04
WJ56401	0.08	64.26	179.75	65	47.05	171.65	0	106.57
WJ56397	0.08	66.71	179.75	65	49.1	172.03	0	106.95
WJ3000920	0.28	61.08	179.87	65	44.86	173.49	0	108.21
WJ51883	0.44	50.14	179.77	65	35.59	174.61	0	109.17
WJ3000886	0.61	63.33	179.81	65	46.8	175.06	0	109.45
WJ3000332	0.58	50.14	179.76	65	35.64	175.91	0	110.33
WJ3000631	0.1	77.06	180.64	190	34.73	300.53	0	110.43
WJ3000572	0.53	65.45	179.94	65	48.75	176	0	110.47
WJ24325	1.11	77.07	180.65	190	34.79	301.85	0	110.74
WJ56393	0.15	64.83	179.75	65	47.97	176.09	0	110.94
WJ3000584	0.07	62.19	179.87	65	46.13	177.44	0	112.37
WJ3000005	0.26	65.39	179.89	65	48.93	178.41	0	113.15
WJ3000054	0.19	49.85	179.77	65	35.63	179.06	0	113.87
WJ3000885	0.35	63.78	179.87	65	47.63	179.51	0	114.16
WJ56421	0.23	68.64	182.43	65	52.32	179.64	0	114.41
WJ3000315	0.9	62.8	179.76	65	46.62	180.53	0	114.63
WJ51882	0.05	50.14	179.77	65	35.92	179.8	0	114.75
WJ3000099	0.28	51.77	179.76	65	37.27	180.27	0	114.99
WJ22402	0.34	66.12	179.89	65	49.7	180.37	0	115.03
WJ3000794	0.34	51.1	179.85	65	36.91	180.89	0	115.55
WJ3000807	0.38	66.61	179.78	65	50.02	181.26	0	115.88
WJ56397	0.08	70.49	182.41	65	54.18	183.85	0	118.77
WJ51914	0.08	56.26	179.77	65	41.41	184.03	0	118.95
WJ56399	0.09	66.96	179.75	65	50.36	184.28	0	119.19
WJ50354	0.02	82.19	184.24	190	41.05	309.5	0	119.48
WJ56395	0.19	66.71	179.75	65	50.18	184.86	0	119.67
WJ3000282	0.77	65.82	179.75	65	49.5	185.47	0	119.7
WJ50362	0.02	81.24	184.19	190	40.5	309.93	0	119.91
WJ56384	0.06	62.82	179.76	65	47.02	185.12	0	120.06
WJ56401	0.08	68.05	182.42	65	52.24	185.29	0	120.21
WJ56394	0.23	64.26	179.75	65	48.16	185.61	0	120.38
WJ22421	0.22	67.76	179.91	65	51.59	186.32	0	121.1

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000316	0.96	66.1	179.76	65	50.03	188.83	0	122.87
WJ3000100	0.42	55	179.76	65	40.59	190.15	0	124.73
WJ3000573	0.07	69.73	180.01	65	53.65	190.04	0	124.97
WJ3000439	0.22	61.74	179.76	65	46.42	190.42	0	125.2
WJ53252	0.3	64.54	179.99	65	49.04	190.9	0	125.6
WJ3000805	0.19	63.66	179.79	65	48.25	190.94	0	125.75
WJ53276	0.07	68.81	179.97	65	52.94	191.8	0	126.73
WJ3000806	0.25	63.97	179.79	65	48.59	192.15	0	126.9
WJ3000441	0.06	61.6	179.76	65	46.42	192.2	0	127.14
WJ3000071	0.09	70.94	179.75	65	54.37	192.26	0	127.17
WJ50350	0.01	81.29	184.23	190	41.63	317.2	0	127.19
WJ53269	0.04	68.83	179.98	65	53.01	192.28	0	127.24
WJ56382	0.13	62.79	179.76	65	47.52	192.94	0	127.81
WJ53264	0.04	68.81	179.96	65	53.03	193.1	0	128.06
WJ3000625	0.41	53.86	179.87	65	39.95	193.6	0	128.19
WJ3000440	0.11	61.72	179.76	65	46.71	195.56	0	130.45
WJ3000070	0.17	71.45	179.75	65	55.08	195.95	0	130.78
WJ56399	0.09	70.74	182.41	65	55.41	197.22	0	132.13
WJ51893	0.02	63.66	179.78	65	48.67	198.13	0	133.11
WJ51894	0.26	56.26	179.77	65	42.17	198.49	0	133.23
WJ53277	0.44	68.81	179.97	65	53.44	199.67	0	134.23
WJ3000982	1.28	77.87	182.97	190	40.84	325.52	0	134.24
WJ51892	0.06	62.95	179.78	65	48.16	200.32	0	135.26
WJ3000520	0.31	68.72	180.15	65	53.6	200.94	0	135.63
WJ3000101	0.43	58.57	179.76	65	44.27	201.53	0	136.1
WJ3000283	0.55	72.32	179.75	65	56.44	205.23	0	139.68
WJ38150	1.92	81.09	184.09	190	43.28	332.99	0	141.07
WJ3000544	1.22	79.11	182.26	65	64.38	208.01	0	141.79
WJ3000069	0.57	72.03	179.75	65	56.43	209.1	0	143.53
WJ3000102	0.43	61.4	179.76	65	47.18	210.17	0	144.74
WJ3000582	0.42	59.64	179.89	65	45.81	210.23	0	144.81
WJ3000795	0.51	60.13	179.86	65	46.32	211.45	0	145.94
WJ3000334	0.06	62.38	179.78	65	48.22	212.21	0	147.15
WJ56389	0.14	62.82	179.76	65	48.65	214.41	0	149.27
WJ3000574	0.9	70.66	180.04	65	56.02	215.35	0	149.45
WJ56380	0.09	62.79	179.76	65	48.69	215.75	0	150.66
WJ56431	0.07	63.28	179.76	65	49.13	215.94	0	150.87
WJ56385	0.07	62.82	179.76	65	48.75	216.36	0	151.29
WJ50348	0.42	81.31	184.24	190	44.87	342.5	0	152.08
WJ3000632	0.79	80.81	181.75	190	43.49	343.41	0	152.62
WJ51908	0.16	62.38	179.78	65	48.49	218.59	0	153.43
WJ3000068	0.64	72.48	179.76	65	57.41	219.23	0	153.59
WJ51898	0.23	62.38	179.78	65	48.51	218.98	0	153.75

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000796	0.39	63.51	179.87	65	49.86	223.4	0	158.01
WJ3000626	1.04	63.73	179.92	65	50.03	224.32	0	158.28
WJ51910	0.22	63.52	179.78	65	49.92	228.46	0	163.24
WJ3000758	2.59	78.24	182.26	190	43.52	356.23	0	163.64
WJ51937	0.15	63.53	179.79	65	49.95	228.86	0	163.71
WJ3000004	1.02	64.96	179.95	65	51.46	231.84	0	165.82
WJ3001088	0.22	85.98	187.26	190	53.95	356.73	0	166.51
WJ53257	0.12	64.53	180	65	51.19	233.32	0	168.2
WJ53253	0.49	64.69	180	65	51.36	234.6	0	169.11
WJ3000808	0.25	67.92	179.78	65	54.11	234.5	0	169.25
WJ53255	0.17	64.56	180.02	65	51.26	234.55	0	169.38
WJ3000797	0.29	68.2	179.9	65	54.67	237.31	0	172.02
WJ56431	0.07	67.11	182.46	65	54.47	239.9	0	174.83
WJ3000067	0.57	72.47	179.77	65	58.41	240.68	0	175.11
WJ50358	1.56	82.48	184.45	190	48.42	369.88	0	178.32
WJ3000798	0.98	68.86	179.93	65	55.53	245.03	0	179.05
WJ3000062	0.05	72.52	179.94	65	59.3	258.88	0	193.83
WJ3000759	5.37	78.46	182.92	190	47.26	389.92	0	194.55
WJ3000760	2.34	78.62	182.97	190	47.55	388.74	0	196.4
WJ26595	0.02	69.1	180.17	65	56.52	263.43	0	198.41
WJ26598	0.01	69.11	180.18	65	56.59	265.49	0	200.48
WJ3000532	0.02	71.13	180.13	65	58.52	269.54	0	204.52
WJ3001087	0.81	86.36	187.26	190	60.9	428.79	0	237.98
WJ3000767	11.04	86.67	187.33	317	49.46	581.07	0	253.03
WJ3000984	0.27	82.07	184.89	190	55.65	443.82	0	253.55
WJ3000761	2.29	83.26	185	190	59.83	498.56	0	306.27
WJ3000762	0.35	83.13	185.07	190	60.02	501.08	0	310.73
WJ3000763	2.27	83.15	185.08	190	60.08	503.83	0	311.56
WJ3000764	0.38	86.54	187.26	190	69.38	634.92	0	444.54
WJ3000765	0.18	86.83	187.34	190	69.89	641.81	0	451.63
J16	0.14	84.95	188.75	190	71.61	742.91	0	552.77
WJ3000766	0.16	145.9	193.85	190	145.53	8,499.89	0.04	8309.73

Attachment E

Attachment E

PN	17103	Eglinton Intensification					Design Criteria					
Project Name	Eglinton and Laird						Residential	191 Lpcd				
Date	19-Jan-18						Commercial, Office, Retail, Community Centre	180000 L/ha/day				
					Max day Peaking factor	Peak Hour Peaking factor						
					ICl=1.1, Res = 1.3	ICl=1.2, Res = 2.5						
Zone	ADDRESS	BUILDING NO.	ICI AREA (m2)	RESIDENTIAL Units	RES POP	Average Day Scenario		Max Day Scenario		Peak Hour Scenario		
						ICI Demands (L/s)	Residential Demands (L/s)	ICI Demands (L/s)	Residential Demands (L/s)	ICI Demands (L/s)	Residential Demands (L/s)	
A1-1	815-845 Eglinton Ave E	1	3,200	197	351	0.67	0.78	0.73	1.01	0.80	1.94	
		2	6,950	556	989	1.45	2.19	1.59	2.84	1.74	5.47	
		3	0	298	530	0.00	1.17	0.00	1.52	0.00	2.93	
A1-2	849 Eglinton Avenue E	4	8,990			1.87	0.00	2.06	0.00	2.25	0.00	
A1-3		5		335	596	0.00	1.32	0.00	1.71	0.00	3.29	
		6	5,340			1.11	0.00	1.22	0.00	1.34	0.00	
A2-1	849 Eglinton Avenue E	1	4,370	268	476	0.91	1.05	1.00	1.37	1.09	2.63	
A2-2		2		250	445	0.00	0.98	0.00	1.28	0.00	2.46	
		3	8,280			1.73	0.00	1.90	0.00	2.07	0.00	
A3-1	939 Eglinton Avenue E	1	1,285	336	598	0.27	1.32	0.29	1.72	0.32	3.30	
		2	555	172	306	0.12	0.68	0.13	0.88	0.14	1.69	
		3		353	628	0.00	1.39	0.00	1.81	0.00	3.47	
		4	4,300			0.90	0.00	0.99	0.00	1.08	0.00	
A4-1	943-957 Eglinton Avenue E	1	1,400	314	558	0.29	1.23	0.32	1.60	0.35	3.09	
A4-2		2		107	190	0.00	0.42	0.00	0.55	0.00	1.05	
A4-3		3		234	416	0.00	0.92	0.00	1.19	0.00	2.30	
		4		337	600	0.00	1.33	0.00	1.73	0.00	3.32	
Total			44670	3755	6684	9.31	14.78	10.24	19.21	11.17	36.94	
						24.08		29.45		48.11		

Attachment E

PN Project Name Date		17103 Eglinton and Laird 19-Jan-18	Laird Intensification			Design Criteria					
						Residential Commercial, Office, Retail, Community Centre		320 Lpcd 180000 L/ha/day			
Zone	Address	ICI AREA (m2)	RESIDENTIAL Units	RES POP	Average Day Scenario		Max Day Scenario		Peak Hour Scenario		
					ICI Demands (L/s)	Residential Demands (L/s)	ICI Demands (L/s)	Residential Demands (L/s)	ICI Demands (L/s)	Residential Demands (L/s)	
B1-1	83 Vanderhoof Avenue	324	8	18	0.07	0.07	0.07	0.11	0.08	0.17	
	214 Laird Drive										
B1-2	206-210 Laird Drive	970	68	151	0.20	0.56	0.22	0.92	0.24	1.38	
B2-1	202 Laird Drive	616	48	97	0.13	0.36	0.14	0.59	0.15	0.89	
	190-200 Laird Drive										
B2-2	211 Randolph Street	0	68	150	0.00	0.55	0.00	0.91	0.00	1.37	
B3-1	180 Laird Drive	508	0	0	0.11	0.00	0.12	0.00	0.13	0.00	
B3-2	146-150 Laird Drive	11,451	253	557	2.39	2.06	2.62	3.40	2.86	5.11	
B3-3	134 Laird Drive	963	76	166	0.20	0.62	0.22	1.02	0.24	1.53	
B4-1	132 Laird Drive	2760	217	476	0.57	1.76	0.63	2.91	0.69	4.38	
	126 Laird Drive										
	120-124 Laird Drive										
	118 Laird Drive										
	116 Laird Drive										
	114 Laird Drive										
B4-2	96-96A Laird Drive	250	2	4	0.05	0.02	0.06	0.03	0.06	0.04	
B5-1	94 Laird Drive	1,716	135	296	0.36	1.10	0.39	1.81	0.43	2.72	
	86-88 Laird Drive										
	80-82 Laird Drive										
	76-78 Laird Drive										
B5-2	72 Laird Drive	120	0	0	0.03	0.00	0.03	0.00	0.03	0.00	
B5-3	70 Laird Drive	75	0	0	0.02	0.00	0.02	0.00	0.02	0.00	
B5-4	68 Laird Drive	75	0	0	0.02	0.00	0.02	0.00	0.02	0.00	
B5-5	66 Laird Drive	90	0	0	0.02	0.00	0.02	0.00	0.02	0.00	
B5-6	62 Laird Drive	365	0	0	0.08	0.00	0.08	0.00	0.09	0.00	
B6-1	46-48 Laird Drive	733	57	0	0.15	0.00	0.17	0.00	0.18	0.00	
	44 Laird Drive										
B6-2	42 Laird Drive	75	7	15	0.02	0.06	0.02	0.09	0.02	0.14	
	40 Laird Drive										
	38 Laird Drive										
B7-1	2 Laird Drive	0	78	172	0.00	0.64	0.00	1.05	0.00	1.58	
Total		21,090	1,017	2,102	4.39	7.78	4.83	12.84	5.27	19.30	
					12.18		17.68		24.58		

Attachment E

Zone	Address	Existing Average Day demand (Meter Data)	Model Nodes	Proposed Average Day demand	Model Nodes
A1-1	815-845 Eglinton Ave E	0.202	WJS1918,WJS1927	6.25	J18
A1-2				1.87	J20
A1-3				2.43	J22
A2-1	849 Eglinton Avenue E		WJ3000996	1.96	J24
A2-2				2.71	J26
A3-1	939 Eglinton Avenue E	0.501		4.67	J28
A4-1					
A4-2					
A4-3					
B1-1	83 Vanderhoof Avenue	0.007	WJ3000995	0.13	J50
	214 Laird Drive	0.015	WJ3000995		
B1-2	206-210 Laird Drive	0.091	WJ3000800	0.76	J52
B2-1	202 Laird Drive	0.025	WJ3000528	0.49	J54
	190-200 Laird Drive	0.143	WJ3000529		
B2-2	211 Randolph Street	0.323	WJ3000798	0.55	J56
B3-1	180 Laird Drive	0.017	WJ3001074	0.11	J58
B3-2	146-150 Laird Drive	0.178	WJ26594	4.45	J60
B3-3	134 Laird Drive	0.006	WJ26594	0.82	J62
B4-1	132 Laird Drive	0.01	WJ26594	2.34	J66
	126 Laird Drive	0.005	WJ26594		
	120-124 Laird Drive	0.019	WJ26594		
	118 Laird Drive	0.002	WJ26594		
	116 Laird Drive	0.002	WJ26597		
	114 Laird Drive	0.022	WJ26597		
	110 Laird Drive	0.007	WJ26597		
B4-2	96-96A Laird Drive	0.05	WJ26597	0.07	J68
B5-1	94 Laird Drive	0.047	WJ26597	1.45	J72
	86-88 Laird Drive	0.028	WJ26597		
	80-82 Laird Drive	0.054	WJ26597		
	76-78 Laird Drive	0.006	WJ3000345		
B5-2	72 Laird Drive	0.004	WJ3000345	0.03	
B5-3	70 Laird Drive	0.011	WJ3000345	0.02	J76
B5-4	68 Laird Drive	0.003	WJ3000345	0.02	
B5-5	66 Laird Drive	0.004	WJ3000345	0.02	J78
B5-6	62 Laird Drive	0	-	0.08	
B6-1	46-48 Laird Drive	0.005	WJ3000345	0.15	J80
	44 Laird Drive	0.004	WJ3000525		
B6-2	42 Laird Drive	0.001	WJ3000525	0.07	J82
	40 Laird Drive	0.003	WJ3000525		
	30 Laird Drive	0	WJ3000525		
B7-1	2 Laird Drive	0	-	0.64	J84

Attachment F

Attachment F

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ401827	0	158.22	188.72	43.36
WJ300009	0.34	157.83	188.72	43.93
WJ31211	0	157.5	188.72	44.39
WJ300009	0.02	157.31	188.72	44.66
WJ300001	0.16	155.74	188.72	46.89
WJ300009	0.06	155.02	188.72	47.91
WJ300009	0.08	154.19	188.72	49.09
WJ300043	0.25	154.11	188.72	49.21
WJ300043	0.12	153.32	188.72	50.32
WJ300030	0.31	150.95	188.74	53.73
WJ56006	0	150.93	188.72	53.73
WJ300002	0.32	150.84	188.76	53.9
WJ300043	0.19	150.76	188.72	53.97
WJ31228	0	150.5	188.77	54.4
WJ300005	0.1	150.32	188.72	54.6
WJ52820	0	150	188.62	54.9
WJ300079	0.03	150.12	188.77	54.95
WJ300021	0.59	150.06	188.72	54.96
WJ52818	0.08	149.95	188.62	54.97
WJ300027	0.07	149.86	188.72	55.26
WJ23834	0.26	149.81	188.77	55.38
WJ300009	0.13	149.75	188.72	55.41
WJ14740	0.03	149.4	188.62	55.75
WJ23835	0.27	149.54	188.77	55.77
WJ55511	0	149.24	188.72	56.13
WJ300002	0.28	148.91	188.76	56.65
WJ23838	0.24	148.74	188.77	56.91
WJ300001	0.22	148.62	188.72	57.01
WJ300035	0.03	148.06	188.62	57.65
WJ23837	0.21	148.18	188.77	57.7
WJ55513	0	148.12	188.72	57.72
WJ300003	0.16	147.96	188.62	57.79
WJ52814	0.03	147.9	188.62	57.88
WJ52782	0.02	147.82	188.62	58
WJ300028	0.19	147.96	188.77	58.01
WJ300035	0.02	147.81	188.62	58.01
WJ52806	0.02	147.8	188.62	58.02
WJ52813	0.14	147.8	188.62	58.02
WJ52781	0	147.7	188.62	58.17
WJ52784	0	147.7	188.62	58.17
WJ300114	0.05	147.68	188.62	58.19
WJ300075	0.01	147.66	188.62	58.23

Attachment F

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ31227	0.05	147.81	188.78	58.24
WJ300002	0.45	147.77	188.76	58.26
WJ300049	0.03	147.57	188.62	58.35
WJ300035	0.07	147.48	188.62	58.48
WJ4018230	0	147.52	188.72	58.57
WJ55837	0	147.4	188.72	58.74
WJ52804	0.02	147.2	188.62	58.88
WJ300004	0.04	147.19	188.62	58.89
WJ3001090	0.05	147.14	188.62	58.96
WJ300049	0	147.08	188.62	59.05
WJ300034	0.07	147.02	188.62	59.14
WJ52807	0.08	147	188.62	59.16
WJ300079	0.31	147.05	188.77	59.31
WJ52809	0.05	146.8	188.62	59.45
WJ3000579	0.27	146.9	188.76	59.51
WJ300039	0.03	146.64	188.62	59.67
WJ3000279	0.26	146.66	188.72	59.8
WJ300003	0.12	146.45	188.62	59.95
WJ300097	0.24	146.57	188.74	59.96
WJ300056	0.14	146.55	188.78	60.03
WJ300057	0.21	146.48	188.76	60.1
WJ300062	0.05	146.46	188.78	60.15
WJ52803	0.02	146.18	188.62	60.33
WJ300097	0.19	146.18	188.74	60.5
WJ3000001	0.23	146.1	188.76	60.64
WJ300124	0.07	146.06	188.76	60.7
WJ300056	0.16	145.98	188.69	60.71
WJ300088	0.39	146.06	188.76	60.71
WJ52787	0.01	145.8	188.62	60.87
WJ300005	0.13	145.74	188.62	60.95
WJ300079	0.22	145.89	188.77	60.96
WJ14604	0.03	145.6	188.62	61.15
WJ52786	0.05	145.6	188.62	61.15
WJ300004	0.04	145.42	188.76	61.61
WJ3000050	0.29	145.43	188.78	61.63
WJ300011	0.27	145.4	188.77	61.66
WJ14724	0.07	145.2	188.62	61.72
WJ300053	0.19	145.25	188.69	61.76
WJ300011	0.09	145.22	188.77	61.91
WJ300087	0.3	145.1	188.74	62.04
WJ51871	0.25	145.01	188.73	62.15
WJ300002	0.02	144.89	188.62	62.16

**17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-
Post-Dev System Average Day Demand Run**

ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ300053	0.13	144.93	188.69	62.2
WJ54892	0.23	144.91	188.72	62.27
WJ300004	0.4	144.9	188.76	62.35
WJ300043	0.16	144.83	188.72	62.4
WJ300001	0.17	144.81	188.72	62.43
WJ14675	0.1	144.6	188.62	62.57
WJ300005	0.1	144.7	188.73	62.59
WJ300000	0.21	144.72	188.75	62.6
WJ300053	0.13	144.65	188.72	62.64
WJ300011	0.17	144.66	188.77	62.71
WJ300003	0.09	144.43	188.62	62.82
WJ51882	0.03	144.5	188.73	62.87
WJ51883	0.24	144.5	188.73	62.87
WJ51947	0	144.5	188.73	62.87
WJ300033	0.29	144.5	188.73	62.88
WJ300087	0.05	144.48	188.73	62.9
WJ300058	0.17	144.34	188.76	63.15
WJ57286	0.21	144	188.62	63.42
WJ17209	0	144	188.63	63.44
WJ17210	0.28	144	188.63	63.44
WJ52780	0	143.98	188.63	63.47
WJ300004	0.19	143.95	188.62	63.49
WJ300004	0.22	143.92	188.62	63.54
WJ101824	0	143.93	188.63	63.55
WJ300097	0.2	144.01	188.73	63.57
WJ300000	0.24	144.02	188.75	63.59
WJ300002	0.06	143.9	188.63	63.59
WJ300047	0.25	143.99	188.76	63.66
WJ300079	0.19	143.91	188.77	63.77
WJ300085	0.11	143.97	188.86	63.81
WJ14729	0	143.6	188.62	64
WJ14744	0.09	143.6	188.62	64
WJ300004	0.22	143.65	188.77	64.14
WJ300003	0.16	143.47	188.62	64.18
WJ300004	0.04	143.48	188.77	64.37
WJ52792	0.01	143.4	188.74	64.46
WJ300009	0.15	143.34	188.72	64.52
WJ300054	0.17	143.34	188.75	64.56
WJ300047	0.28	143.32	188.78	64.63
WJ300053	0.17	143.19	188.68	64.66
WJ300056	0.08	143.18	188.68	64.68
WJ300096	0.06	143.19	188.74	64.76

**17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-
Post-Dev System Average Day Demand Run**

ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000480	0.37	143.15	188.78	64.87
WJ3000960	0.19	143.07	188.74	64.93
WJ1018240	0.48	143.04	188.74	64.97
WJ3000050	0.26	143.06	188.77	64.99
WJ3000961	0.1	142.75	188.74	65.39
WJ3000010	0.19	142.65	188.74	65.52
WJ3000014	0.01	142.63	188.74	65.54
WJ52810	0.09	142.48	188.62	65.59
WJ3000640	0.21	142.35	188.69	65.87
WJ3000960	0.5	142.4	188.74	65.89
WJ3000620	0.23	141.99	188.78	66.52
WJ3000480	0.08	141.8	188.62	66.55
WJ3000480	0.37	141.88	188.77	66.66
WJ3000640	0.15	141.69	188.62	66.71
WJ3000540	0.06	141.65	188.74	66.94
WJ3000560	0.07	141.53	188.66	67.01
WJ3000540	0.08	141.47	188.75	67.21
WJ3000100	0.23	141.07	188.72	67.75
WJ3000640	0.17	141.07	188.74	67.76
WJ3000910	0.23	141.03	188.77	67.87
WJ3000480	0.14	140.92	188.78	68.03
WJ3000480	0.13	140.83	188.78	68.16
WJ3000580	0.23	140.66	188.77	68.4
WJ3000430	0.22	140.45	188.72	68.62
WJ51894	0.14	140.2	188.73	68.99
WJ51914	0.04	140.2	188.73	68.99
WJ14608	0.04	138.8	188.62	70.82
WJ3000100	0.24	138.56	188.72	71.31
WJ3000050	0.03	138.16	188.77	71.94
WJ3000800	0.21	137.93	188.74	72.23
WJ55845	0	137.9	188.72	72.25
WJ55851	0.01	137.9	188.72	72.25
WJ3000430	0.21	137.87	188.72	72.29
WJ3000580	0.23	137.94	188.79	72.29
WJ55852	0	137.8	188.72	72.39
WJ3000580	0.1	137.72	188.78	72.58
WJ3000790	0.28	137.56	188.77	72.81
WJ3000280	0.33	137.35	188.72	73.03
WJ3000370	0.06	137.19	188.78	73.33
WJ3000850	0.2	137.25	188.86	73.37
WJ3000880	0.09	137.15	188.8	73.43
WJ3000430	0.25	137	188.72	73.52

**17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-
Post-Dev System Average Day Demand Run**

ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ300097	0	137.01	188.72	73.52
WJ300080	0.11	136.93	188.74	73.64
WJ300097	0	136.92	188.72	73.64
WJ300092	0.16	136.9	188.78	73.74
WJ300010	0.24	136.57	188.72	74.14
WJ300080	0.08	136.47	188.74	74.3
WJ300044	0.03	136.43	188.72	74.35
WJ300092	0.15	136.54	188.86	74.39
WJ300044	0.06	136.35	188.72	74.46
WJ300043	0.12	136.33	188.72	74.48
WJ300058	0.04	136.13	188.78	74.85
WJ300033	0.03	135.9	188.73	75.1
WJ51898	0.13	135.9	188.73	75.1
WJ51908	0.09	135.9	188.73	75.1
WJ300044	0.2	135.82	188.72	75.2
WJ56380	0.05	135.59	188.72	75.53
WJ56382	0.07	135.59	188.72	75.53
WJ300031	0.5	135.59	188.72	75.54
WJ56384	0.03	135.57	188.72	75.56
WJ56385	0.04	135.57	188.72	75.56
WJ56387	0	135.57	188.72	75.56
WJ56388	0	135.57	188.72	75.56
WJ56389	0.08	135.57	188.72	75.56
WJ51892	0.04	135.5	188.73	75.67
WJ56391	0	135.41	188.72	75.79
WJ300028	0.14	135.36	188.72	75.86
WJ56431	0.04	135.25	188.72	76.02
WJ300088	0.34	135.26	188.75	76.03
WJ300033	0.33	135.2	188.73	76.1
WJ300079	0.21	135.19	188.77	76.17
WJ300092	0.5	135.3	188.91	76.22
WJ51910	0.12	135.1	188.73	76.24
WJ51936	0.11	135.1	188.73	76.24
WJ51937	0.08	135.1	188.73	76.25
WJ300085	0.61	135.22	188.87	76.26
WJ300062	0.57	135.09	188.8	76.36
WJ300080	0.11	135.01	188.74	76.37
WJ51893	0.01	135	188.73	76.38
WJ300088	0.19	135.01	188.78	76.44
WJ300044	0.13	134.94	188.72	76.45
WJ300080	0.14	134.79	188.73	76.69
WJ300058	0.02	134.8	188.78	76.74

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ56394	0.13	134.54	188.72	77.01
WJ56400	0.02	134.54	188.72	77.01
WJ56401	0.04	134.54	188.72	77.01
WJ53257	0.07	134.6	188.83	77.09
WJ53252	0.17	134.59	188.83	77.1
WJ53255	0.09	134.6	188.84	77.1
WJ300035	0.17	134.42	188.72	77.19
WJ53253	0.27	134.5	188.83	77.24
WJ300007	0.01	134.32	188.72	77.33
WJ300044	0.07	134.28	188.72	77.39
WJ300004	0.56	134.25	188.81	77.56
WJ300044	0.2	134.16	188.72	77.56
WJ56393	0.08	134.15	188.72	77.57
WJ56421	0.13	134.15	188.72	77.57
WJ300085	0.22	134.17	188.89	77.79
WJ300000	0.15	133.89	188.79	78.03
WJ300057	0.29	133.89	188.8	78.06
WJ300007	0.65	133.61	188.72	78.34
WJ300028	0.43	133.45	188.72	78.56
WJ22402	0.19	133.38	188.78	78.76
WJ300031	0.54	133.26	188.72	78.84
WJ300035	0.1	133.17	188.72	78.97
WJ300080	0.21	132.93	188.73	79.33
WJ51918	0.74	132.9	188.73	79.36
WJ56395	0.11	132.82	188.72	79.46
WJ56397	0.04	132.82	188.72	79.46
WJ51919	0.04	132.8	188.73	79.5
WJ300011	0	132.96	188.94	79.59
WJ300011	0.01	132.93	188.94	79.63
WJ56399	0.05	132.65	188.72	79.71
WJ300012	0.27	132.72	188.94	79.92
J18	6.24	132.5	188.72	79.93
J20	1.87	132.5	188.72	79.93
J22	2.43	132.5	188.72	79.93
J24	1.96	132.5	188.72	79.93
J26	2.71	132.5	188.72	79.93
J28	4.67	132.5	188.73	79.93
WJ51921	0.07	132.5	188.73	79.93
J30	1.94	132.5	188.73	79.94
WJ300051	0.07	132.67	188.91	79.96
J32	0.92	132.5	188.79	80.02
WJ300085	0.15	132.5	188.89	80.17

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ300052	0	132.53	188.96	80.21
WJ300053	0	132.53	188.95	80.22
WJ22421	0.12	132.24	188.79	80.39
WJ300116	0.1	131.99	188.62	80.5
WJ300052	0.17	132.32	188.96	80.52
WJ300052	0	132.29	188.96	80.56
WJ300092	0.16	132.24	188.95	80.61
WJ300080	0.14	132	188.72	80.64
WJ300034	0.93	132.15	188.9	80.68
WJ300097	0.16	131.95	188.79	80.8
WJ300079	0.16	131.93	188.79	80.83
WJ300097	0.04	131.82	188.8	80.99
WJ300097	0.03	131.75	188.8	81.09
WJ300052	0.17	131.81	188.89	81.13
J96	0	131.5	188.72	81.35
WJ300099	0.26	131.48	188.74	81.39
WJ53264	0.02	131.56	188.81	81.39
WJ53276	0.04	131.56	188.82	81.39
WJ53277	0.25	131.56	188.82	81.39
WJ53269	0.02	131.56	188.82	81.4
WJ300106	0	131.5	188.8	81.46
WJ300079	0.23	131.49	188.79	81.47
WJ26595	0.01	131.56	188.89	81.5
WJ26596	0	131.56	188.89	81.5
WJ300053	0	131.56	188.89	81.5
WJ26597	0	131.56	188.9	81.51
WJ26598	0	131.56	188.9	81.51
J66	2.33	131.5	188.88	81.57
J68	0.07	131.5	188.89	81.58
J90	0.14	131.5	188.89	81.58
J80	0.08	131.5	188.9	81.6
J82	0.08	131.5	188.9	81.6
J84	1.46	131.5	188.9	81.6
J72	0.64	131.5	188.92	81.63
J74	0.14	131.5	188.92	81.63
J76	0.15	131.5	188.94	81.66
J78	0.08	131.5	188.94	81.66
J86	0.14	131.3	188.75	81.67
WJ300034	0.47	131.29	188.9	81.9
WJ300116	0.09	131.37	189.07	82.03
WJ300057	0.04	130.95	188.83	82.28
J38	0.14	130.84	188.72	82.29

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ300080	0.06	130.86	188.8	82.36
WJ300079	0.01	130.85	188.8	82.37
WJ300052	0.06	130.81	188.8	82.43
WJ300118	0.14	130.85	188.83	82.43
WJ300107	0	130.6	188.8	82.74
WJ300106	0.31	130.59	188.8	82.75
J50	0.14	130.5	188.75	82.81
J52	0.76	130.5	188.75	82.81
J54	0.55	130.5	188.8	82.88
J56	0.49	130.5	188.8	82.88
WJ300123	0.08	130.58	188.88	82.88
J58	0.11	130.5	188.82	82.9
J60	4.45	130.5	188.82	82.9
J62	0.82	130.5	188.82	82.9
WJ300050	0.12	130.56	188.88	82.9
J64	0.14	130.44	188.82	82.98
J36	0.14	130.3	188.72	83.05
WJ300034	0.33	130.42	188.89	83.13
WJ300099	0	130.23	188.72	83.15
WJ300057	0.5	130.34	188.84	83.17
WJ300124	0	130.28	188.8	83.19
WJ55196	0.2	130.18	188.72	83.21
WJ300116	0.01	130.01	188.62	83.31
WJ300124	0	130.13	188.79	83.4
WJ300107	0	130.12	188.8	83.42
WJ300107	0	130.11	188.8	83.43
J92	0	130	188.72	83.48
J94	0	130	188.72	83.48
J98	0	130	188.72	83.48
J100	0	130	188.73	83.49
WJ300053	0.01	130.13	188.87	83.5
J34	1.33	130	188.74	83.51
WJ300125	0	130.04	188.79	83.52
WJ300057	0.01	130.12	188.87	83.53
WJ300107	0.02	130.04	188.8	83.53
WJ26594	0	130.09	188.87	83.57
WJ300053	0.01	130.09	188.87	83.57
WJ14629	0	129.8	188.62	83.61
WJ300124	0	129.96	188.79	83.63
WJ300080	0	129.94	188.79	83.67
WJ300007	0.05	129.85	188.72	83.69
J44	0.14	129.84	188.72	83.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ300016	0.47	129.82	188.86	83.93
J102	0	129.61	188.74	84.06
WJ38309	0.31	129.6	188.8	84.15
WJ38310	0.15	129.58	188.8	84.18
WJ300007	0.09	129.49	188.72	84.2
J40	0.14	129.44	188.72	84.28
WJ27674	0	129.38	188.79	84.46
WJ51927	0.32	129.3	188.72	84.47
WJ300006	0	129.29	188.8	84.59
WJ300006	0.32	129.08	188.72	84.77
WJ300006	0	129.15	188.79	84.78
WJ300115	0	129.44	189.08	84.78
WJ300006	0.06	129.13	188.78	84.81
J42	0.14	129.03	188.73	84.86
WJ300006	0.05	129.06	188.77	84.89
WJ51923	0	129	188.72	84.9
WJ51925	0	129	188.72	84.9
WJ300028	0.31	128.88	188.72	85.07
WJ300006	0.03	128.93	188.79	85.11
WJ300085	0.07	128.92	188.79	85.11
WJ300124	0	128.93	188.79	85.11
WJ300006	0.31	128.8	188.72	85.19
WJ300006	0.35	128.77	188.72	85.22
WJ300116	0.03	129.02	189.07	85.37
WJ300086	0.04	128.6	188.71	85.45
WJ300050	0.79	128.75	188.89	85.49
WJ55201	0.05	128.42	188.72	85.72
WJ56502	0.15	128.41	188.72	85.72
J48	0.14	128.43	188.79	85.8
WJ55199	0.03	128.27	188.72	85.92
WJ27615	0.23	128.26	188.8	86.06
WJ300086	0.24	128.13	188.71	86.12
WJ27574	0.29	128.18	188.79	86.16
WJ27614	0.06	128.09	188.8	86.3
J46	0.14	128.02	188.74	86.33
WJ300051	0.11	128.15	188.89	86.35
WJ27575	0.34	128.02	188.79	86.39
WJ27595	0.28	128.02	188.79	86.39
WJ27596	0.17	128.02	188.79	86.39
WJ55058	0.01	127.78	188.62	86.48
WJ27634	0.2	127.88	188.81	86.61
WJ27694	0	127.88	188.81	86.61

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ300085	0.01	127.54	188.83	87.14
WJ300086	0.07	127.37	188.84	87.39
WJ38289	0.5	127.42	188.9	87.39
WJ300089	0.52	127.21	188.71	87.44
WJ57290	1.09	127	188.62	87.59
WJ38269	0.08	127.27	188.9	87.61
WJ38270	0	127.27	188.9	87.61
WJ38271	0	127.27	188.9	87.61
WJ38272	0	127.27	188.9	87.61
WJ38273	0.02	127.27	188.9	87.61
WJ300085	0.09	127.2	188.83	87.62
WJ300062	0.23	127.29	189.08	87.83
WJ300098	0.64	128.2	189.99	87.85
WJ300088	0.05	126.88	188.71	87.9
WJ38249	0	127	188.92	88.03
WJ38229	0.07	127	188.95	88.06
WJ300123	0	127.11	189.07	88.09
WJ300001	0.2	127.79	189.99	88.42
WJ300075	2.92	127.73	189.97	88.49
WJ38209	0	127.13	189.37	88.49
WJ300108	0	127.13	189.39	88.52
WJ300076	1.17	127.67	189.99	88.6
WJ300115	0.01	126.75	189.08	88.6
WJ27654	0.03	126.48	188.82	88.63
WJ300016	0.13	126.55	188.89	88.63
WJ300075	1.37	127.23	189.72	88.83
WJ300062	0.31	126.53	189.08	88.92
WJ38171	0.58	127.05	189.6	88.93
WJ24324	0	126.43	189.08	89.06
WJ24325	0.55	126.43	189.08	89.06
WJ24326	0	126.43	189.08	89.06
WJ300062	0	126.43	189.08	89.06
WJ300063	0.05	126.43	189.08	89.06
WJ300125	0	126.43	189.08	89.06
WJ300116	0	126.21	189.07	89.37
WJ300116	0	126.1	189.07	89.51
WJ300063	0.02	126	189.08	89.68
J16	0	129	192.1	89.7
WJ300054	0.64	126.61	189.72	89.71
WJ38150	0.96	127.05	190.39	90.05
WJ38169	0	127.05	190.43	90.11
WJ50349	0	127.05	190.43	90.11

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ50362	0.01	127.05	190.43	90.11
WJ50350	0	127.05	190.45	90.13
WJ50348	0.21	127.05	190.45	90.14
WJ50351	0	127.05	190.45	90.14
WJ300098	0.13	127.16	190.69	90.32
WJ300046	1.19	126.32	189.97	90.48
WJ56518	12.23	126.18	189.97	90.67
WJ38149	0	126.43	190.44	90.99
WJ50356	0	126.43	190.44	90.99
WJ50353	0.09	126.43	190.44	91
WJ50354	0.01	126.43	190.45	91.02
WJ50359	0	126.43	190.45	91.02
WJ50360	0	126.43	190.45	91.02
WJ50355	0	126.43	190.5	91.08
WJ50357	0	126.43	190.5	91.08
WJ50361	0	126.43	190.52	91.12
WJ50358	0.78	126.43	190.53	91.13
WJ56519	2.86	125.85	189.97	91.15
WJ300098	0	126.57	190.69	91.16
WJ300076	0.17	126.59	190.76	91.22
WJ300076	1.23	126.59	190.77	91.23
WJ300076	1.15	126.43	190.73	91.42
WJ300124	0	124.64	189.07	91.6
WJ300062	2.19	125.46	189.96	91.69
WJ300033	0.39	124.15	188.72	91.8
WJ300063	0.39	124.91	189.52	91.84
WJ300108	0.11	126.78	191.56	92.1
WJ56492	20.22	125.32	190.19	92.23
WJ300108	0.4	126.51	191.56	92.47
WJ300076	0.19	126.39	191.56	92.65
WJ300076	6.13	126.37	191.59	92.71
WJ300076	0.09	126.26	191.59	92.87
WJ300108	0.4	126.08	191.56	93.08
WJ300076	0.08	91.22	193.95	146.04

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ4018275	0	158.22	179.76	30.62
WJ3000094	0.61	157.83	179.76	31.18
WJ31211	0	157.5	179.76	31.64
WJ3000095	0.03	157.31	179.76	31.92
WJ3000011	0.29	155.74	179.76	34.14
WJ3000096	0.11	155.02	179.76	35.17
WJ3000097	0.14	154.19	179.76	36.35
WJ3000432	0.46	154.11	179.76	36.46
WJ3000433	0.22	153.32	179.76	37.58
WJ56006	0	150.93	179.76	40.98
WJ3000030	0.59	150.95	179.79	41
WJ3000029	0.63	150.84	179.82	41.19
WJ3000434	0.34	150.76	179.76	41.23
WJ31228	0.01	150.5	179.84	41.72
WJ52820	0.01	150	179.37	41.75
WJ52818	0.15	149.95	179.37	41.82
WJ3000055	0.18	150.32	179.76	41.85
WJ3000212	1.1	150.06	179.76	42.22
WJ3000791	0.06	150.12	179.84	42.26
WJ3000278	0.12	149.86	179.76	42.51
WJ14740	0.05	149.4	179.37	42.6
WJ3000098	0.24	149.75	179.76	42.66
WJ23834	0.47	149.81	179.84	42.69
WJ23835	0.49	149.54	179.84	43.08
WJ55511	0	149.24	179.76	43.38
WJ3000028	0.55	148.91	179.82	43.94
WJ23838	0.43	148.74	179.84	44.22
WJ3000012	0.4	148.62	179.76	44.26
WJ3000350	0.05	148.06	179.37	44.5
WJ3000037	0.29	147.96	179.36	44.63
WJ52814	0.06	147.9	179.36	44.73
WJ52782	0.04	147.82	179.37	44.85
WJ3000351	0.03	147.81	179.37	44.86
WJ52806	0.04	147.8	179.36	44.87
WJ52813	0.25	147.8	179.36	44.87
WJ55513	0	148.12	179.76	44.97
WJ23837	0.38	148.18	179.84	45.01
WJ52784	0	147.7	179.36	45.01
WJ52781	0	147.7	179.37	45.02
WJ3001142	0.1	147.68	179.37	45.04
WJ3000756	0.02	147.66	179.37	45.08
WJ3000491	0.06	147.57	179.37	45.2
WJ3000289	0.35	147.96	179.84	45.31

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000352	0.12	147.48	179.37	45.33
WJ3000027	0.85	147.77	179.8	45.53
WJ31227	0.08	147.81	179.86	45.57
WJ52804	0.03	147.2	179.36	45.72
WJ3000044	0.07	147.19	179.36	45.73
WJ3001090	0.09	147.14	179.37	45.81
WJ4018230	0	147.52	179.76	45.83
WJ3000492	0.01	147.08	179.37	45.89
WJ3000349	0.12	147.02	179.36	45.99
WJ55837	0	147.4	179.76	46
WJ52807	0.15	147	179.36	46.01
WJ52809	0.09	146.8	179.36	46.29
WJ3000394	0.05	146.64	179.36	46.52
WJ3000792	0.56	147.05	179.85	46.63
WJ3000579	0.48	146.9	179.8	46.77
WJ3000036	0.22	146.45	179.36	46.79
WJ3000279	0.48	146.66	179.76	47.06
WJ3000972	0.44	146.57	179.74	47.16
WJ52803	0.04	146.18	179.36	47.17
WJ3000563	0.25	146.55	179.86	47.36
WJ3000578	0.38	146.48	179.79	47.36
WJ3000624	0.09	146.46	179.86	47.48
WJ3000971	0.34	146.18	179.73	47.69
WJ52787	0.02	145.8	179.36	47.71
WJ3000569	0.29	145.98	179.57	47.75
WJ3000058	0.24	145.74	179.36	47.80
WJ3000003	0.41	146.1	179.79	47.89
WJ3001242	0.12	146.06	179.79	47.95
WJ3000883	0.71	146.06	179.82	47.99
WJ14604	0.05	145.6	179.37	48.00
WJ52786	0.08	145.6	179.36	48
WJ3000793	0.4	145.89	179.85	48.28
WJ14724	0.12	145.2	179.37	48.57
WJ3000538	0.34	145.25	179.59	48.82
WJ3000047	0.08	145.42	179.81	48.89
WJ3000050	0.52	145.43	179.87	48.96
WJ3000115	0.48	145.4	179.85	48.97
WJ3000023	0.04	144.89	179.37	49.02
WJ3000875	0.54	145.1	179.72	49.22
WJ3000117	0.17	145.22	179.85	49.23
WJ3000537	0.24	144.93	179.58	49.26
WJ54892	0.42	144.91	179.66	49.4
WJ51871	0.48	145.01	179.77	49.41

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ14675	0.17	144.6	179.36	49.42
WJ3000046	0.73	144.9	179.81	49.63
WJ3000435	0.29	144.83	179.76	49.65
WJ3000035	0.16	144.43	179.36	49.66
WJ3000013	0.31	144.81	179.76	49.68
WJ3000539	0.23	144.65	179.66	49.77
WJ3000002	0.38	144.72	179.78	49.85
WJ3000054	0.19	144.7	179.77	49.85
WJ3000116	0.3	144.66	179.85	50.03
WJ3000874	0.09	144.48	179.69	50.05
WJ51947	0	144.5	179.76	50.13
WJ3000332	0.58	144.5	179.76	50.14
WJ51882	0.05	144.5	179.77	50.14
WJ51883	0.44	144.5	179.77	50.14
WJ57286	0.38	144	179.36	50.27
WJ17209	0	144	179.4	50.33
WJ17210	0.5	144	179.4	50.33
WJ3000043	0.35	143.95	179.36	50.34
WJ52780	0	143.98	179.4	50.36
WJ3000042	0.4	143.92	179.36	50.39
WJ1018244	0	143.93	179.4	50.43
WJ3000580	0.3	144.34	179.82	50.43
WJ3000024	0.12	143.9	179.4	50.47
WJ3000970	0.36	144.01	179.72	50.76
WJ3000001	0.44	144.02	179.78	50.83
WJ14729	0	143.6	179.37	50.85
WJ14744	0.16	143.6	179.37	50.85
WJ3000478	0.44	143.99	179.8	50.91
WJ3000034	0.29	143.47	179.36	51.03
WJ3000794	0.34	143.91	179.85	51.1
WJ3000851	0.19	143.97	180.08	51.33
WJ3000049	0.4	143.65	179.83	51.43
WJ3000048	0.07	143.48	179.82	51.66
WJ52792	0.03	143.4	179.74	51.66
WJ3000536	0.3	143.19	179.55	51.68
WJ3000568	0.14	143.18	179.56	51.72
WJ3000099	0.28	143.34	179.76	51.77
WJ3000540	0.3	143.34	179.76	51.77
WJ3000479	0.51	143.32	179.85	51.94
WJ3000969	0.11	143.19	179.75	51.97
WJ3000968	0.33	143.07	179.75	52.14
WJ3000480	0.67	143.15	179.85	52.17
WJ1018241	0.88	143.04	179.74	52.18

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000051	0.47	143.06	179.85	52.31
WJ52810	0.16	142.48	179.36	52.43
WJ3000967	0.18	142.75	179.75	52.6
WJ3000015	0.34	142.65	179.72	52.71
WJ3000014	0.02	142.63	179.72	52.73
WJ3000643	0.38	142.35	179.58	52.92
WJ3000966	0.9	142.4	179.75	53.1
WJ3000486	0.14	141.8	179.36	53.4
WJ3000646	0.26	141.69	179.36	53.55
WJ3000625	0.41	141.99	179.87	53.86
WJ3000481	0.66	141.88	179.85	53.97
WJ3000567	0.13	141.53	179.5	53.99
WJ3000542	0.11	141.65	179.75	54.15
WJ3000541	0.15	141.47	179.76	54.42
WJ3000645	0.31	141.07	179.74	54.97
WJ3000100	0.42	141.07	179.76	55
WJ3000919	0.41	141.03	179.86	55.2
WJ3000482	0.24	140.92	179.87	55.36
WJ3000483	0.23	140.83	179.87	55.49
WJ3000581	0.42	140.66	179.85	55.7
WJ3000436	0.4	140.45	179.76	55.87
WJ51894	0.26	140.2	179.77	56.26
WJ51914	0.08	140.2	179.77	56.26
WJ14608	0.07	138.8	179.37	57.67
WJ3000101	0.43	138.56	179.76	58.57
WJ3000052	0.06	138.16	179.85	59.26
WJ55845	0	137.9	179.76	59.5
WJ55851	0.01	137.9	179.76	59.5
WJ3000802	0.38	137.93	179.79	59.51
WJ3000437	0.37	137.87	179.76	59.54
WJ3000582	0.42	137.94	179.89	59.64
WJ55852	0	137.8	179.76	59.65
WJ3000583	0.18	137.72	179.87	59.92
WJ3000795	0.51	137.56	179.86	60.13
WJ3000280	0.59	137.35	179.76	60.29
WJ3000372	0.1	137.19	179.87	60.67
WJ3000438	0.44	137	179.76	60.78
WJ3000978	0	137.01	179.76	60.78
WJ3000884	0.16	137.15	179.92	60.80
WJ3000852	0.38	137.25	180.08	60.88
WJ3000979	0.01	136.92	179.76	60.9
WJ3000804	0.2	136.93	179.79	60.92
WJ3000920	0.28	136.9	179.87	61.08

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000102	0.43	136.57	179.76	61.4
WJ3000803	0.15	136.47	179.79	61.59
WJ3000441	0.06	136.43	179.76	61.60
WJ3000440	0.11	136.35	179.76	61.72
WJ3000439	0.22	136.33	179.76	61.74
WJ3000923	0.27	136.54	180.07	61.89
WJ3000584	0.07	136.13	179.87	62.19
WJ3000334	0.06	135.9	179.78	62.38
WJ51898	0.23	135.9	179.78	62.38
WJ51908	0.16	135.9	179.78	62.38
WJ3000442	0.36	135.82	179.75	62.45
WJ56380	0.09	135.59	179.76	62.79
WJ56382	0.13	135.59	179.76	62.79
WJ3000315	0.9	135.59	179.76	62.8
WJ56384	0.06	135.57	179.76	62.82
WJ56385	0.07	135.57	179.76	62.82
WJ56387	0	135.57	179.76	62.82
WJ56388	0	135.57	179.76	62.82
WJ56389	0.14	135.57	179.76	62.82
WJ51892	0.06	135.5	179.78	62.95
WJ56391	0	135.41	179.76	63.05
WJ3000281	0.24	135.36	179.76	63.11
WJ56431	0.07	135.25	179.76	63.28
WJ3000886	0.61	135.26	179.81	63.33
WJ3000337	0.61	135.2	179.78	63.38
WJ3000796	0.39	135.19	179.87	63.51
WJ51910	0.22	135.1	179.78	63.52
WJ51936	0.21	135.1	179.78	63.52
WJ51937	0.15	135.1	179.79	63.53
WJ3000805	0.19	135.01	179.79	63.66
WJ51893	0.02	135	179.78	63.66
WJ3000443	0.24	134.94	179.75	63.7
WJ3000626	1.04	135.09	179.92	63.73
WJ3000885	0.35	135.01	179.87	63.78
WJ3000853	1.16	135.22	180.1	63.79
WJ3000924	0.92	135.3	180.2	63.84
WJ3000806	0.25	134.79	179.79	63.97
WJ3000585	0.03	134.8	179.88	64.09
WJ56394	0.23	134.54	179.75	64.26
WJ56400	0.04	134.54	179.75	64.26
WJ56401	0.08	134.54	179.75	64.26
WJ3000354	0.31	134.42	179.75	64.43
WJ53257	0.12	134.6	180	64.53

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ53252	0.3	134.59	179.99	64.54
WJ53255	0.17	134.6	180.02	64.56
WJ3000074	0.01	134.32	179.74	64.57
WJ3000444	0.13	134.28	179.74	64.63
WJ53253	0.49	134.5	180	64.69
WJ3000445	0.36	134.16	179.74	64.8
WJ56393	0.15	134.15	179.75	64.83
WJ56421	0.23	134.15	179.75	64.83
WJ3000004	1.02	134.25	179.95	64.96
WJ3000005	0.26	133.89	179.89	65.39
WJ3000854	0.39	134.17	180.17	65.39
WJ3000572	0.53	133.89	179.94	65.45
WJ3000073	1.18	133.61	179.74	65.58
WJ3000282	0.77	133.45	179.75	65.82
WJ3000316	0.96	133.26	179.76	66.1
WJ22402	0.34	133.38	179.89	66.12
WJ3000355	0.18	133.17	179.74	66.21
WJ3000807	0.38	132.93	179.78	66.61
WJ51918	1.66	132.9	179.78	66.64
WJ56395	0.19	132.82	179.75	66.71
WJ56397	0.08	132.82	179.75	66.71
WJ51919	0.08	132.8	179.78	66.78
WJ56399	0.09	132.65	179.75	66.96
J18	9.3	132.5	179.77	67.21
J20	2.06	132.5	179.78	67.21
J22	2.94	132.5	179.78	67.21
J24	2.37	132.5	179.78	67.21
J26	3.18	132.5	179.78	67.21
WJ51921	0.14	132.5	179.78	67.21
J28	5.81	132.5	179.79	67.23
J30	2.46	132.5	179.8	67.25
WJ3000119	0	132.96	180.29	67.29
WJ3000118	0.03	132.93	180.29	67.33
WJ3001168	0.18	131.99	179.36	67.35
J32	1.2	132.5	179.93	67.42
WJ3000519	0.13	132.67	180.21	67.59
WJ3000120	0.54	132.72	180.29	67.63
WJ22421	0.22	132.24	179.91	67.76
WJ3000855	0.27	132.5	180.17	67.77
WJ3000808	0.25	132	179.78	67.92
WJ3000527	0	132.53	180.33	67.94
WJ3000531	0	132.53	180.32	67.95
WJ3000977	0.29	131.95	179.91	68.19

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000797	0.29	131.93	179.9	68.2
WJ3000525	0.33	132.32	180.34	68.26
WJ3000345	1.99	132.15	180.19	68.3
WJ3000526	0.01	132.29	180.34	68.3
WJ3000925	0.3	132.24	180.32	68.34
WJ3000975	0.07	131.82	179.93	68.39
WJ3000976	0.06	131.75	179.93	68.48
J96	0.14	131.5	179.78	68.63
WJ3000995	0.5	131.48	179.8	68.69
WJ3000520	0.31	131.81	180.15	68.72
WJ53264	0.04	131.56	179.96	68.81
WJ53276	0.07	131.56	179.97	68.81
WJ53277	0.44	131.56	179.97	68.81
WJ53269	0.04	131.56	179.98	68.83
WJ3000798	0.98	131.49	179.93	68.86
WJ3001068	0.27	131.5	179.95	68.88
J86	0	131.3	179.84	69
WJ26595	0.02	131.56	180.17	69.1
WJ26596	0	131.56	180.17	69.1
WJ3000535	0.08	131.56	180.17	69.1
WJ26597	0.24	131.56	180.18	69.11
WJ26598	0.01	131.56	180.18	69.11
J66	3.53	131.5	180.14	69.14
J68	0.09	131.5	180.16	69.18
J90	0	131.5	180.16	69.18
J80	0.09	131.5	180.19	69.22
J82	0.09	131.5	180.19	69.22
J84	2.21	131.5	180.19	69.22
J72	1.06	131.5	180.25	69.3
J74	0	131.5	180.25	69.3
J76	0.16	131.5	180.29	69.36
J78	0.12	131.5	180.29	69.36
WJ3000346	0.95	131.29	180.19	69.52
J38	0	130.84	179.78	69.57
WJ3000573	0.07	130.95	180.01	69.73
WJ3000800	0.13	130.86	179.94	69.77
WJ3000799	0.01	130.85	179.94	69.78
WJ3000528	0.15	130.81	179.94	69.83
WJ3001181	0.28	130.85	180	69.88
WJ3001165	0.19	131.37	180.62	70.01
J50	0.19	130.5	179.84	70.14
J52	1.14	130.5	179.84	70.14
WJ3001074	0.14	130.6	179.94	70.15

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3001169	0.02	130.01	179.36	70.15
WJ3001069	0.62	130.59	179.95	70.17
J54	0.91	130.5	179.95	70.30
J56	0.74	130.5	179.95	70.3
J36	0	130.3	179.77	70.33
J58	0.12	130.5	179.99	70.35
J60	6.03	130.5	179.99	70.35
J62	1.24	130.5	179.99	70.35
J64	0	130.44	179.99	70.43
WJ3000996	0.34	130.23	179.78	70.44
WJ14629	0	129.8	179.36	70.46
WJ3001238	0.17	130.58	180.14	70.46
WJ55196	0.36	130.18	179.75	70.46
WJ3000507	0.31	130.56	180.14	70.48
WJ3001245	0	130.28	179.94	70.6
WJ3000574	0.9	130.34	180.04	70.66
WJ3000347	0.66	130.42	180.18	70.74
J92	0.14	130	179.78	70.76
J94	0.14	130	179.78	70.76
J98	0.14	130	179.78	70.76
J100	0.14	130	179.8	70.8
WJ3001249	0	130.13	179.94	70.8
J34	1.73	130	179.82	70.83
WJ3001071	0	130.12	179.94	70.83
WJ3001075	0	130.11	179.94	70.84
WJ3001251	0	130.04	179.94	70.93
WJ3000071	0.09	129.85	179.75	70.94
WJ3001072	0.04	130.04	179.94	70.94
J44	0	129.84	179.77	70.98
WJ3001248	0	129.96	179.94	71.04
WJ3000530	0.01	130.13	180.12	71.06
WJ3000801	0	129.94	179.94	71.07
WJ3000575	0.02	130.12	180.12	71.09
WJ26594	0.27	130.09	180.13	71.13
WJ3000532	0.02	130.09	180.13	71.13
J102	0.14	129.61	179.82	71.38
WJ3000070	0.17	129.49	179.75	71.45
WJ3000166	0.94	129.82	180.09	71.46
J40	0	129.44	179.78	71.56
WJ38309	0.62	129.6	179.94	71.57
WJ38310	0.29	129.58	179.94	71.6
WJ51927	0.67	129.3	179.77	71.75
WJ27674	0	129.38	179.93	71.86

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000060	0.01	129.29	179.94	72
WJ3000069	0.57	129.08	179.75	72.03
J42	0	129.03	179.79	72.16
WJ3000061	0	129.15	179.93	72.18
WJ51923	0	129	179.77	72.18
WJ51925	0.61	129	179.77	72.18
WJ3000064	0.12	129.13	179.91	72.2
WJ3000065	0.69	129.06	179.87	72.24
WJ3000283	0.55	128.88	179.75	72.32
WJ3000067	0.57	128.8	179.77	72.47
WJ3000068	0.64	128.77	179.76	72.48
WJ3000062	0.05	128.93	179.94	72.52
WJ3000857	0.15	128.92	179.94	72.52
WJ3001246	0	128.93	179.94	72.52
WJ3000868	0.08	128.6	179.74	72.7
WJ3001156	0	129.44	180.64	72.78
WJ55201	0.1	128.42	179.74	72.97
WJ56502	0.28	128.41	179.74	72.97
WJ3000508	1.59	128.75	180.17	73.09
WJ55199	0.05	128.27	179.74	73.17
J48	0	128.43	179.93	73.21
WJ55058	0.02	127.78	179.36	73.33
WJ3001164	0.07	129.02	180.62	73.35
WJ3000869	0.43	128.13	179.74	73.37
WJ27615	0.47	128.26	179.95	73.48
WJ27574	0.58	128.18	179.93	73.57
J46	0	128.02	179.83	73.65
WJ27614	0.12	128.09	179.95	73.72
WJ27575	0.65	128.02	179.92	73.78
WJ27595	0.57	128.02	179.92	73.79
WJ27596	0.32	128.02	179.93	73.79
WJ3000511	0.22	128.15	180.17	73.95
WJ27634	0.4	127.88	179.97	74.05
WJ27694	0	127.88	179.97	74.05
WJ57290	1.96	127	179.36	74.44
WJ3000859	0.03	127.54	180.03	74.63
WJ3000890	0.94	127.21	179.74	74.68
WJ3000860	0.14	127.37	180.06	74.9
WJ38289	0.99	127.42	180.19	75.02
WJ3000858	0.18	127.2	180.03	75.1
WJ3000889	0.09	126.88	179.74	75.14
WJ38269	0.17	127.27	180.19	75.24
WJ38270	0	127.27	180.19	75.24

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ38271	0.01	127.27	180.19	75.24
WJ38272	0	127.27	180.19	75.24
WJ38273	0.04	127.27	180.19	75.24
WJ38249	0.01	127	180.26	75.72
WJ38229	0.14	127	180.32	75.79
WJ3000628	0.47	127.29	180.64	75.83
WJ3001239	0	127.11	180.63	76.08
WJ27654	0.05	126.48	180.01	76.1
WJ3000167	0.27	126.55	180.18	76.25
WJ3001155	0.01	126.75	180.64	76.6
WJ3000629	0.61	126.53	180.64	76.92
WJ24324	0	126.43	180.64	77.05
WJ3000627	0	126.43	180.64	77.05
WJ3001254	0	126.43	180.64	77.05
WJ24326	0	126.43	180.64	77.06
WJ3000631	0.1	126.43	180.64	77.06
WJ24325	1.11	126.43	180.65	77.07
WJ38209	0	127.13	181.42	77.19
WJ3001083	0	127.13	181.48	77.27
WJ3001167	0	126.21	180.63	77.36
WJ3001166	0	126.1	180.62	77.5
WJ3000630	0.03	126	180.64	77.68
WJ3000982	1.28	128.2	182.97	77.87
WJ38171	1.15	127.05	182.01	78.14
WJ3000758	2.59	127.23	182.26	78.24
WJ3000016	0.4	127.79	182.97	78.45
WJ3000759	5.37	127.73	182.92	78.46
WJ3000760	2.34	127.67	182.97	78.62
WJ3000339	0.7	124.15	179.77	79.07
WJ3000544	1.22	126.61	182.26	79.11
WJ3001241	0	124.64	180.63	79.59
WJ3000463	2.14	126.32	182.9	80.44
WJ56518	22.03	126.18	182.9	80.63
WJ3000632	0.79	124.91	181.75	80.81
WJ38150	1.92	127.05	184.09	81.09
WJ56519	5.17	125.85	182.9	81.1
WJ50349	0	127.05	184.18	81.23
WJ38169	0	127.05	184.19	81.24
WJ50362	0.02	127.05	184.19	81.24
WJ50350	0.01	127.05	184.23	81.29
WJ50351	0	127.05	184.24	81.3
WJ50348	0.42	127.05	184.24	81.31
WJ3000621	3.94	125.46	182.88	81.63

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000984	0.27	127.16	184.89	82.07
WJ38149	0	126.43	184.2	82.13
WJ50353	0.19	126.43	184.2	82.13
WJ50356	0	126.43	184.2	82.13
WJ50359	0	126.43	184.24	82.18
WJ50360	0	126.43	184.24	82.18
WJ50354	0.02	126.43	184.24	82.19
WJ50355	0	126.43	184.36	82.36
WJ50357	0	126.43	184.36	82.36
WJ50361	0	126.43	184.43	82.46
WJ50358	1.56	126.43	184.45	82.48
WJ56492	36.43	125.32	183.48	82.68
WJ3000985	0	126.57	184.89	82.91
WJ3000762	0.35	126.59	185.07	83.13
WJ3000763	2.27	126.59	185.08	83.15
WJ3000761	2.29	126.43	185	83.26
J16	0.14	129	188.75	84.95
WJ3001088	0.22	126.78	187.26	85.98
WJ3001087	0.81	126.51	187.26	86.36
WJ3000764	0.38	126.39	187.26	86.54
WJ3000767	11.04	126.37	187.33	86.67
WJ3000765	0.18	126.26	187.34	86.83
WJ3001089	0.79	126.08	187.26	86.97
WJ3000766	0.16	91.22	193.85	145.9

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ4018275	0	158.22	171.88	19.42
WJ3000094	0.85	157.83	171.88	19.99
WJ31211	0	157.5	171.88	20.44
WJ3000095	0.04	157.31	171.88	20.72
WJ3000011	0.41	155.74	171.88	22.94
WJ3000096	0.15	155.02	171.88	23.97
WJ3000097	0.19	154.19	171.88	25.15
WJ3000432	0.63	154.11	171.87	25.26
WJ3000433	0.3	153.32	171.87	26.37
WJ56006	0	150.93	171.88	29.78
WJ3000030	0.59	150.95	171.94	29.85
WJ3000434	0.47	150.76	171.87	30.02
WJ3000029	0.38	150.84	172	30.07
WJ52820	0.01	150	171.16	30.08
WJ52818	0.21	149.95	171.16	30.15
WJ31228	0	150.5	172.03	30.61
WJ3000055	0.25	150.32	171.88	30.65
WJ14740	0.07	149.4	171.16	30.93
WJ3000212	1.18	150.06	171.89	31.02
WJ3000791	0.07	150.12	172.03	31.15
WJ3000278	0.17	149.86	171.88	31.32
WJ3000098	0.34	149.75	171.88	31.46
WJ23834	0.65	149.81	172.03	31.58
WJ23835	0.67	149.54	172.02	31.97
WJ55511	0	149.24	171.88	32.18
WJ3000028	0.41	148.91	172	32.83
WJ3000350	0.07	148.06	171.16	32.83
WJ3000037	0.4	147.96	171.15	32.96
WJ3000012	0.55	148.62	171.87	33.06
WJ52814	0.09	147.9	171.15	33.06
WJ23838	0.59	148.74	172.03	33.11
WJ52782	0.06	147.82	171.16	33.18
WJ3000351	0.04	147.81	171.16	33.2
WJ52806	0.06	147.8	171.16	33.2
WJ52813	0.35	147.8	171.16	33.2
WJ52784	0	147.7	171.16	33.34
WJ52781	0	147.7	171.16	33.35
WJ3001142	0.13	147.68	171.16	33.37
WJ3000756	0.03	147.66	171.16	33.41
WJ3000491	0.09	147.57	171.16	33.53
WJ3000352	0.17	147.48	171.16	33.66
WJ55513	0	148.12	171.88	33.77
WJ23837	0.53	148.18	172.03	33.91

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ52804	0.04	147.2	171.16	34.05
WJ3000044	0.1	147.19	171.15	34.06
WJ3001090	0.12	147.14	171.16	34.15
WJ3000289	0.48	147.96	172.03	34.21
WJ3000492	0.01	147.08	171.16	34.23
WJ3000349	0.17	147.02	171.16	34.32
WJ52807	0.21	147	171.15	34.34
WJ3000027	0.91	147.77	171.96	34.39
WJ31227	0.12	147.81	172.06	34.48
WJ4018230	0	147.52	171.88	34.62
WJ52809	0.12	146.8	171.16	34.62
WJ55837	0	147.4	171.88	34.8
WJ3000394	0.07	146.64	171.16	34.85
WJ3000036	0.3	146.45	171.15	35.12
WJ52803	0.05	146.18	171.16	35.5
WJ3000792	0.78	147.05	172.03	35.52
WJ3000579	0.66	146.9	171.95	35.61
WJ3000279	0.66	146.66	171.88	35.86
WJ3000972	0.61	146.57	171.84	35.92
WJ52787	0.03	145.8	171.15	36.04
WJ3000058	0.33	145.74	171.15	36.13
WJ3000578	0.45	146.48	171.94	36.2
WJ3000563	0.35	146.55	172.06	36.27
WJ3000569	0.4	145.98	171.53	36.32
WJ14604	0.06	145.6	171.16	36.33
WJ52786	0.12	145.6	171.15	36.33
WJ3000624	0.13	146.46	172.06	36.39
WJ3000971	0.48	146.18	171.81	36.43
WJ3000003	0.56	146.1	171.93	36.71
WJ3001242	0.16	146.06	171.93	36.77
WJ3000883	0.98	146.06	171.98	36.85
WJ14724	0.17	145.2	171.16	36.9
WJ3000793	0.56	145.89	172.04	37.18
WJ3000023	0.06	144.89	171.17	37.36
WJ3000538	0.48	145.25	171.56	37.4
WJ14675	0.24	144.6	171.15	37.75
WJ3000047	0.11	145.42	171.97	37.75
WJ3000537	0.33	144.93	171.55	37.84
WJ3000050	0.7	145.43	172.07	37.87
WJ3000115	0.67	145.4	172.04	37.87
WJ3000875	0.76	145.1	171.8	37.96
WJ3000035	0.23	144.43	171.15	37.99
WJ54892	0.58	144.91	171.69	38.06

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000117	0.23	145.22	172.04	38.12
WJ51871	0.43	145.01	171.9	38.22
WJ3000539	0.32	144.65	171.69	38.44
WJ3000435	0.41	144.83	171.87	38.45
WJ3000013	0.43	144.81	171.88	38.48
WJ3000046	1.01	144.9	171.97	38.48
WJ57286	0.53	144	171.15	38.59
WJ3000043	0.48	143.95	171.15	38.66
WJ3000054	0.17	144.7	171.9	38.66
WJ3000002	0.53	144.72	171.92	38.67
WJ17209	0	144	171.23	38.7
WJ17210	0.7	144	171.23	38.7
WJ3000042	0.56	143.92	171.15	38.72
WJ52780	0	143.98	171.23	38.73
WJ3000874	0.12	144.48	171.74	38.75
WJ1018244	0	143.93	171.23	38.81
WJ3000024	0.07	143.9	171.23	38.85
WJ3000116	0.41	144.66	172.04	38.93
WJ3000332	0.35	144.5	171.89	38.94
WJ51947	0	144.5	171.89	38.94
WJ51882	0.06	144.5	171.9	38.95
WJ51883	0.61	144.5	171.9	38.95
WJ14729	0	143.6	171.17	39.19
WJ14744	0.22	143.6	171.17	39.19
WJ3000580	0.42	144.34	171.98	39.29
WJ3000034	0.4	143.47	171.15	39.35
WJ3000970	0.5	144.01	171.8	39.5
WJ3000001	0.6	144.02	171.91	39.64
WJ3000478	0.62	143.99	171.93	39.73
WJ3000794	0.47	143.91	172.05	40
WJ3000536	0.42	143.19	171.49	40.22
WJ3000568	0.19	143.18	171.51	40.27
WJ3000049	0.55	143.65	172.01	40.31
WJ52792	0.02	143.4	171.85	40.44
WJ3000851	0.27	143.97	172.43	40.45
WJ3000048	0.1	143.48	171.99	40.53
WJ3000540	0.42	143.34	171.86	40.54
WJ3000099	0.39	143.34	171.88	40.57
WJ3000969	0.16	143.19	171.85	40.75
WJ52810	0.22	142.48	171.16	40.76
WJ3000479	0.71	143.32	172.03	40.82
WJ3000968	0.46	143.07	171.85	40.91
WJ1018241	1.11	143.04	171.85	40.95

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000480	0.93	143.15	172.03	41.06
WJ3000051	0.65	143.06	172.05	41.21
WJ3000967	0.25	142.75	171.85	41.38
WJ3000015	0.47	142.65	171.8	41.45
WJ3000014	0.02	142.63	171.8	41.47
WJ3000643	0.52	142.35	171.54	41.49
WJ3000486	0.2	141.8	171.16	41.73
WJ3000646	0.37	141.69	171.15	41.88
WJ3000966	1.25	142.4	171.86	41.88
WJ3000567	0.1	141.53	171.41	42.48
WJ3000625	0.57	141.99	172.08	42.78
WJ3000481	0.92	141.88	172.03	42.86
WJ3000542	0.15	141.65	171.85	42.93
WJ3000541	0.21	141.47	171.86	43.19
WJ3000645	0.44	141.07	171.85	43.75
WJ3000100	0.58	141.07	171.88	43.8
WJ3000919	0.57	141.03	172.06	44.11
WJ3000482	0.34	140.92	172.07	44.28
WJ3000483	0.32	140.83	172.07	44.41
WJ3000581	0.59	140.66	172.03	44.59
WJ3000436	0.56	140.45	171.88	44.67
WJ51894	0.36	140.2	171.9	45.07
WJ51914	0.11	140.2	171.91	45.07
WJ14608	0.1	138.8	171.16	46
WJ3000101	0.6	138.56	171.88	47.36
WJ3000052	0.09	138.16	172.05	48.17
WJ55845	0	137.9	171.88	48.3
WJ55851	0.01	137.9	171.88	48.3
WJ3000437	0.52	137.87	171.88	48.34
WJ3000802	0.53	137.93	171.94	48.34
WJ55852	0	137.8	171.88	48.44
WJ3000582	0.58	137.94	172.11	48.58
WJ3000583	0.24	137.72	172.07	48.83
WJ3000795	0.71	137.56	172.05	49.04
WJ3000280	0.82	137.35	171.88	49.09
WJ3000438	0.62	137	171.88	49.57
WJ3000978	0	137.01	171.88	49.57
WJ3000372	0.14	137.19	172.07	49.59
WJ3000979	0.01	136.92	171.88	49.7
WJ3000804	0.28	136.93	171.93	49.75
WJ3000884	0.22	137.15	172.15	49.76
WJ3000852	0.42	137.25	172.43	50
WJ3000920	0.39	136.9	172.08	50

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000102	0.6	136.57	171.88	50.19
WJ3000441	0.08	136.43	171.88	50.4
WJ3000803	0.2	136.47	171.94	50.42
WJ3000440	0.16	136.35	171.88	50.51
WJ3000439	0.3	136.33	171.88	50.53
WJ3000923	0.38	136.54	172.41	51
WJ3000584	0.1	136.13	172.08	51.11
WJ3000334	0.08	135.9	171.91	51.19
WJ51898	0.32	135.9	171.91	51.19
WJ51908	0.22	135.9	171.91	51.19
WJ3000442	0.5	135.82	171.86	51.24
WJ56380	0.12	135.59	171.88	51.59
WJ56382	0.19	135.59	171.88	51.59
WJ3000315	1.25	135.59	171.89	51.6
WJ56384	0.08	135.57	171.88	51.62
WJ56385	0.09	135.57	171.88	51.62
WJ56387	0	135.57	171.88	51.62
WJ56388	0	135.57	171.88	51.62
WJ56389	0.19	135.57	171.88	51.62
WJ51892	0.09	135.5	171.91	51.77
WJ56391	0	135.41	171.88	51.85
WJ3000281	0.34	135.36	171.87	51.91
WJ56431	0.1	135.25	171.88	52.08
WJ3000886	0.85	135.26	171.97	52.18
WJ3000337	0.76	135.2	171.92	52.2
WJ51936	0.2	135.1	171.92	52.34
WJ51910	0.31	135.1	171.92	52.35
WJ51937	0.21	135.1	171.93	52.36
WJ3000796	0.54	135.19	172.07	52.42
WJ3000443	0.33	134.94	171.85	52.47
WJ3000805	0.27	135.01	171.93	52.48
WJ51893	0.03	135	171.92	52.49
WJ3000626	1.35	135.09	172.15	52.69
WJ3000885	0.48	135.01	172.08	52.71
WJ3000806	0.35	134.79	171.93	52.8
WJ3000853	1.16	135.22	172.46	52.93
WJ3000585	0.04	134.8	172.1	53.02
WJ56394	0.32	134.54	171.86	53.04
WJ56400	0.05	134.54	171.86	53.04
WJ56401	0.11	134.54	171.86	53.04
WJ3000924	1.17	135.3	172.63	53.08
WJ3000354	0.43	134.42	171.85	53.21
WJ3000074	0.01	134.32	171.85	53.35

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000444	0.19	134.28	171.85	53.4
WJ53252	0.41	134.59	172.28	53.57
WJ3000445	0.49	134.16	171.85	53.58
WJ53257	0.17	134.6	172.29	53.58
WJ56393	0.21	134.15	171.87	53.61
WJ56421	0.32	134.15	171.87	53.61
WJ53255	0.14	134.6	172.33	53.63
WJ53253	0.68	134.5	172.3	53.74
WJ3000004	1.36	134.25	172.21	53.96
WJ3000005	0.36	133.89	172.12	54.34
WJ3000073	1.64	133.61	171.85	54.36
WJ3000572	0.74	133.89	172.19	54.44
WJ3000282	1.06	133.45	171.86	54.6
WJ3000854	0.53	134.17	172.58	54.61
WJ3000316	1.33	133.26	171.88	54.89
WJ3000355	0.25	133.17	171.85	54.99
WJ22402	0.47	133.38	172.11	55.06
WJ3000807	0.52	132.93	171.92	55.43
WJ51918	1.95	132.9	171.91	55.45
WJ56397	0.11	132.82	171.85	55.48
WJ56395	0.27	132.82	171.85	55.49
WJ51919	0.07	132.8	171.91	55.59
WJ3001168	0.25	131.99	171.15	55.68
WJ56399	0.12	132.65	171.85	55.74
J18	12.86	132.5	171.9	56.01
J22	4.63	132.5	171.9	56.01
J24	3.72	132.5	171.9	56.01
J26	4.53	132.5	171.9	56.01
J20	2.24	132.5	171.9	56.02
WJ51921	0.09	132.5	171.91	56.02
J28	10.01	132.5	171.92	56.04
J30	4.47	132.5	171.94	56.07
J32	2.3	132.5	172.18	56.4
WJ3000119	0	132.96	172.79	56.63
WJ3000118	0.02	132.93	172.79	56.67
WJ22421	0.3	132.24	172.14	56.72
WJ3000808	0.32	132	171.91	56.73
WJ3000519	0.18	132.67	172.66	56.86
WJ3000120	0.32	132.72	172.79	56.97
WJ3000855	0.38	132.5	172.59	56.99
WJ3000797	0.41	131.93	172.14	57.16
WJ3000977	0.39	131.95	172.16	57.16
WJ3000527	0	132.53	172.84	57.3

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000531	0	132.53	172.84	57.31
WJ3000975	0.07	131.82	172.18	57.37
J96	0	131.5	171.9	57.44
WJ3000976	0.08	131.75	172.17	57.46
WJ3000995	0.67	131.48	171.95	57.53
WJ3000345	1.19	132.15	172.63	57.55
WJ3000525	0.2	132.32	172.86	57.63
WJ3000526	0.01	132.29	172.86	57.67
WJ3000925	0.29	132.24	172.83	57.69
WJ53264	0.06	131.56	172.24	57.83
WJ53276	0.08	131.56	172.24	57.83
WJ53277	0.62	131.56	172.24	57.83
WJ3000798	1.36	131.49	172.17	57.84
WJ53269	0.05	131.56	172.26	57.86
J86	0	131.3	172.01	57.88
WJ3001068	0.27	131.5	172.22	57.89
WJ3000520	0.41	131.81	172.56	57.93
WJ26595	0.01	131.56	172.59	58.33
WJ26596	0	131.56	172.59	58.33
WJ3000535	0.05	131.56	172.59	58.33
J66	5.05	131.5	172.54	58.34
WJ26597	0.15	131.56	172.61	58.35
WJ26598	0	131.56	172.61	58.35
J38	0	130.84	171.9	58.38
J68	0.11	131.5	172.58	58.4
J90	0	131.5	172.58	58.4
J80	0.1	131.5	172.63	58.47
J82	0.1	131.5	172.63	58.47
J84	3.16	131.5	172.63	58.47
WJ3001169	0.02	130.01	171.15	58.48
J72	1.59	131.5	172.72	58.6
J74	0	131.5	172.72	58.6
J76	0.18	131.5	172.79	58.7
J78	0.17	131.5	172.79	58.7
WJ3000346	0.57	131.29	172.63	58.77
WJ3000799	0.01	130.85	172.2	58.77
WJ3000800	0.17	130.86	172.2	58.77
WJ14629	0	129.8	171.15	58.79
WJ3000573	0.1	130.95	172.31	58.79
WJ3000528	0.14	130.81	172.2	58.83
WJ3001181	0.23	130.85	172.31	58.95
J50	0.26	130.5	172.01	59.02
J52	1.63	130.5	172.01	59.02

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
J36	0	130.3	171.9	59.14
WJ3001074	0.09	130.6	172.21	59.15
WJ3001069	0.37	130.59	172.22	59.18
WJ3000996	0.2	130.23	171.9	59.24
WJ55196	0.5	130.18	171.85	59.24
J54	1.36	130.5	172.22	59.3
J56	1.05	130.5	172.22	59.3
J58	0.13	130.5	172.28	59.4
J60	7.98	130.5	172.28	59.4
J62	1.78	130.5	172.28	59.4
J64	0	130.44	172.28	59.48
J92	0	130	171.9	59.57
J94	0	130	171.9	59.57
J98	0	130	171.9	59.57
WJ3001245	0	130.28	172.21	59.61
WJ3001165	0.11	131.37	173.31	59.62
J100	0	130	171.94	59.63
WJ3001238	0.1	130.58	172.55	59.67
J34	3.32	130	171.98	59.68
WJ3000507	0.19	130.56	172.54	59.68
WJ3000071	0.13	129.85	171.85	59.72
WJ3000574	1.25	130.34	172.38	59.76
J44	0	129.84	171.9	59.79
WJ3001249	0	130.13	172.2	59.8
WJ3001071	0	130.12	172.21	59.83
WJ3001075	0	130.11	172.21	59.84
WJ3001251	0	130.04	172.2	59.92
WJ3001072	0.03	130.04	172.21	59.94
WJ3000347	0.4	130.42	172.61	59.98
WJ3001248	0	129.96	172.2	60.04
WJ3000801	0	129.94	172.2	60.07
J102	0	129.61	171.98	60.23
WJ3000070	0.24	129.49	171.85	60.23
WJ3000530	0.01	130.13	172.51	60.25
WJ3000575	0.02	130.12	172.51	60.27
WJ26594	0.16	130.09	172.52	60.32
WJ3000532	0.01	130.09	172.52	60.32
J40	0	129.44	171.9	60.37
WJ51927	0.86	129.3	171.9	60.56
WJ38309	0.37	129.6	172.21	60.57
WJ38310	0.18	129.58	172.21	60.6
WJ3000166	0.57	129.82	172.46	60.62
WJ3000069	0.79	129.08	171.86	60.81

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ27674	0	129.38	172.18	60.84
J42	0	129.03	171.92	60.97
WJ51923	0	129	171.9	60.98
WJ51925	0.37	129	171.9	60.98
WJ3000060	0.01	129.29	172.2	61
WJ3000283	0.77	128.88	171.86	61.1
WJ3000061	0	129.15	172.18	61.16
WJ3000064	0.07	129.13	172.15	61.17
WJ3000065	0.41	129.06	172.08	61.17
WJ3000067	0.79	128.8	171.89	61.27
WJ3000068	0.89	128.77	171.87	61.27
WJ3000868	0.11	128.6	171.84	61.47
WJ3000062	0.03	128.93	172.19	61.51
WJ3000857	0.09	128.92	172.19	61.51
WJ3001246	0	128.93	172.19	61.51
WJ55058	0.03	127.78	171.15	61.66
WJ55201	0.13	128.42	171.85	61.74
WJ56502	0.39	128.41	171.85	61.74
WJ55199	0.07	128.27	171.84	61.94
WJ3000869	0.59	128.13	171.84	62.14
J48	0	128.43	172.18	62.19
WJ3000508	0.95	128.75	172.6	62.33
WJ3001156	0	129.44	173.34	62.41
WJ27615	0.28	128.26	172.21	62.48
J46	0	128.02	171.99	62.51
WJ27574	0.35	128.18	172.19	62.56
WJ27614	0.07	128.09	172.21	62.73
WJ27575	0.61	128.02	172.17	62.77
WJ27595	0.34	128.02	172.17	62.77
WJ27596	0.26	128.02	172.18	62.77
WJ57290	2.72	127	171.15	62.77
WJ3001164	0.04	129.02	173.31	62.96
WJ27634	0.24	127.88	172.25	63.08
WJ27694	0	127.88	172.25	63.08
WJ3000511	0.13	128.15	172.6	63.19
WJ3000890	1.3	127.21	171.84	63.45
WJ3000859	0.02	127.54	172.36	63.73
WJ3000889	0.12	126.88	171.84	63.91
WJ3000860	0.08	127.37	172.4	64.02
WJ3000858	0.11	127.2	172.36	64.2
WJ38289	0.6	127.42	172.64	64.28
WJ38269	0.1	127.27	172.64	64.5
WJ38270	0	127.27	172.64	64.5

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ38271	0	127.27	172.64	64.5
WJ38272	0	127.27	172.64	64.5
WJ38273	0.02	127.27	172.64	64.5
WJ38249	0.01	127	172.75	65.03
WJ38229	0.08	127	172.83	65.15
WJ27654	0.03	126.48	172.33	65.18
WJ3000628	0.28	127.29	173.34	65.46
WJ3000167	0.16	126.55	172.62	65.5
WJ3001239	0	127.11	173.32	65.7
WJ3001155	0.01	126.75	173.34	66.23
WJ3000629	0.37	126.53	173.34	66.55
WJ24324	0	126.43	173.34	66.68
WJ3000627	0	126.43	173.34	66.68
WJ3001254	0	126.43	173.34	66.68
WJ24326	0	126.43	173.35	66.69
WJ3000631	0.06	126.43	173.35	66.69
WJ24325	0.67	126.43	173.36	66.71
WJ3001167	0	126.21	173.32	66.98
WJ3001166	0	126.1	173.31	67.11
WJ3000630	0.02	126	173.34	67.3
WJ38209	0	127.13	174.62	67.51
WJ3001083	0	127.13	174.71	67.64
WJ3000339	0.97	124.15	171.89	67.87
WJ38171	0.69	127.05	175.56	68.97
WJ3000758	2.66	127.23	175.87	69.15
WJ3001241	0	124.64	173.32	69.2
WJ3000982	0.77	128.2	176.95	69.31
WJ3000759	6.6	127.73	176.86	69.85
WJ3000016	0.24	127.79	176.95	69.89
WJ3000544	1.1	126.61	175.87	70.02
WJ3000760	1.4	127.67	176.95	70.06
WJ3000632	0.47	124.91	175.08	71.32
WJ3000463	2.98	126.32	176.79	71.75
WJ56518	30.5	126.18	176.8	71.95
WJ56519	7.04	125.85	176.8	72.43
WJ3000621	5.47	125.46	176.77	72.93
WJ38150	1.15	127.05	178.81	73.59
WJ50349	0	127.05	178.96	73.8
WJ50362	0.01	127.05	178.97	73.81
WJ38169	0	127.05	178.97	73.82
WJ50350	0.01	127.05	179.02	73.89
WJ50351	0	127.05	179.04	73.91
WJ50348	0.25	127.05	179.04	73.92

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ56492	50.34	125.32	177.62	74.36
WJ38149	0	126.43	178.98	74.71
WJ50356	0	126.43	178.98	74.71
WJ50353	0.11	126.43	178.98	74.72
WJ50359	0	126.43	179.04	74.79
WJ50360	0	126.43	179.04	74.79
WJ50354	0.01	126.43	179.04	74.8
WJ50355	0	126.43	179.22	75.05
WJ50357	0	126.43	179.22	75.05
WJ3000984	0.16	127.16	179.98	75.09
WJ50361	0	126.43	179.33	75.2
WJ50358	0.94	126.43	179.35	75.23
WJ3000985	0	126.57	179.98	75.93
WJ3000762	0.21	126.59	180.25	76.28
WJ3000763	2.65	126.59	180.27	76.3
WJ3000761	1.37	126.43	180.14	76.35
WJ3001088	0.13	126.78	183.62	80.81
J16	0	129	185.92	80.92
WJ3001087	0.49	126.51	183.62	81.18
WJ3000764	0.23	126.39	183.62	81.37
WJ3000767	15.34	126.37	183.73	81.55
WJ3000765	0.11	126.26	183.75	81.72
WJ3001089	0.48	126.08	183.62	81.79
WJ3000766	0.1	91.22	193.77	145.79

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ52792	0.03	51.66	179.74	317	-403.83	85.86	0	-231.17
WJ1018241	0.88	52.18	179.74	317	-391.53	88.36	0	-229.52
WJ3000029	0.63	41.19	179.82	317	-152.15	116.13	0	-201.5
WJ51871	0.48	49.41	179.77	317	-132.1	135.73	0	-181.75
WJ56400	0.04	64.26	179.75	317	-94.49	173.97	0	-143.07
J38	0	69.57	179.78	317	-31.73	187.15	20	-129.85
WJ3000996	0.34	70.44	179.78	317	-85.78	187.74	0	-129.6
WJ56400	0.04	68.06	182.42	317	-84.31	188	0	-129.04
J40	0	71.56	179.78	317	-33.04	189.21	20	-127.79
J36	0	70.33	179.77	317	-29.55	190.88	20	-126.12
J44	0	70.98	179.77	317	-29.38	192.24	20	-124.76
J42	0	72.16	179.79	317	-27.33	196.81	20	-120.19
J46	0	73.65	179.83	317	-28.3	198.41	20	-118.59
J48	0	73.21	179.93	317	-25.19	201.83	20	-115.17
WJ3000630	0.03	77.68	180.64	190	-318.38	75.25	0	-114.78
WJ3000621	3.94	81.63	182.88	317	-80.37	211.02	0	-109.92
WJ51921	0.14	67.21	179.78	317	-50.72	214.25	0	-102.89
WJ51919	0.08	66.78	179.78	317	-48.36	216.31	0	-100.77
WJ3000567	0.13	53.99	179.5	190	-122.69	89.4	0	-100.73
WJ3000030	0.59	41	179.79	190	-91.1	91.3	0	-99.29
WJ3000463	2.14	80.44	182.9	317	-61.46	224.07	0	-95.07
WJ3001181	0.28	69.88	180	190	-146.27	97.73	0	-92.55
WJ51918	1.66	66.64	179.78	317	-36.06	233.59	0	-85.07
WJ3001068	0.27	68.88	179.95	317	-33.72	238.78	0	-78.49
WJ51927	0.67	71.75	179.77	317	-32.18	243.6	0	-74.07
WJ51925	0.61	72.18	179.77	317	-32.31	243.77	0	-73.84
WJ3000027	0.85	45.53	179.8	190	-45.21	120.67	0	-70.18
WJ3000028	0.55	43.94	179.82	190	-40.33	123.02	0	-67.53
WJ3000578	0.38	47.36	179.79	190	-43.61	123.18	0	-67.2
WJ27575	0.65	73.78	179.92	317	-28.15	252.28	0	-65.37
WJ27595	0.57	73.79	179.92	317	-27.98	252.47	0	-65.1
WJ31228	0.01	41.72	179.84	190	-32.99	127	0	-63.01
WJ3001069	0.62	70.17	179.95	317	-23.47	257.37	0	-60.25
WJ3000800	0.13	69.77	179.94	317	-22.11	259	0	-58.13
WJ3000799	0.01	69.78	179.94	317	-21.99	259.12	0	-57.89
WJ3000528	0.15	69.83	179.94	317	-21.91	259.46	0	-57.69
WJ3001074	0.14	70.15	179.94	317	-21.5	260.53	0	-56.61
J64	0	70.43	179.99	317	-21.55	260.63	0	-56.37
WJ3000345	1.99	68.3	180.19	317	-19.67	264.95	0	-54.04
WJ3001242	0.12	47.95	179.79	190	-29.44	136.54	0	-53.58
WJ3000507	0.31	70.48	180.14	317	-18.02	268.29	0	-49.02
WJ3000975	0.07	68.39	179.93	190	-27.49	152.94	0	-37.13
WJ3000976	0.06	68.48	179.93	190	-26.03	154.41	0	-35.65

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ31227	0.08	45.57	179.86	190	-13.23	157.84	0	-32.24
WJ3000044	0.07	45.73	179.36	65	-23.52	50.19	0	-14.88
WJ3001142	0.1	45.04	179.37	65	-22.51	50.48	0	-14.62
WJ52787	0.02	47.71	179.36	65	-22.33	51.16	0	-13.86
WJ3001089	0.79	86.97	187.26	317	-6.48	304.33	0	-13.46
WJ3000050	0.52	48.96	179.87	190	-4.77	177.78	0	-12.74
WJ52786	0.08	48	179.36	65	-19.27	52.67	0	-12.41
WJ3001090	0.09	45.81	179.37	65	-16.78	53.42	0	-11.67
WJ52782	0.04	44.85	179.37	65	-16.15	53.48	0	-11.56
WJ3000492	0.01	45.89	179.37	65	-12.87	55.5	0	-9.51
WJ3000756	0.02	45.08	179.37	65	-12.41	55.63	0	-9.39
WJ3000394	0.05	46.52	179.36	65	-11.66	56.37	0	-8.68
WJ3000350	0.05	44.5	179.37	65	-9.62	57.3	0	-7.75
WJ3000351	0.03	44.86	179.37	65	-9.33	57.54	0	-7.49
WJ3001155	0.01	76.6	180.64	190	-4.86	182.58	0	-7.43
WJ3000491	0.06	45.2	179.37	65	-8.57	58.14	0	-6.92
WJ3000352	0.12	45.33	179.37	65	-8.08	58.55	0	-6.57
WJ3000058	0.24	47.8	179.36	65	-7.31	59.53	0	-5.71
WJ3000868	0.08	72.7	179.74	65	-12.15	59.5	0	-5.58
WJ52820	0.01	41.75	179.37	65	-6	59.46	0	-5.55
WJ3000349	0.12	45.99	179.36	65	-6.07	60.08	0	-5.04
WJ52818	0.15	41.82	179.37	65	-4.42	60.93	0	-4.22
WJ3000037	0.29	44.63	179.36	65	-4.06	61.65	0	-3.64
WJ14740	0.05	42.6	179.37	65	-3.43	61.78	0	-3.27
WJ14675	0.17	49.42	179.36	65	-3.56	62.31	0	-2.86
WJ52814	0.06	44.73	179.36	65	-3.09	62.24	0	-2.82
WJ3000036	0.22	46.79	179.36	65	-3.18	62.47	0	-2.75
WJ52804	0.03	45.72	179.36	65	-3.09	62.29	0	-2.74
WJ52806	0.04	44.87	179.36	65	-2.89	62.41	0	-2.63
WJ52807	0.15	46.01	179.36	65	-2.87	62.61	0	-2.54
WJ3000854	0.39	65.39	180.17	190	-1.21	188.03	0	-2.36
WJ52813	0.25	44.87	179.36	65	-1.82	63.56	0	-1.69
WJ57286	0.38	50.27	179.36	65	-1.58	64.09	0	-1.29
WJ52809	0.09	46.29	179.36	65	-1.1	64.09	0	-1
WJ3000047	0.08	48.89	179.81	65	-0.88	64.38	0	-0.7
WJ3000043	0.35	50.34	179.36	65	-0.58	64.86	0	-0.49
WJ3000035	0.16	49.66	179.36	65	-0.51	64.73	0	-0.43
WJ52803	0.04	47.17	179.36	65	-0.3	64.76	0	-0.28
WJ3000042	0.4	50.39	179.36	65	0.77	66.06	0	0.66
WJ3000034	0.29	51.03	179.36	65	1.48	66.55	0	1.26
WJ3000646	0.26	53.55	179.36	65	2.09	66.97	0	1.71
WJ14604	0.05	48	179.37	65	1.89	66.8	0	1.75
WJ14724	0.12	48.57	179.37	65	2.65	67.59	0	2.47

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000855	0.27	67.77	180.17	190	1.31	192.83	0	2.56
WJ3000884	0.16	60.8	179.92	65	4.7	68.34	0	3.18
WJ57286	0.38	54.2	182.13	65	4.33	68.94	0	3.56
WJ3000023	0.04	49.02	179.37	65	3.89	68.72	0	3.68
WJ3000889	0.09	75.14	179.74	65	7.78	69.42	0	4.33
WJ52810	0.16	52.43	179.36	65	5.36	69.95	0	4.79
WJ14744	0.16	50.85	179.37	65	5.42	70.21	0	5.05
WJ3000486	0.14	53.4	179.36	65	6.16	70.61	0	5.47
WJ3000519	0.13	67.59	180.21	190	3.18	196.53	0	6.4
WJ17210	0.5	50.33	179.4	65	7.87	73.32	0	7.82
WJ3000024	0.12	50.47	179.4	65	8.16	73.25	0	8.13
WJ3000851	0.19	51.33	180.08	65	10.46	75.01	0	9.82
WJ14608	0.07	57.67	179.37	65	11.67	75.52	0	10.45
WJ3001238	0.17	70.46	180.14	190	6.53	203.33	0	13.16
WJ3000542	0.11	54.15	179.75	65	14.61	79.29	0	14.18
WJ3000541	0.15	54.42	179.76	65	14.84	79.69	0	14.54
WJ3000569	0.29	47.75	179.57	65	13.72	81.91	0	16.62
WJ3001168	0.18	67.35	179.36	65	20.37	82.42	0	17.24
J90	0	69.18	180.16	190	8.8	208.95	0	18.95
WJ3000117	0.17	49.23	179.85	65	16.47	84.34	0	19.17
WJ3001169	0.02	70.15	179.36	65	23.08	84.34	0	19.32
WJ3000568	0.14	51.72	179.56	65	17.05	85.06	0	19.92
WJ56518	22.03	80.63	182.9	317	7.1	360.23	0	21.2
WJ55058	0.02	73.33	179.36	65	26.09	86.56	0	21.54
WJ3000052	0.06	59.26	179.85	65	22.46	87.4	0	22.34
WJ57290	1.96	74.44	179.36	65	27.27	89.42	0	22.46
WJ56519	5.17	81.11	182.9	317	7.76	345.35	0	23.18
WJ3000536	0.3	51.68	179.55	65	19.32	89.74	0	24.44
WJ3000645	0.31	54.97	179.74	65	22	90.77	0	25.46
WJ3000339	0.7	79.07	179.77	65	34.01	92.18	0	26.48
WJ57290	1.96	78.37	182.13	65	33.17	94.47	0	27.51
WJ3000432	0.46	36.46	179.76	65	14.46	93	0	27.54
J86	0	69	179.84	190	11.9	217.7	0	27.7
WJ3000016	0.4	78.45	182.97	190	15.22	218.54	0	28.14
WJ3000537	0.24	49.26	179.58	65	20.46	94.6	0	29.36
WJ3000014	0.02	52.73	179.72	65	23.02	95.14	0	30.12
WJ3000538	0.34	48.82	179.59	65	20.54	95.47	0	30.13
WJ3000643	0.38	52.92	179.58	65	23.09	96.85	0	31.47
WJ3001164	0.07	73.35	180.62	190	15.76	224.95	0	34.88
WJ3000015	0.34	52.71	179.72	65	24.92	100.35	0	35.01
WJ3000540	0.3	51.77	179.76	65	24.59	101	0	35.7
WJ3000890	0.94	74.68	179.74	65	38.21	102.82	0	36.88
WJ3000995	0.5	68.69	179.8	190	14.94	227.99	0	37.49

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ51936	0.21	63.52	179.78	190	13.49	227.87	0	37.66
WJ23837	0.38	45.01	179.84	65	22.14	103.46	0	38.08
WJ3000539	0.23	49.77	179.66	65	24	103.4	0	38.17
WJ3000337	0.61	63.38	179.78	190	13.67	229.07	0	38.46
WJ56492	36.43	82.68	183.48	317	12.68	392.29	0	38.86
WJ54892	0.42	49.4	179.66	65	24.07	104.64	0	39.22
WJ3000011	0.29	34.14	179.76	65	16.06	104.62	0	39.33
WJ3000433	0.22	37.58	179.76	65	18.22	105.33	0	40.11
WJ38310	0.29	71.6	179.94	190	16.77	230.64	0	40.35
WJ3000874	0.09	50.05	179.69	65	25.23	106.48	0	41.39
WJ55851	0.01	59.5	179.76	65	32.71	109.57	0	44.56
WJ3000859	0.03	74.63	180.03	190	19.39	235.71	0	45.68
WJ3000074	0.01	64.57	179.74	65	36.1	110.7	0	45.69
WJ3000853	1.16	63.79	180.1	190	16.02	237.69	0	46.53
WJ3000065	0.69	72.24	179.87	190	18.77	237.41	0	46.72
WJ3000967	0.18	52.6	179.75	65	28.7	112.04	0	46.86
WJ38309	0.62	71.57	179.94	190	18.89	238.27	0	47.65
WJ3000119	0	67.29	180.29	190	17.64	237.67	0	47.67
WJ3000858	0.18	75.1	180.03	190	20.22	238.24	0	48.06
WJ3000971	0.34	47.69	179.73	65	25.8	113.93	0	48.59
WJ3000972	0.44	47.16	179.74	65	25.72	114.84	0	49.4
WJ3000478	0.44	50.91	179.8	65	28.14	114.96	0	49.52
WJ3000875	0.54	49.22	179.72	65	26.9	115.11	0	49.57
WJ3000434	0.34	41.23	179.76	65	22.32	114.92	0	49.58
WJ3000347	0.66	70.74	180.18	190	19.59	241.42	0	50.76
WJ3000924	0.92	63.84	180.2	190	17.38	243	0	52.08
WJ3000046	0.73	49.63	179.81	65	28.35	118.06	0	52.33
WJ3000869	0.43	73.37	179.74	65	44.27	118.72	0	53.29
WJ27615	0.47	73.48	179.95	190	21.18	244.25	0	53.78
WJ3000966	0.9	53.1	179.75	65	30.8	120.17	0	54.27
WJ3000094	0.61	31.18	179.76	65	16.42	120.06	0	54.45
WJ3000012	0.4	44.26	179.76	65	25.37	120.84	0	55.44
WJ3000095	0.03	31.92	179.76	65	17.17	121.86	0	56.83
WJ3000579	0.48	46.77	179.8	65	27.43	123.49	0	58.01
WJ3000064	0.12	72.2	179.91	190	21.79	248.34	0	58.22
WJ3000970	0.36	50.76	179.72	65	29.76	123.65	0	58.29
WJ3000977	0.29	68.19	179.91	190	20.42	249.3	0	59.01
WJ3001165	0.19	70.01	180.62	190	21.88	250.45	0	60.26
WJ23834	0.47	42.69	179.84	65	25.3	126.65	0	61.18
WJ3000968	0.33	52.14	179.75	65	31.57	127.1	0	61.77
WJ3000002	0.38	49.85	179.78	65	30.18	127.4	0	62.02
WJ3000535	0.08	69.1	180.17	190	21.69	252.22	0	62.14
WJ3000001	0.44	50.83	179.78	65	30.92	127.91	0	62.47

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000346	0.95	69.52	180.19	190	22.21	254.63	0	63.68
WJ3000791	0.06	42.26	179.84	65	25.64	131.06	0	66
WJ3000979	0.01	60.9	179.76	65	39.16	131.37	0	66.36
WJ27614	0.12	73.72	179.95	190	24.36	256.54	0	66.42
WJ3000883	0.71	47.99	179.82	65	29.71	132.43	0	66.72
WJ3000860	0.14	74.9	180.06	190	25.08	257.02	0	66.88
WJ27574	0.58	73.57	179.93	190	24.39	257.49	0	66.91
WJ27596	0.32	73.79	179.93	190	24.5	257.32	0	67
WJ3000802	0.38	59.51	179.79	65	38.37	132.46	0	67.08
WJ3000060	0.01	72	179.94	190	23.84	257.25	0	67.24
WJ27634	0.4	74.05	179.97	190	24.71	257.65	0	67.25
WJ3000096	0.11	35.17	179.76	65	20.53	132.65	0	67.54
WJ3000166	0.94	71.46	180.09	190	23.83	258.57	0	67.63
WJ3001072	0.04	70.94	179.94	190	23.56	258.05	0	68.01
WJ3000445	0.36	64.8	179.74	65	42.18	133.68	0	68.32
WJ3000969	0.11	51.97	179.75	65	32.54	133.64	0	68.53
WJ27654	0.05	76.1	180.01	190	26.03	258.97	0	68.92
WJ3000372	0.1	60.67	179.87	65	39.65	134.22	0	69.12
WJ3000857	0.15	72.52	179.94	190	24.49	259.46	0	69.31
WJ3000435	0.29	49.65	179.76	65	31.34	134.61	0	69.32
WJ3000444	0.13	64.63	179.74	65	42.3	134.7	0	69.57
WJ3000480	0.67	52.17	179.85	65	33.23	135.37	0	69.7
WJ3000120	0.54	67.63	180.29	190	22.77	260.41	0	69.87
WJ3000055	0.18	41.85	179.76	65	25.75	135.48	0	70.3
WJ3000479	0.51	51.94	179.85	65	33.15	136.19	0	70.68
WJ3000118	0.03	67.33	180.29	190	22.85	260.97	0	70.94
WJ55199	0.05	73.17	179.74	65	48.9	136.05	0	71
WJ3000097	0.14	36.35	179.76	65	21.73	136.34	0	71.2
WJ3000003	0.41	47.89	179.79	65	30.13	136.75	0	71.34
WJ23835	0.49	43.08	179.84	65	26.87	136.97	0	71.48
WJ3000511	0.22	73.95	180.17	190	25.84	261.77	0	71.55
WJ3000629	0.61	76.92	180.64	190	27.59	262.94	0	72.33
WJ3000508	1.59	73.09	180.17	190	25.6	263.92	0	72.33
WJ3000013	0.31	49.68	179.76	65	31.82	137.96	0	72.65
WJ3000289	0.35	45.31	179.84	65	28.69	138.01	0	72.66
WJ3000278	0.12	42.51	179.76	65	26.5	137.79	0	72.67
WJ3000279	0.48	47.06	179.76	65	29.92	138.32	0	72.84
WJ3000073	1.18	65.58	179.74	65	43.72	139.69	0	73.51
WJ38249	0.01	75.72	180.26	190	27.13	263.65	0	73.64
WJ3000115	0.48	48.97	179.85	65	31.58	139.17	0	73.69
WJ38171	1.15	78.14	182.01	190	29.27	265.65	0	74.5
WJ26597	0.24	69.11	180.18	190	24.42	265.83	0	75.59
WJ3000925	0.3	68.34	180.32	190	24.18	266.04	0	75.74

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
J74	0	69.3	180.25	190	24.66	265.98	0	75.98
WJ56502	0.28	72.97	179.74	65	49.9	141.89	0	76.61
WJ55201	0.1	72.97	179.74	65	49.92	141.76	0	76.66
WJ38271	0.01	75.24	180.19	190	27.5	266.8	0	76.79
WJ3000575	0.02	71.09	180.12	190	25.6	267.16	0	77.14
WJ3000530	0.01	71.06	180.12	190	25.64	267.45	0	77.44
WJ38289	0.99	75.02	180.19	190	27.61	268.81	0	77.82
WJ38273	0.04	75.24	180.19	190	27.73	267.94	0	77.9
WJ23838	0.43	44.22	179.84	65	28.46	143.66	0	78.23
WJ3000525	0.33	68.26	180.34	190	24.67	268.66	0	78.33
WJ3000526	0.01	68.3	180.34	190	24.7	268.39	0	78.38
WJ38269	0.17	75.24	180.19	190	27.92	269.02	0	78.85
WJ3000167	0.27	76.25	180.18	190	28.52	269.52	0	79.25
WJ26594	0.27	71.13	180.13	190	26.08	269.95	0	79.68
WJ3000281	0.24	63.11	179.76	65	43.12	145.17	0	79.93
WJ38229	0.14	75.79	180.32	190	28.99	272.25	0	82.11
WJ56518	22.03	84.55	185.66	317	24.32	421.74	0	82.71
WJ3000436	0.4	55.87	179.76	65	37.98	149.37	0	83.97
WJ3000116	0.3	50.03	179.85	65	33.58	149.32	0	84.02
WJ56502	0.28	76.74	182.4	65	54.85	149.31	0	84.03
WJ3000482	0.24	55.36	179.87	65	37.88	150.06	0	84.82
WJ3000049	0.4	51.43	179.83	65	34.63	150.27	0	84.87
WJ56519	5.17	85.03	185.66	317	24.97	407.25	0	85.08
WJ3000048	0.07	51.66	179.82	65	34.83	150.41	0	85.34
WJ3000852	0.38	60.88	180.08	65	42.29	151.28	0	85.9
WJ3000483	0.23	55.49	179.87	65	38.14	151.44	0	86.21
WJ3000443	0.24	63.7	179.75	65	44.33	151.65	0	86.41
WJ3000580	0.3	50.43	179.82	65	33.92	151.75	0	86.45
WJ3000581	0.42	55.7	179.85	65	38.26	152.28	0	86.86
WJ3000481	0.66	53.97	179.85	65	36.94	153.04	0	87.38
WJ3000212	1.1	42.22	179.76	65	27.62	153.86	0	87.76
WJ3000583	0.18	59.92	179.87	65	41.96	153.97	0	88.79
WJ3000355	0.18	66.21	179.74	65	46.69	154.62	0	89.44
WJ3000098	0.24	42.66	179.76	65	28.09	154.74	0	89.5
WJ3000354	0.31	64.43	179.75	65	45.45	155.84	0	90.53
WJ3000792	0.56	46.63	179.85	65	31.52	156.89	0	91.33
WJ3000437	0.37	59.54	179.76	65	41.85	157.71	0	92.34
WJ3000051	0.47	52.31	179.85	65	36.73	163.7	0	98.23
WJ3000438	0.44	60.78	179.76	65	43.48	163.76	0	98.32
WJ3000442	0.36	62.45	179.75	65	44.8	163.72	0	98.36
WJ3000280	0.59	60.29	179.76	65	43.18	164.72	0	99.13
WJ3000628	0.47	75.83	180.64	190	32.28	289.76	0	99.29
WJ56421	0.23	64.83	179.75	65	47.04	166.17	0	100.94

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000923	0.27	61.89	180.07	65	44.66	166.33	0	101.06
WJ3000803	0.15	61.59	179.79	65	44.64	167.03	0	101.88
WJ3000793	0.4	48.28	179.85	65	33.71	167.9	0	102.5
WJ50353	0.19	82.13	184.2	190	38.22	293.74	0	103.55
WJ3000585	0.03	64.09	179.88	65	47.01	168.98	0	103.95
WJ3000563	0.25	47.36	179.86	65	33.06	169.38	0	104.13
WJ3000804	0.2	60.92	179.79	65	44.32	169.56	0	104.36
WJ55196	0.36	70.46	179.75	65	51.97	169.85	0	104.49
WJ56492	36.43	86.6	186.23	317	29.88	458.24	0	104.81
WJ3000919	0.41	55.2	179.86	65	39.67	170.27	0	104.86
WJ3000624	0.09	47.48	179.86	65	33.22	170.13	0	105.04
WJ56401	0.08	64.26	179.75	65	47.05	171.65	0	106.57
WJ56397	0.08	66.71	179.75	65	49.1	172.03	0	106.95
WJ3000920	0.28	61.08	179.87	65	44.86	173.49	0	108.21
WJ51883	0.44	50.14	179.77	65	35.59	174.61	0	109.17
WJ3000886	0.61	63.33	179.81	65	46.8	175.06	0	109.45
WJ3000332	0.58	50.14	179.76	65	35.64	175.91	0	110.33
WJ3000631	0.1	77.06	180.64	190	34.73	300.53	0	110.43
WJ3000572	0.53	65.45	179.94	65	48.75	176	0	110.47
WJ24325	1.11	77.07	180.65	190	34.79	301.85	0	110.74
WJ56393	0.15	64.83	179.75	65	47.97	176.09	0	110.94
WJ3000584	0.07	62.19	179.87	65	46.13	177.44	0	112.37
WJ3000005	0.26	65.39	179.89	65	48.93	178.41	0	113.15
WJ3000054	0.19	49.85	179.77	65	35.63	179.06	0	113.87
WJ3000885	0.35	63.78	179.87	65	47.63	179.51	0	114.16
WJ56421	0.23	68.64	182.43	65	52.32	179.64	0	114.41
WJ3000315	0.9	62.8	179.76	65	46.62	180.53	0	114.63
WJ51882	0.05	50.14	179.77	65	35.92	179.8	0	114.75
WJ3000099	0.28	51.77	179.76	65	37.27	180.27	0	114.99
WJ22402	0.34	66.12	179.89	65	49.7	180.37	0	115.03
WJ3000794	0.34	51.1	179.85	65	36.91	180.89	0	115.55
WJ3000807	0.38	66.61	179.78	65	50.02	181.26	0	115.88
WJ56397	0.08	70.49	182.41	65	54.18	183.85	0	118.77
WJ51914	0.08	56.26	179.77	65	41.41	184.03	0	118.95
WJ56399	0.09	66.96	179.75	65	50.36	184.28	0	119.19
WJ50354	0.02	82.19	184.24	190	41.05	309.5	0	119.48
WJ56395	0.19	66.71	179.75	65	50.18	184.86	0	119.67
WJ3000282	0.77	65.82	179.75	65	49.5	185.47	0	119.7
WJ50362	0.02	81.24	184.19	190	40.5	309.93	0	119.91
WJ56384	0.06	62.82	179.76	65	47.02	185.12	0	120.06
WJ56401	0.08	68.05	182.42	65	52.24	185.29	0	120.21
WJ56394	0.23	64.26	179.75	65	48.16	185.61	0	120.38
WJ22421	0.22	67.76	179.91	65	51.59	186.32	0	121.1

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000316	0.96	66.1	179.76	65	50.03	188.83	0	122.87
WJ3000100	0.42	55	179.76	65	40.59	190.15	0	124.73
WJ3000573	0.07	69.73	180.01	65	53.65	190.04	0	124.97
WJ3000439	0.22	61.74	179.76	65	46.42	190.42	0	125.2
WJ53252	0.3	64.54	179.99	65	49.04	190.9	0	125.6
WJ3000805	0.19	63.66	179.79	65	48.25	190.94	0	125.75
WJ53276	0.07	68.81	179.97	65	52.94	191.8	0	126.73
WJ3000806	0.25	63.97	179.79	65	48.59	192.15	0	126.9
WJ3000441	0.06	61.6	179.76	65	46.42	192.2	0	127.14
WJ3000071	0.09	70.94	179.75	65	54.37	192.26	0	127.17
WJ50350	0.01	81.29	184.23	190	41.63	317.2	0	127.19
WJ53269	0.04	68.83	179.98	65	53.01	192.28	0	127.24
WJ56382	0.13	62.79	179.76	65	47.52	192.94	0	127.81
WJ53264	0.04	68.81	179.96	65	53.03	193.1	0	128.06
WJ3000625	0.41	53.86	179.87	65	39.95	193.6	0	128.19
WJ3000440	0.11	61.72	179.76	65	46.71	195.56	0	130.45
WJ3000070	0.17	71.45	179.75	65	55.08	195.95	0	130.78
WJ56399	0.09	70.74	182.41	65	55.41	197.22	0	132.13
WJ51893	0.02	63.66	179.78	65	48.67	198.13	0	133.11
WJ51894	0.26	56.26	179.77	65	42.17	198.49	0	133.23
WJ53277	0.44	68.81	179.97	65	53.44	199.67	0	134.23
WJ3000982	1.28	77.87	182.97	190	40.84	325.52	0	134.24
WJ51892	0.06	62.95	179.78	65	48.16	200.32	0	135.26
WJ3000520	0.31	68.72	180.15	65	53.6	200.94	0	135.63
WJ3000101	0.43	58.57	179.76	65	44.27	201.53	0	136.1
WJ3000283	0.55	72.32	179.75	65	56.44	205.23	0	139.68
WJ38150	1.92	81.09	184.09	190	43.28	332.99	0	141.07
WJ3000544	1.22	79.11	182.26	65	64.38	208.01	0	141.79
WJ3000069	0.57	72.03	179.75	65	56.43	209.1	0	143.53
WJ3000102	0.43	61.4	179.76	65	47.18	210.17	0	144.74
WJ3000582	0.42	59.64	179.89	65	45.81	210.23	0	144.81
WJ3000795	0.51	60.13	179.86	65	46.32	211.45	0	145.94
WJ3000334	0.06	62.38	179.78	65	48.22	212.21	0	147.15
WJ56389	0.14	62.82	179.76	65	48.65	214.41	0	149.27
WJ3000574	0.9	70.66	180.04	65	56.02	215.35	0	149.45
WJ56380	0.09	62.79	179.76	65	48.69	215.75	0	150.66
WJ56431	0.07	63.28	179.76	65	49.13	215.94	0	150.87
WJ56385	0.07	62.82	179.76	65	48.75	216.36	0	151.29
WJ50348	0.42	81.31	184.24	190	44.87	342.5	0	152.08
WJ3000632	0.79	80.81	181.75	190	43.49	343.41	0	152.62
WJ51908	0.16	62.38	179.78	65	48.49	218.59	0	153.43
WJ3000068	0.64	72.48	179.76	65	57.41	219.23	0	153.59
WJ51898	0.23	62.38	179.78	65	48.51	218.98	0	153.75

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000796	0.39	63.51	179.87	65	49.86	223.4	0	158.01
WJ3000626	1.04	63.73	179.92	65	50.03	224.32	0	158.28
WJ51910	0.22	63.52	179.78	65	49.92	228.46	0	163.24
WJ3000758	2.59	78.24	182.26	190	43.52	356.23	0	163.64
WJ51937	0.15	63.53	179.79	65	49.95	228.86	0	163.71
WJ3000004	1.02	64.96	179.95	65	51.46	231.84	0	165.82
WJ3001088	0.22	85.98	187.26	190	53.95	356.73	0	166.51
WJ53257	0.12	64.53	180	65	51.19	233.32	0	168.2
WJ53253	0.49	64.69	180	65	51.36	234.6	0	169.11
WJ3000808	0.25	67.92	179.78	65	54.11	234.5	0	169.25
WJ53255	0.17	64.56	180.02	65	51.26	234.55	0	169.38
WJ3000797	0.29	68.2	179.9	65	54.67	237.31	0	172.02
WJ56431	0.07	67.11	182.46	65	54.47	239.9	0	174.83
WJ3000067	0.57	72.47	179.77	65	58.41	240.68	0	175.11
WJ50358	1.56	82.48	184.45	190	48.42	369.88	0	178.32
WJ3000798	0.98	68.86	179.93	65	55.53	245.03	0	179.05
WJ3000062	0.05	72.52	179.94	65	59.3	258.88	0	193.83
WJ3000759	5.37	78.46	182.92	190	47.26	389.92	0	194.55
WJ3000760	2.34	78.62	182.97	190	47.55	388.74	0	196.4
WJ26595	0.02	69.1	180.17	65	56.52	263.43	0	198.41
WJ26598	0.01	69.11	180.18	65	56.59	265.49	0	200.48
WJ3000532	0.02	71.13	180.13	65	58.52	269.54	0	204.52
WJ3001087	0.81	86.36	187.26	190	60.9	428.79	0	237.98
WJ3000767	11.04	86.67	187.33	317	49.46	581.07	0	253.03
WJ3000984	0.27	82.07	184.89	190	55.65	443.82	0	253.55
WJ3000761	2.29	83.26	185	190	59.83	498.56	0	306.27
WJ3000762	0.35	83.13	185.07	190	60.02	501.08	0	310.73
WJ3000763	2.27	83.15	185.08	190	60.08	503.83	0	311.56
WJ3000764	0.38	86.54	187.26	190	69.38	634.92	0	444.54
WJ3000765	0.18	86.83	187.34	190	69.89	641.81	0	451.63
J16	0.14	84.95	188.75	190	71.61	742.91	0	552.77
WJ3000766	0.16	145.9	193.85	190	145.53	8,499.89	0.04	8309.73

Attachment G

Water Main Along	From	To	Model Pipe ID (Char)	Length (m)	Proposed Diameter (mm)	Roughness (Double)	Upgrade type
Overlea Blvd	West of Don River	Thorncliffe Park Dr	LN3001128	1.7	400	120	Rehab to improve Roughness
Overlea Blvd	West of Don River	Thorncliffe Park Dr	LN3001133	6.9	400	120	Rehab to improve Roughness
Overlea Blvd	West of Don River	Thorncliffe Park Dr	LN3007905	188.0	400	120	Rehab to improve Roughness
Overlea Blvd	West of Don River	Thorncliffe Park Dr	LN3007921	177.6	400	120	Rehab to improve Roughness
Overlea Blvd	West of Don River	Thorncliffe Park Dr	P19	11.1	400	120	Rehab to improve Roughness
Overlea Blvd	West of Don River	Thorncliffe Park Dr	P21	105.0	400	120	Rehab to improve Roughness
Length of Upgrades (m)				490.3			
Beth Nealon Dr	Thorncliffe Park Dr	Wicksteed Ave	LN3007863	240.3	400	120	Upsize from 300 mm
Beth Nealon Dr	Thorncliffe Park Dr	Wicksteed Ave	LN50425	186.2	400	115	Upsize from 300 mm
Beth Nealon Dr	Thorncliffe Park Dr	Wicksteed Ave	LN50424	54.6	400	115	Upsize from 300 mm
Beth Nealon Dr	Thorncliffe Park Dr	Wicksteed Ave	LN38484	19.3	400	120	Upsize from 300 mm
Length of Upgrades (m)				500.4			
Wicksteed Ave	Beth Nealon Dr	Leslie St	LN38485	186.3	400	120	Upsize from 300 mm
Wicksteed Ave	Beth Nealon Dr	Leslie St	LN50449	50.3	400	120	Upsize from 300 mm
Wicksteed Ave	Beth Nealon Dr	Leslie St	LN38502	8.7	400	120	Upsize from 300 mm
Wicksteed Ave	Beth Nealon Dr	Leslie St	LN38503	104.8	400	120	Upsize from 300 mm
Length of Upgrades (m)				350.1			
Leslie St	Wicksteed Ave	Research Rd	LN38524	19.1	300	120	Upsize from 200 mm
Leslie St	Wicksteed Ave	Research Rd	LN3009318	78.0	300	120	Upsize from 200 mm
Length of Upgrades (m)				97.0			
Leonard Linton Park Easment	Wicksteed Ave	Vanderhoof Ave	LN3009298	92.7	200	120	Upsize from 150 mm
Leonard Linton Park Easment	Wicksteed Ave	Vanderhoof Ave	LN3009241	83.2	200	120	Upsize from 150 mm
Leonard Linton Park Easment	Wicksteed Ave	Vanderhoof Ave	LN25283	9.0	200	120	Upsize from 150 mm
Length of Upgrades (m)				184.9			
Aerodome Cres	Vanderhoof Ave	Thomas Elgie Dr	LN25142	109.5	300	120	Upsize from 200 mm
Aerodome Cres	Vanderhoof Ave	Thomas Elgie Dr	P35	112.9	300	120	Upsize from 200 mm
Length of Upgrades (m)				222.4			
Brentcliffe Rd	Vanderhoof Ave	Eglinton Ave	LN3009641	104.7	300	120	Upsize from 200 mm
Brentcliffe Rd	Vanderhoof Ave	Eglinton Ave	P31	79.8	300	120	Upsize from 200 mm
Length of Upgrades (m)				184.5			
Vanderhoof Ave	Brentcliffe Rd	Fut Block A1/A2 easement	LN3009229	4.7	200	120	Upsize from 150 mm
Vanderhoof Ave	Brentcliffe Rd	Fut Block A1/A2 easement	LN3001420	10.6	200	120	Upsize from 150 mm
Vanderhoof Ave	Brentcliffe Rd	Fut Block A1/A2 easement	LN3009223	181.1	200	120	Upsize from 150 mm
Vanderhoof Ave	Brentcliffe Rd	Fut Block A1/A2 easement	P29	39.0	200	120	Upsize from 150 mm
Length of Upgrades (m)				235.3			
Vanderhoof Ave	Fut Block A1/A2 easement	Laird Dr	LN3009008	91.0	300	120	Upsize from 200 mm
Vanderhoof Ave	Fut Block A1/A2 easement	Laird Dr	P27	106.2	300	120	Upsize from 200 mm
Length of Upgrades (m)				197.2			
Total Length of Watermain Rehab/improvements (m)				490.3			
Total Length of Upsizing (m)				1971.8			

Attachment H

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ401827	0	158.22	191.25	47.0
WJ3000094	0.34	157.83	191.25	47.5
WJ31211	0	157.5	191.25	48.0
WJ3000095	0.02	157.31	191.25	48.3
WJ3000011	0.16	155.74	191.25	50.5
WJ3000096	0.06	155.02	191.25	51.5
WJ3000097	0.08	154.19	191.25	52.7
WJ3000431	0.25	154.11	191.25	52.8
WJ3000433	0.12	153.32	191.25	53.9
WJ3000030	0.31	150.95	191.25	57.3
WJ56006	0	150.93	191.25	57.3
WJ3000029	0.32	150.84	191.25	57.4
WJ3000434	0.19	150.76	191.25	57.6
WJ31228	0	150.5	191.25	57.9
WJ3000055	0.1	150.32	191.25	58.2
WJ52820	0	150	191.07	58.4
WJ52818	0.08	149.95	191.07	58.5
WJ3000791	0.03	150.12	191.25	58.5
WJ3000211	0.59	150.06	191.25	58.6
WJ3000278	0.07	149.86	191.25	58.9
WJ23834	0.26	149.81	191.25	58.9
WJ3000098	0.13	149.75	191.25	59.0
WJ14740	0.03	149.4	191.07	59.2
WJ23835	0.27	149.54	191.25	59.3
WJ55511	0	149.24	191.25	59.7
WJ3000028	0.28	148.91	191.24	60.2
WJ23838	0.24	148.74	191.25	60.4
WJ3000011	0.22	148.62	191.25	60.6
WJ3000350	0.03	148.06	191.07	61.1
WJ23837	0.21	148.18	191.25	61.2
WJ3000031	0.16	147.96	191.07	61.3
WJ55513	0	148.12	191.25	61.3
WJ52814	0.03	147.9	191.07	61.4
WJ52782	0.02	147.82	191.07	61.5
WJ3000351	0.02	147.81	191.07	61.5
WJ52806	0.02	147.8	191.07	61.5
WJ52813	0.14	147.8	191.07	61.5
WJ3000289	0.19	147.96	191.25	61.5
WJ52781	0	147.7	191.07	61.7
WJ52784	0	147.7	191.07	61.7
WJ3001141	0.05	147.68	191.07	61.7
WJ3000756	0.01	147.66	191.07	61.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ31227	0.05	147.81	191.25	61.8
WJ3000027	0.45	147.77	191.23	61.8
WJ3000491	0.03	147.57	191.07	61.8
WJ3000352	0.07	147.48	191.07	62.0
WJ4018230	0	147.52	191.25	62.2
WJ55837	0	147.4	191.25	62.3
WJ52804	0.02	147.2	191.07	62.4
WJ3000044	0.04	147.19	191.07	62.4
WJ3001090	0.05	147.14	191.07	62.5
WJ3000492	0	147.08	191.07	62.5
WJ3000349	0.07	147.02	191.07	62.6
WJ52807	0.08	147	191.07	62.6
WJ3000792	0.31	147.05	191.25	62.8
WJ52809	0.05	146.8	191.07	62.9
WJ3000579	0.27	146.9	191.22	63.0
WJ3000394	0.03	146.64	191.07	63.2
WJ3000279	0.26	146.66	191.25	63.4
WJ3000036	0.12	146.45	191.07	63.4
WJ3000972	0.24	146.57	191.19	63.4
WJ3000563	0.14	146.55	191.25	63.6
WJ3000578	0.21	146.48	191.22	63.6
WJ3000624	0.05	146.46	191.25	63.7
WJ52803	0.02	146.18	191.07	63.8
WJ3000971	0.19	146.18	191.19	64.0
WJ3000003	0.23	146.1	191.22	64.1
WJ3000569	0.16	145.98	191.14	64.2
WJ3001242	0.07	146.06	191.22	64.2
WJ3000883	0.39	146.06	191.23	64.2
WJ52787	0.01	145.8	191.07	64.4
WJ3000058	0.13	145.74	191.07	64.4
WJ3000793	0.22	145.89	191.25	64.5
WJ52786	0.05	145.6	191.07	64.6
WJ14604	0.03	145.6	191.07	64.6
WJ3000047	0.04	145.42	191.23	65.1
WJ3000050	0.29	145.43	191.25	65.2
WJ3000115	0.27	145.4	191.25	65.2
WJ14724	0.07	145.2	191.07	65.2
WJ3000538	0.19	145.25	191.14	65.2
WJ3000117	0.09	145.22	191.25	65.4
WJ3000875	0.3	145.1	191.19	65.5
WJ3000023	0.02	144.89	191.07	65.7
WJ3000537	0.13	144.93	191.14	65.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ51871	0.25	145.01	191.25	65.7
WJ54892	0.23	144.91	191.16	65.8
WJ3000046	0.4	144.9	191.23	65.9
WJ3000435	0.16	144.83	191.25	66.0
WJ3000013	0.17	144.81	191.25	66.0
WJ14675	0.1	144.6	191.07	66.1
WJ3000001	0.21	144.72	191.22	66.1
WJ3000539	0.13	144.65	191.17	66.1
WJ3000054	0.1	144.7	191.25	66.2
WJ3000116	0.17	144.66	191.25	66.2
WJ3000035	0.09	144.43	191.07	66.3
WJ3000874	0.05	144.48	191.18	66.4
WJ51882	0.03	144.5	191.25	66.5
WJ51883	0.24	144.5	191.25	66.5
WJ51947	0	144.5	191.25	66.5
WJ3000331	0.29	144.5	191.25	66.5
WJ3000580	0.17	144.34	191.23	66.7
WJ57286	0.21	144	191.07	66.9
WJ17209	0	144	191.08	66.9
WJ17210	0.28	144	191.08	66.9
WJ52780	0	143.98	191.08	67.0
WJ3000043	0.19	143.95	191.07	67.0
WJ1018244	0	143.93	191.08	67.0
WJ3000042	0.22	143.92	191.07	67.0
WJ3000970	0.2	144.01	191.19	67.1
WJ3000024	0.06	143.9	191.08	67.1
WJ3000001	0.24	144.02	191.21	67.1
WJ3000478	0.25	143.99	191.21	67.1
WJ3000851	0.11	143.97	191.29	67.3
WJ3000794	0.19	143.91	191.25	67.3
WJ14729	0	143.6	191.07	67.5
WJ14744	0.09	143.6	191.07	67.5
WJ3000049	0.22	143.65	191.24	67.7
WJ3000034	0.16	143.47	191.07	67.7
WJ3000048	0.04	143.48	191.23	67.9
WJ52792	0.01	143.4	191.2	68.0
WJ3000540	0.17	143.34	191.19	68.0
WJ3000099	0.15	143.34	191.25	68.1
WJ3000479	0.28	143.32	191.23	68.1
WJ3000536	0.17	143.19	191.13	68.1
WJ3000568	0.08	143.18	191.13	68.2
WJ3000969	0.06	143.19	191.2	68.3

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000480	0.37	143.15	191.23	68.4
WJ3000968	0.19	143.07	191.2	68.4
WJ1018241	0.48	143.04	191.2	68.5
WJ3000051	0.26	143.06	191.25	68.5
WJ3000961	0.1	142.75	191.2	68.9
WJ3000019	0.19	142.65	191.19	69.0
WJ3000014	0.01	142.63	191.19	69.0
WJ52810	0.09	142.48	191.07	69.1
WJ3000643	0.21	142.35	191.14	69.4
WJ3000966	0.5	142.4	191.2	69.4
WJ3000625	0.23	141.99	191.25	70.0
WJ3000480	0.08	141.8	191.07	70.0
WJ3000481	0.37	141.88	191.24	70.2
WJ3000646	0.15	141.69	191.07	70.2
WJ3000541	0.06	141.65	191.2	70.4
WJ3000561	0.07	141.53	191.11	70.5
WJ3000541	0.08	141.47	191.19	70.7
WJ3000645	0.17	141.07	191.2	71.3
WJ3000100	0.23	141.07	191.25	71.3
WJ3000919	0.23	141.03	191.26	71.4
WJ3000481	0.14	140.92	191.26	71.6
WJ3000483	0.13	140.83	191.26	71.7
WJ3000581	0.23	140.66	191.24	71.9
WJ3000436	0.22	140.45	191.25	72.2
WJ51894	0.14	140.2	191.25	72.6
WJ51914	0.04	140.2	191.25	72.6
WJ14608	0.04	138.8	191.07	74.3
WJ3000101	0.24	138.56	191.25	74.9
WJ3000051	0.03	138.16	191.25	75.5
WJ3000581	0.23	137.94	191.26	75.8
WJ3000801	0.21	137.93	191.26	75.8
WJ55845	0	137.9	191.25	75.8
WJ55851	0.01	137.9	191.25	75.8
WJ3000431	0.21	137.87	191.25	75.9
WJ55852	0	137.8	191.25	76.0
WJ3000583	0.1	137.72	191.26	76.1
WJ3000795	0.28	137.56	191.26	76.3
WJ3000280	0.33	137.35	191.25	76.6
WJ3000851	0.2	137.25	191.29	76.8
WJ3000371	0.06	137.19	191.26	76.9
WJ3000884	0.09	137.15	191.26	76.9
WJ3000978	0	137.01	191.25	77.1

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000438	0.25	137	191.25	77.1
WJ3000804	0.11	136.93	191.26	77.2
WJ3000979	0	136.92	191.25	77.2
WJ3000920	0.16	136.9	191.26	77.3
WJ3000102	0.24	136.57	191.25	77.7
WJ3000923	0.15	136.54	191.28	77.8
WJ3000803	0.08	136.47	191.26	77.9
WJ3000441	0.03	136.43	191.25	77.9
WJ3000440	0.06	136.35	191.25	78.1
WJ3000439	0.12	136.33	191.25	78.1
WJ3000584	0.04	136.13	191.26	78.4
WJ3000334	0.03	135.9	191.26	78.7
WJ51898	0.13	135.9	191.26	78.7
WJ51908	0.09	135.9	191.26	78.7
WJ3000442	0.2	135.82	191.25	78.8
WJ3000315	0.5	135.59	191.25	79.1
WJ56380	0.05	135.59	191.25	79.1
WJ56382	0.07	135.59	191.25	79.1
WJ56384	0.03	135.57	191.25	79.2
WJ56385	0.04	135.57	191.25	79.2
WJ56387	0	135.57	191.25	79.2
WJ56388	0	135.57	191.25	79.2
WJ56389	0.08	135.57	191.25	79.2
WJ51892	0.04	135.5	191.26	79.3
WJ56391	0	135.41	191.25	79.4
WJ3000281	0.14	135.36	191.25	79.5
WJ3000886	0.34	135.26	191.26	79.6
WJ56431	0.04	135.25	191.25	79.6
WJ3000924	0.5	135.3	191.31	79.6
WJ3000337	0.33	135.2	191.26	79.7
WJ3000796	0.21	135.19	191.26	79.7
WJ3000853	0.61	135.22	191.29	79.7
WJ51910	0.12	135.1	191.26	79.8
WJ51936	0.11	135.1	191.26	79.8
WJ51937	0.08	135.1	191.26	79.8
WJ3000626	0.57	135.09	191.26	79.9
WJ3000805	0.11	135.01	191.26	80.0
WJ3000885	0.19	135.01	191.26	80.0
WJ51893	0.01	135	191.26	80.0
WJ3000443	0.13	134.94	191.25	80.1
WJ3000585	0.02	134.8	191.26	80.3
WJ3000806	0.14	134.79	191.26	80.3

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ53257	0.07	134.6	191.27	80.6
WJ53252	0.17	134.59	191.27	80.6
WJ53255	0.09	134.6	191.28	80.6
WJ56394	0.13	134.54	191.25	80.6
WJ56400	0.02	134.54	191.25	80.6
WJ56401	0.04	134.54	191.25	80.6
WJ53253	0.27	134.5	191.28	80.7
WJ300035	0.17	134.42	191.25	80.8
WJ300007	0.01	134.32	191.25	80.9
WJ300044	0.07	134.28	191.25	81.0
WJ300000	0.56	134.25	191.27	81.1
WJ300044	0.2	134.16	191.25	81.2
WJ56393	0.08	134.15	191.25	81.2
WJ56421	0.13	134.15	191.25	81.2
WJ300085	0.22	134.17	191.31	81.2
WJ300000	0.15	133.89	191.26	81.6
WJ300057	0.29	133.89	191.27	81.6
WJ300007	0.65	133.61	191.25	81.9
WJ300028	0.43	133.45	191.25	82.2
WJ22402	0.19	133.38	191.26	82.3
WJ300031	0.54	133.26	191.25	82.4
WJ300035	0.1	133.17	191.25	82.6
WJ300080	0.21	132.93	191.26	82.9
WJ51918	0.74	132.9	191.26	83.0
WJ300011	0	132.96	191.34	83.0
WJ300011	0.01	132.93	191.34	83.0
WJ56395	0.11	132.82	191.25	83.1
WJ56397	0.04	132.82	191.25	83.1
WJ51919	0.04	132.8	191.26	83.1
WJ56399	0.05	132.65	191.25	83.3
WJ300012	0.27	132.72	191.34	83.3
WJ300051	0.07	132.67	191.33	83.4
J18	6.24	132.5	191.26	83.5
J20	1.87	132.5	191.26	83.5
J22	2.43	132.5	191.26	83.5
J26	2.71	132.5	191.26	83.5
WJ51921	0.07	132.5	191.26	83.5
J24	1.96	132.5	191.26	83.5
J28	4.67	132.5	191.27	83.6
J30	1.94	132.5	191.29	83.6
J32	0.92	132.5	191.3	83.6
WJ300052	0	132.53	191.34	83.6

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000531	0	132.53	191.34	83.6
WJ3000859	0.15	132.5	191.32	83.6
WJ3000529	0.17	132.32	191.34	83.9
WJ22421	0.12	132.24	191.27	83.9
WJ3000526	0	132.29	191.34	83.9
WJ3001168	0.1	131.99	191.07	84.0
WJ3000929	0.16	132.24	191.34	84.0
WJ3000349	0.93	132.15	191.33	84.1
WJ3000808	0.14	132	191.26	84.2
WJ3000971	0.16	131.95	191.29	84.4
WJ3000791	0.16	131.93	191.28	84.4
WJ3000975	0.04	131.82	191.27	84.5
WJ3000520	0.17	131.81	191.32	84.6
WJ3000976	0.03	131.75	191.27	84.6
WJ53264	0.02	131.56	191.28	84.9
WJ53269	0.02	131.56	191.28	84.9
WJ53276	0.04	131.56	191.28	84.9
WJ53277	0.25	131.56	191.28	84.9
J96	0	131.5	191.26	85.0
WJ26595	0.01	131.56	191.32	85.0
WJ26596	0	131.56	191.32	85.0
WJ26597	0	131.56	191.33	85.0
WJ26598	0	131.56	191.33	85.0
WJ3000539	0	131.56	191.32	85.0
WJ3000995	0.26	131.48	191.26	85.0
WJ3000798	0.23	131.49	191.29	85.0
WJ3001068	0	131.5	191.3	85.0
J66	2.33	131.5	191.32	85.0
J68	0.07	131.5	191.32	85.0
J90	0.14	131.5	191.32	85.0
J80	0.08	131.5	191.33	85.1
J82	0.08	131.5	191.33	85.1
J84	1.46	131.5	191.33	85.1
J76	0.15	131.5	191.34	85.1
J78	0.08	131.5	191.34	85.1
J72	0.64	131.5	191.34	85.1
J74	0.14	131.5	191.34	85.1
J86	0.14	131.3	191.27	85.3
WJ3001169	0.09	131.37	191.38	85.3
WJ3000346	0.47	131.29	191.33	85.4
WJ3000573	0.04	130.95	191.29	85.8
J38	0.14	130.84	191.26	85.9

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000800	0.06	130.86	191.3	85.9
WJ3001181	0.14	130.85	191.29	85.9
WJ3000799	0.01	130.85	191.3	85.9
WJ3000528	0.06	130.81	191.3	86.0
WJ3001074	0	130.6	191.3	86.3
WJ3001069	0.31	130.59	191.3	86.3
WJ3001238	0.08	130.58	191.32	86.4
WJ3000507	0.12	130.56	191.32	86.4
J50	0.14	130.5	191.27	86.4
J52	0.76	130.5	191.27	86.4
J54	0.55	130.5	191.3	86.4
J56	0.49	130.5	191.3	86.4
J58	0.11	130.5	191.31	86.4
J60	4.45	130.5	191.31	86.4
J62	0.82	130.5	191.31	86.4
J64	0.14	130.44	191.31	86.5
WJ3000347	0.33	130.42	191.34	86.6
J36	0.14	130.3	191.26	86.7
WJ3000574	0.5	130.34	191.3	86.7
WJ3001245	0	130.28	191.3	86.7
WJ3000996	0	130.23	191.26	86.8
WJ3001169	0.01	130.01	191.07	86.8
WJ55196	0.2	130.18	191.25	86.8
WJ3001249	0	130.13	191.3	87.0
WJ3001071	0	130.12	191.3	87.0
WJ3000530	0.01	130.13	191.32	87.0
WJ3001075	0	130.11	191.3	87.0
WJ3000575	0.01	130.12	191.32	87.0
WJ26594	0	130.09	191.32	87.0
WJ3000532	0.01	130.09	191.32	87.0
WJ3001072	0.02	130.04	191.3	87.1
WJ3001251	0	130.04	191.3	87.1
J92	0	130	191.26	87.1
J94	0	130	191.26	87.1
J98	0	130	191.26	87.1
WJ14629	0	129.8	191.07	87.1
J100	0	130	191.29	87.1
J34	1.33	130	191.31	87.2
WJ3001248	0	129.96	191.3	87.2
WJ3000801	0	129.94	191.3	87.2
WJ3000071	0.05	129.85	191.25	87.3
J44	0.14	129.84	191.26	87.3

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000166	0.47	129.82	191.32	87.4
J102	0	129.61	191.31	87.7
WJ38309	0.31	129.6	191.3	87.7
WJ38310	0.15	129.58	191.3	87.7
WJ3000070	0.09	129.49	191.25	87.8
J40	0.14	129.44	191.26	87.9
WJ27674	0	129.38	191.3	88.0
WJ3001156	0	129.44	191.38	88.1
WJ51927	0.32	129.3	191.27	88.1
WJ3000060	0	129.29	191.3	88.2
WJ3000061	0	129.15	191.3	88.3
WJ3000064	0.06	129.13	191.29	88.4
WJ3000069	0.32	129.08	191.25	88.4
WJ3000065	0.05	129.06	191.28	88.5
J42	0.14	129.03	191.28	88.5
WJ51923	0	129	191.27	88.5
WJ51925	0	129	191.27	88.5
WJ3001164	0.03	129.02	191.38	88.7
WJ3000061	0.03	128.93	191.3	88.7
WJ3000283	0.31	128.88	191.25	88.7
WJ3000851	0.07	128.92	191.3	88.7
WJ3001246	0	128.93	191.3	88.7
WJ3000061	0.31	128.8	191.27	88.8
WJ3000068	0.35	128.77	191.26	88.8
WJ3000508	0.79	128.75	191.34	89.0
WJ3000868	0.04	128.6	191.25	89.1
WJ55201	0.05	128.42	191.25	89.3
WJ56502	0.15	128.41	191.25	89.3
J48	0.14	128.43	191.3	89.4
WJ55199	0.03	128.27	191.25	89.5
WJ27615	0.23	128.26	191.36	89.7
WJ3000869	0.24	128.13	191.25	89.7
WJ27574	0.29	128.18	191.33	89.8
WJ3000511	0.11	128.15	191.37	89.9
WJ27614	0.06	128.09	191.36	89.9
WJ55058	0.01	127.78	191.07	90.0
J46	0.14	128.02	191.31	90.0
WJ27596	0.17	128.02	191.32	90.0
WJ27575	0.34	128.02	191.33	90.0
WJ27595	0.28	128.02	191.33	90.0
WJ27634	0.2	127.88	191.39	90.3
WJ27694	0	127.88	191.39	90.3

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000981	0.64	128.2	191.75	90.4
WJ3000859	0.01	127.54	191.41	90.8
WJ3000016	0.2	127.79	191.75	90.9
WJ3000759	2.92	127.73	191.74	91.0
WJ38289	0.5	127.42	191.43	91.0
WJ3000890	0.52	127.21	191.25	91.0
WJ57290	1.09	127	191.07	91.1
WJ3000760	1.17	127.67	191.75	91.1
WJ3000628	0.23	127.29	191.38	91.1
WJ3000860	0.07	127.37	191.52	91.2
WJ38272	0	127.27	191.43	91.2
WJ38269	0.08	127.27	191.43	91.2
WJ38270	0	127.27	191.43	91.2
WJ38271	0	127.27	191.43	91.2
WJ38273	0.02	127.27	191.43	91.2
WJ3000858	0.09	127.2	191.41	91.3
WJ3001239	0	127.11	191.38	91.4
J16	0	129	193.28	91.4
WJ3000889	0.05	126.88	191.25	91.5
WJ3000758	1.37	127.23	191.63	91.6
WJ38209	0	127.13	191.63	91.7
WJ3001083	0	127.13	191.64	91.7
WJ38249	0	127	191.57	91.8
WJ38229	0.07	127	191.58	91.8
WJ38171	0.58	127.05	191.66	91.9
WJ3001159	0.01	126.75	191.38	91.9
WJ38150	0.96	127.05	191.76	92.0
WJ38169	0	127.05	191.77	92.0
WJ50349	0	127.05	191.79	92.0
WJ50362	0.01	127.05	191.79	92.0
WJ50348	0.21	127.05	191.8	92.1
WJ50350	0	127.05	191.8	92.1
WJ50351	0	127.05	191.8	92.1
WJ3000161	0.13	126.55	191.4	92.2
WJ3000629	0.31	126.53	191.38	92.2
WJ3000984	0.13	127.16	192.02	92.2
WJ24324	0	126.43	191.38	92.3
WJ24326	0	126.43	191.39	92.3
WJ3000621	0	126.43	191.38	92.3
WJ3001254	0	126.43	191.38	92.3
WJ24325	0.55	126.43	191.39	92.3
WJ3000631	0.05	126.43	191.39	92.3

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-Post-Dev Upgraded System Average Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ27654	0.03	126.48	191.45	92.4
WJ3000544	0.64	126.61	191.63	92.4
WJ3001167	0	126.21	191.38	92.7
WJ3001166	0	126.1	191.38	92.8
WJ38149	0	126.43	191.79	92.9
WJ50353	0.09	126.43	191.79	92.9
WJ50356	0	126.43	191.79	92.9
WJ50354	0.01	126.43	191.8	92.9
WJ50359	0	126.43	191.8	92.9
WJ50360	0	126.43	191.8	92.9
WJ3000630	0.02	126	191.38	93.0
WJ3000463	1.19	126.32	191.71	93.0
WJ50355	0	126.43	191.85	93.0
WJ50357	0	126.43	191.85	93.0
WJ3000985	0	126.57	192.02	93.1
WJ50358	0.78	126.43	191.88	93.1
WJ50361	0	126.43	191.88	93.1
WJ56518	12.23	126.18	191.71	93.2
WJ3000762	0.17	126.59	192.2	93.3
WJ3000763	1.23	126.59	192.2	93.3
WJ3000761	1.15	126.43	192.17	93.5
WJ56519	2.86	125.85	191.71	93.6
WJ3001088	0.11	126.78	192.86	93.9
WJ3000621	2.19	125.46	191.7	94.2
WJ3001087	0.4	126.51	192.86	94.3
WJ3000764	0.19	126.39	192.86	94.5
WJ56492	20.22	125.32	191.8	94.5
WJ3000767	6.13	126.37	192.88	94.6
WJ3000765	0.09	126.26	192.88	94.7
WJ3000632	0.39	124.91	191.56	94.7
WJ3001241	0	124.64	191.38	94.9
WJ3001089	0.4	126.08	192.86	94.9
WJ3000339	0.39	124.15	191.26	95.4
WJ3000766	0.08	91.22	193.96	146.1

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ4018275	0	158.22	186.55	40.3
WJ3000094	0.61	157.83	186.55	40.8
WJ31211	0	157.5	186.55	41.3
WJ3000095	0.03	157.31	186.55	41.6
WJ3000011	0.29	155.74	186.55	43.8
WJ3000096	0.11	155.02	186.55	44.8
WJ3000097	0.14	154.19	186.55	46.0
WJ3000432	0.46	154.11	186.55	46.1
WJ3000433	0.22	153.32	186.55	47.2
WJ3000030	0.59	150.95	186.53	50.6
WJ56006	0	150.93	186.55	50.6
WJ3000029	0.63	150.84	186.53	50.7
WJ3000434	0.34	150.76	186.55	50.9
WJ52820	0.01	150	185.98	51.1
WJ52818	0.15	149.95	185.98	51.2
WJ31228	0.01	150.5	186.54	51.2
WJ3000055	0.18	150.32	186.55	51.5
WJ3000791	0.06	150.12	186.54	51.8
WJ3000212	1.1	150.06	186.55	51.9
WJ14740	0.05	149.4	185.98	52.0
WJ3000278	0.12	149.86	186.55	52.2
WJ23834	0.47	149.81	186.53	52.2
WJ3000098	0.24	149.75	186.55	52.3
WJ23835	0.49	149.54	186.53	52.6
WJ55511	0	149.24	186.55	53.0
WJ3000028	0.55	148.91	186.51	53.5
WJ23838	0.43	148.74	186.54	53.7
WJ3000350	0.05	148.06	185.98	53.9
WJ3000012	0.4	148.62	186.55	53.9
WJ3000037	0.29	147.96	185.97	54.0
WJ52814	0.06	147.9	185.97	54.1
WJ52782	0.04	147.82	185.98	54.2
WJ3000351	0.03	147.81	185.98	54.3
WJ52806	0.04	147.8	185.97	54.3
WJ52813	0.25	147.8	185.97	54.3
WJ52781	0	147.7	185.98	54.4
WJ52784	0	147.7	185.97	54.4
WJ3001142	0.1	147.68	185.98	54.4
WJ3000756	0.02	147.66	185.98	54.5
WJ23837	0.38	148.18	186.54	54.5
WJ3000491	0.06	147.57	185.98	54.6
WJ55513	0	148.12	186.55	54.6
WJ3000352	0.12	147.48	185.98	54.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000289	0.35	147.96	186.53	54.8
WJ3000027	0.85	147.77	186.47	55.0
WJ31227	0.08	147.81	186.54	55.1
WJ52804	0.03	147.2	185.97	55.1
WJ3000044	0.07	147.19	185.97	55.1
WJ3001090	0.09	147.14	185.98	55.2
WJ3000492	0.01	147.08	185.98	55.3
WJ3000349	0.12	147.02	185.98	55.4
WJ52807	0.15	147	185.97	55.4
WJ4018230	0	147.52	186.55	55.5
WJ55837	0	147.4	186.55	55.7
WJ52809	0.09	146.8	185.97	55.7
WJ3000394	0.05	146.64	185.98	55.9
WJ3000792	0.56	147.05	186.54	56.1
WJ3000036	0.22	146.45	185.97	56.2
WJ3000579	0.48	146.9	186.45	56.2
WJ3000972	0.44	146.57	186.36	56.6
WJ52803	0.04	146.18	185.97	56.6
WJ3000279	0.48	146.66	186.55	56.7
WJ3000578	0.38	146.48	186.45	56.8
WJ3000563	0.25	146.55	186.54	56.8
WJ3000624	0.09	146.46	186.54	57.0
WJ3000971	0.34	146.18	186.34	57.1
WJ52787	0.02	145.8	185.97	57.1
WJ3000569	0.29	145.98	186.18	57.2
WJ3000058	0.24	145.74	185.97	57.2
WJ3000003	0.41	146.1	186.43	57.3
WJ3001242	0.12	146.06	186.43	57.4
WJ14604	0.05	145.6	185.98	57.4
WJ52786	0.08	145.6	185.97	57.4
WJ3000883	0.71	146.06	186.46	57.4
WJ3000793	0.4	145.89	186.54	57.8
WJ14724	0.12	145.2	185.98	58.0
WJ3000538	0.34	145.25	186.2	58.2
WJ3000047	0.08	145.42	186.47	58.4
WJ3000023	0.04	144.89	185.98	58.4
WJ3000050	0.52	145.43	186.54	58.4
WJ3000115	0.48	145.4	186.53	58.5
WJ3000875	0.54	145.1	186.33	58.6
WJ3000537	0.24	144.93	186.19	58.7
WJ3000117	0.17	145.22	186.54	58.7
WJ54892	0.42	144.91	186.27	58.8
WJ14675	0.17	144.6	185.97	58.8

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ51871	0.48	145.01	186.54	59.1
WJ3000035	0.16	144.43	185.97	59.1
WJ3000046	0.73	144.9	186.47	59.1
WJ3000539	0.23	144.65	186.27	59.2
WJ3000002	0.38	144.72	186.43	59.3
WJ3000435	0.29	144.83	186.55	59.3
WJ3000013	0.31	144.81	186.55	59.3
WJ3000874	0.09	144.48	186.3	59.5
WJ3000054	0.19	144.7	186.55	59.5
WJ3000116	0.3	144.66	186.54	59.5
WJ57286	0.38	144	185.97	59.7
WJ17209	0	144	186.01	59.7
WJ17210	0.5	144	186.01	59.7
WJ3000043	0.35	143.95	185.97	59.7
WJ52780	0	143.98	186.01	59.8
WJ3000332	0.58	144.5	186.55	59.8
WJ51947	0	144.5	186.55	59.8
WJ3000042	0.4	143.92	185.97	59.8
WJ51882	0.05	144.5	186.56	59.8
WJ51883	0.44	144.5	186.56	59.8
WJ1018244	0	143.93	186.01	59.8
WJ3000024	0.12	143.9	186.01	59.9
WJ3000580	0.3	144.34	186.47	59.9
WJ3000970	0.36	144.01	186.34	60.2
WJ14729	0	143.6	185.98	60.3
WJ14744	0.16	143.6	185.98	60.3
WJ3000001	0.44	144.02	186.42	60.3
WJ3000478	0.44	143.99	186.39	60.3
WJ3000034	0.29	143.47	185.97	60.4
WJ3000794	0.34	143.91	186.55	60.6
WJ3000851	0.19	143.97	186.62	60.6
WJ3000049	0.4	143.65	186.49	60.9
WJ3000536	0.3	143.19	186.16	61.1
WJ52792	0.03	143.4	186.38	61.1
WJ3000568	0.14	143.18	186.17	61.1
WJ3000048	0.07	143.48	186.48	61.1
WJ3000540	0.3	143.34	186.35	61.1
WJ3000479	0.51	143.32	186.47	61.3
WJ3000969	0.11	143.19	186.38	61.4
WJ3000099	0.28	143.34	186.55	61.4
WJ3000968	0.33	143.07	186.38	61.6
WJ3000480	0.67	143.15	186.47	61.6
WJ1018241	0.88	143.04	186.38	61.6

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000051	0.47	143.06	186.54	61.8
WJ52810	0.16	142.48	185.97	61.8
WJ3000967	0.18	142.75	186.38	62.0
WJ3000015	0.34	142.65	186.33	62.1
WJ3000014	0.02	142.63	186.33	62.1
WJ3000643	0.38	142.35	186.19	62.3
WJ3000966	0.9	142.4	186.39	62.5
WJ3000486	0.14	141.8	185.97	62.8
WJ3000646	0.26	141.69	185.97	63.0
WJ3000625	0.41	141.99	186.54	63.3
WJ3000567	0.13	141.53	186.12	63.4
WJ3000481	0.66	141.88	186.5	63.4
WJ3000542	0.11	141.65	186.38	63.6
WJ3000541	0.15	141.47	186.35	63.8
WJ3000645	0.31	141.07	186.38	64.4
WJ3000100	0.42	141.07	186.55	64.7
WJ3000919	0.41	141.03	186.55	64.7
WJ3000482	0.24	140.92	186.55	64.9
WJ3000483	0.23	140.83	186.55	65.0
WJ3000581	0.42	140.66	186.5	65.2
WJ3000436	0.4	140.45	186.55	65.5
WJ51894	0.26	140.2	186.56	65.9
WJ51914	0.08	140.2	186.56	65.9
WJ14608	0.07	138.8	185.98	67.1
WJ3000101	0.43	138.56	186.55	68.2
WJ3000052	0.06	138.16	186.55	68.8
WJ3000582	0.42	137.94	186.54	69.1
WJ3000802	0.38	137.93	186.56	69.1
WJ55845	0	137.9	186.55	69.2
WJ55851	0.01	137.9	186.55	69.2
WJ3000437	0.37	137.87	186.55	69.2
WJ55852	0	137.8	186.55	69.3
WJ3000583	0.18	137.72	186.55	69.4
WJ3000795	0.51	137.56	186.56	69.7
WJ3000280	0.59	137.35	186.55	69.9
WJ3000372	0.1	137.19	186.55	70.2
WJ3000852	0.38	137.25	186.62	70.2
WJ3000884	0.16	137.15	186.55	70.2
WJ3000438	0.44	137	186.55	70.4
WJ3000978	0	137.01	186.55	70.4
WJ3000804	0.2	136.93	186.56	70.6
WJ3000979	0.01	136.92	186.55	70.6
WJ3000920	0.28	136.9	186.56	70.6

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000102	0.43	136.57	186.55	71.1
WJ3000923	0.27	136.54	186.6	71.2
WJ3000803	0.15	136.47	186.56	71.2
WJ3000441	0.06	136.43	186.55	71.3
WJ3000440	0.11	136.35	186.55	71.4
WJ3000439	0.22	136.33	186.55	71.4
WJ3000584	0.07	136.13	186.56	71.7
WJ3000334	0.06	135.9	186.57	72.0
WJ51898	0.23	135.9	186.57	72.0
WJ51908	0.16	135.9	186.57	72.0
WJ3000442	0.36	135.82	186.55	72.1
WJ3000315	0.9	135.59	186.56	72.5
WJ56380	0.09	135.59	186.55	72.5
WJ56382	0.13	135.59	186.55	72.5
WJ56384	0.06	135.57	186.55	72.5
WJ56385	0.07	135.57	186.56	72.5
WJ56387	0	135.57	186.56	72.5
WJ56388	0	135.57	186.56	72.5
WJ56389	0.14	135.57	186.55	72.5
WJ51892	0.06	135.5	186.57	72.6
WJ56391	0	135.41	186.55	72.7
WJ3000281	0.24	135.36	186.55	72.8
WJ56431	0.07	135.25	186.55	72.9
WJ3000886	0.61	135.26	186.57	72.9
WJ3000337	0.61	135.2	186.58	73.0
WJ3000796	0.39	135.19	186.57	73.0
WJ3000924	0.92	135.3	186.69	73.1
WJ3000853	1.16	135.22	186.64	73.1
WJ3000626	1.04	135.09	186.55	73.2
WJ51910	0.22	135.1	186.58	73.2
WJ51936	0.21	135.1	186.58	73.2
WJ51937	0.15	135.1	186.58	73.2
WJ3000805	0.19	135.01	186.57	73.3
WJ3000885	0.35	135.01	186.57	73.3
WJ51893	0.02	135	186.58	73.3
WJ3000443	0.24	134.94	186.55	73.4
WJ3000585	0.03	134.8	186.56	73.6
WJ3000806	0.25	134.79	186.57	73.6
WJ53252	0.3	134.59	186.58	73.9
WJ53257	0.12	134.6	186.59	73.9
WJ53255	0.17	134.6	186.6	73.9
WJ56394	0.23	134.54	186.55	73.9
WJ56400	0.04	134.54	186.55	73.9

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ56401	0.08	134.54	186.55	73.9
WJ53253	0.49	134.5	186.6	74.1
WJ3000354	0.31	134.42	186.55	74.1
WJ3000074	0.01	134.32	186.54	74.2
WJ3000444	0.13	134.28	186.54	74.3
WJ3000004	1.02	134.25	186.57	74.4
WJ3000445	0.36	134.16	186.54	74.5
WJ56393	0.15	134.15	186.55	74.5
WJ56421	0.23	134.15	186.55	74.5
WJ3000854	0.39	134.17	186.7	74.7
WJ3000005	0.26	133.89	186.57	74.9
WJ3000572	0.53	133.89	186.58	74.9
WJ3000073	1.18	133.61	186.54	75.3
WJ3000282	0.77	133.45	186.55	75.5
WJ22402	0.34	133.38	186.58	75.6
WJ3000316	0.96	133.26	186.56	75.8
WJ3000355	0.18	133.17	186.55	75.9
WJ3000807	0.38	132.93	186.58	76.3
WJ51918	1.66	132.9	186.58	76.3
WJ56395	0.19	132.82	186.55	76.4
WJ56397	0.08	132.82	186.55	76.4
WJ51919	0.08	132.8	186.58	76.5
WJ3000119	0	132.96	186.76	76.5
WJ3000118	0.03	132.93	186.76	76.5
WJ56399	0.09	132.65	186.55	76.6
WJ3001168	0.18	131.99	185.97	76.8
WJ3000120	0.54	132.72	186.76	76.8
WJ3000519	0.13	132.67	186.74	76.9
WJ51921	0.14	132.5	186.58	76.9
J18	9.3	132.5	186.59	76.9
J20	2.06	132.5	186.59	76.9
J22	2.94	132.5	186.59	76.9
J24	2.37	132.5	186.59	76.9
J26	3.18	132.5	186.59	76.9
J28	5.81	132.5	186.61	76.9
J30	2.46	132.5	186.66	77.0
J32	1.2	132.5	186.69	77.0
WJ3000855	0.27	132.5	186.71	77.1
WJ3000527	0	132.53	186.77	77.1
WJ3000531	0	132.53	186.77	77.1
WJ22421	0.22	132.24	186.6	77.3
WJ3000525	0.33	132.32	186.77	77.4
WJ3000526	0.01	132.29	186.77	77.4

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000925	0.3	132.24	186.76	77.5
WJ3000808	0.25	132	186.59	77.6
WJ3000345	1.99	132.15	186.74	77.6
WJ3000797	0.29	131.93	186.61	77.7
WJ3000977	0.29	131.95	186.65	77.8
WJ3000975	0.07	131.82	186.6	77.9
WJ3000976	0.06	131.75	186.6	78.0
WJ3000520	0.31	131.81	186.71	78.0
WJ53264	0.04	131.56	186.6	78.2
WJ53276	0.07	131.56	186.6	78.2
WJ53277	0.44	131.56	186.6	78.2
WJ53269	0.04	131.56	186.61	78.3
J96	0.14	131.5	186.59	78.3
WJ3000995	0.5	131.48	186.59	78.3
WJ3000798	0.98	131.49	186.64	78.4
WJ26595	0.02	131.56	186.73	78.4
WJ26596	0	131.56	186.73	78.4
WJ3000535	0.08	131.56	186.73	78.4
WJ26597	0.24	131.56	186.74	78.4
WJ26598	0.01	131.56	186.74	78.4
WJ3001068	0.27	131.5	186.67	78.4
J66	3.53	131.5	186.72	78.5
J68	0.09	131.5	186.72	78.5
J90	0	131.5	186.72	78.5
J80	0.09	131.5	186.74	78.5
J82	0.09	131.5	186.74	78.5
J84	2.21	131.5	186.74	78.5
J72	1.06	131.5	186.77	78.6
J74	0	131.5	186.77	78.6
J76	0.16	131.5	186.76	78.6
J78	0.12	131.5	186.76	78.6
J86	0	131.3	186.61	78.6
WJ3000346	0.95	131.29	186.74	78.8
WJ3001165	0.19	131.37	186.87	78.9
WJ3000573	0.07	130.95	186.63	79.2
J38	0	130.84	186.59	79.3
WJ3001181	0.28	130.85	186.63	79.3
WJ3000800	0.13	130.86	186.67	79.3
WJ3000799	0.01	130.85	186.67	79.4
WJ3000528	0.15	130.81	186.67	79.4
WJ3001169	0.02	130.01	185.97	79.6
WJ3001074	0.14	130.6	186.67	79.7
WJ3001069	0.62	130.59	186.67	79.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
J50	0.19	130.5	186.61	79.8
J52	1.14	130.5	186.61	79.8
WJ3001238	0.17	130.58	186.73	79.8
WJ3000507	0.31	130.56	186.72	79.8
J54	0.91	130.5	186.67	79.9
J56	0.74	130.5	186.67	79.9
WJ14629	0	129.8	185.97	79.9
J58	0.12	130.5	186.7	79.9
J60	6.03	130.5	186.7	79.9
J62	1.24	130.5	186.7	79.9
J64	0	130.44	186.7	80.0
J36	0	130.3	186.59	80.0
WJ3000574	0.9	130.34	186.66	80.1
WJ3000347	0.66	130.42	186.77	80.1
WJ3000996	0.34	130.23	186.59	80.1
WJ55196	0.36	130.18	186.55	80.1
WJ3001245	0	130.28	186.67	80.2
WJ3001249	0	130.13	186.68	80.4
WJ3001071	0	130.12	186.67	80.4
WJ3001075	0	130.11	186.67	80.4
WJ3000530	0.01	130.13	186.72	80.4
J92	0.14	130	186.59	80.5
J94	0.14	130	186.59	80.5
J98	0.14	130	186.59	80.5
WJ3000575	0.02	130.12	186.72	80.5
WJ26594	0.27	130.09	186.72	80.5
WJ3000532	0.02	130.09	186.72	80.5
WJ3001072	0.04	130.04	186.67	80.5
WJ3001251	0	130.04	186.68	80.5
J100	0.14	130	186.66	80.6
WJ3000071	0.09	129.85	186.55	80.6
J34	1.73	130	186.71	80.6
WJ3001248	0	129.96	186.68	80.6
WJ3000801	0	129.94	186.68	80.7
J44	0	129.84	186.59	80.7
WJ3000166	0.94	129.82	186.71	80.9
WJ3000070	0.17	129.49	186.55	81.1
WJ38309	0.62	129.6	186.68	81.2
J102	0.14	129.61	186.71	81.2
WJ38310	0.29	129.58	186.68	81.2
J40	0	129.44	186.59	81.3
WJ27674	0	129.38	186.68	81.5
WJ51927	0.67	129.3	186.6	81.5

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000060	0.01	129.29	186.68	81.6
WJ3001156	0	129.44	186.88	81.7
WJ3000069	0.57	129.08	186.56	81.7
WJ3000061	0	129.15	186.68	81.8
WJ3000064	0.12	129.13	186.67	81.8
WJ3000065	0.69	129.06	186.64	81.9
J42	0	129.03	186.63	81.9
WJ51923	0	129	186.6	81.9
WJ51925	0.61	129	186.61	81.9
WJ3000283	0.55	128.88	186.56	82.0
WJ3000062	0.05	128.93	186.68	82.1
WJ3000857	0.15	128.92	186.68	82.1
WJ3001246	0	128.93	186.68	82.1
WJ3000067	0.57	128.8	186.6	82.2
WJ3000068	0.64	128.77	186.57	82.2
WJ3001164	0.07	129.02	186.87	82.2
WJ3000868	0.08	128.6	186.54	82.4
WJ3000508	1.59	128.75	186.78	82.5
WJ55201	0.1	128.42	186.55	82.6
WJ56502	0.28	128.41	186.55	82.6
WJ55058	0.02	127.78	185.97	82.7
J48	0	128.43	186.69	82.8
WJ55199	0.05	128.27	186.55	82.8
WJ3000869	0.43	128.13	186.54	83.0
WJ27615	0.47	128.26	186.83	83.3
WJ27574	0.58	128.18	186.77	83.3
WJ3000511	0.22	128.15	186.84	83.4
J46	0	128.02	186.72	83.5
WJ27596	0.32	128.02	186.73	83.5
WJ27575	0.65	128.02	186.75	83.5
WJ27595	0.57	128.02	186.76	83.5
WJ27614	0.12	128.09	186.83	83.5
WJ57290	1.96	127	185.97	83.8
WJ27634	0.4	127.88	186.91	83.9
WJ27694	0	127.88	186.92	83.9
WJ3000890	0.94	127.21	186.54	84.4
WJ3000859	0.03	127.54	186.97	84.5
WJ3000628	0.47	127.29	186.88	84.7
WJ3000982	1.28	128.2	187.8	84.7
WJ38289	0.99	127.42	187.02	84.7
WJ3000889	0.09	126.88	186.54	84.8
WJ38272	0	127.27	187.01	84.9
WJ38269	0.17	127.27	187.02	85.0

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Maximum Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ38270	0	127.27	187.02	85.0
WJ38271	0.01	127.27	187.02	85.0
WJ38273	0.04	127.27	187.02	85.0
WJ3001239	0	127.11	186.88	85.0
WJ3000858	0.18	127.2	186.98	85.0
WJ3000860	0.14	127.37	187.24	85.1
WJ3000016	0.4	127.79	187.8	85.3
WJ3000759	5.37	127.73	187.77	85.4
WJ3000760	2.34	127.67	187.8	85.5
WJ3001155	0.01	126.75	186.88	85.5
WJ3000758	2.59	127.23	187.51	85.7
WJ3000629	0.61	126.53	186.88	85.8
WJ38249	0.01	127	187.37	85.8
WJ3000167	0.27	126.55	186.93	85.9
WJ38229	0.14	127	187.4	85.9
WJ38209	0	127.13	187.55	85.9
WJ3001083	0	127.13	187.56	85.9
WJ24324	0	126.43	186.88	85.9
WJ24326	0	126.43	186.88	85.9
WJ3000627	0	126.43	186.88	85.9
WJ3000631	0.1	126.43	186.88	85.9
WJ3001254	0	126.43	186.88	85.9
WJ24325	1.11	126.43	186.88	85.9
WJ38171	1.15	127.05	187.63	86.1
WJ27654	0.05	126.48	187.08	86.2
WJ3001167	0	126.21	186.88	86.2
WJ3001166	0	126.1	186.87	86.4
WJ38150	1.92	127.05	187.89	86.5
WJ38169	0	127.05	187.91	86.5
WJ3000630	0.03	126	186.88	86.6
WJ3000544	1.22	126.61	187.5	86.6
WJ50349	0	127.05	187.95	86.6
WJ50362	0.02	127.05	187.95	86.6
WJ50348	0.42	127.05	187.97	86.6
WJ50350	0.01	127.05	187.97	86.6
WJ50351	0	127.05	187.97	86.6
WJ3000463	2.14	126.32	187.66	87.2
WJ3000984	0.27	127.16	188.57	87.3
WJ56518	22.03	126.18	187.67	87.4
WJ38149	0	126.43	187.96	87.5
WJ50356	0	126.43	187.96	87.5
WJ50353	0.19	126.43	187.96	87.5
WJ50359	0	126.43	187.98	87.5

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018-
Post-Dev Upgraded System Maximum Day Demand Run

ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ50360	0	126.43	187.98	87.5
WJ50354	0.02	126.43	187.99	87.5
WJ50355	0	126.43	188.11	87.7
WJ50357	0	126.43	188.11	87.7
WJ50361	0	126.43	188.19	87.8
WJ50358	1.56	126.43	188.2	87.8
WJ56519	5.17	125.85	187.67	87.9
WJ3000985	0	126.57	188.57	88.1
WJ3000621	3.94	125.46	187.65	88.4
WJ3001241	0	124.64	186.88	88.5
WJ3000632	0.79	124.91	187.31	88.7
WJ3000339	0.7	124.15	186.6	88.8
WJ3000762	0.35	126.59	189.04	88.8
WJ3000763	2.27	126.59	189.05	88.8
WJ3000761	2.29	126.43	188.97	88.9
WJ56492	36.43	125.32	187.9	89.0
J16	0.14	129	192.01	89.6
WJ3001088	0.22	126.78	190.84	91.1
WJ3001087	0.81	126.51	190.84	91.5
WJ3000764	0.38	126.39	190.84	91.6
WJ3000767	11.04	126.37	190.9	91.7
WJ3000765	0.18	126.26	190.91	91.9
WJ3001089	0.79	126.08	190.84	92.1
WJ3000766	0.16	91.22	193.88	146.0

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ4018275	0	158.22	182.45	34.5
WJ3000094	0.85	157.83	182.45	35.0
WJ31211	0	157.5	182.45	35.5
WJ3000095	0.04	157.31	182.45	35.8
WJ3000011	0.41	155.74	182.45	38.0
WJ3000096	0.15	155.02	182.45	39.0
WJ3000097	0.19	154.19	182.45	40.2
WJ3000432	0.63	154.11	182.45	40.3
WJ3000433	0.3	153.32	182.45	41.4
WJ52820	0.01	150	181.43	44.7
WJ52818	0.21	149.95	181.43	44.8
WJ3000030	0.59	150.95	182.43	44.8
WJ56006	0	150.93	182.45	44.8
WJ3000029	0.38	150.84	182.43	44.9
WJ3000434	0.47	150.76	182.45	45.1
WJ31228	0	150.5	182.44	45.4
WJ14740	0.07	149.4	181.43	45.5
WJ3000055	0.25	150.32	182.45	45.7
WJ3000791	0.07	150.12	182.44	46.0
WJ3000212	1.18	150.06	182.45	46.1
WJ3000278	0.17	149.86	182.45	46.3
WJ23834	0.65	149.81	182.43	46.4
WJ3000098	0.34	149.75	182.45	46.5
WJ23835	0.67	149.54	182.43	46.8
WJ55511	0	149.24	182.45	47.2
WJ3000350	0.07	148.06	181.43	47.4
WJ3000037	0.4	147.96	181.42	47.6
WJ3000028	0.41	148.91	182.41	47.6
WJ52814	0.09	147.9	181.42	47.7
WJ52782	0.06	147.82	181.43	47.8
WJ3000351	0.04	147.81	181.43	47.8
WJ52806	0.06	147.8	181.42	47.8
WJ52813	0.35	147.8	181.42	47.8
WJ23838	0.59	148.74	182.44	47.9
WJ52784	0	147.7	181.42	47.9
WJ52781	0	147.7	181.43	48.0
WJ3001142	0.13	147.68	181.43	48.0
WJ3000756	0.03	147.66	181.43	48.0
WJ3000012	0.55	148.62	182.45	48.1
WJ3000491	0.09	147.57	181.43	48.1
WJ3000352	0.17	147.48	181.43	48.3
WJ52804	0.04	147.2	181.42	48.7
WJ3000044	0.1	147.19	181.42	48.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ23837	0.53	148.18	182.44	48.7
WJ3001090	0.12	147.14	181.43	48.8
WJ55513	0	148.12	182.45	48.8
WJ3000492	0.01	147.08	181.43	48.8
WJ3000349	0.17	147.02	181.42	48.9
WJ52807	0.21	147	181.42	48.9
WJ3000289	0.48	147.96	182.42	49.0
WJ3000027	0.91	147.77	182.32	49.1
WJ31227	0.12	147.81	182.44	49.2
WJ52809	0.12	146.8	181.42	49.2
WJ3000394	0.07	146.64	181.42	49.5
WJ4018230	0	147.52	182.45	49.7
WJ3000036	0.3	146.45	181.42	49.7
WJ55837	0	147.4	182.45	49.8
WJ52803	0.05	146.18	181.42	50.1
WJ3000579	0.66	146.9	182.28	50.3
WJ3000792	0.78	147.05	182.44	50.3
WJ3000972	0.61	146.57	182.11	50.5
WJ52787	0.03	145.8	181.42	50.6
WJ3000058	0.33	145.74	181.42	50.7
WJ3000279	0.66	146.66	182.45	50.9
WJ3000578	0.45	146.48	182.28	50.9
WJ3000569	0.4	145.98	181.79	50.9
WJ14604	0.06	145.6	181.43	50.9
WJ52786	0.12	145.6	181.42	50.9
WJ3000563	0.35	146.55	182.44	51.0
WJ3000971	0.48	146.18	182.09	51.1
WJ3000624	0.13	146.46	182.44	51.1
WJ3000003	0.56	146.1	182.25	51.4
WJ3001242	0.16	146.06	182.25	51.4
WJ14724	0.17	145.2	181.43	51.5
WJ3000883	0.98	146.06	182.31	51.5
WJ3000023	0.06	144.89	181.44	52.0
WJ3000793	0.56	145.89	182.45	52.0
WJ3000538	0.48	145.25	181.83	52.0
WJ14675	0.24	144.6	181.42	52.4
WJ3000537	0.33	144.93	181.82	52.4
WJ3000047	0.11	145.42	182.33	52.5
WJ3000875	0.76	145.1	182.07	52.6
WJ3000035	0.23	144.43	181.42	52.6
WJ3000050	0.7	145.43	182.44	52.6
WJ3000115	0.67	145.4	182.44	52.7
WJ54892	0.58	144.91	181.95	52.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000117	0.23	145.22	182.45	52.9
WJ3000539	0.32	144.65	181.96	53.0
WJ57286	0.53	144	181.42	53.2
WJ3000046	1.01	144.9	182.33	53.2
WJ51871	0.43	145.01	182.45	53.2
WJ3000043	0.48	143.95	181.42	53.3
WJ17209	0	144	181.49	53.3
WJ17210	0.7	144	181.49	53.3
WJ3000042	0.56	143.92	181.42	53.3
WJ52780	0	143.98	181.49	53.3
WJ3000002	0.53	144.72	182.25	53.4
WJ3000874	0.12	144.48	182.01	53.4
WJ1018244	0	143.93	181.49	53.4
WJ3000024	0.07	143.9	181.49	53.4
WJ3000435	0.41	144.83	182.45	53.5
WJ3000013	0.43	144.81	182.45	53.5
WJ3000054	0.17	144.7	182.46	53.7
WJ3000116	0.41	144.66	182.44	53.7
WJ14729	0	143.6	181.44	53.8
WJ14744	0.22	143.6	181.44	53.8
WJ3000034	0.4	143.47	181.42	54.0
WJ3000332	0.35	144.5	182.46	54.0
WJ51947	0	144.5	182.46	54.0
WJ51882	0.06	144.5	182.47	54.0
WJ51883	0.61	144.5	182.47	54.0
WJ3000580	0.42	144.34	182.32	54.0
WJ3000970	0.5	144.01	182.09	54.1
WJ3000478	0.62	143.99	182.16	54.3
WJ3000001	0.6	144.02	182.23	54.3
WJ3000794	0.47	143.91	182.46	54.8
WJ3000536	0.42	143.19	181.75	54.8
WJ3000568	0.19	143.18	181.78	54.9
WJ3000851	0.27	143.97	182.58	54.9
WJ3000049	0.55	143.65	182.36	55.0
WJ52792	0.02	143.4	182.15	55.1
WJ3000540	0.42	143.34	182.1	55.1
WJ3000048	0.1	143.48	182.34	55.2
WJ52810	0.22	142.48	181.42	55.4
WJ3000969	0.16	143.19	182.16	55.4
WJ3000479	0.71	143.32	182.31	55.4
WJ3000968	0.46	143.07	182.16	55.6
WJ3000099	0.39	143.34	182.45	55.6
WJ1018241	1.11	143.04	182.15	55.6

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000480	0.93	143.15	182.32	55.7
WJ3000051	0.65	143.06	182.45	56.0
WJ3000967	0.25	142.75	182.16	56.0
WJ3000015	0.47	142.65	182.07	56.1
WJ3000014	0.02	142.63	182.07	56.1
WJ3000643	0.52	142.35	181.81	56.1
WJ3000486	0.2	141.8	181.42	56.3
WJ3000646	0.37	141.69	181.42	56.5
WJ3000966	1.25	142.4	182.17	56.5
WJ3000567	0.1	141.53	181.68	57.1
WJ3000625	0.57	141.99	182.44	57.5
WJ3000481	0.92	141.88	182.38	57.6
WJ3000542	0.15	141.65	182.16	57.6
WJ3000541	0.21	141.47	182.1	57.8
WJ3000645	0.44	141.07	182.15	58.4
WJ3000100	0.58	141.07	182.45	58.8
WJ3000919	0.57	141.03	182.46	58.9
WJ3000482	0.34	140.92	182.45	59.0
WJ3000483	0.32	140.83	182.46	59.2
WJ3000581	0.59	140.66	182.38	59.3
WJ3000436	0.56	140.45	182.45	59.7
WJ51894	0.36	140.2	182.47	60.1
WJ51914	0.11	140.2	182.47	60.1
WJ14608	0.1	138.8	181.43	60.6
WJ3000101	0.6	138.56	182.46	62.4
WJ3000052	0.09	138.16	182.46	63.0
WJ3000582	0.58	137.94	182.45	63.3
WJ3000802	0.53	137.93	182.47	63.3
WJ55845	0	137.9	182.45	63.3
WJ55851	0.01	137.9	182.45	63.3
WJ3000437	0.52	137.87	182.45	63.4
WJ55852	0	137.8	182.45	63.5
WJ3000583	0.24	137.72	182.46	63.6
WJ3000795	0.71	137.56	182.47	63.9
WJ3000280	0.82	137.35	182.46	64.1
WJ3000372	0.14	137.19	182.46	64.4
WJ3000884	0.22	137.15	182.47	64.4
WJ3000852	0.42	137.25	182.58	64.4
WJ3000438	0.62	137	182.46	64.6
WJ3000978	0	137.01	182.46	64.6
WJ3000804	0.28	136.93	182.47	64.7
WJ3000979	0.01	136.92	182.46	64.7
WJ3000920	0.39	136.9	182.47	64.8

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000102	0.6	136.57	182.46	65.2
WJ3000803	0.2	136.47	182.47	65.4
WJ3000923	0.38	136.54	182.55	65.4
WJ3000441	0.08	136.43	182.46	65.4
WJ3000440	0.16	136.35	182.46	65.6
WJ3000439	0.3	136.33	182.46	65.6
WJ3000584	0.1	136.13	182.47	65.9
WJ3000334	0.08	135.9	182.48	66.2
WJ51908	0.22	135.9	182.48	66.2
WJ51898	0.32	135.9	182.49	66.2
WJ3000442	0.5	135.82	182.45	66.3
WJ56380	0.12	135.59	182.46	66.6
WJ56382	0.19	135.59	182.46	66.6
WJ3000315	1.25	135.59	182.47	66.6
WJ56384	0.08	135.57	182.46	66.7
WJ56385	0.09	135.57	182.46	66.7
WJ56387	0	135.57	182.46	66.7
WJ56388	0	135.57	182.46	66.7
WJ56389	0.19	135.57	182.46	66.7
WJ51892	0.09	135.5	182.49	66.8
WJ56391	0	135.41	182.46	66.9
WJ3000281	0.34	135.36	182.46	67.0
WJ56431	0.1	135.25	182.46	67.1
WJ3000886	0.85	135.26	182.49	67.1
WJ3000796	0.54	135.19	182.5	67.2
WJ3000337	0.76	135.2	182.51	67.3
WJ3000626	1.35	135.09	182.47	67.4
WJ3000853	1.16	135.22	182.62	67.4
WJ51910	0.31	135.1	182.51	67.4
WJ51936	0.2	135.1	182.5	67.4
WJ3000924	1.17	135.3	182.71	67.4
WJ51937	0.21	135.1	182.51	67.4
WJ3000805	0.27	135.01	182.49	67.5
WJ3000885	0.48	135.01	182.49	67.5
WJ3000443	0.33	134.94	182.44	67.5
WJ51893	0.03	135	182.5	67.5
WJ3000585	0.04	134.8	182.48	67.8
WJ3000806	0.35	134.79	182.49	67.8
WJ56394	0.32	134.54	182.45	68.1
WJ56400	0.05	134.54	182.45	68.1
WJ56401	0.11	134.54	182.45	68.1
WJ53252	0.41	134.59	182.52	68.1
WJ53257	0.17	134.6	182.54	68.1

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ53255	0.14	134.6	182.55	68.2
WJ3000354	0.43	134.42	182.44	68.3
WJ53253	0.68	134.5	182.54	68.3
WJ3000074	0.01	134.32	182.44	68.4
WJ3000444	0.19	134.28	182.44	68.5
WJ3000004	1.36	134.25	182.5	68.6
WJ3000445	0.49	134.16	182.44	68.6
WJ56393	0.21	134.15	182.45	68.7
WJ56421	0.32	134.15	182.45	68.7
WJ3000854	0.53	134.17	182.72	69.0
WJ3000005	0.36	133.89	182.49	69.1
WJ3000572	0.74	133.89	182.51	69.1
WJ3000073	1.64	133.61	182.44	69.4
WJ3000282	1.06	133.45	182.46	69.7
WJ22402	0.47	133.38	182.5	69.8
WJ3000316	1.33	133.26	182.47	70.0
WJ3000355	0.25	133.17	182.44	70.1
WJ3001168	0.25	131.99	181.42	70.3
WJ3000807	0.52	132.93	182.5	70.5
WJ51918	1.95	132.9	182.51	70.5
WJ56395	0.27	132.82	182.45	70.6
WJ56397	0.11	132.82	182.45	70.6
WJ51919	0.07	132.8	182.51	70.7
WJ56399	0.12	132.65	182.45	70.8
WJ3000119	0	132.96	182.82	70.9
WJ3000118	0.02	132.93	182.82	70.9
WJ51921	0.09	132.5	182.51	71.1
J18	12.86	132.5	182.51	71.1
J20	2.24	132.5	182.52	71.1
J22	4.63	132.5	182.52	71.1
J24	3.72	132.5	182.52	71.1
J26	4.53	132.5	182.52	71.1
J28	10.01	132.5	182.55	71.2
WJ3000120	0.32	132.72	182.82	71.2
WJ3000519	0.18	132.67	182.78	71.2
J30	4.47	132.5	182.64	71.3
J32	2.3	132.5	182.69	71.4
WJ3000855	0.38	132.5	182.74	71.4
WJ22421	0.3	132.24	182.54	71.5
WJ3000527	0	132.53	182.83	71.5
WJ3000531	0	132.53	182.83	71.5
WJ3000808	0.32	132	182.52	71.8
WJ3000525	0.2	132.32	182.84	71.8

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000526	0.01	132.29	182.84	71.9
WJ3000925	0.29	132.24	182.82	71.9
WJ3000797	0.41	131.93	182.56	72.0
WJ3000345	1.19	132.15	182.8	72.0
WJ3000977	0.39	131.95	182.64	72.1
WJ3000975	0.07	131.82	182.54	72.1
WJ3000976	0.08	131.75	182.54	72.2
WJ3000520	0.41	131.81	182.74	72.4
WJ53264	0.06	131.56	182.54	72.5
WJ53276	0.08	131.56	182.55	72.5
WJ53277	0.62	131.56	182.55	72.5
WJ53269	0.05	131.56	182.56	72.5
J96	0	131.5	182.52	72.5
WJ3000995	0.67	131.48	182.52	72.6
WJ3000798	1.36	131.49	182.61	72.7
WJ3001068	0.27	131.5	182.67	72.8
WJ26595	0.01	131.56	182.78	72.8
WJ26596	0	131.56	182.78	72.8
WJ3000535	0.05	131.56	182.78	72.8
WJ26597	0.15	131.56	182.78	72.8
WJ26598	0	131.56	182.78	72.8
J66	5.05	131.5	182.76	72.9
J86	0	131.3	182.56	72.9
J68	0.11	131.5	182.76	72.9
J90	0	131.5	182.76	72.9
J80	0.1	131.5	182.8	72.9
J82	0.1	131.5	182.8	72.9
J84	3.16	131.5	182.8	72.9
J76	0.18	131.5	182.82	73.0
J78	0.17	131.5	182.82	73.0
J72	1.59	131.5	182.83	73.0
J74	0	131.5	182.83	73.0
WJ3001169	0.02	130.01	181.42	73.1
WJ3000346	0.57	131.29	182.8	73.2
WJ14629	0	129.8	181.42	73.4
WJ3001165	0.11	131.37	183.01	73.4
WJ3000573	0.1	130.95	182.6	73.4
J38	0	130.84	182.52	73.5
WJ3001181	0.23	130.85	182.6	73.6
WJ3000800	0.17	130.86	182.66	73.6
WJ3000799	0.01	130.85	182.66	73.7
WJ3000528	0.14	130.81	182.66	73.7
J50	0.26	130.5	182.56	74.0

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
J52	1.63	130.5	182.56	74.0
WJ3001074	0.09	130.6	182.67	74.0
WJ3001069	0.37	130.59	182.67	74.0
J54	1.36	130.5	182.67	74.2
J56	1.05	130.5	182.67	74.2
WJ3001238	0.1	130.58	182.78	74.2
WJ3000507	0.19	130.56	182.76	74.2
J36	0	130.3	182.51	74.2
J58	0.13	130.5	182.72	74.2
J60	7.98	130.5	182.72	74.2
J62	1.78	130.5	182.72	74.2
WJ55196	0.5	130.18	182.45	74.3
J64	0	130.44	182.72	74.3
WJ3000996	0.2	130.23	182.52	74.3
WJ3000574	1.25	130.34	182.65	74.4
WJ3001245	0	130.28	182.67	74.5
WJ3000347	0.4	130.42	182.85	74.5
J92	0	130	182.52	74.7
J94	0	130	182.52	74.7
J98	0	130	182.52	74.7
WJ3001249	0	130.13	182.67	74.7
WJ3001071	0	130.12	182.67	74.7
WJ3001075	0	130.11	182.67	74.7
WJ3000071	0.13	129.85	182.45	74.8
WJ3000530	0.01	130.13	182.75	74.8
WJ3001072	0.03	130.04	182.67	74.8
WJ3001251	0	130.04	182.67	74.8
J100	0	130	182.64	74.8
WJ3000575	0.02	130.12	182.75	74.8
WJ26594	0.16	130.09	182.75	74.9
WJ3000532	0.01	130.09	182.75	74.9
J44	0	129.84	182.52	74.9
WJ3001248	0	129.96	182.67	74.9
J34	3.32	130	182.72	74.9
WJ3000801	0	129.94	182.67	75.0
WJ3000166	0.57	129.82	182.75	75.2
WJ3000070	0.24	129.49	182.45	75.3
J40	0	129.44	182.52	75.5
WJ38309	0.37	129.6	182.69	75.5
J102	0	129.61	182.72	75.5
WJ38310	0.18	129.58	182.69	75.5
WJ51927	0.86	129.3	182.54	75.7
WJ27674	0	129.38	182.68	75.8

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ3000069	0.79	129.08	182.47	75.9
WJ3000060	0.01	129.29	182.68	75.9
WJ3000061	0	129.15	182.67	76.1
WJ3000064	0.07	129.13	182.65	76.1
WJ51923	0	129	182.54	76.1
J42	0	129.03	182.58	76.1
WJ3000065	0.41	129.06	182.61	76.1
WJ51925	0.37	129	182.55	76.1
WJ3001156	0	129.44	183.02	76.2
WJ3000283	0.77	128.88	182.46	76.2
WJ55058	0.03	127.78	181.42	76.3
WJ3000068	0.89	128.77	182.49	76.4
WJ3000067	0.79	128.8	182.54	76.4
WJ3000062	0.03	128.93	182.68	76.4
WJ3000857	0.09	128.92	182.68	76.4
WJ3001246	0	128.93	182.68	76.4
WJ3000868	0.11	128.6	182.44	76.5
WJ3001164	0.04	129.02	183.01	76.8
WJ55201	0.13	128.42	182.44	76.8
WJ56502	0.39	128.41	182.44	76.8
WJ3000508	0.95	128.75	182.87	76.9
WJ55199	0.07	128.27	182.44	77.0
J48	0	128.43	182.69	77.1
WJ3000869	0.59	128.13	182.44	77.2
WJ57290	2.72	127	181.42	77.4
WJ27574	0.35	128.18	182.82	77.7
WJ27615	0.28	128.26	182.92	77.7
J46	0	128.02	182.74	77.8
WJ27596	0.26	128.02	182.76	77.8
WJ27575	0.61	128.02	182.8	77.9
WJ27595	0.34	128.02	182.8	77.9
WJ3000511	0.13	128.15	182.96	77.9
WJ27614	0.07	128.09	182.93	78.0
WJ27634	0.24	127.88	183.07	78.5
WJ27694	0	127.88	183.08	78.5
WJ3000890	1.3	127.21	182.44	78.5
WJ3000889	0.12	126.88	182.44	79.0
WJ3000859	0.02	127.54	183.17	79.1
WJ3000628	0.28	127.29	183.02	79.2
WJ38289	0.6	127.42	183.25	79.4
WJ3001239	0	127.11	183.01	79.5
WJ3000858	0.11	127.2	183.17	79.6
WJ38272	0	127.27	183.24	79.6

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ38270	0	127.27	183.25	79.6
WJ38271	0	127.27	183.25	79.6
WJ38269	0.1	127.27	183.25	79.6
WJ38273	0.02	127.27	183.25	79.6
WJ3000860	0.08	127.37	183.59	79.9
WJ3000982	0.77	128.2	184.42	79.9
WJ3001155	0.01	126.75	183.02	80.0
WJ3000629	0.37	126.53	183.02	80.3
WJ3000167	0.16	126.55	183.11	80.4
WJ24324	0	126.43	183.02	80.4
WJ24326	0	126.43	183.02	80.4
WJ3000627	0	126.43	183.02	80.4
WJ3000631	0.06	126.43	183.02	80.4
WJ3001254	0	126.43	183.02	80.4
WJ24325	0.67	126.43	183.02	80.5
WJ3000016	0.24	127.79	184.42	80.5
WJ3000759	6.6	127.73	184.37	80.5
WJ3000758	2.66	127.23	183.98	80.7
WJ3000760	1.4	127.67	184.42	80.7
WJ3001167	0	126.21	183.01	80.8
WJ38249	0.01	127	183.8	80.8
WJ38229	0.08	127	183.85	80.8
WJ27654	0.03	126.48	183.34	80.8
WJ3001166	0	126.1	183.01	80.9
WJ38209	0	127.13	184.08	81.0
WJ3001083	0	127.13	184.1	81.0
WJ3000630	0.02	126	183.02	81.1
WJ38171	0.69	127.05	184.21	81.3
WJ3000544	1.1	126.61	183.98	81.6
WJ38150	1.15	127.05	184.62	81.8
WJ38169	0	127.05	184.65	81.9
WJ50349	0	127.05	184.71	82.0
WJ50362	0.01	127.05	184.72	82.0
WJ50348	0.25	127.05	184.75	82.0
WJ50350	0.01	127.05	184.75	82.0
WJ50351	0	127.05	184.75	82.0
WJ3000463	2.98	126.32	184.12	82.2
WJ56518	30.5	126.18	184.13	82.4
WJ56519	7.04	125.85	184.13	82.9
WJ38149	0	126.43	184.73	82.9
WJ50356	0	126.43	184.73	82.9
WJ50353	0.11	126.43	184.73	82.9
WJ50359	0	126.43	184.77	82.9

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018- Post-Dev Upgraded System Peak Hour Day Demand Run				
ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (psi)
WJ50360	0	126.43	184.77	82.9
WJ50354	0.01	126.43	184.78	83.0
WJ3001241	0	124.64	183.01	83.0
WJ3000339	0.97	124.15	182.53	83.0
WJ3000984	0.16	127.16	185.65	83.2
WJ50355	0	126.43	184.96	83.2
WJ50357	0	126.43	184.96	83.2
WJ3000621	5.47	125.46	184.1	83.4
WJ50361	0	126.43	185.08	83.4
WJ50358	0.94	126.43	185.1	83.4
WJ3000632	0.47	124.91	183.68	83.5
WJ3000985	0	126.57	185.65	84.0
WJ56492	50.34	125.32	184.45	84.1
WJ3000762	0.21	126.59	186.36	85.0
WJ3000763	2.65	126.59	186.38	85.0
WJ3000761	1.37	126.43	186.25	85.0
J16	0	129	190.94	88.1
WJ3001088	0.13	126.78	189.14	88.7
WJ3001087	0.49	126.51	189.14	89.0
WJ3000764	0.23	126.39	189.14	89.2
WJ3000767	15.34	126.37	189.23	89.4
WJ3000765	0.11	126.26	189.24	89.5
WJ3001089	0.48	126.08	189.14	89.6
WJ3000766	0.1	91.22	193.82	145.9

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev - Upgraded System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ52792	0.03	61.1	186.4	317.0	-352.9	105.2	0.0	-211.9
WJ1018241	0.88	61.6	186.4	317.0	-340.6	108.1	0.0	-209.7
WJ3000029	0.63	50.7	186.5	317.0	-99.4	164.6	0.0	-153.0
WJ51871	0.48	59.1	186.5	317.0	-76.5	191.6	0.0	-125.9
WJ3000630	0.03	86.6	186.9	190.0	-289.6	84.0	0.0	-106.0
WJ3000567	0.13	63.4	186.1	190.0	-92.3	110.1	0.0	-80.0
WJ3001181	0.28	79.3	186.6	190.0	-115.3	114.4	0.0	-75.9
WJ3000621	3.94	88.4	187.7	317.0	-51.2	245.3	0.0	-75.7
WJ56400	0.04	73.9	186.6	317.0	-36.9	246.8	0.0	-70.3
WJ3000030	0.59	50.6	186.5	190.0	-59.1	120.7	0.0	-69.9
WJ3000463	2.14	87.2	187.7	317.0	-32.3	264.4	0.0	-54.7
WJ3000027	0.85	55.0	186.5	190.0	-14.5	165.2	0.0	-25.7
WJ3000578	0.38	56.8	186.5	190.0	-13.0	167.6	0.0	-22.8
WJ3000028	0.55	53.5	186.5	190.0	-9.3	172.5	0.0	-18.1
WJ3000044	0.07	55.1	186.0	65.0	-8.3	59.8	0.0	-5.3
WJ3001142	0.1	54.4	186.0	65.0	-7.3	60.4	0.0	-4.7
WJ52787	0.02	57.1	186.0	65.0	-7.1	60.6	0.0	-4.4
WJ31228	0.01	51.2	186.5	190.0	-1.7	186.2	0.0	-3.9
WJ52786	0.08	57.4	186.0	65.0	-4.0	62.5	0.0	-2.6
WJ3001090	0.09	55.2	186.0	65.0	-1.5	64.0	0.0	-1.1
WJ52782	0.04	54.2	186.0	65.0	-0.9	64.4	0.0	-0.6
WJ3000492	0.01	55.3	186.0	65.0	2.4	66.8	0.0	1.8
WJ3000868	0.08	82.4	186.5	65.0	4.2	67.0	0.0	1.9
WJ3000756	0.02	54.5	186.0	65.0	2.9	67.2	0.0	2.2
WJ3001242	0.12	57.4	186.4	190.0	1.1	192.5	0.0	2.4
WJ3000394	0.05	55.9	186.0	65.0	3.6	67.8	0.0	2.7
WJ3000350	0.05	53.9	186.0	65.0	5.6	69.7	0.0	4.6
WJ3000351	0.03	54.3	186.0	65.0	5.9	69.9	0.0	4.8
WJ3000491	0.06	54.6	186.0	65.0	6.7	70.6	0.0	5.5
WJ3000975	0.07	77.9	186.6	190.0	3.7	195.7	0.0	5.6
WJ3000352	0.12	54.7	186.0	65.0	7.2	71.1	0.0	5.9
WJ3000058	0.24	57.2	186.0	65.0	7.9	71.5	0.0	6.3
WJ3000349	0.12	55.4	186.0	65.0	9.2	72.9	0.0	7.8
WJ3000976	0.06	78.0	186.6	190.0	5.2	198.1	0.0	8.0
WJ52820	0.01	51.1	186.0	65.0	9.3	73.8	0.0	8.8
WJ14675	0.17	58.8	186.0	65.0	11.7	74.8	0.0	9.6
WJ3000037	0.29	54.0	186.0	65.0	11.2	75.5	0.0	10.2
WJ52818	0.15	51.2	186.0	65.0	10.8	75.8	0.0	10.6
WJ3000036	0.22	56.2	186.0	65.0	12.1	75.9	0.0	10.7
WJ52804	0.03	55.1	186.0	65.0	12.2	76.1	0.0	11.0
WJ52807	0.15	55.4	186.0	65.0	12.4	76.4	0.0	11.2
WJ52814	0.06	54.1	186.0	65.0	12.2	76.4	0.0	11.3
WJ57286	0.38	59.7	186.0	65.0	13.7	76.8	0.0	11.5

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev - Upgraded System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ52806	0.04	54.3	186.0	65.0	12.4	76.6	0.0	11.5
WJ14740	0.05	52.0	186.0	65.0	11.8	76.7	0.0	11.6
WJ3000047	0.08	58.4	186.5	65.0	14.5	76.8	0.0	11.7
WJ3000043	0.35	59.7	186.0	65.0	14.7	77.9	0.0	12.5
WJ3000035	0.16	59.1	186.0	65.0	14.8	78.0	0.0	12.8
WJ52813	0.25	54.3	186.0	65.0	13.4	78.1	0.0	12.9
WJ52809	0.09	55.7	186.0	65.0	14.2	78.3	0.0	13.2
WJ3000889	0.09	84.8	186.5	65.0	24.1	78.7	0.0	13.6
WJ3000884	0.16	70.2	186.6	65.0	20.1	78.9	0.0	13.8
WJ52803	0.04	56.6	186.0	65.0	15.0	78.9	0.0	13.9
WJ3000042	0.4	59.8	186.0	65.0	16.0	79.4	0.0	14.0
WJ3000646	0.26	63.0	186.0	65.0	17.4	79.7	0.0	14.5
WJ3000034	0.29	60.4	186.0	65.0	16.7	79.9	0.0	14.7
WJ14604	0.05	57.4	186.0	65.0	17.2	81.4	0.0	16.4
WJ14724	0.12	58.0	186.0	65.0	17.9	82.3	0.0	17.2
WJ3000023	0.04	58.4	186.0	65.0	19.2	83.7	0.0	18.6
WJ52810	0.16	61.8	186.0	65.0	20.6	84.1	0.0	18.9
WJ3000486	0.14	62.8	186.0	65.0	21.4	84.7	0.0	19.5
WJ14744	0.16	60.3	186.0	65.0	20.7	85.0	0.0	19.8
WJ17210	0.5	59.7	186.0	65.0	23.1	89.2	0.0	23.7
WJ51921	0.14	76.9	186.6	317.0	8.1	341.0	0.0	23.8
WJ3000024	0.12	59.9	186.0	65.0	23.4	89.2	0.0	24.1
WJ3000851	0.19	60.6	186.6	65.0	25.7	89.9	0.0	24.7
WJ14608	0.07	67.1	186.0	65.0	26.9	89.9	0.0	24.8
WJ3000542	0.11	63.6	186.4	65.0	29.9	95.0	0.0	29.9
J38	0	79.3	186.6	317.0	27.2	347.3	20.0	30.3
WJ3000541	0.15	63.8	186.4	65.0	30.1	95.5	0.0	30.4
WJ3001168	0.18	76.8	186.0	65.0	35.6	96.3	0.0	31.1
WJ3001169	0.02	79.6	186.0	65.0	38.3	98.1	0.0	33.1
WJ51919	0.08	76.5	186.6	317.0	10.9	351.0	0.0	33.9
WJ55058	0.02	82.7	186.0	65.0	41.4	100.2	0.0	35.2
J40	0	81.3	186.6	317.0	28.6	352.5	20.0	35.5
WJ57290	1.96	83.8	186.0	65.0	42.5	103.1	0.0	36.1
WJ3000569	0.29	57.2	186.2	65.0	29.0	102.1	0.0	36.8
WJ3001089	0.79	92.1	190.8	317.0	16.1	354.8	0.0	37.0
J36	0	80.0	186.6	317.0	28.8	354.7	20.0	37.7
WJ3000117	0.17	58.7	186.5	65.0	32.1	104.1	0.0	38.9
WJ3000052	0.06	68.8	186.6	65.0	38.1	104.3	0.0	39.2
WJ3000568	0.14	61.1	186.2	65.0	32.3	104.7	0.0	39.5
WJ3000339	0.7	88.8	186.6	65.0	50.6	106.6	0.0	40.9
J44	0	80.7	186.6	317.0	29.6	358.1	20.0	41.1
WJ3001155	0.01	85.5	186.9	190.0	23.9	231.8	0.0	41.8
WJ3000645	0.31	64.4	186.4	65.0	37.3	110.5	0.0	45.1

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ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000536	0.3	61.1	186.2	65.0	34.6	111.5	0.0	46.2
J48	0	82.8	186.7	317.0	32.3	369.3	20.0	52.3
WJ3000014	0.02	62.1	186.3	65.0	38.3	118.0	0.0	53.0
WJ3000537	0.24	58.7	186.2	65.0	35.7	120.1	0.0	54.9
WJ3000890	0.94	84.4	186.5	65.0	54.6	121.2	0.0	55.3
WJ3000643	0.38	62.3	186.2	65.0	38.4	121.1	0.0	55.8
J42	0	81.9	186.6	317.0	32.8	373.3	20.0	56.3
WJ3000538	0.34	58.2	186.2	65.0	35.8	121.7	0.0	56.4
WJ31227	0.08	55.1	186.5	190.0	17.6	246.5	0.0	56.4
WJ3000015	0.34	62.1	186.3	65.0	40.2	125.6	0.0	60.2
WJ3000540	0.3	61.1	186.4	65.0	39.8	127.2	0.0	61.9
J46	0	83.5	186.7	317.0	34.3	379.2	20.0	62.2
WJ3000432	0.46	46.1	186.6	65.0	30.7	130.9	0.0	65.5
WJ3000539	0.23	59.2	186.3	65.0	39.3	133.0	0.0	67.8
WJ3000854	0.39	74.7	186.7	190.0	29.0	259.8	0.0	69.4
WJ54892	0.42	58.8	186.3	65.0	39.3	135.3	0.0	69.9
WJ23837	0.38	54.5	186.5	65.0	37.8	136.4	0.0	71.0
WJ3000016	0.4	85.3	187.8	190.0	34.8	261.6	0.0	71.2
WJ3000074	0.01	74.2	186.5	65.0	52.4	136.2	0.0	71.2
WJ3001068	0.27	78.4	186.7	317.0	20.6	388.9	0.0	71.7
WJ55851	0.01	69.2	186.6	65.0	48.9	137.0	0.0	72.0
WJ3000874	0.09	59.5	186.3	65.0	40.5	137.6	0.0	72.5
WJ3000855	0.27	77.1	186.7	190.0	31.7	266.0	0.0	75.7
WJ3000967	0.18	62.0	186.4	65.0	44.0	143.6	0.0	78.4
WJ3000869	0.43	83.0	186.5	65.0	60.6	143.8	0.0	78.4
WJ3000519	0.13	76.9	186.7	190.0	33.5	273.6	0.0	83.4
WJ3000478	0.44	60.3	186.4	65.0	43.4	149.6	0.0	84.2
WJ3000971	0.34	57.1	186.3	65.0	41.1	151.7	0.0	86.4
WJ3000875	0.54	58.6	186.3	65.0	42.2	152.0	0.0	86.5
WJ3000972	0.44	56.6	186.4	65.0	41.0	153.6	0.0	88.2
WJ3000433	0.22	47.2	186.6	65.0	34.4	153.7	0.0	88.4
WJ3000046	0.73	59.1	186.5	65.0	43.7	155.4	0.0	89.7
WJ3000966	0.9	62.5	186.4	65.0	46.1	155.8	0.0	89.9
WJ51918	1.66	76.3	186.6	317.0	23.9	412.6	0.0	93.9
WJ3000011	0.29	43.8	186.6	65.0	32.3	160.2	0.0	94.9
WJ3001238	0.17	79.8	186.7	190.0	37.7	285.8	0.0	95.6
WJ3000996	0.34	80.1	186.6	317.0	25.7	413.1	0.0	95.8
WJ3000050	0.52	58.4	186.5	190.0	26.0	286.9	0.0	96.4
WJ3000970	0.36	60.2	186.3	65.0	45.1	165.1	0.0	99.7
WJ3000434	0.34	50.9	186.6	65.0	38.5	166.1	0.0	100.8
WJ3000579	0.48	56.2	186.5	65.0	42.8	168.9	0.0	103.4
WJ3000968	0.33	61.6	186.4	65.0	46.9	169.0	0.0	103.7
WJ55199	0.05	82.8	186.6	65.0	65.2	169.8	0.0	104.7

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WJ3000979	0.01	70.6	186.6	65.0	55.4	170.6	0.0	105.6
WJ3000445	0.36	74.5	186.5	65.0	58.5	171.4	0.0	106.0
WJ3000001	0.44	60.3	186.4	65.0	46.3	171.6	0.0	106.2
WJ3000002	0.38	59.3	186.4	65.0	45.5	171.9	0.0	106.6
WJ3000802	0.38	69.1	186.6	65.0	54.3	172.0	0.0	106.6
WJ3000372	0.1	70.2	186.6	65.0	55.2	172.0	0.0	106.9
WJ3000012	0.4	53.9	186.6	65.0	41.6	172.4	0.0	107.0
WJ3000444	0.13	74.3	186.5	65.0	58.6	173.3	0.0	108.2
J90	0	78.5	186.7	190.0	39.6	299.2	0.0	109.2
WJ56502	0.28	82.6	186.6	65.0	66.2	178.9	0.0	113.6
WJ55201	0.1	82.6	186.6	65.0	66.3	178.8	0.0	113.7
WJ3000073	1.18	75.3	186.5	65.0	60.0	180.1	0.0	114.0
WJ3000969	0.11	61.4	186.4	65.0	47.9	181.1	0.0	116.0
WJ3000480	0.67	61.6	186.5	65.0	48.5	182.3	0.0	116.7
WJ23834	0.47	52.2	186.5	65.0	40.9	182.4	0.0	117.0
WJ51927	0.67	81.5	186.6	317.0	29.8	435.2	0.0	117.6
WJ3000883	0.71	57.4	186.5	65.0	45.1	183.4	0.0	117.7
WJ3000479	0.51	61.3	186.5	65.0	48.4	184.4	0.0	118.9
WJ51925	0.61	81.9	186.6	317.0	30.5	438.0	0.0	120.4
WJ3001164	0.07	82.2	186.9	190.0	44.6	314.5	0.0	124.5
WJ3000435	0.29	59.3	186.6	65.0	47.6	190.7	0.0	125.4
WJ3000281	0.24	72.8	186.6	65.0	59.4	192.0	0.0	126.7
WJ3000003	0.41	57.3	186.4	65.0	45.5	192.8	0.0	127.3
WJ3001069	0.62	79.7	186.7	317.0	30.8	445.8	0.0	128.2
WJ3000791	0.06	51.8	186.5	65.0	41.2	193.7	0.0	128.6
WJ27595	0.57	83.5	186.8	317.0	32.8	446.8	0.0	129.2
WJ3000115	0.48	58.5	186.5	65.0	47.1	195.4	0.0	129.9
WJ27575	0.65	83.5	186.8	317.0	33.2	449.6	0.0	131.9
WJ3000013	0.31	59.3	186.6	65.0	48.0	197.5	0.0	132.2
WJ3000852	0.38	70.2	186.6	65.0	57.5	198.9	0.0	133.5
WJ3000289	0.35	54.8	186.5	65.0	44.2	200.4	0.0	135.1
WJ56518	22.03	87.4	187.7	317.0	36.3	476.0	0.0	137.0
WJ3000279	0.48	56.7	186.6	65.0	46.1	203.5	0.0	138.0
WJ3000443	0.24	73.4	186.6	65.0	60.6	203.4	0.0	138.2
WJ23835	0.49	52.6	186.5	65.0	42.5	204.4	0.0	139.0
WJ56519	5.17	87.9	187.7	317.0	37.0	462.1	0.0	140.0
WJ3000482	0.24	64.9	186.6	65.0	53.4	205.6	0.0	140.4
WJ3000355	0.18	75.9	186.6	65.0	63.0	206.1	0.0	140.9
WJ3000583	0.18	69.4	186.6	65.0	57.5	206.5	0.0	141.4
WJ3000483	0.23	65.0	186.6	65.0	53.7	208.2	0.0	143.0
WJ3000800	0.13	79.3	186.7	317.0	32.6	460.5	0.0	143.4
WJ3000581	0.42	65.2	186.5	65.0	53.6	208.8	0.0	143.4
WJ3000436	0.4	65.5	186.6	65.0	54.2	209.5	0.0	144.1

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WJ3000799	0.01	79.4	186.7	317.0	32.7	461.3	0.0	144.3
WJ3000345	1.99	77.6	186.7	317.0	32.1	463.7	0.0	144.8
WJ3000528	0.15	79.4	186.7	317.0	32.8	461.9	0.0	144.8
WJ3000354	0.31	74.1	186.6	65.0	61.7	210.2	0.0	144.9
WJ3000055	0.18	51.5	186.6	65.0	41.9	211.7	0.0	146.5
WJ3001074	0.14	79.7	186.7	317.0	33.2	463.9	0.0	146.7
WJ3000049	0.4	60.9	186.5	65.0	50.0	212.7	0.0	147.3
WJ3000481	0.66	63.4	186.5	65.0	52.3	213.0	0.0	147.4
WJ3000048	0.07	61.1	186.5	65.0	50.2	213.0	0.0	147.9
J64	0	80.0	186.7	317.0	33.6	465.0	0.0	148.0
WJ3000116	0.3	59.5	186.5	65.0	49.1	214.5	0.0	149.2
WJ56492	36.43	89.0	187.9	317.0	39.4	503.5	0.0	150.0
WJ3000278	0.12	52.2	186.6	65.0	42.7	215.5	0.0	150.4
WJ3000094	0.61	40.8	186.6	65.0	32.6	216.7	0.0	151.1
WJ23838	0.43	53.7	186.5	65.0	44.1	216.9	0.0	151.4
WJ3000580	0.3	59.9	186.5	65.0	49.3	218.3	0.0	153.0
WJ3000507	0.31	79.8	186.7	317.0	34.3	471.2	0.0	153.9
WJ3000437	0.37	69.2	186.6	65.0	58.1	220.2	0.0	154.8
WJ3000095	0.03	41.6	186.6	65.0	33.4	219.8	0.0	154.8
J86	0	78.6	186.6	190.0	46.2	344.9	0.0	154.9
WJ3000923	0.27	71.2	186.6	65.0	59.8	225.1	0.0	159.9
WJ3000442	0.36	72.1	186.6	65.0	61.1	227.9	0.0	162.6
WJ3000585	0.03	73.6	186.6	65.0	62.6	228.6	0.0	163.6
WJ55196	0.36	80.1	186.6	65.0	68.3	229.1	0.0	163.7
WJ56421	0.23	74.5	186.6	65.0	63.3	229.1	0.0	163.9
WJ3000438	0.44	70.4	186.6	65.0	59.7	230.3	0.0	164.9
WJ3000280	0.59	69.9	186.6	65.0	59.4	232.9	0.0	167.3
WJ38310	0.29	81.2	186.7	190.0	49.5	357.6	0.0	167.3
WJ3000803	0.15	71.2	186.6	65.0	60.6	232.7	0.0	167.6
WJ3000096	0.11	44.8	186.6	65.0	36.7	235.9	0.0	170.7
WJ3000572	0.53	74.9	186.6	65.0	64.2	239.1	0.0	173.5
WJ56397	0.08	76.4	186.6	65.0	65.4	238.7	0.0	173.6
WJ3000804	0.2	70.6	186.6	65.0	60.3	239.2	0.0	174.0
WJ3000051	0.47	61.8	186.5	65.0	52.3	240.4	0.0	174.9
WJ3000097	0.14	46.0	186.6	65.0	37.9	241.0	0.0	175.9
WJ3000792	0.56	56.1	186.5	65.0	47.1	241.6	0.0	176.0
WJ56401	0.08	73.9	186.6	65.0	63.3	241.9	0.0	176.8
WJ3000920	0.28	70.6	186.6	65.0	60.4	242.3	0.0	177.0
WJ3000005	0.26	74.9	186.6	65.0	64.5	244.4	0.0	179.2
WJ3000886	0.61	72.9	186.6	65.0	62.8	245.2	0.0	179.6
WJ22402	0.34	75.6	186.6	65.0	65.3	247.4	0.0	182.1
WJ3000119	0	76.5	186.8	190.0	47.8	372.5	0.0	182.5
WJ3000919	0.41	64.7	186.6	65.0	55.2	248.0	0.0	182.6

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WJ3000584	0.07	71.7	186.6	65.0	61.7	248.5	0.0	183.4
WJ56393	0.15	74.5	186.6	65.0	64.2	249.5	0.0	184.4
WJ3000885	0.35	73.3	186.6	65.0	63.2	250.0	0.0	184.6
WJ3000544	1.22	86.6	187.5	65.0	76.0	252.8	0.0	186.5
WJ3000347	0.66	80.1	186.8	190.0	50.8	377.8	0.0	187.2
WJ38309	0.62	81.2	186.7	190.0	51.7	379.6	0.0	189.0
WJ3000807	0.38	76.3	186.6	65.0	66.2	255.7	0.0	190.3
WJ22421	0.22	77.3	186.6	65.0	67.2	256.7	0.0	191.5
WJ3000573	0.07	79.2	186.6	65.0	69.1	259.7	0.0	194.6
WJ3001165	0.19	78.9	186.9	190.0	50.7	385.0	0.0	194.8
WJ3000212	1.1	51.9	186.6	65.0	43.8	261.8	0.0	195.7
WJ3000315	0.9	72.5	186.6	65.0	62.8	261.9	0.0	196.0
WJ56399	0.09	76.6	186.6	65.0	66.7	264.2	0.0	199.2
WJ3000793	0.4	57.8	186.5	65.0	49.3	264.7	0.0	199.3
WJ3000098	0.24	52.3	186.6	65.0	44.3	265.0	0.0	199.8
WJ53276	0.07	78.2	186.6	65.0	68.4	264.9	0.0	199.8
WJ3000853	1.16	73.1	186.6	190.0	46.3	391.2	0.0	200.1
WJ56395	0.19	76.4	186.6	65.0	66.5	265.8	0.0	200.7
WJ53269	0.04	78.3	186.6	65.0	68.5	265.7	0.0	200.7
WJ3000629	0.61	85.8	186.9	190.0	56.4	392.6	0.0	202.0
WJ3000282	0.77	75.5	186.6	65.0	65.8	267.9	0.0	202.1
WJ53264	0.04	78.2	186.6	65.0	68.5	267.5	0.0	202.4
WJ53252	0.3	73.9	186.6	65.0	64.3	269.5	0.0	204.2
WJ3000563	0.25	56.8	186.5	65.0	48.5	270.6	0.0	205.3
WJ3000624	0.09	57.0	186.5	65.0	48.7	272.4	0.0	207.3
WJ56394	0.23	73.9	186.6	65.0	64.4	272.7	0.0	207.4
WJ3000316	0.96	75.8	186.6	65.0	66.3	274.5	0.0	208.5
WJ51936	0.21	73.2	186.6	190.0	47.0	398.8	0.0	208.6
WJ56384	0.06	72.5	186.6	65.0	63.3	274.0	0.0	208.9
WJ3000071	0.09	80.6	186.6	65.0	70.7	274.1	0.0	209.0
WJ3000858	0.18	85.0	187.0	190.0	56.6	401.0	0.0	210.8
WJ3000337	0.61	73.0	186.6	190.0	47.2	403.2	0.0	212.6
WJ3000995	0.5	78.3	186.6	190.0	51.4	405.5	0.0	215.0
WJ53277	0.44	78.2	186.6	65.0	68.9	280.6	0.0	215.2
WJ3000070	0.17	81.1	186.6	65.0	71.4	281.4	0.0	216.2
WJ3000924	0.92	73.1	186.7	190.0	47.5	407.4	0.0	216.5
WJ3000520	0.31	78.0	186.7	65.0	68.9	281.9	0.0	216.6
WJ3000805	0.19	73.3	186.6	65.0	64.3	281.8	0.0	216.6
WJ50353	0.19	87.5	188.0	190.0	59.8	408.1	0.0	217.9
WJ3000806	0.25	73.6	186.6	65.0	64.7	284.3	0.0	219.0
WJ51883	0.44	59.8	186.6	65.0	51.8	288.0	0.0	222.6
WJ27615	0.47	83.3	186.8	190.0	56.0	413.2	0.0	222.7
WJ51914	0.08	65.9	186.6	65.0	57.6	289.4	0.0	224.3

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WJ3000794	0.34	60.6	186.6	65.0	52.5	289.8	0.0	224.4
WJ3000439	0.22	71.4	186.6	65.0	62.7	290.0	0.0	224.8
WJ3000332	0.58	59.8	186.6	65.0	51.8	291.8	0.0	226.2
WJ56382	0.13	72.5	186.6	65.0	63.7	293.2	0.0	228.1
WJ3000535	0.08	78.4	186.7	190.0	52.7	418.2	0.0	228.1
WJ3000441	0.06	71.3	186.6	65.0	62.7	295.4	0.0	230.3
WJ3000346	0.95	78.8	186.7	190.0	53.2	421.4	0.0	230.5
WJ3000099	0.28	61.4	186.6	65.0	53.5	299.6	0.0	234.3
WJ3000283	0.55	82.0	186.6	65.0	72.8	300.7	0.0	235.2
WJ51893	0.02	73.3	186.6	65.0	64.9	303.1	0.0	238.1
WJ3000440	0.11	71.4	186.6	65.0	62.9	304.0	0.0	238.9
WJ3000054	0.19	59.5	186.6	65.0	51.8	304.7	0.0	239.5
WJ3000166	0.94	80.9	186.7	190.0	55.3	430.9	0.0	239.9
WJ51882	0.05	59.8	186.6	65.0	52.1	305.9	0.0	240.9
WJ3001088	0.22	91.1	190.8	190.0	68.2	432.0	0.0	241.8
WJ3000574	0.9	80.1	186.7	65.0	71.5	310.2	0.0	244.3
WJ3000977	0.29	77.8	186.7	190.0	53.0	434.9	0.0	244.7
WJ3000625	0.41	63.3	186.5	65.0	55.4	310.7	0.0	245.3
WJ51892	0.06	72.6	186.6	65.0	64.3	310.5	0.0	245.5
WJ3000069	0.57	81.7	186.6	65.0	72.8	311.2	0.0	245.7
WJ3000511	0.22	83.4	186.8	190.0	57.9	436.2	0.0	246.0
WJ3000859	0.03	84.5	187.0	190.0	58.7	437.0	0.0	246.9
WJ3000508	1.59	82.5	186.8	190.0	57.2	439.6	0.0	248.0
WJ3000100	0.42	64.7	186.6	65.0	56.8	315.0	0.0	249.5
WJ50354	0.02	87.5	188.0	190.0	62.3	440.4	0.0	250.3
WJ3000120	0.54	76.8	186.8	190.0	52.9	443.0	0.0	252.5
WJ3000982	1.28	84.7	187.8	190.0	60.4	445.4	0.0	254.2
WJ3000060	0.01	81.6	186.7	190.0	56.8	447.1	0.0	257.1
WJ3000065	0.69	81.9	186.6	190.0	56.9	448.6	0.0	257.9
WJ3000118	0.03	76.5	186.8	190.0	53.0	448.3	0.0	258.3
WJ3001072	0.04	80.5	186.7	190.0	56.0	449.4	0.0	259.4
WJ3000064	0.12	81.8	186.7	190.0	57.1	450.3	0.0	260.2
WJ50362	0.02	86.6	188.0	190.0	62.2	452.9	0.0	262.9
WJ3000857	0.15	82.1	186.7	190.0	57.8	456.8	0.0	266.7
WJ3000582	0.42	69.1	186.5	65.0	61.2	333.1	0.0	267.7
WJ27596	0.32	83.5	186.7	190.0	58.9	458.5	0.0	268.2
WJ3000101	0.43	68.2	186.6	65.0	60.5	334.1	0.0	268.7
WJ27574	0.58	83.3	186.8	190.0	58.9	459.7	0.0	269.1
WJ3000925	0.3	77.5	186.8	190.0	54.2	459.5	0.0	269.2
WJ51894	0.26	65.9	186.6	65.0	58.3	334.5	0.0	269.2
WJ27614	0.12	83.5	186.8	190.0	59.2	460.4	0.0	270.3
WJ3000068	0.64	82.2	186.6	65.0	73.8	337.2	0.0	271.6
WJ3000167	0.27	85.9	186.9	190.0	61.4	462.0	0.0	271.7

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev - Upgraded System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3000795	0.51	69.7	186.6	65.0	62.0	339.8	0.0	274.3
WJ3000575	0.02	80.5	186.7	190.0	56.9	464.8	0.0	274.8
WJ3000530	0.01	80.4	186.7	190.0	56.9	466.2	0.0	276.2
WJ26597	0.24	78.4	186.7	190.0	55.4	467.4	0.0	277.2
WJ3000526	0.01	77.4	186.8	190.0	54.6	467.6	0.0	277.5
WJ27634	0.4	83.9	186.9	190.0	60.0	468.0	0.0	277.6
WJ3000525	0.33	77.4	186.8	190.0	54.6	468.0	0.0	277.7
WJ27654	0.05	86.2	187.1	190.0	62.0	469.2	0.0	279.2
J74	0	78.6	186.8	190.0	55.7	470.8	0.0	280.8
WJ50350	0.01	86.6	188.0	190.0	63.3	470.9	0.0	280.9
WJ38271	0.01	85.0	187.0	190.0	61.3	471.8	0.0	281.8
WJ3000102	0.43	71.1	186.6	65.0	63.4	348.3	0.0	282.9
WJ3000334	0.06	72.0	186.6	65.0	64.4	349.1	0.0	284.1
WJ26594	0.27	80.5	186.7	190.0	57.3	474.4	0.0	284.1
WJ3000628	0.47	84.7	186.9	190.0	61.0	476.1	0.0	285.6
WJ38273	0.04	85.0	187.0	190.0	61.6	478.3	0.0	288.2
WJ3000626	1.04	73.2	186.6	65.0	65.4	354.6	0.0	288.6
WJ38289	0.99	84.7	187.0	190.0	61.5	479.8	0.0	288.9
WJ56389	0.14	72.5	186.6	65.0	64.9	356.0	0.0	290.9
WJ38269	0.17	85.0	187.0	190.0	61.8	481.2	0.0	291.1
WJ56431	0.07	72.9	186.6	65.0	65.4	358.9	0.0	293.8
WJ56380	0.09	72.5	186.6	65.0	64.9	360.7	0.0	295.6
WJ3000796	0.39	73.0	186.6	65.0	65.6	361.4	0.0	296.0
WJ56385	0.07	72.5	186.6	65.0	65.0	362.6	0.0	297.6
WJ3000860	0.14	85.1	187.2	190.0	62.3	492.2	0.0	302.0
WJ3000004	1.02	74.4	186.6	65.0	66.8	370.6	0.0	304.6
WJ51908	0.16	72.0	186.6	65.0	64.7	370.5	0.0	305.3
WJ51898	0.23	72.0	186.6	65.0	64.7	371.6	0.0	306.4
WJ53257	0.12	73.9	186.6	65.0	66.5	377.9	0.0	312.8
WJ53253	0.49	74.1	186.6	65.0	66.7	380.2	0.0	314.7
WJ53255	0.17	73.9	186.6	65.0	66.6	381.0	0.0	315.9
WJ3000631	0.1	85.9	186.9	190.0	63.5	507.1	0.0	317.0
WJ24325	1.11	85.9	186.9	190.0	63.5	508.4	0.0	317.3
WJ3000797	0.29	77.7	186.6	65.0	70.4	383.7	0.0	318.4
WJ38249	0.01	85.8	187.4	190.0	64.0	517.5	0.0	327.5
WJ3000808	0.25	77.6	186.6	65.0	70.4	399.5	0.0	334.2
WJ51910	0.22	73.2	186.6	65.0	66.1	400.8	0.0	335.6
WJ51937	0.15	73.2	186.6	65.0	66.2	401.8	0.0	336.6
WJ38229	0.14	85.9	187.4	190.0	64.5	527.5	0.0	337.4
WJ3000798	0.98	78.4	186.6	65.0	71.3	406.1	0.0	340.1
WJ300067	0.57	82.2	186.6	65.0	75.0	415.5	0.0	349.9
WJ38171	1.15	86.1	187.6	190.0	65.4	542.3	0.0	351.2
WJ3000632	0.79	88.7	187.3	190.0	67.8	547.1	0.0	356.4

17103 - Eglinton Laird Intensification Water Modelling - Jan 2018 - Post-Dev - Upgraded System Max Daily Demand with Fireflow Simulation Run

Note:- At any given node the Available Flow at Hydrant must be greater than Total demand. Therefore the Residual Fire Flow at any node should be greater than Zero (indicating a greater available fire flow than what is required).

ID	Static Demand (L/s)	Static Pressure (psi)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (psi)	Available Flow at Hydrant (L/s)	Available Flow Pressure (psi)	Residual Fire Flow (L/s)
WJ3001087	0.81	91.5	190.8	190.0	75.1	550.0	0.0	359.2
WJ3000758	2.59	85.7	187.5	190.0	65.7	557.1	0.0	364.6
WJ38150	1.92	86.5	187.9	190.0	66.6	563.2	0.0	371.3
WJ50348	0.42	86.6	188.0	190.0	67.0	568.9	0.0	378.5
WJ3000062	0.05	82.1	186.7	65.0	75.4	454.7	0.0	389.7
WJ26595	0.02	78.4	186.7	65.0	71.9	459.1	0.0	394.0
WJ3000759	5.37	85.4	187.8	190.0	66.9	595.8	0.0	400.4
WJ26598	0.01	78.4	186.7	65.0	72.0	466.4	0.0	401.4
WJ3000760	2.34	85.5	187.8	190.0	67.1	594.8	0.0	402.4
WJ50358	1.56	87.8	188.2	190.0	69.3	598.5	0.0	406.9
WJ3000532	0.02	80.5	186.7	65.0	74.0	473.3	0.0	408.3
WJ3000984	0.27	87.3	188.6	190.0	70.8	644.7	0.0	454.4
WJ3000767	11.04	91.7	190.9	317.0	72.0	874.2	0.0	546.2
WJ3000761	2.29	88.9	189.0	190.0	75.6	766.9	0.0	574.6
WJ3000762	0.35	88.8	189.0	190.0	75.8	777.5	0.0	587.2
WJ3000763	2.27	88.8	189.1	190.0	75.9	781.2	0.0	589.0
WJ3000764	0.38	91.6	190.8	190.0	83.6	1085.5	0.0	895.1
WJ3000765	0.18	91.9	190.9	190.0	84.1	1103.3	0.0	913.1
J16	0.14	89.6	192.0	190.0	84.5	1432.2	0.0	1242.0
WJ3000766	0.16	146.0	193.9	190.0	145.7	9750.4	0.1	9560.2

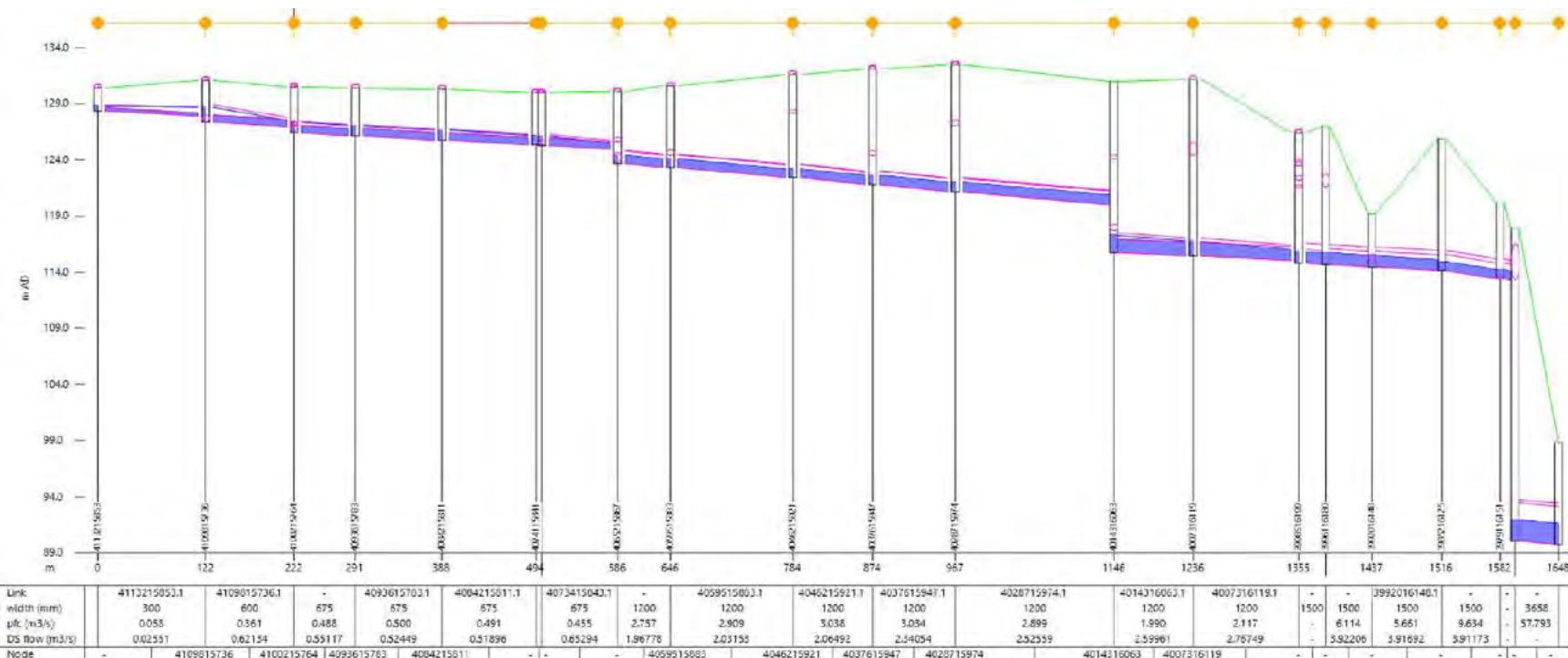
APPENDIX C-3

PROFILES



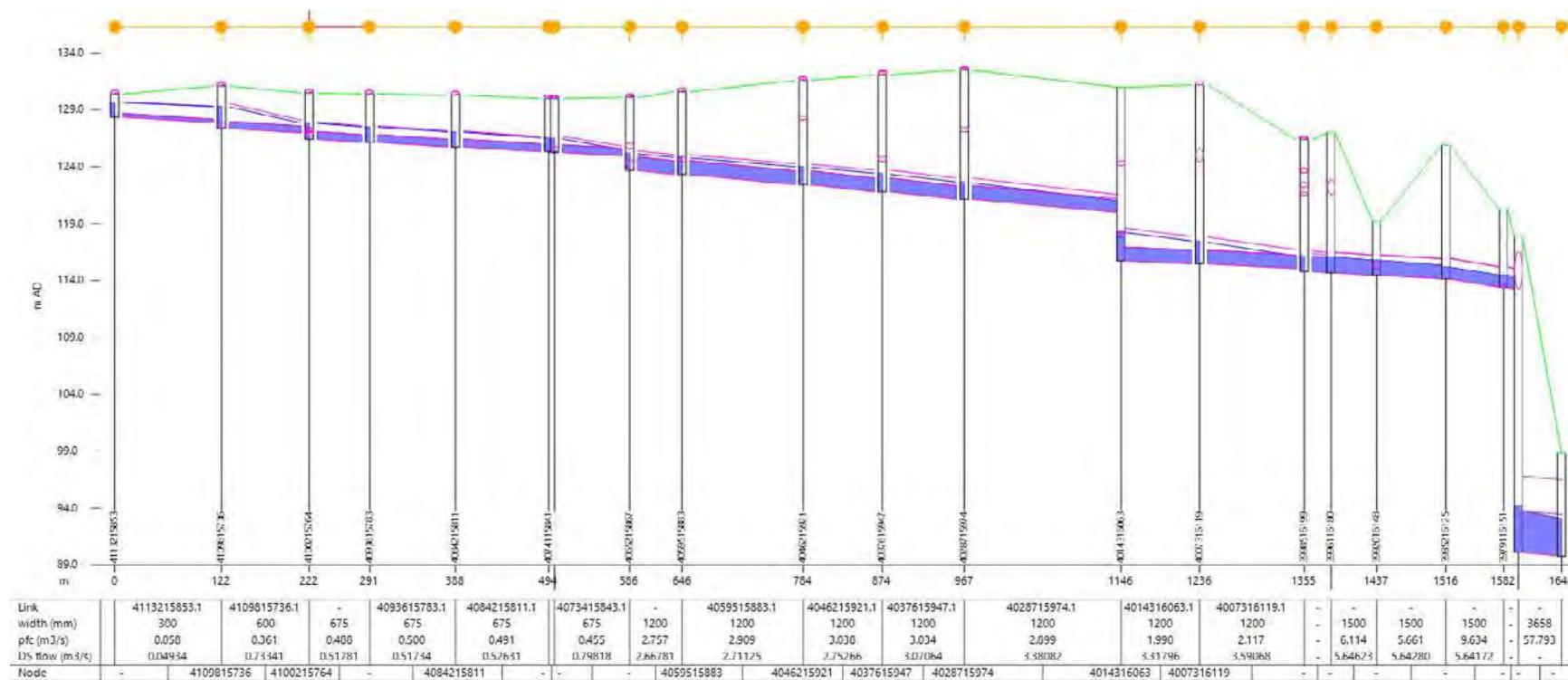
Laird Drive – Pre-Development

2-Year Storm



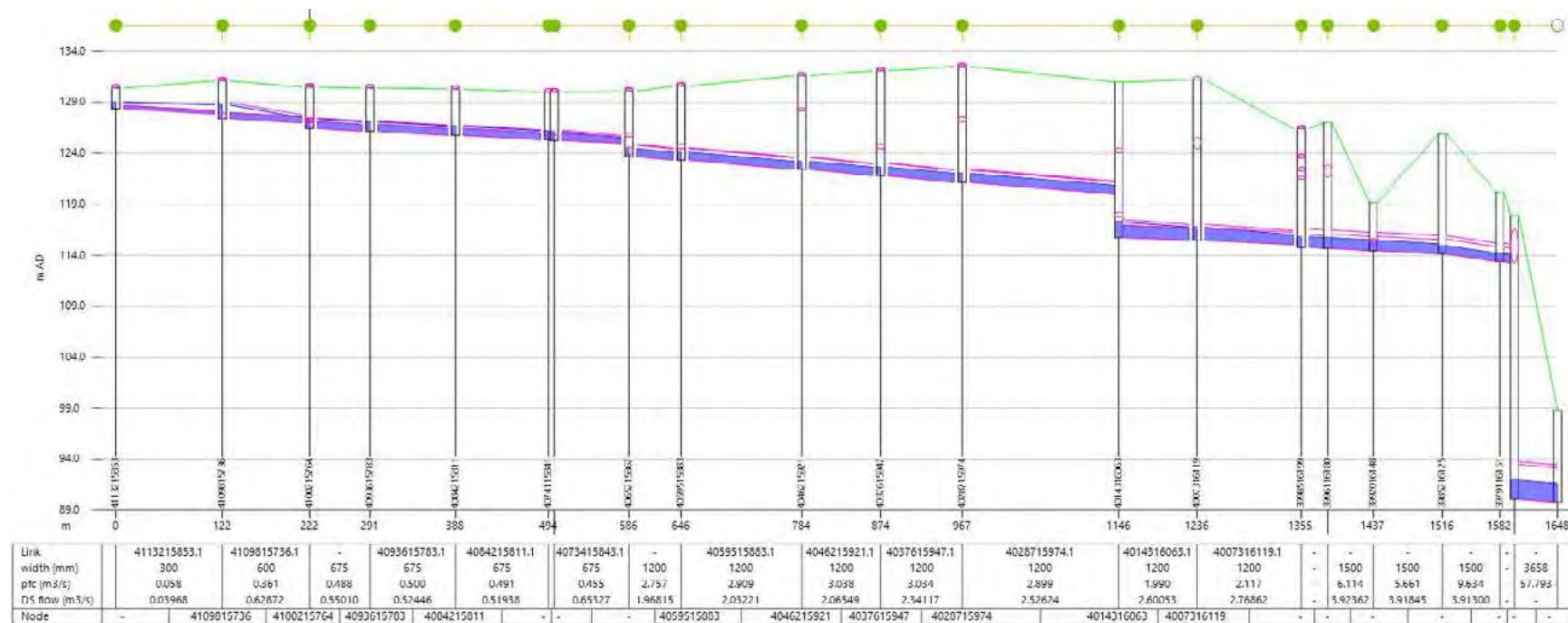
Laird Drive – Pre-Development

100-Year Storm



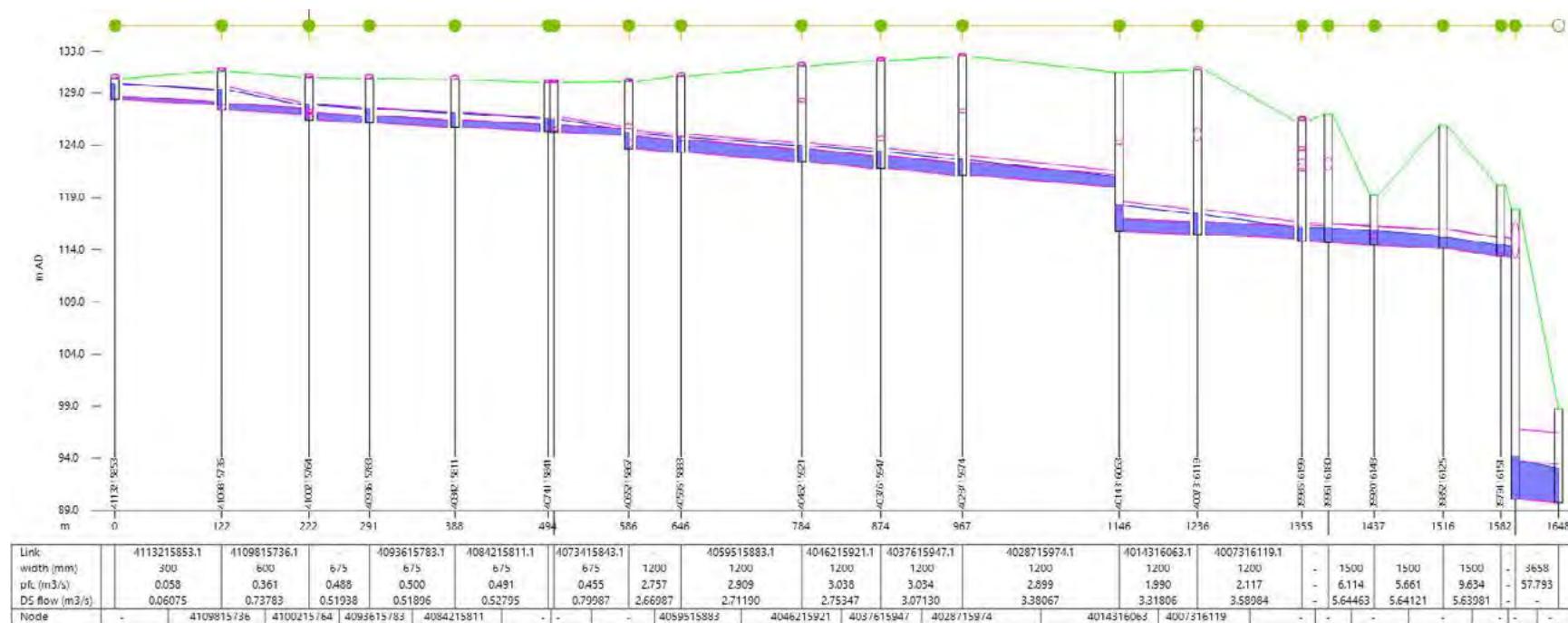
Laird Drive – Post-Development

2-Year Storm



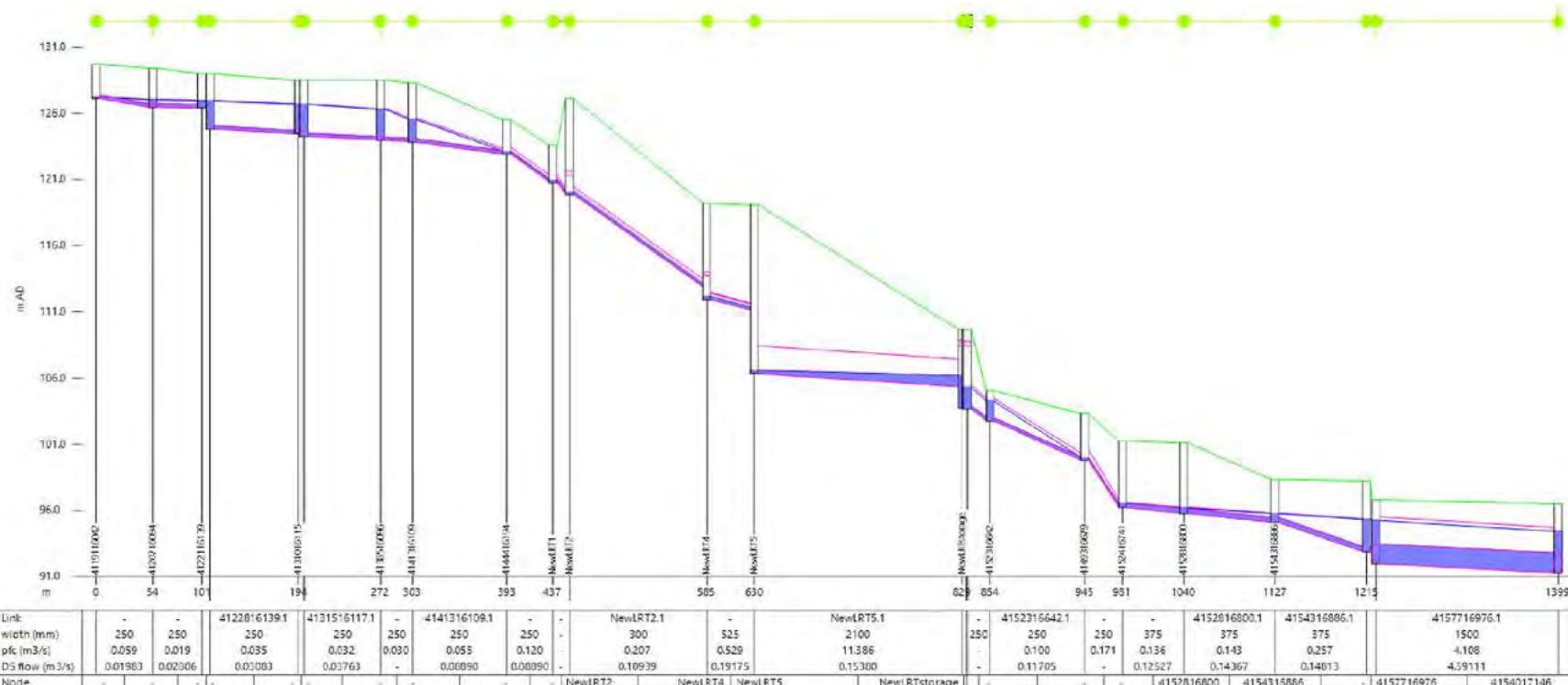
Laird Drive – Post-Development

100-Year Storm



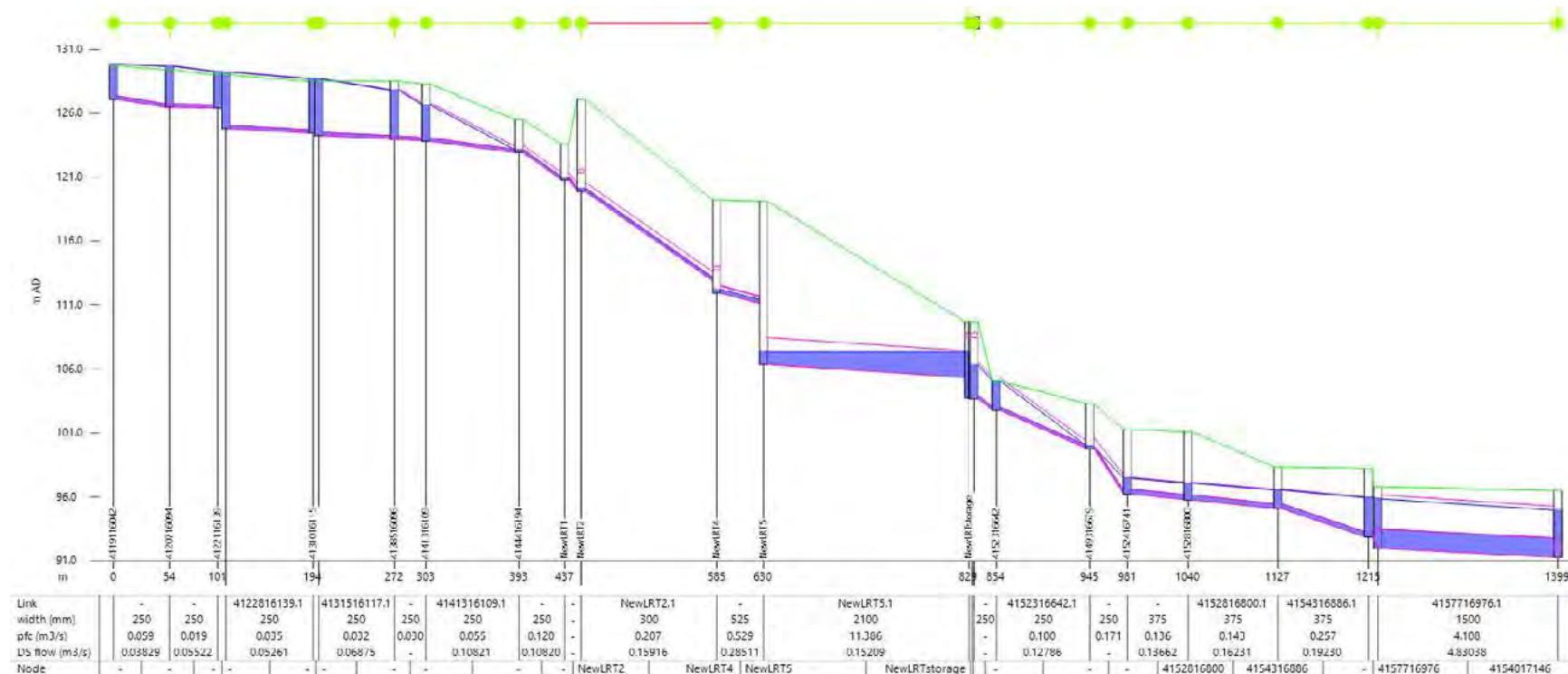
Eglinton Avenue East – Pre-Development

2-Year Storm



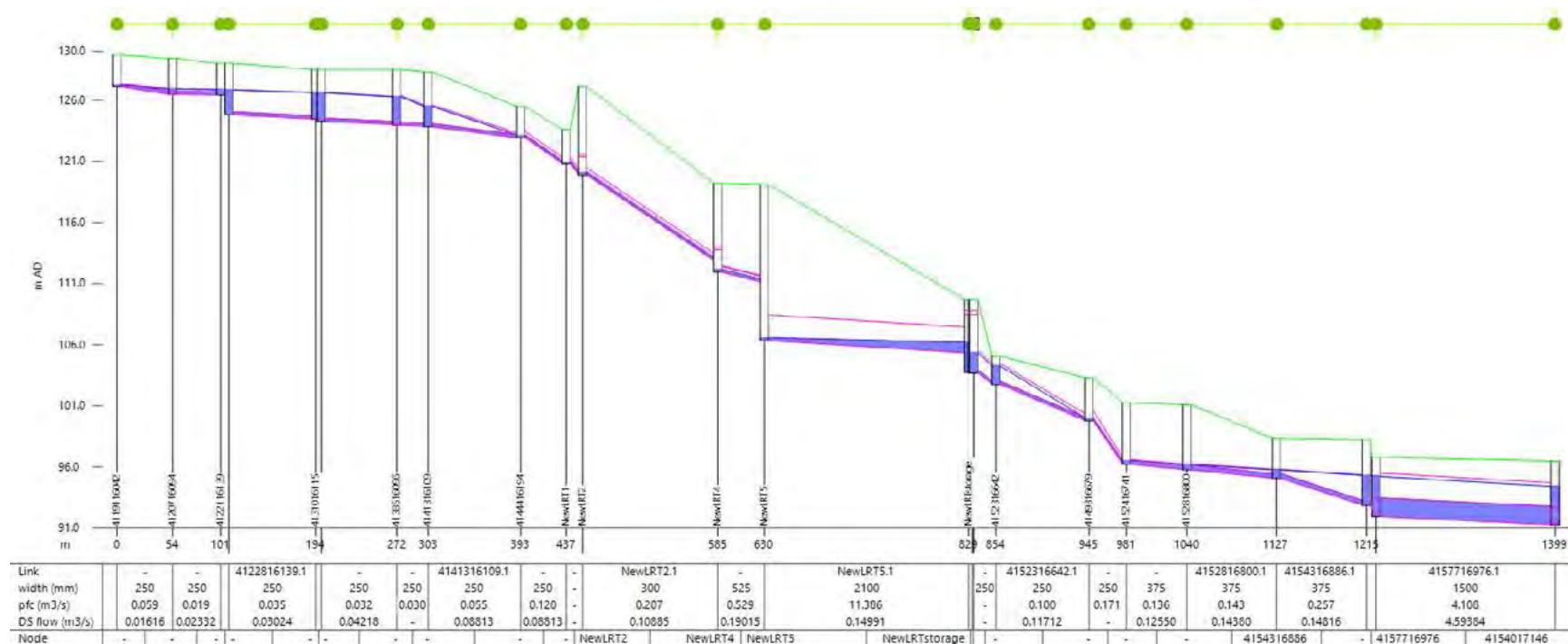
Eglinton Avenue East – Pre-Development

100-Year Storm



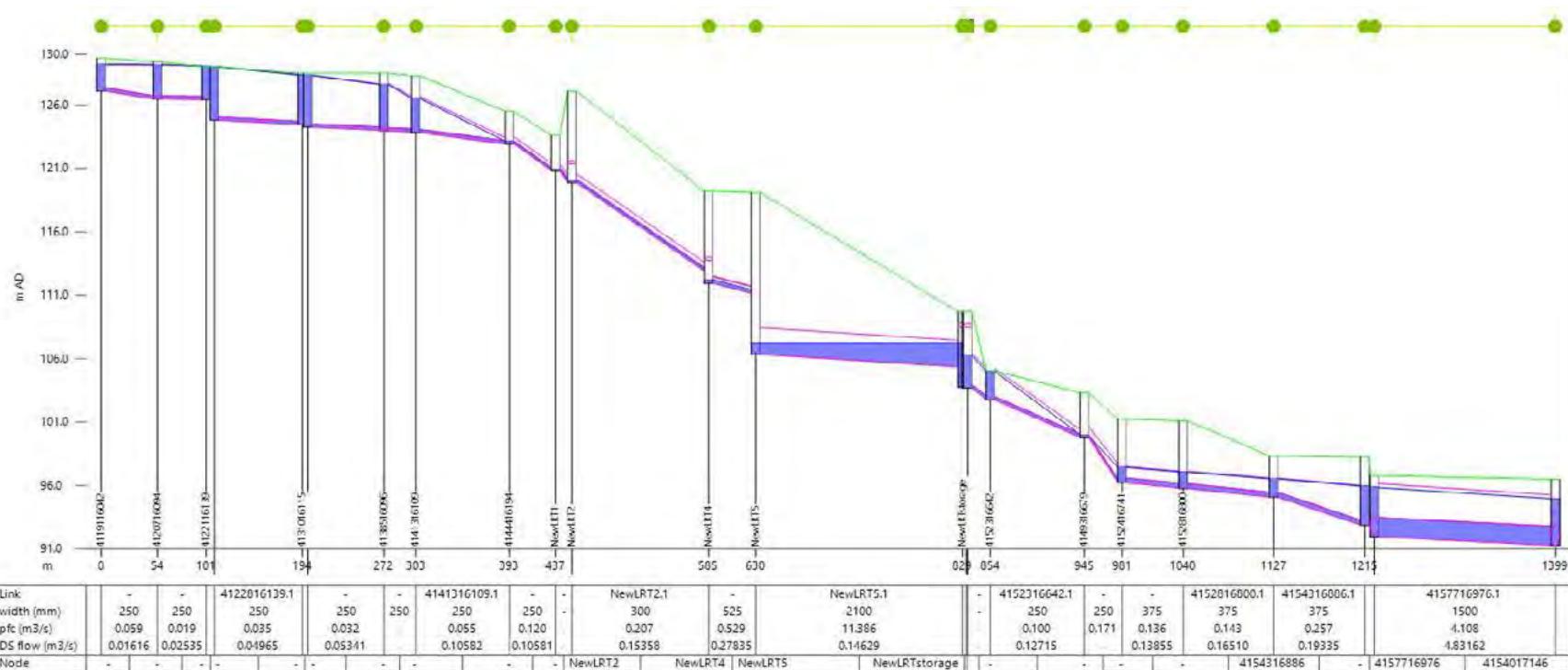
Eglinton Avenue East – Post-Development

2-Year Storm



Eglinton Avenue East – Post-Development

100-Year Storm



APPENDIX C-4

COST ESTIMATE





**PRELIMINARY COST
ESTIMATE
SUMMARY PAGE**

Project No: 1896
Date: May 14, 2018
Owner:
SCS Estimator: Henry L
Checked By: Julia R

Existing Sanitary Re and Re, Upsizing Existing Watermains

All unit prices are exclusive of Harmonized Sales Tax (H.S.T.).

Assumptions:

This estimate of probable cost is preliminary and is subject to, but not limited to, the following items:

A - GENERAL

- → Estimate is for hard construction costs only.
- → Estimate of Re and Re and upsizing works does not include allowance for demolition or decommissioning costs.
- → Cost is based on representative prices of 2017 work, as well as the current year-to-date contract rates, without allowances for escalation in inflation, etc...
- → No utility conflicts and/or required utility relocation are assumed.
- → Ground conditions are assumed to be adequate for the proposed works (e.g. no dewatering, sub-excavation, etc.)
- → Quantities are for estimating purposes only and were based on preliminary sketch, aerial images and street views sourced through Google Map. Some variation is anticipated at final design.
- → Work assumed to be undertaken during season with +7 degree C and up. No winterization cost has been allowed.
- → SCS Consulting Group Ltd. has no control over costs of labour, materials, equipment, future conditions or contractor bidding methods at the time of construction.

B - SANITARY RE and RE

- → Close one lane of traffic for construction.

C - WATERMAIN UPSIZING and REHABILITATION

Watermain rehabilitation work assumed to be isolated, power-flushed to remove the calcification at the inner wall of the pipe in order to increase the roughness coefficient. For the section going across the creek underneath the bridge assuming power-flush to take place at the chamber located at the top of the slope at both endings of the bridge

This is an estimate of the general magnitude of the works and associated costs for construction. There should be explicit recognition that the estimate may significantly change due to uncontrollable factors. SCS Consulting Group Ltd. assumes no liability toward the use of this estimate and it shall not be relied upon in any way by a third party.


Existing Sanitary Re and Re, Upsizing Existing Watermains
Project No: 1896

Date: 11 May, 2018

SCS Estimator: Henry L

Checked By: Julia R

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
A - SANITARY RE and RE					
1	Mobilization and demobilization.	1.0	each	\$10,000.00	\$10,000.00
2	ESC measures.	1.0	lump sum	\$10,000.00	\$10,000.00
3	Traffic Control	1.0	lump sum	\$18,000.00	\$18,000.00
4	Mud Dust control	1.0	lump sum	\$10,000.00	\$10,000.00
5	Pumping to by-pass sewage to facilitate the work.	1.0	lump sum	\$25,000.00	\$25,000.00
6	Re and Re 250mm dia PVC Sanitary (4m avg depth)	200.0	m	\$1,250.00	\$250,000.00
7	Re and Re 1200mm dia manhole (4.5m depth)	6.0	each	\$14,000.00	\$84,000.00
8	Remove and dispose mixed trench material	1500.0	m ³	\$50.00	\$75,000.00
9	Assume U-fill backfill	1200.0	m ³	\$130.00	\$156,000.00
10	Re and Re Road asphalt and granular	400.0	m ²	\$90.00	\$36,000.00
				Total Section A:	\$674,000.00
B - WATERMAIN UPSIZING					
1	Mobilization and demobilization.	1.0	each	\$10,000.00	\$10,000.00
2	ESC measures.	1.0	lump sum	\$30,000.00	\$30,000.00
3	Traffic Control	1.0	lump sum	\$70,000.00	\$70,000.00
4	Tree/vegetation clearing to facilitate the work.	1.0	lump sum	\$25,000.00	\$25,000.00
5	Locate, expose, identify and secure existing utilities within boulevard	1.0	lump sum	\$100,000.00	\$100,000.00
6	By pass potable water in a section not exceeding 100m (or max fire hydrant spacing)	20.0	each	\$40,000.00	\$800,000.00
7	Mud and Dust control	1.0	lump sum	\$20,000.00	\$20,000.00
8	Isolate watermain sections not exceeding 100m (or max fire hydrant spacing)	20.0	each	\$7,000.00	\$140,000.00
9	Remove and upsize existing watermain from 300mm to 400mm and valve/chamber.	850.0	m	\$825.00	\$701,250.00

**Existing Sanitary Re and Re, Upsizing Existing Watermains**

Project No: 1896

Date: 11 May, 2018

SCS Estimator: Henry L

Checked By: Julia R

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
10	Remove and upsize existing watermain from 200mm to 300mm and valve/chamber.	700.0	m	\$550.00	\$385,000.00
11	Remove and upsize existing watermain from 150mm to 200mm and valve/chamber.	400.0	m	\$400.00	\$160,000.00
12	Re and re existing hydrants	8.0	each	\$12,000.00	\$96,000.00
13	Reconnection all new watermain	21.0	each	\$7,500.00	\$157,500.00
14	Testing and commissioning of new watermain	1.0	lump sum	\$75,000.00	\$75,000.00
15	Remove and dispose mixed trench material	4000.0	m ³	\$25.00	\$100,000.00
16	Backfill watermain with Granular B	5600.0	m ³	\$60.00	\$336,000.00
17	Restore boulevard with topsoil and seed	11000.0	m ²	\$7.00	\$77,000.00
18	Re and re damaged concrete sidewalk	1000.0	m	\$170.00	\$170,000.00
19	Restore asphalt parking area	3000.0	m ²	\$60.00	\$180,000.00
				Total Section B:	\$3,632,750.00

C - WATERMAIN REHABILITATION

1	Rehabilitation of existing 400mm (assume PVC) Watermain by power pressure wash along with continuous water pumping (unknown type of pipe used and existing condition of the watermain pipe)	490.0	m	\$300.00	\$147,000.00
2	CCTV the watermain three (3) times to ensure pipe successfully cleaned	490.0	m	\$30.00	\$14,700.00
				Total Section C:	\$161,700.00
				Sub-Total	\$4,468,450.00
				15% Contingency	\$670,267.50
				TOTAL	\$5,138,717.50

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