

TO:	CHAIR AND MEMBERS STRATEGIC PRIORITIES & POLICY COMMITTEE MAY 15, 2017
FROM:	MARTIN HAYWARD MANAGING DIRECTOR, CORPORATE SERVICES & CITY TREASURER, CHIEF FINANCIAL OFFICER AND CITY MANAGER
SUBJECT:	GROWTH MANAGEMENT IMPLEMENTATION STRATEGY (GMIS): 2018 ANNUAL REVIEW & UPDATE

RECOMMENDATION

That on the recommendation of the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer and City Manager with regard to the implementation of the Official Plan growth management policies applicable to the financing of growth-related infrastructure works, the following actions be taken:

- a. the 2018 Growth Management Implementation Strategy Update **BE APPROVED** as attached in Appendix 'B', it being noted that:
 - i. Fox Hollow SWM 1 North Cell will be rescheduled from 2022 to 2019;
 - ii. North Lambeth SWM 10 will be rescheduled from 2018 to 2021;
 - iii. Wickerson Watermain will be rescheduled from 2024 to 2018;
 - iv. Kilally Watermain A30 will be rescheduled from 2030 to 2025;
 - v. Dingman Watermain A20 will be rescheduled from 2028 to 2026;
 - vi. project design work for Dingman Watermain A21 will commence in 2017.
- b. the project timing adjustments and changes to budget estimates arising from the 2018 Growth Management Implementation Strategy **BE REFLECTED** in the 2018 Annual Update of the Multi-Year Budget.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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November 7, 2016	Report to Strategic Priorities and Policy Committee – Development Charges Rate Monitoring – 2016 Review
June 6, 2016	Report to Strategic Priorities and Policy Committee – Growth Management Implementation Strategy (GMIS): 2017 Annual Review & Update
June 23, 2014	Report to Strategic Priorities and Policy Committee – “Approval of 2014 Development Charges By-law and DC Background Study”

EXECUTIVE SUMMARY

The Growth Management Implementation Strategy (GMIS) is an important tool for Council to coordinate growth infrastructure with development approvals and correspond with the pace of growth across the city, while maintaining an acceptable financial position. This GMIS report builds upon the financial analysis provided in the previous GMIS reports and seeks to ensure the affordability of growth servicing in the City of London.

The scope of the 2018 GMIS’s analysis focuses on all projects that will directly impact specific subdivision or site plan applications. The attached tables and figures outline the timing of key growth related infrastructure projects needed to facilitate development in the city.

Demand for new housing increased markedly in 2016 with medium and high density housing

accounting for the bulk of the increase. Single family residential construction improved in 2016, however it still remains below the City’s adopted growth projections (used in the 2014 DC study) as it has for several years. While single family unit construction accounts for almost 50% of DC revenues, unmet revenue projections in this building type were offset by improved performance in other categories. As such, the City is in a position to maintain the current GMIS timing for growth infrastructure projects and to advance some projects based on warranted growth needs.

This report discusses some of the financial considerations (DC reserve fund and debt) which arise from maintaining the City’s current plan for investment and the implications of requests for project accelerations. Council’s adopted Project Evaluation Framework is used to review the timing of future infrastructure projects with the aim of providing a future 3 year supply of single family residential lots in each greenfield area.

Following from these observations, it is recommended that on balance the current project timing plan be maintained. Certain strategic project accelerations are being recommended by staff to achieve efficiencies through coordinated timing with other projects and to meet greenfield land supply targets. Extensive developer and community stakeholder consultation is a vital part of the annual GMIS process.

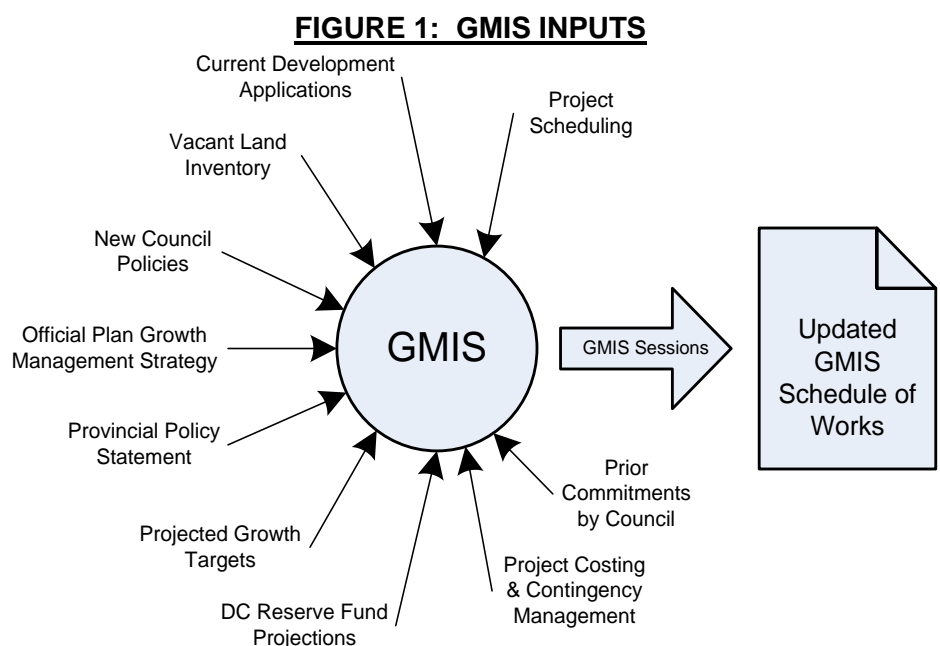
BACKGROUND

The initial Growth Management Implementation Strategy (GMIS) document, dated June 4, 2008, provided a schedule for growth infrastructure with estimated costs over the 20-year growth period. This schedule was incorporated into the finalized Development Charges (DC) Background Study which came into effect with the passing of the DC By-law in August, 2009. Since then, the GMIS has been updated annually, reflecting adjustments to timing for DC-funded projects.

The purpose of the GMIS is to provide Council with a tool to coordinate growth infrastructure with development approvals and to correspond with the pace of growth across the city in a financially practical manner. The GMIS is reviewed and updated annually to allow for adjustment of the schedule of works between DC background studies so that it continues to align with growth needs and DC revenues. The GMIS considers the pace of development, the status of DC reserve funds, the Provincial Policy Statement housing supply requirements, and the desires of developers to progress development applications in areas approved for growth. It provides flexibility to respond to changes in market conditions or to make adjustments that reflect the financial status of the DC reserve funds.

GMIS Inputs and Principles

The GMIS update involves the integration and assessment of multiple inputs (Figure 1). Typically, each GMIS update assesses the collected information against the eight Council approved principles of GMIS to make appropriate adjustments to the schedule of works.



As part of drafting the first GMIS in 2008, staff and development industry representatives participating in the DC Implementation Team helped develop core principles for the implementation of the City’s growth management policies. These core principles guided the

considerations and analysis for the original GMIS as well as future annual updates. The eight core principles set out by Council in 2008 include:

1. Provide direction for timely and cost efficient extension of municipal services both from an efficiency and municipal affordability perspective.
2. Support growth costs that are affordable within our financial capacity, having regard for both the capital and operating costs of services to support growth.
3. Allocate growth in a manner that optimizes the utilization of existing services and facilities.
4. Support the development of sufficient land to meet the City's growth needs and economic development objectives.
5. Support the implementation of Official Plan growth management policies.
6. Support the completion of existing development approvals.
7. Maintain lot and land supply that is consistent with provincial policies and conducive to a healthy housing market.
8. Co-ordinate the phasing of development approvals and the scheduling/funding of works through the capital budget.

DISCUSSION

2018 GMIS Update – Introduction

The 2018 GMIS report builds upon information provided in the previous GMIS reports and seeks to sustain adequate servicing of growth areas in the City of London and prudent management of Development Charge reserve funds. The scope of the 2018 GMIS analysis includes all projects that directly impact specific subdivision or site plan applications with the goal of creating the most efficient servicing solutions as possible.

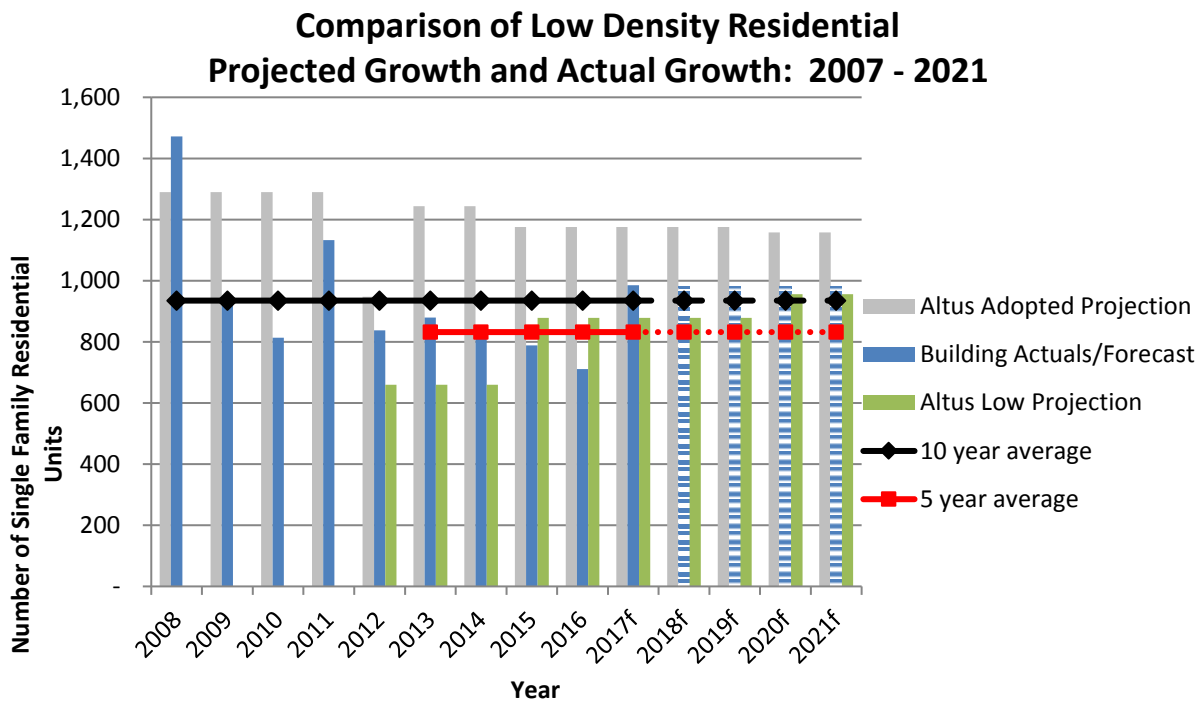
2018 GMIS Context – Growth and Development Observations and Trends

An important relationship exists between the projected amount of residential and non-residential growth and the City's future investments in infrastructure projects. Development Charge rate calculations are based on growth projections that determine servicing needs, which in turn establish DC rates. If actual growth in the form of development and building construction does not consistently meet the growth projections contained in the DC Background Study, then sufficient revenues are not being generated to maintain the original schedule of investments in infrastructure. The two key elements – growth activity and investment in infrastructure – should move in tandem.

The 2014 Development Charges Background Study contained a large number of stormwater and sanitary growth projects in the first five years of the recovery period. Given the largely “front-loaded” capital program for these service areas, after several years of growth activity that was well below projections, a ‘reset’ was required last year that resulted in several project deferrals to provide the necessary relief for DC reserve funds to respond to a scenario of less than anticipated DC revenues.

For the 2018 GMIS Update, staff reviewed growth levels for all forms of residential and non-residential development. Figure 2 provides a graph of historic and forecasted growth for low density residential development which is particularly important for DC purposes since single family homes represent almost 50% of calculated DC revenues and are the primary driver for the construction of new infrastructure to support greenfield subdivisions. It should be noted, however, that the growth forecasts for all forms of residential and non-residential development are used for determining future DC revenues and for assessing the health of the DC reserve funds.

FIGURE 2: LOW DENSITY RESIDENTIAL GROWTH: 2007-2021



Staff notes the following growth observations and trends that impact DC revenues and the 2018 GMIS recommendation:

- Over the previous 5 years (2011-2015), the City experienced an annual average of 805 permits for single family homes. This was exceeded in 2016 when 970 single family home permits were issued. While this represents an improvement, it remains below the 1176 units per year projected in the 2014 DC study. Staff is anticipating the trends experienced in 2016 will carry forward and may be exceeded in 2017; several GMIS stakeholders have indicated that they are experiencing increased interest in single family dwellings and believe the recently experienced demand will be sustained into the future. As such, the City’s forecast has been revised from 800 to 950 single family units anticipated for 2017 through 2021. This projection will be reviewed following the findings of the 2019 DC Study population and employment projections being prepared this year. Industry representatives have said that 2017 may indeed exceed the 950 projection used in Staff’s analysis and may exceed 1,200 units should current activity continue.
- Medium density residential growth was strong in 2016 after being well below projections for several years. It is anticipated that townhouse construction will remain at or slightly above growth projections for the coming years due to an increasing demand for this housing form from young adults and retirees. The City’s forecast for townhouses for 2016 and beyond is consistent with the Altus projection (used in the 2014 DC Study) and higher than average growth experienced during the 2012-2016 period.
- Apartment construction continues to be strong in London, but has a “peaks and troughs” building cycle. The City experienced a very high level of construction in 2016 and the market appears to be in a “peak”. There is strong development interest at present for new apartment buildings due to low vacancy rates; however, construction levels are likely to be at or below the growth projection by the end of the decade.
- Several large commercial developments are anticipated to be built in the coming years at a number of locations city-wide. Additionally, the Altus projection of commercial space has been exceeded for the past five years. These factors have prompted adjustments to the City’s forecast of commercial space to assume a higher amount of DC revenues from commercial buildings than originally anticipated.
- After several years of low to moderate development, a large amount of institutional space was constructed in 2016 that exceeded the institutional growth projection. Future institutional construction is difficult to predict in light of spending restraints by upper levels of government. As a result, future institutional growth is anticipated to be at, or slightly below, projected levels to 2020.

- The industrial sector in the London area has been challenged with the impact of the 2008 recession and the continued restructuring of manufacturing globally. The City is attracting new businesses to London, and the amount of new industrial floor space has been steadily increasing over the last three years; however actuals are still well below projected amounts. Future industrial construction is likely to be challenged by a reduced amount of industrial construction province-wide. Longer-term external forecasts for the industrial sector anticipate continued recovery, which will coincide with the City's development of new industrial lands attractive to larger industrial users. By the end of the decade, London's industrial growth is forecasted to be at the Altus projection.

In recent months, several publications by Statistics Canada, the Conference Board of Canada and the Canada Mortgage and Housing Corporation have indicated that London's economy is anticipated to remain stable over the next few years. Staff is optimistic of increased employment opportunities, stronger population growth and corresponding market demand for higher levels of construction of residential units and non-residential floor space. This scenario should improve DC revenues in comparison to the performance of the last few years. .

2018 GMIS Context – Development Charges Reserve Fund Analysis

As part of the 2014 Development Charges Background Study, Staff reviewed the cash flow projections for each service component funded by DCs. This analysis revealed a need to closely monitor reserve fund revenues and drawdown activity, especially for the following high cost service components:

- Stormwater Management Facilities (SWMFs);
- Sanitary Sewerage;
- Roads Services; and
- Water Distribution.

These services rely heavily on debt to facilitate the timing of infrastructure construction given that:

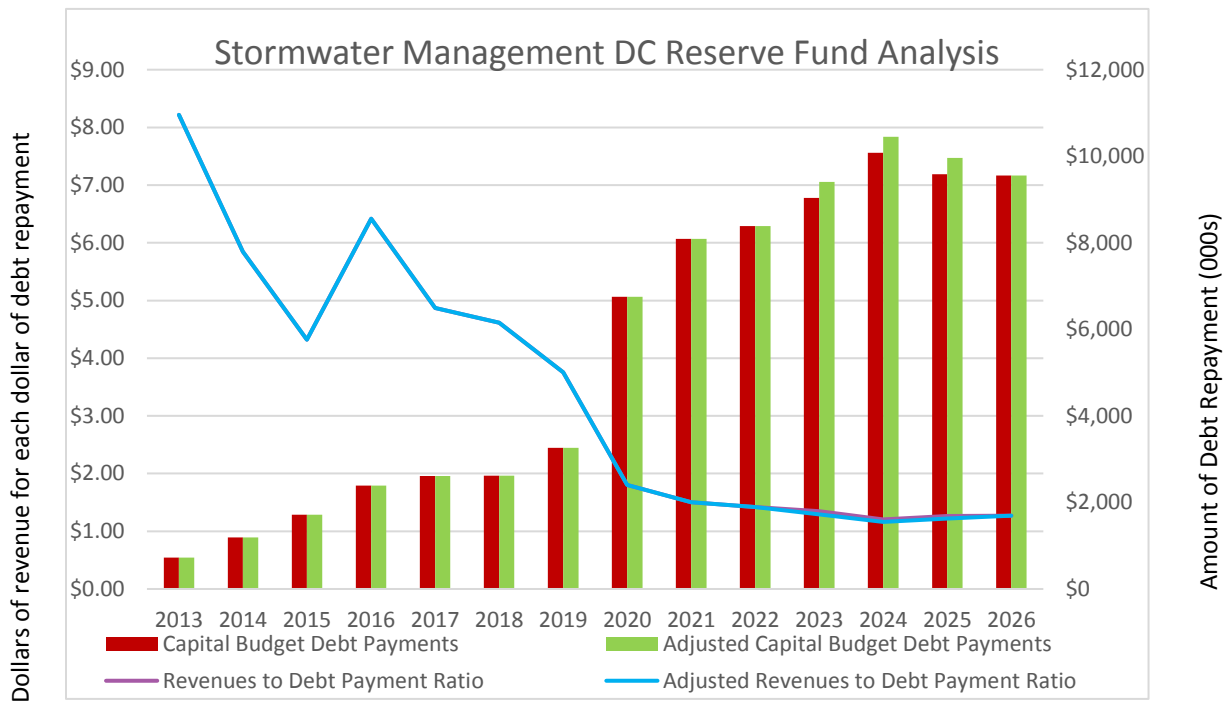
- major expenditures (especially sanitary sewers and stormwater management) precede and facilitate growth in that new investments are required prior to development being possible in a new area;
- reserve fund balances in the Roads and Water service categories are diminishing and will soon require more debt to sustain; and,
- significant amounts of project costs have been identified for future recovery (i.e. post period benefits) in the 2014 DC rate calculations with the objective of achieving a fair allocation of recovery of investment in growth costs. Therefore, the DC reserve funds that finance these services rely on debt to finance the portion of the project costs identified for recovery beyond the 20 year time horizon of the DC study.

Staff has conducted a detailed cash flow analysis of all DC reserve funds to assess the financial risks and overall affordability of the present GMIS. Additionally, Environmental and Engineering Services division managers were interviewed to determine emergent changes to project timing and cost estimates.

Figures 3 and 4 provide a graphical representation of the Stormwater and Sanitary Development Charge reserve fund analysis undertaken by Development Finance staff:

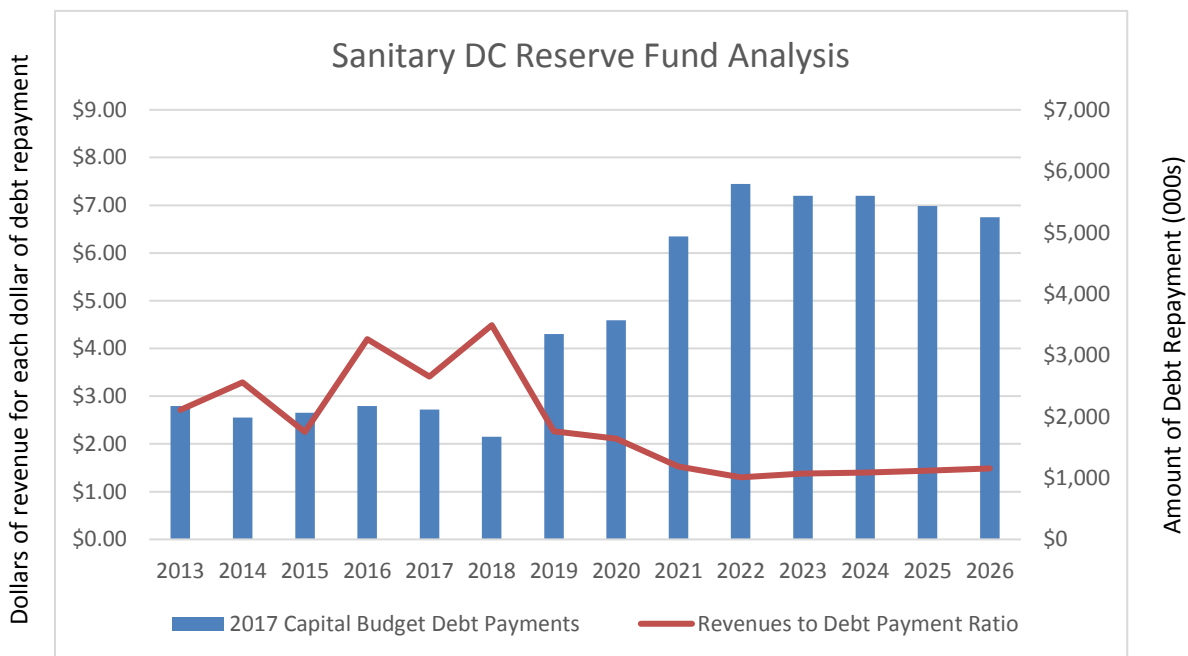
- **Debt payments (vertical bars):** For each year, the bars reflect annual debt payments required by the reserve fund to pay for infrastructure investments. Viewing the graph from left to right, the first (red) bar reflects debt payments based on currently approved capital budgets and forecasts. The second (green) bar reflects an 'adjusted' annual debt payment based on revised debt payment changes arising from the recommended project timing adjustments which are discussed later in this report.
- **Revenues to debt payment ratio (lines):** To provide context for the debt obligations of the Stormwater and Sanitary Reserve Funds, a line depicting a revenues to debt ratio is provided. The declining line in Figure 3 indicates that an increasing share of DC revenues is being used to pay down debt, limiting the amount of cash draws available to fund projects. As shown on the figures below, the ratio dips substantially after 2018/2019 as several projects are to slated for construction that require the use of debt financing. As shown, annual debt payments will consume a substantial portion of projected revenues over the next 10 years and beyond (approximately \$1.25 of revenue for each dollar of DC revenue required to meet debt obligations).

FIGURE 3: STORMWATER DC RESERVE FUND ANALYSIS



The same pattern is apparent in Figure 4. As no timing adjustments to sanitary projects are recommended as part of the 2018 GMIS Update, no second bar is needed to identify proposed changes to the fund. As with the Stormwater Reserve Fund in Figure 3, the revenue to debt payment ratio in the Sanitary Reserve Fund is only slightly above the 1:1 ratio.

FIGURE 4: SANITARY DC RESERVE FUND ANALYSIS



The following provides a summary of the DC reserve fund analysis:

- **DC Revenues:**
 - Residential and non-residential construction actuals improved in 2016 and have had a positive impact on the DC reserve funds. Projected revenues are necessary to maintain timing of projected investments (expenditures) in new infrastructure.
 - Staff will need to remain vigilant of growth activity to be in a position to recommend corrective measures, if circumstances (e.g. economic condition and reversal of current housing market expansion) reflect a changing growth pattern.
- **DC Expenditures:**
 - Last year, a review identified that several infrastructure project cost estimates significantly exceeded the estimates upon which 2014 DC rates were set. Revised project cost estimates were included in the 2017 Capital Budget and these are currently what is used to estimate future DC reserve fund expenditures. In previous years, the GMIS Schedule of Works has identified the original 2014 Development Charges Background Study project cost estimates. As part of the 2018 GMIS

Update, Schedule of Works project estimates have been updated to align with the current Capital Budget to ensure the most up-to-date project cost estimates are identified.

- **DC Reserve Funds:**

- The combination of improved DC revenues in 2016 and minimal changes in project cost variances since last year's GMIS allow the City to maintain project timing as set out in the 2017 GMIS Update and provide for some flexibility to accommodate warranted project accelerations.

The significant changes made during last years' 2017 GMIS process and the favourable variance in 2016 DC revenues have helped to stabilize the DC reserve fund, clarify expectations for the timing of development progression (as deferrals can be avoided), and have better positioned the DC reserve funds to afford the future growth infrastructure plan.

2018 GMIS Stakeholder Consultation

Stakeholder engagement is a vital component of the annual GMIS update. Two general stakeholder meetings were held to provide an overview of growth information and reserve fund health, to discuss GMIS timing considerations and to outline draft project changes. In addition to the general stakeholder meetings, individual one-on-one interviews were held with developers, builders and other community stakeholders that requested an opportunity to discuss development plans or issues with Staff related to GMIS projects.

A total of 10 one-on-one meetings were held with stakeholders, resulting in a wide array of perspectives and infrastructure requests for consideration with the GMIS. The interviews provided important information regarding the GMIS Infrastructure Project Evaluation Framework, growth modelling assumptions, development timelines, community benefits, and suggestions for process improvements. The collective knowledge of the stakeholders was vital to producing the recommended 2018 GMIS Update.

On April 7th, the draft GMIS was presented to the stakeholders based on feedback received from the first round of interviews, growth and reserve fund analysis and internal discussions with City project managers to explore projects that might be feasible to accelerate. Although Staff have not been able to accommodate all stakeholder requests, the continued dialogue through the GMIS process has produced an infrastructure strategy that maximizes development opportunities while not increasing concerns about the financial sustainability of the DC reserve funds.

2018 GMIS Review

Through the stakeholder consultations, seven requests for project accelerations were received; one request for deferral was requested by the Stormwater Engineering Division (North Lambeth SWM 10), and another three Water projects were identified for review as their timing in the capital budget is not in alignment with their GMIS timing. The requests were considered in the context of the eight core principles set out by Council in 2008, an analysis of the Development Charge Reserve Funds, and the project timing review tests set out below.

The GMIS process uses a series of questions to inform project timing and consider requests to accelerate projects. Each serves as a "lens" for evaluating whether changes are merited to the timing of infrastructure projects and are applied equally to all projects. Referred to as the GMIS "tests," the questions are as follows:

- ***Is the project needed to provide additional buildable lots to meet demand in the growth area?***
- ***Has a developer sufficiently progressed a development proposal to warrant the construction project next year or the following year?***
- ***Can we afford the project?***

To accelerate a project, all three tests must be met. The first question speaks to the need for infrastructure, in relation to market demand and supply of lots in a geographic area. This criterion is used to match the pace of infrastructure construction with the pace of growth with an aim to provide a future 3 year supply of single family residential lots in each greenfield area.

This project evaluation framework was endorsed by Council as part of the 2017 GMIS Update and is to be used by subsequent updates such as this exercise. Appendix 'A' provides a

summary of the GMIS growth framework and the results of the analysis conducted by Staff, based on feedback received from stakeholder interviews and a review of historic phasing trends.

While this framework remains unchanged, an important change from the 2017 inputs is that while the previous iteration assumed a city-wide demand of 850 units/year over the next 20 years, the 2018 input has increased this assumption by 100 units/year in response to trends experienced during 2016 and what was heard during the stakeholder consultations. The growth model in Appendix 'A' now assumes an average demand of 950 units/year over the next 20 years.

2018 GMIS – Recommended Project Timing Adjustments

In general, the current timing for projects aligns with the needs of the development community stakeholders and provides for significant new growth opportunities throughout the City. Appendix 'B': (2018 GMIS Project Tables and Figures) proposes a Schedule of Works that identifies the timing of key growth related infrastructure projects required to facilitate development throughout the City over 0-5 year, 6-10 year and 10+ year horizons. This Schedule of Works maintains timing that is similar to that approved by Council as part of the 2017 GMIS Update.

The recommended project schedule discussed below is the best compromise between:

- maintaining financially sustainable reserve funds,
- the desire of several developers to advance timing on projects that will accelerate development of their land holdings; and
- the feasibility of advancing infrastructure projects given the time needed to execute them in a judicious manner.

From the 2018 GMIS Update analysis, Table 1 below identifies the proposed project timing adjustments to the last years' Schedule of Works. One stormwater project is recommended to be accelerated and one stormwater project is recommended to be deferred; all other GMIS projects are recommended to maintain their timing as approved in the 2017 GMIS Update. The final project timing outlined for the 2018 GMIS is subject to the approval of the 2018 Capital Budget Update.

TABLE 1: 2017 GMIS PROJECT TIMING ADJUSTMENTS

Service	Project Description	2017 GMIS Year	Rationale for Timing Change	2018 GMIS Year	Total Gross Cost
Stormwater	Fox Hollow SWM1 North Cell	2022	Achieve greenfield lot supply target	2019	\$3.0M
Stormwater	North Lambeth SWM 10	2018	Not immediately needed	2021	\$3.6M

Through the 2018 GMIS process, three water projects were identified as having capital budget timing that differs from their GMIS timing. Staff have reviewed these projects and are recommending that the GMIS timing for these projects be advanced to align with the approved capital budget. These adjustments are identified below:

TABLE 1A: 2017 GMIS PROJECT TIMING ADJUSTMENTS TO ALIGN WITH APPROVED CAPITAL BUDGET

Service	Project Description	2017 GMIS Year	Rationale for Timing Change	2018 GMIS Year	Total Gross Cost
Water	Wickerson Water	2024	Align timing with Capital Budget	2018	\$1.4M
Water	Watermain A30 (Kilally)	2030	Align timing with Capital Budget	2025	\$1.6M
Water	Wonderland Watermain A20	2028	Align timing with Capital Budget	2026	\$2.9M

A more complete discussion of the project timing to be adjusted in the tables above is provided in Appendix 'D'.

2018 GMIS – Developer Requests Not Recommended

Table 2 identifies requests that were received through GMIS stakeholder consultations that are not being recommended for acceleration. In general, Staff are not recommending the following infrastructure timing acceleration requests due to sufficient lot supply in the greenfield area, technical concerns and/or affordability constraints. ***A more complete discussion of the requests and Staff rationale is provided in Appendix ‘E’.***

TABLE 2: PROJECT TIMING REQUESTS NOT RECOMMENDED BY STAFF

Service	Project Description	Stakeholder Request	2018 GMIS Year	Requested 2018 GMIS Timing	Total Cost
Stormwater	Sunningdale SWM 7.1	Drewlo	2023	2021	\$1.7M
Stormwater	Kilally SWM S/E Basin	Auburn, Sifton	2024	2020/ >2037	\$3.7M
Stormwater	White Oaks SWMF 3	Z-Group, DLN Group, York	2023	2020/2019	\$2.8M
Stormwater	Pincombe Drain SWM 4	Sifton	2020	2018	\$5.1M
Water	Wonderland Rd. S. Watermain (Lambeth A21 Growth Area)	Sifton	2024	2018	\$3.5M
Roads	Sunningdale Rd. E. Road Widening (Adelaide to Bluebell)*	Sergautis	2025	<2025	\$11.0M

* Sunningdale Rd. E. Road Widening is a DC-funded roadwork, but it is not a GMIS project as it represents a network need improvement.

2018 GMIS – Short-Term Development Opportunities

The proposed Schedule of Works in Appendix B provides infrastructure investment timing that accommodates a wide range of future housing demand scenarios. At present, the City has committed \$69.8 million to GMIS infrastructure projects that are currently in design or under construction for 2017, including six stormwater management facilities, five sanitary trunk projects, a watermain and a road project. Furthermore, the current timing plan assigns an additional \$113.1 million dollars to be spent on projects over the next five years between 2018 and 2022. **All of the GMIS projects identified for construction from 2018 to 2020 are to proceed as planned.**

Subdivision applications that are progressing and will be advancing over the next two years to provide new opportunities for residential and non-residential greenfield development are identified in Appendix F. These near-term subdivisions will provide for substantial single family residential availability and market choice in several areas of the City over the next few years.

“GMIS Booklet” Enhancements

Each year, Development Finance produces the “GMIS Booklet” – a comprehensive reference document that contains mapping for new development areas, Vacant Land Inventory information (i.e. residential construction opportunities), infrastructure servicing areas, and up-to-date GMIS project timing. Additionally, the digital version of the GMIS Booklet provides interactive capabilities to turn on and off various layers, making it customizable for the needs of the user. This resource has proven to be a positive “value add” to GMIS stakeholders and City staff.

For the 2018 GMIS Update, Staff have added an additional project timing table. Whereas previous iterations identified projects on 0-5 year and 5+ year tables, the new booklet will add a third table identifying 5-10 year projects. Providing 0-5 year, 6-10 year and 10+ year project timing tables was identified by stakeholders as being beneficial information for subdivision planning.

A draft version of the 2018 GMIS Booklet has been prepared to reflect the recommendations contained in this report and hard copies will be provided to the Committee at the May 15th meeting. Subject to Council adoption of the GMIS (with revisions where applicable), a final version of the 2018 GMIS Booklet will be prepared. The document will be broadly circulated to GMIS stakeholders and City staff as well as being made available on the City’s website.

Next Steps

Pending the adoption of the recommendations of this report, Staff will reflect the GMIS changes in the 2018 Annual Update to the Multi-Year Budget this fall and collectively work towards addressing any implementation challenges so that infrastructure projects are delivered in a timely manner, consistent with the completion of subdivision approvals.

The preliminary schedule for the 2019 GMIS Update is attached as Appendix 'G'.

CONCLUSION

The GMIS is an important tool for Council to coordinate growth infrastructure with development approvals and to manage the available financial resources. After a number of changes to infrastructure timing last year, the 2018 GMIS has generally maintained project construction timelines. Following discussions with stakeholders and a review of emerging trends, certain strategic project accelerations can be recommended by Staff to achieve efficiencies by coordinating the timing of multiple infrastructure projects.

The 2018 Growth Management Implementation Strategy Update recommendations provide for infrastructure investment timing that is able to accommodate a wide range of future housing demand scenarios. Staff will continue to work with and consult with development and community stakeholders over the coming year to ensure efficient and timely servicing that will provide for a logical and sustainable progression of growth well into the future.

Acknowledgements

Administration wishes to extend appreciation to all GMIS stakeholders for their insights and time commitment to this year's GMIS process. The feedback received helped to improve Staff's understanding of present housing market conditions.

The annual GMIS Update is a major corporation-wide activity that involves numerous staff from the following service areas: Environmental and Engineering Services, Development and Compliance Services, Planning Services and Finance and Corporate Services. The participation of staff members in these Service Areas is greatly appreciated and their input was essential to the recommendations contained in this report.

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May 8, 2017

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Appendix 'A': GMIS Infrastructure Project Evaluation Framework

Appendix 'B': 2018 GMIS Project Tables and Figures:

- Table B1 - GMIS Annual Update 2018: Detailed List of Works and Costs by Service 5 Year Projects
- Figure B1 - GMIS Annual Update 2018: Works 0-5 Years (2018-2022) Year of Construction
- Table B2 – GMIS Annual Update 2018: Detailed List of Works and Costs by Service 6-10 Year Projects
- Figure B2 – GMIS Annual Update 2018: Works 6-10 Years (2023-2027) Year of Construction
- Table B3 - GMIS Annual Update 2018: Detailed List of Works and Costs by Service 10+ Year Projects
- Figure B3 - GMIS Annual Update 2018: Works 10+ Years (2028-2033) Year of Construction

Appendix 'C': List of GMIS Stakeholders

Appendix 'D': Rationale for 2018 GMIS Project Timing Adjustments

Appendix 'E': Detailed Commentary Regarding Developer Infrastructure Requests

Appendix 'F': Short-Term Development Opportunities

Appendix 'G': Preliminary 2019 GMIS Schedule

APPENDIX 'A'
GMIS Infrastructure Project
Evaluation Framework

Appendix 'A': GMIS Infrastructure Project Evaluation Framework

GMIS "Tests"

The following questions are applied to each project listed in the GMIS in relation to the development contained within the benefitting area. The three questions serve as separate, but related lenses for considering infrastructure timing and all three tests must be met in order to consider acceleration of a project.

- a) **Is the project needed to provide additional buildable lots to meet demand in the growth area?** (If yes, proceed to Test 2; if no, maintain timing/defer project).
- b) **Has a developer sufficiently progressed a development proposal to warrant the construction project next year or the following year?** (If yes, proceed to Test 3; if no, /defer project).
- c) **Can we afford the project?** (If yes, consider project acceleration; if no, other projects must be deferred to accommodate the selected project).

GMIS Targets/Growth Modelling

In order to address GMIS Test a) outlined above, growth modelling is required to examine demand for and supply of single family residential lots for each of the City's greenfield growth areas (North, Northwest, Northeast, Southeast, Southwest, West). The model is informed by the following targets and assumptions:

- Provide three (3) years of permit ready supply of single family lots in each greenfield area (where possible);
- Using a straight-line demand forecast of 950 single family units per year, deduct 5% to account for construction within the Built Area and a further 11% to address houses that are constructed on medium density designated lands (i.e., Vacant Land Condominiums). This will provide for an "apples-to-apples" comparison of demand for single family residential lots with available supply;
- Base the model on when building permits can be issued for developable lands, rather than on the timing of the installation of major infrastructure (i.e., "permit-ready" supply of lands versus "serviced" supply of lands);
- Assume the following market capture shares for single family lots, based on a review of historic trends and stakeholder feedback:
 - North: 20%
 - Northwest: 22%
 - Northeast: 8%
 - Southeast: 15%
 - Southwest: 20%
 - West: 15%
- In establishing the baseline, employ subdivision timing and phasing from information supplied by development proponents in the GMIS interviews and adjust where warranted based on model iterations and professional judgement;
- Select year of registration at the year following the construction of infrastructure to provide a buffer for any process-related issues that may arise; and,
- Provide opportunities in multiple locations and for multiple developers (where possible).

The results of the 2018 GMIS growth modelling are provided in the following tables.

Southwest Demand and Supply Analysis

Assume 950 units/year
 * 95% on greenfield lands
 * 11% of unit construction as VLC

FINAL MAY 2017

	803	20%	161	FINAL MAY 2017									
	0	1	2	3	4	5	6	7	8	9	10		
Opening Supply	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
Add: New Supply	93	-17	7	290	547	825	1069	1273	1585	1719	1774		
Subtotal	51	185	444	418	439	405	365	473	295	216	237		
Subtract: Demand	144	168	451	708	985	1230	1434	1746	1880	1935	2011		
Years of Serviced Supply	161	161	161	161	161	161	161	161	161	161	161		
Remaining	0.9	1.0	2.8	4.4	6.1	7.6	8.9	10.8	11.7	12.0	12.5		
	-17	7	290	547	825	1069	1273	1585	1719	1774	1850		

Subdivisions Legend

Infrastructure construction Year
 Estimate as no application received to date
 Subdivision build-out date

GMIS Timing Legend

2017 GMIS construction timing maintained
 Suggested 2018 GMIS construction timing changes

Subdivisions	Serviced Year	Reg'n Year	Total	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
T-06502	Serviced	2018	17			17	0	0	0	0	0	0	0	0	0	0	0	0	0
T-06511	Serviced	2018	61			31	31	0	0	0	0	0	0	0	0	0	0	0	0
T-14502	Serviced	2016	152	51	51	51	0	0	0	0	0	0	0	0	0	0	0	0	0
T-12503 Ph1	2017	2018	110		55	55	0	0	0	0	0	0	0	0	0	0	0	0	0
T-12503 Ph2	2017	2019	111				56	56	0	0	0	0	0	0	0	0	0	0	0
T-12503 Ph3	2018	2021	110					55	55	0	0	0	0	0	0	0	0	0	0
T-12503 Ph4	2018	2023	111						56	56	0	0	0	0	0	0	0	0	0
T-14504 Ph1	2017	2018	102		34	34	34	0	0	0	0	0	0	0	0	0	0	0	0
T-14504 Ph2	2017	2020	72				24	24	0	0	0	0	0	0	0	0	0	0	0
T-14506 Ph1	2017	2018	122		31	31	31	0	0	0	0	0	0	0	0	0	0	0	0
T-14506 Ph2	2017	2022	122							31	31	31	0	0	0	0	0	0	0
T-15501 Ph1	2018	2018	150				50	50	0	0	0	0	0	0	0	0	0	0	0
T-15501 Ph2	2018	2021	221						74	74	74	0	0	0	0	0	0	0	0
T-15501 Ph3	2023	2024	278								70	70	70	70	0	0	0	0	0
T-16508	2023	2024	36								36	0	0	0	0	0	0	0	0
T-16509	2018	2019	82			42	42	0	0	0	0	0	0	0	0	0	0	0	0
Colonel Talbot (TB103/105)	2018	2019	110				28	28	28	28	0	0	0	0	0	0	0	0	0
Col. Talbot SS15C (TB103/105)	2018	2019	622			78	78	78	78	78	78	78	78	78	0	0	0	0	0
Col. Talbot SS14B (TB102)	2033	2034	132																
LW107	2023	2024	220								37	37	37	37	37	0	0	0	0
LB106	2020	2021	171												41	41	41	41	41
LB106 North Lambeth P6	2026	2027	205																
LB106 (Beyond 2032)	2034	2035	30																
BT100 (Beyond 2032)	2033	2034	80																
BT101 (Beyond 2032)	2033	2034	81																
LW100	Serviced	2019	94			31	31	31	0	0	0	0	0	0	0	0	0	0	0
LW102	2018	2019	10			10	0	0	0	0	0	0	0	0	0	0	0	0	0
LW103	2020	2021	77				0	0	0	0	0	0	0	0	0	0	0	0	0
LW104 White Oaks 4	2026	2027	568				26	26	26	0	0	0	0	0	0	0	0	0	0
LW104 Pincombe 5	2028	2029	423											57	57	57	57	57	57
LW105	2027	2028	508												51	51	51	51	51

APPENDIX 'B'
2017 GMIS Project Tables and Figures

**Table A1: GMIS ANNUAL UPDATE 2018
 DETAILED LIST OF WORKS AND COSTS BY AREA
 5 YEAR PROJECTS (2018 to 2022)**

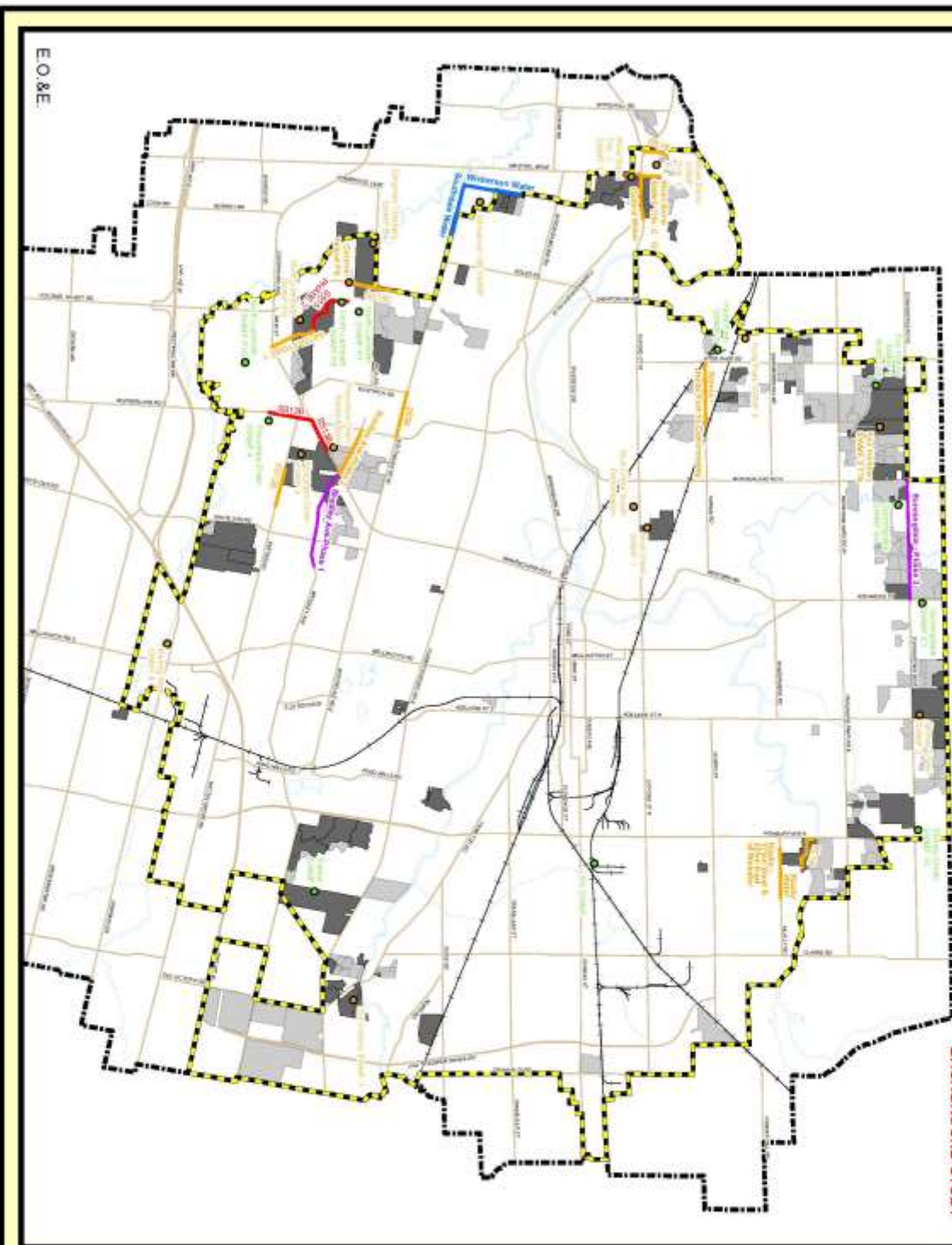
(E&O Excepted)

Apr-17

PREVIOUS GMIS TIMING	GMIS 2018 TIMING	PROJECT DESCRIPTION			TOTAL COST	GROWTH		NON-GROWTH	
		DC ID	GENERAL DESCRIPTION	Service					
BUILT OUT CITY									
2019	2019	DC14-MS00011	London Psychiatric Hospital (LPH) SWMF	SWM	\$3,577,358	100%	\$3,577,358	0%	\$0
2014-2033	2014-2033	DC14-MS01002	Infill and Intensification Nodes Storm Sewer Servicing	SWM	\$13,782,913	93%	\$12,861,194	7%	\$921,719
2014-2033	2014-2033	DC14-WW02002	Infill and Intensification Nodes Sanitary Sewer Servicing	Wastewater	\$4,862,299	85%	\$4,136,238	15%	\$726,063
2014-2033	2014-2033	DC14-WD01002	Infill and Intensification Nodes Water Servicing	Water	\$10,960,381	95%	\$10,385,938	5%	\$574,443
TOTAL BUILT OUT CITY PROJECTS					\$33,212,951		\$30,960,725		\$2,252,226
NORTH									
Stoney Creek									
2022	2022	DC14-MS00034	Stoney Creek SWMF 10	SWM	\$2,100,000	100%	\$2,100,000	0%	\$0
TOTAL STONEY CREEK PROJECTS					\$2,100,000		\$2,100,000		\$0
Sunningdale									
2018	2018	DC14-MS00037	Sunningdale SWMF 6A	SWM	\$1,800,000	100%	\$1,800,000	0%	\$0
2020	2020	DC14-RS00017	12 (2c) Sunningdale Road-Stage 2 - Phase 3 - Richmond to Wonderland (2 to 4 through lanes)	Roads	\$18,757,609	94%	\$17,608,459	0%	\$1,149,150
TOTAL SUNNINGDALE PROJECTS					\$20,557,609		\$19,408,459		\$1,149,150
Uplands									
2020	2020	DC14-MS00038	Sunningdale SWMF E1	SWM	\$2,100,000	100%	\$2,100,000	0%	\$0
TOTAL UPLANDS PROJECTS					\$2,100,000		\$2,100,000		\$0
TOTAL NORTH PROJECTS					\$24,757,609		\$23,608,459		\$1,149,150
NORTHWEST									
Fox Hollow									
2022	2019	DC14-MS00006	Fox Hollow 1 - Phase 2	SWM	\$3,100,000	100%	\$3,100,000	0%	\$0
TOTAL FOX HOLLOW PROJECTS					\$3,100,000		\$3,100,000		\$0
Hyde Park									
2022	2022	Pre-2014 DC Study	Hyde Park SWMF 6	SWM	\$4,502,800	100%	\$4,502,800	0%	\$0
TOTAL HYDE PARK PROJECTS					\$4,502,800		\$4,502,800		\$0
TOTAL NORTHWEST PROJECTS					\$7,602,800		\$7,602,800		\$0
WEST									
2018	2018	DC14-WD00021	Summercrest Growth Area - Southdale (Bramblewood to Wickerson)	Water	\$1,257,181	100%	\$1,257,181	0%	\$0
2024	2018	DC14-WD00022	Summercrest Growth Area - Wickerson (Southdale to Wickerson Gate)	Water	\$1,361,030	100%	\$1,361,030	0%	\$0
TOTAL WEST PROJECTS					\$2,618,211		\$2,618,211		\$0
SOUTHEAST									
Jackson									
2018	2018	DC14-MS00027	Parker SWMF - Phase 1	SWM	\$6,055,000	100%	\$6,055,000	0%	\$0
TOTAL SOUTHEAST PROJECTS					\$6,055,000		\$6,055,000		\$0
SOUTHWEST									
Entire Area									
2014-2019	2014-2019	DC14-GS00005	Southwest Area Environmental Assessments	SWM	\$1,000,000	100%	\$1,000,000	0%	\$0
TOTAL ENTIRE AREA PROJECTS					\$1,000,000		\$1,000,000		\$0
Lambeth									
2018	2018	DC14-WW00005-B	SS15A - Lambeth Growth Area Greenway PCP sewershed - Phase 2	Wastewater	\$1,637,455	100%	\$1,637,455	0%	\$0
2018	2021	DC14-MS00018	North Lambeth P10 (Dingman Tributary D2) Phase 1	SWM	\$4,300,000	9%	\$387,000	91%	\$3,913,000
TOTAL LAMBETH PROJECTS					\$5,937,455		\$2,024,455		\$3,913,000
Longwoods									
2018	2018	DC14-WW00009	SS13B - Wonderland/ Bostwick E Growth Area Greenway PCP sewershed	Wastewater	\$8,000,000	100%	\$8,000,000	0%	\$0
2020	2020	DC14-MS00030	Pincombe Drain SWMF 4 - Phase 1	SWM	\$5,354,000	100%	\$5,354,000	0%	\$0
2022	2022	DC14-RS00022	22a Bradley Avenue Extension-Phase 1 - Jalna to Wharmcliffe (4 through lanes)	Roads	\$10,755,000	100%	\$10,755,000	0%	\$0
TOTAL LONGWOODS PROJECTS					\$24,109,000		\$24,109,000		\$0
Talbot									
2018	2018	DC14-MS00023	North Lambeth P7	SWM	\$3,850,000	100%	\$3,850,000	0%	\$0
2020	2020	DC14-MS00024	North Lambeth P8	SWM	\$3,950,000	100%	\$3,950,000	0%	\$0
TOTAL TALBOT PROJECTS					\$7,800,000		\$7,800,000		\$0
TOTAL SOUTHWEST PROJECTS					\$38,848,455		\$34,933,455		\$3,913,000
TOTAL 5 YEAR PROJECTS (2018 to 2022)					\$113,093,026		\$105,778,650		\$7,314,376

Note: Timing refers to the year of construction.

NOT THE CITY OF LONDON
BACKGROUND STUDY



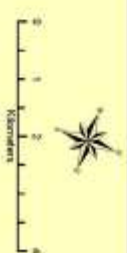
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GMIS 2018
Draft Schedule of Works

0-5 Years (2018 - 2022)
YEAR OF CONSTRUCTION

- MAJOR ROADS
- RAILWAYS
- RIVERS / STREAMS
- CITY LIMITS
- GROWTH BOUNDARY
- REGISTERED SUBDIVISIONS (2006 - 2016)
- ACTIVE SUBDIVISION APPLICATIONS
- TRANSPORTATION
- SANITARY
- STORM
- WATER
- PCP/SANITARY PUMPING STATIONS
- SWM FACILITIES
- INTERSECTION WORKS
- WATER PUMPING STATIONS
- APPROVED
- CONSTRUCTION PENDING



PREPARED BY: Development Services
 CREATION DATE: April 12, 2017
 LOCATION: Substation and Intersections, Double Grid
 project:\Server\GIS\Projects\GIS_02_Schedule_of_Works_City_of_London.mxd

Table A2: GMIS ANNUAL UPDATE 2018

(E&O Excepted)

**DETAILED LIST OF WORKS AND COSTS BY AREA
6-10 YEAR PROJECTS (2023 to 2027)**

Apr-17

PREVIOUS GMIS TIMING	GMIS 2018 TIMING	PROJECT DESCRIPTION			TOTAL COST	GROWTH		NON-GROWTH	
		DC ID	GENERAL DESCRIPTION	SERVICE					
		NORTH							
		Stoney Creek							
2027	2027	DC14-MS00036	Stoney Creek SWMF 8	SWM	\$1,130,000	100%	\$1,130,000	0%	\$0
2023	2023	DC14-MS00033	Stoney Creek 7.1	SWM	\$1,800,000	100%	\$1,800,000	0%	\$0
			TOTAL STONEY CREEK PROJECTS		\$2,930,000		\$2,930,000		\$0
			TOTAL NORTH PROJECTS		\$2,930,000		\$2,930,000		\$0
		NORTH EAST							
		Huron Heights							
2024	2024	DC14-MS00069	Kilally South, East Basin	SWM	\$4,000,000	100%	\$4,000,000	0%	\$0
2030	2025	DC14-WD00040	Kilally (A30) Growth Area - Kilally Road (Highbury to Clarke) Phase 2	Water	\$1,770,000	100%	\$1,770,000	0%	\$0
			TOTAL NORTHEAST PROJECTS		\$5,770,000		\$5,770,000		\$0
		SOUTHWEST							
		Lambeth							
2025	2025	DC14-WW00010	SS156 - North Talbot Growth Area Greenway PCP sewershed	Wastewater	\$2,745,674	100%	\$2,745,674	0%	\$0
2026	2026	DC14-MS00022	North Lambeth P6	SWM	\$3,000,000	100%	\$3,000,000	0%	\$0
			TOTAL LAMBETH PROJECTS		\$5,745,674		\$5,745,674		\$0
		Longwoods							
2027	2027	DC14-MS00040	White Oaks SWMF 4 - Phase 1	SWM	\$4,900,000	100%	\$4,900,000	0%	\$0
2027	2027	DC14-MS00061	Old Oak SWMF 1 (former Contingent Facility A)	SWM	\$2,517,000	100%	\$2,517,000	0%	\$0
2023	2023	DC14-MS00039	White Oaks SWMF 3	SWM	\$2,925,000	100%	\$2,925,000	0%	\$0
2024	2024	DC14-WD00010	Lambeth (A21) Growth Area - Wonderland (Dingman to Exeter)	Water	\$1,681,128	95%	\$1,597,072	5%	\$84,056
2028	2026	DC14-WD00009	Lambeth (A20) Growth Area - Phase 2 Dingman (Wonderland to White Oak)	Water	\$2,874,778	100%	\$2,874,778	0%	\$0
			TOTAL LONGWOODS PROJECTS		\$4,555,906		\$4,471,850		\$84,056
			TOTAL SOUTHWEST PROJECTS		\$29,343,580		\$29,259,524		\$84,056
			TOTAL 6-10 YEAR PROJECTS (2023 to 2027)		\$29,343,580		\$29,259,524		\$84,056

Note: Timing refers to the year of construction.

Table A3: GMIS ANNUAL UPDATE 2018

(E&O Excepted)

**DETAILED LIST OF WORKS AND COSTS BY AREA
10+ YEAR PROJECTS (2028 and Beyond)**

Apr-17

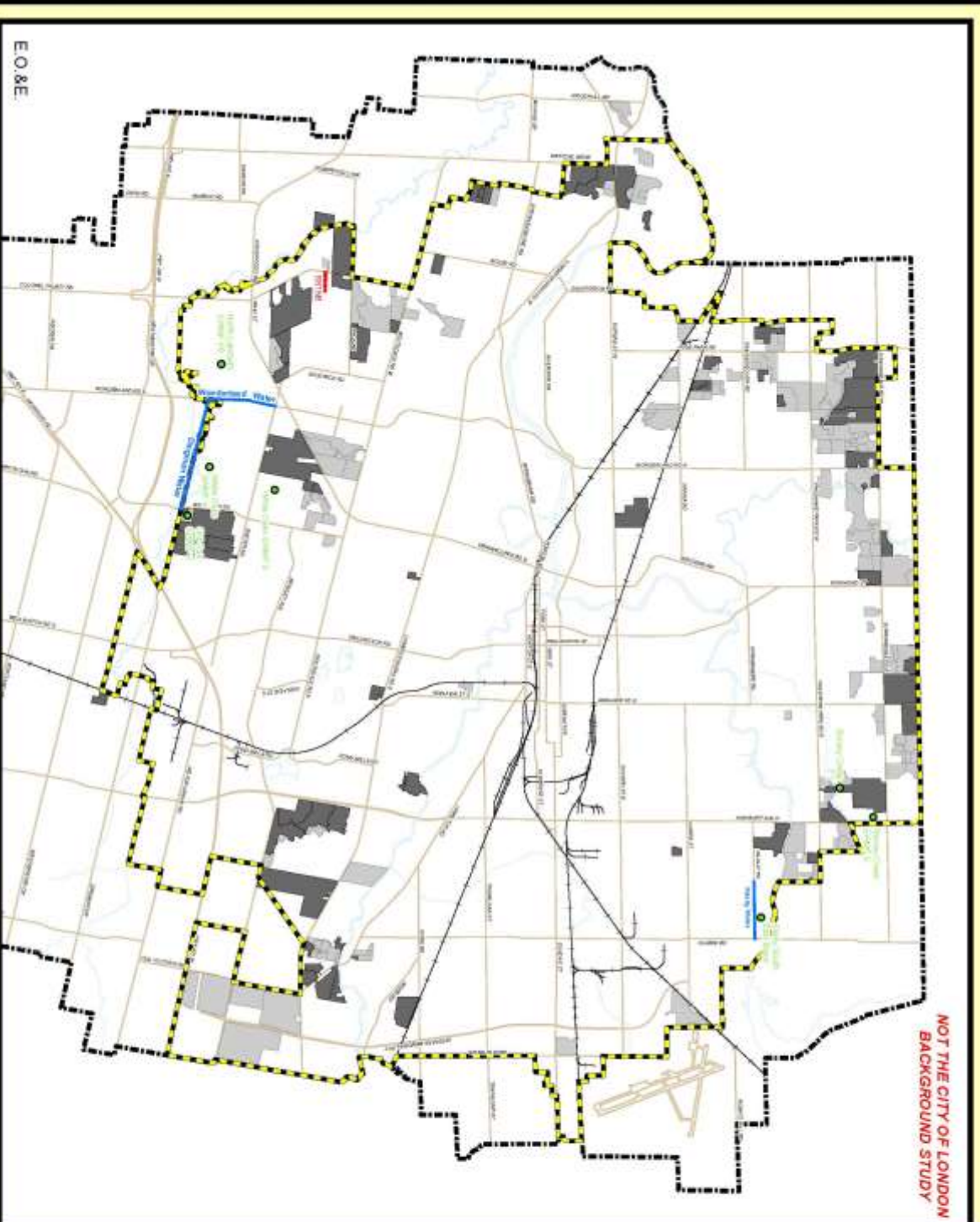
PREVIOUS GMIS TIMING	GMIS 2018 TIMING	PROJECT DESCRIPTION			TOTAL COST	GROWTH		NON-GROWTH	
		DC ID	GENERAL DESCRIPTION	SERVICE					
		WEST							
		River Bend							
2032	2032	DC14-RS00052	13b. Oxford Street West-Phase 2 - Commissioners to Westdel Boume (2 to 4 through lanes)	Roads	\$4,675,000	90%	\$4,186,000	10%	\$489,000
			TOTAL RIVERBEND PROJECTS		\$4,675,000		\$4,186,000		\$489,000
			TOTAL WEST PROJECTS		\$4,675,000		\$4,186,000		\$489,000
		SOUTHWEST							
		Bostwick							
2032	2032	DC14-RS00047	22c. Bradley Avenue Extension-Phase 3 - Wonderland to Bostwick (2 through lanes)	Roads	\$6,090,000	100%	\$6,090,000	0%	\$0
2032	2032	DC14-MS00019	North Lambeth P3 (Dingman Tributary D4)	SWM	\$3,700,000	100%	\$3,700,000	0%	\$0
2033	2033	DC14-MS00017	North Lambeth P1	SWM	\$3,000,000	100%	\$3,000,000	0%	\$0
			TOTAL BOSTWICK PROJECTS		\$12,790,000		\$12,790,000		\$0
		Lambeth							
2030	2030	DC14-MS00021	North Lambeth P5	SWM	\$2,100,000	100%	\$2,100,000	0%	\$0
			TOTAL LAMBETH PROJECTS		\$2,100,000		\$2,100,000		\$0
		Longwoods							
2028	2028	DC14-MS00031	Pincombe Drain SWMF 5	SWM	\$1,900,000	100%	\$1,900,000	0%	\$0
2029	2029	DC14-MS00020	North Lambeth P4 (Dingman Tributary D3)	SWM	\$2,800,000	100%	\$2,800,000	0%	\$0
			TOTAL LONGWOODS PROJECTS		\$4,700,000		\$4,700,000		\$0
		Talbot							
2030	2030	DC14-WW00011	SS146 - Bostwick W Growth Area Greenway PCP sewershed	Wastewater	\$12,807,600	100%	\$12,807,600	0%	\$0
			TOTAL TALBOT PROJECTS		\$12,807,600		\$12,807,600		\$0
			TOTAL SOUTHWEST PROJECTS		\$37,072,600		\$36,583,600		\$489,000
			TOTAL 10+ YEAR PROJECTS (2028 and Beyond)		\$37,072,600		\$36,583,600		\$489,000

Note: Timing refers to the year of construction.



GMIS 2018
Draft Schedule of Works

6-10 Years (2023 to 2027)
YEAR OF CONSTRUCTION



**NOT THE CITY OF LONDON
BACKGROUND STUDY**

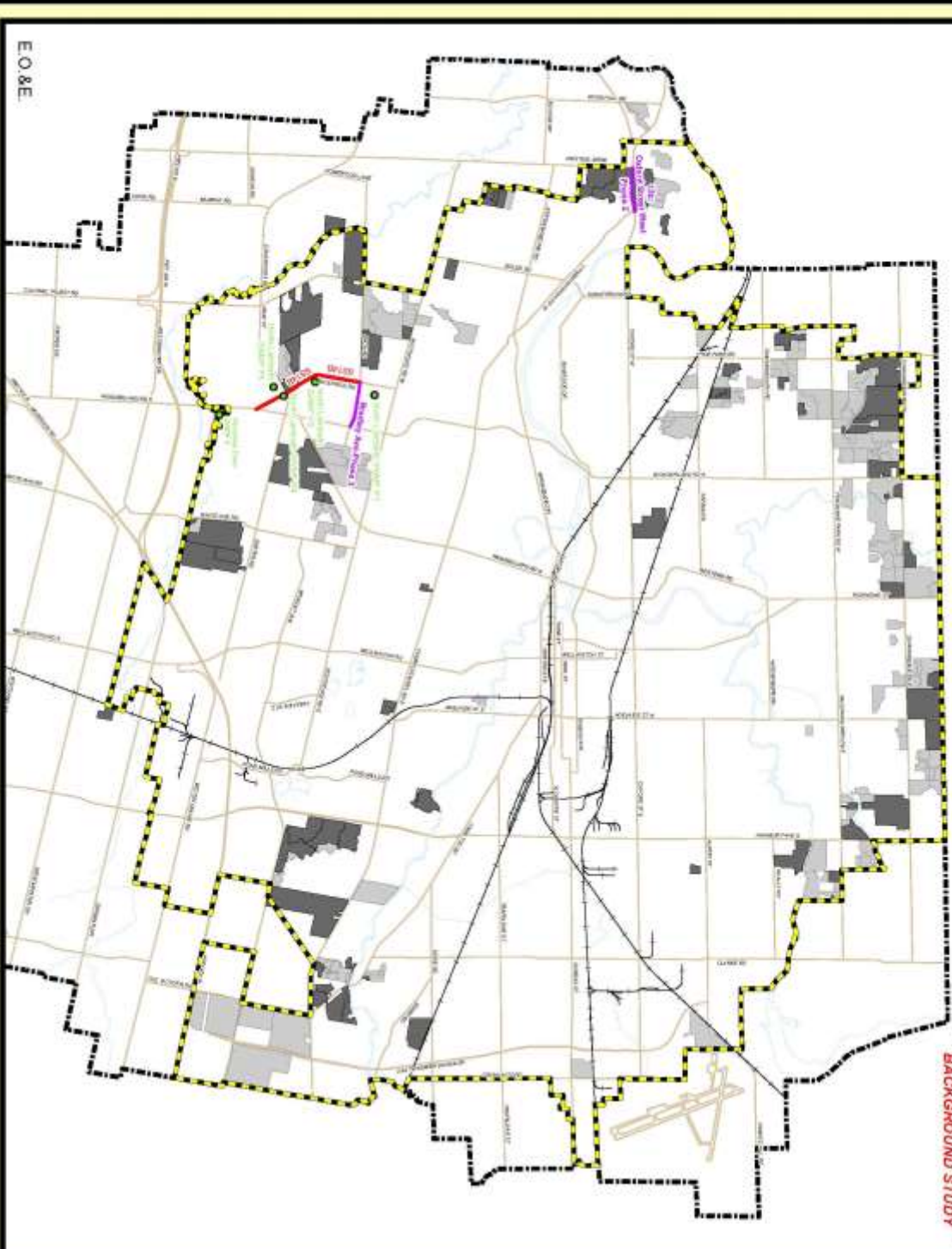
- MAJOR ROADS
- RAILWAYS
- RIVERS / STREAMS
- CITY LIMITS
- GROWTH BOUNDARY
- REGISTERED SUBDIVISIONS
(2006 - 2016)
- ACTIVE SUBDIVISION
APPLICATIONS
- TRANSPORTATION
- SANITARY
- STORM
- WATER
- PCP/SANITARY
PUMPING STATIONS
- SWM FACILITIES
- INTERSECTION WORKS
- WATER PUMPING STATIONS



PREPARED BY: Development Services
CREATION DATE: April 12, 2017
LOCATION: <http://www.cityoflondon.gov.uk>
PROJECT: <http://www.cityoflondon.gov.uk>

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**NOT THE CITY OF LONDON
BACKGROUND STUDY**



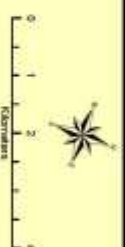
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**GMS 2018
Draft Schedule of Works**

**10+ Years (2028 and Beyond)
YEAR OF CONSTRUCTION**

- MAJOR ROADS
- RAILWAYS
- RIVERS / STREAMS
- CITY LIMITS
- GROWTH BOUNDARY
- REGISTERED SUBDIVISIONS
(2006 - 2016)
- ACTIVE SUBDIVISION
APPLICATIONS
- TRANSPORTATION
- SANITARY
- STORM
- WATER
- POP/SANITARY
PUMPING STATIONS
- SWM FACILITIES
- INTERSECTION WORKS
- WATER PUMPING STATIONS



PREPARED BY: Development Services
CREATION DATE: MAY 12, 2017
LOCATION: \\data\project\gms\development_services\GIS\CityOfLondon\GIS\background_study\mapserver\background_study.mxd

APPENDIX 'C'
List of GMIS Stakeholders

Appendix 'C': List of GMIS Stakeholders

Name	Organization
Adam Carapella	Tricar Group
Ali Soufan	York Development Group
Allan Churchill	Fusion Homes
Allan Drewlo	Drewlo Holdings Inc
Blair Doman	Doman Developments, Inc.
Bob Stratford	R. W. Stratford Consulting Inc
Chris Bourdeau	Futurestreets Inc.
Chris Leigh	Tricar Group
Craig Linton	DevelPro Land Services
Dan Walsh	Sydenham investments
Dara Honeywood	Z Group
Dave Schmidt	Corlon Properties Inc.
David Ailles	Consultant
David Tennant Jr.	Dave Tennant Urban Concepts
David Tennant Sr.	Hampton Group Inc
Don de Jong	Tridon Group
Doug Stanlake	Consultant
George Bikas	Drewlo Holdings Inc
Gloria McGinn-McTeer	Urban League
Gord Thompson	Corlon Properties Inc.
Jamie Crich	Auburn Developments Inc.
Jeff Paul	Stantec
Jeff Willick	Decade Group Inc.
Lois Langdon	London Home Builders Association
Mardi Turgeon	BlueStone Properties
Maureen Zunti	Sifton Properties Limited
Mike Howe	Norquay Developments Limited
Ornella Richichi	SmartCentres
Paul Hinde	Tridon Group
Peter Sergautis	Extra Realty Limited
Phil Masschelein	Sifton Properties Limited
Phillip Abrantes	Kape Developments
Ric Knutson	Kenmore Homes (London) Inc
Richard Sifton	Sifton Properties Limited
S. Graham	SegwayGroup
Sandy Levin	Urban League
Shmuel Farhi	Farhi Holdings Corporation
Stephen Stapleton	Auburn Developments Inc.
Tony Fediw	AECOM
Tony Marsman	Rembrandt Homes
Vito Frijia	Southside Group
Tim Stubgen	Stantec
Bernie Bierbaum	BlueStone Properties
Ben Farhi	Farhi Holdings Corporation
Todd Pierce	SmartCentres
Jeff Thomas	Development Engineering
John-Paul Sousa	City of London Planning Services
Mike Johnson	Urban Metrics Inc.
Jim Sheffield	Nicholson Sheffield Architects
Lindsey Gerrish	Infrastructure Ontario
Eric Saulesleja	GSP Group
David Drake	SmartCentres
Anthony Passarelli	CMHC
Wes Kinghorn	Urban League
Amanda Stratton	Urban League
Michelle Doornbosch	Consultant
Michael Mayo	Landowner
Louie Maisano	Homebuilder
Jonathan Aarts	Landowner
Lisa Lansink	Realtor
Nandor Gortva	Infrastructure Ontario
Chris Hendriksen	Stantec
B. Scott	1173735 Ontario Ltd.
Dave Nuttall	DLN Group Inc.
Christine Campbell	Auburn Developments Inc.

APPENDIX 'D'
Rationale for 2017 GMIS Update
Project Timing Adjustments

Appendix D: Rationale for 2018 GMIS Update Project Timing Adjustments

The following sections provide commentary and rationale for project timing adjustments identified in Table 1 of the 2018 GMIS Annual Review & Update report.

Adjustments to Previously Timed 2018 Projects:

- **North Lambeth SWM 10:** In consultation with Engineering and Environmental Services, it was determined that this project is not immediately needed and should be deferred from 2018 until 2021. This project has a minor 9% growth share. As no development interest has been expressed on the benefiting lands, Staff are recommending rescheduling this project to 2021 to avoid a premature investment. Rescheduling this project will have the added benefit of improving the financial health of the SWM DC reserve fund.

Adjustments to Previously Timed 2022 Projects:

- **Fox Hollow SWM 1 North Cell:** Based on subdivisions that are progressing towards registration, the growth analysis for the Northwest area indicates that a sufficient amount of single family residential lots are being brought online to meet the target of a 3 year permit ready lot supply by 2019. However given recent lot absorption rates in the growth area and the reliance on only a few large subdivisions to meet the target, Staff are recommending accelerating this project from 2022 to 2019 to ensure an adequate supply is maintained in the Northwest growth area over the medium-term. In addition, the necessary lands for the facility have been dedicated to the City and an Environmental Compliance Approval (ECA) for the project has been completed. As such, it is feasible to meet a 2019 construction date.

2018 GMIS/ 2017 Capital Budget Reconciliations:

The following sections identify reconciliations to align the 2018 GMIS with the 2017 Capital Budget.

- **Wickerson Water:** While last year's 2017 GMIS identified a Wickerson Water construction date of 2024, the Capital Budget and Water Development Charge Reserve Fund have budgeted for a 2018 construction date since 2015. This timing aligns with the Southdale Water project that forms part of the same water loop and is coordinated with the reconstruction of Wickerson Road. The GMIS timing for the Wickerson Water project will be revised to 2018 to reflect the Capital Budget program previously approved by Council.
- **Watermain A20:** This watermain would complete the loop along Dingman Drive from Wonderland Road South to White Oaks Road. The 2017 GMIS identifies a construction date of 2028, however the Capital Budget and Water Development Charge Reserve Fund have budgeted for a 2026 construction date. The 2026 timing is correct as the project would extend and complete the loop to begin with Watermain A21 Phase 2 that is to be constructed in 2024. Engineering and Environmental Services has indicated that water loops should be constructed within two years to protect drinking water quality and reduce the added environmental and financial costs of regularly discharging water. The GMIS timing for the Watermain A20 project will be revised to 2026 to reflect the Capital Budget program previously approved by Council.
- **Watermain A30:** This watermain would extend the water system east along Kilally Road to Clarke Road. The 2017 GMIS identifies a construction date of 2030, however the Capital Budget and Water Development Charge Reserve Fund have budgeted for a 2025 construction date. The 2025 timing is correct as the project would align with the timing of the Kilally South, East Basin stormwater management facility to be constructed in 2024. These services, together with the extension of an oversized sanitary sewer to the west, will allow this area to be developed. The GMIS timing for the Watermain A30 project will be revised to 2025 to reflect the Capital Budget program previously approved by Council.

APPENDIX 'E'
**Detailed Commentary Regarding
Developer Infrastructure Requests**

Appendix 'E': Detailed Commentary Regarding Developer Infrastructure Requests

Staff are unable to support the project acceleration requests identified in Table 2 of the GMIS report for the following reasons:

- **Sunningdale SWM 7.1:** Drewlo has requested the acceleration of the Sunningdale SWM 7.1 stormwater management facility from 2023 to 2021. Staff do not recommend the requested acceleration of this facility due to the pending availability of additional development lands in the growth area. In addition, the lands require substantial planning review, including an Environmental Impact Study, which has yet to be completed. Should applications progress in the future, Staff can assess the merits of an acceleration as part of a future GMIS update. At present, it is premature to consider accelerating this project.
- **White Oaks SWM 3:** DLN Group, Z-Group and York Developments has requested an accelerated construction for White Oaks SWM 3 stormwater management facility from 2023 to 2019. Staff do not recommend the requested acceleration of this facility due to the pending availability of additional development lands in the area. In addition, this stormwater facility is presently being reviewed as part of the Dingman Creek Environmental Assessment (EA) which is scheduled to be completed by the beginning of 2018. Given the ample supply of available lands in the growth area and that the EA is not complete, staff are recommending that no changes are made to the GMIS timing for White Oaks SWM 3.
- **Pincombe Drain SWM 4:** Sifton Properties has requested the acceleration of Pincombe Drain SWM 4 from 2020 to 2018. Staff do not recommend the requested acceleration of this facility due to the pending availability of additional development lands in the area. In addition, the facility has not been designed and the necessary lands to site the facility are not the subject of an active planning application and thus have not been secured. In discussions with Engineering and Environmental Services, securing the lands, gaining the necessary approvals and designing the facility for a 2018 construction date does not appear feasible. As such, it would be premature to consider an acceleration by two years.
- **Wonderland Rd. S. Watermain A21:** This watermain is planned to service the lands along Wonderland Road south of Hamlyn Road and north of Dingman Road and is timed for 2024 to align with the widening of Wonderland Road from Exeter Road to Highway 401. Sifton Properties has requested that this project be accelerated from 2024 to 2018 to allow for the development of their lands to be serviced by the Pincombe 4 SWM stormwater management facility discussed above. In reviewing the request, Staff have assessed the costs of advancing the project prior to the road widening. As the watermain would need to be off-set from a sanitary forcemain on one side of the road and a large gravity sewer on the other, it would need to be located under the existing pavement. As such, a temporary road widening would need to be constructed to maintain two lanes of traffic and the pavement area that would have to be removed to construct the watermain would need to be restored. Preliminary estimates indicate that this additional work will have the effect of tripling costs in comparison to coordinating the watermain with the road widening currently timed for 2024. This request would have negative impacts on the health of the Water DC Reserve Fund and it is premature to consider an acceleration.
- However, to better understand the true costs of advancing the project, Staff are proposing to advance the watermain design work to 2017. Advancing the project may be considered as part of a future GMIS update if the more detailed design work and assessment determine that costs are reasonable.
- **Sunningdale Road (Adelaide to Bluebell):** Peter Sergautis, owner of the Applewood Estates subdivision, has requested an accelerated timing for Sunningdale Rd. E. from the present 2025 timing. Mr. Sergautis believes that the immediate area will be built out by the early 2020s, resulting in increased vehicular use of the road. Further, he has expressed safety concerns associated with the Sunningdale/Adelaide intersection. Staff reviewed the request as part of the 2017 GMIS Update and did not recommend an adjustment to the project timing. Upgrades to Sunningdale Rd. E. are outside the GMIS process as they are based on network needs and traffic warrants, which are not anticipated to be met until 2025.
- **Bostwick Area:** York Developments is progressing a large subdivision in the North Lambeth Community. Although the bulk of the lands are serviced by sanitary trunk sewers to be constructed on Colonel Talbot Road (2017), portions of the site are planned to be serviced via trunk sewer SS14B on Bostwick Road. While York intends to phase their

subdivision, they believe that the final phases will be commencing prior to the current timing of the sewer (2030) and stormwater management facilities (2029-2033). Given the time horizon of the subject projects, Staff is not recommending an acceleration of the projects as part of the 2018 GMIS Update; such an assessment is much better suited to be holistically considered as part of the upcoming 2019 DC Background Study and associated Master Plans.

- **Kilally SWM S/E Basin:** Auburn Developments has requested the acceleration of the Kilally S/E Basin stormwater management facility presently timed for construction in 2024. Conversely, Sifton Properties has requested that the project be deferred until after 2039 as they feel they can develop their lands using alternative servicing solutions including temporary sanitary forcemains and Low-Impact Development measures (LID's). According to the GMIS timing, these lands are anticipated to develop in the longer-term, thus it would be premature to consider a GMIS acceleration under current conditions. However, should a developer wish to pursue alternative servicing solutions, Staff recommend that an IPR (Initial Proposal Report) be submitted to Development Services to begin the review process.

APPENDIX 'F'
Short-Term Development Opportunities

Appendix 'F': 2018-2020 Short-Term Development Opportunities

- **39T-09501, 39T-11502 (Serguatis/Comfort Lands):** These two subdivisions north of Sunningdale Road East along both sides of Adelaide Street are proceeding toward registration in 2019. A total of 257 single detached lots are proposed. These lands will be serviced by the Stoney Creek 2 stormwater management facility.
- **800 Sunningdale Rd. W.:** The Sunningdale Golf and Country Club is presently undertaking the relocation of golf holes from the south to the north of Sunningdale Rd. W. Approximately 120 single detached lots will be developed in the south by Corlon Properties and will be serviced by the Sunningdale SWM 6A stormwater management facility.
- **39T-04510, 39T-05511, 39T-05512 (Kent/Landea):** These three subdivisions in the Northwest are draft approved and are proceeding toward registration in 2017/2018. With the completion of the Fox Hollow SWM 3 T19 stormwater management facility currently under construction, approximately 381 lots will be available as a first phase. A total of 876 single detached lots can be brought on in phases between 2017 and 2020.
- **39T-05505 (Edge Valley):** These lands in the Northeast are advancing toward registration in 2017. A total of 128 single detached lots are proposed. Development of this subdivision will result in the extension of the KL1B sewer through the lands that in turn will allow for the development of lands to the east.
- **39T-06407 (Parker Jackson):** The owners of the Parker Jackson lands in the Southeast are proceeding towards a 2018 subdivision registration. The first phase is anticipated to consist of 150 single detached lots, with the total subdivision having over 500 lots. This development will be serviced by the Parker SWMF.
- **39T-92020 (Summerside):** These lands in the Southeast were originally serviced by infrastructure in the 1990s, but are only now being registered. The first phase is planned to be registered in 2017 and contain approximately 100 lots with future phases being brought on annually until 2021. This subdivision will provide a total supply of approximately 670 lots.
- **39T-12503 (Hunt Lands):** Auburn Developments is advancing a subdivision immediately to the north of the Lambeth urban area along Colonel Talbot Road that is planned to be registered in phases between 2018 and 2021. The subdivision requires the construction of the SS15A trunk sewer that will be constructed and extended as development progresses. While intended to be brought on in phases, this subdivision will provide a total supply of approximately 420 single detached lots.
- **39T-14506 (Talbot Village):** Southside Construction is finalizing approvals for an extension of Talbot Village in the Southwest. With the construction of the Colonel Talbot Pumping Station, forcemain and trunk sanitary sewer SS15C, these lands will be available for building construction. A total of 244 single detached lots have been proposed.
- **39T-15501 (Richardson):** Z-Group is progressing these lands with registration anticipated in 2018. With the construction in 2017 of trunk sewer SS12B and the Pincombe SWM 3 facility, these lands are intended to be brought on in phases between 2018 and 2021. A total supply of over 300 single detached lots are proposed.
- **39T-14504 (Courtney):** York Developments is advancing a large subdivision located at the southwest corner of Pack Road and Colonel Talbot Road. With the construction of the Colonel Talbot Pumping Station, forcemain and trunk sewer SS15C in 2017, the subdivision can proceed to registration in late 2017/2018. 172 single detached lots are proposed.
- **39T-16509:** At the southeast corner of Pack Road and Colonel Talbot Road, Sifton Properties has proposed developing approximately 85 single detached lots on lands that will be serviced by the Colonel Talbot Pumping Station, forcemain and trunk sewer SS15C. Anticipated registration in 2018 will provide additional near-term residential opportunities in the Southwest.

- **39T-14505, 39T-16502 (Riverbend South):** Sifton Developments has proposed two subdivisions south of Oxford Road West along Westdel Bourne that are proceeding through the approval process. The first development phase is planned for late 2017 and the second in 2018/2019. 217 single detached lots are proposed. With the construction of the Tributary C stormwater management facilities this year, these lands will be available for building.
- **39T-00519, 39T-08507 (Wickerson Area):** These two subdivisions in the West are in the final stages of the approval process. The necessary infrastructure is in place with the recent completion of the Wickerson SB stormwater management facility. 259 lots are proposed.

APPENDIX 'G'
Preliminary 2018 GMIS Update Schedule

Appendix 'G': Preliminary 2018 GMIS Update Schedule

Timing	Milestone
February 8, 2018	<p>Milestone 1: GMIS Update Kickoff Meeting</p> <ul style="list-style-type: none"> • Presentation will be provided by LDI on the “State of the Market”. The presentation will summarize the overall housing trends for the previous year and provide a projection of the trends for the following year. Commentary would be provided on a City-wide basis. • Presentation will be provided by the City on the following subjects: <ul style="list-style-type: none"> ○ Draft Detailed List of Works and Costs by Area; ○ Vacant Land Inventory Update; and, ○ Summary of Development Charge Cash Flow and Debt position.
February 19, 2018 (All week)	<p>Milestone 2: Development Community Rep Interviews</p> <ul style="list-style-type: none"> • One on one interviews each developer in the City. The purpose of the interview is to discuss each developer’s plans for bringing forward lands for development in upcoming years.
March 7, 2018	<p>Milestone 3: Internal Divisions Project Managers Meeting</p> <ul style="list-style-type: none"> • An internal session to discuss the information provided in the Developer Interviews and with senior managers of the various development related groups. These groups include Engineering, Development Services, and Finance.
March 14, 2018	<p>Milestone 4: Internal City Development Management Team Meeting (Internal Steering Committee)</p> <ul style="list-style-type: none"> • Discussion with the various engineering division head to provide direction on the timing and need of growth related infrastructure.
April 7, 2018	<p>Milestone 5: Development Community Stakeholder Session Meeting</p> <ul style="list-style-type: none"> • City Staff presents a draft version of the GMIS Update to the industry stakeholders. The City receives comments from the development community, makes changes as seen appropriate, and brings forward a GMIS update report to Council.
May 2018	<p>Milestone 6: City Staff GMIS Update Presentation to the Strategic Priorities and Policy Committee Public Meeting</p> <ul style="list-style-type: none"> • Presentation of the proposed GMIS update (including all written development stakeholder comments) and a related Public meeting to allow comments from individual development community members.