

--	--

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON FEBRUARY 25, 2013
FROM:	JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	TIMELINE FOR MAJOR ENVIRONMENTAL & ENGINEERING REPORTS

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, the following report **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
--

Various reports on these subject matters are found at www.london.ca, search Council Meetings.

BACKGROUND

PURPOSE & CONTEXT:

The purpose of this report is to provide Civic Works Committee and Council with a preview of the major reports that will be delivered in 2013 (and possibly into early 2014) in the areas of:

- Roads & Transportation Services
- Solid Waste Services
- Water Services
- Wastewater Services

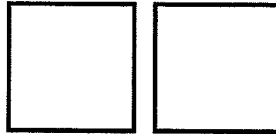
We view these reports and highlighted subject matters as extremely important to the future direction of our major service areas and for the residents, businesses, institutions and visitors to London. These service updates and plans are an essential part of the foundation of London and will highlight future potential direction; areas that will be optimized to contain and/or reduce cost; economic development opportunities (or contributions to economic development) while meeting our environmental and Council mandates and community expectations.

It is worth noting that substantial work on Water Services over the last few years culminated with major activities in 2012. These focused on a new model for water financing, water conservation and water delivery that ensures compliance with all water regulations and legislation, and meets community and Council expectations. For 2013, operational work will be the priority for Water Services.

DISCUSSION:

ROADS & TRANSPORTATION SERVICES

The City of London is responsible for a transportation system that promotes the movement of goods and services to strengthen our economic growth, provides for sustainable transportation mobility choices for residents that improve our quality of life and shape our community, and ensure that our roads and bridges remain safe and in good repair.



Report: Progress Report and Implementation Plan for the London 2030 Transportation Master Plan

Date: August 2013

Description: This report will present both progress on and the recommended approach to the implementation of the London 2030 Transportation Master Plan (TMP). The TMP identified an investment of \$800 million in transportation system needs and \$378 million for the Bus Rapid Transit (BRT) system. The report will provide Committee and Council with an assessment of the overall transportation infrastructure system that identifies the current and projected transportation system needs (lifecycle, growth, service enhancement) perspective consistent with the goals and objectives of the TMP.

The assessment will identify the gap in capital and operating budget funding, staffing and resource requirements needed to deliver the various elements and provide an implementation strategy to optimize the level of investment in transportation infrastructure. The strategy will provide a road map for the delivery of the roadway expansions, Bus Rapid Transit, bridges/culverts rehabilitation, railway grade separations, cycling infrastructure, other active transportation, transportation demand management (TDM) program, traffic signals, street lighting, road reconstruction, traffic calming, noise walls and roadway safety improvements. The strategy plan will be based on the principle of Fiscal Responsibility while at the same time providing Sustainable Infrastructure, promoting a Strong Economy and allowing for a Green and Growing City.

SOLID WASTE SERVICES

The City of London continues to operate and administer a fully integrated solid waste management program that has a solid foundation. To summarize; first, London has achieved 42% waste diversion and its waste management system cost is one of the lowest in Ontario and in Canada. Second, London is one of the few municipalities in Ontario that can boast about 11 years of available, approved waste disposal capacity. Third, future waste diversion and resource recovery decisions, which will be more costly than the current system will be made without a waste management (disposal) crisis hanging over elected official's heads. These three pieces are the foundation of London's sustainable waste management system.

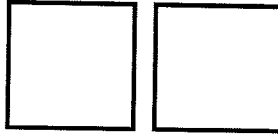
The City of London's Waste Management System is based on a Continuous Improvement Strategy (management philosophy) and sustainable waste management concepts. This strategy, which was approved by Municipal Council in 1997, uses an active framework that recognizes integrated waste management as an important environmental service in the community. By effectively allocating financial and human resources, this service contributes to the protection of human health and the environment. As part of Continuous Improvement, City staff have been examining a number of potential improvements to many aspects of service delivery for the last few years as well as ensuring that financial and environmental sustainability and community expectations are addressed. Our upcoming major reports include:

Report: Update on 2007 Road Map to Maximize Waste Diversion in London

Date: May 2013

Description: The last major update on the 2007 Road Map was provided to Committee and Council in August 2011 and a minor update in April 2012. This report will capture a range of achievements, challenges and opportunities that have occurred in the last couple of years including:

- recycling, Material Recovery Facility (MRF) operations and the status of extended producer responsibility (EPR)
- results of the Green Bin Pilot Project and status of Ontario Green Bin Programs
- potential next steps for achieving higher waste diversion – what are the options?
- potential adjustments to garbage collection – what are the options?



- Report: **Overview of Resource Recovery and Waste Conversion Technologies and the Role of the W12A Landfill Site**
- Date: September 2013
- Description: The W12A Landfill Site is one of the most important assets owned by the City as it ensures that remaining garbage from residents and business of London can be managed within our boundaries at an affordable cost. Equally, if not more importantly, is the need to meet or exceed all environmental requirements and maintaining an open and positive relationship with the neighbourhood around the W12A Landfill area and Material Recovery Facility (MRF). The future of additional resource recovery and waste conversion technologies has been noted in the past as being part of future considerations. This report will provide an update on the following:
- Update on landfill operations, Landfill and Waste Diversion/MRF Reserve Funds and capital requirements (20 and 40 year forecasts)
 - Update on the W12A Landfill Community Enhancement and Mitigative Measures Program
 - Overview of Resource Recovery and Waste Conversion Technologies including facility costs, economic development opportunities, environmental and community concerns and benefits

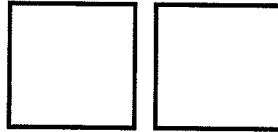
- Report: **Environmental Assessment Requirements for Long Term Resource Recovery, Waste Conversion and Waste Disposal**
- Date: November 2013
- Description: Waste quantity projections suggest that the W12A Landfill has between 9 and 13 years of capacity remaining depending on how residential and business waste is managed in the future. Under existing conditions, it is estimated that the W12A Landfill has approximately 11 years of capacity remaining. It is strongly advised that the Environmental Assessment (EA) process, as prescribed by the Provincial Government, re-start in 2014. It had been placed on hold for several years while related work was undertaken including the W12A Landfill Area Plan and the Road Map to Maximize Waste Diversion. This report will provide a framework for moving forward with an EA, financial and resource requirements required to complete an EA, along with the major steps that are required.

WATER & WASTEWATER SERVICES

The City of London provides the continuum of water service from delivery of potable water to the taps of homes and businesses, to the discharge of treated sewage. The storm drainage system removes rainfall from private properties, public properties and roads. The replacement value of the physical assets that make up these services ranges into the billions of dollars, and the performance of the systems are tightly controlled by provincial and federal regulations. For both of these reasons, there are continuous efforts to improve upon the reliability and financial performance of the services while complying with numerous regulations. In 2013, staff will be working on the following reports related to service reliability, performance and compliance:

- Report: **Sewage Residual Management Review**
- Date: July 2013
- Description: In light of new technologies and an interest in energy recovery, the London method of managing the end result of wastewater treatment will be reviewed. The goal is to ensure that the existing processes are the most cost effective before making energy recovery decisions. Although this is a topic also included in the Optimization report noted on the next page, there is a desire to accelerate this component because of emerging opportunities.

London's existing residuals management method involves trucking biosolids to a central location followed by dewatering, incineration and ash disposal. There are other approaches to managing residuals that involve different processes and infrastructure. These also have energy recovery and beneficial end use possibilities. London's method will be benchmarked against other approaches to provide direction to Optimization and energy recovery.

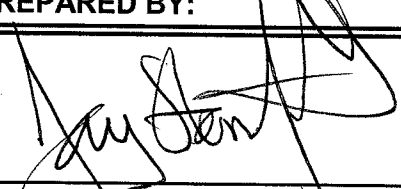

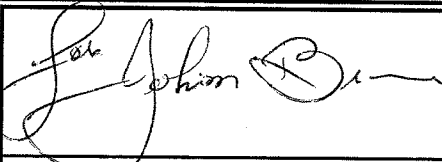
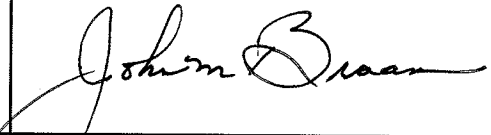


Report: **Pollution Prevention and Control Plan (PPCP)**
Date: September 2013 (Phase 1)
Description: The PPCP is a Master Planning level tool that will provide the City with project implementation and capital planning guidance for the next 20 years and beyond. It will give strategic direction for implementation of infrastructure improvement projects that will mitigate the impacts of sewer overflows (CSO) and bypasses to the Thames River, and provide capacity for redevelopment and intensification within the City. The goals and objectives were set through a collaborative process involving the City, The Ontario Ministry of the Environment (MOE), The Upper Thames River Conservation Authority (UTRCA), First Nations, and local stakeholders to maximize the benefits of the PPCP implementation plan.

The PPCP has been split into three phases which are estimated to take three years to complete. The first phase is currently being undertaken with a consultant and is projected to be completed within 2013. This phase includes collection and review of all background data, a Thames River historical benthic study and water quality review, detailed inventory of all overflows, bypasses, and discharge locations, determination of flow monitoring requirements, and ranking of CSO and bypass locations which will ultimately drive the priority setting focus of the next phase.

Report: **Approach to Wastewater Treatment Optimization**
Date: November 2013
Description: This report will develop for Council a recommended approach to reducing long term capital costs for wastewater treatment plant expansions and effectively plan to meet more stringent effluent criteria. The goal is to find latent capacity at existing facilities and coordinate expansions with life cycle replacements over the next twenty years, giving consideration to the location of future expansions and technological upgrades. The future challenges of tighter effluent criteria, Combined Sewer Overflow treatment and mitigation and the effects of climate change will also be recognized. Operational savings are possible through reduced energy consumption coupled with increased efficiency and recovery in both growth and lifecycle project designs, and by deferring capital expansions.

The plan will embrace new technologies, and involve technical staff and outside expertise within a phased process that recognizes successful pilot projects that are in progress and envisions the benefits of automation and innovation into the future. This approach will leverage the work of London's International Water Centre of Excellence, our academic and business partners, and adding the implementation of new technologies to our leadership in research role.

PREPARED BY:	PREPARED BY:
	
JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE	EDWARD SOLDO, P.ENG. DIRECTOR, ROADS & TRANSPORTATION
PREPARED BY:	REVIEWED & RECOMMENDED BY:
	
JOHN LUCAS, P.ENG DIRECTOR, WATER & WASTEWATER	JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER