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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 20, 2015
FROM:	EDWARD SOLDI, P. ENG. DIRECTOR, ROADS AND TRANSPORTATION
SUBJECT:	MUNICIPAL PARKING LOT UPGRADE STRATEGY

RECOMMENDATION

That on the recommendation of the Director, Roads and Transportation, the following report on a Municipal Parking Lot Upgrade Strategy **BE RECEIVED** for information and consideration as part of the 2016 multi-year budget process.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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- None

BACKGROUND

The City’s urban areas with commercial and office business districts rely on the efficient working of London’s transportation network which includes the provision and management of available short-term and long-term parking. The City of London owns and maintains a number of public parking lots located throughout Downtown London and Old East Village. The poor condition of certain lots has created a negative customer service experience which has been expressed by users.

A condition assessment of the municipal parking lots was led by Transportation Planning & Design Division in coordination with the Municipal Law Enforcement (Parking) Division and the Urban Design Planning offices. The purpose of this assessment was to determine the rehabilitation and repair needs of all municipally owned metered parking lots, and to consider opportunities for improvement.

A capital account, TS4208 Parking Lots Rehabilitation, was approved by Council during the 2014 Capital budget process. The account allocated \$100,000 in 2014 for consulting services associated with the parking lot condition assessment. Future year projections were not identified pending the results of the condition assessment and estimated capital rehabilitation costs.

The Municipal Parking Lot Upgrade Strategy is a component of the transportation mobility program. It supports the objectives identified in the Strategic Plan under Building a Sustainable City – Robust Infrastructure, by managing and upgrading transportation infrastructure such as parking lots.

As part of the 2015-2019 Strategic Plan process, the need to develop a Municipal Parking Lot Upgrade Strategy was identified and approved by Council.

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Municipal Parking Lots included in Study

Eleven municipally owned parking lots were studied in order to evaluate their needs in terms of required pavement, drainage and lighting improvements along with potential urban design enhancements. The lots that were considered within the study are listed as follows:

Lot #	Location	Parking Spaces
1	434 Elizabeth Street	101
2	641 Queens Avenue	139
3W	210 Piccadilly Street	24
3E	234 Piccadilly Street	35
4	635 Marshall Street	88
5	185 Queens Avenue	74
7	824 Dundas Street	66
8	100 King Street (Budweiser Gardens)	168
11	331 Thames Street	18
15	299 King Street (Convention Centre)	72
17	331 Thames Street	26

Locations of these eleven parking lots are illustrated in the Figure presented in Appendix A.

The lot located at 299 King Street is funded separately by the London Convention Centre Corporation. The condition of this lot was assessed but any capital improvements are at the discretion and cost of the Convention Centre Corporation.

Additional Parking Lots not included in Study

The lot at 78 Riverside Drive – Lot 9 was recently converted to metered parking in April 2015. This lot was not included in the condition study. A cursory review indicates a satisfactory asset condition.

It should be noted that the City of London also manages a number of lots on behalf of others, including:

- Lot 3N – 743 Richmond Street
- Lot 6 – 174 Kent Street
- Lot 12 – 199 Ridout Street
- Lot 14 – 197 York Street
- Lot 19 – 421 Ridout Street
- Lot 20 – 155 Kent Street
- Lot 21 – 558 Talbot Street
- Lot 22 – 695 Richmond Street

While the City carries out operational maintenance activities at these lots and invoices the owners accordingly, the City is not responsible for any capital works undertakings at these locations. As such, these parking lots were not considered within the parking lot condition study.

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DISCUSSION

Investigations were undertaken at 11 municipally owned metered parking lots in order to assess their needs in terms of required pavement, drainage, and lighting improvements, as well as their suitability for incorporating urban design aesthetic enhancements. A summary of the investigation results is presented in the attached Appendix B.

Visual Pavement Inspections

Detailed visual inspections were performed on the parking lots during the period between May and August, 2014. The inspections consisted of recording the general inventory of each site, as well as documenting the nature and severity of all pavement distresses present at the time of the inspection. Pavement condition index surveys were performed based on the procedures outlined within *ASTM D6433-11: Standard Practice for Roads and Parking Lots*. Results from these surveys ultimately factored into the overall pavement condition ratings that were assigned to each parking lot.

Geotechnical Investigations

AMEC Environment & Infrastructure, a division of AMEC Americas Limited, was retained by the City of London to carry out a geotechnical investigation of the parking lots. The purpose of this investigation was to supplement visual pavement condition surveys by advancing exploratory cores with boreholes to log the nature of the existing pavement structure and underlying soil. Through this investigation, AMEC produced a *Geotechnical Investigation Report* that outlines recommended rehabilitation strategies for each of the parking lots analyzed within this study.

Sewer Condition Review

The City of London Wastewater and Drainage Engineering Division was contacted to conduct a review of all sewer lines located beneath the parking lots. The purpose of this review was to video the underground catch basin leads and pipes, detail their condition and identify any potential needs for sewer improvements. These required sewer repairs can be addressed while pavement repairs are being undertaken.

A number of sewer lines were not able to be sufficiently flushed and cleared during the initial review and some outstanding work still remains and is scheduled for completion in 2015. Any additional sewer repair needs that are identified will be addressed during the scheduled rehabilitation works.

Potential for Urban Design Improvements

Planning Services was consulted in order to garner input on which parking lots might be best suited for incorporating urban design enhancements. Lots were rated based on “importance” (i.e. prominence and visibility) and “priority” (i.e. current condition and aesthetics) when assessing their needs for aesthetic improvements.

Examples of potential urban design components that will be considered include parking lot screening measures (i.e. walls or greenery that divide the parking lot from the adjacent streetscape), landscaping features, unique signage components, and unique

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lighting components. The desired features at each site will be developed further during the design process. Where necessary, relevant stakeholders (e.g. the Old East Village Community Association) and/or regulations (e.g. regulations for lots located within a heritage conservation district) that might impact/govern the design of a parking lot will be consulted/considered.

COST ESTIMATE

The *Geotechnical Investigation Report* includes recommended rehabilitation strategies for each of the eleven parking lots, and provides a number of specifics. Estimated costs to perform these recommended pavement rehabilitation operations were determined based on approximate unit costs observed in previous construction tenders.

Furthermore, while detailed design plans have not yet been developed, the cost estimates include provisions for urban design enhancements, lighting improvements, and sewer repairs. The following table lists the estimated costs that would be associated with the rehabilitation of all 11 parking lots:

Lot	Location	Parking Spaces	Condition Rating	Rehabilitation Recommendation	Cost Estimate
1*	434 Elizabeth	101	Very Poor	Partial depth re-construction, lighting improvements	\$540,000
2*	641 Queens	139	Very Poor	Partial depth re-construction, lighting improvements	\$750,000
3W	210 Piccadilly	24	Fairly Poor	Partial depth re-construction	\$65,000
3E	234 Piccadilly	35	Fair	Asphalt removal and replacement	\$80,000
4*	635 Marshall	88	Fair	Asphalt removal and replacement	\$235,000
5*	185 Queens	74	Fairly Good	Milling and resurfacing	\$165,000
7	824 Dundas	66	Good	Minor crack fills and application of a seal coat	\$75,000
8	100 King	168	Fairly Good	Asphalt removal and replacement, sewer repairs	\$385,000
11	331 Thames	18	Fairly Good	Crack repairs and seal coat	\$30,000
15	299 King	72	Fairly Good	Asphalt removal and replacement	\$135,000**
17*	331 Thames	26	Fairly Poor	Partial depth re-construction, grading improvements	\$85,000
Total Rehabilitation Cost Estimate:					\$2,545,000

* Lots requiring priority from an urban design standpoint.

** The lot at 299 King St. is funded separately by the London Convention Centre Corporation.

The total capital cost estimate for rehabilitating all 11 parking lots considered in the study is \$2,545,000. However, it should be noted that the lot located at 299 King Street is funded separately by the London Convention Centre Corporation. The capital cost estimate for rehabilitating the remaining 10 parking lots is **\$2,410,000**.

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SCHEDULE

A recommended schedule for rehabilitating the 11 parking lots was established based on the results of the assessments undertaken and considering budgetary, time, and resource constraints. The prioritization of the parking lots also takes into account potential on-street parking impacts that may result from the Shift Rapid Transit Initiative. The suggested rehabilitation schedule subject to Council budget approval is presented below:

Year	Year 1	Year 2	Year 3	Year 4
Lots	Lot 2 641 Queens \$750,000	Lot 1 434 Elizabeth \$540,000 Lot 17 331 Thames \$85,000	Lot 4 635 Marshall \$235,000 Lot 5 185 Queens \$165,000 Lot 3W 210 Piccadilly \$65,000 Lot 3E 234 Piccadilly \$80,000	Lot 8 100 King \$385,000 Lot 11 331 Thames \$30,000 Lot 7 824 Dundas \$75,000 Lot 15 299 King *
Budget	\$750,000	\$625,000	\$545,000	\$490,000

** Lot 15 at the discretion and cost of the London Convention Centre Corporation.*

SUMMARY

The City of London owns and maintains a number of public metered parking lots throughout Downtown London and Old East Village. In 2013, the Municipal Law Enforcement (Parking) Division identified a need to rehabilitate a number of lots that were observed to be in particularly poor condition. This prompted the initiation of a parking lot condition study that assessed the repair and design needs for all municipally owned lots identified for improvement.

A recommended four year schedule for rehabilitating the parking lots was established based on the results of the various assessments undertaken. A variety of factors were considered when establishing this recommended schedule, including:

- parking lot location and usage patterns;
- parking lot condition ratings;
- recommended rehabilitation strategies;
- required sewer improvements that overlap with the studied lots;
- potential for urban design aesthetic enhancements; and
- budgetary, time, and resource constraints.

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A summary of the investigation results is presented in the attached Appendix B. The total capital cost estimate for rehabilitating the ten parking lots requiring municipal funding is **\$2,410,000**. A capital rehabilitation program will be identified in the upcoming budget to address these needs.

Acknowledgements:

This report was prepared with assistance from Josh Wilson, M. Eng, Engineer-In-Training, Transportation Planning & Design Division and Karl Grabowski, P. Eng, Transportation Design Engineer, Transportation Planning & Design Division with input from Annette Drost, Manager of Municipal Law Enforcement (Parking), Development & Compliance Services Division and Jim Yanchula, Manager of Urban Regeneration, Planning and Development.

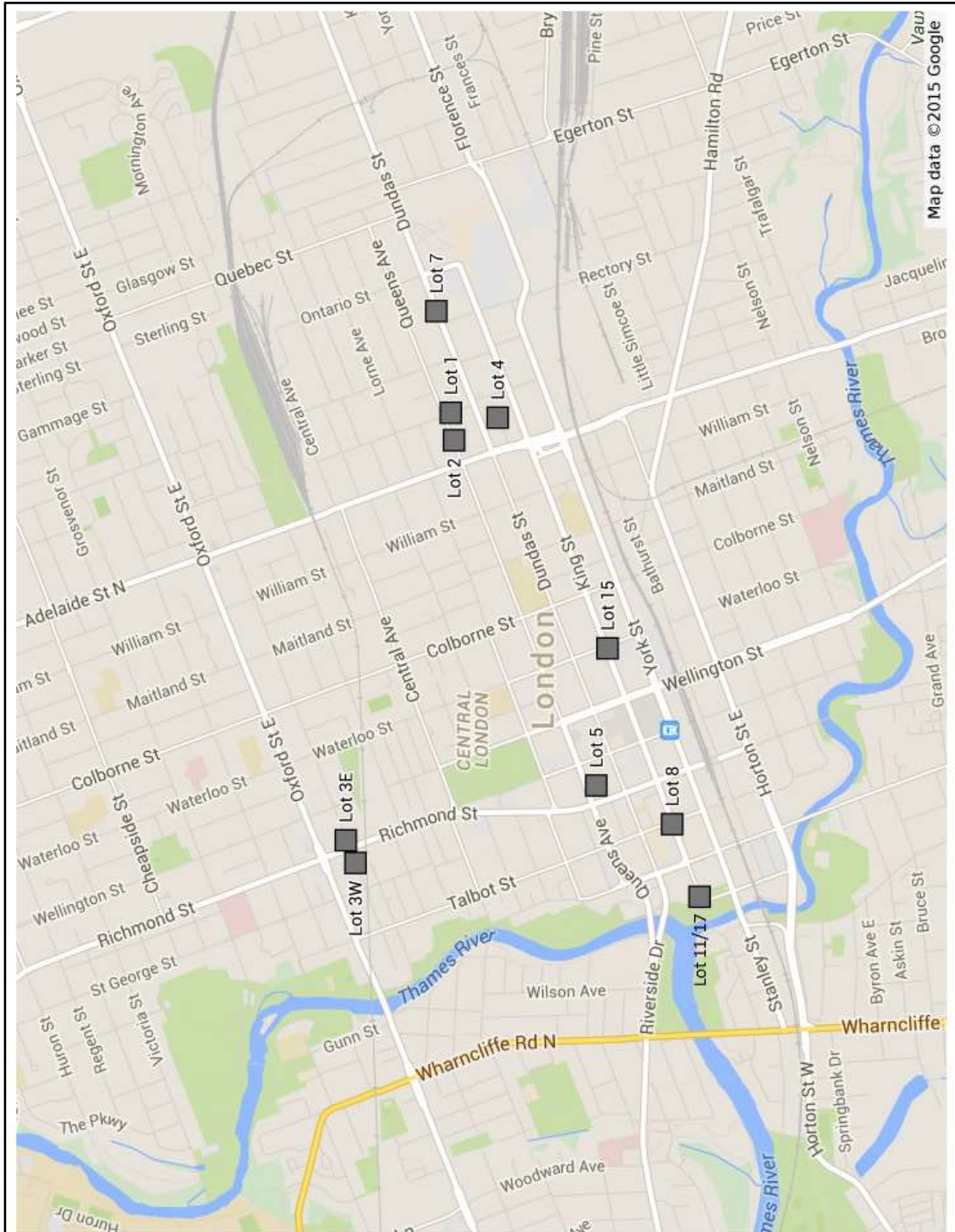
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Attach: Appendix A – Map of Municipal Parking Lots
 Appendix B – Summary of Parking Lot Assessment Results

cc: Annette Drost, Development & Compliance Services Division

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Appendix A Map of Municipal Parking Lots Studied



Parking Lot Locations

- Lot 1 - 434 Elizabeth St
- Lot 2 - 641 Queens Ave
- Lot 3W - 210 Piccadilly St
- Lot 3E - 234 Piccadilly St
- Lot 4 - 635 Marshall St
- Lot 5 - 185 Queens Ave
- Lot 7 - 824 Dundas St
- Lot 8 - 100 King St
- Lot 11/17 - 331 Thames St
- Lot 15 - 299 King St

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Appendix B Summary of Parking Lot Assessment Results

Table 2: Summary of parking lot investigation results, rehabilitation recommendations, and suggested maintenance schedule.

Lot #	Suggested Schedule	Parking Lot Location	Pavement Rating	Pavement Rehabilitation Recommendations	Sewer Improvement Requirements	Urban Design Importance / Priority	Cost Estimate: Repair (Design)
2	Year 1	641 Queens Ave.	Very Poor Condition	Partial depth re-construction.	(Further investigation needed by CCTV).	High Importance High Priority	\$750,000
1	Year 2	434 Elizabeth St.	Very Poor Condition	Partial depth re-construction. Lighting improvements.	No sewer requirements.	High Importance High Priority	\$540,000
17	Year 2	331 Thames St. (Lot 17)	Fairly Poor Condition	Partial depth re-construction. Improvements to drainage system. Lighting improvements.	No catch basin present; very poor lot drainage.	High Importance High Priority	\$85,000
4	Year 3	635 Marshall St.	Fair Condition	Removal and replacement of existing asphalt, resurfacing.	(Further flushing and investigation needed).	Medium Importance Medium Priority	\$235,000
5	Year 3	185 Queens Ave.	Fairly Good Condition	Milling and resurfacing.	Some clay pipe exists outside parking lot limits. No sewer requirements within lot limits.	High Importance High Priority	\$165,000
3W	Year 3	210 Piccadilly St.	Fairly Poor Condition	Partial depth re-construction.	(Further flushing and investigation needed).	Low Importance Low Priority	\$65,000
3E	Year 3	234 Piccadilly St.	Fair Condition	Removal and replacement of existing asphalt, resurfacing.	No sewer requirements.	Low Importance Low Priority	\$80,000
8	Year 4	100 King St. (Budweiser Gardens)	Fairly Good Condition	Removal and replacement of existing asphalt, resurfacing.	Two pipe deformities that require repair. (Further investigation needed by CCTV).	High Importance Low Priority	\$385,000
11	Year 4	331 Thames St. (Lot 11)	Fairly Good Condition	Crack repairs and application of a seal coat to asphalt portions of the lot. No needs on the concrete portions.	No catch basin present; lot drainage currently not a major issue.	High Importance Low Priority	\$30,000
7	Year 4	824 Dundas St.	Good Condition	Minor crack fills and application of a seal coat.	No sewer requirements.	High Importance Low Priority	\$75,000
15	N/A	299 King St. (Convention Centre)	Fairly Good Condition	Removal and replacement of existing asphalt, resurfacing.	No sewer requirements	Low Importance Low Priority	(\$135,000) *
Total Rehabilitation Cost Estimate of the Ten Municipally Controlled Lots:							\$2,410,000

* The lot located at 299 King St. is funded separately by the London Convention Centre Corporation, and is not included in the total cost estimate summation.