



Old Victoria Hospital Lands - Phase 1 Brownfield Business Case Report Medallion Realty Holdings March 19, 2018







Stantec Consulting Ltd. 171 Queens Avenue, 6th Floor, London ON N6A 5J7

March 19, 2018 File: 161413305

The Corporation of the City of London Planning and Development Department Planning Division 300 Dufferin Avenue London, ON N6A 4L9

Attention: James Yanchula, Manager, Urban Regeneration

Reference: Old Victoria Hospital Lands – Phase 1 Brownfield Business Case

On behalf of Medallion Realty Holdings Limited (Medallion), please accept this Business Case submission as a request for funding under the City of London's Community Improvement Plan (CIP) for Brownfield Incentives and as a detailed summary of the process and cost of remediation for the above noted property. This Business Case outlines the following:

- The subject site location and description of the proposed development concept;
- The historical planning and development activities, and context for Medallion's proposed development;
- The historical land use, site contamination, and previous remediation of the site;
- Intent of the CIP for Brownfield Incentives;
- The environmental, social, and economic benefits of the proposal; and
- The results of environmental site investigations, remediation requirements, and estimated costs.

1.0 Location / Site Description

The subject site is located on the site of the former London Health Sciences South Street Campus within the SoHo (South of Horton Street) neighbourhood. The site is bounded by South Street on the north, Colborne Street on the east, the Nelson Street extension to the south, and additional development lands to the west. The site is located within the Old Victoria Hospital South Street Secondary Planning Area, and a portion of the site is also located within the Four Corners Character Area as outlined in the Secondary Plan. The site represents an important focal point



within the Old Victoria Hospital community, pivotal to the realization of the goals and objectives for a vibrant SoHo community.

2.0 Project Description

Medallion Realty Holdings Limited is proposing to build a distinctive mixed use development within the approximately 0.94ha Old Victoria Hospital Lands site, as presented in their response to RFP #16-06.

The proposed project is located within the context of existing SoHo neighbourhood, on the site of the former London Health Sciences Centre South Street Campus. The location of the site promotes intensification, redevelopment, and compact form; encourages densities and a mix of uses which minimizes land consumption and servicing costs; efficiently uses infrastructure and public service facilities; supports active transportation and transit; and conserves and enhances significant cultural heritage resources existing on the site. The project hopes to act as a catalyst for positive change in the SoHo neighbourhood by implementing the vision identified within the Old Victoria Hospital South Street Secondary Plan. The site was also part of the Back to the River Design Competition, which developed a vision for revitalization of a five kilometer stretch of the Thames River, part of the City's ongoing initiative for re-centering the London community along this rich natural and cultural resource. This mixed-use development will significantly contribute to the objectives of this initiative by creating a neighbourhood focal point that supports the winning Back to the River design along the Thames River corridor.

The proposed development includes the adaptive reuse of the historic Colborne Building centrally located at the southwest portion of the intersection of South Street and Colborne Street (the Four Corners). The building will include mixed-use ground floor commercial/retail uses with residential on the upper floors, connected to the surrounding open space areas. The landscape concept surrounding the historic building is built on exceptional urban design principles that emphasize the pedestrian realm and enhance view corridors and connectivity to the Thames River, including the riverside promenade and pedestrian bridge as proposed in the Secondary Plan.

In addition to adaptive reuse of the existing historic building, the proposed development also includes infill and intensification of the lands immediately to the west, consistent with the High Density Residential land use designation within the Secondary Plan. The proposal consists of an eight (8) storey residential building fronting South Street, which provides an appropriate transition between lower densities to the north and higher densities concentrated along Nelson Street, facing the Thames River corridor. Twenty-two (22) storey and eighteen (18) storey residential towers are situated along the Nelson Street extension, and are connected via open space that extends under the buildings' piloti. The twenty-two (22) storey building will be connected to the lower eight (8) storey building via a raised pedestrian walkway situated over the entranceway.

All site parking will be located underground (two levels of underground parking), and a complete streets approach has been adopted within the driveway areas interior to the development to further enhance the pedestrian realm and accessibility through the use of curbless driveways.



A draft Zoning Bylaw Amendment has been prepared to permit the proposed mixed-use development and implement the vision within the Secondary Plan. As detailed in RFP #16-06, Medallion will be undertaking the Zoning Bylaw Amendment.

The proposal contributes to various goals outlined in Secondary Plan, as well as the City of London Official Plan and London Plan, including supporting the development of this under-utilized land close to the downtown core and vital services and infrastructure, which will contribute to an economic environment conducive to the health and vitality of commercial enterprises, and the integration of new development with existing heritage resources.

3.0 Background

As part of the decommissioning of the London Health Sciences Centre South Street Campus, the City of London undertook remediation of the subject site to achieve contaminant levels within Ministry of the Environment and Climate Change (MOECC) Table 3 levels for residential/parkland/institutional property use. Three separate Records of Site Condition (RSC) were filed for the subject site by the City of London in 2011 (#109518 – April 14. 2011; #109520 – June 22, 2011; and #110712 – May 5, 2011). Based on the RSC, the subject site was deemed ready for development.

RFP #16-06 was released by the City in 2016, following the prequalification of respondents through the Request for Expression of Interest process. The RFP process was intended to choose a preferred developer with which the City would negotiate a final agreement for redevelopment of the site. Based on their development proposal submission, Medallion was chosen as the 'preferred respondent.' Page 5 of RFP #16-06 identified that "the Site has been remediated by the London Health Sciences Centre (LHSC), and has been deemed ready for development."

Upon being selected as the 'preferred respondent', Medallion undertook a due-diligence review of the 2011 RCS and retained WSP Canada Inc. to conduct environmental soil testing on the subject site.

Effective July 1, 2011, the MOECC published the updated Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act. Soil testing from a number of boreholes indicated that the soil contaminant levels exceeded the acceptable MOECC Table 3 levels for residential/parkland/institutional property use within the updated standards. Details of the soil testing and exceedances are provided in the Phase 1 and Phase 2 ESAs contained in Appendix 2.

Therefore, Medallion is submitting a request for consideration of funding under the City of London's Community Improvement Plan (CIP) for Brownfield Incentives to address the remediation works required at the site to ensure site conditions meet the updated MOECC Table 3 levels for residential/parkland/institutional property use prior to development.



4.0 Historical Land Use, Site Contamination and Remediation

It must be noted at the outset that the applicant for the Brownfield Incentive Program (Medallion) has not undertaken any alterations to the site, and thus has not contributed to the existing site contamination.

Based on the Phase I and Phase II reports completed in 2011, and those prepared by WSP in 2017, a number of land uses and activities associated with the former hospital complex were identified as potential contributions to site contaminations. Historic uses included the hospital's power plant building including three (3) bunker oil fired high pressure boilers and standby diesel generator, later replaced by natural gas boilers; laundry facilities, maintenance shops, spray painting facilities, storage facilities for flammable materials, nuclear medicine facilities, research laboratories, etc. In addition, quality of fill material used throughout the site was unknown.

The findings of WSP's updated Phase II ESA indicated that fill soil samples exceeded the applicable Table 2 and Table 3 SCS for various metals and PAH parameters, EC, SAR, and pH as well as for PHCs in the F3 fraction at BH17-1 and BH17-3. In addition, fill soil from BH17-8 and BH17-3 exceeded the Table 2 and Table 3 SCS for PCBs.

Due to the known and potential impacts as identified through the Phase I and II ESA on the subject site and the projected remediation costs which are based on the Ministry standards, remediation compensation is required in order to make redevelopment of this under-utilized site by Medallion feasible.

A summary of the projected remediation costs developed by Stantec Consulting Ltd. (Stantec) and WSP is provided in Table 1. The remediation cost also includes environmental consultant fees, laboratory and monitoring fees required as part of the cleanup process, and soil retention costs.

5.0 Community Improvement Plan and Brownfield Incentives: Value, Benefits, and Cost

Community Improvement Plans (CIPs) are a tool provided for within the *Planning Act*, through which municipalities can provide financial support for development activities that effectively use, reuse, and restore lands, buildings, and infrastructure (Ministry of Municipal Affairs and Housing, 2008). The City of London has adopted a CIP for Brownfield Incentives (2006) to reduce the difficulties that encumber brownfield remediation and redevelopment in the City of London.

The redevelopment of brownfield sites represents good planning practice. History of brownfield redevelopments in the City have stimulated the local economy, community vitality, improved environmental conditions, all while utilizing existing infrastructure and maximizing land potential. These developments epitomize the goals and objectives for the City within the London Plan to grow 'inward and upward.' Examples of successful brownfield redevelopments include Budweiser Gardens, Covet Garden Market, Convention Centre and the King Street Towers housing development. These properties were contaminated as a result of former activities, and as such, were under-utilized or abandoned. Their previous brownfield state, environmental condition and



potential liability concerns resulted in lost property tax revenue, inefficient use of existing infrastructure and lost employment opportunities.

Medallion is proposing a \$200M mixed-use development of a brownfield site. Remediation and redevelopment are feasible through a combination of incentives. The proposed development meets the General Eligibility Criteria and Requirements as outlined in Section 2 of the City's CIP for Brownfield Incentives.

The SoHo neighbourhood has unique characteristics that make it one of the most desirable locations for infill and intensification in the City, as outlined in Roadmap Soho: Regeneration South of Horton Street, a CIP for London's Soho District: it has a long history as a distinct community within the City of London and has ties to the Underground Railroad; it boasts affordable housing, it is located at the fringe of the downtown core; and is situated along the Thames River Valley Corridor with direct access onto the Thames Valley Parkway trail system. Medallion's proposed development will represent a giant leap in realizing the Vision Statement within *Roadmap SoHo*:

Our SoHo will be a vibrant and healthy urban neighbourhood that celebrates its rich sense of community and heritage. With its unique links to the Downtown and Thames River, SoHo will be a great place to live, work, shop, and play!

In addition to bringing a new landmark development to the SoHo neighbourhood, the proposed development will create a new benchmark for exemplary architectural design and good planning practice, and provide a range of benefits to the City and public Interest through environmental, economic and social improvements.

Provincial Policy Statement

The proposed brownfield redevelopment represents good planning practice and supports provincial interest as set out in the Provincial Policy Statement (2014):

- it promotes cost-effective development standards to minimize land consumption and servicing costs;
- it promotes intensification, redevelopment and compact form, while maintaining appropriate levels of public health and safety;
- it uses existing infrastructure and public service facilities;
- it supports long term economic prosperity by promoting the redevelopment of brownfield sites; and
- It protects against adverse effects by remediation of a contaminated site prior to development activities.

Social, Environmental, and Economic Benefits

Medallion's project will provide environmental benefits through improvement of performance in energy, transportation, waste, water, and soil remediation. In addition to the reduction in the adverse environmental impacts associated with contaminated sites, the development will seek to provide a dense and well utilized site, using a complete streets approach to promote active



transportation connections to the downtown core, major transportation networks, and open space uses. The proposed landscaping concept seamlessly integrates pedestrian connections between the new and existing amenities including the downtown core, and parks improvements along the Thames River Corridor including the riverfront promenade and pedestrian bridge as outlined in the winning Back to the River Design. The overall development concept has been designed with enhanced sensitivity to vistas and view corridors.

The site is adjacent to public transportation routes, pedestrian, and cycling networks and has onsite bicycle storage. Future residents will have many active transportation choices, and the development is served by on-site and adjacent retail, commercial and service commercial uses within the SoHo neighbourhood within walking distance. The active pedestrian connection provides residents ease of access to the downtown core, the Thames River and future community amenities identified through the Back to the River Design Competition, and other vital amenities.

New trees and landscaping features on site will contribute to the urban canopy, and new growth will add to the overall rejuvenation of the urban forest. Drought resistant plant material will be selected to reduce water consumption. The design and construction of the building will take into consideration building material, energy efficient design, efficient water use, energy efficiencies and use of natural light, and locally sourcing materials.

The proposed mixed use development will provide a multitude of value for the residents and business owners/employees utilizing the site, and opportunities for the public. The development will deliver a variation of housing choices in the Soho area, retail options, employment prospects, and proximity to parks and on-site amenity areas. This promotes live-work-play opportunities for residents within the downtown community.

In addition to the social and environmental gains, this development will provide spin off construction jobs, additional employment opportunities through the design and development of the site, and commercial opportunities for the local economy. Upon completion of the Brownfield CIP incentive program, the development will result in significant tax revenue for the City from the residential and commercial uses.

As discussed throughout this section, the social, environment and economic value anticipated from this landmark development exceeds the initial remediation costs, ensuring a promising investment for the SoHo community, the City, and all its residents. The incentives provided through the CIP brownfield redevelopment programs are crucial to funding the remediation on the site. This proposed brownfield redevelopment satisfies the intent and growth objectives as set out in policies from the Planning Act, Provincial Policy Statement, Roadmap SoHo, The Old Victoria Hospital Lands South Street Secondary Plan, and the London Plan. Medallion's proposed development is a compatible and unique opportunity, ideal for approval of the City's existing incentive programs.



6.0 Site Contamination and Remediation Summary

As discussed in Section 4.0 Historical Land Use, the City and London Health Sciences Centre had previously undertaken Phase I and II ESAs, remediation work at the site, and had registered RSC for the subject lands indicating that remediation was complete and the site was suitable for redevelopment; however, upon preliminary soil investigations on the site, it was identified by WSP Canada Inc. that contaminant levels throughout the site exceeded the updated MOECC standards.

Updated Phase I and II investigations were undertaken by WSP in 2017.

Due to the known and potential impacts as identified through the Phase I and II ESA on the subject site and the projected remediation costs which are based on the Ministry standards, remediation compensation is required in order to make redevelopment of this under-utilized site by Medallion feasible.

A summary of the projected remediation costs developed by Stantec Consulting Ltd. (Stantec) and WSP is provided in Table 1. The remediation cost also includes environmental consultant fees, laboratory and monitoring fees required as part of the cleanup process, and soil retention costs.



ITEM 1: HEAVY METAL IMPACTED SOIL							
Item Description of Work Methodology	Cost						
Instructiond on a review of the Phase two ESA Report d November, 2017, and erence to MOECC e 2 & 3 of the Soil, nd Water and Sediment dards for Use Under Part of the Environmental ection Act, the following amples exceed the enoted parameters:For estimating purposes, a total site area of 8,800m² is assumed. This area does not include the heritage building footprint (Entire bilding footprint (Entire dards for Use Under Part of the Environmental ection Act, the following amples exceed the enoted parameters:For estimating purposes, a total site area of 8,800m² is assumed. This area does not include the heritage building footprint (Entire total site area 9,400m²). All the fill material is interpreted to be impacted based on tornes based on borehole information.2017 BH17-1 S1: Mercury, Electrical Conductivity, pH BH17-3 S1B: Mercury, Electrical Conductivity, pH, Fluoranthene, Benz(a)anthracene, Fluoranthene, Benz(a)anthracene, BH17-3 S28: PHC F3 (C16-C34) BH17-3 S38: Electrical Conductivity BH17-3 S38: Electrical Conductivity BH17-4 S1A: Mercury, Electrical Conductivity, BH, Fluoranthene, BH17-4 S1A: Mercury, Electrical Conductivity, BH, Fluoranthene, HU7-3 S1B: BH17-4 S1A: Mercury, Electrical Conductivity, BH, Fluoranthene, BH17-4 S1A: Mercury, Electrical Conductivity, BH, Fluoranthene, HU7-3 S1B: BH	Based on methodology and noted assumptions, total estimated cost is: \$3,744,000.00						
erence to MOECC 2 & 3 of the Soil, and Water and Sediment dards for Use Under Part of the Environmental action Act, the following amples exceed the 2 & 3 regulatory limits le noted parameters: 2017 BH17-1 S1: Mercury, Electrical Conductivity, pH BH17-1 S2A: PHC F3 C(16-C34) BH17-3 S1B: Mercury, Electrical Conductivity, pH, Fluoranthene, Benz(a) anthracene, Fluoranthene, BH17-3 S2B: PHC F3 (C16-C34) BH17-3 S2	age tire All the ted to on al the fill the ed at s such, ere is nes of red. Ses an moval a,000 and nes jency						



Table 1 – Summary of Estimated Brownfield Costs					
Old Vic	toria Hospital Lanc	ls – 391 South Street			
 BH17-5 S1B: Lead, Zinc, Mercury, Mercury, Electrical Conductivity, Sodium Adsorption Ratio, pH BH17-6 S1A: Lead, Mercury, Electrical Conductivity, pH BH17-7 S1A: Mercury, Electrical Conductivity, pH, Fluoranthene, Benz(a)anthracene, Benzo(a)pyrene BH17-7 S1B: Fluoranthene, Benz(a)anthracene, Benzo(a)pyrene BH17-8 S1A: Electrical Conductivity, pH, Polychlorinated Biphenyls 	Boundary Soil Retention: Removal of contaminated soil to an approximate depth of 2.6m at the north property limit requires soil retention based on borehole information. The remaining limits of the site could likely be excavated without soil retention due to lesser concerns of impacts on boulevard services.	Boundary Soil Retention: Boundary Soils Retention will only apply to depth of impacted soil, cost below impacted soil will not be charged to Brownfield cost. The total north frontage of the site is approximately 100m. Assuming the heritage building is 15m wide, the remaining frontage would be approximately 85m.The resulting area of soil retention would be 221m ² . 2.6m x 85m = 221m ² Budgetary information obtained from our shoring consultant suggests a typical unit rate of \$600/m ² for soldier pile and lagging. Includes 20% contingency	\$159,120.00		
	Groundwater treatment and/or discharge: The groundwater treatment and/or discharge numbers are currently unknown, and costs noted are an allowance.	Groundwater treatment and/or discharge: Soil and groundwater disposal and/or remediation costs vary for many reasons. Unknown conditions may affect the final volumes and correspondingly the remediation costs. Includes 20% contingency	\$ 60,000.0 0		



Table 1 – Summary of Estimated Brownfield Costs Old Victoria Hospital Lands – 391 South Street						
ITEM 2: ENVIRONMENTAL CONSULTANT FEE						
ltem	Description of Work	Methodology	Cost			
Estimated costs associated with environmental consultant fees and laboratory fees required as part of the Brownfield Remediation work to verify site	Monitoring during excavation, collection of confirmatory samples to verify environmental quality of remaining soils following removal of impacted soils, and that remaining soils may be disposed of as clean material, followed by	The following estimates are provided based on costs for Environmental Consultant review and costs incurred for Laboratory Analysis as part of the consultant review and confirmation (disbursements required as part of the review process):	Based on methodology and noted assumptions, total estimated costs are:			
condition.	report preparation documenting the removal of soils. Costs include allowance for investigation below the heritage building, conducting risk	 Review Consultant: Coordination of Brownfield process for owner and review \$50,000.00 Includes a 20% Contingency 	\$60,000.00			
	assessment should the investigation indicate impacts the site condition standards. The cost does not include any additional costs required to implement the risk management measures recommended (if any) through the heritage risk assessment, as costs cannot be determined at this time. In addition, it does not include additional costs incurred as a result of the implementation of the proposed MOECC	 Environmental Consultant: Information assembly and cost estimate preparation. \$6,000.00 Hydrogeological Assessment and Disposal Testing \$20,000.00 Investigation below heritage building \$20,000.00 Risk Assessment of heritage building (if required) \$100,000.00 Record of Site Condition/Preparation of conceptual site 	\$305,400.00			



Table 1 – Summary of Estimated Brownfield Costs Old Victoria Hospital Lands – 391 South Street				
regulation regarding management of excess soils with an expected implementation in 2020.	 model (if required) \$10,000.00 Well decommissioning \$3,500.00 Monitoring during excavation of impacted material \$35,000.00 Confirmatory sampling program including collection of samples and analytical for metals and inorganics, PAHs, PHCs, VOCs, and PCBs. \$15,000.00 Reporting including remedial report, drawings, and submission to the city \$20,000.00 Meetings, discussions, & consultation throughout the process \$15,000.00 Groundwater Discharge Permitting \$10,000.00 Includes a 20% Contingencies All Contingencies based on Cost Estimate Classification System - Estimate Class 3 			
TOTAL ESTIMATED BROWNFIELD CC (Items 1 & 2)	DSTS excluding taxes	\$4,328,520.00		



The remediation costs provided in Table 1 are based upon estimates of soil quantity that may be impacted to levels above MOECC standards as determined through interpolation of the borehole data, and preliminary contractor costs provided or otherwise estimated based on costs from previous projects. However, given that soil conditions may differ between test locations and the potential that the Ministry standards may be further adjusted following stakeholder input through the current guideline review process, final remediation costs may vary. Accordingly, the estimates contained within should be considered budgetary in nature and the final cost will be based on the actual cost of the remediation.

7.0 Summary of Application Requests

As identified in the City's CIP, the total of the grant and rebates cannot exceed the Brownfield site remediation cast which is presently estimated at \$4,328,520.00 (taxes not included).

In accordance with the City's CIP for Brownfield Incentives general eligibility requirements, we confirm the following:

- Medallion has not contributed to the site contamination.
- There are no outstanding taxes, municipal orders or by-law infractions on the subject property.
- A Phase I & Phase II ESA has been provided to the City of London.
- The incentives are considered necessary to make the remediation and redevelopment on the subject property feasible.

8.0 Closing

In summary, the City of London and London Health Sciences Centre undertook site remediation and registered the RSC for the subject lands in 2011. Later that year, the MOECC updated their Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act. After being selected as the 'preferred respondent' for their response to RFP #16-06, Medallion has undertaken due-diligence investigations on the subject site, which have determined that the site does not currently meet MOECC Table 3 contaminant levels for residential/parkland/institutional property use. Therefore, Medallion has submitted this Business Case as a request for funding under the City of London's CIP for Brownfield Incentives.

Roadmap Soho: Regeneration South of Horton Street, a CIP for London's Soho District, the Old Victoria Hospital South Street Secondary Plan, and the Request for Expression of Interest and Request for Proposal processes undertaken by the City shows Council's strong commitment to development of the subject lands. Medallion is equally excited for the opportunity to make such a significant contribution to the London community.



Medallion has proposed to create a new and vibrant infill community within the SoHo neighbourhood which is sensitive to its neighbours, addresses the planning and urban design objectives set out within the Old Victoria Hospital Lands South Street Secondary Plan, and promotes an improved environment by emphasizing attractive design with pedestrian linkages to amenities interior and exterior to the development including the Thames River Valley Corridor.

We believe this development meets the objectives of design and intensification and request your support for the costs required for remediation under the Brownfield program.

We trust this submission meets your acceptance. Should you have any questions regarding our information, please contact the undersigned.

STANTEC CONSULTING LTD.

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7. Medenceul

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Cc: Mr. Rad Vucicevich, Medallion Realty Holdings Limited



Figures



Old Victoria Hospital Lands Brownfield Business Case Report Medallion Realty Holdings March 19, 2018



HORZ - 1 : 1000 10 0 20m

- Approximate Site Location City of London (RFP # 16-06)
 - Location of Boundary Soil Retention (Shoring ~ 85.0m) WSP February 2018
- \bullet Location of Borehole & Designation - WSP July 2017
- \bullet Location of Borehole with Monitoring Well & Designation - WSP July 2017

Stantec

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Figure No.

1.0 Title

Approximate Borehole and Boundary Soil Retention Locations



Legend:

- Approximate Site Location City of London (RFP # 16-06)
- Location of Borehole & Designation WSP July 2017
- Location of Borehole with Monitoring Well & Designation WSP July 2017

HORZ - 1 : 1000 10 0 20m

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Client/Project

Medalion Realty Holdings Old Victoria Hospital Lands London, ON Canada

Figure No.

2.0

Title

Approximate Borehole Locations On Conceptial Design

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MW17-7 S1A A ercury Electrical Conductivity H MW17-7 S4A A en BGS H MW17-7 S1A A en BGS Acenaphthene	 T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI 5 to 9 T2/T3 RPI 7.9 	Result 0.51 1.31 11.4 Result 4.8 Result 0.11		BH17-4 S1A 0.6 mBGS Mercury Electrical Conductivity pH BH17-4 S1A 0.6 mBGS	T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI	Result 0.67 1.25 11.9 Result	MW17-1 BH17-3 BH17-5 BH17-4
MW17-7 S1A 0.6 mBGS Mercury Electrical Conductivity MW17-7 S4A 0.6 mBGS MW17-7 S1A 0.6 mBGS Acenaphthene Phenanthrene	T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI 5 to 9 T2/T3 RPI 5 to 9 7.9 6.2	Result 0.51 1.31 11.4 Result 4.8 Result 0.11 0.93		BH17-4 S1A 0.6 mBGS Mercury Electrical Conductivity pH BH17-4 S1A 0.6 mBGS Acenaphthene	T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI 7.9	Result 0.67 1.25 11.9 Result 0.12	MW17-1 BH17-3 BH17-5 BH17-4
MW17-7 S1A D.6 mBGS Mercury Electrical Conductivity DH MW17-7 S4A D.6 mBGS DH MW17-7 S1A D.6 mBGS Accenaphthene Phenanthrene Anthracene	T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI 5 to 9 T2/T3 RPI 5 to 9 7.9 6.2 0.67	Result 0.51 1.31 11.4 Result 4.8 Result 0.11 0.93 0.23		BH17-4 S1A 0.6 mBGS Mercury Electrical Conductivity pH BH17-4 S1A 0.6 mBGS Acenaphthene Phenanthrene	T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI 7.9 6.2	Result 0.67 1.25 11.9 Result 0.12 1.0 0.25	MW17-1 BH17-3 BH17-5 BH17-4
MW17-7 S1A 0.6 mBGS Mercury Electrical Conductivity OH MW17-7 S4A 0.6 mBGS OH MW17-7 S1A 0.6 mBGS Accenaphthene Phenanthrene Anthracene Eluoranthene	T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI 5 to 9 T2/T3 RPI 0.27 0.7 0.7 5 to 9 7.9 6.2 0.67 0.69	Result 0.51 1.31 11.4 Result 4.8 Result 0.11 0.93 0.23 1.5		BH17-4 S1A 0.6 mBGS Mercury Electrical Conductivity pH BH17-4 S1A 0.6 mBGS Acenaphthene Phenanthrene Anthracene	T2/T3 RPI 0.27 0.7 5 to 9 T2/T3 RPI 7.9 6.2 0.67	Result 0.67 1.25 11.9 Result 0.12 1.0 0.25	MW17-1 BH17-3 BH17-5 BH17-4

Pyrene

Benz(a)anthracene

Benzo(a)pyrene

MW17-7 S1B

Acenaphthene

0.9 mBGS

Benzo(b)fluoranthene

Indeno(1,2,3-cd)pyrene



0.5

0.78

0.3

0.38

T2/T3 RPI

7.9

62

6.2

0.67

0.69

78

0.5

0.78

0.3

0.38

0.56

0.68

0.57

0.32

Result

0.22

0.19

1.5

0.37

1.5

1.2

0.55

0.76

0.55

0.29





0.62 0.78 0.52 0.3 0.29 0.38 BH17-6

1.1

0.50

78

0.5

Pyrene

Benz(a)anthracene

Benzo(a)pyrene

Benzo(b)fluoranthene

Indeno(1,2,3-cd)pyrene

Phase Two Property







MW17-2 S2A	T2/T2 DDI	Pocult	
1.9 mBGS	12/13 KFI	Result	
Naphthalene	0.6	0.17	
Acenaphthene	7.9	0.27	
Fluorene	0.69	0.22	
Phenanthrene	6.2	1.7	
Anthracene	0.67	0.40	
Fluoranthene	0.69	2.2	
Pyrene	78	1.8	
Benz(a)anthracene	0.5	0.73	
Benzo(b)fluoranthene	0.78	0.99	
Benzo(a)pyrene	0.3	0.84	
Indeno(1,2,3-cd)pyrene	0.38	0.46	
MW17-2 S1B			
0.8 mBGS	12/13 RPI	Result	
Polychlorinated Biphenyls	0.35	0.30	
MW17-2 S1A			
0.3 mBGS	T2/T3 RPI	Result	
F1 (C6 to C10)	55	<5	
F2 (C10 to C16)	98	<10	
F3 (C16 to C34)	300	170	
F4 (C34 to C50)	2800	130	
6	18.26		
A DESCRIPTION OF THE OWNER.			
	14.20	print.	
BH17-5 S1B	T2/T3 RPI	Result	
1.2 mBGS			
Lead	120	338	
Zinc	340	422	
Mercury	0.27	0.28	
Electrical Conductivity	0.7	2.06	
Sodium Adsorption Ratio	5	2.64	
рН	5 to 9	11.6	
131 18 18 18	1	and the second	
BH17-8 S1A		and the second second	
0.6 mBGS	T2/T3 RPI	Result	
Electrical Conductivity	0.7	1.05	
nH	5 to 9	11.2	
BH17-8 S1A	5.05		
	T2/T3 RPI	Result	

	and the second se	And Personnelling
BH17-8 S1A	T2/T2 DDI	Pocult
0.6 mBGS	12/13 KFT	Nesun
Electrical Conductivity	0.7	1.05
рН	5 to 9	11.2
BH17-8 S1A	T2/T2 DDI	Pocult
0.6 mBGS	12/13 KFI	Result
Polychlorinated Biphenyls	0.35	0.9

BH17-8

MW17-7

C

Contraction of the second second	100	
BH17-6 S1A	T2/T2 DDI	Pocult
0.6 mBGS	12/13 KF1	Result
Lead	120	201
Mercury	0.27	3.93
Electrical Conductivity	0.7	1.01
рН	5 to 9	11.8

0 10 20 3	40	50m
States a trans 20 h.		100 C
	PROJECT NO:	DRAWING NO:
MEDALLION REALTY HOLDINGS LIMITED	171-08654-00	4
CHEMICAL EXCEEDANCES IN SOIL	DRAWN BY:	CHECKED BY:
(MOECC TABLE 2/3 RPI)	RA	RO
	DATE:	SCALE:
SE TWO ENVIRONMENTAL SITE ASSESSMENT	July 2017	AS SHOWN
LD VICTORIA HOSPITAL, LONDON, ONTARIO	ORIGINAL SIZE:	REV. #
	Tabloid	N/A





Environmental Site Assessments Phase I and Phase II WSP



Old Victoria Hospital Lands Brownfield Business Case Report Medallion Realty Holdings March 19, 2018