

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**

**THE HAMPTONS SITE B  
LOTS 5 AND 7; PLAN 931 1969  
AND  
UTILITY CORRIDOR RIGHT OF WAY PLAN 961 2422  
N. 1/2-24-2-W5M  
CALGARY, ALBERTA**



**PROJECT NO. WA-16-05973**

**REPORT TO  
THE HAMPTONS GOLF CLUB  
C/O  
QUANTUMPLACE DEVELOPMENTS LTD.**

**PHASE I  
ENVIRONMENTAL SITE ASSESSMENT**

**THE HAMPTONS SITE B  
LOTS 5 AND 7; PLAN 931 1969  
AND  
UTILITY CORRIDOR RIGHT OF WAY PLAN 961 2422  
N. 1/2-24-2-W5M  
AND  
BLOCK 1, Plan 8311619  
CALGARY, ALBERTA**



**WA Environmental Services Ltd.  
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Lethbridge  
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**Tel: (403) 381-8141  
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**June 10, 2016**

## EXECUTIVE SUMMARY

Between May 17 and June 10, 2016 WA Environmental Services Ltd. (WAES) conducted a Phase I Environmental Site Assessment of a 1.03 hectare piece of property located at The Hamptons Golf Club located at 69 and 61 Hamptons Drive N.W. and 11080R 53 St. NW Calgary, Alberta. The site is known as Site B and entails the proposed development of an area located east of the "pitching" practice area, southeast of Hole 2 to allow for the construction of residential lots. It is understood that the assessment forms part of a business transaction involving the property.

A summary of environmental concerns identified at the site is presented in Table 1.

The subject site is located in a Special Purpose Recreation (S-R) Transportation and Utility Corridor (S-TUC) and Residential Contextual One Dwelling (R-C1) zoned area of northwest Calgary, Alberta. The site was historically used for agricultural purposes until the late 1980s when the initial development of the golf course occurred in conjunction with single family residential development. The golf course was officially opened on 1994 and has operated as a private golf club since that time.

Surrounding land use is primarily residential and municipal reserve. No concerns were identified with current adjacent land use.

There are no buildings located on the property; therefore, no hazardous building materials were observed at the time of the site reconnaissance.

Based on the information gathered and on observations made during this investigation, the Phase I Environmental Site Assessment has revealed no evidence of environmental contamination associated with the site.

No further environmental investigation of the site is recommended at this time.

**Table 1 - Summary of Findings and Recommendations**

Potential Source of Contamination	Level of Environmental Contamination	Findings	Recommended Action
Adjacent Properties	None	Surrounding land use is a primarily residential and municipal reserve.	None.
Historical Land Use	None	Historically, the site has been used for agricultural purposes since the early 1900s. Development of the golf course and residential housing began in the mid to late 1980s.	None
Underground Fuels and Chemicals	None	Two 500 gallon fibreglass USTs are located at the maintenance shop approximately 130 m to the east of Site B	None. The USTs and piping are double walled and located far enough away from the site and cross gradient so as not to cause a concern.
Aboveground Fuels and Chemicals	None	None observed or reported at the time of the site reconnaissance	None.
Waste Management	None	No waste is presently generated at Site A	None.
Spill and Stain Arcas	None	None observed or reported spills reported	None.
Wastewater Discharges	None	No waste water is presently generated at Site A.	None.
Air Discharges	None	No concerns.	None.
Polychlorinated Biphenyls (PCBs)	None	None observed or reported.	None.
Asbestos	None	None observed or reported.	None.
UFFI	None	None observed or reported	None.
Ozone Depleting Substances (ODSs)	None	None observed or reported	None.
Lead	None	None observed or reported	None
Electromagnetic Frequencies	None	None observed or reported.	None.
Radon	Low	Radon gas is a site specific issue based on geology	Passive testing can be conducted once any residential property has been constructed should the owner wish to confirm the levels of radon gas within any proposed buildings.
Hydraulic Hoists/Elevators	None	None observed or reported.	None
Mercury	None	None observed or reported.	None
Mould	None	None observed or reported.	None
Water Supply	None	Site A is currently not serviced for domestic water use.	None
Fill Areas	None	Possible fill located in the landscaped areas of the golf course and buried irrigation pipes.	None

**High** - Evidence of actual contamination, **Moderate** - Evidence of potential contamination (significant), **Low** - Evidence of potential contamination (minor), **None** - No evidence of contamination

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## 1.0 INTRODUCTION

WA Environmental Services Ltd. (WAES) was retained by QuantumPlace Developments Ltd. on behalf of The Hamptons Golf Club to conduct a Phase I Environmental Site Assessment of a 1.03 hectare piece of property located at 69 and 61 Hamptons Drive N.W. and 11080R 53 St. NW. Calgary, Alberta. The site is known as Site B and entails the proposed development of an area located southeast of Hole 2, to allow for the construction of 10 proposed residential lots. It is understood that the assessment forms part of a business transaction involving the property. A site location plan and a site plan showing adjacent land use are included in Appendix A of this report.

The purpose of the Phase I ESA was to identify any actual or potential environmental contaminants associated with the site that exist as a result of current or past activities.

This report is presented in nine sections. Sections 1 and 2 present general information about the project, and describe the scope of work and the methodology used. Section 3 provides a summary of applicable legislation that may be referenced during the assessment. Sections 4 to 6 describe the present and historic conditions of the subject and adjacent properties. Section 7 presents the findings of the site visit. Environmental concerns are identified in this section. Significant environmental concerns and related recommendations are summarized in Section 8. Section 9 discusses the limitations of the assessment and its findings. Supporting information is provided in several appendices at the end of this report. Select photographs are included in the text of this report.

## 2.0 PHASE I SCOPE AND METHODOLOGY

### 2.1 Scope of Work

The Phase I ESA carried out by WAES on this property is based on the requirements of the Canadian Standards Association (CSA) Phase I Environmental Site Assessment Information Product, Z768-01, (CSA protocol) and consists of the following:

- records review;
- interviews with regulatory officials and personnel associated with the site and adjoining properties;
- a site visit; and
- evaluation of information and preparation of the report provided herein.

A Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water or building materials. These activities would be carried out in a Phase II ESA, if required. No enhancements of this assessment were conducted. The professional qualifications of the project team and Insurance Certificates

are provided in Appendix B. The contract between QuantumPlace Developments Ltd. and WAES to conduct the Phase I Environmental Site Assessment is confidential and has not been included in this report.

## **2.2 Methodology**

### **2.2.1 Records Review**

The applicable search distance for the records review included properties immediately adjacent to the sites and other properties (as identified by aerial photographs, insurance records, etc.) where the potential for environmental contamination of the subject sites was apparent (e.g., petroleum products storage in the immediate area).

Previous Environmental Site Assessments and existing title searches were not provided for review. A list of records reviewed is included in **Appendix C**.

### **2.2.2 Interviews**

Interviews were carried out to obtain or confirm information on the environmental characteristics of this property. A summary of interviewees and contact information is presented in Appendix C.

### **2.2.3 Site Visit**

The subject property and readily visible and publicly accessible portions of adjacent sites were examined for the presence of actual or potential environmental contamination. All areas of the property were accessible to WAES during the site visit on May 17, 2016.

## **3.0 REGULATORY FRAMEWORK**

Applicable federal, provincial and municipal regulations were reviewed to identify and assess potential or actual environmental contamination at the sites and to develop appropriate recommendations. It should be noted, however, that this assessment did not include a review or audit of operational environmental compliance issues or of any environmental management system (EMS) that may exist for the property. Where required, the documents listed in Appendix D were used as reference material for the completion of the Phase I Assessment.

## 4.0 SITE DESCRIPTION

### 4.1 Property Description

The site is located in a Special Purpose Recreation (S-R) Transportation and Utility Corridor (S-TUC) and Residential Contextual One Dwelling (R-C1) zoned area of northwest Calgary, Alberta. The subject site has a total plan area of approximately 1.03 ha (2.55 acres). The site is presently an undeveloped portion of the Hamptons Golf Club. The legal description of the site is Lots 5 and 7, Plan 931 1969 and Utility Corridor Right of Way Plan 961 2422 and Block 1, Plan 831 1619 within the N.1/2-24-25-2-W5M, Calgary, Alberta, (Drawing 2, Appendix A).



Photograph 1: Looking west at site from the "pitching" practice area

### 4.2 Soil, Topography and Drainage

The site is generally flat, with landscaped areas throughout. Surface water from the site drains towards the east and then south towards the pond located on Hole 7. Buried irrigation lines for fairway irrigation are located throughout the fairways. According to published geological information (Shetsen, 1987<sup>1</sup>), site soils are typically silt and clay, overlying clay till up to 20 m thick.

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<sup>1</sup>Shetsen, I. 1987. *Surficial Geology of Southern Alberta*. Alberta Research Council.

Based on local topography, shallow groundwater flow is suspected to be towards the southwest towards the irrigation pond. The direction of regional (i.e., deep) groundwater flow is predicted to be southwest towards the Bearspaw Reservoir (Tokarsky, 1974<sup>2</sup>).

It should be noted that topography, geologic materials, development of land and soil disturbances influence localized variances in groundwater movement and pattern. In addition, groundwater levels will fluctuate seasonally and in response to climatic conditions.

No evidence of wells, pits or stressed vegetation was observed on the property.

#### 4.3 On-Site Buildings and Structures

There are no buildings situated on the site. A summary of the property information is presented in Table 2.

Table 2 - Summary of Lot Information	
Property	
Current Zoning	Special Purpose Recreation (S-R) Transportation and Utility Corridor (S-TUC) and Residential Contextual One Dwelling (R-C1)
Area	Approximately 1.03 ha
Services: Sewer, Water, Electricity	The site is presently not serviced.
Building (Office, Shop and Residence)	
Number of Storeys	NA
Exterior Finish	NA
Interior Finish	NA
Foundation	NA
Basement	NA
Insulation	NA
Roof	NA
Lighting	NA
Heating, Ventilating, Air Conditioning	NA

NA = Not applicable



Photograph 2: – Looking east towards the "pitching" practice area (arrowed)

## 5.0 ADJACENT PROPERTIES

Land use of the adjacent properties is identified on Drawing 2 in Appendix A. A summary of this land use is presented in Table 3.

Table 3 - Adjacent Properties - Land Use		
Boundary Side of Site	Current Activity	Potential Sources of Contamination
North	Hole 2	None identified
South	Residential	None identified
East	Hole 1	None identified
West	Residential	None identified

No evidence of actual or potential environmental impact from neighbouring properties was observed on the sites during the site reconnaissance.



*Photograph 3: – View of residential property adjacent to the site to the southwest*

## **6.0 REVIEW OF HISTORICAL LAND USE AND REGULATORY HISTORY**

### **6.1 Historical Land Use**

Historical information describing the site was obtained from a variety of sources as detailed in Appendix C of this report. Lists of historical land uses for the investigated site and adjacent properties are provided in Table 4 and 5, respectively.

<b>Table 4 - Historical Information for the Site</b>		
<b>Period/Date</b>	<b>Land Use</b>	<b>Sources of Information</b>
Prior to late 1980s	Undeveloped/agricultural land.	Air photographs and interviews
From late 1980s until the present day	The construction of the golf course in conjunction with single family dwellings and residential roadways. Stoney Trail construction began in approximately 2010.	Air photographs and interviews

Based on information obtained during the historical review, it is unlikely that the presence of the above land use has adversely impacted the site.

Table 5 - Historical Information for Adjacent Properties		
Boundary Side of Site	Comments	Sources of Information
North, south east and west	The area has been used for agricultural purposes since the early 1900s. In the late 1970s, residential construction started to the southwest in the Beddington Heights area and grew steadily north and west since that time.	Air photographs and interviews

Based on information obtained during the historical review, it is unlikely that the presence of the above land use has adversely impacted the site.

## 6.2 Regulatory History

A summary of information obtained from interviews with and/or written requests from regulatory agencies is provided below:

- **Alberta Environment and Parks, Regulatory Approvals Centre:** Information received from the Regulatory Approvals Centre indicates that they have no record if any approvals having been issued for the site.
- **Environmental Law Centre:** Information received from the Environmental Law Centre indicates that they have no record of Control Orders, Stop Orders, Prosecutions, or Tickets issued regarding the property owner.
- **Petroleum Tank Management Association of Alberta:** Written information received from the PTMAA states that there are two underground storage tanks registered at the site. These are located approximately 130 m to the east at the maintenance yard. The tanks and product lines are double walled fibreglass. Additionally, the tanks are located cross gradient from the site.
- **City of Calgary:** Verbal information received indicated that there are no records of violations of the Alberta Fire Code for the site.

## 7.0 SITE VISIT FINDINGS AND DISCUSSION

The site visit was carried out by Mr. Tim Waters, C.E.T. on May 17, 2016. All areas of the site were made available for observation at the time of the site visit.

## **7.1 Fuel/Chemical Handling and Storage**

No aboveground fuel storage tanks were observed at the site. No evidence of fill or vent pipes indicating the possible presence of underground storage tanks was observed on site.

## **7.2 Waste Materials**

No waste is presently generated at the site.

## **7.3 Spill and Stain Areas**

No spills observed or reported at the time of the site reconnaissance.

## **7.4 Wastewater Discharges**

No regulated wastewater discharges were identified during the site visit. No sewage is generated at the site.

## **7.5 Air Discharges**

No sources of air emissions were observed during the site reconnaissance.

## **7.6 Polychlorinated Biphenyls (PCBs)**

The past use of PCBs in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors was common. The federal *Environmental Contaminants Act*, 1976, prohibited the use of PCBs in heat transfer and electrical equipment installed after September 1, 1977, and in transformers and capacitors installed after July 1, 1980. In addition, storage and disposal of PCB waste materials is regulated. No evidence of any PCB equipment was observed at the time of the site reconnaissance.

## **7.7 Asbestos**

The common use of potential friable (breakable by hand) asbestos-containing materials (ACMs) (pipe/boiler insulation and fireproofing) in construction generally ceased voluntarily in the mid 1970s. No potential ACMs were observed at the time of the site reconnaissance.

## **7.8 Urea Formaldehyde Foam Insulation (UFFI)**

The sale and installation of UFFI as thermal insulation began in approximately 1970, and continued until December 1980 when it was banned under the federal *Hazardous Products Act*. UFFI was installed in both

new and existing buildings during this period. Evidence of UFFI was not observed during the site reconnaissance.

## **7.9 Lead**

In 1976, the lead content in interior paint was limited to 0.5% by weight under the federal *Hazardous Products Act*. Lead is also associated with plumbing solder and old pipes as well as other lead based products such as wall shielding (x-ray rooms). No evidence of lead based products was observed on-site during the site reconnaissance.

## **7.10 Ozone Depleting Substances (ODSs)**

In 1994, the federal government filed the *Ozone-depleting Substances Regulations* to amend controls on production and consumption of (chlorofluorocarbons (CFCs). Halons, carbon, tetrachloride and methyl chloroform. No sources of ozone depleting substances (ODSs) were observed on-site.

## **7.11 Radon**

Radon gas is a product of the decay series that begins with uranium. Radon is produced directly from radium, which can be commonly found in bedrock that contains black shale and/or granite. Radon gas can migrate through the ground and enter buildings through porous concrete or fractures. Radon tends to accumulate in poorly ventilated basements. Health Canada now recommends that all homeowners have their homes tested for radon. WAES is not aware of radon gas testing for the subject site; however, natural radon concentrations are low in Alberta and radon gas concentrations are usually well below target limits set for Canada. Methods that the builder can use to reduce entry routes in new home construction include:

- minimizing cracking of the basement floor slab by properly preparing the sub-slab area (i.e. replacing unstable soil, large stones, etc.) using higher strength concrete, and providing proper curing conditions,
- sealing the basement floor/foundation wall crack,
- sealing around all penetrations of the foundation walls and basement floors by objects such as utility lines (e.g. water, sewer, electrical, natural gas, fuel oil),
- installing a barrier of at least 0.15 mm (6 mil) polyethylene under the basement floor slab or on top of exposed soil in crawlspaces,
- installing special traps in floor drains that allow water to drain but prevent radon from entering the basement, and
- using a solid course of masonry units at the top and bottom of concrete block foundation walls.

Reducing the pressure difference between the home and soil may reduce the amount of radon drawn indoors. Options include:

- installing an insulated duct to provide outdoor air to a gas or oil furnace, boiler or water heater,
- for a forced-air service heating system, installing and insulated duct from the outdoors to the main return-air duct, equipping a wood or gas fireplace with glass doors that fit tightly and with a supply of outdoor air for combustion, and installing a balanced ventilation system such as a heat recovery ventilator (HRV).

#### **7.12 Electromagnetic Frequencies (EMFs)**

No high-tension transmission lines were observed near the site. Electro-magnetic frequencies are not anticipated to impact the site.

#### **7.13 Noise and Vibration**

There were no major sources of noise and vibration identified on or adjacent to the subject property during the site reconnaissance.

#### **7.14 Hydraulic Hoists and Elevators**

There were no hydraulic hoists or elevators observed at the subject property during the site reconnaissance.

#### **7.15 Mercury**

None observed at the time of the site reconnaissance.

#### **7.16 Mould**

None observed at the time of the site reconnaissance.

#### **7.17 Water Supply**

The site is not presently serviced for potable water. There are buried irrigation lines throughout the fairway system.

#### **7.18 Fill Areas**

Some is present where the site has been landscaped for golf course usage. Additionally, shallow fill is present where the irrigation system has been installed.

## 8.0 CONCLUSIONS AND RECOMMENDATIONS

The subject site is located in a Special Purpose Recreation (S-R) Transportation and Utility Corridor (S-TUC) and Residential Contextual One Dwelling (R-C1) zoned area of northwest Calgary, Alberta. The site was historically used for agricultural purposes until the late 1980s when the initial development of the golf course occurred in conjunction with single family residential development. The golf course was officially opened on 1994 and has operated as a private golf and country club since that time.

Surrounding land use is primarily residential and municipal reserve. No concerns were identified with current adjacent land use.

There are no buildings located on the property; therefore, no hazardous building materials were observed at the time of the site reconnaissance.

Based on the information gathered and on observations made during this investigation, the Phase I Environmental Site Assessment has revealed no evidence of environmental contamination associated with the site.

No further environmental investigation of the site is recommended at this time.

## 9.0 CLOSURE

The American Society for Testing and Materials Standard of Practice notes that no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of a standard environmental site assessment protocol is intended to reduce but not eliminate this uncertainty, given reasonable limits of cost and time.

This report has been prepared for the sole benefit of The Hamptons Golf Club and QuantumPlace Developments Ltd. and their agents. This report may not be relied upon by any third party or entity without the express written consent of WA Environmental Services Ltd., The Hamptons Golf Club and QuantumPlace Developments Ltd.

Any use a third party may make of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. WA Environmental Services Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, WA Environmental Services Ltd. in certain instances, has been required to assume that the information provided is accurate.

The conclusions presented represent the best judgement of the assessor based on current environmental standards and on the site conditions observed on May 17, 2016. Due to the nature of the investigation and the limited data available, the assessor cannot warrant against undiscovered environmental liabilities.

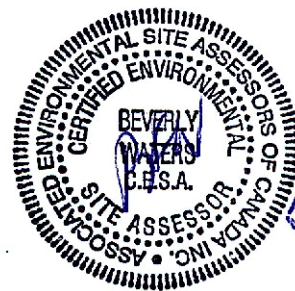
Should additional information become available WA Environmental Services Ltd. requests that this information be brought to our attention so that we may re-assess the conclusions presented herein.

Respectfully submitted,

**WA ENVIRONMENTAL SERVICES LTD.**



Tim Waters, C.E.T.  
Project Manager

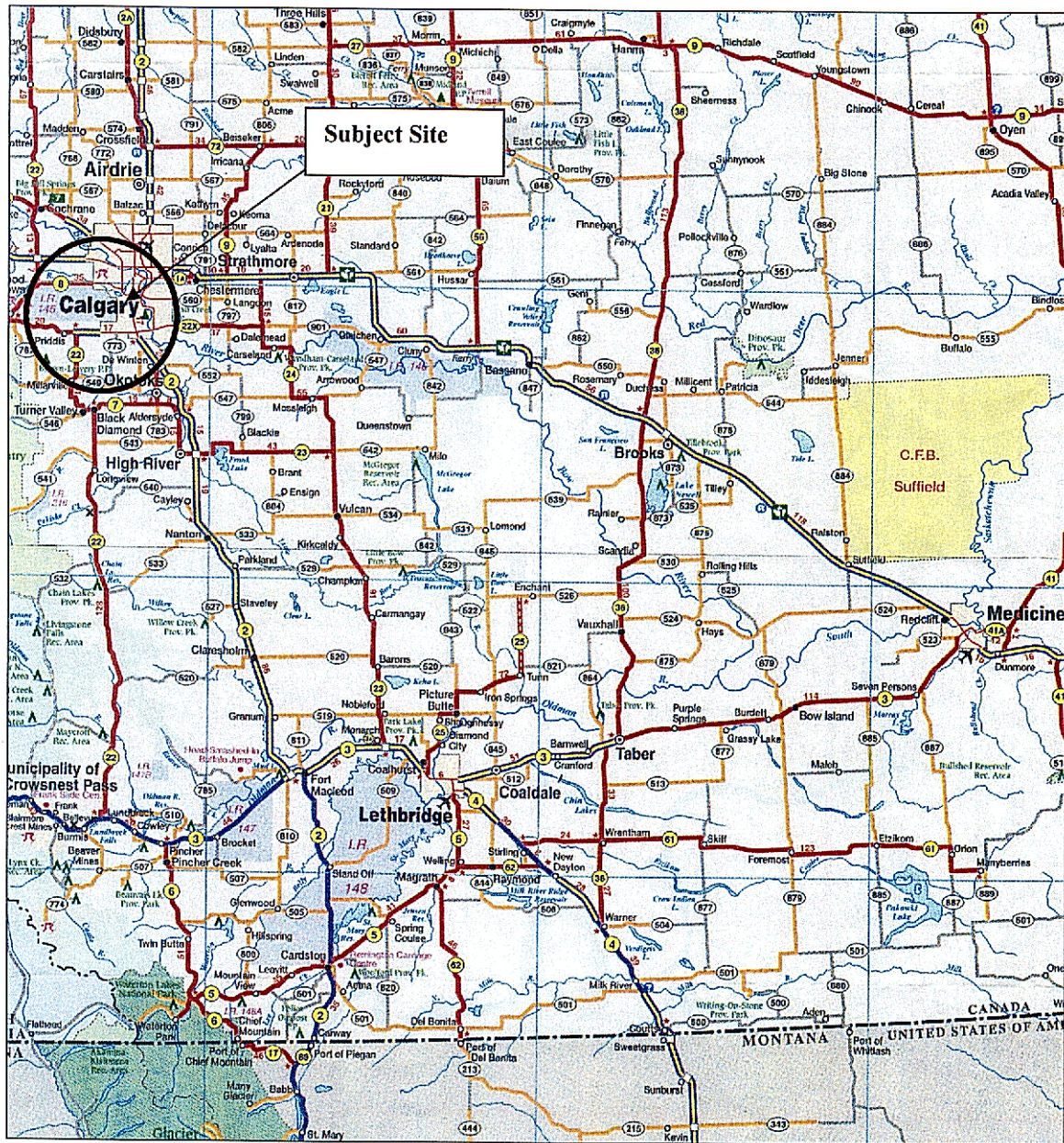



June 7/16

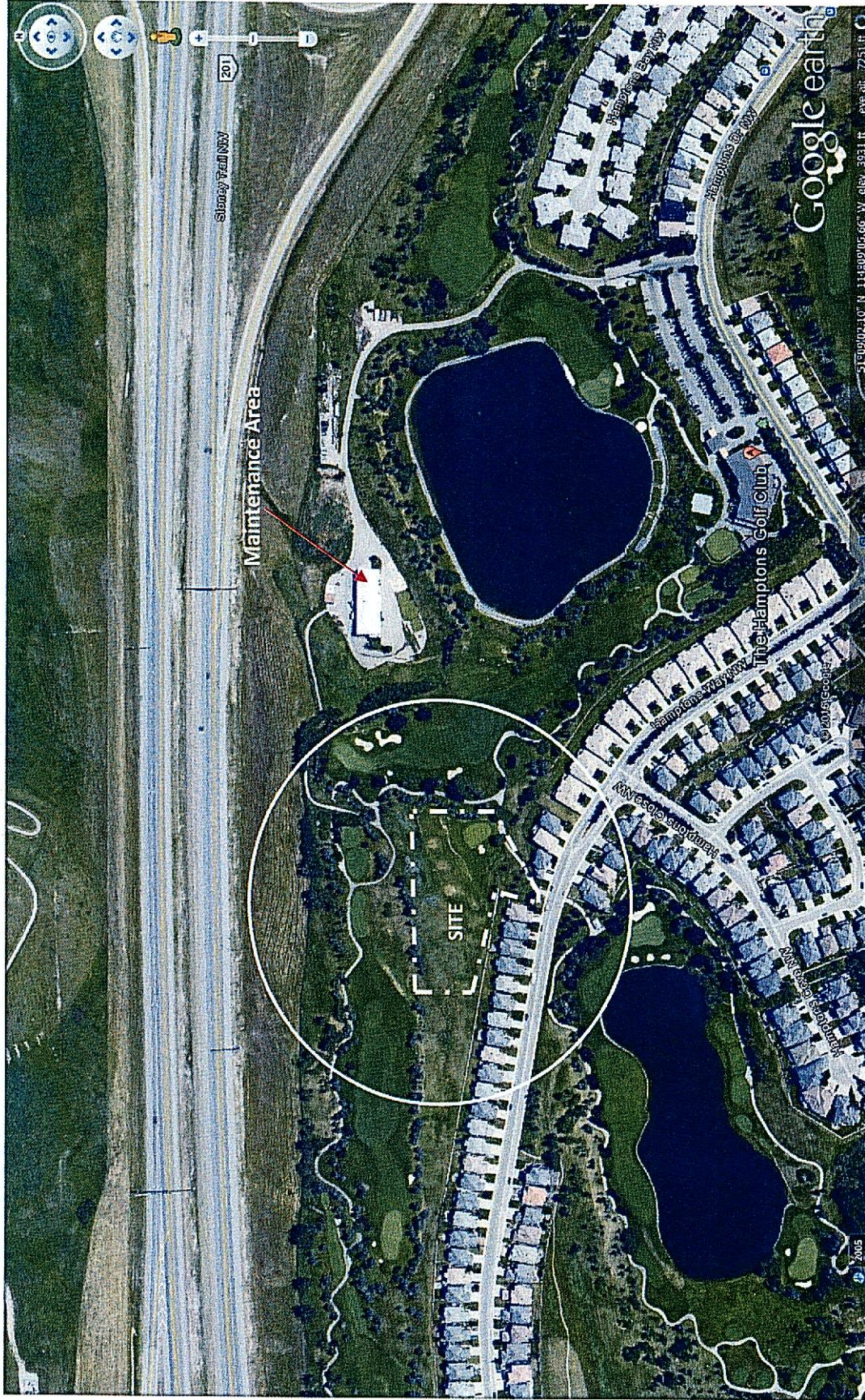
Beverly Waters, C.E.S.A.  
Senior Reviewer


## **APPENDIX A**

### **SITE PLANS**



	Date: June 10, 2016	Drawn by: TGW	Project: Phase I Environmental Site Assessment
	Title: Drawing 1 Site Location Map The Hamplons Site "B" 130 Hamplons Drive N.W. Calgary, Alberta		Project No.: WA-16-01973 Client: The Hamplons Golf & Country Club C/O QuantumPlace Developments Ltd. Calgary, Alberta



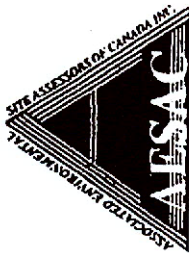
	Project: Phase I Environmental Site Assessment		Project No: WA-16-05973	Date: June 10, 2016
	Location: Hamptons Site "B" 130 Hamptons Drive NW Calgary, Alberta		Drawn By: TGW Reviewed By: BFW	Client: Hamptons Golf & Country Club C/O QuantumPlace Developments Ltd.
	Drawing 2: Site Plan Showing Adjacent Land Use			

**APPENDIX B**

**ASSESSOR QUALIFICATIONS**

**INSURANCE CERTIFICATES**

# Associated Environmental Site Assessors of Canada



*this is to acknowledge that*

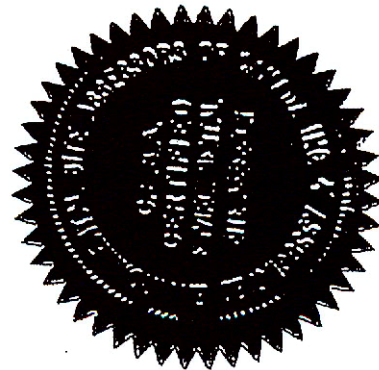
**Beverly Waters**

*has been qualified for the Certified Environmental Site Assessment Designation*

**C.E.S.A.**

*Certified Environmental Site Assessor - Phase 1  
according to AESAC's National Certification Programme*

*signed and sealed this day of October 7th, 2004*



*Brian Lupton, President*

# LLOYD'S

## ARCHITECTS/ENGINEERS PROFESSIONAL LIABILITY INSURANCE

Effectuated with certain Lloyd's Underwriters ("the Insurer") through  
Lloyd's Approved Coverholder ("the Coverholder")  
**SOUTH WESTERN INSURANCE GROUP LIMITED**  
401 The West Mall, Suite 700, Toronto, ON M9C 5J5

DH (27/05/2015) PLAE

### DECLARATIONS THIS IS A CLAIMS-MADE PROFESSIONAL LIABILITY INSURANCE POLICY

#### PLEASE READ CAREFULLY

#### RENEWAL POLICY

This declaration, together with the policy wordings and endorsements, if any,  
issued to form a part thereof, completes this policy.

#### POLICY NUMBER

LAP 980175  
REPLACING POLICY No.:

#### BROKER

SCHWARTZ RELIANCE INSURANCE  
300-10TH STREET SOUTH  
LETHBRIDGE, AB T1J 3Y5

#### 1. NAME OF INSURED

WA ENVIRONMENTAL SERVICES LTD.

#### MAILING ADDRESS

221 RIVERPARK BOULEVARD WEST  
LETHBRIDGE, AB T1K 0P6

#### 2. POLICY PERIOD

From: June 08, 2015 To: June 08, 2016

12:01 a.m. Standard Time at the Mailing  
Address of the Named Insured as stated  
herein

#### 3. LIMIT OF LIABILITY

- (a) \$2,000,000 Each Claim - Includes Claims Expenses  
(b) \$2,000,000 Annual Aggregate - Includes Claims Expenses

The total Limit of Liability of the Insurer, including Damages and Claims Expenses, for all Claims first made against the Insured and reported in writing to the Insurer during the Policy Period shall not exceed in the Aggregate, the limit stated herein.

#### 4. SELFINSURED RETENTION

\$ 7,500

The Self-Insured Retention amount shall be separately applicable to each Claim first made during the Policy Period and shall apply to Damages and Claims Expenses.

#### 5. PREMIUM

\$ 9,900

#### MINIMUM EARNED PREMIUM

30%

#### 6. RETROACTIVE DATE

June 08, 2000 - Primary \$1,000,000 Limit  
June 08, 2011 - \$1,000,000 excess of \$1,000,000 Limit

Coverage shall apply only to those Claims or those matters reported pursuant to the terms and conditions of the Policy arising out of Professional Services described in Definitions X and performed subsequent to the date stated herein.

#### 7. NOTICE OF CLAIM TO:

South Western Insurance Group Ltd.  
1.855.801.0299  
swgclaims@scm.ca

#### 8. NOTICE OF ELECTION TO:

SOUTH WESTERN INSURANCE GROUP LIMITED  
401 The West Mall, Suite 700  
Toronto, ON M9C 5J5

#### 9. FORMS AND ENDORSEMENTS ATTACHED HERETO:

AFB-A&E	Architects/Engineers Professional Liability Insurance
LBA-041B	Rain Screen Exclusion
LSW-559	Retroactive Limitation Clause
LBA-068	Mould Exclusion

LBA-070	Asbestos Exclusion
NMA-1477	Radioactive Contamination Exclusion Clause
NMA-1978	Nuclear Incident Exclusion Clause
NMA-2962	Biological or Chemical Materials Exclusion
NMA-2918	War and Terrorism Exclusion
MIN-EARN1	Minimum Earned Premium Endorsement
AMDEND	Amendatory Endorsement
623AFB0089	Short Rate Cancellation Table
623AFB0097	Warranted No Higher Limits Endorsement
LBA-074	Amended Pollution Exclusion

10. This Policy has been issued based on the information contained in the Application signed and dated May 06, 2015

#### IDENTIFICATION OF INSURER / ACTION AGAINST INSURER

This insurance has been effected in accordance with the authorization granted to the Coverholder by the Underwriting Members of the Syndicates whose definitive numbers and proportions are shown in the Table attached to Agreement No. B1921KC0000800 (Hereinafter referred to as "the Underwriters"). The Underwriters shall be liable hereunder each for his own part and not one for another in proportion to the several sums that each of them has subscribed to the said Agreement.

In any action to enforce the obligations of the Underwriters they can be designated or named as "Lloyd's Underwriters" and such designation shall be binding on the Underwriters liable hereunder as if they had each been individually named as defendant. Service of such proceedings may validly be made upon the Attorney In Fact In Canada for Lloyd's Underwriters, whose address for such service is 1155, rue Metcalfe, Suite 1540, Montreal, Quebec, H3B 2V6.

#### NOTICE

Any notice to the Underwriters may be validly given to the Coverholder.

In witness whereof this policy has been signed, as authorized by the Underwriters, by **SOUTH WESTERN INSURANCE GROUP LIMITED.**

Per



John A. Barclay, President & CEO

The Insured is requested to read this policy, and if incorrect, return it immediately for alteration.

In the event of an occurrence likely to result in a claim under this insurance, immediate notice should be given to the Coverholder whose name and address appears above. All inquiries and disputes are also to be addressed to this Coverholder.



Head Office: 1200, 321 - 6th Avenue S.W., Calgary, Alberta T2P 4W7

## Business Insurance Policy

Renewal

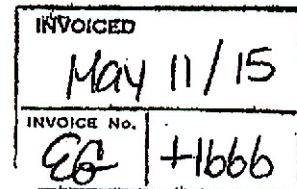
Policy Number: 5A1276036

Intact Insurance Company hereinafter called the Insurer.

The Policy Declarations together with the Supplementary Declarations, Policy Conditions, forms, riders and endorsements, if any, issued to form a part thereof, completes the Policy.

**Insured Name** WA Environmental Services Ltd

**Mailing Address** 221 Riverpark Blvd W  
Lethbridge, AB  
T1K 0P6



**Policy Period** From June 09, 2015 To June 09, 2016  
12:01 a.m. standard time at the postal address of the Named Insured stated herein.

**Insured's Business Operation** Environmental Consultants

**Broker** Schwartz Reliance Insurance  
220, 300 10 ST S Lethbridge, Alberta T1J3Y5

**Broker No.** 28083

**Phone No.** 403-320-1010

**Branch ID** C

**Total Policy Premium** \$ 1,666

**Minimum Retained Policy Premium** \$ 0

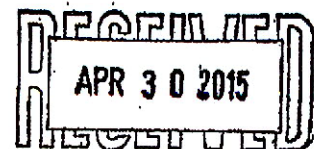
**Billing Method** Agency Bill

In witness whereof the Insurer has duly executed this policy, provided however that this policy shall not be valid or binding unless countersigned by a duly Authorized Representative of the Insurer.

*[Signature]*

Authorized Representative

Authorized Representative



This Policy Contains a Clause(s) That May Limit the Amount Payable



Head Office: 1200, 321 - 6th Avenue S.W., Calgary, Alberta T2P 4W7

## Business Insurance Policy

Policy Number: 5A1276036

Insurance provided subject to the Declarations, Terms, and Conditions of the policy and its Forms only for the coverages for which specific Forms are attached and for which a specific Limit or Amount of Insurance is shown hereunder.

**THE FOLLOWING COVERAGES APPLY TO ALL LOCATIONS UNLESS OTHERWISE SPECIFIED.**

Insurance Coverages						
2485	Declaration of Emergency Endorsement					
BF04	Contractor's Equipment (Actual Cash Value)					
	Catastrophe Limit		Broad Form			\$ 30,000
	Heavy Contractors Equipment	\$ 1,000	Broad Form	Actual Cash Value	90%	\$ 30,000
BF10R2	Miscellaneous Articles Floater					
	As per Schedule Attached	\$ 1,000	Broad Form	Actual Cash Value	100%	\$ 10,000
BF33	Motor Truck Cargo Carriers' Legal Liability					
	Any One Vehicle	\$ 1,000				\$ 25,000
	Catastrophe Limit					\$ 25,000
	Debris Removal Expense	\$ 1,000				\$ 10,000
	Freight Charges	\$ 1,000				\$ 10,000
E037R1	Percentage Basis Deductible	2 %				
E074	Data Exclusion					
E077	Terrorism Exclusion					
E078	Fungi and Fungal Derivatives Exclusion					
G001	General Deductible					
G003	Statutory Conditions (except Quebec)					
GE0001	Large Equipment - Schedule Item 1					



Head Office: 1200, 321 - 6th Avenue S.W., Calgary, Alberta T2P 4W7

## Business Insurance Policy

Policy Number: 5A1276036

Form Of Business: Corporation

### RATING INFORMATION:

Rating Description: Environmental Consultants

Rating Base: Receipts

Advance Premium: \$ 958

### RATING INFORMATION:

Rating Description: Environmental Consultants

Rating Base: Receipts

Advance Premium: \$ 205

Head Office: 1200, 321 - 6th Avenue S.W., Calgary, Alberta T2P 4W7



## Business Insurance Policy

Policy Number: 5A1276036

LR20	Commercial General Liability Max		
	Coverage A - Bodily Injury, Personal Injury and Property Damage Liability	Limit of Liability - each accident or occurrence	\$ 2,000,000
	Coverage A - Products-Completed Operations	Limit of Liability - aggregate	\$ 2,000,000
	Coverage A - Property Damage Deductible: Per Occurrence		
	Coverage B - Advertising Injury	Limit of Liability - each accident or occurrence	\$ 2,000,000
	Coverage B - Advertising Injury	Limit of Liability - aggregate	\$ 2,000,000
	Coverage C - Medical Payments	Limit of Liability - each person	\$ 10,000
	Coverage D - Tenants' Legal Liability	Limit of Liability - any one accident	\$ 500,000
L407	Coverage Territory Amendment - Canada only		
L408	Crane and Hoist Operators' Liability Endorsement		
L410	Employee benefit program liability		\$ 100,000
	Aggregate		
	Each Employee		\$ 1,000,000
L415OG	Forest and Prairie Fire Fighting Expense Endorsement - Oil and Gas		\$ 1,000,000
	Limit of Liability - Aggregate		
	Limit of Liability - Each accident or "occurrence"		\$ 1,000,000
L429	S.E.F. 94 Legal Liability for Damage to Hired Automobiles		\$ 1,000,000
	Subsection 1 - All Perils		
L431	S.E.F. No. 99 Excluding Long term Leased Vehicle Endorsement		\$ 75,000
L432	S.P.F. No. 6 - Standard Non-Owned Automobile Policy		
	Section A - Third party Liability		\$ 2,000,000
L436	Absolute Pollution Exclusion Endorsement		
L440	Concrete Rip & Tear Liability Endorsement		
	Limit of Liability - Annual aggregate		\$ 50,000
	Limit of Liability - Each claim		\$ 50,000
	Reimbursement		\$ 1,000
L442	Employers Liability Exclusion		
L450	Sub-contractor's Warranty Endorsement		
	Minimum Limit of Liability - Aggregate Limit		\$ 1,000,000
	Minimum Limit of Liability - Per Accident or Occurrence		\$ 2,000,000
L483	Amended Professional Services Exclusion Endorsement		
L508	Oil and Gas Limitation Endorsement		
	Deductible: land	\$ 5,000	
	Deductible: pipelines	\$ 50,000	
	Deductible: underground	\$ 1,000	
	Deductible: water	\$ 25,000	



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## Business Insurance Policy

Policy Number: 5A1276036



2006 Big Beaver BIGBVR HB0-0284 Drill Unit c/w 2006 Big Beaver PS-20H 10405 Power Supply Unit.

Form# GE0001

**Name:** Timothy G. Waters, C.E.T.

**Position:** Senior Project Manager

**Education:** General Certificate of Education, Advanced Level  
(Geography/Geomorphology), University of London, England.

**Relevant Experience:**

- Lead assessor on 550 Phase I Environmental Site Assessments of residential, commercial, industrial and institutional properties throughout Alberta and B.C.
- Transport Canada, Lethbridge Airport Fire Training Area. Responsible for Phase III drilling program, sample collection and gathering field data.
- Transport Canada, Medicine Hat and Empress Non Directional Beacon Sites. Responsible for Phase II drilling program and subsequent field monitoring and sampling
- Transport Canada, Pincher Creek, Alberta: Responsible for data collection at three facilities at the Pincher Creek Airport and subsequent sampling of groundwater.
- Federal Business Development Bank, Blairmore, Alberta. Responsible for the safe removal of USTs.
- Alberta Transportation and Utilities, Kipp and Burmis, Alberta. Responsible for the safe removal of USTs.

**APPENDIX C**  
**RESOURCE INFORMATION**

**REGULATORY CONTACTS, PERSONS INTERVIEWED, AND  
HISTORICAL SOURCES**

<b>SOURCE</b>	<b>INFORMATION/CONTACT/PHONE NUMBER</b>
<b>Alberta Environment and Parks</b>	Environmental Permits/Approvals Mr. Dennis Eriksen, Regulatory Approvals Centre (403) 427-6311
<b>Aerial Photographs</b>	1970, 1977, 1984, 2000, 2003, 2008, 2015
<b>Fire Insurance Maps</b>	Not available for this site
<b>Historical City Directories</b>	Not available for this site
<b>Previous Environmental Reports</b>	None available for this site
<b>Other Sources</b>	Ms. Iris Djurfors, Environmental Law Centre, (403) 424-5099  Ms. Connie Jacobsen, PTMAA, (403) 425-9265  City of Calgary Planning Dept. (403) 268-5311  City of Calgary, Fire Marshall, (403) 268-2489  Mr. Gord Courage, Head Professional, (403) 239-8088 Hamptons Golf Club  Mr. Mitch Braun; Planning Coordinator, (587) -350-5172 QuantumPlace Developments Ltd.

**APPENDIX D**  
**REGULATIONS**

## **Federal**

### **Legislation**

#### Canada Water Act

- Guidelines for Canadian Drinking Water Quality - 6th edition
- Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments

#### **Canadian Environmental Protection Act**

- Chlorobiphenyls Regulations (SOR/91-152)
- Federal Aboveground Storage Tank Technical Guidelines
- Federal Underground Storage Tank Technical Guidelines
- Registration of Storage Tank Systems for Petroleum Products and Allied Petroleum
- Federal Lands Regulations
- Storage of PCB Material Regulations (SOR/92-507)

#### Fisheries Act

#### Transportation of Dangerous Goods Act/Regulations

#### Hazardous Products Act

#### *Policies, Guidelines and Codes*

#### Canadian Council of Ministers of the Environment (CCME)

- Environmental Codes of Practice for Underground Storage Tanks Containing Petroleum Products and Allied Petroleum Products, March 1993
- Environmental Code of Practice for Aboveground Storage Tanks Containing Petroleum Products, 1993

#### Government of Canada Asbestos Abatement Guidelines, 1991-01-04

#### Code of Good Practice for Handling Solid Wastes at Federal Establishments (Environment Canada)

#### Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments (EPS-1-EC-76-1)

## **Provincial**

Alberta Fire Code

Environmental Protection and Enhancement Act (1993)

Ozone-Depleting Substances and Halocarbons Regulation (2000)

Occupational Health and Safety Act (1993)

Transportation of Dangerous Goods Control Act (1986)

## **Municipal**

City of Calgary Unsightly/Untidy Premises By-law

City of Calgary Refuse By-law

County of Calgary Sewer Service By-law

County of Calgary Noise Control By-law