



**Procurement Division**  
Public Services Building  
2051 Kaen Road  
Oregon City, OR 97045  
(503) 742-5444 (Office)

## **REQUEST FOR QUOTES (RFQ) #2017-53**

Issue Date: July 03, 2017

Project Name:	Demolition of Dorman Center Building		
Quote Due Date/Time:	August 2, 2:00 PM		
Mandatory Walkthrough:	July 25, 10:00 AM		
Buyer:	Ryan Rice	Phone:	503-742-5446
		Email:	<a href="mailto:rrice@clackamas.us">rrice@clackamas.us</a>

**SUBMIT QUOTES VIA EMAIL TO [PROCUREMENT@CLACKAMAS.US](mailto:PROCUREMENT@CLACKAMAS.US)  
OR MAIL/HAND DELIVERY TO THE ABOVE ADDRESS**

**PLEASE NOTE: EMAIL SUBMISSIONS SHOULD HAVE  
“#2017-53 DEMOLITION OF DORMAN CENTER” IN THE SUBJECT LINE**

### **1. ANNOUNCEMENT AND SPECIAL INFORMATION**

Quoters are required to read, understand, and comply with all information contained within this Request for Quotes (“RFQ”). All quotes are binding upon Quoter for sixty (60) days from the Quote Due Date/Time. Quotes received after the Quote Due Date/Time may not be considered. If authorized in the RFQ and resulting contract, travel and other expense reimbursement will only be reimbursed in accordance with the Clackamas County travel reimbursement policy in effect at the time the expense is incurred.

It will be the responsibility of potential Quoters to refer daily to the Bids and Contract Information Page ([www.clackamas.us/bids/index.html](http://www.clackamas.us/bids/index.html)) to check for any available addenda, response to clarifying questions, cancellations or other information pertaining to this RFQ.

All questions regarding this RFQ are to be directed to the Contract Analyst named above.

### **2. SCOPE**

The purpose of this RFQ is to purchase the dismantling services of the Dorman Building located at 25400 E, Salmon River Road, Welches Oregon 97067. The resulting contract will cover the dismantling, demolition, removal and proper disposal of the entire building. The existing concrete slab, septic tank and leach field, water service (meter) and propane tank shall remain in place and be protected from damage during deconstruction. All work shall be completed by October 31, 2017.

Attendance at a Mandatory Pre-Quote Walkthrough is required to be eligible to quote on this opportunity. *The Mandatory Pre-Quote Walkthrough will be conducted at the project site located at 25400 E. Salmon River Road, Welches Oregon, 97067 on July 25, 2017 at 10:00 AM.* Attendance will be documented through a sign-in sheet.

### **PROJECT OVERVIEW**

The type of structure and materials to be dismantled include a 1960’s timber framed, ‘A-frame’ style wooden structure covering approximately 5000 square feet. Salvageable materials include approximately 5,500 sf of 1x8 and 1x4 pine board paneling, 3,260 sf of rock from Chimney, 8,950 sf of 4" thick rough sawn 2x4 (35,000 bf), un-estimated 2x4 and 2x12 framing. The structure contains a concrete slab which will remain after demolition for future use.

Dismantling/demolition is required to be performed in a manner that equipment, personnel and debris are not located, placed or allowed to fall outside of the construction containment area. Disposal can be for reuse, recycling or disposal in a licensed landfill permitted to accept such materials.

### **LICENSING**

Subcontractors must be currently licensed in good standing with the Oregon Construction Contractor's Board and have or obtain a Metro or City of Oregon City license to quote on this project.

### **3. DETAILED SCOPE**

The contractor shall supply all materials and labor to complete their portion of the project in compliance with all local codes and regulations according to detailed requirements specified below.

#### **GENERAL REQUIREMENTS**

1. Quotations must be submitted as specified above, or they will not be considered.
2. The Contractor shall apply and pay for all necessary permits to perform the work associated with or described in this RFQ. If the quotation should exceed \$50,000 the Contractor must obtain and pay for performance and payment bonds which shall be a required part of the Contract.
3. It is understood that work to be performed by the Contractor is based upon the specified structure in the existing location and condition and that Clackamas County assumes no responsibility and makes no guarantee or representation as to the condition thereof prior to, or subsequent to, the execution of the contract, disposal agreement or purchase order. Clackamas County also accepts no liability for protection of improvements identified for removal and/or disposal after the agreement has been executed.
4. Work hours are 6:30am to 5:00 pm Monday through Friday.
5. Clackamas County will provide potable water access and 120v power supply for Subcontractor's operations to the extent at which time they are dismantled as part of this project. Any additional requirements or needs of the Contractor shall be included in the bid proposal.

#### **DETAILED REQUIREMENTS**

1. The Contractor shall be responsible for supplying, fabricating, delivering and installing all required materials and labor to include incidentals to complete the scope of work detailed in these specifications and as directed by the County.
2. Prior to contract closeout, the Contractor shall submit a complete site waste recycling form recording the dismantled materials recycled or salvaged over the duration of the project. The summary statement should identify and explain any discrepancies between the amounts originally estimated and the actual amounts recycled or salvaged. This document shall include copies of receipts, weight slips, bills of lading, etc. for recycled, reused or waste materials.
3. The Contractor is responsible for dismantling the structure in a manner that no equipment, personnel or debris resides, steps into or falls beyond the designated lay down and containment area. Containment area and access points are designated in Exhibit "A". The Contractor shall be responsible for dismantling, removal, clearing and disposal of all materials as follows:
  - a. A dismantling plan is required for review and approval a minimum 72-hours prior to initiation of work. The plan shall demonstrate a duration schedule, proposed methods and operations of deconstruction of the structure. Include in the schedule the coordination of shut-off, capping, and continuation of utility service as required or specified.
  - b. Prior to beginning any work on a given site, secure the entire work area with 6-foot tall temporary portable chain link fence. The fence will be placed no further than within the safe fall zone as determined by the height of the structure. Fence is to be intact at all times with the exception of an opening for access during working hours only.
  - c. The Contractor is responsible for obtaining any and all necessary permits from Clackamas County Building Services, Clackamas County Planning, and any and all other involved jurisdiction(s) and providing a copy of said permits to the Clackamas County Project Manager.
  - d. Any delays caused by the Contractor's failure to apply for and/or obtain any and all permits in a timely manner shall not constitute grounds for an extension of the schedule.
  - e. Prior to commencement of the dismantling of a structure the Contractor shall be responsible for contacting the appropriate utility companies or public agencies for the disconnection of utility

services. Copies of work orders or disconnect completion notices from appropriate utilities shall be submitted to the County.

**f.** Where applicable, the Contractor shall cap and seal any openings leading to sewer, water, or gas mains to the satisfaction of utility and/or government jurisdictions.

**g.** Record existing conditions by use of preconstruction photographs or videotapes. Perform surveys as the work progresses to detect hazards resulting from deconstruction activities. Provide and maintain shoring, bracing and structural supports as required to prevent unexpected or uncontrolled movement or collapse of construction being deconstructed.

**h.** All non-recoverable debris, vegetation, and/or other waste materials removed for disposal from the work site shall be disposed of at a DEQ permitted disposal facility with copies of disposal receipts furnished to the County.

**i.** An Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury and PCB Inspection survey was completed in August of 2012 in accordance with Oregon State DEQ requirements (Exhibit D) and asbestos containing materials **were detected** in the random sample collected and tested. Lead Based Paint however was determined **not** to be present in the random sample. Polychlorinated Biphenyl (PCB) were noted to **be present** in various light fixtures and ballast. All HCM within the structure shall be disposed of in accordance with all DEQ, EPA, and OSHA requirements and records of such disposal shall be copied and forwarded to the County.

**j.** The Contractor shall immediately suspend work and notify the County if any suspected hazardous waste materials outside the scope of the August 2012 HCM survey are encountered on the County's work site. If this results in a project delay, a contract time adjustment equal to the duration of the remediation will be granted.

**k.** All debris, waste and salvaged materials of value for reuse or recycling will be the property of the Contractor.

**l.** Remove waste materials from the project site on a regular basis.

**m.** All material, equipment, rubble, debris, and other products of the demolition shall become the property of the Contractor for disposal off-site in accordance with all applicable laws and ordinances at the Contractor's expense. The Contractor shall post no materials or salvage "For Sale" or "Available" signs of any sort on the premises. ***The sale of salvageable materials by the Contractor shall only be conducted off-site. The sale of removed items on the site is prohibited by the County.***

**n.** Protect existing trees, shrubs, landscaping materials, etc. that are designated by the County to remain from damage.

**o.** Keep all debris off of adjacent properties and road right-of-ways. If contractor's operations will create excessive dust or particulates, the Contractor shall use water to mitigate airborne off-site transmissions.

**p.** Take erosion control measures (best management practices) as necessary during the course of the dismantling work.

**q.** The Contractor is not to commence work before receiving a Notice to Proceed from Clackamas County.

**r.** Do not allow anyone onto the subject property during this project except for the Contractor, their employees or agents, the County's employees or agents, and personnel from utilities to disconnect its services.

**s.** Board up or otherwise restrict access into the existing buildings at the earliest possible opportunity and at the end of each workday until removal of said structure is completed.

## **POST DISMANTLE REQUIREMENTS**

**1.** The Contractor shall cap and cover the existing fire suppression system supply line, septic system drain line and any water lines currently entering the building for access of future use.

**2.** The contractor shall upon completion of the demolition and before removal of the construction fence, sweep the entire area with rolling magnetic sweepers to ensure the site is free from all metal debris and nails.

**3.** Convene an on-site post dismantle meeting within three (3) days after above requirements have been met to review project area for compliance with specifications.

**The following items are included and incorporated within this RFQ:**

- Hoodland Community Center Site Analysis; dated April 11, 2012; updated August 7, 2017
- A Phase I Environmental Site Assessment; dated August 30, 2012
- Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection; Dated August 27, 2012

**PREVAILING WAGE RATES**

Prevailing Wage Rates requirements apply to this project because the maximum compensation for all owner-contracted work is more than \$50,000. The selected contractor and all subcontractors shall comply with the provision of ORS 279C.800 through 279C.870, relative to the Prevailing Wage Rates and the required public works bond.

PREVAILING WAGE RATES for Public Works Contracts in Oregon, July 1, 2017, which can be downloaded at the following web

address: [http://www.oregon.gov/boli/WHD/PWR/JULY2017/July\\_1\\_2017\\_PWR.pdf](http://www.oregon.gov/boli/WHD/PWR/JULY2017/July_1_2017_PWR.pdf)

The Work will take place in Clackamas County, Oregon.

**Delivery – Choose one of the following:**

- ☐ Delivery required within \_\_\_\_\_ days of supplier's receipt of order.
- ☒ Delivery required on or before October 31, 2017.
- ☐ Delivery time is of the essence and may be a factor in making an award.

**4. Quote**

Quotes should be short and concise with the following information:

- A. Company experience in these types of projects;
- B. Not-to-exceed price to complete the project;
- C. **If Quote is over \$100,000.00, attached Bid Bond must be included with Quote;**
- D. Estimated time to complete the project;
- E. Clackamas County Certifications Form; and
- F. Any additional information that Clackamas County should take into consideration for the project or qualifications.

**5. Evaluation**

The quote received from the lowest responsive responsible Quoter will be awarded a contract. The "lowest responsive responsible Quoter" is the lowest Quoter who has substantially complied with all requirements of the Request for Quote and who can be expected to deliver promptly and perform reliably in the determination of Clackamas County.



**CLACKAMAS COUNTY CERTIFICATIONS**  
**RFQ #2017-53**

Each Quoter must read, complete and submit a copy of this Clackamas County Certification with their Quote. Failure to do so may result in rejection of Quote. By signature on this Certification the undersigned certifies that they are authorized to act on behalf of the Quoter and that under penalty of perjury the undersigned will comply with the following:

**SECTION I. OREGON TAX LAWS**

As required in ORS 279B.110(2)(3), the undersigned hereby certifies that, to the best of the undersigned's knowledge, the Quoter is not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means a state tax imposed by ORS 320.005 to 320.150 and 403.200 to 403.250 and ORS chapters 118, 314, 316, 317, 318, 321, 323, and elderly rental assistance program under ORS 310.630 to 310.706, and local taxes administered by the Department of Revenue under ORS 305.620, all as applicable. If a contract is executed, this information will be reported to the Internal Revenue Service. Information not matching IRS records could subject Quoter to 28% backup withholding.

**SECTION II. NON-DISCRIMINATION**

The undersigned hereby certifies that the Quoter has not and will not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation, national origin, or any other protected class. Nor has Quoter or will Quoter discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emergency small business that is certified under ORS 200.055.

**SECTION III. CONFLICT OF INTEREST**

The undersigned hereby certifies that no elected official, officer, agency or employee of Clackamas County is personally interested, directly or indirectly, in any resulting contract from this RFQ, or the compensation to be paid under such contract, and that no representation, statements (oral or in writing), of the County, its Commissioners, officers, agents, or employees had induced Quoter to submit this Quote. In addition, the undersigned hereby certifies that this proposal is made without connection with any person, firm, or corporation submitting a quote for the same material, and is in all respects fair and without collusion or fraud.

**SECTION IV. COMPLIANCE WITH SOLICITATION**

The undersigned further agrees and certifies that they:

1. Have read, understand and agree to be bound by and comply with all requirements, instructions, specifications, terms and conditions of the RFQ (including any attachments); and
2. Are an authorized representative of the Quoter, that the information provided is true and accurate, and that providing incorrect or incomplete information may be cause for rejection of the Quote or contract termination; and
3. Will furnish the designated item(s) and/or service(s) in accordance with the RFQ and Quote; and
4. Will use recyclable products to the maximum extent economically feasible in the performance of the contract work set forth in this RFQ.

Firm Name: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Name: \_\_\_\_\_ Telephone: \_\_\_\_\_

Email: \_\_\_\_\_ OR CCB # (if applicable): \_\_\_\_\_

Business Designation (check one):

☐ Corporation ☐ Partnership ☐ Sole Proprietorship ☐ Non-Profit ☐ Limited Liability Company

☐ Resident Quoter, as defined in ORS 279A.120

☐ Non-Resident Quote. Resident State: \_\_\_\_\_

Oregon Business Registry Number: \_\_\_\_\_

## CLACKAMAS COUNTY INSTRUCTIONS TO QUOTERS

Quotes are subject to the applicable provisions and requirements of the Clackamas County Local Contract Review Board Rule C-047-0270 (Intermediate Procurements) and Oregon Revised Statutes.

### QUOTE PREPARATION

1. **QUOTE FORMAT:** Quotes must be submitted as indicated in the RFQ. Quotes may be submitted in writing to Clackamas County via e-mail, mail or in person.
2. **CONFORMANCE TO RFQ REQUIREMENTS:** Quotes must conform to the requirements of the RFQ. Unless otherwise specified, all items quoted are to be new, unused and not remanufactured in any way. Any requested attachments must be submitted with the quote and in the required format. Quote prices must be for the unit indicated on the quote. Failure to comply with all requirements may result in quote rejection.
3. **ADDENDA:** Only documents issued as addenda by Clackamas County serve to change the RFQ in any way. No other directions received by the Quoter, written or verbal, serve to change the RFQ document. NOTE: IF YOU HAVE RECEIVED A COPY OF THE RFQ, YOU SHOULD CONSULT THE CLACKAMAS COUNTY BIDS AND CONTRACT INFORMATION WEBSITE ([www.clackamas.us/bids/index.html](http://www.clackamas.us/bids/index.html)) TO ENSURE THAT YOU HAVE NOT MISSED ANY ADDENDA OR ANNOUNCEMENTS. QUOTERS ARE NOT REQUIRED TO RETURN ADDENDUMS WITH THEIR QUOTE. HOWEVER, QUOTERS ARE RESPONSIBLE TO MAKE THEMSELVES AWARE OF, OBTAIN AND INCORPORATE ANY CHANGES MADE IN ANY ADDENDA ISSUED, AND TO INCORPORATE ANY CHANGES MADE BY ADDENDUM INTO THEIR FINAL QUOTE. FAILURE TO DO SO MAY, IN EFFECT, MAKE THE QUOTER'S QUOTE NON-RESPONSIVE, WHICH MAY CAUSE THE QUOTE TO BE REJECTED.
4. **USE of BRAND or TRADE NAMES:** Any brand or trade names used by Clackamas County in the specifications are for the purpose of describing and establishing the standard of quality, performance and characteristics desired and are not intended to limit or restrict competition. Quoters may submit quotes for substantially equivalent products to those designated unless the RFQ provides that a specific brand is necessary because of compatibility requirements, etc. All such brand substitutions shall be subject to approval by Clackamas County.
5. **PRODUCT IDENTIFICATION:** Quoters must clearly identify all products quoted. Brand name and model or number must be shown. Clackamas County reserves the right to reject any quote when the product information submitted with the quote is incomplete.
6. **FOB DESTINATION:** Unless specifically allowed in the RFQ, ***QUOTE PRICE MUST BE F.O.B. DESTINATION with all transportation and handling charges included in the Quote.***
7. **DELIVERY:** Delivery time must be shown in number of calendar days after receipt of purchase order.
8. **EXCEPTIONS:** Any deviation from quote specifications, or the form of the Clackamas County Public Improvement Contract, may result in quote rejection at County's sole discretion.
9. **SIGNATURE ON QUOTE:** Quotes must be signed by an authorized representative of the Quoter. Signature on a quote certifies that the quote is made without connection with any person, firm or corporation making a quote for the same goods and/or services and is in all respects fair and without collusion or fraud. Signature on a quote also certifies that the Quoter has read and fully understands all quote specifications, and the Clackamas County Public Improvement Contract (including insurance requirements). No consideration will be given to any claim resulting from quoting without comprehending all requirements of the RFQ.
10. **QUOTE MODIFICATION:** Quotes, once submitted, may be modified in writing before the time and date set for quote closing. Any modifications should be signed by an authorized representative, and state that the new document supersedes or modifies the prior quote. Quoters may not modify quotes after quote closing time.
11. **QUOTE WITHDRAWALS:** Quotes may be withdrawn by request in writing signed by an authorized representative and received by Clackamas County prior to the Quote Due Date/Time. Quotes may also be withdrawn in person before the Quote Due Date/Time upon presentation of appropriate identification.

- 12. QUOTE SUBMISSION:** Quotes may be submitted by returning to Clackamas County Procurement Division in the location designated in the introduction of the RFQ via email, mail or in person; however, no oral or telephone quotes will be accepted. Envelopes, or e-mails containing Quotes should contain the RFQ Number and RFQ Title.

#### **QUOTE EVALUATION AND AWARD**

- 1. PRIOR ACCEPTANCE OF DEFECTIVE PROPOSALS:** Due to limited resources, Clackamas County generally will not completely review or analyze quotes which fail to comply with the requirements of the RFQ or which clearly are not the best quotes, nor will Clackamas County generally investigate the references or qualifications of those who submit such quotes. Therefore, neither the return of a quote, nor acknowledgment that the selection is complete shall operate as a representation by Clackamas County that an unsuccessful quote was complete, sufficient, or lawful in any respect.
- 2. DELIVERY:** Significant delays in delivery may be considered in determining award if early delivery is required.
- 3. CASH DISCOUNTS:** Cash discounts will not be considered for award purposes unless stated in the RFQ.
- 4. PAYMENT:** Quotes which require payment in less than 30 days after receipt of invoice or delivery of goods, whichever is later, may be rejected.
- 5. INVESTIGATION OF REFERENCES:** Clackamas County reserves the right to investigate references and or the past performance of any Quoter with respect to its successful performance of similar services, compliance with specifications and contractual obligations, and its lawful payment of suppliers, sub-contractors, and workers. Clackamas County may postpone the award or execution of the contract after the announcement of the apparent successful Quoter in order to complete its investigation. Clackamas County reserves the right to reject any quote or to reject all quotes at any time prior to Clackamas County's execution of a contract if it is determined to be in the best interest of Clackamas County to do so.
- 6. METHOD OF AWARD:** Clackamas County reserves the right to make the award by item, groups of items or entire quote, whichever is in the best interest of Clackamas County.
- 7. QUOTE REJECTION:** Clackamas County reserves the right to reject any and all quotes.
- 8. QUOTE RESULTS:** Quoters who submit a quote will be notified of the RFQ results. Awarded quote files are public records and available for review by submitting a public records request or by appointment.



CLACKAMAS COUNTY  
PUBLIC IMPROVEMENT CONTRACT

**BID BOND**

Project Name: #2017-53  
DEMOLITION OF DORMAN CENTER BUILDING

We, \_\_\_\_\_, as "Principal,"  
(Name of Principal)

and \_\_\_\_\_, an \_\_\_\_\_ Corporation,  
(Name of Surety)

authorized to transact Surety business in Oregon, as "Surety," hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns to pay unto Clackamas County ("Obligee") the sum of (\$\_\_\_\_\_)

\_\_\_\_\_ dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its proposal or bid to an agency of the Obligee in response to Obligee's procurement document (No. \_\_\_\_\_) for the project identified above which proposal or bid is made a part of this bond by reference, and Principal is required to furnish bid security in an amount equal to ten (10%) percent of the total amount of the bid pursuant to the procurement document.

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Principal:\_\_\_\_\_

Surety:\_\_\_\_\_

By:\_\_\_\_\_

Signature

By: Attorney-In-Fact

\_\_\_\_\_  
Name

\_\_\_\_\_  
Official Capacity

\_\_\_\_\_  
Address

Attest:\_\_\_\_\_

Corporation Secretary

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Fax



**SAMPLE CLACKAMAS COUNTY  
PUBLIC IMPROVEMENT CONTRACT**

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This Public Improvement Contract (the "Contract"), is made by and between the Clackamas County, a political subdivision of the State of Oregon, hereinafter called "Owner," and Contractor Name (No DBA/ABN), hereinafter called the "Contractor" (collectively the "Parties"), shall become effective on the date this Contract has been signed by all the Parties and all County approvals have been obtained, whichever is later.

Project Name: #2017-53 Demolition of Dorman Center Building ("Project")

1. **Contract Documents.** This Contract shall consist of the following documents ("Contract Documents"), hereby incorporated by reference, and are listed in descending order of precedence.
  - A. This Public Improvement Contract
  - B. Clackamas County General Conditions for Public Improvement Contracts (dated 1/1/2017) ("General Conditions")
  - C. Exhibit A - Scope of Work
  - D. Exhibit B – Fee Schedule (only if time and material basis)
2. **Contract Price.** The Owner will compensate the Contractor for Work on a ☐ time and material basis at the rates outlined in Exhibit B and subject to a maximum not-to-exceed price of \$ \_\_\_\_\_; or ☐ in the firm, fixed-price amount of \$ \_\_\_\_\_; in accordance with the requirements of the General Conditions for the performance of all Work described and reasonably inferred from the Contract Documents. If the Project is done on a time and materials basis, the Contractor's listing of wage rates, material unit costs and overhead charges for the Work is attached to this Contract.
3. **Scope of Work.** This Project consists of the Scope of Work ("Work") as described in Exhibit A.
4. **Representatives.** Contractor has named \_\_\_\_\_ it's Authorized Representative to act on its behalf. Owner designates, or shall designate, its Authorized Representative as indicated below (check one):  
  
☒ Unless otherwise specified in the Work, the Owner designates Steven Bloemer as its Authorized Representative in the administration of this Contract. The above-named individual shall be the initial point of contact for matters related to Contract performance, payment, authorization, and to carry out the responsibilities of the Owner.  
  
☐ Name of Owner's Authorized Representative shall be submitted by owner in a separate writing.
5. **Contractor Key Persons.** The Contractor's personnel identified below shall be considered Key Persons and shall not be replaced during the project without the written permission of Owner, which shall not be unreasonably withheld. If the Contractor intends to substitute personnel, a request must be given to Owner at least 30 days prior to the intended time of substitution. When replacements have been approved by Owner, the Contractor shall provide a transition period of at least 10 working days during which the original and replacement personnel shall be working on the project concurrently. Once a replacement for any of these staff members is authorized, further replacement shall not occur without the written permission of Owner. The Contractor's project staff shall consist of the following personnel:

**Project Executive:** shall be the Contractor's project executive, and will provide oversight and guidance throughout the project term.

**Project Manager:** shall be the Contractor's project manager and will participate in all meetings throughout the project term.

**Job Superintendent:** shall be the Contractor's on-site job superintendent throughout the project term.

**Project Engineer:** shall be the Contractor's project engineer, providing assistance to the project manager, and subcontractor and supplier coordination throughout the project term.

**6. Contract Dates.** The following critical dates are hereby set for this Project. Time is of the essence.

- A. COMMENCEMENT DATE: Upon Issuance of Notice to Proceed
- B. SUBSTANTIAL COMPLETION DATE: October 31, 2017
- C. FINAL COMPLETION DATE: November 30, 2017

**7. Minimum Wage Rates. (Check one of the following):**

☐ Prevailing Wage Rates requirements do not apply to this Project because the maximum compensation for all Owner-contracted Work does not exceed \$50,000.

☒ Prevailing Wage Rates requirements apply to this Project because the maximum compensation for all Owner-contracted Work is more than \$50,000. Contractor and all subcontractors shall comply with the provisions of ORS 279C.800 through 279C.870, relative to Prevailing Wage Rates and the required public works bond, as outlined in Sections C.1, C.2, and G.2.3 of the General Conditions. The Bureau of Labor and Industries (BOLI) wage rates and requirements set forth in the following BOLI booklet (and any listed amendments to that booklet), which are incorporated herein by reference, apply to the Work authorized under this Contract:

PREVAILING WAGE RATES for Public Works Contracts in Oregon, July 1, 2017, which can be downloaded at the following web address:

[http://www.oregon.gov/boli/WHDPWR/JULY2017/July\\_1\\_2017\\_PWR.pdf](http://www.oregon.gov/boli/WHDPWR/JULY2017/July_1_2017_PWR.pdf)

The Work will take place in Clackamas County, Oregon

**8. Tax Compliance.** Contractor must, throughout the duration of this Contract and any extensions, comply with all tax laws of this state and all applicable tax laws of any political subdivision of this state. Any violation of this section shall constitute a material breach of this Contract. Further, any violation of Contractor's warranty in this Contract that Contractor has complied with the tax laws of this state and the applicable tax laws of any political subdivision of this state also shall constitute a material breach of this Contract. Any violation shall entitle County to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract, at law, or in equity, including but not limited to: (A) Termination of this Contract, in whole or in part; (B) Exercise of the right of setoff, and withholding of amounts otherwise due and owing to Contractor, in an amount equal to County's setoff right, without penalty; and (C) Initiation of an action or proceeding for damages, specific performance, declaratory or injunctive relief. County shall be entitled to recover any and all damages suffered as the result of Contractor's breach of this Contract, including but not limited to direct, indirect, incidental and

consequential damages, costs of cure, and costs incurred in securing replacement performance. These remedies are cumulative to the extent the remedies are not inconsistent, and County may pursue any remedy or remedies singly, collectively, successively, or in any order whatsoever.

The Contractor represents and warrants that, for a period of no fewer than six calendar years preceding the effective date of this Contract, has faithfully complied with: (A) All tax laws of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318; (B) Any tax provisions imposed by a political subdivision of this state that applied to Contractor, to Contractor's property, operations, receipts, or income, or to Contractor's performance of or compensation for any work performed by Contractor; (C) Any tax provisions imposed by a political subdivision of this state that applied to Contractor, or to goods, services, or property, whether tangible or intangible, provided by Contractor; and (D) Any rules, regulations, charter provisions, or ordinances that implemented or enforced any of the foregoing tax laws or provisions.

**9. Insurance Certificates and Required Performance and Payment Bonds.**

- 9.1 In accordance with Section G.3.5 of the General Conditions, Contractor shall furnish proof of the required insurance naming Clackamas County and the Owner as additional insureds. Insurance certificates may be returned with the signed Contract or may emailed to [Procurement@clackamas.us](mailto:Procurement@clackamas.us).
- 9.2 In accordance with Section G. of the General Conditions, Contractor shall furnish performance and payment bonds, on the bond forms furnished by the Owner, and in a sum equal to the Contract Price.

**10. Execution and Counterparts.** This Contract may be executed in several counterparts, each of which shall be an original, all of which shall constitute one and the same instrument.

**11. Integration.** The Contract Documents constitute the entire agreement between the Parties. There are no other understandings, agreements or representations, oral or written, not specified herein regarding this Contract. Contractor, by the signature below of its authorized representative, hereby acknowledges that it has read this Contract, understands it, and agrees to be bound by its terms and conditions.

**12. Liquidated Damages [OPTIONAL].** The Contractor acknowledges that the Owner will sustain damages as a result of the Contractor's failure to substantially complete the Project in accordance with the Contract Documents. These damages may include, but are not limited to delays in completion, use of the Project, and costs associated with Contract administration and use of temporary facilities.

- 12.1 Liquidated Damages shall be as follows if the actual Substantial Completion exceeds the required date of Substantial Completion:
  - 12.1.1. \$            per Calendar day from Day 1 through Day 28 past the Substantial Completion date.
  - 12.1.2. \$            per Calendar Day from Day 29 through Day 118 past the Substantial Completion date (7 days before Fall Quarter).
  - 12.1.3. \$            per Calendar Day from Day 119 and beyond.



**13. Contractor Data.**  
**(Insert Contractor Name & Address)**

Contractor CCB #                      Expiration Date:  
Oregon Business Registry #                      Entity Type:                      State of Formation:

*Payment information will be reported to the IRS under the name and taxpayer ID# provided by the Contractor. Information must be provided prior to contract approval. Information not matching IRS records could subject Contractor to 28 percent backup withholding.*

By their signatures below, the parties to this Contract agree to the terms, conditions, and content expressed herein.

Contractor Name (No DBA/ABN)

Clackamas County

\_\_\_\_\_  
Date

\_\_\_\_\_  
Marc Gonzales, Director                      Date

\_\_\_\_\_  
Name / Title Printed

APPROVED AS TO FORM

\_\_\_\_\_  
County Counsel                      Date

## **EXHIBIT A – SCOPE OF WORK**

**EXHIBIT B – FEE SCHEDULE**

# **Hoodland Community Center Site Analysis**

## **Clackamas County, Oregon**



**Prepared for:**

**Clackamas County Parks**

**April 11, 2012**

**Updated August 7, 2012**

**Prepared by:**



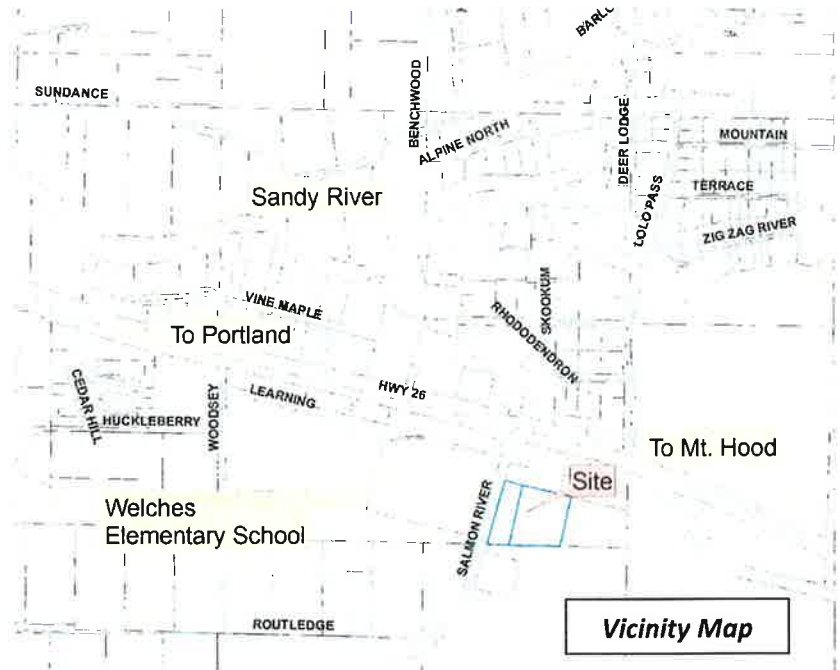
**Harper  
Houf Peterson  
Righellis Inc.**

ENGINEERS ♦ PLANNERS  
LANDSCAPE ARCHITECTS ♦ SURVEYORS

205 SE Spokane Street, Suite 200, Portland, OR 97202  
PHONE: 503.221.1131 www.hhpr.com FAX: 503.221.1171

## Site Location:

The Hoodland Community Center (Dorman Center) is located on Clackamas County Parks property located within unincorporated Clackamas County. The Community Center is directly east of Welches Elementary School, in an area just south of Highway 26 along Salmon River Road. The existing parcel is approximately 4 acres in size. The existing community center building is approximately 5,000 s.f. in size and has approximately 40 existing parking spaces.



## Background and Summary of Report

Harper Houf Peterson Righellis Inc. (HHPR) was hired by Clackamas County Parks to complete a site analysis for the Hoodland Community Center Site. Our scope of work included a site visit researching the following elements:

- Inventory existing overhead and underground utilities. Provide a written report for feasibility of connection to the utilities.
- Summary of Drainage and Soil Conditions
- Develop an “Opportunities and Constraints Site Analysis Map”
- Summary of Anticipated Public Improvements
- Cost Estimates for anticipated public frontage improvements and potential site cost improvements.

## Site Visit and Photo Log

HHPR visited the site on Friday, February 17<sup>th</sup> to review existing conditions and prepare a photo log of the site. Dan Houf, P.E. attended the site visit with HHPR Structural Engineer Steve Entenman, P.E. and Kelly Edwards of Scott Edwards Architecture who were completing a separate analysis for the existing Community Center building. Site photos are included in *Appendix “A”* of the report



## Overhead and Underground Utilities:

HHPR obtained a current copy of a preliminary title report for the site to review if there are any existing utility easements on the site. The preliminary title report did not indicate the presence of any existing utility easements on site. The preliminary title report is included in Appendix "B" of the report.

Existing plans for the existing building were destroyed and not available for the review as we analyzed the existing conditions.

### Sanitary Sewer:

The site connects to a public sanitary sewer system in Salmon River Road. Water Environment Services of Clackamas County (WES) provided HHPR copies of the sanitary sewer main and a sewer permit connection drawings from the private sewer lateral installation completed in 1988 to the existing on-site building. The sewer main in Salmon River Road is an 8" PVC main installed in 1987. The main is approximately 12-14' in depth and appears adequate to serve the entire Hoodland Community site. We did not note any manholes along the Salmon River Road frontage during our site visit, therefore the manhole cover may have been paved over. The lateral serving the site appears to be located within the existing driveway area. The sanitary sewer is deep enough, and should have adequate capacity to serve an expanded Community Center constructed on site.

### Domestic Water:

The site is served by an estimated 2" domestic water service line. The current building is served by an existing meter to the east of the building near the play ground area.

The site is within Salmon Valley Water District. Maps were not available showing the exact location of the existing service line; however, we were told by a staff member at the Water District that the domestic line is likely east and south of the existing building.



Service for a larger community center would likely be served by the 6" main in E. Salmon River Road, and the District signed a preliminary statement of feasibility when the Conditional Use Permit was approved in 2007. Based upon this information, domestic service to the new community center should be feasible.



## Fire Protection:

There is an existing fire hydrant in Salmon River Road on the west side of the roadway.

The existing building has a “dry” fire protection system. In reviewing the on-site data contained at the fire service riser, it appears that the static water pressure is 86 psi with a residual pressure of approximately 69 psi. The fire riser in the building has a FDC connection, with what appears to be a smaller service connection (2”). We did not see a backflow vault on-site; therefore, the fire service may be supplied from the domestic water line. However, absent site drawings, we could not confirm this.

The water pressure of the existing system is adequate for the development of a new community center; however, the available fire flow rates for the proposed fire protection for the building must be confirmed and analyzed with the final design.



## Power

PGE power is located on overhead utility poles along the roadway frontage of the site. The power service for the existing building appears to come from a transformer along Salmon River Road to the northerly portion of the site. The service line to the building is underground, but was not located for this report. The meter base is located in the building. Power is available to the site for a larger Community Center; however, the load requirements should be verified through final design of electrical and mechanical system.

## Phone

Phone is located on overhead utility poles. Service to site is already provided and should not be an issue for an expanded Community Center. There may be other options for phone service such as Internet based service.

## TV/Intranet

Cable TV and Internet can be provided by either hard line wire to the Wave Broadband cable system or other options such as satellite service.



## Drainage and Soil Conditions

**Existing Stormwater Conditions:** The site lies on the northwest slope of Hunchback Mountain. The drainage basin above the site consists of approximately 12 acres of forested property with slopes in the range of 30% with some slopes upwards of 65%. The actual site appears to be in the 2-6% range of slope (this is from visual observation and previous conditional use reports). A topographic survey was not completed for the site, however, based upon our field visit and review of the USGS basin map, it does not appear that there are any defined drainage ways flowing through the site. The majority of runoff from the contributing basin above the site sheet flows westerly to Salmon River Road where is collected in a roadside ditch and flows to the north along Salmon River Road via ditches and culverts at roadway crossings. Ultimately, the storm water flows to the Highway 26 system, of which we do not have any data.

The drainage from the parking lot current sheet flows towards the public ROW and into the public road. There are no catch basins or other on-site drainage facilities that we are aware of. The roof drains from the buildings currently flow into rock splash basins at each building corner. We do not have information as to how these are constructed, and if there is additional piping or infiltration capacities associated with the splash pits.

### **Anticipated Soil Conditions:**

The Soil Conservation Survey (SCS) of Clackamas County provides information on the type of soils that may be expected on site. The information with this section is obtained directly from the SCS, and the information summarized from the resource as follow:

*"Soil Classification 26B-Crutch cobbly loamy coarse sand, 0 to 5 percent slopes. This deep, moderately well drained soil is on stream terraces. It formed in glacial outwash derived dominantly from andesite and basalt. The vegetation in areas not cultivated is mainly Douglas-fir, western hemlock, western red cedar, red alder, salal, and oxalis. Elevation is 500 to 2,000 feet. The average annual precipitation is about 80 to 95 inches, the average annual air temperature is 46 to 50 degrees F, and the average frost-free period is 80 to 130 days.*

*Typically, the surface layer is dark gray cobbly loamy coarse sand about 2 inches thick. The subsoil is dark brown and brown cobbly loamy coarse sand and very cobbly loamy coarse sand about 26 inches thick. The substratum to a depth of 60 inches or more is weakly consolidated extremely cobbly loamy coarse sand. Depth to the weakly consolidated substratum ranges from 24 to 36 inches.*

*Permeability of this Crutch soil is moderately rapid to a depth of 28 inches and slow below this depth. Available water capacity is about 1 to 2 inches. Effective rooting depth is restricted by the weakly consolidated substratum. Runoff is slow, and the hazard of water erosion is slight. The water table is at a depth of 18 to 30 inches in winter and early in spring. This soil is droughty in summer.*

*Drainage should be provided if buildings with basements and crawl spaces are constructed. The weakly consolidated substratum is rippable and therefore is not a serious limitation for most engineering uses. Because of this restrictive layer, onsite sewage disposal systems often fail or do not function properly during periods of high rainfall.*

*Plans for homesite development should provide for the preservation of as many trees as possible. It is difficult to establish plants in areas that have had the upper part-of the soil removed, exposing the substratum. Mulch and fertilizer help to establish plants in cut areas. Removal of gravel and cobbles in disturbed areas is required for best results when landscaping, particularly in areas used for lawns. Plants that tolerate wetness and droughtiness should be selected if drainage and irrigation are not provided.”*

The infiltration rates noted in the SCS book indicate an infiltration rate of 2.0-6.0 inches per hour.

Based upon the limited research completed, there does not appear to be any geotechnical issues related to the site that would prevent development of a larger community center. However, as a part of the final planning and design of a new community center and parking improvements, a Geotechnical Report should be prepared for the site development by a registered Geotechnical Professional Engineer in Oregon. The geotechnical report should address typical elements for site development such as pavement section recommendation, building construction recommendations, and infiltration testing data to be used for stormwater design.

**Water Quality:** Water Quality will be required for the redevelopment of the site. Based upon the conditions of approval and our current understanding of the code, treatment will be required to treat 2/3<sup>rd</sup> of the 2 year storm event.

**Detention:** Detention will be required for the redevelopment of the site. Based upon the conditions of approval and our current understanding of the code, detention will be required to reduce peak flows from the existing 2 year event to the ½ year existing condition. Based upon recent experience and interpretation of the WES code, the existing flow condition must be calculated based upon the undeveloped condition of the site prior to development. This may result in larger detention facilities necessary for the site.

**Downstream Capacity:** Based upon very preliminary calculations, downstream capacity is likely not an issue. However, the WES code “Downstream analysis shall demonstrate adequate conveyance capacity to the distance where the project site contributes less than 15% of the upstream drainage area OR 1500 feet downstream of the project, whichever is greater.” Highway 26 is approximately 500 feet north, therefore, the capacity within the Highway 26 system must be checked with final design. If downstream capacity is an issue, the site must meet additional detention requirements.

## **Infiltration:**

Redevelopment of the site will trigger regulations that require infiltration. Based upon the SCS Soil survey, it does appear that infiltration is feasible; therefore, we do not envision that an infiltration waiver would be granted. Based upon the current WES code, 0.5 inches of rainfall must be infiltrated on-site over a 96 hour period.

There are multiple options for development of the Stormwater Facilities on site. A few options are outlined as follows:

### **Option 1: Detention Pond**

- Detention Pond
- Water Treatment in Swale before Pond
- Infiltration constructed in swale and Pond bottom with over-excavated aggregate pad

### **Option 2: Treatment Planters and Sustainable Stormwater Practices**

A good option for the stormwater management for the site may be the installation of treatment planters located outside the building, and in the redeveloped parking areas. Other sustainable options could include pervious pavers, and pervious asphalt installation.

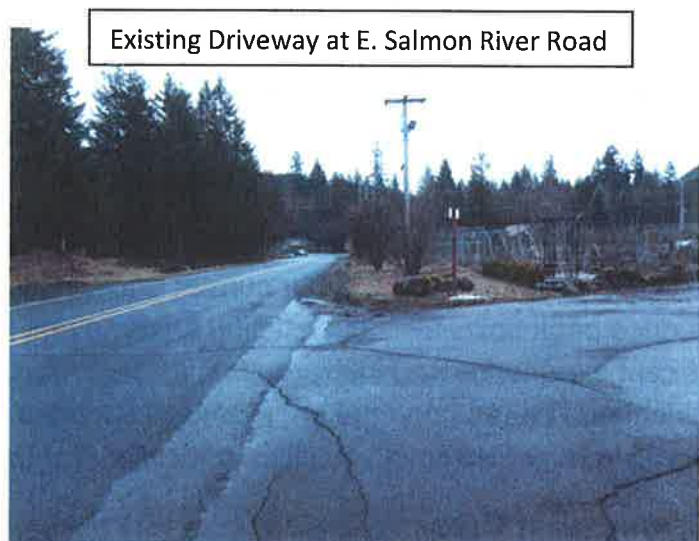
The challenge for the site will be that the stormwater discharge point is a roadside ditch, therefore, the systems used must be relatively shallow. This shallow system would make it difficult to install a detention pipe system.

## **Public Improvements**

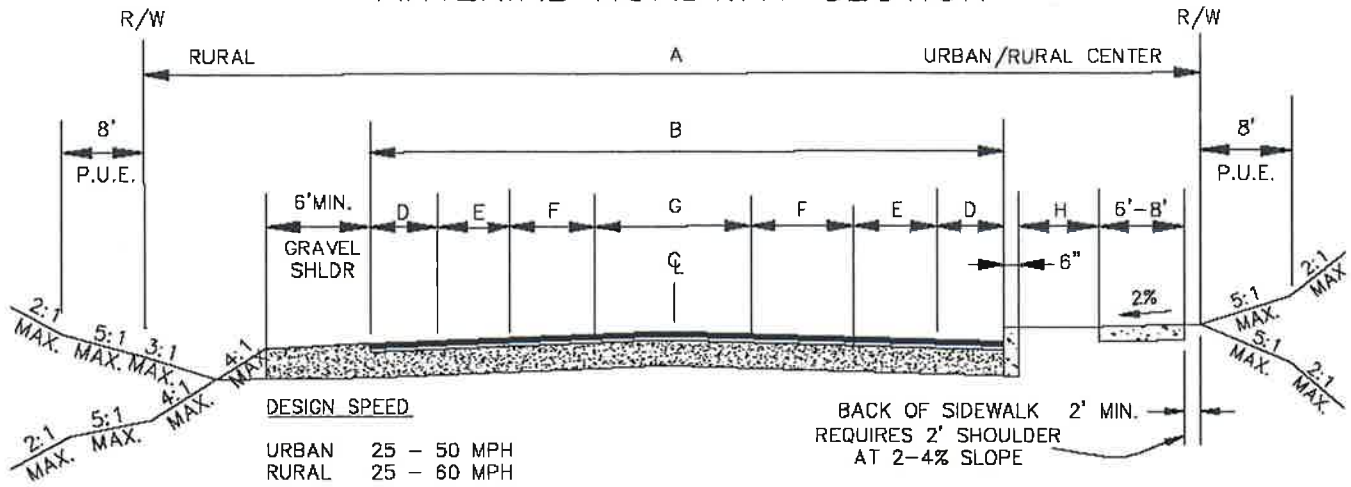
### **Frontage Street Improvements:**

The original conditions of approval for the 2007 Conditional Use Permit, outline requirements for public street frontage improvements along E. Salmon River Road. The conditions of approval indicate that the 6 foot shoulder should be installed along with a separated pathway.

However, the conditions also state that curb shall be installed as well as a separated pathway. E. Salmon River Road is identified as a minor-arterial roadway. Per the following exhibit from Clackamas County, there are two potential roadway sections that could be installed. For the cost analysis, we have assumed that the section will be a Rural Arterial with a separated 6' path. We made a phone call to Robert Hixson at Clackamas County DTD to discuss, and he indicated that the County would be flexible in applying the standards as long as the pathway was constructed.



## ARTERIAL ROADWAY SECTION



### MINIMUM REQUIREMENTS

ROAD TYPE	MINIMUM RIGHT-OF-WAY (FT)	PAVED WIDTH (FT)	NO. OF LANES	BIKE LANE (FT)	CURB TRAVEL LANE (FT)	TRAVEL LANE (FT)	CENTER TURN LANE (FT)	TRAVEL LANE (FT)	CURB TRAVEL LANE (FT)	BIKE LANE (FT)	PARKING LANE	SIDE-WALK (FT)	LANDSCAPE STRIP (FT)
	A	B	C	D	E	F	G	F	E	D			H
URBAN ARTERIALS (MAJOR & MINOR), AND RURAL CENTERS	134	98	7	6	11-12	11-12	12-14	11-12	11-12	6	W/ ADD'L R/W	6-8	5
	110	74	5	6	11-12	11-12	12-14	11-12	11-12	6	W/ ADD'L R/W	6-8	5
	90	60	4	6	11-12	11-12	0	11-12	11-12	6	W/ ADD'L R/W	6-8	5
	80	50	3	6	0	11-12	12-14	11-12	0	6	W/ ADD'L R/W	6-8	5
	60	36	2	6	0	11-12	0	11-12	0	6	W/ ADD'L R/W	6-8	5
RURAL ARTERIALS	60-70	50	3	6	0	11-12	12-14	11-12	0	6	NONE	NONE	NONE
	60	36	2	6	0	11-12	0	11-12	0	6	NONE	NONE	NONE

**Off-Site Transportation Improvements:** Per the County's staff report for the Conditional Use Approval:

*ODOT has raised concerns with the right-turn only movement at the Hwy 26/Salmon River Road intersection. The right-turn deficiency has also been identified in the 2000 Rural TSP. ODOT's comments indicate concern during the peak 30th highest hours primarily on weekends. ODOT states a traffic impact study will be necessary to make adequate findings for significant use during these hours. ODOT notes the applicant's submittal indicates the community center will operate primarily 8:30 a.m. to 8 p.m. and is confident traffic adequacy and safety concerns are addressed during these hours. However, staff notes the supplemental text also identifies "potential youth activities on Saturdays; and potential facility rentals for community events, youth group events, non-profit groups or private events hosted by local residents that could operate during weekend hours." Without additional information to the contrary, staff recommends a condition to limit weekend activity.*

Depending on the ultimate use of the site, improvements at the intersection of Hwy 26 and E. Salmon River Road may be necessary, which may include a right-turn lane.

## Cost Estimates:

Rough cost estimates were completed for the improvements for the site. The estimates are based upon the Conceptual Site Plan included with the Report. A summary of the cost estimates are summarized below along with a list of assumptions for the improvements.

Item	Description	Total Estimate
1	Public Frontage Road Improvements	\$103,730.00
2	Parking Lot Improvements (90 Parking Spaces)	\$423,350.00
3	Mass Grading	\$125,190.00
4	Utilities to Serve New Building	\$80,210.00
5	Landscaping and Irrigation	\$105,000.00
<b>Total Estimate</b>		<b>\$837,480.00</b>

### Notes:

1. Costs include a 30% contingency included in each design Element.
2. Estimates do not include Sewer SDC's, Water Meter SDC's or Traffic Impact Fees
3. Costs for parking lot Improvements include budget items for storm water facilities including treatment, detention and water quality via treatment planters.
4. Supporting cost estimate information is provided in Appendix "C" of the report.
5. Our estimate assumes the rural section with a shoulder and separated path and full depth reconstruction of the roadway to the centerline. However, if the rural section is required, curbs and storm pipe would be necessary adding an estimated \$25,000 to the Frontage Costs.
6. A right-turn-lane was not included in the Estimate for Public Improvements. As noted, it was not conditioned in the staff report because the center would not have weekend use. However, if weekend use is anticipated, improvements to the Hwy 26 intersection may be necessary depending upon the final traffic analysis. For budgeting purposes only, the cost for 50 foot storage lane for a right-turn lane is estimated at \$40,000. The existing Conditional Use Approval did not indicate any other off-site costs such as a signal at Hwy 26 would be necessary; therefore, this cost is not estimated.

## Reduced Scope Cost Estimate:

After review of the draft report and cost estimates, Clackamas County Parks asked for a second alternative for the site redevelopment to reduce the overall costs of the project. This reduced cost analysis would look to utilize the existing parking lot area as much as possible and shift the building closer to the E. Salmon River Road to reduce utility costs. For the estimate, we made the assumption that the new building would be constructed in the area of the demolished tennis courts, or in the place of the existing building. The existing parking lot is approximately 36 parking spaces and the County code will allow up to 20% of reduction in minimum parking requirements for offsite parking (Welches School) allowing up to 8 parking spaces offsite to be included in the parking total for availability of an estimated 44 parking spaces. For the sake of analysis, the following example shows a mixture of uses that would yield a 44 parking lot, and is illustrated on the Conceptual Site Plan – Reduced Scope Option which is included in the report.

<b>Max to 36 Parking spaces</b>			
<b>Building Use</b>	<b>Building SF</b>	<b>Spaces</b>	<b>Code</b>
Community Room, Senior Ctr., Library	4100	41	1 per 100 SF
Day Care	2500	1.25	0.5 spaces per 1,000 SF
Office	600	1.62	2.7 per 1,00 SF
<b>Total</b>		<b>43.87</b>	
Subtract 20% reduction for shared parking		35.096	

Based upon the assumption of rehabilitating the existing parking lot, we have estimated costs associated with the assumed reduced scope site improvements. The cost estimates assumes that the existing parking lot would be overlaid, and curbs, detention and treatment facilities, lighting, striping and landscaping would be added to the parking lot.

Item	Description	Total Estimate
1	Public Frontage Road Improvements	\$103,730.00
2	Parking Lot Improvements (Rehabilitate Existing Parking Spaces)	\$110,110.00
3	Mass Grading	\$26,650.00
4	Utilities to Serve New Building	\$39,850.00
5	Landscaping and Irrigation	\$20,000.00
<b>Total Estimate</b>		<b>\$300,340.00</b>

Notes:

1. Costs include a 30% contingency included in each design Element.
2. Estimates do not reduce costs for a non-Boli wage job. HHPR did not find any credible information on the differences of costs between a Boli and non-Boli job. However, labor costs may be up to 40% less in a non-Boli project vs. a Boli project. This may equate to a 20% reduction in estimated costs.
3. Estimates do not include Sewer SDC's, Water Meter SDC's or Traffic Impact Fees
4. Costs for parking lot Improvements include budget items for storm water facilities to be constructed in the area of the existing community garden.
5. Supporting cost estimate information is provided in Appendix "C" of the report.
6. Our estimate assumes the rural section with a shoulder and separated path and full depth reconstruction of the roadway to the centerline. However, if the rural section is required, curbs and storm pipe would be necessary adding an estimated \$25,000 to the Frontage Costs.
7. A right-turn-lane was not included in the Estimate for Public Improvements. As noted, it was not conditioned in the staff report because the center would not have weekend use. However, if weekend use is anticipated, improvements to the Hwy 26 intersection may be necessary depending upon the final traffic analysis. For budgeting purposes only, the cost for 50 foot storage lane for a right-turn lane is estimated at \$40,000. The existing Conditional Use Approval did not indicate any other off-site costs such as a signal at Hwy 26 would be necessary; therefore, this cost is not estimated.

## **Limitations of Estimates:**

Estimates for the Conceptual Design were based upon the construction of a theoretical 90 space parking lot. It was assumed that the building would be set back from the E. Salmon River Road approximately 350 feet, and that the parking lot configuration would be constructed in a north-south configuration.

Estimates for the Reduced Cost Analysis were based upon the assumption of overlaying the exiting parking lot. A geotechnical analysis will be required to support this assumption as the project develops.

HHPR did not have a project survey to verify actual grades or utility locations, and final layouts and configuration of parking lot will vary and impact the cost estimates.



## Opportunities and Constraints Map

We have developed an Opportunities and Constraints Map for the site. The map shows the schematic location of the elements located on site, as well as key features of the site as well as specific site code information relevant to the development of the site.

The site was not surveyed, and a combination of GIS mapping and existing aerial mapping was used as a basis for the mapping. The aerial mapping available had a very low resolution, therefore, the use of the map should be for informational purposes only, and should be used only for limited conceptual design options.

Also included is a quick sketch of the concept that was used for estimating on the site.

## Conclusions and Recommendations

Based upon the information obtained in the development of the analysis, the site appears to have the utilities and site features necessary to improve and/or expand the existing building on site, or construct a new larger Community Center.

Prior to the final In addition to further development of the plans for improvements to the site, we would suggest that the following investigative analysis be performed:

- Detailed Topographic and Boundary Survey
- Geotechnical Investigation and Report
- Traffic Analysis and Report

If a design build arrangement is considered to develop the site, we would suggest an approved site plan be obtained through the planning level and with the detailed reports outlined above before procurement of the construction.

The cost estimates contained in this report are for general budgeting purposes only. Depending upon site alternatives developed, costs could vary depending on a number of design elements including the placement of the building, and the number of parking spaces constructed.

## A PHASE I ENVIRONMENTAL SITE ASSESSMENT

Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Clackamas County, Oregon

August 30, 2012

HAI Project No.8270



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**HAI HAHN AND ASSOCIATES, INC.**  
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**ENVIRONMENTAL CONSULTANTS**  
ASSESSMENT  
INVESTIGATION  
REMEDIATION

## A PHASE I ENVIRONMENTAL SITE ASSESSMENT

**Project Location:**

Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Clackamas County, Oregon

**Prepared For:**

Clackamas County Parks & Forest Department  
c/o Mr. Jeroen Kok  
150 Beaver Creek Road  
Oregon City, Oregon 97045

**Prepared By:**

Hahn and Associates, Inc.  
434 NW 6th Avenue, Suite 203  
Portland, Oregon 97209-3651  
www.hahnenv.com

**Date:**

August 30, 2012

**Project No.:** 8270

**Certification:**

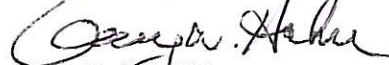
We, Roger Lewis and Gary Hahn, declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in Title 40 of the Code of Federal Regulations (CFR) Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in Title 40 CFR Part 312.

**Prepared By:**

  
Roger Lewis, R.G.  
Project Manager

**Date:** 8-30-2012

**Reviewed By:**

  
Gary Hahn, E.P.  
Principal

**Date:** 08/30/12

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  - Site Photographs
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- A Oregon Water Resources Department Water Well Log Report
- B Client-Furnished Information Checklist
- C First American Title Insurance Company, *Preliminary Title Report*, January 15, 2010
- D Oregon Department of Environmental Quality Environmental Cleanup Site Information System: Facility Profiler List and Site Summary Reports
- E Oregon Department of Environmental Quality Leaking Underground Storage Tank Cleanup Sites: Facility Profiler List
- F G2 Consultants, Inc., *Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection*, August 27, 2011

## **1.0 EXECUTIVE SUMMARY**

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Hahn and Associates, Inc. has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of the American Society for Testing and Materials Practice E1527-05 of the Hoodland Community Center property located at 25400 E Salmon River Road, Welches, Clackamas County, Oregon (herein referred to as the subject property or the property), at the request of Clackamas County Parks & Forest Department. The Phase I Environmental Site Assessment consisted of a site reconnaissance, an historical and physical features evaluation of the subject property, an examination of the surrounding land uses, and an environmental database review of the property and of the surrounding land uses.

### **Site Description**

The approximate 3.95-acre subject property consisted two tax lots located in unincorporated Clackamas County, Oregon. The property was improved with the Hoodland Community Center building, which encloses approximately 5,000 feet. The property was accessed by a driveway that extended from E Salmon Road to an asphalt parking area located to the west of the building. A community garden was located on the northwestern corner of the property. Undeveloped areas were situated at the southern and eastern portions of the property.

### **Site Reconnaissance**

Evidence of underground storage tanks was not observed on the subject property, nor was the presence of underground storage tanks indicated from historical research. However, one aboveground propane storage tank was observed on the southwestern portion of the property.

Evidence of the storage of hazardous substances and petroleum products, including 55-gallon drums, was not observed on the property.

Several consumer-sized containers (5 gallons or less) of cleaning agents, degreasers and paint were noted at various locations within the Hoodland Community Center building. Spills or leaks were not observed at the container storage areas. With the exception of these materials, evidence of the storage of hazardous substances, was not observed on the property.



## **Site History**

### *Subject Property*

According to historical information, the subject property was undeveloped prior to construction of an open-sided A-frame shelter in 1965. Walls were added to the shelter in the late 1960s, forming the Hoodland Community Center building that was evaluated as part of this assessment. Since 1975, the property has been in use as a community center that was used primarily for social events and as a child daycare center. A septic system located to the east of the building was abandoned when the property was connected to municipal sanitary sewer lines in 1987. In 2004, community tennis courts were removed from the northern portion of the property. In 2006, a community garden was planted on the northeastern portion of the property. The configuration and use of the property has remained largely unchanged since 2006.

### *Surrounding Properties*

The adjacent and nearby surrounding properties have been used for timber production from prior to 1949 until residential and community development began sometime in the 1950s. A roadway was constructed to the west of the subject property between 1959 and 1965. Surrounding properties were improved with a school and residences in the 1970s and 1980s. Adjoining properties have not undergone significant development between the late 1980s and August 2012.

## **Records Review**

A review of state and Federal environmental records disclosed several sites located within a 1.0-mile radius of the subject property that are currently or have previously been under review for environmental issues. However, these sites do not appear to represent a Recognized Environmental Condition for the property at this time.

## **Conclusions and Recommendations**

Hahn and Associates, Inc. has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of American Society for Testing and Materials Practice E1527-05 of the Hoodland Community Center property located at 25400 E Salmon River Road,

Welches, Clackamas County, Oregon. Any exceptions to, or deletions from, this practice are described in Section 9.0 of this report.

This Phase I Environmental Site Assessment did not reveal evidence of a Recognized Environmental Condition in connection with the property. From the data that was assembled during the course of this investigation, it is the professional opinion of Hahn and Associates, Inc. that further investigatory work in the form of a Phase II Environmental Site Assessment does not appear to be necessary for the subject property.

## 2.0 INTRODUCTION

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### 2.1 Purpose

Clackamas County Parks & Forest Department (the Client/User) retained the environmental consulting firm of Hahn and Associates, Inc. (HAI) to perform a Phase I Environmental Site Assessment (ESA) of the Hoodland Community Center property located at 25400 E Salmon River Road, Welches, Clackamas County, Oregon.

This Phase I ESA was undertaken by the Client/User for the purpose of identifying Recognized Environmental Conditions (RECs) at the property, that is, *the presence or likely presence of any hazardous substance or petroleum product on the property under conditions that indicate an existing or an historical release, or a material threat of a release into structures on the property or into the ground, groundwater, or surface water of the property resulting from the current or historical usage of the property or sites located in the vicinity of the property.* This report is intended to constitute *All Appropriate Inquiry* (AAI) for purposes of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

### 2.2 Detailed Scope-of-Services

Information on the property under consideration was gathered through a physical inspection (site reconnaissance) of the subject property, through interviews of knowledgeable persons including past and present owners, operators, and occupants, and others, by a review of the available historical documents including recorded environmental cleanup liens, by noting the physical features of the property, by a survey of the surrounding land uses, through reviews of Federal, tribal, state, and local government records, and from the examination of other pertinent documents including photographs and maps. The scope of work for this project followed the American Society for Testing and Materials (ASTM) guideline (E1527-05) entitled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The U.S. Environmental Protection Agency (EPA) has stated that ASTM E1527-05 may be used to comply with meeting the objectives and performance factors of 40 Code of Federal Regulations (CFR) Part 312 Standards for All Appropriate Inquiries, Final Rule (40 CFR 312.11). Any deviations to or from ASTM E1527-05 are described in Section 9.0 *Deviations*.

In accordance with the services agreement for this project and unless specifically noted herein, the Phase I ESA review and inspection activities did not include items that were outside the scope of ASTM E1527-05 such as issues related to lead-based paint, lead in drinking water, electromagnetic radiation, cultural and/or historical resources, indoor air quality (e.g. vapor intrusion, radon, etc.), fungi (e.g. mold), wetlands and other ecological resources, and endangered species. Similarly, the review and inspection activities did not include surveys for asbestos, health and safety, regulatory compliance, or a determination of the suitability of a property or its structures for any purpose.

## **2.3 Significant Assumptions**

### **User's Responsibilities**

Unless specifically noted herein, it is the obligation of the Client/User of this Phase I ESA to provide HAI with certain information as specified in ASTM E1527-05 as the *User's Responsibilities*, including:

- A Title Report or Chain of Title that includes the required search for recorded environmental liens and activity and use limitations (AULs), as well as any actual knowledge thereof
- Information regarding any specialized knowledge or experience, or commonly known information that may be material to identifying RECs at the subject property
- Information regarding the reason for a significantly reduced property purchase price (lower than fair market value)

### **Topographic Gradient**

For the purpose of evaluating the potential for groundwater contamination from offsite sources to impact the subject property, the uppermost groundwater flow has been inferred to generally follow surface topography, and to flow toward surface water bodies, unless specific information is available regarding groundwater flow direction. HAI has not field-checked any of the site hydrogeological information for accuracy, nor did HAI conduct an independent evaluation of the local geology.

### **Accuracy/Completeness**

The accuracy and completeness of recorded information and historical documentation varies among and within information sources, including governmental sources. Historical records and documentation are often inaccurate or incomplete, or may provide conflicting information. Similarly, the accessibility to or the ease of retrieval of such records may vary or be inconsistent. Under ASTM E1527-05, the Client/User or Environmental

Professional (EP) is not obligated to identify mistakes or insufficiencies in the information provided or obtained. HAI has made a reasonable effort to take into consideration the possible significance of any such mistakes or insufficiencies that are obvious in light of the available information of which HAI has actual knowledge.

#### **Limitations and Exceptions**

This report is not intended to be an exhaustive investigation of environmental conditions or a characterization of any contamination discovered. In performing an environmental site assessment, a balance must be struck between the desire to conduct a complete inquiry into environmental matters and the limits of time, cost and technology. This report sets forth HAI's evaluation of the possibility of RECs based on the scope of work agreed to by the Client and within the Client's schedule and budget. HAI's limitations and exceptions are described in Section 11.0 *Limitations*.

#### **Special Terms and Conditions**

None.

## **2.4 User Reliance**

Unless otherwise specified in writing, this report has been prepared solely for use by the Client and for use only in connection with the described property, subject to the limitations and conditions in the services agreement for this project. Any other use by the Client or any use by any other person shall be at the user's sole risk, and HAI shall have neither liability nor responsibility with respect to such use.

## **3.0 SITE BACKGROUND**

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### **3.1 Location and Legal Description**

The subject property consisted of two tax lots, located in the NE 1/4 of the NE 1/4 of Section 4, Township 3 South, Range 7 East, Willamette Meridian (W.M.).

Street Address	Tax Lot	Acreage	Improvement Type	Year Built	Owner
25400 E Salmon River Road	3600	2.71	Community Center	1965	Clackamas County
No Address	3300	1.24	Parking lot	Not Applicable	

Source: Clackamas County Department of Assessment and Taxation records

According to Mr. Jeroen Kok of Clackamas County Parks & Forest Department (the Client/User), the subject property consists of Tax Lot 3300 and Tax Lot 3600, with a total size of approximately 3.95 acres.

### 3.2 Site and Vicinity General Characteristics

The subject property was located in an area of mixed community and residential usage in unincorporated Clackamas County. Undeveloped and a commercial property bounded to subject property to the north. Undeveloped land and single-family residence were located to the south and east of the property. A school and playing fields were located to the west of the property (Figure 1).

### 3.3 Current Use of the Property

The subject property was developed with a two-story building that was used as a community center. The building was composed of a modified A-frame design and reportedly enclosed approximately 5,000 square feet. The western portion of the property was covered with an asphalt-paved parking lot and a community garden. The eastern portion of the property consisted of undeveloped land (Figure 2).

### 3.4 Current Uses of the Adjoining Properties

The surrounding properties consisted of undeveloped land, residences, playing fields, and a school, as shown in Figure 2.

Surrounding Properties	
Direction	Description
North	Undeveloped land, beyond which was a commercial property
Northwest	Welches Elementary School
Northeast	Single-family residence
East	Single-family residences
South	Undeveloped Land, beyond which was a single-family residence
Southwest	Single-family residence
West	Playing field

### 3.5 Physical Setting Sources

#### 3.5.1 Topography

The subject property was located on the U.S. Geological Survey 7.5-Minute Quadrangle, Rhododendron, Oregon, 1984 (Figure 1). It was situated on northward-sloping terrain at elevations ranging from approximately 1,400 to approximately 1,450 feet above mean sea level (msl).

#### 3.5.2 Geology

According to the *U.S. Geological Survey Geologic Map of Oregon*, 1991, the soils in the vicinity of the subject property are underlain by Miocene lava flows and clastic rocks of andesitic and basaltic composition..

#### 3.5.3 Hydrogeology

Water wells or monitoring wells were not observed on the subject property or indicated by Oregon Water Resources Department (OWRD) records to be located on the property. An OWRD well log report for all registered wells in Section 4 of Township 3 South, Range 7 East, W.M. indicated the median depth to first groundwater in the vicinity of the property was 17 feet below ground surface (bgs) (Appendix A). HAI did not field-check any of the site geological or hydrogeological information for accuracy as a part of this environmental site assessment.



## 4.0 SITE RECONNAISSANCE

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A site reconnaissance of the subject property was conducted on August 14, 2012 by Mr. Roger Lewis R.G., a representative of HAI. Access to the property was granted by Mr. Jeroen Kok (Client/User), who represented the property Clackamas County (Owner). Mr. Kok accompanied Mr. Lewis on a portion of the site visit.

### 4.1 Methodologies and Limiting Conditions

The methodologies for conducting the site reconnaissance included:

- Visual inspection of the accessible interior areas of all of the structures at the property, and, where applicable, a representative sample of occupant spaces
- Visual inspection of the accessible exterior areas of all of the structures at the property.
- Visual inspection of the property perimeter
- Visual inspection of the remainder of the property, which was inspected from the accessible footpaths, utility easements and access roads. Due to the presence of densely vegetated forested areas, only those areas of the property were inspected that were visually or physically accessible from footpaths and/or roads, as described in Section 4.2 *General Site Observations, Exterior Areas*.
- Visual inspection of the adjoining properties from the subject property boundary, public rights-of-way, or other vantage points (e.g., aerial photography).

The visual inspection of the subject and adjoining properties endeavored to identify areas where hazardous substances and petroleum products may be or may have been stored, treated, handled or disposed.

### 4.2 General Site Observations

The approximately 3.95 acre subject property consists of two contiguous tax lots that are developed with a community center building, a community garden, a playground, storage shed, and an asphalt parking lot.

#### *Interior Areas*

The community center building consists of a modified wooden A-frame divided into two stories that are developed for use as offices, meeting halls, storage rooms, a kitchen, and a classroom. Offices and storage rooms are

located on the ground floor of the north end of the building. The class room and kitchen are located on the ground floor of the south end of the building. A meeting hall occupies the top floor of the building.

### *Exterior Areas*

The northwestern half of the property was developed with the Hoodland Community Center. Exterior areas on the southern half of the property consisted of wooded land. An asphalt-paved parking lot accessed from E salmon River Road was present on the northwestern portion of the subject property. A community garden on the north end of the property was developed with raised beds and enclosed by a wire fence. A playground was located immediately to the east of the community center building. The former site of tennis courts that were removed from the north-central portion of the property was overgrown with weeds.

Staining, odors, or other evidence of surface spillage, discharges, or emissions of toxic or regulated substances were not noted within the property structures or elsewhere on the subject property. Evidence of releases of hazardous substances or petroleum products, such as stains, soil discoloration, odors, distressed vegetation, or other visible indications of impairment, was not noted at the subject property.

### *Utilities*

The subject property was served by the following utilities:

Utility	Provider / Comments
Electricity	Portland General Electric
Natural Gas	Not Provided
Water	Salmon Valley Water Company
Sewer	Clackamas County
Heating / Cooling	Propane-fired, forced air and ceiling-mounted electric units

### *Surrounding Properties*

Evidence of the usage, storage, or disposal of hazardous substances, petroleum products or RECs on the adjoining parcels and right-of-way areas was not observed from the property boundary or from the public right-of-way.

## 4.3 Storage Tanks

### 4.3.1 Underground Storage Tanks

During the assessment activities, the subject property was inspected for visual evidence of underground storage tanks (USTs). Visual evidence of USTs would include fill caps, vent pipes, and pump islands.

In addition, the following resources were queried / reviewed regarding UST records pertaining to the subject property:

- The Hoodland Fire District #74
- Site Analysis Document<sup>1</sup>
- The Oregon Department of Environmental Quality's (ODEQ) Registered UST Facility and Leaking Underground Storage Tank (LUST) lists (
- Mr. Jeroen Kok, Manager for Clackamas County Parks & Forest Department (the property Owner also Client/User)

### 4.3.2 Aboveground Storage Tanks

The subject property was visually inspected for evidence of aboveground storage tanks (ASTs). Visual evidence of ASTs would include tanks, concrete foundations or saddles, pedestals or steel support structures.

One propane AST, with an approximate capacity of 1,000 gallons, was noted approximately 120 feet southwest of the community center building. The AST was connect to the furnace of the community center through underground lines. Mr. Doug Garfield, the property maintenance manager, indicated that this AST was installed prior to 1982.

## 4.4 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs), EPA-regulated hazardous substances, are commonly found in electrical equipment manufactured prior to 1980, the year PCBs above 50 parts per million (ppm) were banned from commerce for most applications. Pole and pad-mounted fluid-filled electrical transformers, ballasts associated with fluorescent light fixtures and some hydraulic fluids are typical of electrical equipment that would be suspected to contain PCBs.

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<sup>1</sup> Harper Houf Peterson Righellis, Inc. (HHPR 2012). *Hoodland Community Center Site Analysis, Clackamas County, Oregon*. August 7, 2012.

### *Electrical Transformers*

Electrical transformers were not observed on the subject property. One pole-mounted, fluid-filled electrical transformer was located adjacent to the property's western perimeter (Figure 2). The unit was not labeled for PCB content, and should be assumed to contain PCBs. Portland General Electric, the utility that owns the transformers, is responsible for the cleanup of the release of any transformer fluids. The transformer noted during the site visit did not appear to have leaked.

### *Hydraulic Equipment*

Evidence of hydraulic equipment (e.g. hydraulic hoists or elevators that have hydraulic fluid containing reservoirs or jacks) was not observed on the subject property.

### *Fluorescent Light Ballasts*

Fluorescent light ballasts (used in light fixtures) manufactured prior to 1979 typically contained PCBs. Fluorescent lights were noted throughout the interior of the community center building. Based on the age of the building (1965), the ballasts may contain PCBs. However, these types of units do not typically pose an environmental concern unless they leak. The fixtures that were noted during the site visit did not appear to have leaked. Ballasts that are removed for replacement and/or disposal should be evaluated for PCB content. Those not labeled with the words "No PCBs" must be assumed to contain PCBs and must be managed in accordance with the applicable regulations.

### *Water Well Pumps*

PCBs may also be associated with submersible water well pumps manufactured prior to 1979. Water supply wells were not observed on the subject property, or indicated by OWRD records or through interviews to be located on the property.

## **4.5 Hazardous Substances, Petroleum Products, and Hazardous Wastes**

The subject property was visually inspected for signs of the storage, use or disposal of hazardous substances, petroleum products, and hazardous wastes (e.g. containers, drums, staining, leakage, etc.).

Several consumer-sized containers (five-gallon or less) of household maintenance materials (dishwashing and janitorial cleaning supplies and household paints) were noted at various locations within the community center building. All of the containers appeared to be properly sealed and stored. Spills or leaks were not noted at the time of the site visit. Fifty-five gallon drums were not noted on the subject property.

## **4.6 Water, Wastewater and Stormwater**

### **4.6.1 Wastewater Discharge Sources**

Evidence of industrial, process or other discharge sources was not observed at the subject property.

### **4.6.2 Subsurface Discharge Features**

The subject property was inspected for evidence of subsurface discharge features (e.g. floor drains, oil/water separators, sumps and trenches).

A floor drain was noted in the kitchen of the community center building. Doug Garfield, maintenance manager for the community center, indicated that the floor drain was connected to the sanitary sewer. Staining or evidence of hazardous material storage or disposal was not observed in the vicinity of the floor drain.

### **4.6.3 Sanitary Systems and Water Supply**

The subject property was visually inspected for evidence of current or former onsite sanitary systems (e.g. septic tanks, cesspools).

The subject property was served by public sanitary sewer services at the time of the site visit. Prior to 1987, the site was served by an onsite septic system, which was reportedly abandoned in place on the east side of the community center building.

### **4.6.4 Stormwater Discharge**

#### *Stormwater*

Stormwater features, such as catch basins or bioswales, were not observed at the subject property. Accordingly, stormwater at the property would

infiltrate into the ground surface or flow as sheet runoff downslope to the west and toward low-lying areas along E Salmon River Road.

#### *Drywells*

Drywells were not observed nor indicated by permits or plans to be present at the subject property.

#### *Surface Water*

Evidence of surface water (e.g. ponds, lagoons or standing surface water indicative of industrial or wastewater disposal), was not observed at the subject property. Surface water in this context does not include naturally occurring bodies of water such as rivers, lakes, streams, or wetlands (annual or perennial).

### **4.7 Solid Waste Disposal / Fill Materials**

Solid waste generated at the subject property was disposed of by the municipal solid waste service. Uncontrolled or improper solid waste disposal practices were not observed at the property.

The presence of undocumented fill at a property could present environmental concerns. Although the possibility exists that undocumented fill could be located on the subject property, evidence of imported fill was not observed on the property (e.g. stockpiles, mounds, hummocks, depressions, etc.) or identified by interviews or the historical records review performed for the property.

### **4.8 Wells**

The subject property was inspected for evidence of wells (e.g. potable supply, irrigation, monitoring, extraction, dry injection).

Evidence of wells was not observed at the subject property during the site reconnaissance. Further, wells were not indicated by Oregon Water Resources Department (OWRD) records, interviews or the historical records review to be located on the property.

#### 4.9 Table 1 – Summary of Site Features

The results of the site reconnaissance, interview(s), and/or the records review with respect to specific site features are summarized in Table 1. Where indicated, a reference where additional information can be found in this report with regard to a specific item, has been included.

**Table 1**

<b>Feature/Condition</b>	<b>Observed/Present (Yes/No/Unknown)</b>	<b>Reference Section for Additional Information</b>
Potable Water Supply	Yes	4.2
Water Supply Well	No	
Monitoring Well	No	
Municipal Sanitary Sewer	Yes	4.2, 4.6.3
Septic Tank	Yes	4.6.3
Stormwater Catch Basins	Yes	4.6.4
Connected to Municipal Stormwater Collection System	Yes	4.6.4
Stormwater Swale or Retention Pond	No	
Drywells	No	
Hazardous Substances/Petroleum Products	Yes	4.3
Drums/Totes (55-gallon or larger)	No	
Petroleum or Potentially Hazardous Substance Containers (less than 55- gallons)	No	
Unidentified Substance Containers	No	
USTs/ASTs	Yes	4.3
Odors	No	
Ponds, Lagoons, Standing Surface Water	No	
Pits/Sumps	No	
Floor Drains	Yes	4.6.2
Spillage (other than water)	No	
Staining (other than water staining)	No	
Fluid-filled Electrical Transformers	Yes	4.4
Hydraulic Equipment	No	
Stressed Vegetation	No	
Obvious Areas of Fill (stockpiles, mounds,	No	



**Table 1**

<b>Feature/Condition</b>	<b>Observed/Present (Yes/No/Unknown)</b>	<b>Reference Section for Additional Information</b>
hummocks, depressions, etc.)		
Evidence of On-Site Solid Waste Disposal (other than litter)	No	

#### **4.10 Additional Services**

Unless specifically noted herein, the Phase I ESA review and inspection activities did not include items that are outside the scope of ASTM E1527-05 such as issues related to lead-based paint, lead in drinking water, electromagnetic radiation, cultural and/or historical resources, indoor air quality (e.g. vapor intrusion, radon, etc.), fungi (e.g. mold), wetlands and other ecological resources, and endangered species. Similarly, the review and inspection activities did not include surveys for asbestos, health and safety, regulatory compliance, or a determination of the suitability of a property or its structures for any purpose.

##### **4.10.1 Asbestos**

In addition to this Phase I ESA, a Hazardous Building Materials Survey (HBMS) was requested so that hazardous building materials could be identified prior to renovation or demolition of the Hoodland Community Center building. The survey was intended to identify asbestos-containing materials, lead-containing paint, and other buildings materials that may require special management and disposal.

Asbestos is a U. S. Environmental Protection Agency (EPA)-regulated toxic substance and a human carcinogen. By EPA standards, asbestos-containing material (ACM) is any material that contain more than one percent asbestos. ACMs were typically used in insulation materials, ceiling tiles, and linoleum manufactured prior to the mid-1970s. However, certain types of ACMs, including roofing felt and coatings, among others, may continue to legally be imported or produced, sold, and installed in structures today.

EPA requires that all Regulated ACM (RACM) be removed from a site prior to demolition, dismantling or renovation of structures to prevent the release

of asbestos fibers to the air. RACM would include friable ACM or nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or has crumbled, or has been pulverized or reduced to powder in the course of demolition or renovation operations. Friable ACM is defined as any material with more than one percent asbestos by weight that hand pressure can crumble, pulverize or reduce to powder when dry.

State regulations further require that all ACMs be removed from a site prior to demolition, dismantling or renovation of structures, regardless if the material is friable.

In addition, Federal and state Occupational Safety and Health Administrations (OSHA) require that commercial and industrial building and facility owners communicate asbestos hazards and provide asbestos awareness training to tenants, employees, and maintenance personnel.

*An Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection (Inspection)* was conducted at the subject property concurrently with this Phase I ESA by G2 Consultants (G2). The *Inspection* consisted of a pre-demolition level survey for the Hoodland Community Center building, which included limited sampling for asbestos-containing materials, lead-containing paint, and Universal Waste, which include fluorescent bulbs, ballasts, smoke detectors, mercury switches, and exit signs with back-up batteries.

The presence of asbestos was identified in the following materials:

- Roof Felt
- Mastic under Beige Speckled 12"x12" Floor Tile, Black
- Floor Tile, 12"x12" Off-white w/Brown Streaks
- Sink Undercoating, Black
- Ceiling Texture

The August 27, 2012, G2 survey report indicated that the identified ACMs should be removed by a licensed asbestos contractor prior to demolition of the building. The locations of the identified materials are detailed in the G2 report (Appendix F). Prior to any renovation or demolition of the structures, the results of the survey should be given to any contractor that may impact these materials.

### *Lead-Containing Paint*

Lead-Containing paint (LCP) is defined by the EPA and the U.S. Department of Housing and Urban Development (HUD) as that containing greater than one milligram of lead per square centimeter of surface area ( $>1 \text{ mg/cm}^2$ ) or 0.5% by weight. At the time of this assessment, there were no regulations requiring the removal of LBP from structures other than for HUD-funded or insured housing. However, over time, it is possible that LBP can flake off of structures and accumulate in nearby soils to levels of concern. The manufacturer's current maximum allowable concentration of lead in paint as established by the National Consumer Information and Health Promotion Act of 1976 is 0.06%.

G2 did not identify LBP containing greater than one milligram of lead per square centimeter of surface area ( $1 \text{ mg/cm}^2$ ) on and/or within all of the structures on the subject property.

Universal Wastes identified by G2 included fluorescent bulbs, ballasts, smoke detectors, mercury switches, and exit lights with back-up batteries.

The locations and extent of ACMs, LBP, and Universal Wastes are detailed in the *Hazardous Materials Survey Report* prepared by G2 (Appendix F).

## **5.0 INTERVIEWS**

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### **5.1 Interviews with Owner, Site Manager, Occupant**

Attempts were made to interview current Owner(s), the key site manager, occupants and/or major occupants, and occupants likely to use, store, treat, handle or dispose of hazardous substances or petroleum products at the subject property. In addition, to the extent that they have been identified, past owners, operators, and occupants likely to have information regarding the potential for contamination at the property were also interviewed. Further, a reasonable attempt has been made to interview a state and/or local government agency. Additional personnel may also be interviewed as deemed necessary. Data Gaps with regard to the referenced interviews are discussed below and in Section 9.1 *Data Gaps*.

#### *Current Property Owner, Key Site Manager, and Occupant*

Information obtained from Clackamas County Tax records identified the following current Owner of the subject property:

- Clackamas County, current Owner since the 1950s

Mr. Jeroen Kok, of Clackamas County Parks and Forest Department, the subject property Owner, was interviewed on August 14, 2012. Mr. Kok indicated the following:

- Clackamas County acquired the property in the 1950s.
- The property has been occupied by the Hoodland Women's Club since the early 1970s.
- The property was recently evaluated for potential redevelopment with a new community center building.

Mr. Kok indicated that he was not aware of:

- Other historical uses of the property or of any former property structures
- Any existing or former USTs, ASTs, water supply wells, septic tanks, drywells, pits, sumps, fill material, or hazardous substances and/or petroleum product usage on the property
- Environmental permits, notices, significantly lower property purchase price (lower than comparable), environmental liens or activity and use limitations, or RECs in association with the property
- Any pending, threatened or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property
- Any notices from any government entity regarding possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products
- Environmental conditions that have affected or may affect the purchase or lease price of the property.
- Any specialized knowledge of the property or surrounding sites, and knew of no commonly known information about the property that would help in identifying conditions indicative of releases or threatened releases, including RECs at the property
- Any obvious indicators that point to the presence or likely presence of contamination at the property.

## 5.2 Interviews with Past Owners, Operators, Occupants

### *Past Property Owner(s), Operator(s) and Occupant(s)*

Information obtained from Clackamas County Tax records and interviews of person knowledgeable with the property indicate that the property was acquired by Clackamas County in the 1950 through foreclosure due to non-payment of taxes. Failure to determine previous ownership after 1940, is

considered a Data Gap. However, based on historical aerial photographs that show that the property was undeveloped prior to current improvements, this Data Gap was not considered to be significant.

### **5.3 Interviews with Government Officials / Others**

#### *State and/or Local Government Agency*

State and County government agency records and information were readily available through Internet database searches and queries. Local agency representatives for the building and fire departments did not have additional information beyond publicly available records and plans (Section 7.1 *Historical Use Resources*). Accordingly, interviews with state or local government agency representatives were not conducted during this assessment.

#### *Additional Interviews*

Ms. Barbara Salvidar, who managed the property from the early 1970s until approximately 2006, was interviewed on August 16, 2012. Ms. Salvidar indicated the following:

- The property was vacant land prior to development of current the community center building in 1965.
- The Hoodland Women's Center managed the property beginning in the early 1970s.
- A childcare center has been in operation at the property since the early 1970s.

### **6.0 USER PROVIDED INFORMATION**

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Persons (e.g. the Client/User) seeking to qualify for the innocent landowner defense, prospective purchaser or contiguous property owner liability protection under CERCLA must provide any specialized knowledge of the subject property or surrounding sites, commonly known or reasonably ascertainable information within the community regarding the subject property, and any other experience relevant to this inquiry, for the purpose of identifying conditions indicative of releases or threatened releases at the subject property. The Client/User must also consider the degree of obviousness of the presence or likely presence of contamination on the property.

Mr. Jeroen Kok of Clackamas County Parks & Forest Department (the Client/User) completed a *Phase I Environmental Site Assessment Client-Furnished Information Checklist* (Appendix B).

## **6.1 Title Records**

On behalf of Clackamas County Parks & Forest Department (the Client/User), Mr. Jeroen Kok provided HAI with a Preliminary Title Report for the subject property, prepared by Lawyers Title Insurance and dated February 17, 2012 (Appendix C).

## **6.2 Environmental Liens or Activity and Use Limitations**

Mr. Kok indicated that he was not aware of Federal, tribal, state, or local environmental liens or activity and use limitations (AULs, such as engineering or institutional controls) in association with the subject property, as borne out by the preliminary title report provided by Clackamas County Parks & Forest Department.

## **6.3 Specialized Knowledge and Commonly Known or Reasonably Ascertainable Information**

Mr. Kok indicated that he had no specialized knowledge of the property or surrounding sites, and that he knew of no commonly known information about the property that would help in identifying conditions indicative of releases or threatened releases, including RECs at the property.

## **6.4 Valuation Reduction for Environmental Issues**

Mr. Kok indicated that he was not aware of:

- Environmental permits, notices, or significantly lower property purchase price (lower than fair market value)
- Any pending, threatened, or past litigation or administrative proceedings concerning hazardous substances or petroleum products in relation to the property
- Any notices from any government entity regarding possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products
- Environmental conditions that have affected or may affect the purchase or lease price of the property
- Knowledge of RECs at the property or of any obvious indicators that point to the presence or likely presence of contamination at the property.

## 6.5 Reason for Performing Phase I ESA

Mr. Kok indicated that Clackamas County Parks & Forest Department was conducting the Phase I ESA prior to redeveloping the property. Refer to Item 20 of the Client Checklist (Appendix B) for the Client's Statement of Purpose

## 7.0 SITE HISTORY

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### 7.1 Historical Use Resources

A combination of practically reviewable information (available within reasonable cost and time constraints), obtained from publicly available records and resources, was used to determine the prior uses of the subject property and of the surrounding properties. A complete listing of all references, including sources and dates of review, is included in Section 12.0 *References*. The following resources were reviewed in an effort to establish the history of the subject property and surrounding land use:

- Clackamas County Department of Assessment and Taxation, tax assessment records and previous ownership information for each Tax Lot associated with the property
- Multnomah County Library
- Lawyers Title Insurance Company of Oregon, *Preliminary Title Report*, February 17, 2012 (Appendix C)
- Reverse City Directories (Cole) for Greater Portland, Oregon, 2012, 2012, and 2005
- Sanborn Fire Insurance Maps for Welches, Oregon, were not available
- Aerial Photographs for 1949, 1959, 1965, 1967, 1972, 1979, 1988, 1994 and 2009, obtained from the University of Oregon Map & Aerial Photography Collection, Eugene, Oregon. Aerial photograph for 2011 obtained from Google Earth Imagery. Aerial Photographs for the years 1949, 1959, 1965, 1967, 1972, 1979, and 2009 are included in the Appendix of this report.



## **7.2 Previous Environmental Site Assessments**

Previous ESAs for the subject property were not provided to HAI for review. Mr. Jeroen Kok of Clackamas County Parks & Forest Department (the Client/User) and was not aware of previous ESAs having been performed for the property.

## **7.3 Summary of Historical Use**

Based upon the interviews and the resources that were reviewed, the history of the subject property and of the surrounding land use was determined.

### *Subject Property*

According to historical information, the subject property was undeveloped prior to construction of an open-sided A-frame shelter in 1965. Walls were added to the shelter in the late 1960s, forming the Hoodland Community Center building that was evaluated as part of this assessment. Since 1975, the property has been in use as a community center that was used primarily for social events and as a child daycare center. A septic system located east of the building was abandoned when the property was connected to municipal sanitary sewer lines in 1987. In 2004, community tennis courts were removed from the northern portion of the property. In 2006, a community garden was planted on the northeastern portion of the property. The configuration of the property has remained largely unchanged since 2006.

### *Surrounding Properties*

Surrounding properties consisted of undeveloped woodland from before 1949 until a small structure was added to the northeast of the subject property sometime in the 1950s. A roadway was constructed to the west of the subject property between 1959 and 1965. A small structure was constructed to the west of the subject property between 1965 and 1967. An elementary school was constructed to the west of the subject property in the early 1970s and a small structure was added to the northeast of the subject property in the late 1970s. Additional buildings were added to the west and north of the subject property in the early 1980s. Adjoining properties have not undergone significant development between the late 1980s and August 2012.

## 8.0 RECORDS REVIEW

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As a part of this Phase I ESA of the subject property and as deemed necessary, inquiries were made to governmental agencies with jurisdiction over current and prior activities conducted at the subject property that could have affected the environment. When available and as necessary, files on nearby properties were also reviewed and agency personnel knowledgeable about activities conducted in the area of the subject property were interviewed.

Federal and state databases were reviewed as part of this Phase I ESA. For databases organized by zip code, the 97067 zip code was reviewed for both the 0.5-mile and 1.0-mile radii. The following lists satisfy the requirements of ASTM E1527-05. The lists reviewed by HAI were the most recent lists available online as of August 10, 2012

### 8.1 Standard Environmental Record Sources

#### ***Federal NPL Site List***

*Search Distance: 1.0-mile radius*

*Source Date: August 10, 2012*

The EPA National Priority List (NPL) details the locations of hazardous substance sites that present a potential for imminent and substantial harm to the environment. The subject property or sites located within a 1.0-mile radius of the property did not appear on the NPL List.

#### ***Federal De-listed NPL Site List***

*Search Distance: 0.5-mile radius*

The Federal De-listed NPL Site (NPL) List details the locations of hazardous substance sites where either environmentally significant quantities of hazardous waste were never confirmed at the site, or an environmentally insignificant amount of hazardous waste is all that remains at the site as a result of remediation. The subject property or sites located within a 0.5-mile radius of the property did not appear on the NPL List.

#### ***Federal CERCLIS List***

*Search Distance: 0.5-mile radius*

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) lists hazardous substance sites undergoing

EPA investigations. The subject property or sites located within a 0.5-mile radius of the property did not appear on the CERCLIS List.

***Federal CERCLIS NFRAP List***

*Search Distance: 0.5-mile radius*

This report lists all CERCLIS No Further Remedial Action Planned (NFRAP) sites, which are CERCLIS sites that have been removed from the CERCLIS List. Archived status indicates that contamination was not found at the CERCLIS NFRAP sites, the contamination has been remediated, or the contamination has been deemed to not be significant enough to require consideration under CERCLIS or NPL. The listing of a site on the CERCLIS NFRAP does not necessarily imply that contamination has been deemed insignificant or remediated based upon applicable state or local standards. The subject property or sites located within a 0.5-mile radius of the property did not appear on the CERCLIS NFRAP List.

***Federal CORRACTS List***

*Search Distance: 1.0-mile radius*

The Corrective Action Report (CORRACTS) List identifies hazardous waste handlers with RCRA corrective action activity. The subject property or sites located within a 1.0-mile radius of the property did not appear on the CORRACTS List.

***Federal RCRA TSD Facilities List***

*Search Distance: 0.5-mile radius*

The EPA Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal (TSD) Facilities List identifies sites which manage hazardous waste for the purpose of on-site treatment, interim storage, or on-site disposal. The subject property or sites located within a 0.5-mile radius of the property did not appear on the RCRA TSD List.

***Federal RCRA Handlers List***

*Search Distance: Subject Property and Adjoining Properties*

The EPA RCRA Handlers List identifies facilities which have given notification as current hazardous waste generators, including Large Quantity Generators (LQG), Small Quantity Generators (SQG), or Conditionally Exempt Generators (CEGs), and facilities that do not presently generate

hazardous waste (Non-Generators). The subject property or adjoining properties did not appear on the RCRA Handlers List.

**Federal Engineering and Institutional Controls Lists**

*Search Distance: Subject Property Only*

The EPA Federal Engineering Controls List identifies sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or affect human health. The EPA Federal Institutional Controls List identifies sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls. The subject property did not appear on the Federal Engineering or Institutional Controls Lists.

**Federal ERNS List**

*Search Distance: Subject Property Only*

The Emergency Response Notification System (ERNS) List records and stores information on reported releases of oil and hazardous substances. The subject property did not appear on the ERNS List.

**ODEQ ECSI List**

*Search Distance: 1.0-mile radius*

*Source Date: August 10, 2012*

The Oregon Department of Environmental Quality (ODEQ) Environmental Cleanup Site Information (ECSI) List includes hazardous substance sites undergoing ODEQ investigations, along with ODEQ Voluntary Cleanup Program (VCP) sites, State Brownfield sites, and sites with State-registered engineering and/or institutional controls. The subject property did not appear on the ODEQ ECSI List.

One site located within an approximately 1.0-mile radius of the subject property appeared on the ODEQ ECSI List reviewed for this report (Appendix D). However, this site did not appear to represent a REC for the property based upon its distance from the property (1 mile) and the fact that the site has been conferred ODEQ No Further Action (NFA) status.

**ODEQ SWDS and SWDF Lists**

*Search Distance: 0.5-mile radius*

*Source Date: December 2, 2010*

The ODEQ list of actively permitted open and closed Solid Waste Disposal Facilities (SWDF) and the State of Oregon Closed Solid Waste Disposal Sites (SWDS) List (dated April 12, 2000 – no update is expected), were reviewed. The subject property or sites located within a 0.5-mile radius of the property did not appear on either of these lists.

**ODEQ LUST List**

*Search Distance: 0.5-mile radius*

*Source Date: August 10, 2012*

The ODEQ Leaking Underground Storage Tank (LUST) Database List contains an inventory of reported LUST incidents. The subject property did not appear on the ODEQ LUST List.

No sites located within an approximately 0.5-mile radius of the property appeared on the LUST List reviewed for this report (Appendix E).

**ODEQ UST List**

*Search Distance: Subject Property and Adjoining Properties*

The subject property or adjoining properties did not appear on the ODEQ UST Database List.

**Indian LUST List**

*Search Distance: 0.5-mile radius*

The Indian LUST List identified leaking USTs on Indian land in Alaska, Idaho, Oregon and Washington. The subject property or sites located within a 0.5-mile radius of the property did not appear on the Indian LUST List.

**Indian UST List**

*Search Distance: Subject Property and Adjoining Properties*

The Indian UST List identified USTs on Indian land in Alaska, Idaho, Oregon and Washington. The subject property or adjoining properties did not appear on the Indian UST List.

The following tribal lists are not known to exist and thus could not be reviewed:

*Tribal-Equivalent NPL List*

*Tribal-Equivalent CERCLIS*

*Tribal Landfill and/or Solid Waste Disposal Site Lists*

*Tribal Institutional Control/Engineering Control Registries*

*Tribal Voluntary Cleanup Sites*

*Tribal Brownfield Sites*

## **8.2 Additional Environmental Record Sources**

### ***Federal Brownfields Program Sites List***

*Search Distance: 0.5-mile radius*

EPA's Brownfields Program empowers states, communities, and other stakeholders in economic development to work together to prevent, assess, safely clean up, and sustainably reuse brownfields. A Brownfield Site is real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. The subject property or sites located within a 0.5-mile radius of the property did not appear on the Federal Brownfields Program Sites List.

### ***Oregon State Fire Marshal's Office HSIS List***

*Search Distance: Subject Property Only*

*Source Date: August 10, 2012*

The Oregon State Fire Marshal's Office Hazardous Substance Information Survey (HSIS) identifies companies in Oregon submitting the HSIS and either reporting or not reporting hazardous substances. The subject property did not appear on the HSIS List.

### ***Oregon ERIS Spills List***

*Search Distance: Subject Property Only*

The Oregon Emergency Response Information System (ERIS) List identifies reported releases of petroleum and/or hazardous substances to land or water since 1995. The subject property did not appear on the ERIS List.

**Oregon Building Codes Division Drug Lab Cleanup Program List**  
*Search Distance: Subject Property Only*

The Building Codes Division of the Oregon Department of Consumer & Business Services maintains a list of properties declared by law enforcement agencies to be unfit for use due to methamphetamine manufacturing and/or storage activities. The properties are considered unfit for habitation until they are certified clean in accordance with the Oregon Department of Human Services' Clandestine Drug Lab Cleanup Program, at which time they are removed from the list. The subject property did not appear on the Drug Lab Cleanup Program List of uninhabitable properties.

## **9.0 DEVIATIONS**

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This Phase I ESA deviates from ASTM E1527-05 as follows:

- No deviations.

### **9.1 Data Gaps**

A Data Gap is defined in ASTM E1527-05 as a lack of or inability to obtain information required by the standards and practices listed in the regulation despite good faith efforts by the environmental professional or prospective landowner to gather such information. Such Data Gaps may affect the environmental professional's ability to identify RECs at the property.

A Data Failure is defined as the failure to achieve the historical research objectives contained in ASTM E1527-05, including identifying obvious uses of the property from the present, back to the property's first developed use, or back to 1940, whichever is earlier. A Data Failure is one type of Data Gap.

The following Data Gap was identified in association with this Phase I ESA, along with its significance and the attempts made to fill the Data Gap:

- Former Owners or representatives with knowledge of the previous uses of the subject property could not be interviewed during the course of this assessment (Data Gap). However, historical evidence indicates that the property was undeveloped prior to construction of current improvements. Therefore, the absence of data with regard to the types of heating systems historically used at the property does not appear to be a significant Data Gap.



## **10.0 ADDITIONAL SERVICES**

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In addition to the basic elements of ASTM E1527-05, this report includes the following:

- Limited screening for suspect asbestos-containing materials, lead-containing paint, and Universal Wastes was conducted during the course of the site reconnaissance (Section 4.10.1). The results of this sampling are provided in Appendix F.

## 11.0 LIMITATIONS

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The purpose of this environmental assessment is to evaluate the possibility that the specified real property contains a *Recognized Environmental Condition* (REC), as defined by the American Society for Testing and Materials (ASTM) guideline (E1527-05). In performing an environmental assessment, a balance must be struck between the desire to conduct a complete inquiry into environmental matters and the limits of time, cost and technology. This report sets forth HAI's evaluation of the possibility of RECs based on the scope of work agreed to by the client and within the client's schedule and budget.

No investigation is thorough enough to ensure that hazardous substances are not present on a particular property. Even if RECs have not been identified in this report, there is no guarantee that contamination or other environmental conditions are not present. If samples have been collected in connection with this assessment, our assessment is based in part on our interpretation of data from discrete sample locations that may not represent actual conditions at unsampled locations. In evaluating the potential risks associated with the subject property, we have focused on possible sources on the property and on property in the immediate vicinity. We have not attempted to assess the risk that the property may be affected by regional contamination problems, such as the possibility of widespread contamination of the groundwater from sources not associated with this property.

All conclusions, opinions, and recommendations presented in this report are based on conditions existing at the time the services were performed and the laws, practices and technology in effect and commonly used as of that time. HAI is not able to predict future events that may affect the condition of the property or that may affect the risks attendant to such conditions.

Unless otherwise specified in this report, HAI has not investigated either the conditions inside any buildings on the property or the possible presence of hazardous substances incorporated into buildings, equipment, or other improvements on the property. HAI has not investigated conditions in any area of the property not readily accessible. Except as specifically described in this report, HAI also has not investigated the presence of hazardous substances that may be naturally occurring on the property. HAI has relied on information provided by the client and other individuals and documents and has not verified the accuracy of such information.

Unless otherwise specified in writing, this report has been prepared solely for the use by the client and for use only in connection with the described property, subject to the limitations and conditions in HAI's services agreement with its client. Any other use by the client or any use by any other person shall be at the user's sole risk, and HAI shall have neither liability nor responsibility with respect to such use.

(07/05)

## 12.0 REFERENCES

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- Clackamas County Department of Assessment and Taxation, property ownership and tax lot information, August 10, 2012
- Cole City Directories for Greater Portland, Oregon, 2012, 2010, and 2005, reviewed at the Multnomah County Library and HAI offices, August 10, 2012
- Google Map Imagery, aerial photographs for 1994, 2000, 2005, and 2011, obtained August 10, 2012.
- Google search engine (<http://www.google.com/webhp?hl=en>), keyword searches, various dates, February and August 2012
- MyTopo Map Pass Subscription Service, topographic base map for Figure 1, ([map-pass.mytopo.com](http://map-pass.mytopo.com)), August 10, 2012
- Oregon Department of Environmental Quality, state regulatory lists, reviewed August 10, 2012
- Oregon State Tax Map, *The Oregon Map*, tax lot maps ([www.ormap.org](http://www.ormap.org)), reviewed August 10, 2012
- Oregon Water Resources Department, water well logs review, August 10, 2012 ([www.wrd.state.or.us](http://www.wrd.state.or.us))
- U.S. Environmental Protection Agency, Federal regulatory lists, reviewed August 10, 2012
- U.S. Geological Survey 7.5-Minute Quadrangle, Rhododendron, Oregon, 1987, area topography
- U.S. Geological Survey, Geologic Map of Oregon, 1991, area geology
- University of Oregon Map & Aerial Photography Collection, Eugene, Oregon aerial photographs for 1949, 1959, 1965, 1967, 1972, 1979, 1988, 1994, and 2009

## 13.0 GLOSSARY OF ABBREVIATIONS

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ACM	Asbestos-Containing Materials
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
AUL	activity and use limitations
bgs	below ground surface
CCDs	Cole City Directories
CEG	Conditionally Exempt Generator
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response Compensation and Liability Information System
CFR	Code of Federal Regulations
CORRACTS	RCRA Corrective Action Report
ECSI	Environmental Cleanup Site Information
EPA	U.S. Environmental Protection Agency
ERNS	EPA Emergency Response Notification System
HAI	Hahn and Associates, Inc.
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
MSL	Mean Sea Level
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NPL	National Priority List
OAR	Oregon Administrative Rule
ODEQ	Oregon Department of Environmental Quality
OSHA	Occupational Safety and Health Administration
OWRD	Oregon Water Resources Department
PCB	Polychlorinated Biphenyls
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RECs	Recognized Environmental Conditions
SFIM	Sanborn Fire Insurance Map
SQG	Small Quantity Generator of Hazardous Waste
SWDF	Solid Waste Disposal Facility
SWDS	Solid Waste Disposal Site
TSD	Treatment, Storage and Disposal
USGS	U.S. Geological Survey
UST	Underground Storage Tank
W.M.	Willamette Meridian

## 14.0 DEFINITIONS OF TERMS

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**Abandoned Property** — property that can be presumed to be deserted, or an intent to relinquish possession or control can be inferred from the general disrepair or lack of activity thereon such that a reasonable person could believe that there was an intent on the part of the current owner to surrender rights to the property.

**Activity and Use Limitation (AUL)** — legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls, are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

**Adjoining Properties** — any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

**All Appropriate Inquiry** — that inquiry constituting “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined in CERCLA, 42 U.S.C §9601(35)(B), that will qualify a party to a commercial real estate transaction for one of threshold criteria for satisfying the landowner liability protections to CERCLA liability (42 U.S.C §9601(35)(A) & (B), §9607(b)(3), §9607(q); and §9607(r)), assuming compliance with other elements of the defense.

**Approximate Minimum Search Distance** — the area for which records must be obtained and reviewed under ASTM E1527-05, subject to limitations as provided in ASTM E1527-05. This distance is to be measured from the nearest subject property boundary. This term is used in lieu of radius to include irregularly shaped properties.

**Business Environmental Risk** — a risk which can have a material environmental or environmentally-driven impact on a business associated with the current or future use of a parcel of commercial real estate. Consideration of business environmental risk is not necessarily limited to those environmental issues required to be investigated under ASTM E1527-05, and may involve addressing considerations outside the scope of this practice (non-scope considerations).

**Continuing Obligations** — Continuing Obligations that the Client/User must achieve and maintain in order to qualify for one of the Landowner Liability Protections (LLPs) to CERCLA liability under the 2002 Brownfields Amendments, assuming compliance with other elements of the defense. Continuing Obligations include: (1) complying with land use restrictions and institutional controls; (2) taking reasonable steps with respect to hazardous substance releases; (3) providing full cooperation, assistance, and access to persons that are authorized to conduct response actions or natural resource restoration; (4) complying with requests for

information and with administrative subpoenas; and (5) providing legally required notices.

**Data Failure** — a failure to achieve the historical research objectives contained in ASTM E1527-05 (includes identifying obvious uses of the property from the present, back to the property's first developed use, or back to 1940, whichever is earlier) after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data Failure is one type of Data Gap.

**Data Gap** — a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).

**De Minimis Condition** — a condition that generally does not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions.

**Drywells** — underground areas where soil has been removed and replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional) and wastewater disposal (often illegal).

**Environmental Compliance Audit** — the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe this practice, although an environmental compliance audit may include an environmental site assessment or, if prior audits are available, may be part of an environmental site assessment.

**Environmental Lien** — a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 U.S.C. §9607(1) & 9607(r) and similar state or local laws.

**Environmental Professional** — (1) a person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases on, at, in, or to a property, sufficient to meet the objectives and performance factors in §312.20(e) and (f).

(2) Such a person must: (i) hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or (ii) be licensed or certified by the federal government, a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries as defined in §312.21 and have the equivalent of three (3) years of full-time relevant experience; or (iii) have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or

science and the equivalent of five (5) years of full-time relevant experience; or (iv) have the equivalent of ten (10) years of full-time relevant experience.

(3) An environmental professional should remain current in his or her field through participation in continuing education or other activities.

(4) The definition of environmental professional provided above does not preempt state professional licensing or registration requirements such as those for a professional geologist, engineer, or site remediation professional. Before commencing work, a person should determine the applicability of state professional licensing or registration laws to the activities to be undertaken as part of the inquiry identified in §312.21(b).

(5) A person who does not qualify as an environmental professional under the foregoing definition may assist in the conduct of all appropriate inquiries in accordance with this part if such person is under the supervision or responsible charge of a person meeting the definition of an environmental professional provided above when conducting such activities.

**Environmental Site Assessment (ESA)** — the process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to recognized environmental conditions. At the option of the user, an environmental site assessment may include more inquiry than that constituting all appropriate inquiry or, if the user is not concerned about qualifying for the *landowner liability protections*, less inquiry than that constituting all appropriate inquiry. An environmental site assessment is both different from and less rigorous than an environmental compliance audit.

**Fill Dirt** — dirt, soil, sand, or other earth, that is obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities.

**Good Faith** — the absence of any intention to seek an unfair advantage or to defraud another party; an honest and sincere intention to fulfill one's obligations in the conduct or transaction concerned.

**Hazardous Substance** — Per ASTM 1527-05, a substance defined as a *hazardous substance* pursuant to CERCLA 42 U.S.C. §9601(14), as interpreted by EPA regulations and the courts:“ (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §6901 et seq.) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. §7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)



**Hazardous Waste** — any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of RCRA, as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §6901-6992k) has been suspended by Act of Congress). RCRA is sometimes also identified as the Solid Waste Disposal Act. RCRA defines a hazardous waste, at 42 U.S.C. §6903, as: “a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.”

**Historical Recognized Environmental Condition (HREC)** — an environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently.

**Landowner Liability Protections** — landowner liability protections (LLPs) include the bona fide prospective purchaser liability protection, contiguous property owner liability protection, and innocent landowner defense from CERCLA liability (42 U.S.C. §§9601(35)(A), 9601(40), 9607(b), 9607(q), 9607(r)).

**Innocent Landowner Defense** — (42 U.S.C. §9601(35) & 9607(b)(3)) — a person may qualify as one of three types of innocent landowners: (i) a person who “did not know and had no reason to know” that contamination existed on the property at the time the purchaser acquired the property; (ii) a government entity which acquired the property by escheat, or through any other involuntary transfer or acquisition, or through the exercise of eminent domain authority by purchase or condemnation; and (iii) a person who “acquired the facility by inheritance or bequest.” To qualify for the first type of innocent landowner LLP, such person must have made all appropriate inquiry on or before the date of purchase. Furthermore, the all appropriate inquiry must not have resulted in knowledge of the contamination. If it does, then such person did “know” or “had reason to know” of contamination and would not be eligible for the innocent landowner defense.

**Institutional Controls** — a legal or administrative restriction (for example, “deed restrictions,” restrictive covenants, easements, or zoning) on the use of, or access to, a site or facility to (1) reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. An institutional control is a type of Activity and Use Limitation (AUL).

**Major Occupants** — those tenants, subtenants, or other persons or entities each of which uses at least 40 % of the leasable area of the property or any anchor tenant when the property is a shopping center.

**Material Threat** — a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment. An example might include an aboveground storage tank system that contains a hazardous substance and which shows evidence of damage. The damage would

represent a material threat if it is deemed serious enough that it may cause or contribute to tank integrity failure with a release of contents to the environment.

**Petroleum Products** —those substances included within the meaning of the petroleum exclusion to CERCLA, 42 U.S.C. §9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 U.S.C. §9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

**Pits, Ponds, or Lagoons** — man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing hazardous substances or petroleum products.

**Practicably Reviewable** — information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the user can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the property or a geographic area in which the property is located are not generally practically reviewable.

**Publicly Available** — information that is publicly available means that the source of the information allows access to the information by anyone upon request.

**Reasonably Ascertainable** — for purposes of both the ASTM Phase I ESA (Practice E 1527) and the TSA (Practice E 1528) standards, information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practicably reviewable.

**Recognized Environmental Condition (REC)** — the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

**Relevant Experience** — as used in the definition of environmental professional, means: participation in the performance of environmental site assessments that may include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases or threatened releases (per §312.1(c)) to the subject property.

**Subject Property** — the real property that is the subject of this Phase I ESA. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

**Sump** — a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

**Underground Storage Tank (UST)** — any tank, including underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground.

**User** — the party seeking to use ASTM E1527-05 to complete a Phase I ESA of the subject property. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.

**User's Responsibilities** — ASTM E1527-05 describes specific tasks to be performed by the Client/User that will help identify the possibility of RECs in connection with the subject property and which a) do not require the technical expertise of an environmental professional (EP) and b) are generally not performed by EPs performing a Phase I ESA. These tasks include communicating to the EP any specialized or actual knowledge or experience the Client/User may have with respect to the property, the relationship of the purchase price to the fair market value of the property, and the reason for conducting the Phase I ESA. Additionally, under ASTM E1527-05, it is the Client/User's responsibility to either: 1) engage a title company or title professional to undertake a review of reasonably ascertainable recorded land title records and lien records for environmental liens or AULs currently recorded against or relating to the property, or 2) negotiate such an engagement of a title company or title professional as an addition to the scope of the Phase I ESA activities.

**Wastewater** — water that (1) is or has been used in an industrial or manufacturing process, (2) conveys or has conveyed sewage, or (3) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as stormwater flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

(4/06)

## 15.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

---

**Roger Lewis, R.G.**  
Project Manager

### Technical Expertise

Mr. Lewis has over 6 years experience managing field sampling of soil, gas, and water, and in conducting Phase I and Phase II Environmental Site Assessments (ESAs).

### Summary

Mr. Lewis has collected and analyzed field data for investigative reports since 2005. He has performed water, soil, and gas sampling, field mapping, environmental sampling, well completion, and core logging. Mr. Lewis has prepared a wide variety of environmental documents including Phase I ESA reports, Phase II Investigations, Risk-Based closures, Vapor Intrusion Investigations, and UST removal and closures

### Credentials

MS Marine Science, Moss Landing Marine Labs, California State University  
BS Geology, San Jose State University

### *Professional Training*

- Oregon Registered Geologist G2187
- Oregon Soil Matrix Cleanup License 26715
- Oregon Oil Tank License 26715
- AHERA Asbestos Inspector

### Employment History

Hahn and Associates, Inc.	Project Manager	2012 to present
PBS Engineering & Environmental	Project Geologist	2008 to 2012
EMG, Inc.	Project Manager	2011 to 2012
EnviroBusiness Inc.	Project Scientist	2006-2008
Iris Environmental Geologist	Geologist	2005-2006

(01/12)

**GARY W. HAHN, E.P.**

President, Principal

**Technical Expertise**

Mr. Hahn is a qualified Environmental Professional (E.P.), with technical expertise in managing the day-to-day operations of a regionally-based environmental consulting firm that specializes in site assessment, investigation, and remediation.

**Experience Summary**

Mr. Hahn has owned and managed Hahn and Associates, Inc. since its inception in 1987, and has provided environmental regulatory assistance and site assessment activities for industry and government, as well as overseeing the design and implementation of environmental compliance programs and the management of environmental cleanup projects for over 30 years.

**Credentials**

B.S. Chemistry, Case Western Reserve University

**Professional Titles and Affiliations**

- Member, Board of Directors, The Wetlands Conservancy
- Past Member, Board of Directors, Oregon Association of Environmental Professionals

**Selected Professional Training**

- OSHA 40-Hour Health and Safety Training for Hazardous Waste Workers
- OSHA 8-Hour Health and Safety Supervisor Training for Hazardous Waste Workers

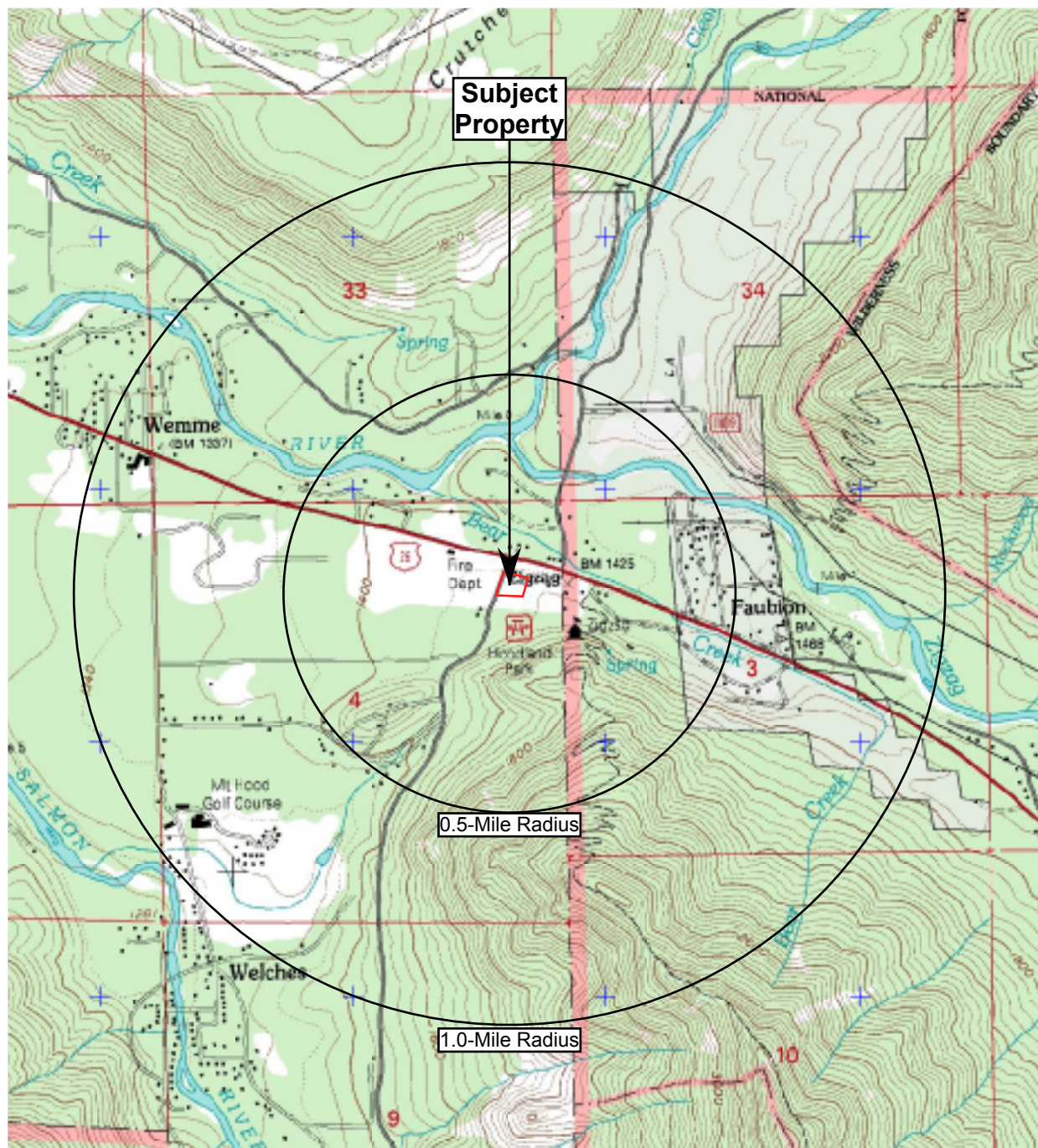
**Employment History**

Hahn and Associates, Inc.	President	1987 to present
SRH Associates, Inc.	Environmental Scientist	1986 to 1987
McCall Oil and Chemical Corp.	Environmental Compliance Manager	1983 to 1986
Waste Management, Inc.	Remedial Action/Cleanup Manager	1981 to 1983
Oregon DEQ	Hazardous Waste Specialist	1980 to 1981
Ohio EPA	Hazardous Spill Response Manager	1976 to 1979

(01/12)

## FIGURES





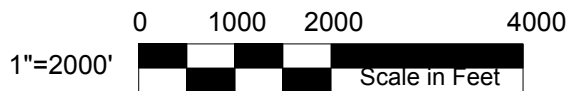
Note:  
Base Map from the Rhododendron, Oregon (1997)  
USGS 7.5-Minute Quadrangle  
Contour Intervals: 40 Feet

## FIGURE 1 Location Map

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.  
Project No. 8270

August 2012







## LEGEND

- Site Boundary
- - - Tax Lot Line



Pole-Mounted  
Electrical Transformer

Figure Not to Scale

## FIGURE 2 Site and Surrounding Land Use Map

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.  
Project No. 827

August 2012

## **SITE PHOTOGRAPHS**





#### **Photograph No. 1**

Date Taken: August 9, 2012

Direction Facing: West

Comments: A community garden is located on the northwest corner of the property.

Photo File Name: P1000518.jpg



#### **Photograph No. 2**

Date Taken: August 9, 2012

Direction Facing: West

Comments: A propane AST was located southwest of the Hoodland Community Center.

Photo File Name:Propane.jpg

#### **HAHN AND ASSOCIATES, INC.**

434 NW 6th Avenue, Suite 203  
Portland, Oregon 97209  
503-796-0717

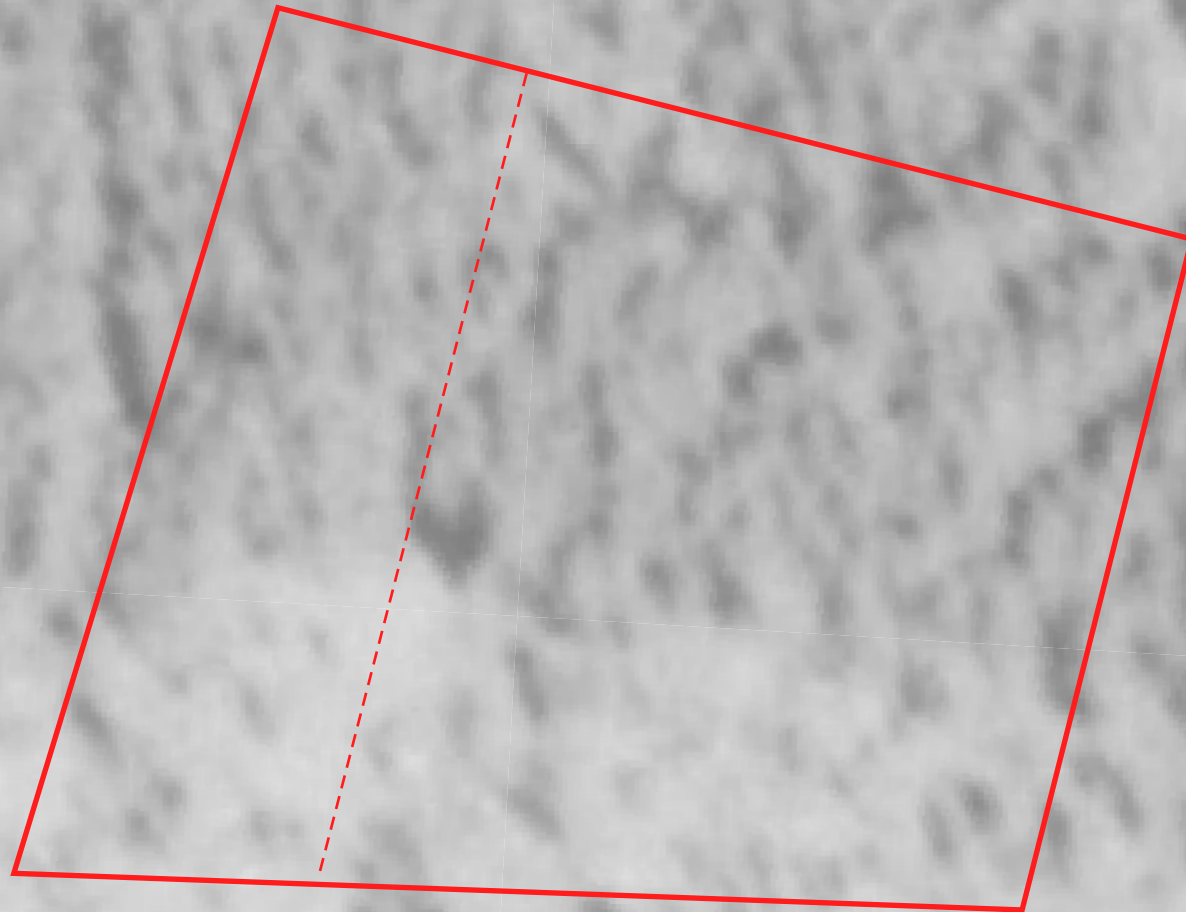
#### **Site Photographs**

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

Project No. 8270

August 2012

## **AERIAL PHOTOGRAPHS**



### **1949 Aerial Photograph**

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.

Project No. 8270

August 2012





## **1965 Aerial Photograph**

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.

Project No. 8270

August 2012





### **1967 Aerial Photograph**

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.

Project No. 8270

August 2012





### **1972 Aerial Photograph**

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.

Project No. 8270

August 2012



### **1979 Aerial Photograph**

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.

Project No. 8270

August 2012





## **2009 Aerial Photograph**

Phase I Environmental Site Assessment  
Hoodland Community Center Property  
25400 E Salmon River Road  
Welches, Oregon

HAHN AND ASSOCIATES, INC.

Project No. 8270

August 2012

## **Appendix A**

### Oregon Water Resources Department Water Well Log Report

Well	Type	First	Static	Town	Range	Sec	qtr160	qtr40	tax_lot		
17656	W	10	67.2	3	S	7	E	4	SW	SE	
17668	W		54.5	3	S	7	E	4	SW	NW	
17957	W	70	35	3	S	7	E	4	NW	SW	4300
18228	W	58	30	3	S	7	E	4	NE	NE	200
1842	W	159		3	S	7	E	4	NE	NW	
1843	W	66	50	3	S	7	E	4	NE	NW	
1844	W	32	18	3	S	7	E	4	NW	NW	
1845	W		52	3	S	7	E	4	SW	SW	
1846	W		13	3	S	7	E	4			
1847	W		25	3	S	7	E	4			
1848	W		24	3	S	7	E	4			
1849	W			3	S	7	E	4			
1850	W		20	3	S	7	E	4	SW	SW	
1851	W		61	3	S	7	E	4	SW	NE	
1852	W	40	25	3	S	7	E	4	NE	NW	
1853	W		144	3	S	7	E	4	SE	NE	
1854	W		28	3	S	7	E	4			
1855	W	15	20	3	S	7	E	4			
1856	W		18	3	S	7	E	4	NE	NE	
14412	W	10	62	3	S	7	E	4	SW	NW	
14413	W	0	0	3	S	7	E	4	SW	SE	
126	W	20	408	3	S	7	E	4	SW	NE	170100000
50308	W	7	16	3	S	7	E	4	NE	NE	1405
50441	W	50	19	3	S	7	E	4	NW	SW	4300
50450	W		33.6	3	S	7	E	4	NW	SW	4300
50535	W	100	30	3	S	7	E	4	NE	SW	7
50534	W	440	30	3	S	7	E	4	NE	SW	7
53318	W	17	15	3	S	7	E	4	NE	NE	1500
53325	W	30	26	3	S	7	E	4	NE	NE	700
58429	W	980	36	3	S	7	E	4	NE	SE	900
58978	W	38	38	3	S	7	E	4	NE	NE	2500
62854	W	33	25	3	S	7	E	4	NE	NE	900
62880	G			3	S	7	E	4	NW	SE	3200
62881	G			3	S	7	E	4	NW	SE	3200
64862	M	16	15.7	3	S	7	E	4	SW	SE	
64863	M	14	14.1	3	S	7	E	4	SW	SE	
64901	M	6	5.5	3	S	7	E	4	SW	SE	
64902	M	6	6.8	3	S	7	E	4	SW	SE	
64903	M	5	5.2	3	S	7	E	4	SW	SE	
64904	M	9	7.2	3	S	7	E	4	SW	SE	
64906	M	10.5	11	3	S	7	E	4	SW	SE	
65136	W	21	21	3	S	7	E	4	NE	NE	400
68287	M			3	S	7	E	4	NW	SE	ROW
68288	M	21.15		3	S	7	E	4	NW	SE	ROW
68289	M	11.75		3	S	7	E	4	NW	SE	ROW
68290	M			3	S	7	E	4	NW	SE	ROW
68291	M			3	S	7	E	4	NW	SE	ROW
68292	M	9.5		3	S	7	E	4	NW	SE	ROW

68293	M	11.3		3	S	7	E	4	NW	SE	ROW
68294	M	13		3	S	7	E	4	NW	SE	ROW

<b>Max</b>		<b>980</b>	<b>408</b>
<b>Min</b>		<b>0</b>	<b>0</b>
<b>Median</b>		<b>17</b>	<b>25</b>

## **Appendix B**

### Client-Furnished Information Checklist



**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
CLIENT-FURNISHED INFORMATION CHECKLIST**

Property: 4-acre Hoodland Community Park Property, 25400 E Salmon River Road, Welches, Oregon

HAI Project No. 8270

In order to qualify for one of the Landowner Liability Protections (LLPs) available under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the User must provide the following information (if available) to the Environmental Professional. Failure to do so could result in a determination that "All Appropriate Inquiry" is not complete. Accordingly, please indicate to the best of your knowledge the existence of this information and/or these documents by checking the appropriate boxes below. Then sign this form and return it to HAI along with copies of any of the indicated documents or information. This form will be made a part of the completed Phase I ESA Report to be prepared by Hahn and Associates, Inc.

**Existence of Document/ Information?**

**Provided to HAI?**

Yes	No	Un-known		Yes	No
	X		1. Are there any sources of knowledge or experience that you have regarding the Property that may be pertinent to this assessment, i.e., PRIOR ENVIRONMENTAL SITE ASSESSMENTS (ESAs), or regulatory agency documents or correspondence?		
	X		2. Environmental permits (e.g. underground or above-ground storage tank registrations/permits, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, stormwater permits, drywell permits, etc.)		
	X		3. Information regarding whether specific chemicals are present or once were present at the property, or whether hazardous materials have been stored on site (e.g. material safety data sheets, community right-to-know plans, site safety plans, preparedness and prevention plans, spill prevention, spill control and countermeasure plans, etc.)		
	X		4. Hazardous waste generator notices or reports		
	X		5. Reports regarding geotechnical or hydrogeologic conditions on the property or surrounding area		
	X		6. Information concerning any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products		
	X		7. Notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products		
X			8. Existence / location of water wells, fill material, drywells, sumps, pits, or drainage systems		
	X		9. Building plans (architectural, mechanical, utility, plumbing)		
X			10. Description of current site operations, including site plans or sketches	X	
	X		11. Tax Assessor records (previous owner and occupants)		
X			12. Title Report or Preliminary Title Report (which may include a search for recorded liens and <i>Activity and Land Use Limitations</i> (AULs)), and/or Chain Of Title	X	
	X		13. a) Has a search for recorded <u>environmental cleanup liens</u> encumbering the property and filed under Federal, tribal, State, or local law been conducted by a <i>title company</i> or <i>title professional</i> ? b) Are you aware of any such liens encumbering the property? Yes <input type="checkbox"/> No <input type="checkbox"/>		
	X		14. a) Has a search for recorded <i>Activity and Land Use Limitations</i> (AULs) been conducted by a <i>title company</i> or <i>title professional</i> ? AULs may include engineering controls, land use restrictions or institutional controls in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law. b) Are you aware of any AULs in connection with the property? Yes <input type="checkbox"/> No <input type="checkbox"/>		
	N/A		15. Information regarding whether the purchase price for this property reasonably reflects the fair market value of the property, and if not, whether the lower purchase price reflects known or suspected contamination to be present at the property.		
X			16. As the User of this ESA, do you have any specialized knowledge or experience related to the property or nearby property? For example, if you have been a tenant of the property or have been involved in the same line of business as the current or		

**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
CLIENT-FURNISHED INFORMATION CHECKLIST**

Property: 4-acre Hoodland Community Park Property, 25400 E Salmon River Road, Welches, Oregon

HAI Project No. 8270

			former occupant(s) you may have specialized knowledge of the chemicals and/or processes used at the property.		
--	--	--	---	--	--

Existence of Document/ Information?				Provided to HAI?	
Yes	No	Un-known		Yes	No
X			17. Are you aware of commonly known or reasonably ascertainable information about the property (40 CFR 312.30) that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example as the User, do you know (a) The historical uses of the property? _____ (b) Of specific chemicals that are present or once were present at the property? _____ (c) Of spills or other chemical releases that have taken place at the property? _____ (d) Of any environmental cleanups that have taken place at the property? _____		
	X		18. As the User of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?		

19. What type of Property Transaction is this ESA being performed for?

- A. \_\_\_\_\_ Sale of Property
- B. \_\_\_\_\_ Purchase of Property
- C. \_\_\_\_\_ Exchange of property
- D. X Other (Specify) *Partnerships w/ Women's Club to construct new community center.*

20. Statement of Purpose for this ESA:

- A. \_\_\_\_\_ Due Diligence purposes in support of Innocent Landowner Defense under CERCLA
- B. \_\_\_\_\_ Due Diligence purposes in support of Bona Fide Prospective Purchaser defense under CERCLA
- C. \_\_\_\_\_ Due Diligence purposes in support of or Contiguous Owner Defense under CERCLA

NOTE: to qualify for any one of the CERCLA defenses (A, B or C), a title company or title professional must be engaged to conduct the required search for environmental cleanup liens and AULs.

- D. X Business Risk
- E. X Other (Specify) *Assess building for hazardous materials, assurance that site is clean for grants/ fund raising.*

21. What is the complete and correct address and/or legal description of this property, i.e., Map and Tax Lot(s)?

25400 E Salmon River Road, Welches, OR 97067

22. Are there any additional required scopes of service that apply to this ESA, i.e., additional lender requirements beyond ASTM Practice E 1527-05, such as those required by a buyer, seller, etc.?

Hazardous Building Materials Survey

23. Are there any additional parties, beyond the Client who will rely on this ESA, such as a lender, etc.?

Hoodland Women's Club, Inc.

24. Please provide the name and contact information (telephone, email, fax, etc.) for the Site Contact:

Jeroen Kok, Clackamas County Parks

25. Are there any special Terms and Conditions which must be agreed upon by the Environmental Professional (E.P.)?

Building is occupied, will need to notify occupants of visits + investigations - 24 hr. minimum.

I have reviewed the above list and where noted have or will provide copies of existing documents and information.

Signature

Date

**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
CLIENT-FURNISHED INFORMATION CHECKLIST**

Property: 4-acre Hoodland Community Park Property, 25400 E Salmon River Road, Welches, Oregon

HAI Project No. 8270

*Teroen Kok*  
Printed Name

*Clackamas County*  
Company Name/Firm (if applicable)

## **Appendix C**

### Preliminary Title Report



Lawyers Title  
Title Specialist Unit  
1120 NW Couch St., Suite 500  
Portland, OR 97209  
503-553-5677 FAX 877-805-2512

Attn: Keith Jones  
HHPR  
205 SE Spokane  
Ste 200  
Portland, OR 97202

Date Prepared: February 29, 2012

**TITLE PLANT RECORDS REPORT**  
**Report of Requested Information from Title Plant Records**  
**Lawyers Title**  
**herein the Company,**

**Customer Ref :**

**Order No.** : 14F0019134  
**Effective Date** : February 17, 2012  
**Fee:** : \$300.00

The information contained in this report is furnished by Lawyers Title (the "Company") as an information service based on the records and indices maintained by the Company for the county identified below. THIS IS NOT TITLE INSURANCE, NOR IS IT A PRELIMINARY TITLE REPORT OR A COMMITMENT FOR TITLE INSURANCE. No examination has been made of the Company's records, other than as specifically set forth herein. Liability for any loss arising from errors and/or omissions is limited to the lesser of the fee paid or the actual loss to the customer, and the Company will have no greater liability by reason of this report.

**County and Time Period**

This report is based on a search of the Company's title plant records for Clackamas, Oregon, for the time period through February 17, 2012 (with the through date being the "Effective Date").

**Ownership and Property Description**

(The Company reports that, as of the Effective date and with respect to the following described property ("the Property")):

**Owner.** The apparent vested owner of the Property is:

Clackamas County, State of Oregon

**Premises.** The Property is:

**(a) Street Address**

25400 E Salmon River Rd  
Welches, OR 97067

(b) **Legal Description**

Lots 1, 2, 3 and 4, Block 9, and Lots 11, 12, 13 and 14, Block 10, CEDARFIR PARK, Clackamas County, Oregon. TOGETHER WITH those portions of vacated Sylvan Way, Hemlock Drive and Alder Drive that inured thereto by Order No. 14990 and recorded June 6, 1967 in Book 691, Page 304.

EXCEPTING THEREFROM that portion lying in E. Salmon River Road.

**Encumbrances**

**Encumbrances.** For the above stated time period, the Company reports that, as of the Effective Date, the Property appears subject to the following encumbrances, not necessarily in order of priority:

1. CURRENT TAX INFORMATION

See below

2. MUNICIPAL LIEN(S), IF ANY

☐ Not Applicable

☒ Info Not Provided

3. The subject property is under public, charitable, fraternal, or religious organization ownership and is exempt from ad valorem taxation. Any change in ownership prior to delivery of the assessment roll may result in tax liability.

Tax Account No. : 00968956 and 00968965

4. Any irregularities, reservations, easements or other matters in the proceedings occasioning the abandonment or vacation of the street/road shown below:

Name : Hemlock Drive, Alder Drive and Sylvan Way

Recording Date : June 5, 0067

Recording No. : B 691; P 304

**General Liens against Named Party**

For the above stated county and time period, and as of the Effective Date, with respect to the following named party or parties:

Clackamas County

The Company reports that the following general involuntary monetary liens, such as judgments, federal tax liens, state warrants or orders and county tax warrants, may be unsatisfied: NONE

**End of Reported Information**

There will be additional charges for additional information or copies. For questions or additional requests, contact:

Title Officer: Kim Wylie: 503-553-5677 222-3019



## **Appendix D**

Oregon Department of Environmental Quality  
Environmental Cleanup Site Information System Site Summary Reports

# Oregon DEQ Facility Profiler 2.0

[\[Help\]](#) [\[Close Window\]](#)

## Matching Sites

[View Results on Map](#)[Home/Search Again](#)[Edit Search](#)

The following DEQ facilities and sites matched your search.

Select a site below for detailed information.

Page 1 of 1 Total Matches (max 5000): 1

[Print Results](#)

	<u>Distance (Mi)</u>	<u>Facility/Site Information</u>	DEQ Programs	Details
#1	1.00	<a href="#">THE RESORT AT THE MOUNTAIN</a> 68010 E FAIRWAY AVE WELCHES , 97067	Cleanup, Leaking UST	<a href="#">Go &gt;&gt;</a>

[Download Data File](#)

## Selected location information.

Search Radius:	1 Mi
Latitude, Longitude:	45.3431, -121.9456
OR House District :	52
Congressional District :	3
Township Range Section :	3.00S 7.00E 4
6th Field Hucs Code :	170800010401
Zip Code Area :	97067
County :	Clackamas
EPA Ecoregion :	4
Forest Type :	Low Elevation Westside Coniferous Forests
Vegetation Type :	Douglas Fir-Western Hemlock-Grand Fir Forest
Watershed :	Lower Columbia/Sandy
OR Senate District :	26

[\[DEQ's Privacy Notice\]](#) [\[Contact DEQ\]](#) [\[Application Feedback\]](#)

**Disclaimer:** This product is for informational purposes, and may not be suitable for legal, engineering or surveying purposes. This information or data is provided with the understanding that conclusions drawn from such information are the responsibility of the user.



## Oregon Department of Environmental Quality

[Projects and Programs](#) [Publications and Forms](#) [Laws and Regulations](#) [Public Notices](#) [Permits and Licenses](#)  
Databases/GIS

[DEQ Home](#) | [Divisions](#) | [Regions](#) | [Commission](#)



### Land Quality Environmental Cleanup

[DEQ Home](#) > [Land Quality](#) > [Environmental Cleanup](#) > [ECSI](#) > [Site Summary Full Report](#)

## Environmental Cleanup Site Information (ECSI) Database Site Summary Full Report - Details for Site ID 5087, Resort at the Mountain

This report shows data entered as of August 10, 2012 at 12:35:32 PM

This report contains site details, organized into the following sections: 1) [Site Photos](#) (appears only if the site has photos); 2) [General Site Information](#); 3) [Site Characteristics](#); 4) [Substance Contamination Information](#); 5) [Investigative, Remedial and Administrative Actions](#); and 6) [Site Environmental Controls](#) (i.e., institutional or engineering controls; appears only if DEQ has applied one or more such controls to the site). A key to certain acronyms and terms used in the report appears at the bottom of the page.

Go to [DEQ's Facility Profiler](#) to see a site map as well as information on what other DEQ programs may be active at this site.

### General Site Information

Site ID:	Site Name: Resort at the Mountain	CERCLIS No:
5087		
Address:	68010 East Fairway Ave Welches 97067	
	County: Clackamas	Region: Northwest
Other location information:	The site is located 68010 East Fairway Avenue in Welches, Clackamas County, Oregon, in Section 5 of Township 3 South (T3S), Range 7 East (R17E). The property is used as a golf course and includes a shop, a restaurant, and a resort. The 1.99 acre lot is zoned commercial land. Land use in the project vicinity is mixed, rural residential and commercial (PortlandMaps, 2007).	
Investigation Status:	No further action required	
Property:	Brownfield Site: No      NPL Site: No	Orphan Site: No      Study Area: No
	Twtnshp/Range/Sect: 3S , 7E , 5	Tax Lots:
	Latitude: 45.3379 deg.      Longitude: -121.9648 deg.	Site Size: 1.99 acre
Other Site Names:		

### Site Characteristics

General Site  
Description:

**Site History:  
Contamination  
Information:**

After removing the UST and 13 tons of PCS, DTTS collected additional samples from the area near the former east end of the UST. Concentrations of DRO's were detected in soil below the kitchen floor, but decline by several orders of magnitude over a distance of 3 feet below the former UST (22,300 ppm at 112 inches; 242 ppm at 124 inches and 86 ppm at 148 inches). After UST decommissioning and soil removal, DTTS collected a total of 5 soil samples just below the floor of the basement. The highest detection of DROs present was at a concentration of 1,020 ppm.

**Manner and Time of  
Release:**

Petroleum leaked from a previously unknown underground storage tank (UST) that was located beneath the kitchen floor of the restaurant. The western edge of this building is located at the edge of a canyon wall. The former UST was located approximately 88 feet east of and 27 feet above an unnamed stream.

**Hazardous  
Substances/Waste  
Types:**

Diesel

**Pathways:****Environmental/Health  
Threats:****Status of  
Investigative or  
Remedial Action:**

(10/9/08 JMW/ICP) The Resort was referred to Environmental Cleanup Program from DEQ's Heating Oil Tank Program in September 2007, for a surface release of petroleum hydrocarbons reported to the Department in April 2007. Resort at the Mountain entered DEQ's Voluntary Cleanup Program (VCP), Independent Cleanup Pathway (ICP) in December 2007 and submitted documentation to support a NFA determination.

Based upon the information presented in the final Risk-Based Corrective Action Plan (Report), DEQ has concluded that the Resort at the Mountain site (the Resort) does not present a significant threat to human health or the environment for current and future land use.

**Data Sources:****Substance Contamination Information**

<b>Substance</b>	<b>Media Contaminated</b>	<b>Concentration Level</b>	<b>Date Recorded</b>
DIESEL - FUEL OIL	Soil	22,300 ppm highest concentration in soil below kitchen floor	4/18/2007 4:15:18 PM
DIESEL - FUEL OIL	Soil	1,020 ppm highest concentration below the floor of the basement.	4/18/2007 4:15:18 PM

**Investigative, Remedial and Administrative Actions**

<b>Action</b>	<b>Start Date</b>	<b>Compl. Date</b>	<b>Resp. Staff</b>	<b>Lead Pgm</b>
SITE EVALUATION	06/21/2007			HOT
BASIC PRELIMINARY ASSESSEMENT	09/27/2007	09/27/2007	Janelle Waggy	ICP
REMOVAL	09/27/2007	09/27/2007	Janelle Waggy	ICP
Independent Cleanup Program	12/01/2007	02/01/2009	Janelle Waggy	ICP
Site added to database	10/09/2008	10/09/2008	Janelle	

Excluded from confirmed release definition	02/01/2009 02/01/2009	Waggy Janelle Waggy	ICP
NO FURTHER STATE ACTION REQUIRED (Primary Action)	02/01/2009	Bruce Gilles	ICP

### Key to Certain Acronyms and Terms in this Report:

**CERCLIS No.:** The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

**Region:** DEQ divides the state into three regions, Eastern, Northwest, and Western; the regional office shown is responsible for site investigation/cleanup.

**NPL Site:** Is this site on EPA's National Priority List (i.e., a federal Superfund site)? (Y/N).

**Orphan Site:** Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program uses state funds to clean up high-priority sites where owners and operators responsible for the contamination are absent, or are unable or unwilling to use their own resources for cleanup.

**Study Area:** Is this site a Study Area? (Y/N). Study Areas are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem. ECSI assigns unique Site ID numbers to both individual sites and to Study Areas.

**Pathways:** A description of human or environmental resources that site contamination could affect.

**Lead Pgm:** This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS or SAP = Site Assessment; VCS or VCP = Voluntary Cleanup; ICP = Independent Cleanup; SRS or SRP = Site Response (enforcement cleanup); ORP = Orphan Program.

You may be able to obtain more information about this site by contacting Bruce Gilles at the [Northwest regional office](#) or via email at [gilles.bruce@deq.state.or.us](mailto:gilles.bruce@deq.state.or.us). If this does not work, you may contact Gil Wistar at (503) 229-5512, or via email at [wistar.gil@deq.state.or.us](mailto:wistar.gil@deq.state.or.us) or contact the [Northwest regional office](#).

[\[print version\]](#)

For more information about **ECSI** call Gil Wistar at 503-229-5512 or [email](#).

For more information about **DEQ's Land Quality programs**, visit the [DEQ contact page](#).

#### Oregon Department of Environmental Quality

Headquarters: 811 SW Sixth Ave., Portland, OR 97204-1390

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## **Appendix E**

Oregon Department of Environmental Quality  
Leaking Underground Storage Tank Incident Reports

## Leaking Underground Storage Tanks ( LUST ) Site Information

[Home](#) > [Programs](#) > [LUST Program Information](#) > [LUST Database](#)

(Use "Back" button on browser to return to previous search results)

## Leaking Underground Storage Tank (LUST) Site Information

Log Nbr: **03-92-0174**

## Basic Incident Information

Status: **CLOSED**Site Name: **THE RESORT AT THE MOUNTAIN**Received Date: **6/20/1992**Address: **68010 E FAIRWAY AVE**UST Facility Id: **5706**City: **WELCHES**Zip Code: **97067**County: **CLACKAMAS**Site Type: **Soil Matrix Cleanup**File Status: **No Further Action**

Heating Oil Tank (HOT):

Regulated Tank: **YES**

## Assessment Information

03-92-0174

Cause: **UNKNOWN**Source: **Not Reported**Discovery: **DECOMMISSIONING**Media EffectedContaminants Released

&gt;Soil

&gt;OtherPetro

Free Product Removed:

Free Vapor Removed:

CAP Requested:

Delineate Groundwater:

Groundwater Delineated:

CAP Submitted:

Delineate Soil:

Soil Delineated:

CAP Approved:

Compliance Monitoring:

## Management Information

03-92-0174

Release Stopped Date: **6/24/1992**Cleanup Start Date: **6/24/1992**Cleanup End Date: **8/18/1997**

## Work Reported Information

03-92-0174

Work ReportedReported ByReported Date

Initial Response

Data Conversion 2006

1/1/1901

**This information may not reflect current status of site.****For further detail, refer to the [DEQ Regional Office](#) file.**

This page last updated: January 9, 2006

DEQ Online is the official web site for the Oregon Department of Environmental Quality.



## **Appendix F**

*Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection,*  
G2 Consultants, Inc., August 27, 2012



consultants

# **Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection**

Purpose: Pre-Demolition

Client:

**Hahn and Associates Inc.  
434 NW 6th Avenue, Suite 203  
Portland, Oregon 97209**

Project:

**Commercial Structure  
25400 East Salmon River Road  
Welches, Oregon 97067**

G2 Project #: 1011-62

August 27, 2012

Prepared By:

G2 Consultants, Inc.  
16869 SW 65th Avenue, #15  
Lake Oswego, Oregon 97035  
[www.g2ci.com](http://www.g2ci.com)  
CCB #188682

# Table of Contents

- Introduction
- Scope of Services
- Inspection Findings
- Conclusions and Recommended Response Actions
- Methodology
- Limitations

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- Appendix A: Asbestos Material Sample Data Table
- Appendix B: XRF Readings Table
- Appendix C: Laboratory Analysis Results & Chain of Custody
- Appendix D: XRF Testing Protocols
- Appendix E: Performance Characteristic Sheets (PCS)
- Appendix F: Certifications & Accreditations

## **Introduction**

---

G2 Consultants Inc. (G2) was retained by Hahn and Associates Inc. to conduct a building inspection for asbestos-containing materials (ACM), limited lead-containing-paint (LCP), Universal Waste, mercury and polychlorinated biphenyls (PCBs). The inspection was conducted at the commercial structure located at 25400 East Salmon River Road in Welches, Oregon. The scope of work included the main residence.

Dan Rouse (AHERA Asbestos Building Inspector Certificate #137284) and Noal Kraft (AHERA Asbestos Building Inspector Certificate #137282, (OR CCB Lead Inspector #9151842, Oregon DHS Lead Inspector #1842) ) of G2 Consultants conducted the inspection on August 14, 2012.

Results of the inspection indicate that asbestos is present in some of the identified suspected materials.

Results of the inspection has determined that lead-based paint (LBP) was not identified on the building that is equal to or above the concentration of 1.0 mg/cm<sup>2</sup>. LCP below the 1.0 mg/cm<sup>2</sup> concentration was identified in several components.

Results of the inspection indicate that Universal Waste and suspect PCBs were present at the site.

Details of the inspection, locations of materials, quantities, etc. can be found in the following sections.

## **Scope of Services**

---

In anticipation of an upcoming demolition, G2 Consultants Inc. was contracted by Hahn and Associates, Inc. to perform a demo-level comprehensive survey for accessible asbestos-containing materials. A limited inspection for LCP of the predominant painted surfaces was conducted in order to provide a general indication of the distribution of lead for demolition purposes. G2 also conducted a visual inspection for PCBs and items suspected of containing mercury, including fluorescent tubes, thermostats and switches, as well as Universal Waste.

### **Asbestos**

The scope of services was to perform a visual and tactile inspection, and identify the presence, quantity and location of the accessible ACM in the building.

All suspect accessible materials were sampled. The structure was vacant at the time of the inspection. Destructive sampling techniques were utilized in order to gain access to areas, such as hidden layers under finished floors, etc.

### **Lead**

Readings of the lead content of painted surfaces throughout the interior and exterior of the building were collected using an X-Ray Fluorescence (XRF) device. The readings were taken on the predominant interior and exterior colors of paint, to give a general understanding of the distribution of lead in these surfaces.

### **Universal Waste, Mercury and PCBs**

A visual inspection for Universal Waste, mercury and PCBs was conducted. Items categorized as Universal Waste, and items known to be suspect for mercury and PCBs were identified, including: florescent bulbs, ballasts, smoke detectors, and mercury switches. A representative number of fluorescent fixtures were disassembled to inspect the ballasts. Ballasts without the markings "No PCBs" are suspected of containing PCBs. No other equipment was disassembled in an attempt to identify PCBs, mercury or Universal Waste.

### **Inspection Findings**

---

Results of the inspection indicate that asbestos is present in the following materials:

- Roof Felt
- Mastic under Beige Specked 12" x 12" Floor Tile, Black
- Floor Tile, 12" x 12" Off White w/ Brown Streaks
- Sink Undercoating, Black
- Ceiling Texture

Details of the asbestos sampling, including locations and quantities, can be found in Appendix A.

### **Lead**

None of components tested indicated the presence of lead at or above the Environmental Protection Agency Renovation, Repair and Painting Rule (EPA RRP) and the U.S. Department of the Housing and Urban Development (HUD) Guidelines action level. The EPA and HUD definition of "positive" LBP is lead equal to or greater than 1.0 milligrams per cubic centimeter (mg/cm<sup>2</sup>). Additional details including reading number, floor, substrate, side, color and lead content details are located in the XRF Readings Table found in Appendix B.

### **Universal Waste, Mercury and PCBs**

The following were observed in the house and garage:

- (40) 4 lf. Fluorescent Tubes
- (18) 8 lf. Fluorescent Tubes
- (32) Fluorescent Ballasts
- (60) Compact Fluorescent Bulbs
- (11) Smoke Detectors
- (5) Exit Lights

## **Conclusions and Recommended Response Actions**

---

### **Asbestos**

Asbestos was identified at the subject property, and must be removed prior to demolition.

Current State and Federal standards define an ACM as any material containing asbestos in excess of one percent by weight. The National Emissions Standards for Hazardous Air Pollutants (NESHAPs) requires that all Regulated Asbestos-Containing Materials (RACMs) be removed from a building prior to demolition. These materials must also be removed by a licensed asbestos abatement contractor, or other properly trained individual, if they are to be disturbed by renovation activities.

Any ACM likely to be disturbed during renovation or demolition activities, other than by incidental contact with no generation of debris related to other construction activities, should be abated by a licensed asbestos-abatement contractor. Any activities conducted where the primary object of the activity is the removal of ACM must be conducted by a licensed asbestos abatement contractor or other properly trained individuals as described below.

### **Lead**

G2 has determined that LBP is not present at the property equal to or above the concentration of 1.0 mg/cm<sup>2</sup>. LCP below the 1.0 mg/cm<sup>2</sup> concentration was identified in several components.

Buildings that are scheduled to be demolished are exempt from both the EPA RRP rules and HUD regulations, as long as they are not expected to be occupied prior to demolition. It is recommended that lead safe work practices are followed during the course of demolition activities, in order to reduce the potential for contamination and/or exposure. Oregon OSHA also has requirements for employees working with or around LCP.

LBP is a common cause of lead poisoning in children and represents a threat to the health and welfare of the occupants. Where economically feasible, it is our recommendation that all components that tested positive, and any similar untested components, be considered lead-laden, and lead-safe procedures be incorporated into any overall renovation and maintenance strategy. Safe methods include: containing any work area to prevent dispersal of lead dust and chips, wet sanding and scraping at a minimum; collecting all paint chips and debris and, properly disposing of them.

A risk assessment has not been conducted to evaluate the magnitude of lead hazards present in the building and surrounding soil as part of this scope of work.

### **Universal Waste, Mercury and PCBs**

Items categorized as Universal Waste, and items known to be suspect for PCBs were identified and quantified, including: fluorescent bulbs, ballasts, smoke detectors and exit lights that may contain backup batteries. These materials must be removed and disposed of according to the applicable regulations prior to demolition.

## **Methodology**

---

### **Asbestos**

The field work was conducted using industry best practices. Samples of representative accessible suspect materials within the scope of work were collected during the course of the inspection. Materials were sampled according to homogeneous groupings using AHERA sampling guidelines. Samples were collected in such a manner as to minimize release of the material into the surroundings. Sample number, material description, sample location and material location were recorded at the time of sampling. Each sample was placed in a sample container labeled with a unique sample number and submitted to Forensic Analytical Laboratories Inc., a NVLAP-accredited laboratory, for analysis under chain of custody documentation. Samples were analyzed in accordance with EPA Method 600/R-93-116, using PLM with dispersion staining and using visual area estimation to determine percent asbestos content. This method allows for the identification of the primary types of asbestos used in building materials. The lower limit of detection for this method is one percent. Samples containing less than one percent asbestos by PLM with visual area estimation are reported as "Trace".

### **Lead**

All testing of suspect LCP was conducted utilizing a Niton X-ray fluorescence (XRF) LBP analyzer, Model XLp-300A bearing Serial #25643. The source type, cadmium-109 ( $\text{Cd}^{109}$ ), was sourced on September 1, 2010. G2 followed the Performance Characteristics Sheets (PCS) for the specific X-Ray fluorescence instrument (XRF) used during the LBP evaluation of the property. The XRF PCS is presented in Appendix E. The method employed for testing painted surfaces was with an X-ray fluorescence (XRF) analyzer. The instrument was calibrated to the manufacturer's specifications and was also periodically verified against the National Institute of Standards and Testing (NIST) Standard Reference Material (SRM) 2579 lead film ( $1.0 \text{ mg/cm}^2$ ).

The calibration of the instrument is conducted in accordance with the Performance Characteristic Sheet (PCS) for this instrument. These instruments are calibrated using a calibration standard block of known lead content. If for any reason the instruments do not maintain a consistent calibration reading within the manufacturer's standards for performance on the calibration block supplied by the manufacturer, manufacturer's recommendations are used to bring the instrument into calibration. If the instrument cannot be brought back into calibration, it is taken off the site and sent back to the manufacturer for repair and/or re-calibration.

Wall "A" in each room is the wall where the front entrance door opening is located (or aligned with street). Going clockwise and facing Wall "A", Wall "B" will always be to your right, Wall "C" directly to the rear and Wall "D" to the left. Doors, windows and closets may be designated as left, center or right depending on their location on the wall. Doors, windows, and closets are designated as left, center or right depending on their location on the wall.

Noal Kraft of G2 performed the limited inspection. Mr. Kraft has completed an EPA sponsored curriculum in Lead Inspector and Risk Assessment training, attended the manufacturer's radiation safety course for operation and handling of the instrument, and is the radiation officer of the program for G2. Mr. Kraft is currently State certified and licensed for lead inspections and assessments by Oregon Department of Health Services (DHS) (Certification No. 1842, expiration 6/30/13) and the Oregon CCB (License No. 9151842, expiration 7/12/13). G2 is certified by the



Oregon DHS to conduct LBP activities (Certification No. 1844, expiration 6/30/2013) and the Oregon CCB (License No. LBPI188682, expiration 7/12/13).

All individuals who performed this XRF testing and visual assessment have EPA and/or state licenses as Lead Inspector/Risk Assessors and have been trained in the use, calibration and maintenance of the XRF, along with the principles of radiation safety, in accordance with the work practices of [40 CFR 745, section 227](#), for states and Native American tribal groups.

### **Universal Waste, Mercury and PCBs**

As part of this survey, a visual inspection for Universal Waste, mercury and PCBs was conducted. Items categorized as Universal Waste, and items known to be suspect for PCBs were quantified, including: florescent bulbs, ballasts, smoke detectors, and emergency batteries. A representative number of fluorescent fixtures were disassembled to inspect the ballasts. Ballasts without the markings "No PCBs" were assumed to contain PCBs. No other equipment was disassembled in an attempt to identify mercury, PCBs or Universal Waste.

### **Limitations**

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G2 has performed this inspection in accordance with best industry methods and practices of the profession, and consistent with the level of care and skill ordinarily exercised by reputable environmental consultants under similar circumstances and conditions. The observations contained within this assessment are based upon site conditions readily accessible at the time of the site inspection. No other representation, guarantee or warranty, express or implied, is included or intended in this hazardous materials survey report.

If any untested suspect ACM are encountered during demolition activities, they should be assumed to be ACM and not disturbed, unless sampling and analysis of the materials proves otherwise.

The LBP portion of the inspection was planned, developed, and implemented based on G2's professional experience in performing LBP inspections. G2 performed a limited inspection lead for lead-containing paint of the predominant painted surfaces in order to provide a general indication of the distribution of lead for demolition purposes. G2 utilized state-of-the-art practices and techniques in accordance with regulatory standards while performing this inspection. A copy of personnel certifications and equipment licenses have been provided in Appendix F. G2's evaluation of the painted surfaces identified during this inspection is based on conditions observed at the time of the inspection. G2 cannot be responsible for changing conditions that may alter the relative exposure risk for future changes in accepted methodology.

This report consists of a visual survey, and XRF analysis of the readily accessible areas of this building and tested components. The presence or absence of LBP or LBP hazards applies only to the tested or assessed surfaces on the date(s) of the field visit and it should be understood that conditions may change due to deterioration or maintenance. The results and material conditions noted within this report were accurate at the time of the evaluation and in no way reflect the conditions at the property after the date of the evaluation.

Hahn and Associates Inc.  
Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection  
Commercial Structure - 25400 E Salmon River Road, Welches, OR  
August 27, 2012

As with all environmental investigations, this inspection is limited to the defined scope and does not purport to set forth all hazards, nor indicate that other hazards do not exist.

Respectfully Submitted and Reviewed By:

A handwritten signature in blue ink, appearing to read 'Noal Kraft', on a light blue rectangular background.

Noal Kraft, CIEC, CMC  
Principal  
G2 Consultants, Inc.

A handwritten signature in blue ink, appearing to read 'Dan Rouse', on a light blue rectangular background.

Dan Rouse, CIEC, CMC  
Principal  
G2 Consultants, Inc.

# Appendix A:

## Asbestos Material Sample Data Table

Hahn and Associates Inc.  
 Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection  
 Asbestos Material Sample Data Table  
 Commercial Structure - 25400 East Salmon River Road, Welches, OR  
 August 27, 2012

Sample #	Material Description	Sample Location	Material Extent	Asbestos % and Type	Approximate Material Quantity
1011-62-1	Roof Felt	Roof - under Cedar Shingles, Rear	Roof - under Cedar Shingles	60 - Chrysotile	9,280 sq. ft.
1011-62-2	Roof Felt	Roof - under Cedar Shingles, Front	Roof - under Cedar Shingles	60 - Chrysotile	9,280 sq. ft.
1011-62-3	Foil-Backed Pipe Insulation	Exterior - Rear	-	ND	-
1011-62-4	Building Felt	Exterior - behind Cedar Shingles, North	-	ND	-
1011-62-5	Building Felt	Exterior - behind Cedar Shingles, North	-	ND	-
1011-62-6	Floor Tile, 12" x 12" Beige Specked, and Black Mastic	Entry	Entry, 1st Floor Hallways, Large Day Care Room	ND	2,790 sq. ft.
1011-62-7	Plaster	Exterior - Overhangs, Front	-	ND	-
1011-62-8	Plaster	Exterior - Overhangs, Front	-	ND	-
1011-62-9	Plaster	Exterior - Overhangs, Rear	-	ND	-
1011-62-10	Carpet Adhesive, Tan	Library	-	ND	-
1011-62-11	Sheet Vinyl, Off White w/ Brown and Gold Specks	Food Storage	-	ND	-
1011-62-12	Sheet Vinyl, Grey and Off White Specked	Janitor's Closet	-	ND	-
1011-62-13	Floor Tile, 12" x 12" Off White w/ Brown Streaks, and Tan Adhesive	2nd Floor	-	ND	2,520 sq. ft.

ND - No Asbestos Detected

Materials in red contain greater than 1% asbestos or are presumed to be asbestos-containing.

Hahn and Associates Inc.  
 Asbestos, Limited Lead-Containing Paint, Universal Waste, Mercury & PCB Inspection  
 Asbestos Material Sample Data Table  
 Commercial Structure - 25400 East Salmon River Road, Welches, OR  
 August 27, 2012

Sample #	Material Description	Sample Location	Material Extent	Asbestos % and Type	Approximate Material Quantity
1011-62-14	Sink Undercoating, Black	2nd Floor	2nd Floor	7 - Chrysotile	1 Sink
1011-62-15	Ceiling Texture	Hallway	Throughout Middle and North End of Main Floor	2 - Chrysotile	1,300 sq. ft.
1011-62-16	Ceiling Texture	Food Storage	Throughout Middle and North End of Main Floor	2 - Chrysotile	1,300 sq. ft.
1011-62-17	Ceiling Texture	Food Storage	Throughout Middle and North End of Main Floor	2 - Chrysotile	1,300 sq. ft.
1011-62-18	Drywall & Joint Compound	Entry	-	ND	-
1011-62-19	Drywall & Joint Compound	Men's Restroom	-	ND	-
1011-62-20	Drywall & Joint Compound	Hallway	-	ND	-

ND - No Asbestos Detected  
 Materials in red contain greater than 1% asbestos or are presumed to be asbestos-containing.

# Appendix B:

## XRF Readings Table

READING NO.	SITE/ADDRESS	FLOOR	ROOM TYPE	COMPONENT	SUBSTRATE	SIDE	COLOR	RESULTS	CONDITION	PbC	UNITS	ACTION LEVEL	PbC Error
2158										2.19	cps		0
2159	Calibration							Positive		1	mg / cm ^2	1	0.1
2160	Calibration							Positive		1	mg / cm ^2	1	0.1
2161	Calibration							Positive		1	mg / cm ^2	1	0.1
2162	Calibration							Positive		1	mg / cm ^2	1	0.1
2163	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door S.	Wood	W.	Green	Negative	INTACT	0.13	mg / cm ^2	1	0.11
2164	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door	Wood	W., S. End	Green	Negative	INTACT	0.18	mg / cm ^2	1	0.16
2165	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door Trim	Wood	W., S. End	Green	Negative	INTACT	0.14	mg / cm ^2	1	0.17
2166	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Log Supports	Wood	W., S. End	Green	Negative	Not Intact- FAIR	0	mg / cm ^2	1	0.02
2167	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door	Wood	W., Center	Green	Negative	Not Intact- FAIR	0.26	mg / cm ^2	1	0.28
2168	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door Trim	Wood	W., Center	Green	Negative	Not Intact- FAIR	0.05	mg / cm ^2	1	0.07
2169	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door	Metal	W., Center	Blue	Negative	INTACT	0.01	mg / cm ^2	1	0.04
2170	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door Trim	Wood	W., Center	Green	Negative	INTACT	0	mg / cm ^2	1	0.02
2171	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Win. Sill	Wood	W., Center	Green	Negative	Not Intact- FAIR	0	mg / cm ^2	1	0.02
2172	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door Casing	Wood	W., Center	Green	Negative	INTACT	0	mg / cm ^2	1	0.02
2173	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Log Support	Wood	W., Center	Green	Negative	Not Intact- FAIR	0.3	mg / cm ^2	1	0.33
2174	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door	Metal	W., N. End	Yellow	Negative	INTACT	0	mg / cm ^2	1	0.02
2175	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door Trim	Wood	W., N. End	Yellow	Negative	INTACT	0.01	mg / cm ^2	1	0.03
2176	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door	Wood	N.	Red	Negative	INTACT	0.11	mg / cm ^2	1	0.15
2177	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door Trim	Wood	N.	Black	Negative	INTACT	0.06	mg / cm ^2	1	0.09
2178	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door	Wood	N.	Green	Negative	INTACT	0.08	mg / cm ^2	1	0.12
2179	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Door Trim	Wood	N.	Green	Negative	INTACT	0.11	mg / cm ^2	1	0.18
2180	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Log Support	Wood	N.	Green	Negative	INTACT	0.4	mg / cm ^2	1	0.4
2181	Null Reading												
2182	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Ceiling	Drywall	Ceiling	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2183	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Door	Metal	A	Blue	Negative	INTACT	0	mg / cm ^2	1	0.03
2184	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Door Trim	Metal	A	Blue	Negative	INTACT	0	mg / cm ^2	1	0.02
2185	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Win. Casing	Wood	A	Green	Negative	INTACT	0	mg / cm ^2	1	0.02
2186	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Win. Sill	Wood	A	Green	Negative	INTACT	0	mg / cm ^2	1	0.02
2187	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Door	Wood	C	Green	Negative	INTACT	0.07	mg / cm ^2	1	0.1
2188	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Door Trim	Wood	C	Green	Negative	INTACT	0.06	mg / cm ^2	1	0.08
2189	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Entry, W. Side	Service Window	Wood	B	Green	Negative	INTACT	0	mg / cm ^2	1	0.02
2190	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Library	Door	Metal	A	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2191	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Library	Door Casing	Metal	A	White	Negative	INTACT	0.01	mg / cm ^2	1	0.03
2192	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Senior Center	Door	Metal	A	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2193	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Senior Center	Door Casing	Metal	A	White	Negative	INTACT	0.01	mg / cm ^2	1	0.04
2194	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	N. Entry	Door	Wood	B	Brown	Negative	INTACT	0.4	mg / cm ^2	1	0.4
2195	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	N. Entry	Door Casing	Wood	B	Brown	Negative	INTACT	0.02	mg / cm ^2	1	0.05
2196	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Baby Rm.	Door	Wood	B	Green	Negative	INTACT	0.04	mg / cm ^2	1	0.07
2197	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Baby Rm.	Door Casing	Wood	B	Green	Negative	INTACT	0.04	mg / cm ^2	1	0.08
2198	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Baby Rm.	Ceiling	Drywall	Ceiling	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2199	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Baby Rm.	Pipes	Metal	Ceiling	White	Negative	INTACT	0.01	mg / cm ^2	1	0.03
2200	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Tool & Service Rm.	Wall	Wood	A	Green	Negative	INTACT	0.5	mg / cm ^2	1	0.3
2201	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Tool & Service Rm.	Door	Wood	C	Green	Negative	INTACT	0.06	mg / cm ^2	1	0.1
2202	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Tool & Service Rm.	Door Casing	Wood	C	Green	Negative	INTACT	0.05	mg / cm ^2	1	0.11
2203	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Tool & Service Rm.	Wall	Wood	C	Grey	Negative	INTACT	0.24	mg / cm ^2	1	0.21
2204	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Tool & Service Rm.	Stair Tread	Wood	D	Grey	Negative	INTACT	0.5	mg / cm ^2	1	0.3
2205	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Men's Restroom	Wall	Plaster	B	White	Negative	INTACT	0.01	mg / cm ^2	1	0.04
2206	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Men's Restroom	Wall	Plaster	B	White	Negative	INTACT	0.01	mg / cm ^2	1	0.02
2207	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Men's Restroom	Ceiling	Plaster	Ceiling	White	Negative	INTACT	0.02	mg / cm ^2	1	0.05
2208	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Men's Restroom	Baseboard	Wood	A	White	Negative	INTACT	0	mg / cm ^2	1	0.03
2209	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Men's Restroom	Dividers	Metal	D	Grey	Negative	INTACT	0	mg / cm ^2	1	0.02
2210	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Men's Restroom	Door Casing	Wood	C	White	Negative	INTACT	0.14	mg / cm ^2	1	0.26
2211	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Men's Restroom	Win. Sill	Wood	C	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2212	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Women's Restroom	Wall	Plaster	B	White	Negative	INTACT	0.03	mg / cm ^2	1	0.11
2213	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Women's Restroom	Ceiling	Plaster	Ceiling	White	Negative	INTACT	0	mg / cm ^2	1	0.02



READING NO.	SITE/ADDRESS	FLOOR	ROOM TYPE	COMPONENT	SUBSTRATE	SIDE	COLOR	RESULTS	CONDITION	PbC	UNITS	ACTION LEVEL	PbC Error
2214	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Women's Restroom	Baseboard	Wood	B	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2215	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Women's Restroom	Dividers	Metal	A	Grey	Negative	INTACT	0	mg / cm ^2	1	0.02
2216	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Women's Restroom	Win. Casing	Wood	C	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2217	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Women's Restroom	Win. Sill	Wood	C	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2218	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Sink Closet	Wall	Plaster	C	Beige	Negative	INTACT	0	mg / cm ^2	1	0.02
2219	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Sink Closet	Win. Casing	Wood	C	Beige	Negative	INTACT	0.02	mg / cm ^2	1	0.07
2220	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Sink Closet	Shelf	Wood	A	Beige	Negative	INTACT	0	mg / cm ^2	1	0.02
2221	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Day Care	Door	Wood	D	Green	Negative	INTACT	0.03	mg / cm ^2	1	0.05
2222	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Day Care	Door Casing	Wood	D	Green	Negative	INTACT	0.06	mg / cm ^2	1	0.08
2223	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Day Care	Door	Metal	C	Brown	Negative	INTACT	0.05	mg / cm ^2	1	0.08
2224	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Day Care	Log Support	Wood	C	Green	Negative	INTACT	0.06	mg / cm ^2	1	0.2
2225	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Day Care	Door	Wood	C	Green	Negative	INTACT	0.05	mg / cm ^2	1	0.09
2226	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Day Care	Door Casing	Wood	C	Green	Negative	INTACT	0.09	mg / cm ^2	1	0.12
2227	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Ceiling	Plaster	E.	White	Negative	Not Intact- FAIR	0	mg / cm ^2	1	0.02
2228	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Ext. Gutter	Metal	E.	Brown	Negative	INTACT	0.06	mg / cm ^2	1	0.13
2229	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Log Support	Wood	E.	Red	Negative	INTACT	0	mg / cm ^2	1	0.02
2230	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Log Support	Wood	E.	Green	Negative	INTACT	0.5	mg / cm ^2	1	0.4
2231	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Log Support	Wood	E.	Yellow	Negative	INTACT	0	mg / cm ^2	1	0.02
2232	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Exterior	Log Support	Wood	E.	Blue	Negative	Not Intact-POOR	0	mg / cm ^2	1	0.02
2233	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Kitchen	Wall	Plaster	A	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2234	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Kitchen	Ceiling	Plaster	Ceiling	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2235	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Kitchen	Win. Casing	Wood	C	White	Negative	INTACT	0.01	mg / cm ^2	1	0.04
2236	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Ground	Kitchen	Win. Sill	Wood	C	White	Negative	INTACT	0	mg / cm ^2	1	0.02
2237	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School	Dividers	Wood	C	Yellow	Negative	INTACT	0.01	mg / cm ^2	1	0.03
2238	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School	Wall	Drywall	C	White	Negative	INTACT	0.07	mg / cm ^2	1	0.12
2239	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School	Countertop	Wood	C	Blue	Negative	INTACT	0	mg / cm ^2	1	0.02
2240	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School - Restroom	Door Trim	Wood	C	Yellow	Negative	INTACT	0	mg / cm ^2	1	0.02
2241	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School - Restroom	Log Supports	Wood	A	Green	Negative	INTACT	0	mg / cm ^2	1	0.03
2242	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School - Restroom	Support Beams	Wood	A	Green	Negative	INTACT	0.04	mg / cm ^2	1	0.17
2243	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School - Restroom	Support Brackets	Metal	A	Black	Negative	INTACT	0.03	mg / cm ^2	1	0.07
2244	Dorman Center - 25400 E Salmon River Rd, Welches, OR	Second	Pre School - Restroom	Duct	Metal	D	Brown	Negative	INTACT	0.02	mg / cm ^2	1	0.1
2245	Calibration							Positive		1	mg / cm ^2	1	0.1
2246	Calibration							Positive		1	mg / cm ^2	1	0.1
2247	Calibration							Positive		1	mg / cm ^2	1	0.1
2248	Calibration							Positive		1	mg / cm ^2	1	0.1
2249	Calibration							Positive		1	mg / cm ^2	1	0.1

## Appendix C:

# Laboratory Analysis Results & Chain of Custody



# Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

G2 Consultants Inc.  
Noal Kraft  
16869 SW 65th Avenue  
#15  
Lake Oswego, OR 97035

**Client ID:** L1159  
**Report Number:** B167197  
**Date Received:** 08/15/12  
**Date Analyzed:** 08/16/12  
**Date Printed:** 08/17/12  
**First Reported:** 08/17/12

**Job ID/Site:** 1011-62**Date(s) Collected:** 08/14/2012**FALI Job ID:** L1159**Total Samples Submitted:** 20**Total Samples Analyzed:** 20

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>1011-62-1</b>	11289238						
Layer: Tan Fibrous Material		Chrysotile	60 %				
Total Composite Values of Fibrous Components:		Asbestos (60%)					
Cellulose (35 %)							
<b>1011-62-2</b>	11289239						
Layer: Tan Fibrous Material		Chrysotile	60 %				
Total Composite Values of Fibrous Components:		Asbestos (60%)					
Cellulose (35 %)							
<b>1011-62-3</b>	11289240						
Layer: Silver Foil			ND				
Layer: Grey Foam			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>1011-62-4</b>	11289241						
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
<b>1011-62-5</b>	11289242						
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
<b>1011-62-6</b>	11289243						
Layer: Beige Tile			ND				
Layer: Black Mastic		Chrysotile	2 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
<b>1011-62-7</b>	11289244						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

**Client Name:** G2 Consultants Inc.**Report Number:** B167197**Date Printed:** 08/17/12

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>1011-62-8</b>	11289245						
Layer: White Plaster			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>1011-62-9</b>	11289246						
Layer: Off-White Plaster			<b>ND</b>				
Layer: Paint			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>1011-62-10</b>	11289247						
Layer: Tan Mastic			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>1011-62-11</b>	11289248						
Layer: Off-White Sheet Flooring			<b>ND</b>				
Layer: Yellow Mastic			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>1011-62-12</b>	11289249						
Layer: Tan Tile			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (ND)</b>					
Cellulose (Trace)							
<b>1011-62-13</b>	11289250						
Layer: Beige Tile		Chrysotile	<b>2 %</b>				
Layer: Tan Mastic			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (2%)</b>					
Cellulose (Trace)							
<b>1011-62-14</b>	11289251						
Layer: Black Coating		Chrysotile	<b>7 %</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (7%)</b>					
Cellulose (Trace)							
<b>1011-62-15</b>	11289252						
Layer: Off-White Texture		Chrysotile	<b>2 %</b>				
Layer: Paint			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (2%)</b>					
Cellulose (Trace)							
<b>1011-62-16</b>	11289253						
Layer: Off-White Texture		Chrysotile	<b>2 %</b>				
Layer: Paint			<b>ND</b>				
Total Composite Values of Fibrous Components:		<b>Asbestos (2%)</b>					
Cellulose (Trace)							

**Client Name:** G2 Consultants Inc.

**Report Number:** B167197

**Date Printed:** 08/17/12

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
<b>1011-62-17</b>	11289254						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
<b>1011-62-18</b>	11289255						
Layer: White Drywall			ND				
Layer: Off-White Joint Compound			ND				
Layer: White Fibrous Material			ND				
Layer: Off-White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %) Fibrous Glass (10 %)							
<b>1011-62-19</b>	11289256						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
<b>1011-62-20</b>	11289257						
Layer: White Drywall			ND				
Layer: Off-White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %) Fibrous Glass (10 %)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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**CHAIN OF CUSTODY RECORD**G2 Contact: Dan Rouse  
Phone #: 503/701.7325Client: 1011-62  
Address: \_\_\_\_\_  
\_\_\_\_\_

Page #: 1 of 2

G2 Job #: 1011-62  
Sample Date: 8-14-12  
Submit Date: 8-14-12  
Sampled by: Dan Rouse

Notes: \_\_\_\_\_

Analysis Type: \_\_\_\_\_

Mold: ☐ NVA  
☐ NVB  
☐ VA  
☐ VBAsbestos: ☒ PLM  
☐ PCM  
☐ TEM - 7400  
☐ TEM - 7402Lead: ☐ AIR  
☐ BULK  
☐ SOIL  
☐ WATERTurn-around time: ☐ Rush ☐ 24-hr ☒ 48-hr ☐ 72-hr  
Results to: dan@g2ci.com, noal@g2ci.com

Notes: \_\_\_\_\_

Sample #	Material Description	Location	Extent	Condition	Quantity
✓ 1011-62-1	Roof felt	under Cedar Shingles - Rear			
✓ 1011-62-2	" "	" " " - FRONT			
✓ 1011-62-3	Foil-backed Pipe Insulation	Exterior - Rear			
✓ 1011-62-4	Building felt	Exterior behind Cedar Shingles - North			
✓ 1011-62-5	" "	" " " " South			
✓ 1011-62-6	FT, 12x12 Beige SPG + MAGIC	ENTRY			
✓ 1011-62-7	Plaster	Exterior - Overhangs - Front			
1011-62-8	" "	✓ ↓	" "		
1011-62-9	" "	✓ ↓	Rear		
✓ 1011-62-10	CARPET ADHESIVE, TAN	Library			

Samples Relinquished by: Dan Rouse

Date and Time: 8-14-12 @ 4:00PM

Samples Received by: DR

Date and Time: 8-15-12 @ 10:30am

Samples Relinquished by: \_\_\_\_\_

Date and Time: \_\_\_\_\_

Samples Received by: \_\_\_\_\_

Date and Time: \_\_\_\_\_

**CHAIN OF CUSTODY RECORD**G2 Contact: Dan Rouse  
Phone #: 503/701.7325Client: 1011-62  
Address: \_\_\_\_\_

Page #: 2 of 2

G2 Job #: 1011-62  
Sample Date: 8-14-12  
Submit Date: 8-14-12  
Sampled by: Dan Rouse

Notes: \_\_\_\_\_

Analysis Type: \_\_\_\_\_

Mold: ☐ NVA  
☐ NVB  
☐ VA  
☐ VBAsbestos: ☒ PLM  
☐ PCM  
☐ TEM - 7400  
☐ TEM - 7402Lead: ☐ AIR  
☐ BULK  
☐ SOIL  
☐ WATERTurn-around time: ☐ Rush ☐ 24-hr ☒ 48-hr ☐ 72-hr

Results to: dan@g2ci.com, noal@g2ci.com

Notes: \_\_\_\_\_

Sample #	Material Description	Location	Extent	Condition	Quantity
1011-62-11	SV, off white w/ AT + Gold spots	Food Storage			
1011-62-12	CV, <del>off white</del> Grey + off white	Sanitor's Closet			
1011-62-13	FR, off white w/ brown spots + tan ash	2nd Floor			
1011-62-14	Shk WC, Black	" "			
1011-62-15	Ceiling Tiles	Hallway			
1011-62-16		Food Storage			
1011-62-17		" "			
1011-62-18	W + JC	ENTRY			
1011-62-19		Meds Rm			
1011-62-20		Hallway			

Samples Relinquished by: Dan Rouse

Date and Time: 8-14-12 @ 4:00PM

Samples Received by: [Signature]

Date and Time: 8-15-12 @ 10:30am

Samples Relinquished by: \_\_\_\_\_

Date and Time: \_\_\_\_\_

Samples Received by: \_\_\_\_\_

Date and Time: \_\_\_\_\_



# Appendix D:

## XRF Testing Protocols

## Testing Protocol

Testing was conducted in accordance with Chapter 7 of the Guidelines for the Evaluation and Control of Lead-Based Paint (LBP) Hazards in Housing as published by HUD in October 1997. Exterior and interior XRF readings were taken on representative painted surfaces on each building component in each room equivalent, per the limited scope of work. The EPA and HUD definition of LBP is lead equal to or greater than 1.0 mg/ cm<sup>2</sup>. All XRF readings below the regulatory threshold are considered negative and all readings at and above this level are considered positive. Since readings below 1.0 mg/ cm<sup>2</sup> can still pose health hazards, they are shown as <1%.

When establishing a sampling strategy, the following is used as a reference:

A “room” is an identifiable part of a residence, such as a room, foyer, staircase, hallway, or a house exterior or other exterior area. Exterior areas contain items such as play areas, painted swing sets, painted sandboxes, etc. Small closets or other similar areas adjoining rooms should not be considered as separate room equivalents unless they are obviously dissimilar from the adjoining room equivalent. However, walk-in closets should be considered as separate room equivalents.

Each room equivalent is made up of “components”. Components may be located inside or outside a building. For example, components in a room could be its ceiling, floor, walls, a door and its casing, the window sash, and window casings. The substrate is the material underneath the paint of a component. Although many different substrates exist, HUD guidelines recommend classifying substrates into one of six types: (1) brick; (2) concrete; (3) drywall; (4) metal, (5) plaster; and (6) wood. If the true substrate under investigation is not one of the aforementioned types, HUD guidelines mandate the inspector/risk assessor to select the substrate type that most closely resembles one of the six defined substrate types. For substrates that are layered, such as plaster on concrete, the substrate directly beneath the painted surface is identified during a LBP inspection. A “testing combination” is characterized by the room equivalent, component, and substrate. Visible color may not be an accurate predictor of painting history and is not included in the definition of a testing combination. Components that are coated with paint, varnish, shellac, wallpaper, stain, or other coating should be considered as separate testing combinations. Certain building components that are adjacent to each other and not likely to have different painting histories can be grouped together into a single testing combination as follows:

- Window casings, stops, jambs, and aprons
- Interior window mullions and window sashes
- Interior window components may not be grouped with exterior window components
- Exterior window mullions and window sashes
- Door jambs, stops, transoms, casings, and other door parts
- Door stiles, rails, panels, mullions, and other door parts
- Baseboards and associated trim (such as quarter-round or other caps)
- Painted electrical sockets, switches, or plates can be grouped with the walls.

The “test location” is a specific area on a testing combination where the XRF was used to test for LBP.

De minimis levels for deteriorated LBP are defined follows: (1) For a component with a small surface area, such as window sills, or baseboards, 10% of the surface area; (2) For an interior component

with a large surface area, such as an interior wall, 2 square feet of the surface area; and (3) For an exterior component with a large surface area, 20 square feet of the surface area.

According to the HUD guidelines, a lead reading by XRF of 1.0 mg/cm<sup>2</sup> or above is considered positive for the presence of LBP. An XRF reading below 1.0 mg/cm<sup>2</sup> is considered negative; however, a reading below 1.0 mg/cm<sup>2</sup> could still be harmful if proper precautions are not taken during activities that disturb these paint films. If there are any inconclusive readings, a paint-chip sample may be collected for laboratory analysis. Laboratory analysis of samples collected will only be performed by an EPA approved National Lead Laboratory Accreditation Program (NLLAP) laboratory. There is no inconclusive range for laboratory measurements/results.

Only painted, stained, or varnished components of a dwelling are tested during a LBP evaluation. Wall "A" or "1" in each room is the wall where the front entrance door opening is located (or aligned with street). Going clockwise and facing outward Wall "A" or "1", Wall "B" or "2" will always be to your right, Wall "C" or "3" directly to the rear and Wall "D" or "4" to the left. Doors, windows and closets are designated as left, center or right depending on their location on the wall. When more than one window/door is on a wall, features are numbered left to right.

#### Assessment Logic

A LBP evaluation is performed by use of the following assessment logic. Any paint found to contain lead below the HUD standard of 1.0 mg/cm<sup>2</sup>, regardless of condition, is not considered lead-based paint. Components having lead levels at or above the action level are visually assessed for condition and approximate surface area. The paint condition is placed into one of three categories using the risk assessor's professional judgment. These categories are: (1) intact (good), (2) fair and (3) deteriorated (poor), based on the HUD Guidelines for Evaluation and Control of LBP Hazards in Housing, Chapter 5: Risk Assessment [Table 5-3], June, 1995.

#### **Categories of Paint Film Quality**

Type of Building Component <sup>1</sup>	Total Area of Deteriorated Paint on Each Component		
	Intact	Fair <sup>2</sup>	Poor <sup>3</sup>
Exterior components with large surface areas	Entire surface is intact	Less than or equal to 10 square feet	More than 10 square feet
Interior components with large surface areas (walls, ceilings, floors, doors)	Entire surface is intact	Less than or equal to 10 square feet	More than 2 square feet
Interior components with small surface areas (window sills, baseboards, soffits, trim)	Entire surface is intact	Less than or equal to 10 percent of the total surface area of the component	More than 10 percent of the total square

Building component<sup>1</sup> in this table refers to each individual component or side of building, not the combined surface area of all similar components in a room (e.g., a wall with 1 square foot of deteriorated paint is in “fair” condition, even if the other three walls in a room are intact).

Fair<sup>2</sup> - Surfaces in “fair” condition should be repaired and/or monitored, but are not considered to be “lead-based paint hazards” as defined in Title X.

Poor<sup>3</sup> - Surfaces in “poor” condition are considered to be “lead-based paint hazards” as defined in Title X and should be addressed through abatement or interim controls.

# Appendix E:

## Performance Characteristic Sheets (PCS)

## Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

### MANUFACTURER AND MODEL:

Make: Niton LLC

Tested Model: XLp 300

Source:  $^{109}\text{Cd}$ 

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.

XLp 300A, XLp 301A, XLp 302A and XLp 303A.

XLi 700A, XLi 701A, XLi 702A and XLi 703A.

XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

## FIELD OPERATION GUIDANCE

### OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

### XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm<sup>2</sup> (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm<sup>2</sup> in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm<sup>2</sup> film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

### SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

### INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm <sup>2</sup> )
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

## BACKGROUND INFORMATION

### EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

### OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

### SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

### EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.



If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

#### TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
	All Data			Median for laboratory-measured lead levels (mg/cm <sup>2</sup> )		
Substrate	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	Pb < 0.25	0.25 ≤ Pb < 1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

#### CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

#### DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

# Appendix F:

## Certifications & Licenses

# Certificate of Completion

This is to certify that

**Dan K. Rouse**

has satisfactorily completed  
4 hours of refresher training as an

**Asbestos Building Inspector**

to comply with the training requirements of  
TSCA Title II / 40 CFR 763 (AHERA)

**137284**

Certificate Number



Instructor

EPA Provider Cert. Number: 1085



Jun 13, 2012

Date(s) of Training

Exam Score: NA

Expiration Date: Jun 13, 2013

# Western Regional Lead Training Center

1950 S.E. 176th. Ave. Portland, OR. 97233-4739 503.761.2800

In Recognition That

## Noal Kraft

11335 SW Clifford St. Beaverton, OR. 97008

Has successfully fulfilled the requirements for the  
**State of Oregon & Washington Accredited**

## Lead Inspector

8 Hour Refresher Training Course Per 40 CFR Part 745.225

Patrick J. Lehne

Program Manager



Date of exam

04/11/2011

Certificate Number

IR-41AR001-11-

0006

**Passed Final Examination with a minimum score of at least 70%**

**STATE OF OREGON**  
**CONSTRUCTION CONTRACTORS BOARD**  
**LEAD BASED PAINT**  
**INSPECTOR LICENSE**

**LICENSE NUMBER: 9151842**

This document certifies that:

**NOAL CHRISTOPHER KRAFT**  
16869 SW 65TH AVE #15  
LAKE OSWEGO, OR 97035

is licensed in accordance with Oregon Law as a Lead Based Paint Inspector.

**License Details:**

**LICENSE NO.: 9151842**  
**EXPIRATION DATE: 7/12/2013**