

UNION PACIFIC RAILROAD OPERATIONS AND MAINTENANCE PLAN

Former L.D. McFarland Creosote Wood
Treating Facility, Milwaukie, Oregon

Prepared for: Guardian Real Estate Services, LLC

Project No. AS210426A • June 18, 2024 FINAL



e a r t h + w a t e r

UNION PACIFIC RAILROAD OPERATIONS AND MAINTENANCE PLAN

Former L.D. McFarland Creosote Wood
Treating Facility, Milwaukie, Oregon

Prepared for: Guardian Real Estate Services, LLC

Project No. AS210426A • June 18, 2024 FINAL

Aspect Consulting



Jasmin Toro, EI
Project Engineer
jasmin.toro@aspectconsulting.com



Carla Brock, RG
Senior Principal Geologist
carla.brock@aspectconsulting.com

V:\210426 Monroe Apts_Env Peer Review\Deliverables\O&M Plans\UPRR\Final\UPRR O&M Plan Final.docx

Contents

1	Introduction	1
1.1	Site Description and Background	2
1.2	UPRR Institutional Controls	2
1.2.1	Restrictive Covenants	2
1.2.2	Notifications	3
2	Inspection and Maintenance	4
2.1	Inspections	4
2.2	Maintenance	4
3	Requirements for Soil Disturbance	6
3.1	Procedures	6
3.2	Excavation of Potentially Contaminated Materials	6
4	Reporting	8
4.1	Protectiveness Review	8
4.2	Annual Inspections	8
5	References	9
6	Limitations	10

List of Forms

- | | |
|---|------------------------|
| 1 | Cap Maintenance Record |
|---|------------------------|

List of Figures

- | | |
|---|-------------------|
| 1 | Site Location Map |
| 2 | Site Plan |

List of Appendices

- | | |
|---|---|
| A | Report Limitations and Guidelines for Use |
|---|---|

1 Introduction

Aspect Consulting LLC (Aspect) has prepared this Operations and Maintenance Plan (OMP) for the Union Pacific Railroad (UPRR) Property as part of the Phase II Remedial Action (RA) for the Former L.D. McFarland Company, Ltd. (LDM) Creosote Wood Treating Facility in Milwaukie, Oregon (herein referred to as the Site; Figure 1). The Site consists of all areas where contamination from the Former LDM facility came to be located and includes portions of the Former LDM Property, the UPRR Property, and the Milwaukie Marketplace property (Figure 2). The RA for the Site is described in the Record of Decision, Selected Remedial Action for Former L.D. McFarland Creosote Wood Treating Facility, Milwaukee, Oregon, dated March 2001 (ROD; DEQ, 2001). The Oregon Department of Environmental Quality (DEQ) provides oversight for implementation of the ROD at the Site under the requirements of the August 14, 2001 Stipulation and Consent Decree No. CCV0108179 (Consent Decree).

The UPRR Property consists of land located in Section 36, Township 1 South, Range 1 East, of the Willamette Meridian in the City of Milwaukie, Oregon (Figure 1). The UPRR Property is located between the Former LDM Property and the Milwaukee Marketplace property (Figure 2). The RA selected for the UPRR Property consisted of excavation of accessible soil with contaminant concentrations exceeding the RA goal, capping inaccessible soil containing contaminant concentrations exceeding the remedial action goal, and implementing engineering and institutional controls (DEQ, 2001).

The Former LDM property is divided into two parcels, Parcel 1 and Parcel 2 (Figure 2). A Phase I Remedial Action (RA) was completed in 2001 and consisted of placement of impacted soil excavated from several Site locations onto Parcel 2. Impacted soil is defined as soil with CPAH concentrations greater than the Parcel 1 soil protective level of 0.056 milligrams per kilogram (mg/kg), Parcel 2 soil protective level of 1.56 mg/kg, and Milwaukie Marketplace and UPRR soil protective level of 0.36 mg/kg. Parcel 1 and the Milwaukie Marketplace property were remediated to the DEQ soil protective levels but impacted soil was left in-place on the UPRR Property (Bridgewater, 2002a). A Certificate of Completion for the Phase I RA was received from the DEQ in a letter dated July 11, 2002 (DEQ, 2002). An Easement and Equitable Servitude¹ (EES) was executed between DEQ and the Union Pacific Railroad, owners of the UPRR Property, following completion of the Phase I RA. The EES describes the restrictions on use of the UPRR Property.

Between 2021 and 2023, Parcel 2 was remediated to DEQ occupational/commercial use exposure scenarios as part of the Phase II RA in accordance with the Phase II Design Report (Aspect, 2020) and summarized in the Phase II Construction Closeout Report (Aspect, 2024a).

¹ Easement and Equitable Servitude (EES) between the Oregon Department of Environmental Quality and L. D. McFarland Company, Ltd., recorded by Clackamas County December 2001.

In accordance with Section III.K of the Scope of Work attached to the Consent Decree, this OMP sets forth the requirements for operation and maintenance of the UPRR Property.

1.1 Site Description and Background

The UPRR Property is an active rail corridor, approximately 66 feet in width, with a single mainline rail track UPRR Property (Figure 2). Portions of the UPRR Property on either side of the rail track are covered with railroad ballast and some vegetation. Telecommunications lines, including fiber optic cables, are buried within the rail corridor.

During the Phase I RA, all accessible soil² on the UPRR Property that contained CPAH concentrations greater than the soil protective level was excavated and placed on Parcel 2 (Bridgewater, 2002a). Approximately 880 in-place cubic yards of soil was excavated from the UPRR Property and placed on Parcel 2. Excavated UPRR areas were capped with clean fill soil. Due to the presence of fiber optic utilities and the rail track and 20-foot set-back requirements, soil with CPAH concentrations above the soil protective level remains on the UPRR Property beneath north and south of the railroad ballast.

In addition to soil excavation, groundwater monitoring wells MW-12 and MW-13 were installed on the UPRR Property as part of the Phase I RA (Figure 2). In conjunction with monitoring wells on Parcel 2, the wells on the UPRR Property are used to monitor groundwater flow and quality to ensure that contaminants in groundwater do not migrate to a City of Milwaukie (City) supply well (Well No. 7). Groundwater monitoring on the LDM property, UPRR Property, and the Milwaukie Marketplace property has been conducted on a semi-annual basis in accordance with the Revised Groundwater Monitoring Plan (Bridgewater, 2002b) and will continue until DEQ determines such monitoring is no longer necessary to ensure protection of the City water supply.

Short-term inspection and maintenance on the UPRR Property following the Phase I RA consisted of meeting applicable requirements of the EES detailed in Section 1.2.1. This UPRR OMP presents the long-term operations and maintenance requirements for the UPRR Property following completion of the Phase II RA.

1.2 UPRR Institutional Controls

Institutional Controls have been implemented on the UPRR Property to ensure protectiveness of the Phase I RA. Institutional controls consist of a deed restriction and the operations and maintenance procedures outlined in this OMP.

1.2.1 Restrictive Covenants

The use of restrictive covenants is required by DEQ under the Consent Decree. The restrictive covenants are property use restrictions that apply to all property owners (current and future) of the UPRR Property. The restrictive covenants are described in the EES and have been agreed to by the UPRR Property owner and DEQ as of the execution

² Soil was excavated at a 20-foot set-back distance from the UPRR tracks at an excavation depth up to 8 feet.

of the EES December 10, 2001. The use restrictions for the UPRR Property are as follows:

- No use shall be made of groundwater contained in any aquifer at the Property, by extraction through wells or by other means, which involves consumption or other beneficial use of the groundwater. This prohibition shall not apply to extraction of groundwater associated with remedial activities at the site and/or temporary dewatering activities related to construction, development, or the installation of sewer or utilities at the Property.
- No operation or uses shall be made on or of the Property that will or likely will jeopardize the cover's functional integrity. The owner of the Property shall maintain the surface cover and any other permanent feature of the remedy described in the ROD in accordance with this OMP approved in writing by DEQ.
- The Property shall remain zoned for industrial/commercial use.
- The owner shall provide notice to site operators and employees of the presence of contamination at and under the UPRR Property and of this OMP.

In addition to the use restrictions, DEQ reserves the right of entry, during reasonable hours and security requirements, upon any portion of the UPRR Property to determine whether the requirements of the EES are being complied with.

1.2.2 Notifications

UPRR owners, operators, and employees must be notified of the presence of subsurface impacted soil beneath the existing UPRR surface.

The UPRR Property owner must be notified of DEQ's Protectiveness Review process. A Protectiveness Review is required every five years by the Property owner; however, DEQ may request a Protectiveness Review at any time a significant change in groundwater monitoring data is observed. The results of each Protectiveness Review shall be presented by the LDM property owner to DEQ in a Protectiveness Review Report. The Protectiveness Review process is detailed in Section 4.1.

2 Inspection and Maintenance

Inspections and maintenance will be completed on the UPRR Property to ensure the Phase I RA remains protective. The restrictive covenant prohibits operation or use of the UPRR Property that may jeopardize the cap. Any proposed UPRR activities that will disturb and/or penetrate the cap require DEQ's review and approval before implementation.

2.1 Inspections

The LDM property owner is responsible for conducting an annual inspection of the UPRR Property to ensure that the cap remains intact throughout the UPRR Property and impacted soil remains isolated beneath the cap. Inspections will include:

- Visual inspection of vegetation, including identification of any areas where vegetation has been lost.
- An evaluation of surface conditions for settlement or disturbance of railroad ballast.
- An evaluation of drainage in landscape areas to ensure stormwater and irrigation water are properly managed on the LDM property and not creating a condition that could impact the UPRR surface.
- Visual inspection of groundwater monitoring well flush-mounted monuments (MW-12 and MW-13) to ensure they are accessible and in good condition.
- Documentation of any actions that may have compromised the surface and any mitigation measures to repair the surface.

Annual inspections shall be conducted for the UPRR Property by the LDM property owner in conjunction with required annual inspections on Parcel 2. The results will be documented on a surface inspection form and photographic log (Aspect, 2024b). The inspections will be documented in a report submitted to DEQ for review, detailed in Section 4.

2.2 Maintenance

There is no routine maintenance for the UPRR surface; however, UPRR surface features may require maintenance if there is evidence that the cap has become compromised. Maintenance will be performed on an as-needed basis when a deficiency is determined to exist. The LDM property owner shall notify DEQ within 48 hours of discovering a deficiency in the cap. The UPRR Property owner will be notified and shall promptly repair the cap to maintain protectiveness from underlying impacted soil. In general, maintenance should be performed within 30 days of discovery or as soon as practicable to preclude further system deterioration.

Maintenance activities to address breaches of or damage to the surface features will be documented on a maintenance record form (Form 1). Maintenance documentation shall include:

- A detailed description of the surface breach or damage.
- A detailed description of the maintenance performed.
- The location of the maintenance as indicated on a figure or site plan markup, such as Figure 2.
- Photographic documentation both before and after maintenance is performed.

The Maintenance Records, marked-up site plans, and photographs will be used to document repairs and will be incorporated into the Annual Inspection Report (see Section 4). Any future work that may penetrate below the cap must be reviewed and approved by DEQ before implementation. Requirements for performing invasive work in UPRR Property soils is described in Section 3.

3 Requirements for Soil Disturbance

Disturbance of impacted soil that is currently located beneath the cap on the UPRR Property may occasionally be necessary. This section provides workers and supervisors that have the potential to encounter or generate impacted soil with a summary of requirements for performing soil disturbing activities on the UPRR Property.

3.1 Procedures

Examples of soil disturbing work include drilling; digging; penetration with a sampling device, post, or stake; grading; excavation; and installation or repair of underground utilities. The following requirements are applicable to all invasive work to be performed within the UPRR Property:

- **DEQ Notification:** Provide notice to and receive approval from DEQ's project manager prior to performing the work.
- **Worker Health and Safety:** Use personnel with Hazardous Waste Operations and Emergency Response (HAZWOPER) training in accordance with the Occupational Safety and Health Administration Part 1910.120 of Title 29 of the Code of Federal Regulations and be in possession of a current HAZWOPER certification card.

All workers with the potential to encounter impacted soil should be working under a site-specific health and safety plan (HASP) that has been developed, reviewed, and acknowledged by their employer.

- **Worker Notification:** Notify any personnel with the potential for encountering impacted soil on the UPRR Property of subsurface conditions and the potential presence of contaminants.

3.2 Excavation of Potentially Contaminated Materials

For invasive work in which potentially contaminated materials will be exposed/excavated, DEQ will likely require a project-specific work plan (separate from the contractor's HASP) describing the procedures and protocols to be followed in performing the work. Specific items that may need to be addressed in the work plan include the following:

- **Erosion, Sedimentation, and Dust Control.** When potentially contaminated materials are exposed/excavated, temporary erosion and sedimentation control (TESC) practices compliant with applicable state and local laws, regulations, ordinances, and permits must be followed. In addition, construction best management practices (BMPs) must be implemented to minimize generation of dust in accordance with applicable state and local laws, regulations, ordinances, and permits.
- **Materials Handling On-Site.** Potentially contaminated materials that are excavated and temporarily managed on-site must be stockpiled or placed into appropriate covered containers (e.g., drums). Access to stockpiles/containers must be restricted. Stockpiles must be constructed and maintained to prevent

erosion, contact with stormwater runoff, dust generation, and worker contact. Each stockpile must be underlain and covered by a polyethylene geomembrane liner with a minimum thickness of 10 mils, or an equivalent means providing equal or improved containment, when not in use.

- **Testing and Final Disposition of Excavated Materials.** Samples will be collected from stockpiles/containers of potentially contaminated materials for chemical testing. For off-site disposal, the disposal facility will have specific waste profiling requirements that must be satisfied before transport and disposal is allowed. In the event that off-Site disposal of Parcel 2 soil is required, the soil will be managed as an F034 Hazardous Waste and subject to Resource Conservation and Recovery Act (RCRA) land disposal restrictions (LDRs). The LDM property owner will be the generator for all waste materials generated on their property. Depending on project-specific circumstances and subject to DEQ approval, backfilling/reuse of excavated materials may also be pursued, in which case chemical testing to support on-site backfilling/reuse will be proposed in the work plan.

Additional construction safety requirements are provided in the Former L.D. McFarland Contaminated Media Management Plan (Aspect, 2021).

4 Reporting

4.1 Protectiveness Review

The LDM property owner will perform a Protectiveness Review for the Site every 5 years following the completion of the Phase II RA. The results of the review will be submitted in a report prior to January 31 of each year it is performed. The Protectiveness Review report shall present the results of the review including an opinion of the protectiveness of the remedy on the UPRR Property given the current land use, groundwater use, and toxicological and regulatory conditions.

4.2 Annual Inspections

Annual inspections of the Site will be performed by the LDM property owner during similar seasonal conditions for a period of 5 years. Inspections will be documented in a report submitted to DEQ for review. The report will document the Site conditions through field forms and a photographic log. Inspection reports will be submitted to DEQ within 60 days of completion for review and comment. After 5 years of inspections, DEQ will review Site conditions to determine if less frequent inspections are warranted.

5 References

- Aspect Consulting, LLC (Aspect), 2020a, Phase II Design Report, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, Prepared for: Johnson Development Associates, November 24, 2020.
- Aspect Consulting, LLC (Aspect), 2021, Contaminated Media Management Plan, Monroe Street Apartments, Milwaukie, Oregon, Prepared for: Johnson Development Associates, February 19, 2021.
- Aspect Consulting, LLC (Aspect), 2024a, Phase II Construction Closeout Report, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, June 18, 2024.
- Aspect Consulting, LLC (Aspect), 2024b, Parcel 2 Operations and Maintenance Plan, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, June 18, 2024.
- Bridgewater Group, Inc. (Bridgewater), 2002a, Phase I Soil Remedial Action Closeout Report, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, April 26, 2002.
- Bridgewater Group, Inc. (Bridgewater), 2002b, Revised Groundwater Monitoring Plan, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, July 25, 2002.
- Oregon Department of Environmental Quality (DEQ), 2001, Record of Decision, Selected Remedial Action for the Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, March 2001.
- Oregon Department of Environmental Quality (DEQ), 2002, Phase I Certification of Completion L.D. McFarland Milwaukie Project ECSI No. 887 and No. 3331 Letter between Matt McClincy of DEQ and Les Lonning of L.D. McFarland Company, July 11, 2002.

6 Limitations

Work for this project was performed for Guardian Real Estate Services, LLC. (Client), and this report was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This report does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Appendix A titled “Report Limitations and Guidelines for Use” for additional information governing the use of this report.

FORM 1



Property Address: _____

Tax Parcel ID: _____

Project Name: _____

Project No.: _____

FORM 1 - CAP MAINTENANCE RECORD

Cap Inspection and Maintenance UPRR, Former
L.D. McFarland Site, Milwaukie, Oregon

SECTION 1

Problem Description:

Date Deficiency Observed: _____

Deficiency Reported By: _____

SECTION 2

Maintenance Performed:

Firm Performing Maintenance: _____

Maintenance Start Date: _____

Maintenance Completion Date: _____

Approved By Property Owner

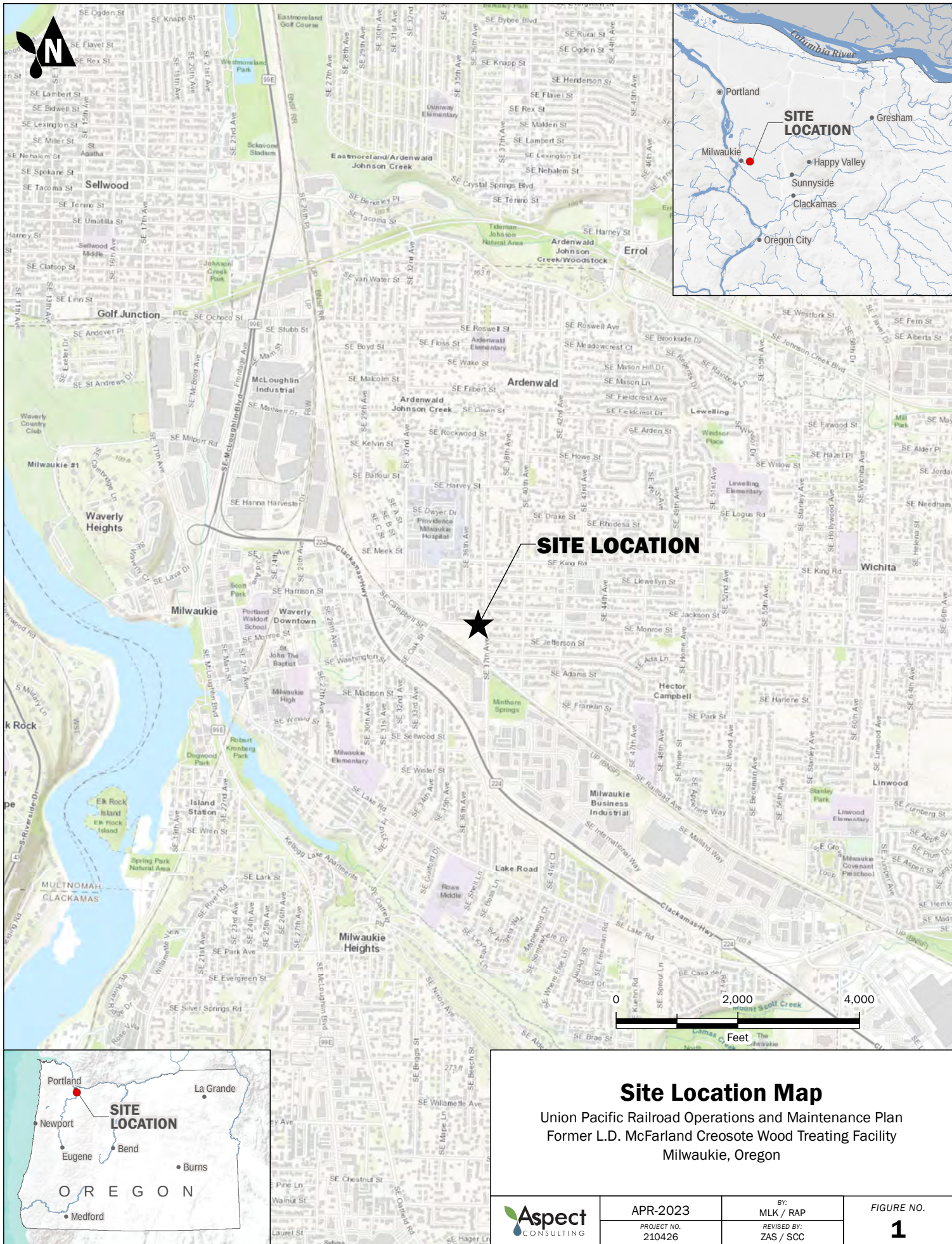
Printed Name: _____

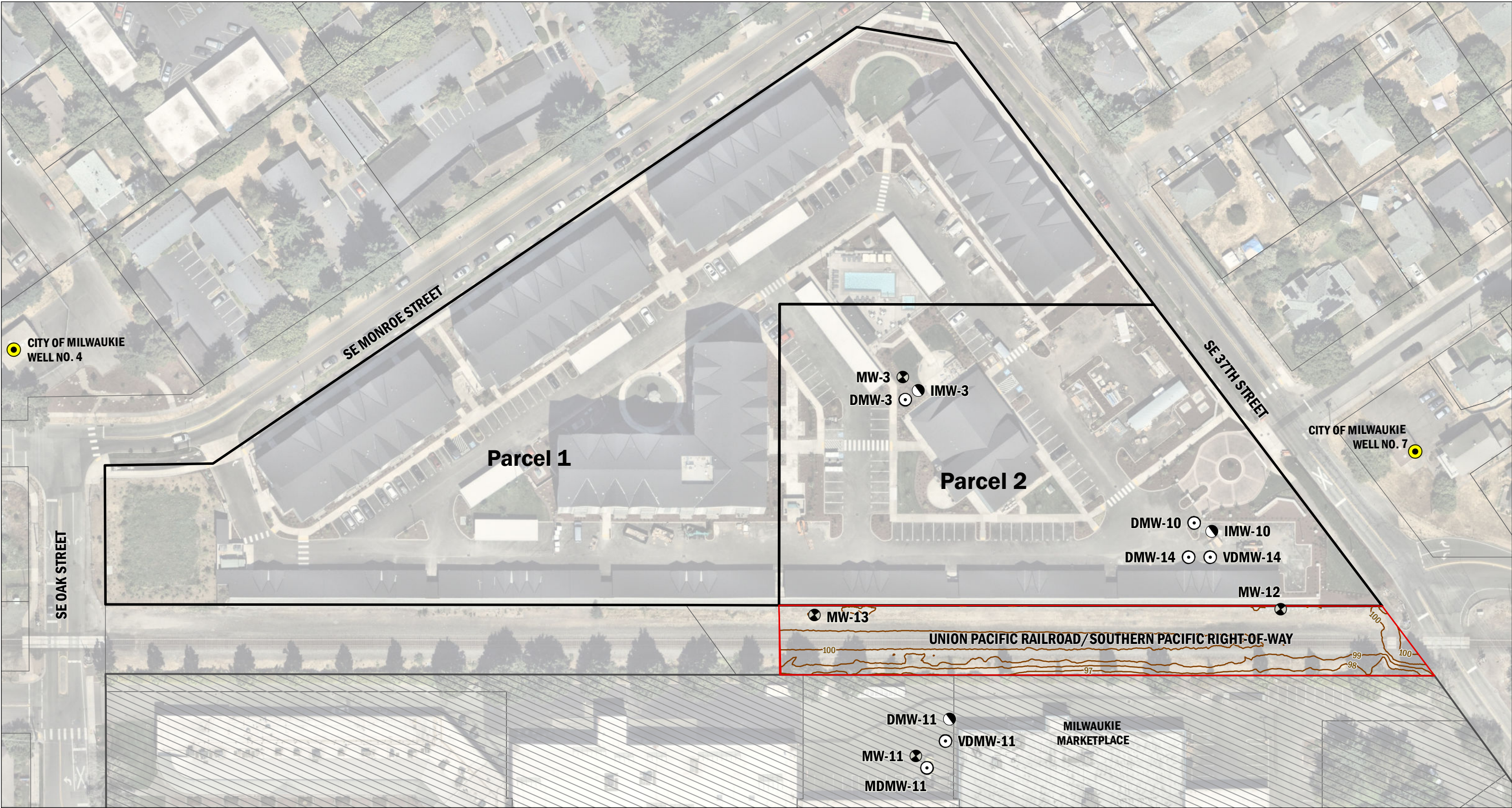
Signature: _____

Title/Affiliation: _____

Date: _____

FIGURES





APPENDIX A

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND USE GUIDELINES

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on this report or the product of our services without the express written consent of Aspect Consulting, LLC (Aspect). This limitation is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual conditions or limitations and guidelines governing their use of the report. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and recognized standards of professionals in the same locality and involving similar conditions.

Services for Specific Purposes, Persons and Projects

Aspect has performed the services in general accordance with the scope and limitations of our Agreement. This report has been prepared for the exclusive use of the Client and their authorized third parties, approved in writing by Aspect. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

This report is not, and should not, be construed as a warranty or guarantee regarding the presence or absence of hazardous substances or petroleum products that may affect the subject property. The report is not intended to make any representation concerning title or ownership to the subject property. If real property records were reviewed, they were reviewed for the sole purpose of determining the subject property's historical uses. All findings, conclusions, and recommendations stated in this report are based on the data and information provided to Aspect, current use of the subject property, and observations and conditions that existed on the date and time of the report.

Aspect structures its services to meet the specific needs of our clients. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and subject property. This report should not be applied for any purpose or project except the purpose described in the Agreement.

This Report Is Project-Specific

Aspect considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the subject property, project or governmental regulatory actions

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Geoscience Interpretations

The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Aspect.

Discipline-Specific Reports Are Not Interchangeable

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

Environmental Regulations Are Not Static

Some hazardous substances or petroleum products may be present near the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or petroleum products or do not otherwise present potential liability. Changes may occur in the standards for appropriate inquiry or regulatory definitions of hazardous substance and petroleum products; therefore, this report has a limited useful life.

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time (for example, Phase I ESA reports are applicable for 180 days), by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope failure or groundwater fluctuations. If more than six months have passed since issuance of our report, or if any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Phase I ESAs – Uncertainty Remains After Completion

Aspect has performed the services in general accordance with the scope and limitations of our Agreement and the current version of the “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”, ASTM E1527, and U.S. Environmental Protection Agency (EPA)'s Federal Standard 40 CFR Part 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries".

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with subject property. Performance of an ESA study is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental conditions affecting the subject property. There is always a potential that areas with contamination that were not identified during this ESA exist at the subject property or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

Historical Information Provided by Others

Aspect has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data does not provide definitive information with regard to all past uses, operations or incidents affecting the subject property or adjacent properties. Aspect makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others.

Exclusion of Mold, Fungus, Radon, Lead, and HBM

Aspect's services do not include the investigation, detection, prevention or assessment of the presence of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detection, assessment, prevention or abatement of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Aspect's services also do not include the investigation or assessment of hazardous building materials (HBM) such as asbestos, polychlorinated biphenyls (PCBs) in light ballasts, lead based paint, asbestos-containing building materials, urea-formaldehyde insulation in on-site structures or debris or any other HBMs. Aspect's services do not include an evaluation of radon or lead in drinking water, unless specifically requested.