REMEDIAL ACTION PLAN

CHELAN LUXURY GARAGES, LLC
CHELAN, WASHINGTON

FOR

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Remedial Action Plan

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Site Name:	Chelan Luxury Garages
Site Address:	Unassigned E Shope Ave (adjoining parcels) Chelan, WA 98816
Alternate Location Info:	Parcel nos. 272318420167 and 272318420195 47.835 N Lat. / -119.996 W Long. T 27 N, R 23 EWM, Section 18, Quarter Section SE
Ecology Facility Site ID No.	**To Be Assigned**
VCP Project No:	**To Be Assigned**
Order No:	N/A
Consent Decree No:	N/A

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ACRONYMS AND ABBREVIATIONS

Applicant	Chelan Luxury Garage, L.L.C.
As	Arsenic
bgs	below ground surface
BLA	boundary line adjustment
Ecology	Washington State Department of Ecology
Grette Associates	Grette Associates, a division of Farallon Consulting L.L.C.
mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act
Pacific	Pacific Engineering and Design, P.L.L.C.
Pb	Lead
Plan	Remedial Action Plan
Publication 21-09-006	Ecology *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington July 2021*
ppm	parts per million
Report	Remedial Action Report
SCR	Site Characterization Report
VCP	Voluntary Cleanup Program
XRF	X-ray Fluorescence Analyzer

1.0 EXECUTIVE SUMMARY

This Remedial Action Plan (Plan) has been prepared by Pacific Engineering and Design, P.L.L.C. (Pacific) on behalf of the applicant to summarize the proposed conversion of former orchard lands to commercial development on parcel nos. 272318420167 and 272318420195 at Unassigned E. Shop Ave within the City of Chelan in Chelan County, WA (herein referred to as the Project Site). Chelan Luxury Garages, L.L.C. (Applicant) is developing the Project Site with self-storage garage units. Development will occur over multiple phases. During the initial feasibility assessment, it was determined that the subject parcels are mapped as potential historical orchard lands on the Washington State Department of Ecology (Ecology) Dirt Alert online mapping tool. A Site Characterization Report (SCR) prepared by Pacific confirmed that both parcels contain surface soil contaminated with arsenic and/or lead levels above the Model Toxics Control Act (MTCA) Method A cleanup levels and remediation is required during development pursuant to the approved model remedies outlined in Ecology Publication 21-09-006 *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington July 2021* (Publication 21-09-006) .

This document serves as the contaminated soil Plan submitted to Ecology by Pacific on behalf of the Applicant demonstrating how arsenic- and lead-contaminated historical orchard soil will be managed during development. The Applicant will use the Ecology model remedies for former orchard lands, as described in Publication 21-09-006 to manage arsenic- and/or lead-contaminated soil at the site. Primarily, arsenic and lead surface/shallow soil will be left on site.

The Applicant has applied for a boundary line adjustment (BLA) to modify the boundaries of the parcels. The BLA is expected to be granted before construction occurs at the site. Sheet 1 included in this Plan reflects the phases of construction following the granting of the BLA (BLA 2025-_____).

Initial site grading will occur on both parcels. Approximately 5,000 cu yds of excess contaminated material including organics generated during the initial site grading will be consolidated before being buried on site. The Applicant proposes to excavate a trench approximately 15 ft x 15 ft x 600 ft running from north to south under the proposed internal driveway (Sheet 1). Uncontaminated deeper material excavated from the trench may be stockpiled on site for use in future remediation work. Following excavation, the bottom of the trench will be lined with a geotextile fabric before backfilling with the contaminated material. The contaminated material will be installed in 2-ft courses with a geogrid fabric placed between each course to provide structural support and prevent settling. Pavement will be installed over the trench as part of Construction Phase 1. Construction Phase 1 will also include construction of Buildings A, B and C in the northeast corner of the Project Site. General utilities and five (5) stormwater infiltration trenches will also be installed during initial site work. Stormwater infiltration trenches will be excavated to an uncontaminated soil layer and backfilled with drain rock and gravel before eventually being capped with asphalt. Perimeter landscaping will be installed along the southern frontage with E. Shop Ave and part way up the western frontage with Jesse Ave as dictated by the City of Chelan Code. A soft cap will be installed in the landscaping areas and will be comprised of an Ecology approved geotextile fabric and six (6) inches of river rock or uncontaminated soil. If any uncontaminated soil is imported to the site for landscaping purposes it will be tested within an XRF and lab verified prior to application. An Environmental Covenant prepared by Ecology will be used as an institutional control for the project and will be recorded with the Auditor's office indicating that arsenic- and/or lead-contaminated soil is present below any capping installed at the site. An Annual Cap Maintenance Plan will also be used as an institutional control for the project.

The project is being submitted to the Ecology Voluntary Cleanup Program (VCP) as one (1) site comprised of four (4) phases of construction. At the completion of each phase of construction, a Remedial Action Report (Report) will be issued to Ecology by the Applicant demonstrating how the model remedies have been applied, and the Applicant will request an Opinion Letter from Ecology approving the remediation work. The Opinion Letter from Ecology is needed to receive the occupancy permit from the City of Chelan at the completion of each phase of construction. At the completion of all phases of construction, the Applicant will request a No Further Action letter from Ecology indicating that no further cleanup actions are required by the Applicant at the Project Site. The Project Site and proposed remedial actions are discussed in detail below.

2.0 INTRODUCTION

The Applicant is developing self-storage garage units on parcel nos. 272318420195 and 272318420167 at Unassigned E. Shop Ave within the City of Chelan, WA. During the initial feasibility assessment, it was determined that the subject parcels are mapped on the Ecology Dirt Alert online mapping tool as potentially containing historical orchard lands. A SCR (Appendix A) prepared by Pacific confirmed that both parcels contain surface/shallow soils contaminated with arsenic and/or lead above the MTCA Method A cleanup levels and remediation is required during development. To move forward with the project, Pacific has developed this Plan on behalf of the Applicant to appropriately manage the arsenic- and/or lead-contaminated soil identified at the site. The project is being submitted to the Ecology VCP as one (1) site comprised of four (4) phases of construction. At the completion of each phase of construction, a Report will be issued to Ecology by the Applicant demonstrating how the model remedies have been applied, and the Applicant will request an Opinion Letter from Ecology approving the remediation work. The Opinion Letter from Ecology is needed to receive the occupancy permit from the City of Chelan at the completion of each phase of construction. At the completion of all phases of construction, the Applicant will request a No Further Action letter from Ecology indicating that no further cleanup actions are required by the Applicant at the Project Site.

Pacific has prepared this Plan on behalf of the Applicant to present the remedial actions to be conducted at the Chelan Luxury Garages, L.L.C. parcels in the City of Chelan, WA for the management of arsenic- and/or lead-contaminated surface/shallow soils associated with the presence of historical orchard lands. This Plan has been developed to meet the requirements of the MTCA Method A Cleanup Regulation (WAC 173-340) and uses Publication 21-09-006 to manage arsenic and/or lead contaminated soil at the site. This Plan summarizes the pre-development and the proposed post-development site conditions, the best available science and environmental reports prepared for the site, and the scope of work for completing the proposed remedial actions.

2.1 SITE INFORMATION

The Project Site is comprised of parcel nos. 272318420195 and 272318420167 located at Unassigned E. Shop Ave on the east side of the City of Chelan, WA. Combined, the parcels are 10.63 acres in size. The parcels are zoned Warehouse and Industrial (W-I) and are undeveloped. The parcels are bounded by E. Shop Ave to the south and partially bound by Jessie Street to the west. Adjacent properties are comprised of light industrial and commercial uses, the Chelan cemetery to the south, and undeveloped to moderately developed parcels to the west and north. An existing irrigation easement with the Chelan River Irrigation District is present along the western and southern boundaries of the Project Site. No commercial orchard is present on either parcel. The Project Site is currently comprised of weedy herbaceous species and grasses.

Figure 1. Vicinity Map.

Figure 2. Map of the Project Site and surrounding parcels.

2.2 SITE HISTORY

Historical aerial imagery indicates that the Project Site was used as commercial orchard prior to 2004 and was cleared of orchard sometime between January of 2004 and April of 2005. Based on the Ecology Dirt Alert online mapping tool, both parcels may have been in commercial orchard production when lead arsenate was still used as a pesticide (1890-1950). The presence of contaminated historical orchard soil was confirmed during the site characterization performed by Pacific in 2024 (Appendix A). Data from the SCR will be submitted to EIM following the issuance of a VCP project number by Ecology. Based on the SCR results, it is assumed that the entire Project Site contains arsenic- and/or lead-contaminated surface/shallow soil. Contamination was not observed deeper than 36 inches below ground surface (bgs) in the soil column.

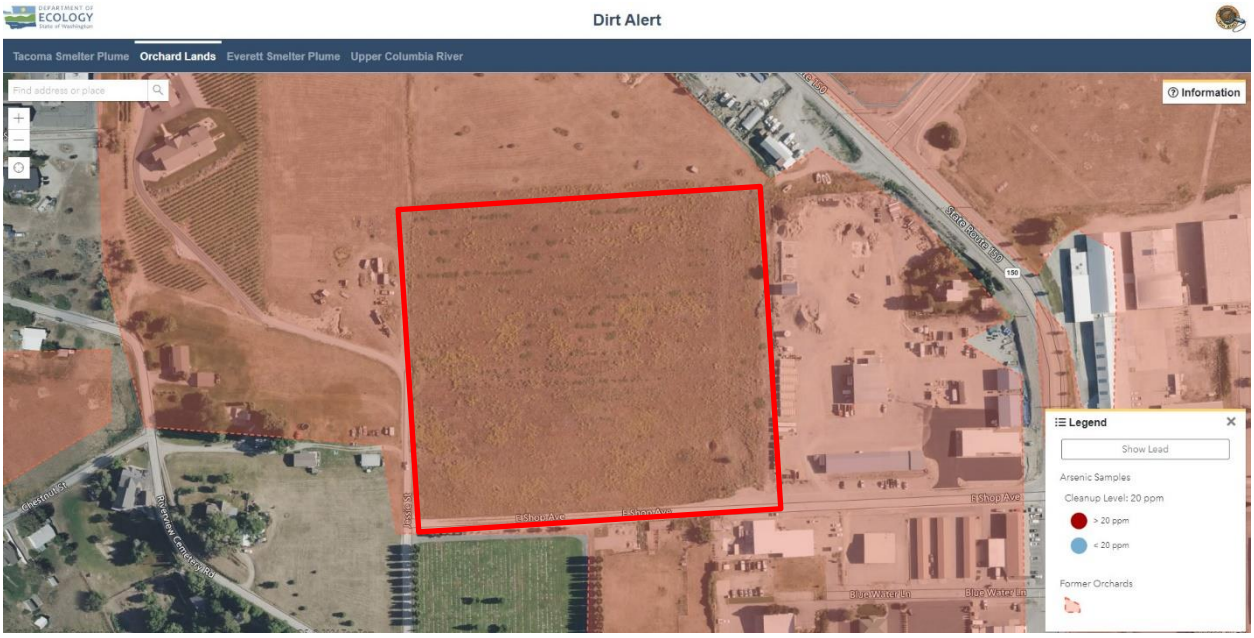

Figure 3. Ecology Dirt Alert mapping of the Project Site and vicinity.

2.3 SITE GEOLOGY

According to the USDA NRCS Websoil Survey (www.websoilsurvey.nrcs.usda.gov), the site is mapped as containing Chelan gravelly sandy loam, pumiceous, 3 to 8 percent slopes (CIB) and 8 to 15 percent slopes (CIC). Chelan gravelly sandy loam is formed on terraces from volcanic ash, pumice, and loess over basil till. A typical profile contains gravelly sandy loam from 0-35 inches and very gravelly sandy loam from 35-60 inches. The depth of the water table is listed as more than 80 inches. Depth to a restrictive layer is listed as more than 80 inches. The soil is not considered hydric in Chelan County. Groundwater was not observed within 6 ft of the ground surface during site characterization testing by Pacific and infiltration testing by Nelson Geotechnical Associates, Inc.

According to Chelan County GIS, the Project Site is not mapped as containing erosive soil or other geohazards. According to City of Chelan GIS, the Project Site is not mapped for slopes.

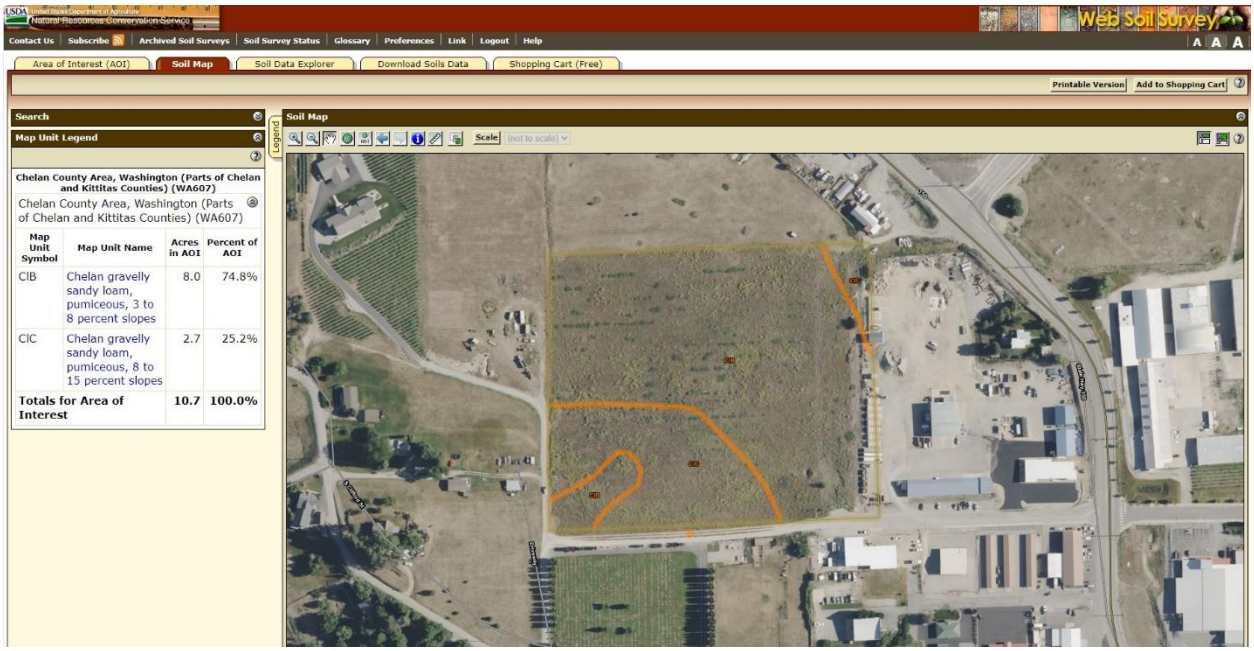

Figure 4. USDA NRCS soil mapping of the Project Site and vicinity.

2.4 SITE HYDROLOGY

During the site characterization performed by Pacific and infiltration testing performed by Nelson Geotechnical Associates, Inc., groundwater was not encountered within six (6) ft of the ground surface during the deeper soil investigations at the site (Photograph 1). It is anticipated based on publicly available well records that static water is present more than 120 ft bgs. Groundwater is not expected to be a medium of concern during remediation.

The parcels sit on a mildly sloping plateau above the Chelan River. No surface water features are located in the vicinity of the site. According to the USFWS National Wetlands Inventory (NWI), no wetlands are mapped in the vicinity of the Project Site. According to the Washington Department of Natural Resources Forest Practices Application Mapping Tool, no surface hydrology is located on the subject parcels or in the vicinity of the Project Site. Further, no wetlands or surface water features were identified during the site visit by Pacific.

No other potential sources of hydrology are present at the site.

2.5 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

An abbreviated SCR was completed by Pacific on September 16, 2024. The SCR was based on twenty-two (22) shallow surface samples and nine (9) deeper samples collected on June 7 and June 11, 2024 (Appendix A). Soil at the site was sampled using an XRF analyzer to determine if arsenic and/or lead contamination is present in surface/shallow soils. Sampling occurred in a semi-organized pattern across the site. Based on data gathered during the Pacific site visit, it was determined that arsenic- and/or lead-contaminated surface/shallow soil is present throughout the parcels. For this Plan and the proposed remedial actions, it is assumed that the entire site contains soil with arsenic and/or lead above MTCA Method A cleanup levels and remediation is required pursuant to Publication 21-09-006. Data from the initial site characterization sampling will be submitted

to Ecology for incorporation into the EIM database, following issuance of a VCP project number.

2.6 OTHER SITE INFORMATION

An existing irrigation easement with the Chelan River Irrigation District is present adjacent to the western and southern boundaries of the Project Site. As part of the development of the project, the Applicant must also grant the City of Chelan a 30-ft-wide ROW dedication along the frontage of Jessie Street on the western edge of the parcel. The irrigation easement is partially located in the dedicated ROW.

The Applicant has applied for a BLA. The BLA will be completed prior to construction. Construction Phases 1-3 will be located on one parcel and Construction Phase 4 will be located on the other parcel. No additional site information is available.

3.0 PROPOSED REMEDIATION STANDARDS

Based on the results of the SCR by Pacific, it was determined that remediation would focus on managing historical arsenic- and lead-contaminated orchard soil across the entire Project Site. Because of the relatively low hazard resulting from arsenic- and lead-contaminated soil on historical orchard land, the MTCA Method A remediation level is appropriate for the site, based on existing and future land use. Per WAC 173-340 Table 740-1, MTCA Method A remediation levels for arsenic and lead for unrestricted land uses are as follows:

Table 1. Summarized remediation level values for arsenic and lead from WAC 173-340 Table 740-1.

Hazardous Substance	CAS Number	Cleanup Level	PPM Conversion
Arsenic	7440-38-2	20 mg/kg	20 ppm
Lead	7439-92-1	250 mg/kg	250 ppm

These levels are considered conservative remediation levels for sites undergoing routine remedial actions with relatively few hazardous substances that also qualify for an exemption from conduction of a simplified or site-specific Terrestrial Ecological Evaluation (TEE) (Appendix C). Such is the case for the subject parcels.

3.1 TEE EXEMPTION

The project meets the TEE Exemption criteria through the implementation of Barriers to Exposure (WAC 173-340-7491(1)(b)). Contaminated soil is or will be covered by physical barriers (such as buildings or pavement) that prevent exposure to plants and wildlife, and institutional controls will be used to manage the remaining contamination. Correspondence with Ecology staff indicates that both hard and soft capping are considered engineered physical barriers for managing exposure to contaminated soil at the Project Site.

The Applicant proposes to remediate the site with hard capping comprised of buildings and pavement. The Applicant also proposes remediating the site with soft capped perimeter landscaping. Between phases, areas left undeveloped would be temporarily capped with up to six (6) inches of compacted gravel for dust and erosion control pending future development. Ultimately, at the completion of all development phases the entire Project Site will be comprised of hard capped surfaces, soft capped landscaping, and uncontaminated stormwater infiltration trenches. The existing utility and irrigation easement running along the western and southern boundaries of the Project Site and will be located under hard capped surfaces. Environmental covenants prepared by Ecology will act as institutional controls for the Project Site. The covenants will address any restrictions on the site.

An Annual Cap Maintenance Plan is included as Appendix D. The Annual Cap Maintenance Plan is a supplement to the TEE Exemption (Appendix C) and demonstrates how engineered physical barriers (hard and soft capping) will be managed to maintain their effectiveness over time. The Annual Cap Maintenance Plan will be included as part of the recorded institutional controls for the development and used by the Applicant to annually evaluate and repair any hard or soft capping at the Project Site. As part of the recorded institutional controls and environmental covenants prepared for the site, Ecology also reserves the right to visit the Project Site every 5 years to ensure caps are properly maintained and that the Project Site remains in compliance with the Model Remedy.

4.0 REMEDIATION DESIGN AND IMPLEMENTATION

This Plan uses a combination of methods including permanent hard and soft capping, soil consolidation, excavation to uncontaminated soil, and institutional controls to limit access and exposure to arsenic- and/or lead-contaminated surface/shallow soil at the Project Site. The implemented methods are consistent with the Model Remedies as outlined in Ecology Publication 21-09-006. Proposed remediation methods at the Project Site are described below.

4.1 REMEDIATION LEVELS

The required remediation levels for arsenic- and/or lead-contaminated soil per WAC 173-340 Table 740-1 and MTCA Method A for sites with unrestricted land use, as cited in Section 3 above are as follows:

- Arsenic: 20 mg/kg or 20 ppm
- Lead: 250 mg/kg or 250 ppm

The primary pathway for exposure at the site is direct contact with contaminated soil. The placement of the engineered hard and soft caps with ongoing maintenance eliminates the direct contact pathway at the site and prevents exposure to arsenic- and/or lead-contaminated soil.

Groundwater is not expected to be affected by historical orchard soil as groundwater at the Project Site is located more than 120 ft bgs and the levels of arsenic and lead are relatively low and confined to near-surface soils. Additionally, groundwater was not encountered within 6 ft of the surface during infiltration testing and deep soil excavation during the site visit by Nelson Geotechnical Associates, Inc. and Pacific in 2024.

During the implementation of this Plan, any soil imported to the site would meet the threshold of <20 mg/kg for arsenic and <250 mg/kg lead when analyzed in a lab. Initial testing for suitability would use an XRF analyzer. An XRF analyzer may be used to determine suitability because it is accurate, reliable, fast, and portable. When imported soils were deemed suitable for soft capping, a representative number of composite samples will be lab tested to verify XRF results prior to application at the site. Composite samples will be collected pursuant to Ecology Publication 21-09-006. Lab results will be included in Appendix B at the close of the project.

4.2 CAPPING IN PLACE

The purpose of Model Remedy 3 Capping in Place is to prevent exposure to contaminated soil by covering the site with a hard or soft cap. Because of the nature of the proposed site development, this is an efficient method for managing a portion of the arsenic- and lead-contaminated surface soil. Capping at the site would include the following project elements:

4.2.1 Hard Cap (Area 1)

A hard cap is comprised of impervious material such as buildings, pavement, concrete, or other impervious surfaces. Hard caps serve as a permanent cap over contaminated soil. Institutional controls convey to future landowners that contamination remains underneath areas of hard capping. Hard caps require periodic inspection to ensure effectiveness. Repairs to the hard cap are part of the ongoing Annual Cap Maintenance Plan (Appendix D).

Hard capping to be completed at the site would include construction of the storage buildings, the internal asphalt roads, the asphalt parking areas, and retaining walls. Areas of hard capping would be constructed of no less than six (6) inches of compacted gravel finished with asphalt over the existing contaminated soil or constructed from keystone block or concrete retaining walls. Photo documentation of the hard cap will be included in the final Report.

4.2.2 Soft Cap (Area 2)

A soft cap may be comprised of pervious material such as lab-verified uncontaminated soil, landscaping rock, compacted gravel, or bark mulch. Soft caps must be no less than four (4) inches in thickness when using machine compacted gravel, no less than six (6) inches in thickness when installing uncompacted soil or rock over an Ecology-approved geotextile barrier fabric in landscaping areas and green spaces, no less than twelve (12) inches in thickness over an approved geotextile fabric in designated playground areas, and no less than eighteen (18) inches in thickness if no geotextile barrier fabric is used. Institutional controls convey to future landowners that contaminated soil remains underneath areas of soft capping. Soft capping must be periodically inspected to verify the depth of uncontaminated material over the geotextile fabric to ensure the remediation remains effective. The periodic addition of uncontaminated material to ensure proper cap depth over the geotextile fabric, or the repair of the underlying geotextile fabric barrier, if damaged, is part of the ongoing Annual Cap Maintenance Plan (Appendix D).

Initial soft capping at the Project Site would be comprised of perimeter landscaping. The landscaping would be constructed with an approved orange Mirafi geotextile fabric installed over contaminated soil and topped with no less than 6 inches of uncontaminated material (soil or rock). Any soil or sand imported to the site for construction of the landscaping areas will be lab tested to ensure MTCA Method A compliance. Rock, gravel, and bark mulch do not require testing. The underlying geotextile fabric will act as a marker material; physically separating the uncontaminated overlying material from the underlying arsenic- and lead-contaminated soil. The geotextile fabric will be non-biodegradable and conform to Ecology standards for this type of underground application. Photo documentation of the barrier material and verification of the depth of soft capping will be included in the final Report at the close of the project. The final choice of landscaping materials is TBD. Planting stock will be installed through the geotextile fabric before top-dressing with the uncontaminated material.

4.2.2.1 Ecology Approved Geotextile Fabric

An Ecology-approved geotextile fabric barrier is required for all soft capping areas comprised of less than 18 inches of uncontaminated material. The geotextile fabric barrier acts as a marker material; physically separating the uncontaminated capping material from the underlying arsenic- and lead-contaminated soil. The geotextile fabric must be non-biodegradable and conform to Ecology standards for this type of underground application. Mirafi 140NL/O Orange, an approved Ecology geotextile fabric will be installed in areas of soft capping at the site. Photographs of the installation will be included in the final Report.

4.2.2.2 Import and Re-use of Uncontaminated Soil

If soil is imported to the site or sourced for re-use from deep excavation at the site it will be tested with an XRF and lab-verified prior to application to ensure compliance with MTCA Method A cleanup levels listed in Table 1: <20 mg/kg (or <20 ppm) for arsenic

and <250 mg/kg (or <250 ppm) for lead. A representative number of lab samples will be collected to verify XRF results. Testing results will be included in the final Report.

Any drain rock or gravel imported to the site for construction of the infiltration trenches does not require lab testing prior to application.

4.2.2.3 In-Progress Inspections

During the installation of the soft capping for the perimeter landscaping areas and during the excavation and backfill of the stormwater infiltration trenches, the Project Site will be monitored by the installation team and/or Pacific to observe and document the work; ensuring that the project is constructed in conformance with the Plan. Photo observations will be included in the final Report.

4.2.3 Consolidation and Capping (Area 3)

Consolidation and capping are proposed to eliminate the need for the export of contaminated soil from the site. The area of consolidation will be compliance sampled with an XRF prior to capping to document the level of remaining contamination in the consolidation area. The map of the consolidation area, the XRF results, and photo documentation of the consolidation area will be included in the final Report at the close of the project.

4.2.3.1 Exporting of Soil

No contaminated soil is expected to be exported from the site. The Applicant proposes using consolidation and capping to avoid export. If export of contaminated soil becomes necessary, soil will be initially tested with an XRF and lab verified prior to export. If initial XRF analysis of the export soil indicates that arsenic and/or lead levels exceed 100 mg/kg (100 ppm), TCLP lab testing will be used as required by Waste Management prior to landfill disposal. Soil testing and composite sampling will comply with the methods listed in Publication 21-09-006, the appropriate forms will be submitted to the waste management facility prior to hauling, and appropriate hauling standards will be observed. If soil export becomes necessary, lab results and landfill paperwork will be included in the final Report.

4.3 EXCAVATION TO UNCONTAMINATED SOIL (Area 4)

Excavation to an uncontaminated soil horizon is a method used for remediation when installing stormwater facilities such as conveyance swales adjacent to residential roads or vaults/trenches/ponds where collected stormwater water will infiltrate into the ground. Five (5) infiltration trenches are proposed under the internal paved roads between buildings. The infiltration trenches will be excavated to a depth below the level of contamination. Ecology recommends collecting an XRF sample every 50 linear feet for trench excavations, with 10% of the XRF samples to be lab verified. Lab results will be included in the final Report. Excavated material from the stormwater trenches will be spread evenly across the site to avoid export. Alternatively, if uncontaminated soil is identified during the deep excavation work, it may be stockpiled for re-use. Earthwork will stay within the parcel boundaries. Following excavation and verification testing, a geotextile fabric will be installed as a trench liner and perforated pipe will be installed before backfilling with drain rock. The infiltration trenches will then be capped with compacted gravel and eventually asphalt. Photo documentation of the stormwater trench construction will be included in the final Report.

4.4 INSTITUTIONAL CONTROLS

Institutional controls include language that demonstrates to Ecology there will be no interference with the remedial action, that human health and the environment will remain protected, that the Project Site will remain in a state of continued compliance, and that future property owners will be made aware of the necessary remedial action. Institutional controls implemented at the site will include the environmental covenants drafted by Ecology. The environmental covenants will be prepared pursuant to MTCA chapter 70.105D RCW and the Uniform Environmental Covenants Act (UECA) chapter 64.70 RCW. It is understood by the Applicant/developer that the covenants will need to be revisited by Ecology during completion of each phase of construction until that time when all development at the site is completed and a NFA can be issued for the subject parcels. The Applicant/developer will provide Ecology with a current Title Report (within 6 months) which includes a 100-year history for drafting of the covenants. After Ecology completes the preparation of the covenants, it will be recorded with the Auditor's office.

Additional institutional controls include the Annual Cap Maintenance Plan for the long-term management of hard and soft capping at the site as discussed in Section 3.1 above (Appendix D).

4.4.1 Existing Utility and Irrigation Easement (Area 5)

Restrictions on the existing utility and irrigation easement with the Chelan River Irrigation District along the western and southern edge of the Project Site will be addressed in the environmental covenants. The utilities and irrigation infrastructure in the easement pre-date the proposed development on the subject parcels.

4.5 ON-GOING MAINTENANCE

Visual inspections of hard and soft capping areas will occur on an annual basis to ensure that the site remains in compliance with Ecology Publication 21-09-006 and MTCA Method A requirements. If damage to the hard or soft cap or the underlying geotextile barrier fabric is found, repairs will occur immediately to re-establish compliance. The stormwater management features will also be inspected to ensure that they are functioning properly. Ecology may perform a site inspection every five (5) years to ensure that institutional controls are still effective. An Annual Cap Maintenance Plan is included as Appendix D. The Annual Cap Maintenance Plan will be included as part of the institutional controls recorded with the Chelan County Auditor's Office.

4.6 STORMWATER MANAGEMENT

All stormwater will be managed to ensure that contaminated water does not leave the site. A SWPPP was prepared for the Project Site and was approved by Ecology. Dust and erosion control methods will be implemented across the Project Site. Any areas not immediately developed at the Project Site will be temporarily capped with up to six (6) inches of compacted gravel to control dust and erosion, pending future development. The gravel will be replaced with hard capped surfaces during future construction phases. Silt fencing will also be installed around the perimeter of the site, a construction entrance comprised of quarry spalls will be constructed, and offsite storm drains will be protected with sediment traps.

5.0 CONCLUSION

The Applicant is developing subject parcel nos. 272318420167 and 272318420195 (Project Site) in the City of Chelan, WA with garage storage units. Development of the Project Site will occur in phases over several years. According to the Ecology Dirt Alert online mapping tool and site data collected by Pacific in the Site Characterization Report (Appendix A) the surface/shallow soil at the Project Site is contaminated with arsenic and/or lead above MTCA Method A cleanup levels from the use of lead arsenate pesticide on historical orchard lands prior to 1950. As part of site development, the Applicant/developer must remediate the Project Site pursuant to Ecology Publication 21-09-006. Pacific has prepared this Plan on behalf of the Applicant to address the remediation of the historical orchard soil at the Project Site. This Plan will be submitted to Ecology as part of the VCP application materials.

Primarily, the Applicant will use soil consolidation, hard and soft capping, excavation to uncontaminated soil, and institutional controls to manage arsenic- and/or lead- contaminated surface/shallow soil at the Project Site. Implementation of this Plan ensures that the site will be remediated during all phases of construction in accordance with Ecology guidelines. The project is comprised of one (1) site within the VCP, with four (4) phases of construction. As each phase of construction is completed, the Applicant will request an Opinion Letter from Ecology demonstrating that each completed phase complies with the Model Remedy. The Opinion Letter is required before receiving an occupancy permit from the City of Chelan at the completion of each phase. At the completion of all phases of construction the Applicant will request a No Further Action Letter from Ecology demonstrating that the Project Site is fully remediated pursuant to Publication 21-09-006 and no further remedial actions are required by the Applicant.

6.0 LIMITATIONS

The conclusions contained in this assessment are based on professional opinions that have been arrived at in accordance with generally accepted professional consulting principles and practices regarding the subject matter applicable at this location. These services were performed consistent with our agreement with our client and currently accepted industry standards. No other warranty, express or implied, is made. Contamination may exist in areas of the site that were not investigated or were inaccessible. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report are derived, in part, from conditions evaluated at the time services were performed and from data gathered by others. This report is intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant and are not responsible for the accuracy or validity of work performed by others or for the impact of changes in environmental standards, practices, or regulations.

Further, this report is limited in scope to the analysis of arsenic and lead in surface soils based on sampling and remediation guidance set forth in Ecology publication Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington, April 2021; publication number 21-09-006. This document serves as guidance in supporting the selection of an appropriate model remedy for remediation of arsenic and lead soils on former orchard lands and does not constitute a formal environmental site analysis.

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Ecology, 2013. Model Toxics Control Act (MTCA) Regulation and Statute, Chapter 173-340 WAC, Publication No. 94-06, revised 2013. Model Toxics Control Act Regulation and Statute: MTCA Cleanup Regulation Chapter 173-340 WAC, Model Toxics Control Act Chapter 70A.305 RCW, Uniform Environmental Covenants Act Chapter 64.70 RCW

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Ecology, 2025. Well Construction and Licensing. Online mapping tool. Well Report Map Search (wa.gov)

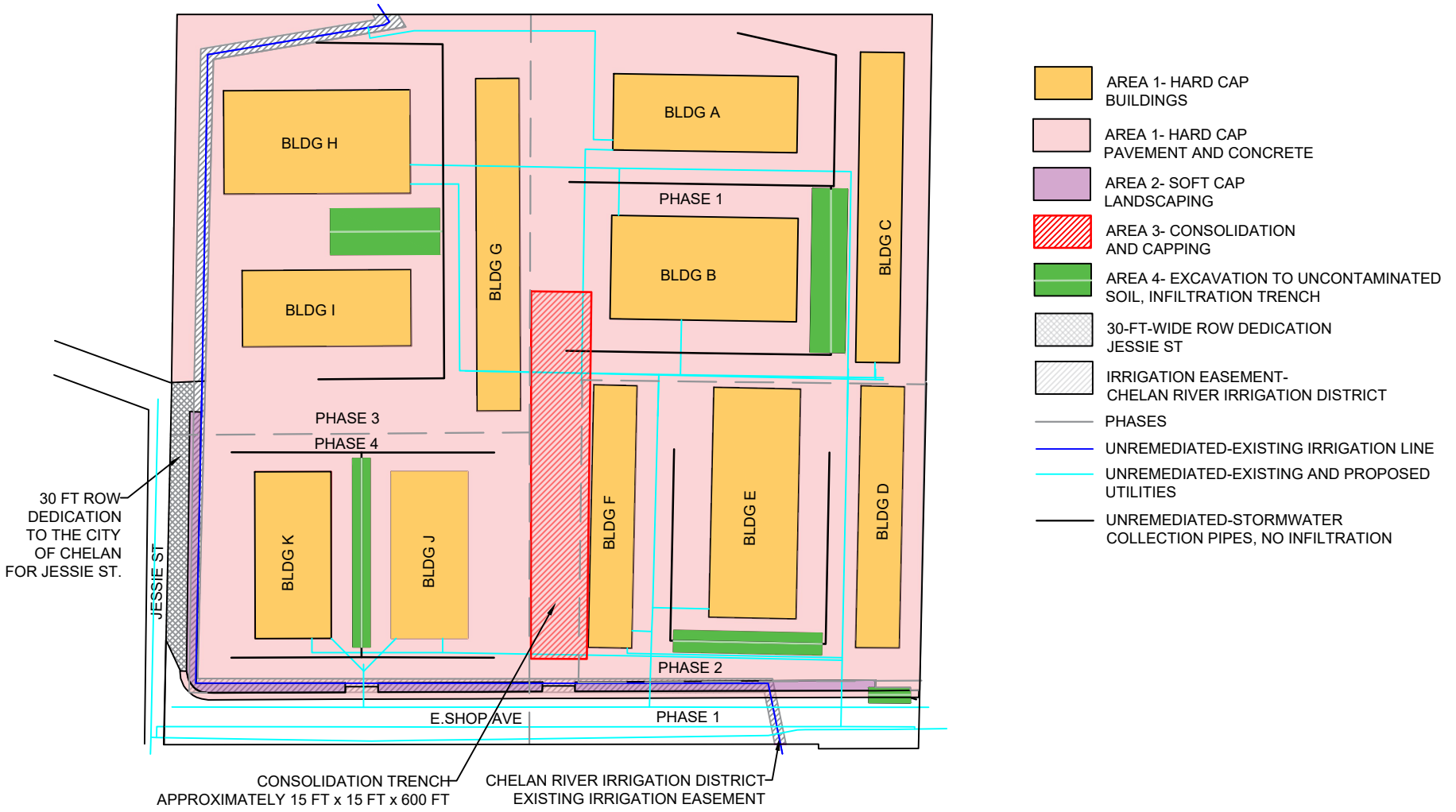
Washington Department of Natural Resources (DNR). Forest Practices Application Mapping Tool. Online Mapper. Forest Practices Application Mapping Tool (FPAMT) (wa.gov)

8.0 PHOTOGRAPHS

Photograph 1. Water was not encountered within 5 ft of the ground surface during deeper soil investigation at the Project Site.

Photograph 2. Project Site.

9.0 SHEETS



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N

SCALE: 1" =140'

CHELAN LUXURY GARAGES, L.L.C.

CHELAN LUXURY GARAGES RAP
CHELAN, WA

PROJ. NO. : 24094.0EA
DATE : 01/28/2025

PROPOSED REMEDIATION SHEET 1

APPENDIX A: Site Characterization Report

SITE CHARACTERIZATION REPORT

CHELAN LUXURY GARAGES, LLC
CITY OF CHELAN, WASHINGTON

FOR

Chris Sandberg
Chelan Luxury Garages, LLC
246 Manson HWY #165
Chelan, WA 98815

BY

Eron Drew
Biologist

PACIFIC ENGINEERING
200 South Columbia Street, Suite 300
Wenatchee, Washington 98801
P 509.662.1161 l F 509.663.8227

Project No. 24094.0EA
September 16, 2024

TABLE OF CONTENTS

PHOTOGRAPHS

ACRONYMS AND ABBREVIATIONS

As ..... Arsenic
bgs ..... Below ground surface
Ecology ..... Washington State Department of Ecology
mg/kg ..... milligrams per kilogram
MTCA ..... Washington State Model Toxics Control Act
Pacific ..... Pacific Engineering and Design, PLLC
Pb ..... Lead
ppm ..... parts per million
Publication 21-09-0006 ..... Ecology Publication 21-09-0006; *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington, April 2021*
RAP ..... Remedial Action Plan
Report ..... Site Characterization Report
XRF ..... X-Ray Fluorescence Analyzer

1.0 INTRODUCTION

Pacific Engineering and Design, PLLC (Pacific) has prepared this Site Characterization Report (Report) for Chris Sandberg as part of the development of the Chelan Luxury Garages project at Unassigned E Shop Ave in Chelan, Washington; adjoining parcel nos. 272318420195 and 272318420167 (herein referenced as the project site, Sheet 1, Photographs 1 and 2). On June 7 and June 11, 2024, Pacific collected twenty-two (22) shallow surface soil samples and nine (9) deeper samples across the project site as part of the characterization of potential historical orchard soils. The purpose of the sampling herein was to characterize the presence/absence of arsenic and lead in soil associated with historical orchard use of the project site and to determine whether further action would be required during development to comply with Ecology Publication 21-09-0006; *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington, April 2021* (Publication 21-09-0006). This Report summarizes the Pacific field methods and soil sampling results. Data summarized in this Report may be used by the client to prepare a Remedial Action Plan (RAP) for the management of arsenic- and lead-contaminated soil at the site pursuant to Publication 21-09-0006. Although several soil samples had concentrations of arsenic and/or lead that were less than the MTCA Method A cleanup levels (Sheets 1 through 3), most of the project site contains soil with concentrations of arsenic and/or lead that exceed the MTCA Method A cleanup levels, requiring further remediation actions that can be completed during the proposed development activities and documented in a RAP.

As part of the site characterization sampling effort, samples were collected and analyzed at thirty-one (31) distinct locations for arsenic and lead content using an X-ray Fluorescence Analyzer (XRF) in areas of the project site mapped on the Ecology Dirt Alert online mapping tool as potentially containing historical commercial orchard land prior to 1950. Ecology Dirt Alert mapping of the site and vicinity is included in Appendix A. Historical orchards are likely to contain elevated levels of arsenic and/or lead in surface/shallow soils due to the use of lead arsenate pesticides, which were common practice at that time. The site characterization testing confirmed that some areas of the project site contain elevated arsenic and/or lead concentrations that exceed the Washington State Model Toxics Control Act (MTCA) Method A cleanup levels of 20 milligrams per kilogram (mg/kg) and 250 mg/kg for arsenic and lead, respectively. The results of the site characterization sampling are included below (Sheets 1 through 3). The site characterization results indicate that development of the project site should consider using the remedies described in Publication 21-09-0006 for the remediation of arsenic- and/or lead-contaminated soil during the proposed development activities.

2.0 SOIL SAMPLING PROGRAM

On June 7 and June 11, 2024, Pacific visited the project site and conducted sampling using an Olympus Vanta Element XRF. Twenty-two (22) surface/shallow soil samples were collected, and nine (9) deeper samples were collected for a total of thirty-one (31) distinct locations across the project site. This sampling was part of the characterization of potential historical orchard soil at the site. Deeper samples were collected to evaluate the likely vertical distribution of arsenic and lead impacts on soil quality. Sampling data will be used to prepare a RAP for the project site pursuant to Publication 21-09-0006. Details regarding the soil sampling locations, sampling/analysis methodologies, the sampling results, and discussion with respect to further actions appropriate under the Ecology Model Remedies are presented below. Although several soil samples had concentrations of arsenic and/or lead that were less than the MTCA Method A cleanup levels, most of the project site contains soil with concentrations of arsenic and/or lead that exceed the MTCA Method A cleanup levels, requiring further remediation actions that can be completed during the proposed development activities and documented in a RAP.

2.1 METHODS

A Pacific biologist visited the project site on June 7 and June 11, 2024, to evaluate the lateral and vertical distribution of arsenic and lead contamination in the surface/shallow soils at the site. Prior to conducting the site visit, current and historical Google Earth aerial photographs, the Ecology Dirt Alert map (Appendix A), and project site parcel data from Chelan County GIS were evaluated to develop a sampling protocol including the appropriate number of site characterization soil samples consistent with Publication 21-09-006. Based on the project site characteristics, a total of thirty-one (31) sample locations across the site were selected to evaluate soil quality (Sheet 1).

Soil samples were collected between 0-6 inches below ground surface (bgs) at all thirty-one (31) locations. Additionally, samples were collected to a depth between 30 and 48 inches bgs at nine (9) of the locations (Sheet 1). Sample locations were established to incorporate samples in each of the individual agricultural and/or land use blocks observed in aerial photography of the site. Sample locations were selected to provide a representative data set across the project site that could be used to develop a RAP that would meet the Ecology Model Remedies requirements.

Sample analysis was performed using an Olympus Vanta Element handheld XRF. The XRF was calibrated prior to the sampling effort to detect both arsenic and lead concentrations in the soil. The XRF measures concentrations as parts per million (ppm) units, which are equivalent to mg/kg concentration units used by Ecology under MTCA. Detection limits of the XRF are approximately 5 ppm for lead and approximately 10 ppm for arsenic, which are less than the MTCA Method A cleanup levels of 20 mg/kg and 250 mg/kg for arsenic and lead, respectively. Required contact time with the soil surface during sampling was set to 30 seconds on the XRF, which is sufficient time to obtain a representative result for comparison with the MTCA cleanup levels and is expected to be a comparable concentration to standard laboratory testing methods.

At each shallow sampling location, a long narrow bladed stainless-steel shovel was used to dig a hole to approximately 6-inches bgs. Each sample location was completed with an even bottom surface so that the XRF analyzer had 100% contact with the soil surface during analysis.

Deeper sampling locations were chosen in advance of the site visit and were dug using a track-mounted excavator. The wall of each excavation was prepared using a stainless-steel hand trowel to expose a fresh soil surface prior to XRF analysis. Measurements with the XRF were taken every 6 inches bgs and extended to a depth between 30 and 48 inches bgs. The sampling details and XRF results were recorded in general accordance with criteria cited in Publication 21-09-006 (Sheets 2 and 3). Additional data collection included geographic position of each sample location, weather conditions during sampling, and any unusual environmental conditions present at the time of sampling. Each sampling location was recorded using a Differential Global Positioning System with sub-meter accuracy. Sampling data were plotted onto a representative map of the site (Sheet 1).

2.2 RESULTS

Based on the XRF sampling, concentrations of arsenic and/or lead that exceed the MTCA Method A cleanup levels are present across nearly the entire project site (Sheets 1 through 3). Elevated concentrations of arsenic and/or lead exceeding the MTCA cleanup levels were detected at thirty (30) of the sampling locations. The lateral distribution of arsenic and lead appear ubiquitous with no point source, which would be consistent with use of the project site as historical orchard lands.

The vertical distribution of arsenic and/or lead appears relatively uniform across the site. All nine (9) deeper soil sampling locations contain concentrations of arsenic and/or lead exceeding the MTCA Method A cleanup levels with a depth up to 42-inches bgs present at one location. Most deeper sampling locations exhibited concentrations above MTCA cleanup levels extending to a depth of 30-inches bgs or less. Groundwater was not observed at any of the deeper sampling locations.

No large contiguous areas of uncontaminated soil were identified within the project site. Based on these results contamination is ubiquitous across the entirety of the project site.

3.0 DISCUSSION

Twenty-two (22) shallow/surface soil sampling locations and nine (9) deeper locations were evaluated across the project site to characterize and refine the understanding of the lateral and vertical distribution of arsenic and lead concentrations from historical orchard use that would require further action pursuant to the Ecology Model Remedies as provided in Publication 21-09-006 and facilitate future development planning. The results of the investigation work indicate that the lateral and vertical distribution of arsenic and/or lead is ubiquitous across the project site, which is consistent with the use of lead arsenate pesticides related to historical commercial orchard use prior to 1950 (Sheets 1 through 3).

The vertical distribution of arsenic and/or lead exceeding the MTCA cleanup levels extended to 42-inches bgs at one location, with most of the contamination observed in the deeper samples extending to 30-inches bgs or less. Contaminated soil was not observed deeper than 42-inches bgs at any of the nine (9) deeper sampling locations. Groundwater was not observed during sampling activities and based on groundwater occurrences in the vicinity of the project site, is present at a depth greater than 100 ft bgs and would not be a medium of concern for future investigation or remediation.

Only one (1) sampling location exhibited no elevated levels or arsenic or lead in surface samples suggesting that small portions of the project site were not in commercial orchard production when lead arsenate pesticides were in use. However, in general contaminated soil is present across most of the project site.

These results confirm that the historical commercial orchard at the project site used lead arsenate pesticides, and it is recommended that any remediation for arsenic and/or lead be applied to the entirety of the project site. Based on the initial deeper sampling results, it is possible that at depth uncontaminated soil may be present at the project site. However, it should be assumed that all soil is contaminated unless lab testing can confirm otherwise. If after excavation and lab confirmation uncontaminated soil is not identified on-site, it is recommended that soil for any future remediation is imported to the site from a reputable off-site location that is free from contamination based on lab sampling.

In summary, due to the ubiquitous lateral and vertical distribution of arsenic and/or lead in exceedance of MTCA Method A cleanup levels, future development activities will need to consider the entirety of the project site during the Chelan Luxury Garages development consistent with the guidance provided in Publication 21-09-006. Sufficient information is available regarding the proposed development activities to prepare a RAP and incorporate remediation activities with the necessary earthwork activities anticipated for the development work.

4.0 LIMITATIONS

The conclusions contained in this assessment are based on professional opinions that have been arrived at in accordance with generally accepted professional consulting principles and practices regarding the subject matter applicable at this location. These services were performed consistent with our agreement with our client and currently accepted industry standards. No other warranty, express or implied, is made. Contamination may exist in areas of the site that were not investigated or were inaccessible. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report are derived, in part, from conditions evaluated at the time services were performed and from data gathered by others. This report is intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant and are not responsible for the accuracy or validity of work performed by others or for the impact of changes in environmental standards, practices, or regulations.

Further, this report is limited in scope to the analysis of arsenic and lead in surface soils based on sampling and remediation guidance set forth in Ecology publication Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington, April 2021; publication number 21-09-006. This document serves as guidance in supporting the selection of an appropriate model remedy for remediation of arsenic and lead soils on former orchard lands and does not constitute a formal environmental site analysis.

5.0 BIBLIOGRAPHY

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Ecology, 2013. Model Toxics Control Act (MTCA) Regulation and Statute, Chapter 173-340 WAC, Publication No. 94-06, revised 2013. Model Toxics Control Act Regulation and Statute: MTCA Cleanup Regulation Chapter 173-340 WAC, Model Toxics Control Act Chapter 70A.305 RCW, Uniform Environmental Covenants Act Chapter 64.70 RCW

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Ecology, 2024. Dirt Alert. Online mapping tool. Former Orchard Lands (wa.gov)

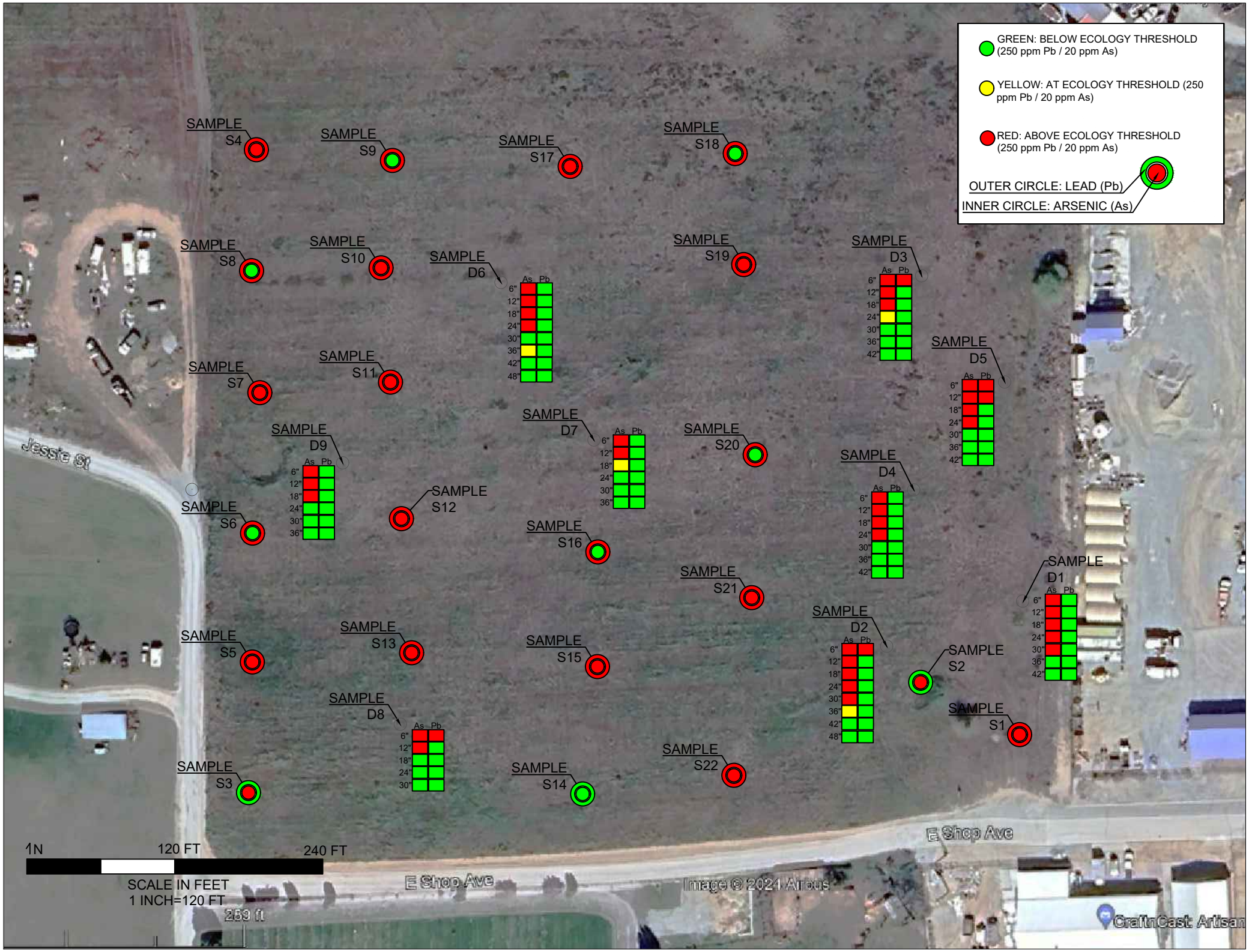
Ecology, 2024. Well Construction and Licensing. Online mapping tool. Well Report Map Search (wa.gov)

6.0 PHOTOGRAPHS

Photograph 1. Deeper soil was investigated at nine (9) sampling locations across the project site.

Photograph 2. Project site.

7.0 SHEETS


GREEN: BELOW ECOLOGY THRESHOLD (250 ppm Pb / 20 ppm As)
YELLOW: AT ECOLOGY THRESHOLD (250 ppm Pb / 20 ppm As)
RED: ABOVE ECOLOGY THRESHOLD (250 ppm Pb / 20 ppm As)
OUTER CIRCLE: LEAD (Pb)
INNER CIRCLE: ARSENIC (As)
SAMPLE S4
SAMPLE S9
SAMPLE S17
SAMPLE S18
SAMPLE S8
SAMPLE S10
SAMPLE D6
SAMPLE S19
SAMPLE D3
SAMPLE S7
SAMPLE S11
SAMPLE D5
SAMPLE D7
SAMPLE S20
SAMPLE D9
SAMPLE D4
SAMPLE S12
SAMPLE S6
SAMPLE S16
SAMPLE S21
SAMPLE D1
SAMPLE D2
SAMPLE S5
SAMPLE S13
SAMPLE S15
SAMPLE S2
SAMPLE D8
SAMPLE S1
SAMPLE S3
SAMPLE S14
SAMPLE S22
Jessie St
E Shop Ave
E Shop Ave
Image © 2021 Airbus
CraftnCast Artisan
1N
120 FT
240 FT
SCALE IN FEET
1 INCH=120 FT
289 ft

XRF Threshold: Pb <250 ppm; Ar <20 ppm							
Location:	**Chris Sandberg; Unassigned E. Shop Ave Chelan, WA**						
Technician:	**Eron Drew; Grette Associates, a Division of Farallon Consulting LLC**						
XRF Make/Model:	**Olympus Vanta Element**						
Date:	**6-7-24 and 6-11-24 Sunny, Clear, High 70s Wind 5-10 mph**						
LAT.	**LONG.**	**Sample Site**	**Depth (Inches):**	**As**	**Pb**	**Notes**	**Date**
47.834347	-119.99413	S1	5"	64	359		6/7/2024
47.834467	-119.994472	S2	48"	38	139	sample taken in previously excavated hole	6/7/2024
47.834222	-119.996713	S3	5"	90	249		6/7/2024
47.835654	-119.996702	S4	5"	75	250		6/7/2024
47.834509	-119.996706	S5	1"	69	302		6/11/2024
47.834794	-119.996716	S6	1"	ND	348		6/11/2024
47.835114	-119.996691	S7	1"	54	323		6/11/2024
47.83538	-119.996724	S8	1"	ND	314		6/11/2024
47.835632	-119.996259	S9	1"	ND	359		6/11/2024
47.835395	-119.996294	S10	1"	86	278		6/11/2024
47.835138	-119.99626	S11	1"	53	317		6/11/2024
47.83483	-119.996222	S12	1"	71	392		6/11/2024
47.834531	-119.996177	S13	1"	66	298		6/11/2024
47.834214	-119.995605	S14	1"	ND	171		6/11/2024
47.834503	-119.995559	S15	1"	57	423		6/11/2024
47.834753	-119.99556	S16	1"	ND	264		6/11/2024
47.835627	-119.995664	S17	1"	52	322		6/11/2024
47.835663	-119.995113	S18	1"	ND	287		6/11/2024
47.835406	-119.995075	S19	1"	70	254		6/11/2024
47.83498	-119.995034	S20	1"	ND	347		6/11/2024
47.834655	-119.995045	S21	1"	60	467		6/11/2024
47.834255	-119.995104	S22	1"	71	433		6/11/2024

LAT.	**LONG.**	**Sample Site**	**Depth (Inches):**	**As**	**Pb**	**Notes**	**Date**
47.834648	-119.994127	D1a	6	46	237	silt to sandy/gravelly silt	6/11/2024
		D1b	12	37	ND		
		D1c	18	58	44		
		D1d	24	37	ND		
		D1e	30	23	ND		
		D1f	36	ND	ND		
		D1g	42	ND	ND		
47.834543	-119.994584	D2a	6	61	490	silt to sandy silt	6/11/2024
		D2b	12	47	46		
		D2c	18	42	ND		
		D2d	24	32	ND		
		D2e	30	26	ND		
		D2f	36	21	ND		
		D2g	42	ND	ND		
		D2h	48	ND	ND	cobble	
47.835387	-119.99448	D3a	6	80	408	silt to sandy silt	6/11/2024
		D3b	12	69	19		
		D3c	18	71	ND		
		D3d	24	22	ND		
		D3e	30	ND	17		
		D3f	36	ND	ND		
		D3g	42	ND	ND		
47.83491	-119.994497	D4a	6	58	22	silt to sandy silt	6/11/2024
		D4b	12	29	ND		
		D4c	18	25	20		
		D4d	24	31	ND		
		D4e	30	ND	ND		
		D4f	36	ND	ND		
		D4g	42	ND	ND		
47.835152	-119.994192	D5a	6	85	522	silt to sandy silt	6/11/2024
		D5b	12	62	330		
		D5c	18	59	ND		
		D5d	24	26	ND		
		D5e	30	ND	ND		
		D5f	36	ND	ND		
		D5g	42	ND	ND		

LAT.	LONG.	Sample Site	Depth (Inches):	As	Pb	Notes	Date
47.835363	-119.99589	D6a	6	84	68	silt to gravelly silt	6/11/2024
		D6b	12	70	29		
		D6c	18	42	ND		
		D6d	24	26	ND		
		D6e	30	19	ND		
		D6f	36	21	ND		
		D6g	42	ND	ND		
		D6h	48	ND	ND		
47.835011	-119.995577	D7a	6	54	ND	silt to gravelly silt	6/11/2024
		D7b	12	53	ND		
		D7c	18	22	ND		
		D7d	24	ND	ND		
		D7e	30	ND	ND		
		D7f	36	ND	19	small cobble	
47.834373	-119.996211	D8a	6	157	282	cobbly	6/11/2024
		D8b	12	57	ND		
		D8c	18	19	ND		
		D8d	24	ND	ND		
		D8e	30	ND	ND		
47.834958	-119.996419	D9a	6	74	230	silt	6/11/2024
		D9b	12	47	ND		
		D9c	18	41	ND		
		D9d	24	ND	ND		
		D9e	30	ND	ND		
		D9f	36	ND	ND		

APPENDIX A: Ecology Dirt Alert Mapping

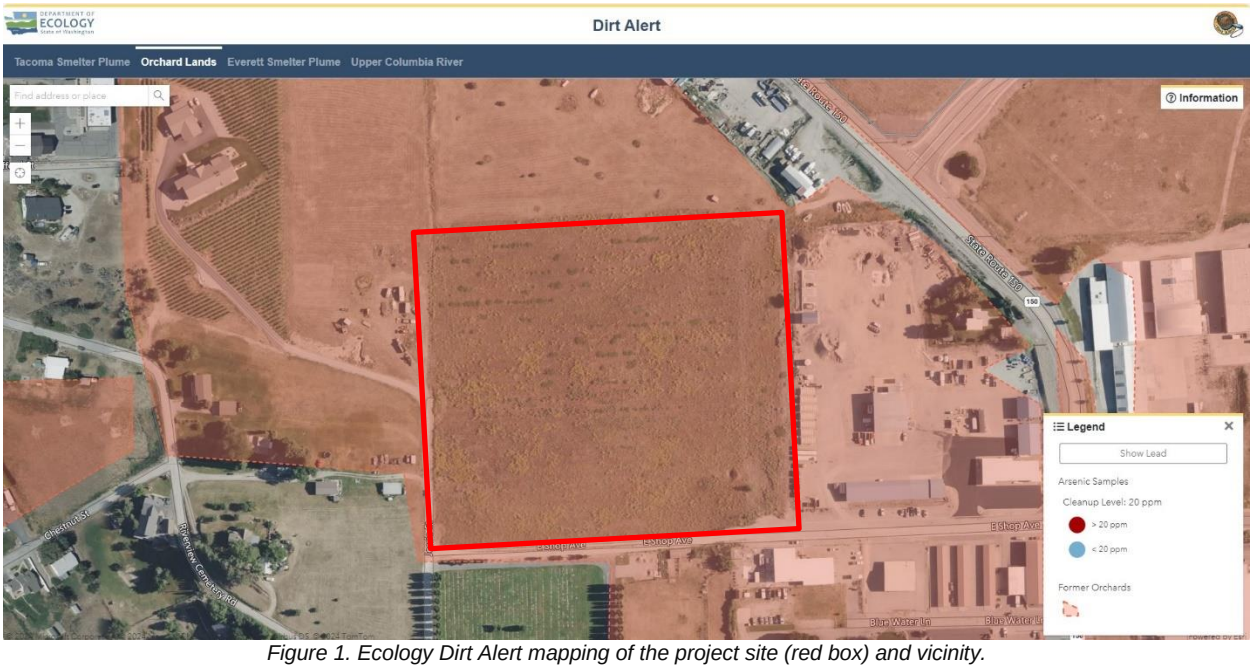


Figure 1. Ecology Dirt Alert mapping of the project site (red box) and vicinity.

APPENDIX B: Ecology Publication 21-09-006 Worksheets

TO BE ADDED AT THE CLOSE OF THE PROJECT

APPENDIX C: TEE Exemption

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: CHELAN LUXURY GARAGES LLC	
Facility/Site Address: Unassigned E Shop Ave Chelan, WA 98816	
Facility/Site No:	VCP Project No.: To Be Assigned by Ecology

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Eron Drew		Title: Biologist
Organization: Pacific Engineering and Design, PLLC		
Mailing address: 200 S. Columbia Street Suite 300		
City: Wenatchee	State: WA	Zip code: 98801
Phone: 509-662-1161	Fax:	E-mail: eron@pacificengineering.net

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 2**.*

☐ No or Unknown *If you answered **"NO" or "UNKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☒ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☐ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No or Unknown *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 3** below.*

☐ No *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

☐ Yes *If you answered **"YES,"** then answer **Question 4** below.*

☐ No *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*

☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

☐ Area of soil contamination at the Site is not more than 350 square feet.

☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

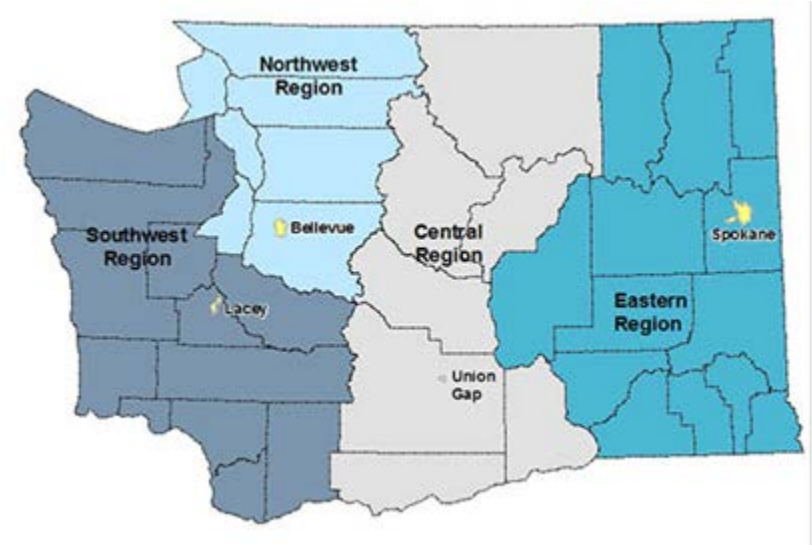
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.

APPENDIX D: Annual Cap Maintenance Plan

TECHNICAL MEMORANDUM

January 17, 2025

TO: Washington State Department of Ecology, Central Regional Office
Attn: Mary Monahan
1250 West Alder Street
Union Gap, WA 98903

FROM: Eron Drew, Biologist, Pacific Engineering & Design

SUBJECT: TEE Exemption, Annual Cap Maintenance Plan
Re: Chelan Luxury Garages, Self-Storage Garage Units Chelan, WA
VCP Project No. TO BE ASSIGNED
Pacific Project No. 24094.0EA

INTRODUCTION

As part of the Chelan Luxury Garages, LLC Self-Storage Garage Units VCP application for the conversion of historical orchard land to commercial development, the applicant/developer has prepared the TEE Exemption Form (attached) indicating that engineered caps constructed of hard capped surfaces and soft capped landscaping will be used to manage exposure to arsenic- and lead-contaminated surface/shallow soil on City of Chelan parcel nos. 272318420167 and 272318420195. Annual maintenance of the engineered caps is required to ensure that the caps are serving their intended function of excluding exposure to arsenic- and lead-contaminated surface/shallow soil at the site. This technical memorandum demonstrates how the engineered hard and soft caps will be evaluated annually by the applicant/developer and outlines the steps that will be taken to ensure the caps remain in good condition.

ANNUAL EVALUATION

Hard Cap

No less than one (1) time annually, the applicant/developer will inspect all hard capped surfaces (sidewalks, pavement, buildings, etc.) within the confines of the subject parcels to ensure that no cracks have formed, or damage has occurred that would allow exposure to the contaminated soil present below the cap. If cracks are identified, they will be filled with tar, caulk, or an appropriate sealant to ensure that the crack does not expand and to eliminate potential exposure to the underlying soil. If any of the hard capped features require professional repair, the workers doing the repair will be informed of the presence of contaminated soil below the hard capping and appropriate measures will be implemented by the workers to limit exposure during the repair.

Soft Cap

No less than one (1) time annually, the applicant/developer will inspect all soft capped landscaping areas (perimeter landscaping, building landscaping, etc.) within the confines of the subject parcels to ensure that the geotextile fabric barrier is undamaged. If damage to the geotextile fabric barrier is discovered, the damage will be repaired immediately using a like and in-kind Ecology approved geotextile. If the geotextile requires professional repair, the workers doing the repair will be informed of the presence of contaminated soil below the geotextile and

appropriate measures will be implemented by the workers to limit exposure during the repair. After the geotextile is repaired, the uncontaminated material over the geotextile will be restored to the appropriate depth, as described below.

No less than one (1) time annually, the applicant/developer will inspect the depth of uncontaminated material over the geotextile barrier every fifty (50) linear feet to ensure that no less than six (6) inches of uncontaminated sand, soil, or river rock is present over the geotextile fabric. If compacted gravel is used, the applicant/developer will ensure that no less than four (4) inches is present over the geotextile. If bark mulch is used, the applicant/owner will ensure that no less than 3 inches of sand/soil is present between the geotextile and the mulch, and that the bark mulch thickness is no less than four (4) inches in depth. If the depth of the uncontaminated material used in the landscaping areas does not comply with the above-listed standards, the applicant/owner will add additional like and in-kind uncontaminated material to reach the proper cap depth.

If sod is used in soft capping areas, six (6) inches of uncontaminated soil must be present between the geotextile and the base of the sod. The sod does not count toward the overall depth of the soft cap.

ECOLOGY INSEPCTION

As part of the VCP permitting process, Ecology reserves the right to visit and inspect the project site every five (5) years to ensure that the engineered caps are performing as intended.