

Appendix A2: Exposure Pathway Assessment

Exposure Pathway Assessment

This assessment is a conservative qualitative determination of whether there is any reason to believe that a complete or potentially complete pathway between contaminants of interest and ecological receptors exists or may exist in the locality of the facility. Locality of facility is defined in rule, and means any point where a human or an ecological receptor contacts, or is reasonably likely to come into contact with, facility-related hazardous substances, considering: a) the chemical and physical characteristics of the hazardous substances; b) physical, meteorological, hydrogeological, and ecological characteristics that govern the tendency for hazardous substances to migrate through environmental media or to move and accumulate through food webs; c) any human activities and biological processes that govern the tendency for hazardous substances to move into and through environmental media or to move and accumulate through food webs; and d) the time required for contaminant migration to occur based on the factors described above.

Note there are three attachments to this Exposure Pathway Assessment Appendix. Attachments 1 and 2 should be completed and submitted to DEQ along with a report or technical memorandum that generally follows the outline provided in Attachment 3. General exposure pathway assessment tasks are described below and refer to relevant attachments.

Tasks

(1) **Assess existing data**

Obtain the following information regarding the site and surrounding area for submittal to DEQ:

- (a) Surface area of the site;
- (b) Present and historical uses of the site and nearby properties;
- (c) Current and reasonably likely future land and/or water use(s);
- (d) Sensitive environments (as defined by OAR 340-122-115(49)) at, adjacent to, or in the locality of the site;
- (e) Known or suspected presence of threatened and/or endangered species or their habitat in the locality of the facility (see text box below for resources to determine the presence of T&E species).
- (f) Accurate site and regional maps showing structures, infrastructure, sampling locations, land use, wetlands, surface water bodies, sensitive environments, etc.;
- (g) Types of hazardous substances reportedly released at the site;
- (h) Magnitude and extent of migration of any hazardous substances reportedly released at the site.

Sources to Determine the Presence of Threatened and Endangered Species

Oregon: Consultation with the Oregon Biodiversity Information Center (ORBIC), provides information on state and federally listed rare, threatened and endangered species in Oregon that may occur at your Site. ORBIC is a part of the [Institute for Natural Resources](https://www.inr.oregonstate.edu/) (INR) which is a cooperative enterprise of Oregon's public universities. Request and submit a data request for the occurrence of rare, threatened, and endangered species for your Site. Data requests can be submitted electronically: <https://inr.oregonstate.edu/orbic>. The Center provides site-specific species information within two miles of the given location.

Additional information and specific state and federal species lists can be found using the following resources.

- Oregon Listed: Oregon Department of Fish and Wildlife
https://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp
- Federally Listed:
 - U.S. Fish and Wildlife Service Information for Planning and Consultation
<https://ecos.fws.gov/ipac/>
 - National Marine Fisheries Service
<https://www.fisheries.noaa.gov/national/endangered-species-conservation/esa-threatened-endangered-species>

Note: Additional coordination with state or federal natural resource trustees and/or tribes may be needed to identify all relevant receptors of concern.

(2) **Perform initial site visit**

A visit to the site to directly assess ecological features, transport pathways, and conditions is typically required, except at very ecologically simple sites where aerial photographs and infrastructure maps suffice. The site itself, areas adjacent to the site, and areas in the locality of the site (as defined by OAR 340-122-115(34)) should all be visited. The size and complexity of the site will determine the time needed for this initial visit. While at the site, the following activities should be performed:

- (a) Look for any signs (e.g. visual, olfactory, etc.) of a chemical release;
- (b) Sketch the site topography, with special emphasis to surface water drainages and other potential hazardous substance migration pathways;
- (c) Note any evident (e.g. visual, olfactory, etc.) signs of hazardous substance migration within the site or offsite;
- (d) Look for signs of threatened and/or endangered species or their habitat within or adjacent to the site;
- (e) As appropriate, note any evident signs (seeps, springs, cutbanks, etc.) for groundwater discharge to the surface;
- (f) Note any natural or anthropogenic disturbances onsite;
- (g) Make a photographic record of the site, with emphasis on ecological features and potential exposure pathways;

(h) Complete the Ecological Scoping Checklist (Attachment 1).

(3) Identify contaminants of interest (COIs)

Identification of contaminants of interest for ecological receptors may necessitate a separate identification process than that used for any human health evaluation, since a contaminant not generally considered a threat to human health may be a threat to biota. The list of COIs are those known or suspected to be present based on the remedial investigation, and are identified based on site-specific sources of contamination. The results of this evaluation are summarized by completing Attachment 1, Parts ① and ②.

(4) Evaluate receptor-pathway interactions

Make an estimate, based on the site-specific information gathered in the previous three tasks and professional judgment, as to whether complete or potentially complete exposure pathways exist between COIs in a specific environmental media and ecologically important receptors associated with that media (e.g., between hazardous substances in surface water and fish). The results of this evaluation are summarized by completing Attachment 2.

(a) For the purpose of completing Attachment 2, complete or potentially complete exposure pathways are those that have: a source and mechanism for hazardous substance release to the environment, an environmental transport medium for the hazardous substance, a point of receptor contact (exposure point) with the contaminated media, and an exposure route to the receptor at the exposure point.

(i) For upland assessments, an exposure point is any area not covered by buildings, roads, paved areas or other barriers that would prevent wildlife from feeding on plants, earthworms, insects or other food or on the soil. Exposure areas generally exclude continuously disturbed or heavily landscaped areas adjacent to active operations that discourage wildlife use. Note that the absence of trees and shrubs does not eliminate exposure, as some species prefer areas with little or no vegetation (e.g., streaked horned lark and killdeer birds).

(ii) For aquatic assessments, an exposure point is sediment, wetland soils, and surface water.

(b) For the purpose of completing Attachment 2, the following species present in the LOF should be considered:

(i) Individual listed threatened and endangered species;

(ii) Local populations of species, including those that are recreational and/or commercial resources;

(iii) Local populations of any species with a known or suspected susceptibility to the hazardous substance(s);

(iv) Local populations of vertebrate species;

(v) Local populations of invertebrate species, such as those that:

- Provide food resource for higher organisms; or
 - Perform a critical ecological function (such as organic matter decomposition) ; or
 - Can be used as a surrogate measure of adverse effects for individuals or populations of other species.
 - (c) For the purpose of completing Attachment 2, “plants are those that form the habitat for local populations of species as defined above or are themselves listed as threatened and endangered species.
 - (d) Because they are not members of natural communities, any of the following should not be considered species of interest for the purpose of completing Attachment 2:
 - (i) Pest and opportunistic species that populate an area entirely because of artificial or anthropogenic conditions;
 - (ii) Domestic animals (e.g., pets and livestock);
 - (iii) Plants or animals whose existence is maintained by continuous human intervention (e.g., fish hatcheries, agricultural crops).
- (5) **Submit Tier I deliverable**
- This deliverable is a brief memorandum (see Attachment 3, Site Ecology Scoping Report, for suggested format and contents) detailing the results of the data review, site visit, and evaluation of receptors and pathways in the locality of the facility (LOF). It should present information in sufficient depth to give risk managers confidence in determining whether receptors and exposure pathways are or are not likely to exist at the site.
- (a) Attachment 3, Items 1a through 1g are 1-2 paragraph summaries of site conditions, making reference to Items 4a through 4f as appropriate.
 - (b) Attachment 3, Item 2a is Part ❶ of Attachment 1.
 - (c) Attachment 3, Item 2b includes, at a minimum, Part ❷ of Attachment 1, as well as any other site-specific observations that the responsible party wishes to include.
 - (d) Attachment 3, Item 2c includes, at a minimum, Part ❸ of Attachment 1, as well as any other site-specific observations that the responsible party wishes to include.
 - (e) Attachment 3, Item 2d discusses efforts to observe species and/or habitats, particularly listed threatened or endangered species (or their habitat) at or adjacent to the site. Any such species or habitats should be noted on Part ❹ of Attachment 1.
 - (f) Attachment 3, Item 2e includes, at a minimum, Attachment 2, as well as any other site-specific observations that the responsible party wishes to include.
 - (g) Attachment 3, Item 3 describes recommendations made on the basis of specific criteria.

(6) **Determine whether potentially complete exposure pathways exist**

Based on information presented in the deliverable, do potential ecological receptors and potentially complete exposure pathways exist at or in the locality of the site? Specific criteria are as follows:

- (a) If any of the “**Y**” or “**U**” boxes in Attachment 2 are checked, then a recommendation to move to risk assessment should be made. In completing this Attachment, a lack of knowledge, presence of high uncertainty, or any “unknown” circumstances should be tabulated as a “**U**”.
 - (i) Note that a “**Y**” answer for any section requires that all three questions within that section be answered “**Y**” or “**U**”.
- (b) If all of the “**No**” boxes in Attachment 2 are checked, then complete exposure pathways to ecological receptors is unlikely, and therefore risk to ecological receptors is improbable. A recommendation for no further ecological investigations should be made.

**ATTACHMENT 1
Ecological Scoping Checklist**

Site Name	Stratus Village
Date of Site Visit	December 14, 2023 and February 21, 2024
Site Location	2450 SE Stratus Avenue, McMinnville OR
Site Visit Conducted by	Mike Reynolds, for Phase II ESA scope

Part 1

CONTAMINANTS OF INTEREST IN LOCALITY OF FACILITY[†] Types, Classes, Or Specific Hazardous Substances[‡] Known Or Suspected	Upland	Aquatic
Chemicals of interest (COI) detected onsite can be found summarized in the Phase II ESA.	X	

[‡] As defined by OAR 340-122-115(30)

[†] As defined by OAR 340-122-115(34)



Part 2


OBSERVED IMPACTS OBSERVED IN THE LOCALITY OF THE FACILITY	Finding
Onsite vegetation (None, Limited, Extensive)	L
Vegetation in the locality of the site (None, Limited, Extensive)	L
Onsite wildlife such as macroinvertebrates, reptiles, amphibians, birds, mammals, other (None, Limited, Extensive)	L
Wildlife such as macroinvertebrates, reptiles, amphibians, birds, mammals, other in the locality of the site (None, Limited, Extensive)	L
Other readily observable impacts (None, Discuss below)	N
Discussion:	
Onsite observation for the Phase II ESA only yielded observation of worms and domestic house cats from the adjacent property.	

**ATTACHMENT 1
Ecological Scoping Checklist (cont'd)**


Part 3

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding
<i>Terrestrial - Wooded</i>	
Percentage of site that is wooded No trees on property	0%
Dominant vegetation type (Evergreen, Deciduous, Mixed)	N/A P *
Prominent tree size at breast height, i.e., four feet (<6", 6" to 12", >12")	N/A
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	N/A
<i>Terrestrial - Scrub/Shrub/Grasses</i>	
Percentage of site that is scrub/shrub Grass area	~10%
Dominant vegetation type (Scrub, Shrub, Grasses, Other)	G P
Prominent height of vegetation (<2', 2' to 5', >5')	<2'
Density of vegetation (Dense, Patchy, Sparse)	P P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	N/A
<i>Terrestrial - Ruderal</i>	
Percentage of site that is ruderal Fallow crop land area	~90%
Dominant vegetation type (Landscaped, Agriculture, Bare ground)	A P
Prominent height of vegetation (0', >0' to <2', 2' to 5', >5')	>0' to <2'
Density of vegetation (Dense, Patchy, Sparse)	D P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	worms
<i>Aquatic - Non-flowing (lentic)</i>	
Percentage of site that is covered by lakes or ponds	0%
Type of water bodies (Lakes, Ponds, Vernal pools, Impoundments, Lagoon, Reservoir, Canal)	N/A
Size (acres), average depth (feet), trophic status of water bodies	N/A
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	N/A
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	N/A
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	N/A P
Vegetation present (Submerged, Emergent, Floating)	N/A P
Obvious wetlands present (Yes / No)	No
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	N/A
<i>Aquatic - Flowing (lotic)</i>	
Percentage of site that is covered by rivers, streams (brooks, creeks), intermittent streams, dry wash, arroyo, ditches, or channel waterway	0%
Type of water bodies (Rivers, Streams, Intermittent Streams, Dry wash, Arroyo, Ditches, Channel waterway)	N/A
Size (acres), average depth (feet), approximate flow rate (cfs) of water bodies	N/A P
Bank environment (cover: Vegetated, Bare / slope: Steep, Gradual / height (in feet))	N/A

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	N/A
Tidal influence (Yes / No)	No
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	N/A
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	N/A
Vegetation present (Submerged, Emergent, Floating)	N/A 
Obvious wetlands present (Yes / No)	No
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	N/A
<i>Aquatic - Wetlands</i>	
Obvious or designated wetlands present (Yes / No)	No
Wetlands suspected as site is/has (Adjacent to water body, in Floodplain, Standing water, Dark wet soils, Mud cracks, Debris line, Water marks)	N/A
Vegetation present (Submerged, Emergent, Scrub/shrub, Wooded)	N/A 
Size (acres) and depth (feet) of suspected wetlands	N/A
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	N/A
Water discharge point (None, River, Stream, Groundwater, Impoundment)	N/A
Tidal influence (Yes / No)	No
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	N/A

: Photographic documentation of these features is highly recommended.

Part 4

HABITATS AND SPECIES OBSERVED OR DOCUMENTED IN LOF	
 ditional information from Stratus Village team:	_____
According to the USFWS Official Species List, eight federally-listed species have the potential to be present within the project area: Marbled Murrelet, Northern Spotted Owl, Streaked Horned Lark, Fender's Blue Butterfly, Monarch Butterfly, Kincaid's Lupine, Nelson's Checker-Mallow and Willamette Daisy.	_____
No suitable habitat is believed to be present for the eight identified species.	_____
No critical habitats were identified within the project area.	_____
According to the NOAA Protected Resources App, there are no identified protected sites within the subject property boundaries and the project does not overlap with federally listed or proposed species and designated or protected critical habitats covered by NOAA fisheries.	_____
Per the USFWS Critical Habitat for Threatened and Endangered Species map, the subject property is not located within any critical habitat areas.	_____
On December 6, 2023, HUD, NMFS, USFWS, D3G, the project engineer and the project sponsor met during the Quarterly Meeting to review the project. The agencies had no concerns about USFWS-listed species. According to the USDA Natural Resources Conservation Service Web Soil Survey website, the subject property is identified as prime farmland and farmland of statewide importance. However, the property is located within an urbanized area; therefore the subject property is already in an area committed to urban development.	_____

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS			Y	N	U
Are hazardous substances present or potentially present in surface waters? This includes tidal or seasonally inundated areas and wetlands. AND Could hazardous substances reach these receptors via surface water?					N/A
When answering the above questions, consider the following: <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in surface waters. • Ability of hazardous substances to migrate to surface waters. Consider migration pathways such as erosion of soils adjacent to aquatic environments (e.g., banks or riparian areas), subsurface preferential pathways (e.g., pipes), outfalls, groundwater discharges, and surface migration (e.g., ditches). • Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters. Aquatic receptors may be exposed through osmotic exchange, respiration or ventilation of surface waters. • Contaminants may be taken-up by terrestrial plants whose roots are in contact with surface waters. • Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source. 					
Are hazardous substances present or potentially present in groundwater? AND Could hazardous substances reach these receptors via groundwater?					X
When answering the above questions, consider the following: <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in groundwater. • Ability of hazardous substances to migrate to groundwater. • Potential for hazardous substances to migrate via groundwater and discharge into habitats and/or surface waters. • Contaminants may be taken-up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1m depth). • Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface. 					

“Y” = yes; “N” = No, “U” = Unknown (counts as a “Y”)

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions (cont'd)

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in sediments? This includes tidal or seasonally inundated areas and wetlands. AND Could hazardous substances reach receptors via contact with sediments?			N/A
When answering the above questions, consider the following: <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in sediment. • Ability of hazardous substances to leach or erode from surface soils and be carried into sediment via surface runoff. • Potential for contaminated groundwater to upwell through, and deposit contaminants in, sediments. • If sediments are present in an area that is only periodically inundated with water, both aquatic and terrestrial species may be exposed. Aquatic receptors may be directly exposed to sediments or may be exposed through osmotic exchange, respiration or ventilation of sediment pore waters. • Terrestrial species may be exposed to sediment in an area that is only periodically inundated with water. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may have direct access to sediments for the purposes of incidental ingestion. Aquatic receptors may regularly or incidentally ingest sediment while foraging. 			
Are hazardous substances present or potentially present in prey or food items of ecologically important receptors? AND Could hazardous substances reach these receptors via consumption of food items?	X		
When answering the above questions, consider the following: <ul style="list-style-type: none"> • Higher trophic level terrestrial and aquatic consumers and predators may be exposed through consumption of contaminated food sources. • In general, organic contaminants with $\log K_{ow} > 3.5$ may accumulate in terrestrial mammals and those with a $\log K_{ow} > 5$ may accumulate in aquatic vertebrates. 			

“Y” = yes; “N” = No, “U” = Unknown (counts as a “Y”)

The Kow for DDE and Dieldrin are 6.51 and 6.2

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions (cont'd)

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
<p>Are hazardous substances present or potentially present in surficial soils? AND Could hazardous substances reach these receptors via incidental ingestion of or dermal contact with surficial soils?</p>	X		
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Known or suspected presence of hazardous substances in surficial (~1m depth) soils. • Ability of hazardous substances to migrate to surficial soils. • Significant exposure via dermal contact would generally be limited to organic contaminants which are lipophilic and can cross epidermal barriers. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash). • Contaminants in bulk soil may partition into soil solution, making them available to roots. • Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil or while grooming themselves clean of soil. 			
<p>Are hazardous substances present or potentially present in soils? AND Could hazardous substances reach these receptors via vapors or fugitive dust carried in surface air or confined in burrows?</p>	X		
<p>When answering the above questions, consider the following:</p> <ul style="list-style-type: none"> • Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant $> 10^{-5}$ atm-m³/mol and molecular weight < 200 g/mol). • Exposure via inhalation is most important to organisms that burrow in contaminated soils, given the limited amounts of air present to dilute vapors and an absence of air movement to disperse gases. • Exposure via inhalation of fugitive dust is particularly applicable to ground-dwelling species that could be exposed to dust disturbed by their foraging or burrowing activities or by wind movement. • Foliar uptake of organic vapors would be limited to those contaminants with relatively high vapor pressures. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces. 			

“Y” = yes; “N” = No, “U” = Unknown (counts as a “Y”)

ATTACHMENT 3
Deliverable - Site Ecology Scoping Report
Outline

(1) **EXISTING DATA SUMMARY**

- (a) Site location [2450 SE Stratus Avenue, McMinnville OR 97128](#)
- (b) Site history [Historical farming. Current property is vacant. See Phase I ESA and Phase II ESA for details.](#)
- (c) Site land and/or water use(s)
 - (i) Current [Vacant property, see photos](#)
 - (ii) Future [Affordable Housing project](#)
- (d) Known or suspected hazardous substance releases [See Phase II ESA provided](#)
- (e) Sensitive environments [None known on site, riparian area and South Yamhill River located ~0.25 miles away](#)
- (f) Threatened and/or endangered species (USFWS/ODFW/NMFS data)
[Included as attachments. No T&E on site. Chinook and Steelhead in site adjacent South Yamhill. Please reference the biodiversity report and Fish and Wildlife letters attached.](#)

(2) **SITE VISIT SUMMARY**

- (a) Contaminants of Interest (Part ❶, Attachment 1) [Please reference Phase II ESA](#)
- (b) Observed impacts (Part ❷, Attachment 1)
- (c) Ecological features (Part ❸, Attachment 1)
- (d) Ecologically important species/habitats (Part ❹, Attachment 1)
 - (i) Threatened and/or endangered species
 - (ii) Threatened and/or endangered species habitat
- (e) Exposure pathways (Attachment 2) [Please reference a table included comparing COI measures with DEQ's ecological risk RBCs for non T&E species.](#)

(3) **RECOMMENDATIONS** [See below.](#)

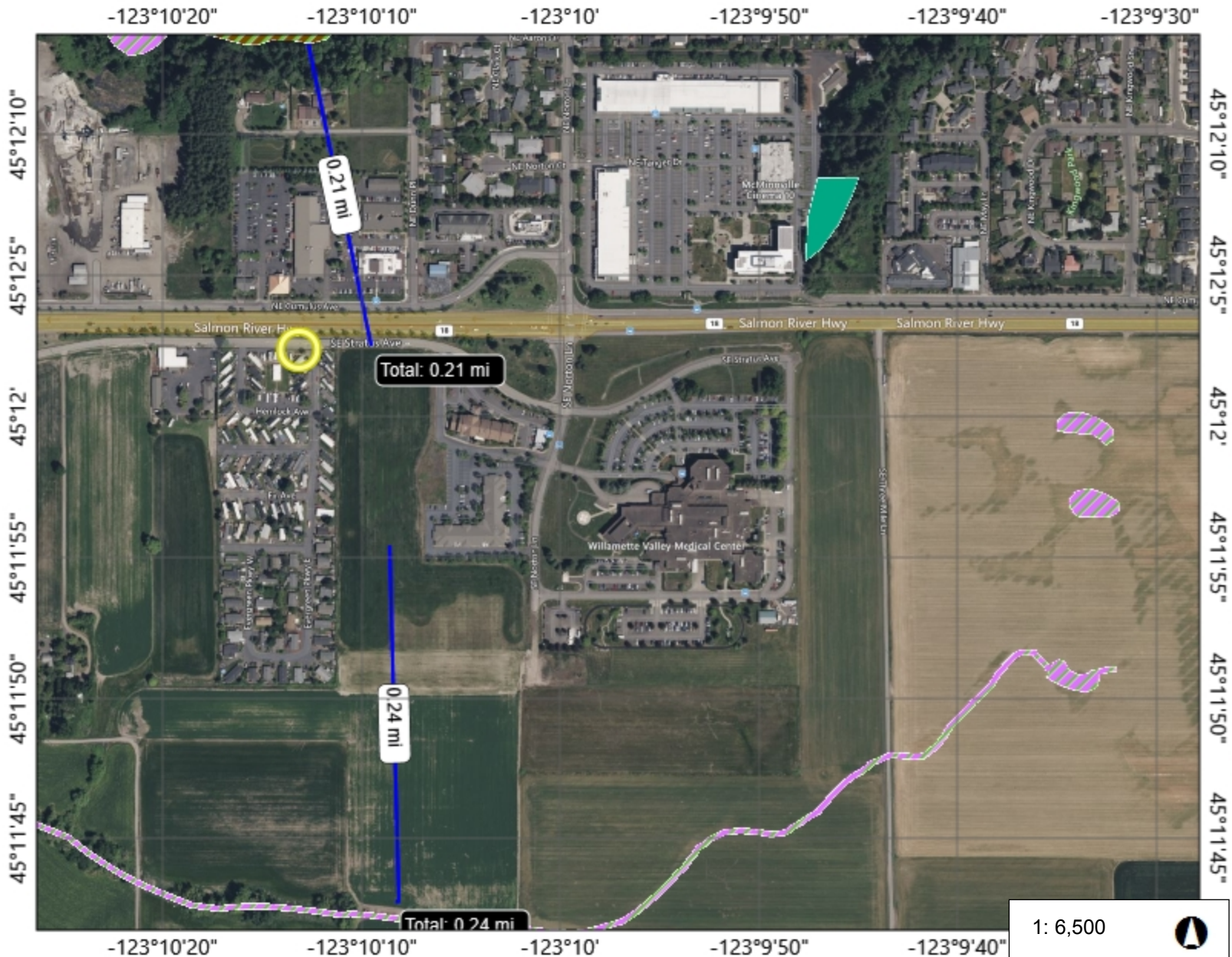
(4) **ATTACHMENTS**

- (a) Regional map showing location of site [Included in PDF](#)
- (b) Local map showing site in relation to adjacent property [Included in PDF](#)
- (c) Aerial photograph or map of LOF and adjacent areas within ¼ mile showing zoning, current land use, location of surface water, critical habitat, and sensitive environments.
- (d) Topographic map [Included in PDF](#) [Floodplain and wetlands inventory maps included](#)
- (e) Figures showing source/release areas, estimated areas of contamination, and surface features such as pavement, stormwater catch basins/drainage systems including outfalls, dry wells, or stormwater swales. [Existing conditions plan C0.02 included. Currently vacant property.](#)
- (f) Site photograph(s) [Included in PDF](#)
- (g) Documentation of the likelihood of T&E species to be present in the LOF.
[U.S. Department of the Interior Letter from Fish & Wildlife included, as well as Biodiversity Report.](#)

(5) **REFERENCES / DATA SOURCES**

[Based on suspected/measured hazardous substances at the site and complete exposure pathways for plants, invertebrates, birds, and mammals exposed to soil, recommend comparing COI measurements with DEQ's ecological soil RBCs \(for non T&E species\). This is a Tier I Ecological Risk Assessment.](#)

[The site is ~0.20-0.25 miles from the sensitive habitat represented by the South Yamhill River and associated riparian zone. However, there is not a clear connection from the proposed site to the sensitive area. To address any concerns about this sensitive area during site development, permit conditions will be followed regarding wastewater and stormwater treatment during construction. The team is working concurrently with Kathy Jacobsen at Oregon DEQ for a 1200C permit that will be followed during construction.](#)

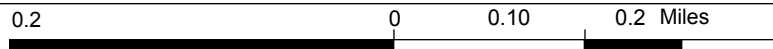


Legend

- States & Provinces
 - Other States and Provinces
 - Oregon
- LWI Probable Wetland Polygons
 - LWI Wetlands
 - Persistent Nontidal
 - Seasonal Nontidal
 - Saturated Nontidal
 - NWI Wetlands
 - More Oregon Wetlands
 - Oregon's Greatest Wetlands

Notes

Add your notes here





Based on contaminants of interest for this site and complete exposure pathways (attachment 2) for

Appendix A
Site
Topographic
Map

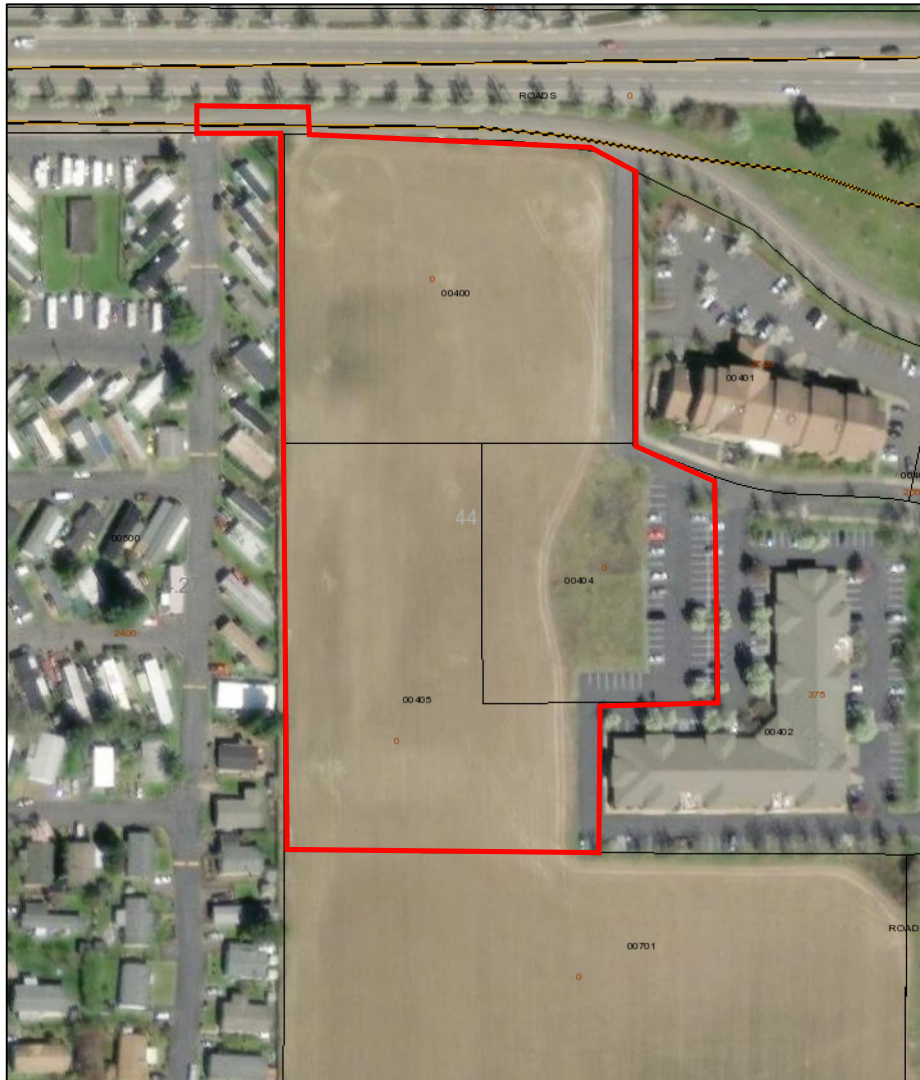


Stratus Village
235 Southeast Stratus Avenue
McMinnville, Oregon

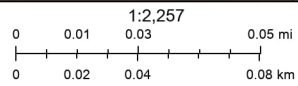
*Topographic Quadrangle:
McMinnville, Oregon 2020*

**DOMINION
DUE DILIGENCE
GROUP**

Yamhill County Parcel Map



10/16/2023, 4:10:53 PM



- Tax Label
- Taxlots
- Townships
- Surveys1
- County Roads
- County
- City Boundary
- UGB_YamhillCo
- SL

Maxar, Microsoft

Yamhill County GIS
Yamhill County Oregon

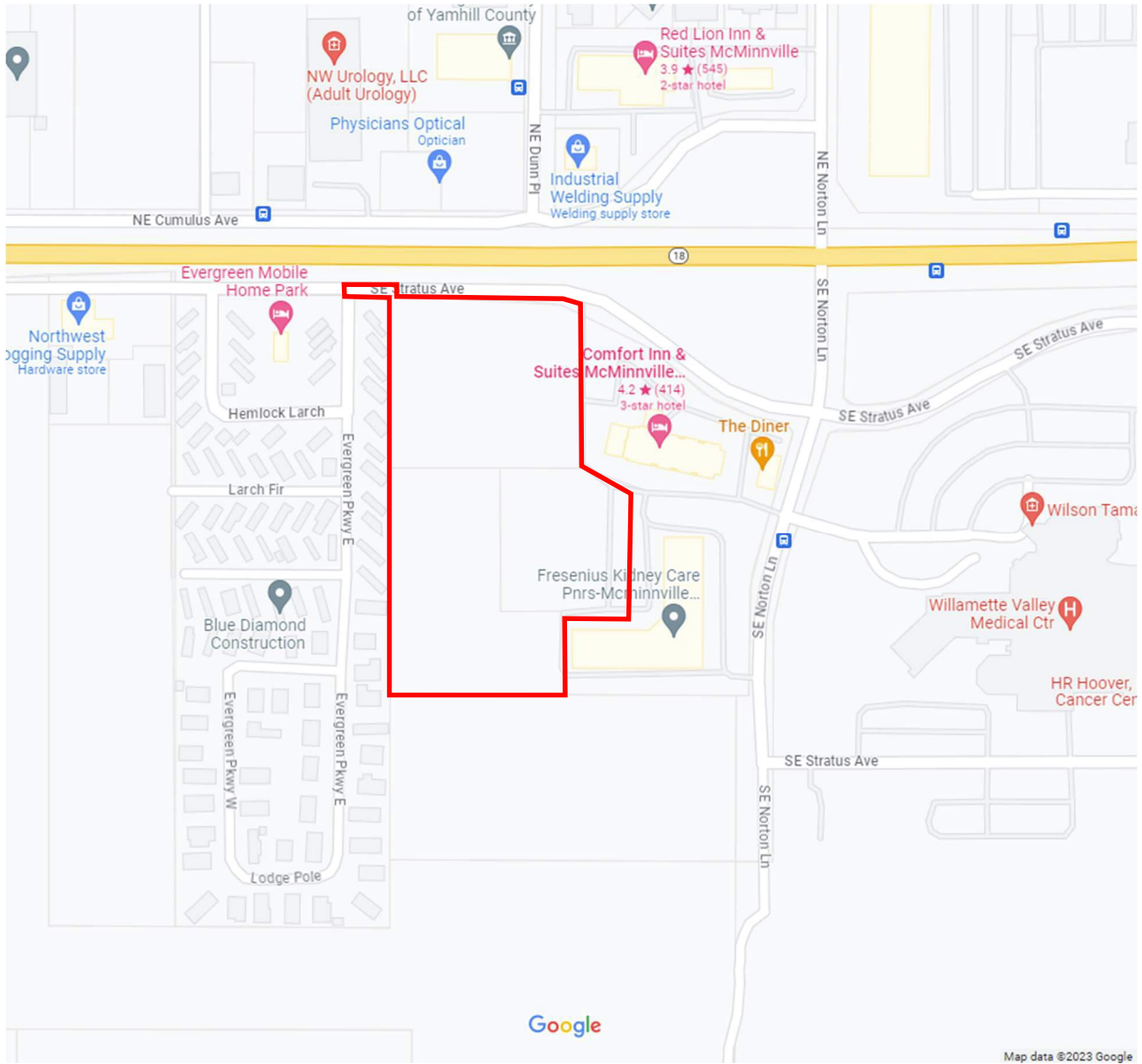
Appendix A
Tax Map



Stratus Village
235 Southeast Stratus Avenue
McMinnville, Oregon

*Taxlot #'s R4427-00400, R4427-00404, and
R4427-00405*

**DOMINION
DUE DILIGENCE
GROUP**



<p>Appendix A Site Locator Map</p>	<p>↑ N</p>	<p>Stratus Village 235 Southeast Stratus Avenue McMinnville, Oregon</p>	<p>DOMINION DUE DILIGENCE GROUP</p>
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October 19, 2023

Wetlands

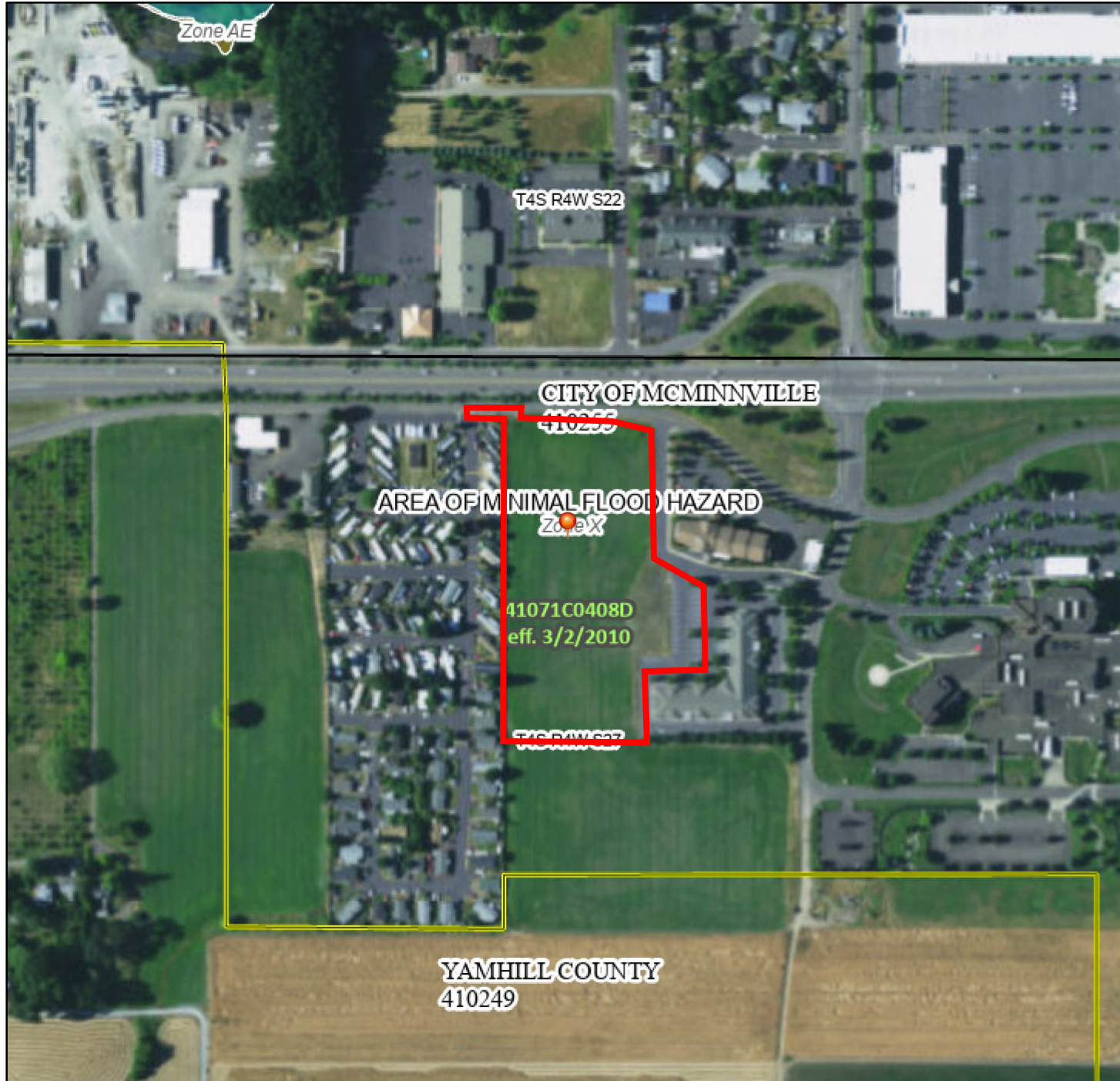
- | | | |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland | Lake |
| Estuarine and Marine Wetland | Freshwater Forested/Shrub Wetland | Other |
| | Freshwater Pond | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Flood Hazard Layer FIRMMette



123°10'28"W 45°12'12"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/4/2023 at 3:26 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

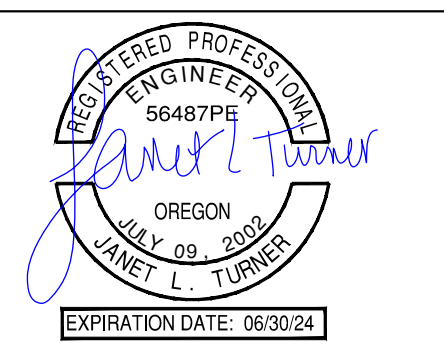
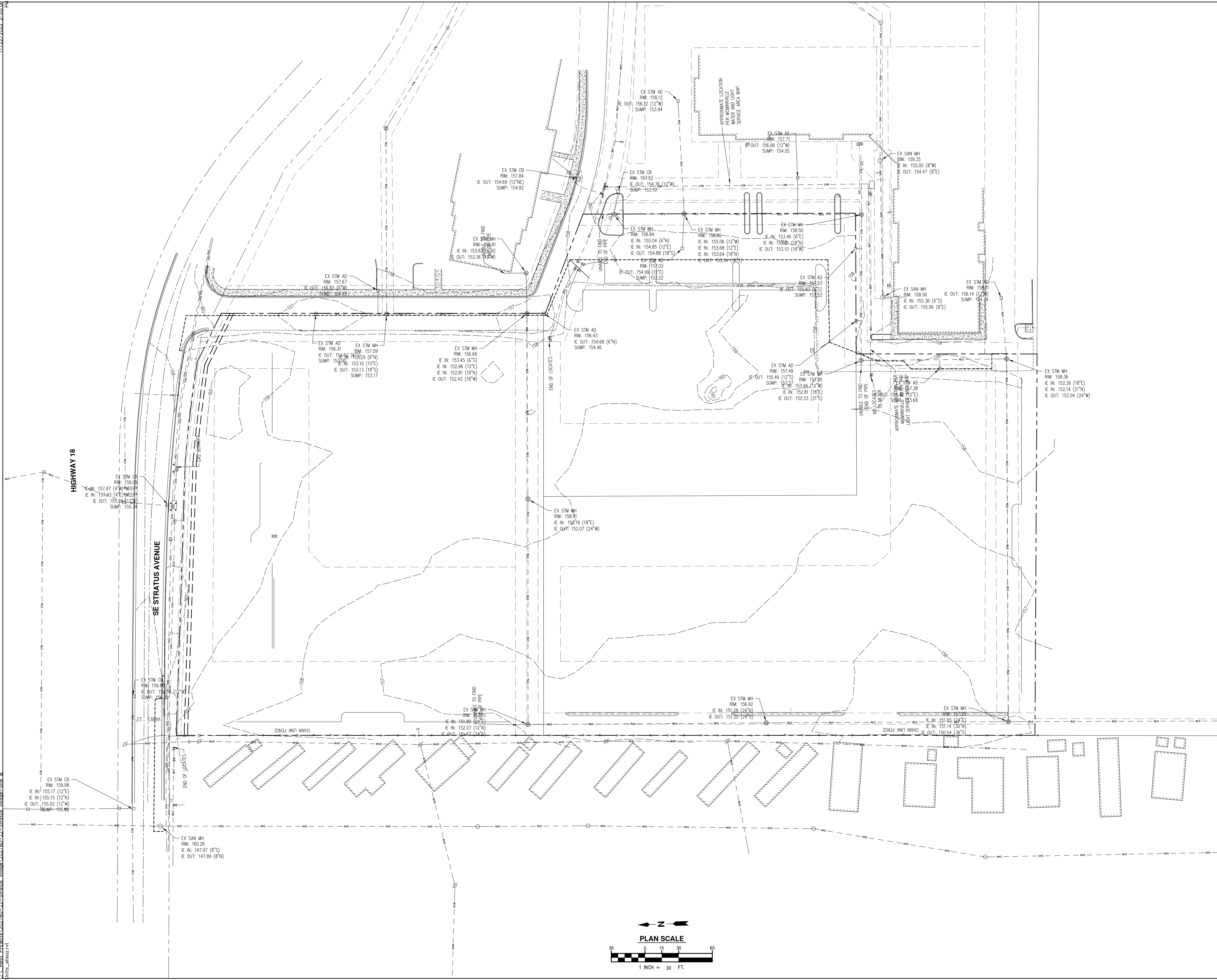
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 Feet

1:6,000

123°9'50"W 45°11'47"N

Basemap Imagery Source: USGS National Map 2023



38 NORTHWEST DAVIS, SUITE 300
PORTLAND, OR 97209
503.245.7100

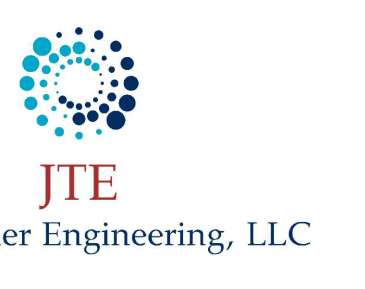
1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
206.576.1600

1014 HOWARD STREET
SAN FRANCISCO, CA 94103
415.252.7063
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STRATUS VILLAGE - SITE & UNITS
2450 SE STRATUS AVE, McMinnville, OR 97128

HOUSING AUTHORITY OF YAMHILL COUNTY

REVISION	DATE	REASON FOR ISSUE
A	9/21/23	PERMIT COMMENTS #1
1	10/11/23	GMP ADD 01
2	4/11/24	IFC SET



EXISTING CONDITIONS
PLAN

PERMIT SET

DATE 6/5/2023	PROJECT NUMBER 202780
SHEET NUMBER C0.02	

Stratus Avenue frontage
Looking East down Right of Way
Photo August 2023



Stratus Avenue frontage
Looking East toward neighboring
hotel property



Stratus Avenue Property
Looking South with Mobile
Home Property to the West



APPENDIX B
Photographs of Sampling Activities



Photo 1 - View of soil sampling activities at sample location C10 in the north-central portion of the Subject Property, looking north. (12/14/2023)



Photo 2 - View of soil sampling location C8 in the southwest corner of the Subject Property, looking north. (12/14/2023)



Photo 3 - View of soil sampling activities at sample location C14 in the south-central portion of the Subject Property, looking north/northeast. (12/14/2023)



Photo 4 - Closeup view of the soil sample collected at sample location C14. (12/14/2023)



Photo 5 - View of the northern portion of the grass field at the east-central portion of the Subject Property, looking north. The area was overlain with a 2-to-3-inch layer of gravel. (12/14/2023)



Photo 6 - Closeup view of the gravel layer at the northern portion of the grass field area. A black filter fabric was observed beneath the gravel layer (not yet exposed in the photo above). (12/14/2023)



Photo 7 - View of mounded materials in the southern portion of the grass field area, looking north/northwest. (12/14/2023)



Photo 8 - View of mounded materials within the the grass field area, looking northeast from the crop field. (12/14/2023)



Photo 9 - View of follow-up soil sampling activities at sample location C1, looking north. A 1-foot hole was 1st dug with a shovel. (2/21/2024)



Photo 10 - View of follow-up sampling location C1 showing the depth the initial hole. (2/21/2024)



Photo 11 - View of follow-up soil sampling from the bottom of the hole at sampling location C1. (2/21/2024)



Photo 12 - View of follow-up soil sampling activities at sample location C6, looking north. The shovel is at the previous sampling location. (2/21/2024)



Photo 13 - View of a hand auger sample being collected at sample location C13. (2/21/2024)



Photo 14 - View of follow-up sampling location G1 showing the depth the initial hole as well as the black filter fabric layer. (2/22/2024)

Biodiversity Report

45.1998°N, -123.1693°W

Location Information

Latitude:	45°11'59"N	Longitude:	-123°10'09"W
Latitude (Decimal Minutes):	45°11.9833'N	Longitude (Decimal Minutes):	-123°10.15'W
Latitude (Decimal Degrees):	45.1998°N	Longitude (Decimal Degrees):	-123.1693°W
USGS Quad:	McMinnville, 45123-B2	Maidenhead Grid Square (ARRL):	CN85JE
Legal (Township Range Section):	Section 21 of Township S4, Range W4	County:	Yamhill County
Magnetic Declination:	(on 2024-5-6) 14.785 deg (east) Annual change (minutes/year): -5.6 deg (east) (based on 2020 model)		
Elevation:	148 ft	Avg Annual Precipitation:	40 in (inches)
Watershed (10 Digit HUC):	Yamhill River (1709000807)		
Sub-watershed (12 Digit HUC):	South Yamhill River (170900080701)		
Fire Protection District:	N/A	ODF Regulated Use:	Not Available
Fire Weather Zone:	604	ODFW Wildlife Management Unit:	WILLAMETTE
Public Ownership:	Private -		

Animal Species (Aquatic Habitat Associated) in Sub-watershed South Yamhill River (170900080701)

** See Appendix for Status and Rank Code Lookup

1	<u>Western pond turtle</u>	<i>Actinemys marmorata</i>	Relative Abundance Index: 1
	Global Rank: G3	Federal Status: SOC	View in Wildlife Viewer
	State Rank: S2	State Rank: SC	View Habitat Map (pdf)
	FPA:	Strategy Species: Y	
2	<u>Great blue heron</u>	<i>Ardea herodias</i>	Relative Abundance Index: 0.82
	Global Rank: G5	Federal Status:	View in Wildlife Viewer
	State Rank: S4	State Rank:	View Habitat Map (pdf)
	FPA: Y	Strategy Species:	
3	<u>Green heron</u>	<i>Butorides virescens</i>	Relative Abundance Index: 0.82
	Global Rank: G5	Federal Status:	View in Wildlife Viewer
	State Rank: S4	State Rank:	View Habitat Map (pdf)
	FPA:	Strategy Species:	
4	<u>Vaux's swift</u>	<i>Chaetura vauxi</i>	Relative Abundance Index: 0.83
	Global Rank: G5	Federal Status:	View in Wildlife Viewer
	State Rank: S4B	State Rank:	View Habitat Map (pdf)
	FPA:	Strategy Species:	
5	<u>Painted turtle</u>	<i>Chrysemys picta</i>	Relative Abundance Index: 1.17
	Global Rank: G5	Federal Status:	View in Wildlife Viewer
	State Rank: S2	State Rank: SC	View Habitat Map (pdf)
	FPA:	Strategy Species: Y	
6	<u>Olive-sided flycatcher</u>	<i>Contopus cooperi</i>	Relative Abundance Index: 0.52
	Global Rank: G4	Federal Status:	View in Wildlife Viewer
	State Rank: S2S3B	State Rank: SC/S	View Habitat Map (pdf)
	FPA:	Strategy Species: Y	

Biodiversity Report

45.1998°N, -123.1693°W

7	<u>Townsend's big-eared bat</u>	<i>Corynorhinus townsendii</i>	Relative Abundance Index: 1.52
	Global Rank: G4 State Rank: S2 FPA:	Federal Status: No status State Rank: SC Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
8	<u>Pacific giant salamander</u>	<i>Dicamptodon tenebrosus</i>	Relative Abundance Index: 0.74
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
9	<u>Willow flycatcher</u>	<i>Empidonax traillii</i>	Relative Abundance Index: 0.62
	Global Rank: G5 State Rank: S3B FPA:	Federal Status: PS State Rank: Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
10	<u>Big brown bat</u>	<i>Eptesicus fuscus</i>	Relative Abundance Index: 1.02
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
11	<u>Bald eagle</u>	<i>Haliaeetus leucocephalus</i>	Relative Abundance Index: 0.82
	Global Rank: G5 State Rank: S4B, S4N FPA: Y	Federal Status: DL State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
12	<u>Yellow-breasted chat</u>	<i>Icteria virens</i>	Relative Abundance Index: 1.09
	Global Rank: G5 State Rank: S4B FPA:	Federal Status: State Rank: SC Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
13	<u>Silver-haired bat</u>	<i>Lasionycteris noctivagans</i>	Relative Abundance Index: 0.52
	Global Rank: G3G4 State Rank: S3S4 FPA:	Federal Status: State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
14	<u>Hoary bat</u>	<i>Lasiurus cinereus</i>	Relative Abundance Index: 0.75
	Global Rank: G3G4 State Rank: S3 FPA:	Federal Status: No status State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
15	<u>Hooded merganser</u>	<i>Lophodytes cucullatus</i>	Relative Abundance Index: 0.59
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
16	<u>Common merganser</u>	<i>Mergus merganser</i>	Relative Abundance Index: 1.22
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
17	<u>California myotis</u>	<i>Myotis californicus</i>	Relative Abundance Index: 1.01
	Global Rank: G5 State Rank: S3 FPA:	Federal Status: State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)

Biodiversity Report

45.1998°N, -123.1693°W

18	<u>Long-eared myotis</u>	<i>Myotis evotis</i>	Relative Abundance Index: 0.99
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
19	<u>Little brown myotis</u>	<i>Myotis lucifugus</i>	Relative Abundance Index: 1
	Global Rank: G3G4 State Rank: S3 FPA:	Federal Status: UR State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
20	<u>Fringed myotis</u>	<i>Myotis thysanodes</i>	Relative Abundance Index: 1.12
	Global Rank: G4 State Rank: S2 FPA:	Federal Status: State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
21	<u>Long-legged myotis</u>	<i>Myotis volans</i>	Relative Abundance Index: 1
	Global Rank: G4G5 State Rank: S3 FPA:	Federal Status: State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
22	<u>Yuma myotis</u>	<i>Myotis yumanensis</i>	Relative Abundance Index: 1
	Global Rank: G5 State Rank: S3 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
23	<u>Steelhead (Upper Willamette River ESU)</u>	<i>Oncorhynchus mykiss pop. 33</i>	Relative Abundance Index: 1.78
	Global Rank: G5T2Q State Rank: S2 FPA:	Federal Status: T State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
24	<u>Chinook salmon (Upper Willamette River)</u>	<i>Oncorhynchus tshawytscha pop. 23</i>	Relative Abundance Index: 2.29
	Global Rank: G5T2Q State Rank: S2 FPA:	Federal Status: T State Rank: SC Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
25	<u>Band-tailed pigeon</u>	<i>Patagioenas fasciata</i>	Relative Abundance Index: 0.52
	Global Rank: G4 State Rank: S3B FPA: Y	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
26	<u>Dunn's salamander</u>	<i>Plethodon dunni</i>	Relative Abundance Index: 0.9
	Global Rank: G4 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
27	<u>Purple martin</u>	<i>Progne subis</i>	Relative Abundance Index: 0.8
	Global Rank: G5 State Rank: S2B FPA:	Federal Status: State Rank: SC Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
28	<u>Pacific water shrew</u>	<i>Sorex bendirii</i>	Relative Abundance Index: 0.55
	Global Rank: G4 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)

Steelhead and Chinook Salmon are the only threatened or endangered species listed in this report. They are not present directly on site, but in the South Yamhill which is <0.25 miles away from the site.

Biodiversity Report

45.1998°N, -123.1693°W

29	<u>Vagrant shrew</u>	<i>Sorex vagrans</i>	Relative Abundance Index: 1.01
	Global Rank: G5	Federal Status:	View in Wildlife Viewer
	State Rank: S4	State Rank:	View Habitat Map (pdf)
	FPA:	Strategy Species:	
30	<u>Northern rough-winged swallow</u>	<i>Stelgidopteryx serripennis</i>	Relative Abundance Index: 1.05
	Global Rank: G5	Federal Status:	View in Wildlife Viewer
	State Rank: S4	State Rank:	View Habitat Map (pdf)
	FPA:	Strategy Species:	

Biodiversity Report

45.1998°N, -123.1693°W

Animal Species in Sub-watershed

South Yamhill River (170900080701)

** See Appendix for Status and Rank Code Lookup

1	<u>Cooper's hawk</u>	<i>Accipiter cooperii</i>	Relative Abundance Index: 0.8
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
2	<u>Sharp-shinned hawk</u>	<i>Accipiter striatus</i>	Relative Abundance Index: 0.69
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: PS State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
3	<u>Northern saw-whet owl</u>	<i>Aegolius acadicus</i>	Relative Abundance Index: 0.61
	Global Rank: G5 State Rank: S4? FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
4	<u>Clouded salamander</u>	<i>Aneides ferreus</i>	Relative Abundance Index: 0.85
	Global Rank: G3G4 State Rank: S3S4 FPA:	Federal Status: State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
5	<u>Red tree vole</u>	<i>Arborimus longicaudus</i>	Relative Abundance Index: 0.36
	Global Rank: G2G3 State Rank: S2S3 FPA:	Federal Status: PS:C State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
6	<u>Swainson's thrush</u>	<i>Catharus ustulatus</i>	Relative Abundance Index: 0.52
	Global Rank: G5 State Rank: S4S5B FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
7	<u>Brown creeper</u>	<i>Certhia americana</i>	Relative Abundance Index: 0.82
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
8	<u>Racer</u>	<i>Coluber constrictor</i>	Relative Abundance Index: 0.98
	Global Rank: G5 State Rank: S4? FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
9	<u>Western wood-pewee</u>	<i>Contopus sordidulus</i>	Relative Abundance Index: 0.73
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
10	<u>Ringneck snake</u>	<i>Diadophis punctatus</i>	Relative Abundance Index: 1
	Global Rank: G5 State Rank: S4? FPA:	Federal Status: No status State Rank: Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)

Biodiversity Report

45.1998°N, -123.1693°W

11	<u>Pileated woodpecker</u>	<i>Dryocopus pileatus</i>	Relative Abundance Index: 0.64
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: S State Rank: S Strategy Species: Y	View in Wildlife Viewer View Habitat Map (pdf)
12	<u>Pacific slope flycatcher</u>	<i>Empidonax difficilis</i>	Relative Abundance Index: 0.5
	Global Rank: G5 State Rank: S4B FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
13	<u>Hammond's flycatcher</u>	<i>Empidonax hammondi</i>	Relative Abundance Index: 0.4
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
14	<u>Macgillivray's warbler</u>	<i>Geothlypis tolmiei</i>	Relative Abundance Index: 0.52
	Global Rank: G5 State Rank: S4B FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
15	<u>Northern pygmy-owl</u>	<i>Glaucidium gnoma</i>	Relative Abundance Index: 0.52
	Global Rank: G4G5 State Rank: S4 FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
16	<u>Humboldt's flying squirrel</u>	<i>Glaucomys oregonensis</i>	Relative Abundance Index: 0.66
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
17	<u>Purple finch</u>	<i>Haemorhous purpureus</i>	Relative Abundance Index: 0.72
	Global Rank: G5 State Rank: S4? FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
18	<u>Bullock's oriole</u>	<i>Icterus bullockii</i>	Relative Abundance Index: 1.15
	Global Rank: G5 State Rank: S4B FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
19	<u>Varied thrush</u>	<i>Ixoreus naevius</i>	Relative Abundance Index: 0.36
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
20	<u>Snowshoe hare</u>	<i>Lepus americanus</i>	Relative Abundance Index: 1.12
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)
21	<u>Red crossbill</u>	<i>Loxia curvirostra</i>	Relative Abundance Index: 0.16
	Global Rank: G5 State Rank: S4 FPA:	Federal Status: S State Rank: S Strategy Species:	View in Wildlife Viewer View Habitat Map (pdf)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

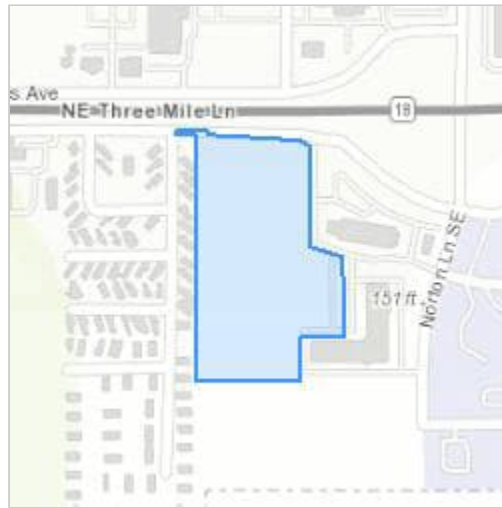
Oregon Fish And Wildlife Office
2600 Southeast 98th Avenue, Suite 100
Portland, OR 97266-1398
(503) 231-6179

PROJECT SUMMARY

Project Code: 2024-0005968
Project Name: Stratus Village
Project Type: Residential Construction
Project Description: Proposed (175) units within (4) three story residential buildings and (1) single-story common building to be constructed on 8.35 acres. Current Owner: Housing Authority of Yamhill County.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@45.19969585,-123.16902009999998,14z>



Counties: Yamhill County, Oregon

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Streaked Horned Lark <i>Eremophila alpestris strigata</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7268	Threatened

INSECTS

NAME	STATUS
Fender's Blue Butterfly <i>Icaricia icarioides fenderi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6659	Threatened
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Kincaid's Lupine <i>Lupinus sulphureus ssp. kincaidii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3747	Threatened
Nelson's Checker-mallow <i>Sidalcea nelsoniana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7340	Threatened
Willamette Daisy <i>Erigeron decumbens</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6270	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the **PROBABILITY OF PRESENCE SUMMARY** at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Sep 30
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

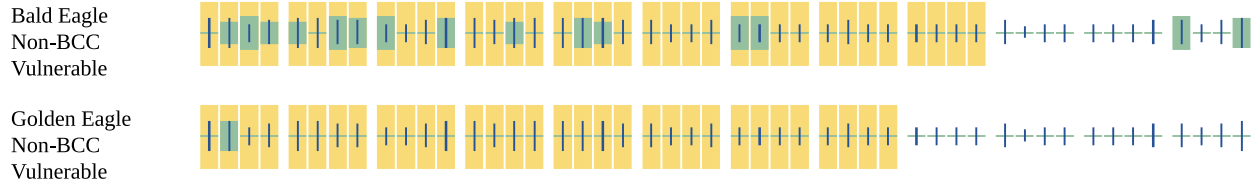
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort - no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Sep 30

NAME	BREEDING SEASON
<p>California Gull <i>Larus californicus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/10955</p>	Breeds Mar 1 to Jul 31
<p>Evening Grosbeak <i>Coccothraustes vespertinus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9465</p>	Breeds May 15 to Aug 10
<p>Golden Eagle <i>Aquila chrysaetos</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p>https://ecos.fws.gov/ecp/species/1680</p>	Breeds Jan 1 to Aug 31
<p>Olive-sided Flycatcher <i>Contopus cooperi</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3914</p>	Breeds May 20 to Aug 31
<p>Rufous Hummingbird <i>selasphorus rufus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/8002</p>	Breeds Apr 15 to Jul 15
<p>Western Grebe <i>aechmophorus occidentalis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/6743</p>	Breeds Jun 1 to Aug 31
<p>Wrentit <i>Chamaea fasciata</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/10668</p>	Breeds Mar 15 to Aug 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

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Phone: 8045250704

Table 1
Soil Analytical Results
Stratus Village
McMinnville, Oregon

Sample Locations:	Crop Field							
	C1 through C8				C9 through C16			
	CFcomp1 0-0.5	CFcomp1 0.5-1	CFcomp1 1-1.3	CFcomp1 1.3-1.7	CFcomp2 0-0.5	CFcomp2 0.5-1	CFcomp2 1-1.3	CFcomp2 1.3-1.7
Sample Depth (feet bgs):	0-0.5	0.5-1	1-1.3	1.3-1.7	0-0.5	0.5-1	1-1.3	1.3-1.7
Collection Date:	12/14/2023	12/14/2023	2/21/2024	2/21/2024	12/14/2023	12/14/2023	2/21/2024	2/21/2024
Metals in mg/kg								
Antimony	0.523 U	0.492 U	0.553 U	0.525 U	0.500 U	0.505 U	0.523 U	0.502 U
Arsenic	5.65	5.20	4.93	5.37	5.36	5.60	6.76	6.80
Barium	146	148	141	138	142	146	158	158
Beryllium	0.684	0.774	0.742	0.691	0.717	0.758	0.860	0.830
Cadmium	0.181 J	0.153 J	0.137 J	0.141 J	0.238	0.140 J	0.120 J	0.108 J
Chromium	21.6	20.7	19.9	19.9	20.7	21.7	23.5	24.2
Cobalt	16.3	16.5	15.8	18.5	16.1	16.5	18.2	18.8
Copper	20.9	13.5	11.8	10.8	13.1	13.7	15.4	15.6
Lead	11.3	11.0	10.3	10.2	11.3	11.3	11.5	11.6
Mercury	0.0418 U	0.0394 U	0.0442 U	0.0420 U	0.0400 U	0.0404 U	0.0418 U	0.0402 U
Molybdenum	0.523 U	0.492 U	0.553 U	0.525 U	0.500 U	0.505 U	0.523 U	0.502 U
Nickel	11.9	11.1	8.94	8.94	11.1	11.8	12.1	12.3
Selenium	0.546 J	0.492 U	0.553 U	0.525 U	0.500 U	0.540 J	0.523 U	0.502 U
Silver	0.105 U	0.0984 U	0.111 U	0.105 U	0.100 U	0.101 U	0.105 U	0.100 U
Thallium	0.197 J	0.196 J	0.146 J	0.155 J	0.158 J	0.159 J	0.177 J	0.180 J
Vanadium	88.7	86.2	85.0	88.9	88.1	91.2	107	109
Zinc	58.6	50.2	38.6	36.8	57.5	53.9	55.0	54.6
Multi-Residue Pesticides (0 to 1 ft bgs) & Organochlorine Pesticides Only (1 to 1.7 ft bgs) in mg/kg								
4,4'-DDE	0.015	0.011	0.00381	0.00315	0.012	0.012	0.00182 U	0.00184 U
Carbendazim	0.0067 U	0.0067 U	--	--	0.0067 U	0.0067 U	--	--
DCPMU	0.018	0.022	--	--	0.038	0.013	--	--
Dieldrin	0.0067 U	0.0067 U	0.00187 U	0.00182 U	0.0067 U	0.0067 U	0.00182 U	0.00184 U
Diuron	0.0067 U	0.0067 U	--	--	0.011	0.0067 U	--	--
All Other Pesticides	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Total Petroleum Hydrocarbons (TPH) in mg/kg								
Gasoline-Range Organics	--	--	--	--	--	--	--	--
Diesel-Range Organics	--	--	--	--	--	--	--	--
Oil-Range Organics	--	--	--	--	--	--	--	--

Notes:

Clean Fill Criteria from the Oregon Department of Environmental Quality (DEQ) Clean Fill Determinations (updated February 21, 2019).
 Soil Maximum Concentrations for TCLP from 40 CFR 261.24, multiplied by 20 to account for dilution performed during TCLP extraction.
 Oregon DEQ RBCs from the Oregon Department of Environmental Quality (DEQ) Risk-Based Concentrations (RBCs) for Individual Chemicals (updated August 2023).
 Ecological Soil RBSs from DEQ Conducting Ecological Risk Assessments Table 1a (updated September 2020).
Bold values indicate the analyte was detected above method detection limits.
 Shaded values indicate the analyte was detected above one or more applicable screening levels.
 bgs = below ground surface
 mg/kg = milligrams per kilogram
 -- = not analyzed/applicable
 B-02 = Analyte was detected in an associated method blank
 J = Estimated result
 MDL = Respective method detection limits
 U = Analyte was not detected above the reported method detection limit

Table 1
Soil Analytical Results
Stratus Village
McMinnville, Oregon

Sample Locations:	Crop Field				Grass Field				Mound
	C17 through C24				G1 through G6				M1 through M3
	Composite Sample ID:	CFcomp3 0-0.5	CFcomp3 0.5-1	CFcomp3 1-1.3	CFcomp3 1.3-1.7	GFcomp1 0-0.5	GFcomp1 0.5-1	GFcomp1 1-1.3	GFcomp1 1.3-1.7
Sample Depth (feet bgs):	0-0.5	0.5-1	1-1.3	1.3-1.7	0-0.5	0.5-1	1-1.3	1.3-1.7	0-3.5
Collection Date:	12/14/2023	12/14/2023	2/22/2024	2/22/2024	12/14/2023	12/14/2023	2/22/2024	2/22/2024	12/14/2023
Metals in mg/kg									
Antimony	0.497 U	0.509 U	0.514 U	0.517 U	0.517 U	0.532 U	0.489 U	0.490 U	0.513 U
Arsenic	6.08	5.67	6.05	6.46	4.43	5.01	5.98	6.25	5.11
Barium	145	151	160	157	141	150	167	171	138
Beryllium	0.743	0.773	0.907	0.869	0.753	0.767	0.929	0.937	0.786
Cadmium	0.189 J	0.126 J	0.103 U	0.103 U	0.107 J	0.106 U	0.148 J	0.0980 U	0.163 J
Chromium	22.3	21.8	21.7	21.4	17.7	19.0	21.5	21.7	19.2 B-02
Cobalt	17.1	17.4	19.1	18.6	18.0	17.7	18.7	19.7	17.6
Copper	14.9	14.0	14.8	15.3	13.1	15.0	16.3	17.1	18.5
Lead	12.0	11.8	11.2	11.5	10.3	10.8	12.3	12.5	10.7
Mercury	0.0398 U	0.0407 U	0.0411 U	0.0414 U	0.0413 U	0.0425 U	0.0391 U	0.0392 U	0.0410 U
Molybdenum	0.497 U	0.509 U	0.514 U	0.517 U	0.517 U	0.532 U	0.489 U	0.490 U	0.513 U
Nickel	12.4	11.9	11.5	11.1	9.84	12.3	11.8	12.2	13.8
Selenium	0.526 J	0.509 U	0.514 U	0.517 U	0.517 U	0.532 U	0.527 J	0.558 J	0.513 U
Silver	0.0994 U	0.102 U	0.103 U	0.103 U	0.103 U	0.106 U	0.0977 U	0.0980 U	0.103 U
Thallium	0.168 J	0.161 J	0.184 J	0.181 J	0.144 J	0.163 J	0.188 J	0.195 J	0.174 J
Vanadium	93.6	93.6	103	107	88.2	90.1	99.5	100	88.8
Zinc	63.1	56.6	49.5	48.8	48.7	52.6	55.8	55.7	55.5
Multi-Residue Pesticides (0 to 1 ft bgs) & Organochlorine Pesticides Only (1 to 1.7 ft bgs) in mg/kg									
4,4'-DDE	0.017	0.018	0.00177 U	0.00106	0.0090	0.014	0.00848	0.00363	--
Carbendazim	0.0067 U	0.0067 U	--	--	0.0074	0.0067 U	--	--	--
DCPMU	0.065	0.028	--	--	0.042	0.017	--	--	--
Dieldrin	0.0067 U	0.0067 U	0.00177 U	0.000910 U	0.0067 U	0.0067 U	0.00168 U	0.00169 U	--
Diuron	0.020	0.0067 U	--	--	0.014	0.0067 U	--	--	--
All Other Pesticides	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	--
Total Petroleum Hydrocarbons (TPH) in mg/kg									
Gasoline-Range Organics	--	--	--	--	--	--	--	--	4.69 U
Diesel-Range Organics	--	--	--	--	--	--	--	--	18.1 U
Oil-Range Organics	--	--	--	--	--	--	--	--	209

Notes:

Clean Fill Criteria from the Oregon Department of Environmental Quality (DEQ) Clean Fill Determinations (updated February 21, 2019).
Soil Maximum Concentrations for TCLP from 40 CFR 261.24, multiplied by 20 to account for dilution performed during TCLP extraction.
Oregon DEQ RBCs from the Oregon Department of Environmental Quality (DEQ) Risk-Based Concentrations (RBCs) for Individual Chemicals (updated August 2023).
Ecological Soil RBSs from DEQ Conducting Ecological Risk Assessments Table 1a (updated September 2020).
Bold values indicate the analyte was detected above method detection limits.
Shaded values indicate the analyte was detected above one or more applicable screening levels.
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Table 1
Soil Analytical Results
Stratus Village
McMinnville, Oregon

Sample Locations: Composite Sample ID: Sample Depth (feet bgs): Collection Date:	Oregon DEQ Clean Fill Criteria (South Willamette Valley)	Maximum Concentration for TCLP	Oregon DEQ RBCs					Oregon DEQ Ecological RBCs - Soil					
			Soil Ingestion, Dermal Contact, and Inhalation					Plants	Invertebrates	Ground Feeding		Top Consumers	
			Residential	Urban Residential	Occupational	Construction Worker	Excavation Worker			Birds (non-T&E)	Mammals (non-T&E)	Birds (non-T&E)	Mammals (non-T&E)
Metals in mg/kg													
Antimony	0.39	--	--	--	--	--	--	11	78	--	2.7	--	49
Arsenic	18	100	0.43	1.0	1.9	15	420	18	6.8	32	31	1,000	290
Barium	730	2,000	15,000	31,000	220,000	69,000	--	110	330	1,200	8,700	13,000	44,000
Beryllium	2.6	--	160	310	2,300	700	19,000	2.5	40	--	42	--	110
Cadmium	1.6	20	78	160	1,100	350	9,700	32	140	1.6	4.0	7.7	1,700
Chromium	100	100	120,000	230,000	--	530,000	--	--	--	73	1,600	560	10,000
Cobalt	43	--	--	--	--	--	--	13	--	170	640	1,400	3,300
Copper	140	--	3,100	6,200	47,000	14,000	390,000	70	80	43	70	240	1,600
Lead	28	100	400	400	800	800	800	120	1,700	23	170	160	1,600
Mercury	0.07	4	23	47	350	110	2,900	34	0.05	0.13	17	0.58	130
Molybdenum	2.1	--	--	--	--	--	--	--	--	160	26	900	460
Nickel	50	--	1,500	3,100	22,000	7,000	190,000	38	280	81	21	440	580
Selenium	0.68	20	--	--	--	--	--	0.52	4.1	1.4	1.0	7.5	33
Silver	2.6	100	390	780	5,800	1,800	49,000	560	--	26	140	130	10,000
Thallium	5.7	--	--	--	--	--	--	0.05	--	45	4.2	480	50
Vanadium	370	--	--	--	--	--	--	60	--	9.5	610	110	1,600
Zinc	200	--	--	--	--	--	--	160	120	120	980	590	30,000
Multi-Residue Pesticides (0 to 1 ft bgs) & Organochlorine Pesticides Only (1 to 1.7 ft bgs) in mg/kg													
4,4'-DDE	0.01	--	1.8	4.5	8.2	66	1,800	4.1	--	0.41	0.24	1.2	0.099
Carbendazim	--	--	--	--	--	--	--	--	--	--	--	--	--
DCPMU	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	0.0045	--	0.034	0.085	0.14	1.2	33	10	--	0.64	0.009	3.0	0.013
Diuron	0.9	--	--	--	--	--	--	--	--	--	--	--	--
All Other Pesticides	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Petroleum Hydrocarbons (TPH) in mg/kg													
Gasoline-Range Organics	31	--	1,200	2,500	20,000	9,700	--	120	120	5,000	5,000	5,000	5,000
Diesel-Range Organics	1,100	--	1,100	2,200	14,000	4,600	--	260	260	6,000	6,000	6,000	6,000
Oil-Range Organics	1,100	--	1,100	2,200	14,000	4,600	--	--	--	--	--	--	--

Notes:

Clean Fill Criteria from the Oregon Department of Environmental Quality (DEQ) Clean Fill Determinations (updated February 21, 2019).
Soil Maximum Concentrations for TCLP from 40 CFR 261.24, multiplied by 20 to account for dilution performed during TCLP extraction.
Oregon DEQ RBCs from the Oregon Department of Environmental Quality (DEQ) Risk-Based Concentrations (RBCs) for Individual Chemicals (updated August 2023).
Ecological Soil RBCs from DEQ Conducting Ecological Risk Assessments Table 1a (updated September 2020).
Bold values indicate the analyte was detected above method detection limits.
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