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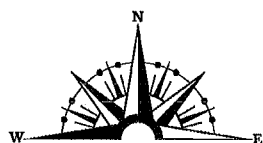
# Irish Restoration and Single- Family Residence – Olympia, WA Restoration and No-Net-Loss Wetland Buffer Enhancement Plan

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June 15, 2023

Prepared for:  
Trevor Irish  
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Prepared by:



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## *Executive Summary*

**Site Name:** Irish Single-family RUE

**Site Location:** 7125 LIBBY RD NE, Olympia, WA 98506

**Parcel Number:** 12913140200

**Acreage:** 4.56 acres

**Partial Legal description:** Section 13 Township 19 Range 2W SE-SE-NE LESS S 315F LESS N 30F LESS CO RD

**Project Staff:** Alex Callender, M.S., PWS

**Field Survey Conducted:** December 16 and December 18, 2022

**Project Description:** Project to allow a partial restoration of an unpermitted area of vegetation removal and grading within a wetland buffer

An RUE to utilize the remaining area to build a 3,000 sq ft single family residence, a 900 sq ft garage, a drinking water well, an 2,620 sq ft onsite septic with a septic drainfield, and 2,955 sq ft driveway for ingress and egress.

**Findings:** Three wetlands were found on and offsite. Wetland A is less than 1,000 square feet and will not carry a regulatory buffer.

Wetland B was rated as Category III wetland with a habitat score of eight (MHH).

Wetland C is a Category III wetland with a habitat score of eight (MHH).

Wetlands with a habitat score of eight (MHH) typically carry a 280-foot buffer. These buffers can be reduced to 210 however, further reductions will be necessary, and a Reasonable Use Exception will be required for relief from the standards in Thurston County Code. An analysis is provided to show that the project will meet the reasonable use criteria found in the code.

**Mitigation:** A mitigation plan to restore an unpermitted area of clearing and grading as well as maintain no net loss of wetland functions and values for unavoidable impacts that will occur due to a single-family residence, garage, onsite septic, driveway for ingress and egress and a drinking water well.

## Table of Contents

<i>Executive Summary</i> .....	ii
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
Figure 1-Vicinity Map .....	1
Table 1-- Wetland, Stream and Buffer Summary .....	2
<b>2.0 PROPOSED PROJECT</b> .....	<b>3</b>
2.1 Description .....	3
2.2 Development Impacts .....	3
Avoidance and Minimization .....	3
2.4 Minimization of Water Quality Impacts .....	5
<b>3.0 MITIGATION</b> .....	<b>5</b>
3.1 Mitigation Requirements .....	5
3.2 Integrated Pest Management .....	7
3.3 Mitigation Functional Analysis .....	8
TABLE 2 - Buffer Functions Comparison Before and After Mitigation .....	8
3.3 Planting Plan .....	9
Table 3 –Violation Restoration (21,005 sq ft) .....	10
Table 4- Total Costs .....	10
Insert Figure 2- Site Plan with Mitigation Planting Area .....	11
3.4 Monitoring Plan .....	12
3.5 Performance Standards .....	12
3.6 Contingency Plans .....	12
3.7 Surety Bond .....	13
<b>4.0 SUMMARY AND CONCLUSIONS</b> .....	<b>15</b>
<b>5.0 LIMITATIONS</b> .....	<b>15</b>
<b>6.0 REFERENCE</b> .....	<b>16</b>

## 1.0 INTRODUCTION

This report is the result of a critical areas study of the 4.56 - acre Parcel #12913140200 at 7125 LIBBY RD NE, Olympia, WA 98506 with the legal description of Section 13 Township 19 Range 2W SE-SE-NE LESS S 315F LESS N 30F LESS CO RD in Thurston County, Washington (**Figure 1**)

The purpose of this report is to 1) identify and describe the wetlands or other critical areas on-site and within 315 ft off-site of the property 2) identify impacts to wetlands or critical areas and their buffers, and 3) apply mitigation and conservation measures to off-set any critical areas or buffer impacts.

This report was prepared to satisfy the critical areas review process required by the Thurston County Development Regulations Title 24 Critical Areas and specifically the reasonable use exception process found in TCC 24.45.

Thurston County and possibly other agencies that may evaluate impacts to critical areas from the proposed project will be able to utilize information in this report.

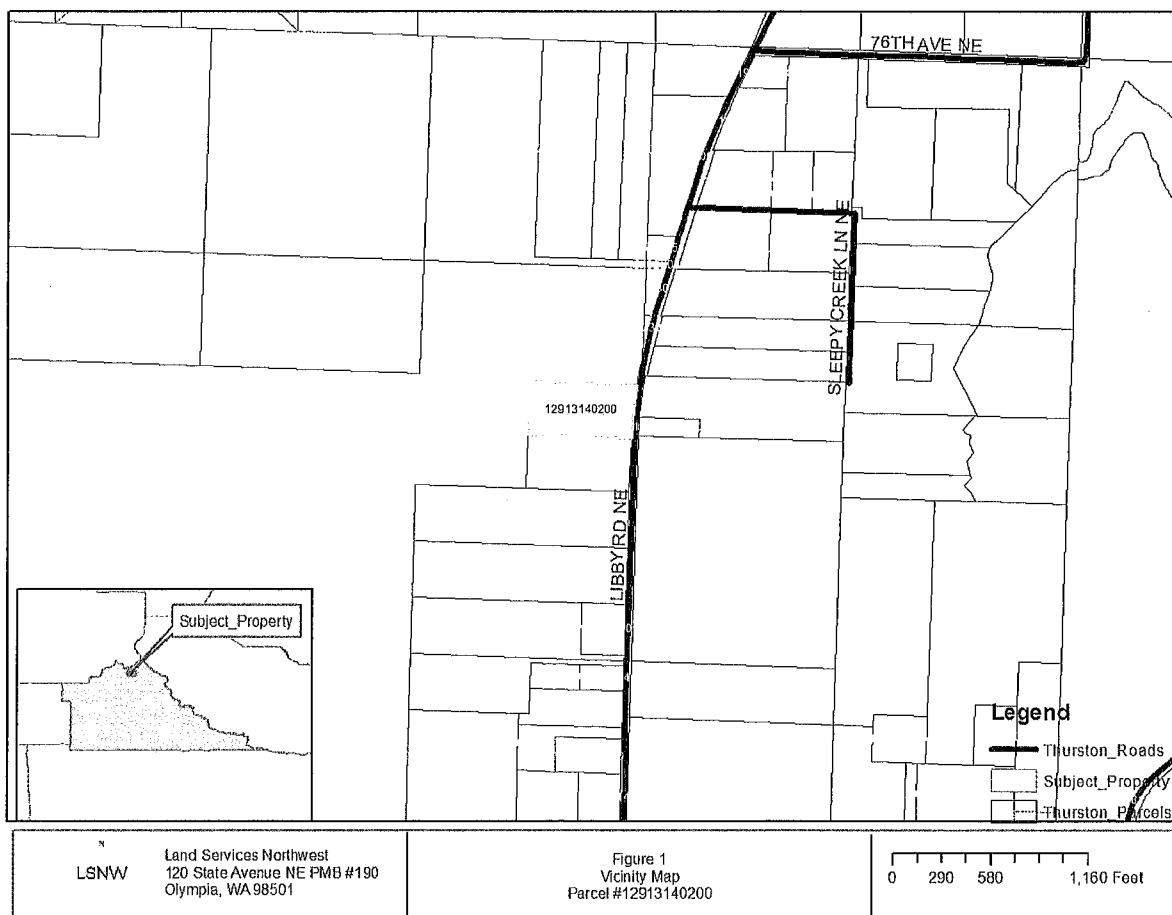


Figure 1-Vicinity Map

Table 1– Wetland, Stream and Buffer Summary

Wetland	Size		Category		Base Buffer Width (feet)	Allowed Reduction/Necessary Reduction	Mitigation Ratio		Cowardin Class	Comments
	On-site	Off-site (estimated)	Thurston	Const Setback			Create	Buffer Enhance		
Wetland A <sup>1</sup>	~967 Sq ft			15-feet	N/A	N/A	None needed		PF OC <sup>1</sup> PE MC <sup>2</sup>	Unregulated with regard to buffers
Wetland B	2.2. acres	10 acres	III	15 feet reduced to 4-ft	280 ft	210 feet/ 58% reduction to 117 feet for home	None Needed No Impacts	Restore Cleared area	PF OC	Buffer Restored except for approved development
Wetland C	1,177 sq ft		III	15 ft Reduced to 4 ft	280 ft	210 ft/ 82% to 51 ft for home and 82.5% to 49 ft for septic	No direct impacts	Restore Cleared Area enhance remainder	PF OC	Buffer restored except for approved development
Un-named Stream	~340 ft	3 miles	Ns < 5ft		150	150	No direct or buffer impacts			No buffer impacts

As outlined in our earlier report no direct impacts are proposed. The buffer of Wetland B and C will need to be reduced beyond that which is allowed by code and a reasonable use exception is required. The total impacts to the buffers of Wetland B and C after restoration and enhancement will be 29,676 square feet due to the project.

The applicant cleared 27,825 sq ft of forested buffer. He will be restoring 19,961 sq ft of the illegal clearing/grading with the remaining 7,864 sq feet of cleared area being converted into a home and driveway.

New Impacts totaling 9,715 sq feet which will require enhancement mitigation are 3,000 sq ft for the Home, 2,955 for the driveway, 900 sq feet for the garage 2,620 sq feet for the onsite septic drainfield and reserve drainfield and an additional 240 sq ft of clearing impacts for the driveway and garage.

In total 9,715 sq ft of area will be enhanced and 19,961 sq feet will be restored for the clearing violation

## 2.0 PROPOSED PROJECT

### 2.1 Description

The project proposes a single-family residence with an onsite septic, driveway, and drinking water well. **(See Site Plan).**

### 2.2 Development Impacts

No direct impacts to the wetlands are proposed. The wetland delineation report by LSNW Inc. dated December 19, 2022, identifies unavoidable impacts to approximately 9,715 square feet of Wetland B and C's buffer due to the project.

TCC 24.30.050 allows for a reduction of wetland buffers by 25 percent, which will be necessary for the distance from the septic to Wetland B, however, the project will require a 58 percent reduction of the buffer of Wetland B to 117 feet. and an 82 percent reduction of the Wetland C to 51 ft. The septic drainfield will require a reduction of the buffer of wetland C by 82.5% to 49 feet.

#### Avoidance and Minimization

The driveway will drain away from the wetlands to an infiltration trench to the west which should maintain the groundwater of the area. The project will have a large portion of the area around the development planted to improve onsite conditions.

The project must meet the overarching requirements of TCC24.01.035 - General requirements which state:

- A. Avoid Impacts. All uses and activities on sites containing critical areas and/or associated buffers or riparian or marine shoreline management zones shall be located, designed, and constructed to avoid or, where that is not possible, minimize all adverse impacts to critical areas, associated buffers designed to protect the functions of critical areas, and management zones. The county shall not authorize impacts to critical areas or buffers unless the applicant demonstrates an inability to avoid impacts and that there will be no net loss of critical area functions as required in subsection (B). Impacts to critical areas and associated buffers that cannot be avoided shall be minimized by sensitive site design and appropriate precautions during the permitted activity and as specifically provided for in this title.

*There is nowhere else on the property where we could site the project that would have less impact. Land Services Northwest viewed the site to determine that no other areas that were available would provide a better site for the development*

*The applicant considered development on other parts of the property, but it was determined that this area was the best area to develop. The driveway will be as small as can be while still meeting the*

*Thurston County standards for safety and design. Stormwater cross drains will allow surface water to pass and the stormwater from the driveway will be directed to a grassy infiltration trench alongside the driveway so there should be no change in hydrology due to the driveway. An invasive removal and enhancement mitigation planting plan will result in No Net Loss of Critical Area Functions and Values of the Wetland and Marine Riparian Area.*

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B. Uses and activities carried out pursuant to this title shall result in equivalent or if the applicant chooses greater critical area functions. Impacts to critical areas, and associated buffers designed to protect the functions of critical areas, shall be repaired, or mitigated through restoration, replacement, enhancement, or through purchase of credits at a mitigation bank consistent with the applicable provisions of this title.

*The applicant has used the parcel for a recreational property. This use will actually provide less impact to the habitat of the area as the new home will be located as far away from wetlands as possible.*

C. Monitoring. In addition to the specific monitoring requirements in this title, the approval authority may require that permitted uses and mitigation projects be reviewed at appropriate intervals as necessary to ensure that they are functioning consistent with the project approval areas and associated buffers designed to protect the functions of critical areas, and to ensure that any required mitigation is successful.

In addition, TCC 24.01.037 - Mitigation sequencing is more specific about the sequence or order of preference for the avoidance criteria.

Mitigation actions associated with development proposals impacting critical areas shall adhere to the following mitigation sequence:

A. Avoiding the impact altogether by not taking a certain action or parts of an action.

*The applicant has avoided any direct impacts that were avoidable, however, the extent of wetlands has made complete avoidance of buffer impacts impossible without abandoning the purpose of providing a single - family residence for the applicant.*

B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.

*The project has been reduced to the point where any more reduction would make the different components unable to fulfill their functions. The impacts are limited to the buffers of Wetland B and C. The house itself will be surrounded by vegetation to screen the daily activities. The new driveway will be screened using vegetation in order to maintain the functions of the wetland. This impact and development represents a footprint that is small but sustainable.*

B. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

*Because of the ongoing nature of residential impact due to everyday activities, the impacts will be small but ongoing as a matter of use of the driveway for ingress and egress and activities associated with the home. Many of these impacts are occurring now as there are recreational vehicles nearby.*

- D. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

*This will not be possible due to the ongoing residential impacts that occur due to daily life.*

- E. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or

*The buffer will be enhanced at a 1:1 ratio, which is what is required by code. This area is now field with grasses and forbes. The mitigation plan will improve the screening, diversity and shading provided by the buffer in this area and should maintain no net loss.*

- F. Monitoring the impact and taking appropriate corrective measures.

*The applicant will be providing a maintenance and monitoring plan for woody and herbaceous vegetation that will assure success over a ten-year period as required. The mitigation should be self-sustaining after this.*

## 2.4 Minimization of Water Quality Impacts

Implementing water quality and sedimentation best management practices (BMPs) will act to minimize sedimentation and protect water quality on-site and any bare areas will be planted with a cover crop. Silt fences and straw wattles will be used where necessary. Splash blocks and infiltration galleries will be used to reduce stormwater impacts from the residence. The increase in vegetation from the proposed buffer enhancement plan will provide for increased surface roughness and nutrient uptake.

## 3.0 MITIGATION

### 3.1 Mitigation Requirements

It was determined that unavoidable impacts will occur by reducing the standard buffer of Wetland B by 58 percent to 117 feet and Wetland C by 82.5 percent to 51 ft for the home and 49 ft for the septic. This is more than the code will allow, as the code only allows a 25% reduction if the project utilizes the measures found in Table 24.30-2, and the qualifications found in **TCC 24.30.050 - Wetland buffers—Reduced Width**.

Lights will be directed away from the wetland and buffers.

Pesticide limited within 150 ft of wetland.

Runoff will be directed away from the wetland since it is uphill.

Use LID infiltration on downspouts.

Plant dense vegetation in buffer from the development edge to the wetland area.

Other mitigation measures from this table will be implemented as applicable.

As mitigation for the reduced impacts, it is proposed that the applicant will follow the recommendation in TCC Table 24.30-2, which states the applicant will:



<u>TCC</u>	<ul style="list-style-type: none"> <li>• If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source.</li> </ul>
	<ul style="list-style-type: none"> <li>• For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10 feet heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.</li> </ul>
Toxic runoff	<ul style="list-style-type: none"> <li>• Treat and contain any toxic runoff.</li> </ul>
	<ul style="list-style-type: none"> <li>• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered.</li> </ul>
	<ul style="list-style-type: none"> <li>• Establish covenants limiting use of pesticides within 150 feet of wetland.</li> </ul>
	<ul style="list-style-type: none"> <li>• Apply integrated pest management standards as found in the Thurston County Integrated Pest management BMP guidance</li> </ul>
Stormwater runoff	<ul style="list-style-type: none"> <li>• To improve existing water quality runoff that may be impacting wetland functions. Retrofit existing stormwater detention and treatment for roads and existing adjacent development.</li> </ul>
	<ul style="list-style-type: none"> <li>• Prevent channelized flow from lawns that directly enters the buffer.</li> </ul>
	<ul style="list-style-type: none"> <li>• Use Low Intensity Development techniques (per PSAT publication on LID techniques).</li> </ul>
Change in water regime	<ul style="list-style-type: none"> <li>• In order to maintain wetland hydrology and discharge only clean stormwater toward the wetland. Stormwater should be treated; then infiltrated, detained, and/or dispersed outside the wetland buffer for any new runoff from impervious surfaces and new lawns. Permanent improvements to the site hydrology that would improve wetland functions and not create off-site flooding. This may include, but is not limited to, removal of a lawfully established agricultural ditch draining a wetland or delivering sediment, pollutants, or excess nutrients to a wetland.</li> </ul>

Pets and human disturbance	<ul style="list-style-type: none"> <li>• Use privacy fencing at buffer edge OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion.</li> </ul>
	<ul style="list-style-type: none"> <li>• Place wetland and its buffer in a separate tract or protect with a conservation easement.</li> </ul>
Dust	<ul style="list-style-type: none"> <li>• During construction or for commercial or industrial activities, use best management practices to control dust.</li> </ul>
Disruption of corridors or connections/habitat enhancement	<ul style="list-style-type: none"> <li>• In order to improve habitat quality and connectivity, a vegetation enhancement plan that improves areas with minimal trees and vegetation and proposes removal of invasive vegetation and replacing it with ground cover and shrubs that will provide dense vegetative cover at maturity. Planting noninvasive plants that provide improved filtration of sediment, excess nutrients, and pollutants that may be present.</li> </ul>
	<ul style="list-style-type: none"> <li>• Maintain habitat connections to off-site areas that are undisturbed.</li> </ul>
	<ul style="list-style-type: none"> <li>• Restore corridors or connections to off-site habitats by replanting.</li> </ul>

### 3.2 Integrated Pest Management

The applicant will use the integrated pest management plan (IPM) methods and utilize management recommendations from the Thurston County Website at

[https://www.co.thurston.wa.us/health/ehipm/ipm\\_homeownr.html](https://www.co.thurston.wa.us/health/ehipm/ipm_homeownr.html). The primary objectives of the planting plan is to provide tree and shrub species that will shade and outcompete the two main species which require control; Himalayan blackberry and the Single seeded hawthorne. The Sitka spruce, Pacific willow and red osier dogwood will be useful to shade out the existing invasive species. The applicant will use manual mechanical means as the preferred method for removal of the Himalayan and Evergreen blackberries on site. The reed canary grass will be carefully line cut until the other plants become established. If these methods are found to be ineffective or infeasible, Other more aggressive methods will be considered to include use of popular effective herbicides consistent with the recommended label application rates and conducted during the dry season by licensed applicators. Other species which may require control from time to time will use recommendations from the Thurston County Noxious Weed website and the Homeowner IPM recommendations adopted for the particular purpose.

### 3.3 Mitigation Functional Analysis

The following planting plan will be combined with the activities of the table above to enhance the buffer will improve wetland functions and improve the overall landscape as well by:

- providing increase roughness
- increasing nutrient uptake of stormwater
- Provide screening for wildlife,
- Provide shade for water quality and habitat,
- Produce food for wildlife and structure.

Currently, the area that will be impacted is an upland grassy field near the wetland area. There is a lack of shrub/tree vegetation and the screening that it provides, so this plan will provide an enhanced proper buffer in the area, where it matters most, along the driveway in the outer portion of the buffer. The planting plan will provide species diversity and structure as well as roughness as shown in the previous chapters.

Buffer areas near the driveway will be planted with native buffer plants, which will not only provide benefits already mentioned but will also become a landscape amenity that combines the practical self-maintaining plantings with aesthetic attributes of our native flora.

The following analysis uses the qualitative scoring values similar to the values developed in the Wetland Rating System for Western Washington. The best available science has found that the resolution of value can only be rated using a qualitative system and maintain a rapid assessment of less than one day. Therefore, we have examined common buffer functions for wetland protection and other habitats to show the overall expected lift by the enhancement plan. Since we are enhancing these areas, the dense native plants should outcompete them in the future.

TABLE 2 - Buffer Functions Comparison Before and After Mitigation

Buffer Performance criteria	Screening Obstruction	Nutrient uptake	Snags and Logs	Structure Diversity	Surface roughness	Temperature attenuation	Organic Matter Production	Erosion control
<b>Before mitigating measures</b>	Low	Low	Low	Low	Low	Low	Medium	High
<b>After mitigating measures</b>	High	Medium	Low	Medium	Medium	Medium	High	High

Scale- Low, Medium, High

### 3.4 Planting Plan

To provide for a higher functioning wetland, a buffer and wetland enhancement and invasive removal plan was developed to make the remaining buffer more resilient and effective. Figure 2 illustrates the placement zones which were created to maximize plant performance by placing species in a position in the landscape where they will thrive. All invasive non-native species like Himalayan or Evergreen blackberry, English ivy and other invasives will be removed from the planting areas. There are not many invasive species in this area, but the removal will ensure that there is no resurgence once the area is planted which will reduce the competition

Trees and shrubs will be planted at grade in holes 2-3 times the width of the container or root ball. Mulch will be applied around each tree 2-4 inches deep in a three-foot diameter around the tree with an edge to retain water. Containerized rootbound trees will be cut with sharp shears on the bottom in an x pattern to promote root growth. Four cuts will be made vertically to allow roots to spread. Trees and shrubs will be thoroughly watered in after installation.

Table 3 –Violation Restoration (19,961 sq ft)

Common Name	Species	Quantity	Spacing	Cost	Total
Sitka spruce	<i>Picea sitchensis</i>	90	10 ft oc	\$10.00	\$900.00
Red osier dogwood	<i>Cornus alba</i>	50	8 ft oc	\$10.00	\$500.00
Cluster rose	<i>Rosa pisocarpa</i>	100	5 ft oc	\$5.00	\$500.00
Quaking aspen	<i>Populus tremuloides</i>	50	10ft oc	\$10.00	\$500.00
Buckthorne cascara	<i>Frangula purshiana</i>	50	15 ft oc	\$10.00	\$500.00
Flowering Current	<i>Ribes sanguineum</i>	20	5ft oc	\$10.00	\$200.00
Salal	<i>Gaultheria shallon</i>	300	3ft oc	\$5.00	\$1,500.00
Oregon grape	<i>Mahonia nervosa</i>	100	5 ft oc	\$10.00	\$1,000.00
<b>Total</b>		<b>760</b>			<b>\$5600.00</b>

Table 4- Enhancement Areas (9,715 sq ft)

Common Name	Species	Quantity	Spacing	Cost	Total
Western red cedar	<i>Thuja plicata</i>	40	10 ft oc	\$10.00	\$400.00
Twinberry	<i>Lonicera involucrata</i>	20	8 ft oc	\$10.00	\$200.00
Nootka rose	<i>Rosa nutkana</i>	20	5 ft oc	\$5.00	\$100.00
Snowberry	<i>Symphoricarpos alba</i>	20	5ft oc	\$5.00	\$100.00
<b>Total</b>		<b>100</b>			<b>\$800.00</b>

Table 4- Total Costs

Labor	100/hour	\$4,000.00
Mulch	\$100/5 yards	\$300.00
Monitoring w/report (10 years)	200.00/yr.	\$2,000.00
Plants and Materials		\$6,400.00
<b>Total</b>		<b>\$12,700.00</b>

The enhancement plan will mitigate the impacts due to the driveway, home, garage, septic and reserve drainfields and for 240 sq feet of extra impacts due to the driveway. The restoration will rectify the 19,961 sq feet of clearing violation. Since these are buffer only impacts they are mitigated at a 1:1 ratio in accordance with TCC 24.30.080.A.

Insert Figure 2- Site Plan with Mitigation Planting Area

### 3.5 Monitoring Plan

The planting plan will be monitored for **ten years** following the as – built (Year 0). Monitoring of the performance standards will be provided each spring, shortly after leafing out, to aid in plant identification. A report that communicates the findings will be provided to the County staff a month following the monitoring. The report will contain pictures to allow the County personnel to evaluate site conditions and performance standards. The photos in the report will be taken in four cardinal directions, unless there is a direction that provides a better view. Four photo points that will be established during the as-built (Year 0). Management of performance deficiencies or maintenance will occur during the spring or fall season following monitoring and a summary of management actions will be included in the following year's monitoring report to track effectiveness and adaptively manage the site.

### 3.6 Performance Standards

The performance standards are as follows:

Year 0 an inventory of plants and photo points will be established for monitoring during the monitoring period within 1 month of the installation.

Year 1 will have 100% survival of installed plants. Noxious weeds will be less than 10% aerial coverage.

Volunteer trees or shrubs may account for up to 10 percent of the overall count of surviving plants. Dead plants will be replaced in kind unless a volunteer is a replacement.

Year 2 -10 will have a survival rate of 80 percent of the original count. Volunteers can account for 10 percent of the total if present. Noxious weeds such as Himalayan blackberry, Reed canary grass, and other invasives will not have more than 10 percent aerial coverage of the planting area. Japanese knotweed, yellow flag iris, or hogweed will have a zero percent tolerance and be removed or sprayed using an appropriate herbicide approved for aquatic use by a licensed applicator.

Because of the shade of the existing forest, it is not expected that the plants will grow as quickly as they would in an open field. Aerial coverage will be at least 80% by year 10.

Failure to meet standards by year 10 will require an additional year of monitoring.

### 3.7 Contingency Plans

If the site does not meet performance standards. Contingencies may be developed to adapt to the site-specific conditions. Contingencies may include:

- Increased watering
- Mulching
- Integrated Pest Management
- Microtopography changes
- Species substitution
- Herbivory protection

- Bark wrap

The area is frequented by deer and the choice of plants were chosen to avoid herbivory issues, but exclusion fencing may be necessary until the plants reach maturity. This is not expected to be needed to be a permanent fixture if required. Any contingencies will be developed in conjunction with landscapers, nursery staff, and other experts. The county would be notified in advance of the contingency plans. No contingencies will be applied without county consent.

### 3.8 Surety Bond

In accordance with 24.70.020 - Surety agreement in lieu of completion of permit approval requirements, the applicant will post a bond to assure completion of the project within the performance measures of the plan for a period of five years.

#### A. Installation.

1.The property owner, applicant, or legal designee, shall install improvements as required by the approval authority as a condition of permit approval under this title and replace any such improvements damaged during development prior to final approval for occupancy and/or use; or

2.The property owner, applicant, or legal designee, shall execute and file with the county a surety agreement guaranteeing and covering the construction, installation, and monitoring of such improvements together with a reasonable amount to cover possible needed replacements or repairs for a time specified by the approval authority as a condition of permit approval.

C. The director may approve such agreements made under this chapter.

#### 24.70.040 - Amounts for surety agreements.

A. Surety agreements required under this chapter for installation of improvements shall be an amount equal to one hundred twenty-five percent of the fair market cost of installation, including materials and labor.

B. Surety agreements required under this chapter for monitoring such improvements required by this title shall be an amount equal to one hundred twenty-five percent of the cost of monitoring.

C. Surety agreements required under this chapter for maintenance and repair of such improvements required by this title shall be an amount equal to one hundred twenty-five percent of the cost of installation, including materials and labor.

D. Amounts required for the various surety agreements under this chapter shall be calculated separately.

E. The amount of the surety agreement or bond shall not be accepted by the county if the review authority determines that it will be inadequate to cover the costs related to fulfillment of the conditions of approval for the permit.

F. The approval authority may utilize various methods to calculate the amount necessary for the surety agreement to fulfill the requirements of the permit approval or mitigation plan. The property owner,



applicant, or designee shall submit to the approval authority receipts, contractor bids/estimates, or other documentation that establishes the cost.

G. Such agreement shall not relieve the property owner or designee of liability for the substandard or defective condition of any required improvements discovered following the effective term of the surety or bond.

H. If costs incurred are related to issues or circumstances undiscovered or undisclosed at the time the surety agreement is accepted by the county, the property owner or applicant shall be responsible for all additional costs.

(Ord. No. 14773, § 3(Att. B), 7-24-2012)

#### 24.70.060 - Forms of surety agreement.

The property owner, applicant, or designee shall include with the agreement set forth in this chapter one or more of the following at the discretion of the approval authority:

A. A surety bond executed by a surety company authorized to transact business in the State of Washington on a form approved by the prosecuting attorney.

B. Cash, deposited with the Thurston County treasurer;

C. A letter of credit or irrevocable assignment of savings executed by a financial institution stating that the money is held for the stated purpose of the installation, monitoring, and/or maintenance and repair.

(Ord. No. 14773, § 3(Att. B), 7-24-2012)

#### 24.70.070 - Forfeiture of surety.

If the property owner, applicant, or designee fails to complete all required work within the period specified, including any approved extensions of time by the approval authority, the county may take steps to demand performance of said obligations within a reasonable time not to exceed ninety days from the date of demand. If the required improvements are not substantially completed within that time, the county may take action to forfeit the financial surety. The county shall be entitled to recover all costs taking of such action, including reasonable attorney fees. The county shall use the financial surety to complete the required improvements and pay the costs incurred. Should the proceeds of the financial security be insufficient for completion of the work and payment of the costs, the county shall be entitled to recover the deficiency from the property owner, applicant, or designee.

(Ord. No. 14773, § 3(Att. B), 7-24-2012)

#### 24.70.080 - Release of surety.

A. The surety agreement shall specify that the surety cannot be terminated or cancelled without written release by the approval authority. The approval authority shall release all or part of the unexpended portion of the surety, as appropriate, upon determining that activities subject to the surety agreement or bond have been completed in compliance with the terms and conditions of the permit and the requirements of this title.

Surety agreements for monitoring of such improvements together with any needed replacements or repairs as required under this title shall not be fully released for at least three years, five years for wetlands, following final acceptance of the improvements by the approval authority.

(Ord. No. 14773, § 3(Att. B), 7-24-2012)

**In accordance with the surety agreement, the applicant will provide a surety of \$15,875.00 for the proposed planting plan.**

## 4.0 SUMMARY AND CONCLUSIONS

An RUE is required to reduce the buffers of wetland B and C and allow the project in the inner 75% of the wetland buffers. This will require that the 280-foot buffer be reduced for Wetland B by 58 percent to 117 feet and for Wetland C by 82 percent to 51 ft for the home and 82.5% to 49 feet for the septic and reserve drainfield.

A mitigation plan to maintain and improve the remaining buffer and improve wetland functions has been developed. This mitigation will be combined with stormwater best management practices in order to limit storm water and wetland impacts. The final mitigation should result no net loss of wetland functions and values. This will ultimately result in a proper single-family residential development with the amenities provided by the natural resources of Thurston County.

## 5.0 LIMITATIONS

This report was created with care and best professional judgment using the current best available science, but the report is subject to interpretation by local, state, and federal regulators who have the final regulatory authority on wetlands and other critical area boundary determinations. No outcomes are warranted by this report.

## 6.0 REFERENCE

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