# TECHNICAL MEMORANDUM

Prepared for: Kevin Anderson – CEO
Wesley Homes
815 South 216th Street
Des Moines, WA 98198-6332

January 19, 2024

Prepared by: Grette Associates LLC
2709 Jahn Ave NW, Suite H-5
Gig Harbor, WA 98335

File No.: 621.008

Re: Wesley Homes – Bradley Park Phase II: Buffer Averaging Plan

## 1 INTRODUCTION

Grette Associates is under contract with Wesley Homes to prepare a wetland buffer averaging plan in response to the City of Puyallup's December 19, 2023 critical area review comments associated with the Bradley Park Phase II project.

## 2 BACKGROUND

### 2.1 2017 Wetland Delineation and Mitigation Summary

In support of Phase I and II project, Soundview Consultants LLC (SVC) identified and delineated four wetlands within the project site during their assessment performed in 2013 (Wetlands A, B, C, and D; SVC 2017). Wetland C is the only wetland feature in the vicinity of the Phase II project area; as such this section is limited to a summary of Wetland C and the approved buffer reduction outlined in the 2017 report.

The 2017 report characterizes Wetland C as a palustrine scrub-shrub wetland (Cowardin et al. 1979) that was approximately 3,075 square feet in size. Dominant vegetation included salmonberry (*Rubus spectabilis*) and soft rush (*Juncus effusus*). Hydrological support came primarily from uphill seeps and shallow groundwater.

Wetland C was rated Category III and was subject to a standard buffer width of 110 feet; however, this standard buffer was approved to be reduced to 50 feet (SVC 2017).

### 2.2 2023 Wetland Verification

In response to the City's July 11, 2022 review comments and the subsequent October 26, 2022 meeting with City staff, Grette Associates performed a site visit to verify if the southern boundary of Wetland C has significantly changed since SVC's 2013 delineations.

Based on data collected, the southeastern portion of Wetland C has extended approximately 10 feet south of the wetland boundary delineated in 2013 (Grette Associates 2023). A preliminary wetland rating (excludes rating figures) was completed using the current version of the Washington Department of Ecology 2014 wetland rating system (Hruby and Yahnke 2023). The wetland was rated Category III which is consistent with SVC's rating summarized in their 2017 report.

### 2.3 December 2023 Critical Area Review Comments

The City provided comments (December 19, 2023) upon review of Grette Associates' 2023 verification report. A summary of the City's comments associated with the review of the 2023 verification report is provided below:

- New modeling and a qualitative assessment of possible impacts associated with additional stormwater to Wetland C needs to be provided;
- Plans need to be revised to show the expansion of the modified buffer to reflect the 2023 wetland boundary;
- Provide mitigation sequencing and impact analysis to address the updated wetland buffer;
- Revise the 2023 verification report to include a copy of the preliminary rating form.

## 3 REVIEW RESPONSE

On January 2, 2024, the project team and the City participated in a virtual meeting to review the December 2023 comments. The project team informed City staff that the roof drain for the new care center will no longer be directed to the dispersion trench upslope of Wetland C. This update appeared to sufficiently address the City's comment regarding additional stormwater analysis associated with Wetland C.

In regards to the wetland boundary changes, the City provided clarification for requiring an update to the previously approved 50-foot wetland buffer and discussed potential options for a path forward to address this issue. It was determined that the appropriate approach to address the buffer change would be through buffer averaging. Provided below is a summary of mitigation sequencing and a proposed buffer averaging plan.

The 2023 verification report was updated to include the preliminary rating form completed by Grette. Please note that this rating form did not include a formal figure set because the 50-foot wetland buffer was previously approved by the City. Grette evaluated the previous rating figure (SVC 2017) and reviewed the online databased to prepare the preliminary rating.

## 4 BUFFER AVERAGING PLAN

This buffer averaging plan has been prepared to address the southern expansion of Wetland C that extends towards the Phase II project area. In summary, the wetland boundary has extended approximately 10 feet south, which also extends a portion of the previously approved 50-foot wetland buffer to the south (Attachment 1). Approximately 400 square feet of new buffer extends into the project area.

### 4.1 Mitigation Sequencing

Per Puyallup Municipal Code (PMC) 21.06.610, an applicant shall demonstrate that all reasonable efforts have been made to avoid, minimize, or compensate for any potential impacts that may occur as a result of a proposed project.

#### *4.1.1 Avoidance*

Elements of Phase II were evaluated during the review and approval of Wesley Home's Phase I project. During the construction of Phase I, all general earth work within the Phase II project area was completed which extended to the edge of the established 50-foot buffer associated with Wetland C. Furthermore, all associated infrastructure such as roads, parking lots, and sidewalks

have been constructed throughout the Phase I and Phase II project areas. Given the existing development, there is no design alternative to move the new care center to avoid wetland buffer impacts while achieving the goals and objectives of the project as well as other City design standards.

#### *4.1.2 Minimization*

All minimization efforts were made during design of both Phase I and Phase II (SVC 2017). As noted above, with the exception of the actual care center, the Phase II site development was largely completed during the construction of Phase I. No additional minimization efforts are available in response to the unanticipated and after-the-fact buffer change.

#### *4.1.3 Rectifying and Reducing*

Given the Phase II project area within the new buffer area is permanent, restoration or eliminating the impact over time is not possible.

#### *4.1.4 Compensation*

Given the existing conditions of the 400 square feet of new buffer, it is Grette's professional opinion that the encroachment into this area will not have a significant impact to the functions of Wetland C or its buffer. As such, with an approved buffer averaging plan, compensatory actions are not necessary to address the updated wetland buffer. Per PMC 21.06.930, any approved buffer averaging plan will need to establish a native plant community. These conditions are currently lacking within new modified buffer area; therefore, buffer enhancement will be performed in this area for compliance with PMC 21.06.930. See below for more detail.

### 4.2 Averaging Plan

Per PMC 21.06.930, a proposed buffer averaging plan shall demonstrate that there is no net loss of buffer area, development will not reduce the overall function of the wetland, and the remaining buffer width shall not be less than 33 percent of the standard buffer width.

The proposed buffer area to be reduced is approximately 400 square feet in size. The proposed buffer averaging will increase buffer area by approximately 725 square feet immediately adjacent to where the buffer reduction will occur (Attachment 2).

The updated wetland buffer that extends approximately 10 feet south of the existing 50-foot buffer is relatively developed and largely devoid of vegetation and doesn't provide much, if any, buffer function. More specifically, this area was previously cleared and graded during Phase I construction in preparation for Phase II and was not previously considered wetland buffer. It is Grette's professional opinion that reducing the buffer by 10 feet (20%) to maintain the previously approved buffer boundary where the care facility is planned to be constructed will not have an adverse impact to existing wetland or buffer functions.

Per PMC 21.06.930, vegetation enhancement shall be performed in conjunction with a proposed buffer averaging plan when those buffer area(s) do not consist of a native plant community. Phase II will enhance the 943[1] square feet of additional buffer and enhancement through invasive species removal, namely Himalayan blackberry (approx. 3,500 sq. ft.), and native plantings within the portion of the buffer adjacent to the new care facility (Attachment 2).

[1] This enhancement area includes the 725 square feet of increased buffer and the 218 square feet of new 50-foot buffer that extends into the enhancement area.

### *4.2.1 Planting Schedule*

The planting schedule for the proposed buffer enhancement is presented below in Table 1. In order to reduce mortality, a late fall planting installation (October – November) schedule is preferred. Plants should not be installed during or immediately before freezing weather.

**Table 1. Planting Schedule**

| Scientific | Common Name | Size | Spacing[1] | Quantity[1] | Buffer Location |
|---|---|---|---|---|---|
| **Trees** | | | | | |
| *Acer macrophyllum* | big leaf maple | 5 gallon | 10 feet | 21 | Inner Area[2] |
| *Acer circinatum* | vine maple | 2 gallon | 10-15 feet | 6 | Averaging Area |
| *Frangula purshiana* | cascara | 2 gallon | 10-15 feet | 6 | Averaging Area |
| *Alnus rubra* | red alder | 2 gallon | 10 feet | 14 | Inner Area[2] |
| **Shrubs** | | | | | |
| *Holodiscus discolor* | oceanspray | 1-2 gallon | 4-6 feet | 50 | Inner / Averaging Area[3] |
| *Oemleria cerasiformis* | osoberry | 1-2 gallon | 4-6 feet | 50 | Inner / Averaging Area[3] |
| *Corylus cornuta* | beaked hazelnut | 1-2 gallon | 4-6 feet | 50 | Inner / Averaging Area[3] |

[1] Spacing and quantities estimated based on the Sound Native Plants Plant Quantity Calculator (2023).
[2] Species to be planted with 50-foot buffer area.
[3] 15 shrubs will be planted in the averaging area and 35 shrubs will be planted in the inner buffer area.

Plant installation will be performed in accordance with the specifications outlined in this Plan. Any alterations to the planting plan due to site conditions will require prior approval from the project biologist and/or land architect.

### *4.2.2 Post-Installation Inspections and Monitoring*

Compliance monitoring will consist of evaluating the plantings immediately after construction to confirm the plan was followed and plants were installed appropriately. A walk-through survey will be conducted by a qualified biologist to verify that the installation conforms to the approved plan. Following completion of the post-installation inspection, a memorandum will be prepared to verify that the enhancement was correctly implemented and document any changes to the planting plan that may have occurred. The post-installation inspection will occur no later than 30 days after plants have been installed.

### *4.2.3 Long-Term Monitoring*

Long-term monitoring will be conducted over a three-year period for compliance with PMC 21.06.930 with observations conducted during years 1, 2, and 3 (Table 2). The purpose of the long-term monitoring program is to evaluate the establishment and maintenance of the plant communities within the enhancement areas. The long-term monitoring associated with this plan will be completed concurrently with the current mitigation monitoring that is occurring for Phase I (SVC 2017).

### *4.2.4 Performance Standards*

Performance standards outlined in Table 2 are established based on the buffer averaging requirements defined in PMC 21.06.930(4).

**Table 2. Performance Standards**

| Restoration Goal | Functional Objective | Performance Standard | Year Inspected | Sampling Method |
|---|---|---|---|---|
| Provide improved buffer functions | 1. Plant an assortment of native trees and shrubs within approx. 4,443 sq. ft. of wetland buffer area. | 1a. The buffers will be free of trash and dumping each monitoring year. | 0, 1, 2, 3 | Visual walk through |
| | | 1b. A minimum of 80% survival of planted vegetation each monitoring year[1,2]. | 0, 1, 2, 3 | Visual walk through |
| | | 1c. A maximum of 20% invasive and noxious species coverage throughout the monitoring period.[3] | 0, 1, 2, 3 | Visual walk through |

[1] 100% percent survival during the post-installation inspection.
[2] All dead plants will be replaced by the landscape contractor at Year 1.
[3] Class A, B and C-listed species in the most current Washington State Noxious Weed List (as issued by the Washington State Noxious Weed Control Board).

If you have any questions on this memo, please contact me at (253) 573-9300, or by email at chadw@gretteassociates.com.

Regards,

Chad Wallin, PWS
Biologist

## References


Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats for the United States. FWS/OBS-79/31, U.S. Department of Interior, Fish and Wildlife Service. Washington D.C.

Grette Associates, LLC. 2023. Wesley Homes – Bradley Park Phase II. Wetland Verification Technical Memorandum. Prepared for Wesley Homes. November 2, 2023.

Soundview Consultants LLC. 2017. Wetland Delineation, Habitat Assessment, and Final Mitigation Plan: Wesley Homes – Puyallup Senior Living. Prepared for: Wesley Homes. Revised August 2017.

# ATTACHMENT A

## WETLAND VERIFICATION MAP

WETLAND C

WB

SP2

SP3

SP1

10-FOOT EXPANSION

CLEARING LIMITS (TYP.)

MODIFIED WETLAND BUFFER

EX CB

INLET

DP-7

Existing stormwater dispersion trench

Existing stormwater dispersion trench

## LEGEND

- APPROX. SAMPLE PLOT LOCATIONS
- APPROX. WETLAND BOUNDARY FLAG
- WB — APPROX. PREVIOUSLY DELINEATED WETLAND BOUNDARY
- APPROX. EXPANDED WETLAND BOUNDARY

SCALE IN FEET
20 10 0 20


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|---|---|
| PROJECT #: | 621.008 |
| DESIGNED BY: | TH |
| CHECKED BY: | CW |
| DATE: | 09/28/2023 |
| DATE: | 09/28/2023 |

CLIENT: WESLEY HOMES

# WESLEY HOMES - WETLAND VERIFICATION

SITE ADDRESS: PUYALLUP, WASHINGTON

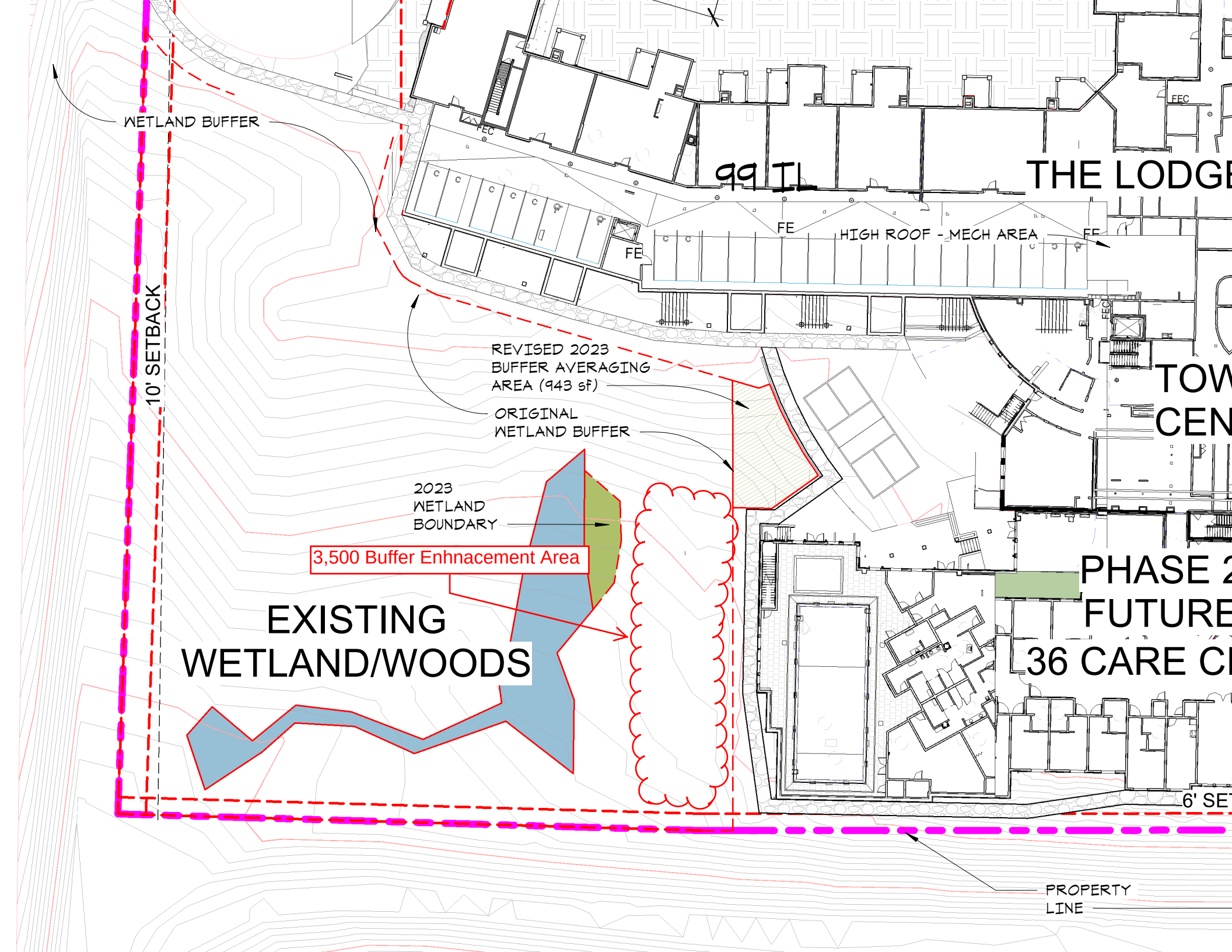
DRAWING SCALE: SEE SCALE

## WETLAND VERIFICATION BOUNDARIES

SHEET 1 OF 1

# ATTACHMENT B

## BUFFER AVERAGING AND ENHANCEMENT MAP


WETLAND BUFFER
10' SETBACK
99 IL
THE LODGE
FE
HIGH ROOF - MECH AREA
FEC
REVISED 2023
BUFFER AVERAGING
AREA (943 sf)
ORIGINAL
WETLAND BUFFER
2023
WETLAND
BOUNDARY
3,500 Buffer Enhnacement Area
EXISTING
WETLAND/WOODS
TOW
CEN
PHASE 2
FUTURE
36 CARE CE
6' SE
PROPERTY
LINE