

Commissioners

Kelly Cochran, Chair
Jeff Craig, Co-Chair
Chris Rule
Erika Bartholomew
Dan Swanson
Joe Pestinger
Jeff Sproul



**City of Orting
Planning Commission Agenda**

Thursday, October 2nd, 2023
7:00pm
City Hall Council Chambers

If joining virtually:

Phone Dial-in - Charges may apply
+1.253.215.8782

To join the meeting on a computer or mobile phone:

<https://us06web.zoom.us/j/87646651363?pwd=fKOsWZmEHgXYOv5atKazyx9Bnyj9Hj.1>

Meeting ID: 876 4665 1363
Password: 903441

1. CALL MEETING TO ORDER, PLEDGE OF ALLEGIANCE, ROLL CALL

The public may attend this meeting virtually via the platform Zoom by clicking the link above or by telephone, or in person at City Hall.

A. Is there a motion to excuse Commissioner(s) from this meeting?

2. AGENDA APPROVAL

A. Does the agenda require an addition or removal of a topic?

3. PUBLIC COMMENTS

Comments may be sent to the Planning Commission Secretary Danielle Charchenko at clerk@cityoforting.org by 1:00pm on the day of the meeting and will be read into the record at the meeting. In the case of a question, the chair will refer the matter to the appropriate administrative staff member. Comments that come in after the deadline will be read into the record at the next Planning Commission meeting.

4. PUBLIC HEARING

A. Public Hearing – Rainier Meadows Division 2 – Preliminary Plat and Planned Unit Development.

5. APPROVAL OF MINUTES

A. Are the minutes of the September 7th, 2023 meeting correct and accurate?

6. ARCHITECTURAL DESIGN REVIEW

None.

7. NEW BUSINESS

None.

8. OLD BUSINESS

- A. Dumpster Violations.
- B. Sign Code Violations.

9. GOOD OF THE ORDER

- 1. Planned Absences.
- 2. Report on Council Meetings.
- 3. Agenda setting.

10. ADJOURN

NEXT PLANNING COMMISSION MEETING: Monday, November 6th, 2023

Commissioners

Kelly Cochran, Chair
Jeff Craig, Co-Chair
Chris Rule
Erika Bartholomew
Dan Swanson
Joe Pestinger
Jeff Sproul



ORTING PLANNING COMMISSION
Planning Commission Meeting Minutes
104 Bridge Street S, Orting, WA
Zoom – Virtual
September 7th, 2023
7:00 p.m.

1. CALL MEETING TO ORDER, PLEDGE OF ALLEGIANCE, AND ROLL CALL.

Chair Kelly Cochran called the meeting to order at 7:00pm. Co-Chair Craig led the pledge of allegiance.

Commissioners present: Chair Kelly Cochran, Co-Chair Jeff Craig, Commissioners Dan Swanson, Joe Pestinger, and Jeff Sproul.

Absent: Commissioners Chris Rule, and Erika Bartholomew.

Commissioner Pestinger made a motion to excuse Commissioners Rule and Bartholomew. Seconded by Co-Chair Craig.

Motion passed (4-0).

Staff present: City Administrator Scott Larson, Planning Commission Secretary Danielle Charchenko, City Planner Josh Kubitz, AHBL.

2. AGENDA APPROVAL.

Co-Chair Craig made a motion to adopt the agenda as prepared with Comprehensive Plan Update added under Old Business. Seconded by Commissioner Pestinger.

Motion passed (4-0).

3. PUBLIC COMMENTS.

No public comments were made.

4. APPROVAL OF MINUTES

Co-Chair Craig made a motion to approve the August 7th, 2023 minutes with the following corrections:

- Add Big J's dumpster discussion under Old Business*
- Add Better Properties and Tugboat Willy's signage out of compliance under Old Business.*
- Add possible American Adult Family Home ADR Signage request under Agenda Setting.*

Seconded by Commissioner Pestinger.

Motion passed (4-0).

5. ARCHITECTURAL DESIGN REVIEW

A. ADR 2023-08 – American Adult Family Home – Signage

Co-Chair Craig made a motion to open discussion on ADR 2023-08 American Adult Family Home. Seconded by Commissioner Pestinger.

Planning Commission Secretary Danielle Charchenko read the staff report for ADR 2023-08 and stated that the recommendation was approval as presented.

Next Planning Commission Meeting: Monday, October 2nd, 2023 7:00pm

Planning Commission discussion followed.

Commissioner Pestinger made a motion to approve ADR 2023-08 as presented. Seconded by Co-Chair Craig.

Motion passed (4-0).

7. NEW BUSINESS.

A. Preliminary Plat Process – AHBL Planner

City Planner Josh Kubitzka, with AHBL, gave a presentation on an introduction of the proposal, roles, and responsibilities in regards to Rainier Meadows Division 2 preliminary plat & planned unit development (PUD) for the Public Hearing scheduled for October 2nd, 2023. City Planner Josh Kubitzka stated a planned unit development (PUD) is a flexible zoning concept that results in as good or better use of land than that produced through the standards of the regular zone classifications. He stated an approved PUD is an overlay zone, enacted as part of the final approval action which may also include subdivision, binding site plan, or master plan approval. City Planner Josh Kubitzka briefed the review and approval process stating there is a two-step procedure; approval of the preliminary development plan and the final PUD approval. City Planner Josh Kubitzka briefed criteria for PUD approval and preliminary plat approval. City Planner Josh Kubitzka gave a brief overview of the Rainier Meadows Division 2 proposal. He stated next steps are staff will issue a SEPA and Public Notice, staff will complete reviews of the proposal and prepare staff report, Planning Commission will receive and review the staff report, Planning Commission will hold an Open Record Public Hearing, Planning Commission will recommend approval, approval with conditions, or denial based on the findings, and finally, City Council will hold a Closed Record Hearing and render a decision.

8. OLD BUSINESS.

1. Comprehensive Plan Periodic Update

City Administrator Scott Larson briefed the draft public survey for the comprehensive plan. He stated there is a QR code and weblink on the memo issued and he is asking the Planning Commission to take the survey and provide any feedback.

2. Dumpster Violations

City Administrator Scott Larson stated letters have been sent to the Leber address and have received no response. He stated he is meeting with a Murrey's representative and will ask for assistance to contact the owners. City Administrator Scott Larson stated Big J's shed has been taken down and this should leave more space for their dumpster.

3. Sign Code Violations

City Administrator Scott Larson stated Shell has paid for their new sign, the sign is being manufactured and is expected to be up by the end of September. Planning Commission Secretary Danielle Charchenko stated a 30-day letter has been issued to Tugboat Willy's requesting submission of a permissible structure plan or the removal of the additional structure. Commissioner Sproul stated there is a homebased barbershop on Riddell Ave that is using an A-frame sign that is too big and is blocking the sidewalk. Co-Chair Craig stated Journeyman Grappling has two sandwich board signs and Better Properties has vinyl window clings on the outside of the business's windows.

Chair Cochran asked for a status update on the 222 Washington Ave N project. City Administrator Scott Larson stated the proposal had conflicting traffic patterns and we are waiting for an update.

Co-Chair Craig stated the sidewalks on Eldredge, Calendar, and Orting Ave are overgrown with overhang branches and buses.

Next Planning Commission Meeting: Monday, October 2nd, 2023 7:00pm

Commissioner Swanson asked for an update on the Whitehawk Boulevard Bypass project. City Administrator Scott Larson stated the project is still about a year out and the City is waiting for a Federal survey regarding the endangered species, Chinook Salmon.

9. GOOD OF THE ORDER.

1. Planned Absences.

None.

2. Report on Council Meetings.

City Administrator Scott Larson briefed the August Council meetings stating the City is implementing a new accounting software and bill pay system. Mail, emails, and doorhangers will be issued to notify the public of the bill pay system change. He stated City Council has decided to pass a utility waiver during this transitional period. The waiver would allow for fees to be waived as the transition is implemented from September 15th – November 15th, 2023. City Administrator Scott Larson stated Council also authorized an extension for final plat submittal for the Bridgewater project.

3. Agenda Setting.

The Planning Commission requested to leave dumpsters and sign code violations under Old Business and add Public Hearing for Rainier Meadow Division 2.

10. ADJOURNMENT.

Co- Chair Craig made a motion to adjourn. Seconded by Commissioner Sproul.

Motion passed (4-0).

Chair Cochran adjourned the meeting at 8:03pm.

ATTEST:

Kelly Cochran, Commission Chair

Danielle Charchenko, Planning Commission Secretary



Staff Recommendation

Project Name: Rainier Meadows Division 2 Preliminary Plat/PUD (PP PUD-22-02)

Applicant: Craig Deaver,
C.E.S. NW Inc.
429 29th Street NE
Suite D
Puyallup, WA 98372

Project Address: 303 Meadow Lane SE
Orting, WA 98360

Parcel Number: 0519321001

Date of Application: December 8, 2022

Date of Notice of Complete Application: December 15, 2022

Date of Staff Report: September 25, 2023

Requested Approvals: Preliminary Plat and PUD

Staff Recommendation: **Approval, Subject to Conditions**

City Staff Contacts: MillieAnne VanDevender, AICP *City Planner* JC Hungerford, PE *City Engineer*

Public Comment Period: December 15 - December 29, following distribution of the Notice of Application to adjacent landowners.
September 15 – September 29, following distribution of the Notice of Public Hearing and Availability of Environmental Documents (SEPA)

Attachments:
1. Application Form
2. Title Report



Figure 1-Aerial view of site

3. Plan Set
4. Landscape drawings
5. Preferred Plan - Charter Park (Appendix E of Main Parks Master Plan)
6. Critical Areas Report prepared by Wetland Resources, Inc, dated August 18, 2023

Description of Proposal

The Rainier Meadows, Division 2 proposal is for a preliminary plat and planned unit development (PUD) to subdivide an approximately 10.8-acre parcel into 41 new lots, provide an approximately 206,430 square foot tract for open space and critical area protection (Tract A), and construct necessary site development improvements, such as grading, utilities, and roadway improvements. In addition to on-site improvements, the applicant will be providing public benefits within Charter Park, which is located on the adjacent parcel (Parcel 0519321017) to the west. The proposal includes the following work off-site:

- Grading and construction of a stormwater facility with capacity for the housing development and current park improvements as well as capacity for future park improvements;
- Grading, site work, and construction of a public parking lot;
- Grading, site work, and construction of a sport court;
- Landscaping throughout the area of the improvements; and
- Rerouting and reconstructing the existing paved trail through Charter Park.

City of Orting utilities will serve the site with sanitary sewer and water services. As part of the PUD process, the applicant is seeking a reduction in the minimum allowed lot size, a reduction of various yard setbacks, and wetland buffer averaging.

Findings of Fact and Conclusions of Law

Procedure for Approval – Planned Unit Development and Preliminary Plat

Per OMC 13-6-4, a PUD is a flexible zoning concept that results in as good or better use of land than that produced through the standards of the regular zone classifications. The uses within the PUD depend on the permitted uses in the underlying zone. The residential densities and bulk and scale of the development within the PUD may vary to provide more flexibility and creativity in addressing the site and project aesthetics, natural areas, and open space planning. An approved PUD is an overlay zone, enacted as part of the final plat approval .

The approval of a PUD shall be considered an amendment to the official zoning maps and shall be processed as is any other zoning amendment with respect to notice, hearings, and appeals. The two-step procedure for approval of a PUD is as follows:

1. The approval of a preliminary development plan after public notice and hearing.

2. The final PUD approval shall not become final and effective until the date the final development plan is approved and overlay zone is adopted. The final development plan may be approved and adopted by stages. The final development plan shall be approved when the City determines that the development conforms with the approved conditions established in the preliminary development approval. (OMC 13-6-4)

Pursuant to OMC 13-6-4:K, when it is the intention of an applicant to subdivide a property within a proposed PUD, a preliminary subdivision approval must be considered concurrently with an application for approval of a preliminary development plan.

According to OMC 15-4-1, Tables 15-4-1 and 15-4-2, Preliminary Plats and Preliminary PUDs are Type 4 land use decisions determined by the City Council following a public hearing by the Planning Commission as a recommending body. The final decision of the City Council may be appealed to Pierce County superior court within 21 days of the date the decision or action became final unless another time period is established by state law or local ordinance. (OMC 15-10-6).

Public Notice

- A notice of application was issued on December 15, 2022, per OMC 15-7-1.
- A Notice of Public Hearing and Availability of Environmental Documents was issued under OMC 15-7-3 on September 15, 2023. The notice was published in the newspaper; mailed to properties within 500 feet; and posted on-site, on the City’s website, and at City Hall.
- Per OMC 15-7-5 a written notice for all final decisions shall be sent to the applicant and all parties of record.

SEPA Environmental Review

The City issued a Determination of Nonsignificance (DNS) on September 15, 2023. The Notice of DNS was published in the newspaper of record; mailed to properties within 500 feet; and posted on-site on the City’s website, and at City Hall, per OMC 15-14-5-3: B.2. The comment period for the DNS concluded on September 29, 2023, and the City had not received any comments at the time of this report. Anyone may file an application to appeal the City of Orting’s environmental determination within 10 days of the end of the final SEPA comment period pursuant to OMC 15-14-7-5. The DNS, Annotated SEPA Checklist and various reports and studies may be accessed on the Department of Ecology SEPA Register at the following link: [202304410 - Orting City of \(wa.gov\)](https://www.ecy.wa.gov/Information/SEPA/202304410-Orting-City-of).

Review Criteria – Zoning Regulations

The development standards for the RU zone are set forth in OMC 13-5-1, OMC 13-5-2, and OMC 13-5-3 and the following table is an analysis of how the proposed development meets the regulations and where it differs.

OMC 13-5-1

Required	Proposed
<i>Minimum required lot size: 7,260 SF</i>	Smallest proposed lot: 3,697 SF

<i>Minimum required setbacks:</i> <i>Front: 25'</i> <i>Rear: 25'</i> <i>Side: 8'</i>	Proposed Front: 25' (except corner lots) Proposed Rear: 10' (except perimeter lots) Proposed Side: 5' (except perimeter lots)
<i>Maximum height: 35'</i>	35' or less
<i>Maximum building coverage: 40%:</i>	20% proposed
<i>Maximum hard surface coverage: 65%</i>	45% proposed
<i>Maximum density: 6 DU/Acre</i>	4.29 Units/Net Acre proposed

OMC 13-5-1: C. 2

A front yard setback is required abutting each right-of-way on corner lots. There are two corner lots proposed (Lots 1 and 16) to be located on dedicated rights-of-way, and they each provide one front setback of 25 feet. The other street-adjacent setback is proposed to be 10 feet for Lot 1 and 15 feet for Lot 16.

OMC 13-5-1: C.10

Rear Yards, Exception: In the case of triangular or otherwise irregularly shaped lots, a line ten feet (10') in length entirely within the lot, parallel to and at a maximum distance from the front lot line may be considered the "rear lot line" at the owner's discretion. If the owner does not select such a line, the city may do so.

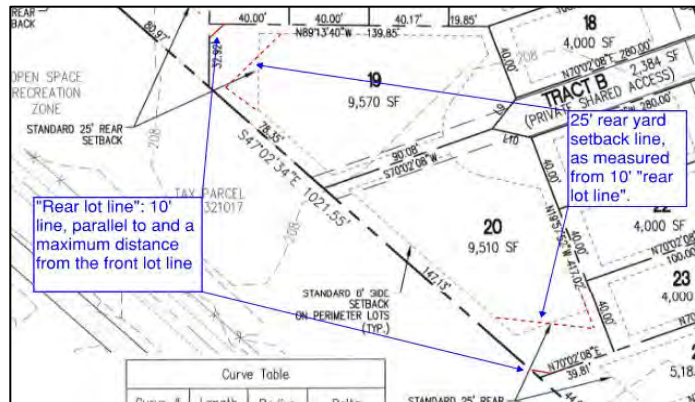


Figure 2- Rear setbacks sketch

This applies to Lots 19 and 20 as shown in red on *Figure 3-Rear setbacks sketch*. Although the size and shape of these lots will allow ample room for the required setbacks, the rear setback lines for Lots 19 and 20 must be revised prior to recording the plat.

OMC 13-5-2 provides requirements for landscaping. The applicant provided a “Tree inventory and retention plan” and landscape plans as part of the preliminary plat drawings (Attachment 4). The plans contain the required landscaping information including the location of existing tree canopy areas, areas to be preserved, new landscaping, and identification of tree protection techniques. According to OMC 13-5-2:D, all significant trees in required perimeter buffers shall be retained however, the applicant states there are no existing significant trees in required perimeter buffers.

OMC 13-5-2: E

Perimeter areas not covered with buildings, driveways and parking and loading areas shall be landscaped. The required width of perimeter areas to be landscaped shall be at least the depth of the required yard or setback area. Areas to be landscaped shall be covered with live plant materials which will ultimately cover seventy five percent (75%) of the ground area within three (3) years. One deciduous tree a minimum of two-inch (2") caliper or one 6-foot evergreen or three

(3) shrubs which should attain a height of three and one-half feet (3¹/₂') within three (3) years shall be provided for every five hundred (500) square feet of the area to be landscaped.

The landscape plans show proposed landscaping along the perimeter areas of the plat. The plans show landscaping for the full depth of the setback on the proposed lots with side yards adjacent to the perimeter. The plans also show an area of landscaping in required rear yard setbacks that covers approximately 10 feet of the setback however, the landscaping must be at least the depth of the required rear yard setback. The landscaping that is shown meets or exceeds the requirements for ground area coverage, minimum number of deciduous trees, and minimum number of shrubs. A condition of approval has been added to require the perimeter landscaping to be at least the depth of the required yard setback. As conditioned, the proposal will meet the requirements of OMC 13-5-2: E.1.

Buffer areas are required by OMC 13-5-2: E.2 to be located along the perimeter of the plat and may consist of fencing, landscaping, or a combination of the two. The landscape plans indicate this requirement is met with a proposed 6-foot-tall solid wood fence and landscaping to be provided along portions of the north, west, and southern property lines where lots are proposed to be located. No fencing or buffering is necessary or proposed where Tract A is adjacent to Rainier Meadows Park to the north and contiguous undeveloped land to the southeast.

According to OMC 13-5-2: E.3., screening is required when a new subdivision or planned development abuts arterial streets or nonresidential uses. The proposed development is surrounded by residential uses to the north, the Carbon River to the east, a parcel with Pierce County Rural 10, residential zoning to the south, and parcels with Open Space and Recreation zoning designations to the west. A 25-foot buffer is not required for the site.

The applicant proposes to plant street trees along the area of each lot that is adjacent to the street. Per OMC 13-5-2: E.5, root barriers are required for all trees to be planted adjacent to right-of-way, and as required by the Public Works Director. A landscape detail is included on Sheet L-6 of the landscape plans that shows a planting detail for trees with root barriers when adjacent to curbs and paved surfaces therefore it appears this requirement will be met.

It appears some of the street trees are proposed to be planted within the lot lines of several lots and some are proposed within a planting strip in the right-of-way. There must be documentation of who is responsible for maintenance of the street trees. A condition of approval has been added to require a note to be placed on the plat to document the responsibility.

OMC 13-5-2:H

Performance Assurance:

1. Landscaping required pursuant to an approved site plan shall be installed prior to the issuance of certificate of occupancy or final inspection unless the applicant submits a performance assurance equal to not less than one hundred ten percent (110%) of the construction cost and commits to complete the landscaping within one year.

A condition of approval has been added to ensure this requirement will be met.

A vegetation management plan is required to be submitted per OMC 13-5-2: H.6 and must meet the minimum requirements specified in OMC 13-5-2: H.7. Information is included in the landscape plan set and on Sheet P5 of the preliminary plat set that demonstrates the proposal meets all the requirements for a vegetation management plan. The information provided includes confirmation that a licensed landscape architect prepared the plans; provisions are included for tree conservation and protection on the site; a narrative description and graphic detail of tree protection and tree maintenance measures required for the trees to be preserved; a tree density calculation; and an irrigation/watering plan for the establishment phase of new plantings and adequate watering of the newly installed trees for a minimum of three years.

Review Criteria – Planned Unit Developments

OMC 13-6-4 governs the review criteria for approval of PUDs and establishes that a PUD may be either residential or nonresidential in character, must meet the density permitted by the underlying zone (six dwelling units) per acre, and must be located on a parcel one acre or larger in size if residential. The proposal will be for residential purposes, is proposing a density of 4.29 dwelling units per acre, and is located on a 10.8 acre parcel.

The specific PUD review criteria provided in OMC 13-6-4 are quoted below in *italics* and applied through the corresponding conclusions of law.

OMC 13-6-4: Decision Criteria:

The action by the City to approve a preliminary development plan for a proposed PUD with or without modifications shall be in writing based upon the following findings:

1. The proposed development is in substantial conformance with the comprehensive plan, the intent of the underlying zoning, and applicable City design standards.

a. The Comprehensive Plan

The Comprehensive Plan encourages the use of PUDs to promote creativity and avoid cookie-cutter subdivisions that do not fit within the character of the landscape, but may include flexible lot sizes, common green spaces, community gardens, and active recreation areas that could be set aside for the benefit of the residents of the development. The residential lots created by the proposed PUD will be situated on the western portion of the site to avoid disrupting the critical areas located on the eastern portion of the site. There will be a variety of lot sizes provided, one passive open space, and one active recreation area with a picnic table devoted to the benefit of the residents of the development. The developer will also be providing amenities within Charter Park for the residents of the development as well as the public and will provide connections from the site to the park.

The proposed PUD is in substantial conformance with the comprehensive plan.

b. The Intent of the Underlying Zoning

The PUD will be located on a parcel that is partially within the Residential Urban (RU) zoning district, with a very small portion on the east of the site zoned as Residential Conservation (RC). OMC 13-3-2 describes the intentions for each of the zoning districts.

OMC 13-3-2

The Residential Urban Zone is intended to provide for high density urban single-family, townhouse, cottage, and duplex residential uses which benefit from the full array of services and amenities available in the Town core. The proposed single-family residential use of the area of the site that is situated within the RU zoning district is within the intent of the zone and includes urban, single family residential uses in close proximity to City parks and amenities, and at a density that is well under that which is allowed in the zoning district.

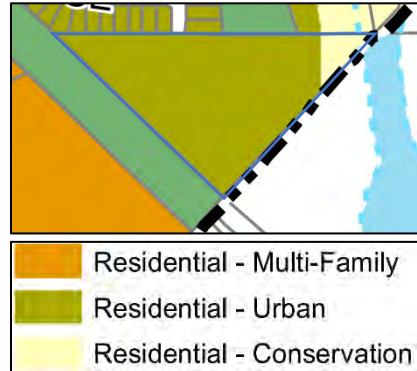


Figure 3-Zoning Designations

The Residential Conservation Zone is intended to provide for low density single-family residential and duplex uses along the Puyallup and Carbon Rivers where there are critical areas such as frequently flooded areas, wetlands, and fish and wildlife habitat. There will be no development located within the area of the site that is zoned RC.

The proposed PUD is in substantial conformance with the intent of the underlying zoning.

c. Applicable City design standards

The architectural design review standards do not apply to uses within the RU or RC zoning districts therefore the proposal is not subject to the standards in OMC 13-6-7.

2. Exceptions from the standards of the underlying district are warranted by the design and amenities incorporated in the development plan and program.

Exceptions:

To protect the critical areas on site, and without increasing the density of housing, the applicant is proposing to group the lots on the portion of the site outside the critical areas. The developable area of the site is reduced therefore the applicant is proposing reduced lot sizes. The proposal includes requests for exceptions from the minimum lot size and setback standards of the underlying district.

The minimum required lot area in the RU zone is 7,260 square feet and the proposed lot areas range in size from 3,697 square feet to 9,570 square feet. The applicant is proposing a reduced lot size for 34 of the 41 lots. The proposed exceptions from the required setbacks include a reduction of one of the required front setbacks on each of the two corner lots (from 25 feet to 10 feet on one lot and from 25 feet to 14 feet on the other corner lot), a proposed reduction of rear setbacks on 20 of the lots from 25 feet to 10 feet, and proposed reduced side setbacks from eight feet to five feet for at least one side of every lot.

OMC 13-6-4: J. provides guidelines for allowing variation from the standard requirements of the underlying zoning district and are not inclusive of every allowable scenario. The guidelines are provided below in italics with the conclusions following each guideline.

1. Off Street Parking and Loading: The total required off street parking facilities should not be less than the sum of the required parking facilities for the various uses computed separately.

The applicant is not requesting a deviation from this standard.

2. Common Walls: In projects receiving final approval where units intended for individual ownership will have common walls, the City may issue building permits for construction of those units prior to approval of a final PUD, although occupancy of said units will not be allowed until the final approval.

The purpose of the proposed preliminary plat is to create individual lots for single family homes. There will not be any units that share common walls therefore this guideline does not apply.

3. Height of Buildings: The height of buildings and structures within a PUD should be limited to the height permitted by the underlying zone, or as required as a special limitation. The height of buildings and structures may be increased in relationship to provisions for greater open space and separation between buildings on the same or adjoining property and when adequate provision is made for light, air, and safety.

The applicant is not seeking a variation from the height standards of the underlying zone.

4. Lot Area Coverage: The maximum lot coverage within a PUD or any portion thereof shall be determined at the time of consideration of a preliminary development plan.

The preliminary plat documents state that the proposal will not exceed the maximum allowed lot area coverage in the RU zone. Therefore, the minimum lot area coverage shall comply with RU zoning district standards.

5. Yards: The requirement for yards in a PUD should be the same as required by the underlying zone for those yards abutting the exterior boundary of the PUD. Yard requirements for any yard not abutting or adjoining the exterior boundary of the PUD shall be as authorized in the preliminary development plan.

The application materials show that all required yard setbacks along the exterior boundary of the plat will be provided. The applicant is proposing to reduce many of the setbacks that are not adjacent to the exterior boundary of the plat. Through the PUD, the applicant is proposing to reduce the setbacks as explained in the Exceptions section above. It appears the intent of the design of the development is to provide much-needed housing within the city while protecting the critical areas located on the site. The critical areas are contained within Tract A which will remain a large open area while the lots are arranged on the remaining portion of the site. In addition to being within close proximity to the large open space, the lots will be close to the

active recreation amenities within Charter Park. The residents of the proposed lots will benefit from smaller lots that require less maintenance and from having direct access to open space that they do not have to personally maintain.

Amenities:

The overall design of the subdivision includes added amenities beyond what is required per code. The proposed on-site amenities include the approximately 206,430 square foot tract for open space and critical area protection (Tract A) and a designated common open space area for more active recreation that is approximately 1,500 square feet in size and will include a picnic table. There are no requirements for the project to provide open space in the RU zoning district.

In addition to on-site improvements, the applicant is proposing to provide amenities off-site to benefit the development as well as the whole community. The applicants worked with City staff to generate potential off-site improvement ideas. As a result of these discussions, the applicant is proposing to construct public benefits within Charter Park that align with the City’s vision for the park. The City adopted a Main Parks Master Plan on May 31, 2023. This park plan included a vision for Charter Park to be developed in areas with sport courts, landscaping, and a parking lot to serve the park and trail. The vision acknowledges that the existing Foothills Trail would need to be repositioned to accommodate these amenities. The vision for Charter Park is included as Appendix E of the Main Parks Master Plan and, for a visual reference, the Master Parks Plan for this area of Charter Park is included as Figure 4 and as Attachment 5.



Figure 4- Master Parks Plan

The applicant has proposed to perform all of the necessary site preparation, infrastructure installation, and construction of the Charter Park envisioned public parking lot and public sport court. There will be a pedestrian and vehicular connection to the park from the plat via Road B as well as a pedestrian connection from the plat to the Foothills Trail located in the cul-de-sac in the southern portion of the site. There will be removable bollards on the west side of the parking lot to allow emergency vehicle access from Meadow Lane SE. The applicant is also proposing to construct a stormwater facility within Charter Park and to the east of the Foothills Trail. The stormwater facility has been designed to initially provide capacity for the stormwater that will be collected from the new parking lot, the sport court, and

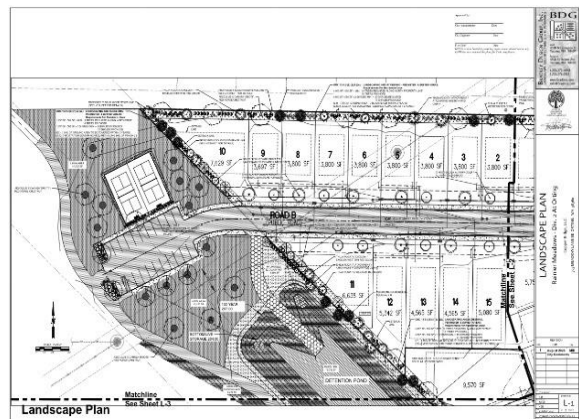


Figure 5-Landscape plan for part of the site

the impervious surfaces within the plat and has also been designed to provide capacity for another sport court to be completed with future park improvements. This essentially means the infrastructure will already be in place when the City constructs additional park amenities in the future, which will provide a cost-savings to the City.

The stormwater facility, or detention pond, will be landscaped rather than covered in gravel to provide visual interest for those using the existing Foothills Trail and sport courts. The existing trail will be rerouted and reconstructed as part of the work. Finally, the applicant will install landscaping and trees around the parking lot and sport court as well as the area between the existing trail and the plat, and some picnic tables. The applicant will be responsible for ownership and maintenance of the proposed storm pond and all vegetation maintenance within the fence. The City will mow the grass outside of the storm pond fence.

The proposed exceptions from the minimum lot size and setback standards of the underlying district are warranted by the intention of the design to protect the critical areas and the proposed amenities on and off-site that have been incorporated in the development plan and program.

3. The proposal does not adversely impact the surrounding area or its potential future use.

The area surrounding the proposed project includes an existing single-family residential neighborhood located to the north with the same RU zoning designation as the subject site; the Carbon River and levee to the east; a vacant parcel within unincorporated Pierce County to the south with the zoning designation of Rural 10 (residential zoning); Charter Park to the west which is zoned Open Space and Recreation; and another existing neighborhood to the west of Charter Park that is in the Residential – Multi-Family zoning district. The proposed use of single family residential and open space will blend with the variety of existing uses. The proposal is providing all required yard setbacks along the exterior boundary of the plat as required per OMC 13-6-4: J. The proposed designated open space on the east side of the site will be located south of and adjacent to Rainier Meadows Park, a similar open space located to the north. The placement will result in a combined large open space area that can provide interesting scenery and passive recreation for humans as well as a larger contiguous habitat for existing wildlife. Therefore, the proposal is not anticipated to adversely impact the surrounding area or its potential future use.

4. The system of ownership and means of developing, preserving, and maintaining common open space is consistent with the size, design and scale of the project.

The developer proposes to form a Homeowner’s Association (HOA). The HOA will be responsible for maintaining all common open spaces, private roads, street trees, and the off-site stormwater retention swale. The applicant will be responsible for ownership and maintenance of the proposed storm pond and all vegetation maintenance within the fence. The HOA and required agreements are sufficient means in developing, preserving, and maintaining common open space.

5. The approval will result in a beneficial effect upon the area which could not be achieved under other zoning districts.

The development of the proposal will provide additional housing opportunities above those that would be allowed in the underlying zoning district. The proposal also includes construction and maintenance of off-site improvements in Charter Park that will be beneficial to the area. The City developed a Master Parks Plan with public input and the applicant worked with the City on the design of a public parking lot and a sport court that aligns with the City's adopted Master Parks Plan. These improvements will offset expenses the City would otherwise have to incur which provides a benefit to the whole community.

6. The proposed development or units thereof will be pursued and completed in a conscientious and diligent manner.

The applicant expressed a desire to begin work in Summer 2024. A final development plan meeting all requirements of OMC 13-6-4 must be submitted to the City for approval within five years of the date of preliminary plat approval (OMC 13-6-4: L).

7. The proposed development will not preclude the use of LID BMPs if LID BMPs are feasible for existing site conditions or existing site characteristics.

The proposal does not preclude the use of LID BMPs.

Review Criteria – Preliminary Plat

Staff reviewed the proposed preliminary plat concurrently with the review of the PUD per the requirements of OMC 13-6-4: K. The following section provides the analysis, findings, and conclusions of the review of the preliminary plat.

OMC 12-5-3 governs the review criteria for planning commission approval of preliminary plats and OMC 12-5-4 provides the basis for the City Council to approve or deny the request. The criteria from OMC 12-5-3 are repeated in OMC 12-5-4 so those listed below are a combination of the sections and are provided in blue italic font and applied through the corresponding findings and conclusions of law.

1. The preliminary plat conforms to chapter 8 of title 12, and title 15 of this code.

Title 15 contains the regulations for development code administration and Chapter 8 provides general requirements for subdivision approval.

a. Title 15

Staff has followed the review and public noticing process for Type 4 land use decisions for the Preliminary Plat and Preliminary PUD as established by Title 15.

b. Title 12, Chapter 8

OMC 12-8-1: A.

Land Use Controls: No subdivision may be approved unless written findings of fact are made that the proposed subdivision or short subdivision is in conformity with any applicable zoning ordinance, comprehensive plan or other existing land use controls.

The proposal is consistent with all the development standards required for the RU zoning district except as requested through the PUD application. Further, the parcel is large enough to be subdivided into the proposed 41 residential lots within the Residential Urban zone. The application materials state the gross site area is 470,628 square feet or 10.8 acres and the proposed density is 4.29 dwelling units per net acre which will be less than the maximum allowed density of 6 dwelling units per acre.

The Comprehensive Plan includes the following policy: *Ensure that the City's development regulations require new development to be in the best interest of the surrounding property, the neighborhood, or the City as a whole, and generally in harmony with the surrounding area. (LU 5.5).*

The proposed use of single family residential and open space will harmoniously blend with the existing uses on surrounding properties. The proposed Tract A will provide open space on the east side of the site that will be located adjacent to a similar open space located to the north. The combined areas will result in a large, protected open space area that will provide a beneficial balance of built and non-built environments. The surrounding properties and the City as a whole will benefit from the protection of the wetlands and flood prone areas. Additionally, the whole city will benefit from the off-site improvements in Charter Park.

OMC 12-8-1: B.

Section B of OMC 12-8-1 provides general information and regulations for any dedications proposed or required as part of the preliminary plat. The proposed plat includes the development of two roads that will be dedicated as public right-of-way and one private shared access road, Tract B which will serve two lots.

1. An offer of dedication may include a waiver of right of direct access to any street from any property, and if the dedication is accepted, any such waiver is effective. The city may require such waiver as a condition of approval.

No waiver is required.

2. Roads not dedicated to the public must be clearly marked "private" on the face of the plat.

Tract B is labeled on the face of the preliminary plat as "Private Shared Access".

3. Any dedication, donation or grant as shown on the face of the plat shall be considered to all intents and purposes, as a quitclaim deed to the said donee(s) or grantee(s) for his/her/their use for the purpose intended by the donor(s) or grantor(s).

Roads A and B will be dedicated to the City of Orting.

4. *If the plat or short plat is subject to a dedication, the certificate or a separate written instrument shall contain the dedication of all streets and other areas to the public, and individual(s), religious society(ies) or to any corporation, public or private, as shown on the plat or short plat, and a waiver of all claims for damages against any governmental authority which may be occasioned to the adjacent land by the established construction, drainage and maintenance of said road. Said certificate or instrument of dedication shall be signed and acknowledged before a notary public by all parties having any ownership interest in the lands subdivided and recorded as part of the final plat.*

Roads A and B will be dedicated to the City of Orting. A condition of approval has been added to ensure a waiver will be included with the dedication.

5. *Every plat and short plat containing a dedication filed for record must be accompanied by a title report confirming that the title of the lands as described and shown on said plat is in the name of the owners signing the certificate or instrument of dedication.*

The applicants submitted a title report with the application materials (Attachment 2) .

6. *Dedication of land to any public body, provision of public improvements to serve the subdivision, and/or impact fees imposed under Revised Code of Washington 82.02.050 through 82.02.090 shall be required as a condition of subdivision approval. No dedication, provision of public improvements or impact fees imposed under Revised Code of Washington 82.02.050 through 82.02.090 shall be allowed that constitutes an unconstitutional taking of private property.*

No dedication, provision of public improvements to serve the subdivision, and impact fees required will constitute an unconstitutional taking of private property.

OMC 12-8-1: C.

Dedication Of Public Park: The planning commission shall recommend naming of streets and parks within proposed subdivisions. If preliminary plats include dedication of land for public parks with areas greater than required for subdivision approval and the proponents request commemorative names, the planning commission shall consider such requests. The city council shall adopt the names as part of final plat approval.

Streets are given names with cardinal directions based on where they are located within the city relative to Calistoga Street, for east and west directions, and State Route 162, for south and north. Staff will assist the applicants with the assignment of a proper numbering system for the proposed development that will be based on Washington Avenue and Calistoga Street as the center of the city with the numbering system flowing outward from that point.

OMC 12-8-1: D.

Release From Damages: The city shall not as a condition to the approval of any subdivision require a release from damages to be procured from other property owners.

The City is not requiring as a condition of approval of the subdivision a release from damages from other property owners.

OMC 12-8-1: E.

Flood, Inundation or Swamp Conditions: A proposed subdivision may be disapproved because of flood, inundation, or swamp conditions. Construction of protective improvements may be required as a condition of approval, and such improvements shall be noted on the final plat. No plat shall be approved covering any land situated in a floodway as provided in Revised Code of Washington chapter 86.16 without the prior written approval of the state department of ecology.

Floodplains

FEMA FIRM panel 53053C0604E (eff. 3/7/2017) shows regulated floodplain and regulated floodway on the site, as shown in Figure 6. The floodplain is located east of the proposed development and the floodway is located at or near the Ordinary High Water Mark (OHWM) which is located in the far east corner of the site along an existing levee. The proposed development does not encroach into the regulated floodplain or the floodway.

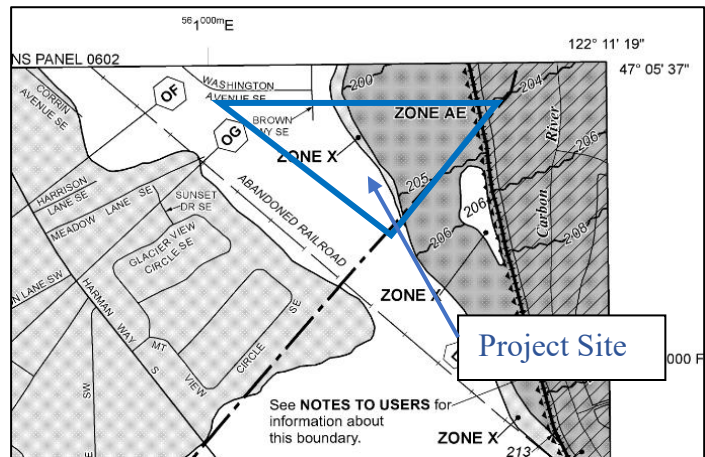


Figure 6-FEMA FIRM Panel

The development proposal will not have an impact on any portion of this floodway fringe, as such a flood hazard permit is not required. However, in all areas of special flood hazards, certain standards are required. OMC 14-1-9:A.4. provides regulations for subdivisions with designated floodplains. Specifically, the final recorded subdivision plat must include a notice that part of the property is in the Special Flood Hazard Area (SFHA), riparian habitat zone and/or channel migration area, as appropriate. A condition of approval has been added to ensure this requirement is met.

Shoreline Jurisdiction

In addition to regulated floodways and floodplain, the site includes an area designated as shoreline jurisdiction per the City’s Shoreline Master Plan (SMP). The shoreline OHWM and the 200-foot shoreline jurisdiction are noted on the plat documents submitted by the applicant (Attachment 3).

The SMP defines the shoreline jurisdiction in Section 1.3 as the following,

“Within the City of Orting, the shorelands (i.e., shoreline jurisdiction) extend two hundred (200) feet from the ordinary high water mark (OHWM) and floodways associated with the Carbon and Puyallup Rivers, and include any wetlands associated with these two rivers, and land necessary for buffers for critical areas in accordance with RCW 90.58.030(2)(f)(ii).”

According to the Critical Areas Report submitted by the applicant (Attachment 6), Wetland A is a depressional wetland that does not discharge directly to a stream or the river. Further, due to the existing levee structure, Wetland A is not hydraulically connected to the Carbon River. Therefore, Wetland A is not considered as part of the shoreline jurisdiction.

Further, Policy S-UC 2 of the SMP establishes that the shoreline of the Carbon River within the city limits of Orting is designated as the Urban Conservancy shoreline environment. Although there is no development proposed within the shoreline jurisdiction and the area is provided as open space, staff reviewed the SMP for any regulations that may apply to the proposal and found the proposal is in compliance with the SMP. Applicable policies in the SMP include 6.7.3.(6.), 6.7.3.(7.), and 7.5.3.(3.).

Wetlands

There are two mapped wetlands on the eastern portion of the site. Wetland A is a Category III wetland and therefore a 150-foot buffer is required, and Wetland B is a Category II which is required to have 150-foot buffers per OMC 11-4-1.C.1. The applicant does not propose any development within Wetland B or its buffers and buffer averaging is proposed for the required buffers of Wetland A.

OMC 11-4-1.C.3. *Buffer Averaging: The city administrator may allow modification of the standard wetland buffer width in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified wetlands professional demonstrates that:*

a. It will not reduce wetland functions or values;

The Critical Areas Report prepared by Wetland Resources, Inc, dated August 18, 2023, says on page 10, “No impacts are proposed to Wetlands A and B as a result of this project. Wetland functions and values will be maintained through buffer averaging.”

b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

The Critical Areas Report explains on page 10 that the functions of the identified wetlands and buffer areas will be improved through the proposed buffer width averaging. The proposed buffer reduction areas consist generally of land that was previously used as pasture and therefore does not support species diversity, whereas the areas of the site proposed to be used for buffer averaging remain as “[...]native forest with moderate to dense understory and high species diversity.” The report goes on to say that this redistribution of wetland buffer areas essentially reduces low-functioning buffer areas and increases the amount of higher functioning areas which will benefit water quality, habitat, erosion protection, and hydrologic flow reduction over time.

c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

The proposed area of reduction is 13,251 square feet and the proposed area of compensatory mitigation is 13,522 square feet therefore the total area contained in the buffer after averaging is larger than that which would be contained within the standard buffer.

d. The buffer width is not reduced to less than seventy five percent (75%) of the standard width.

The minimum buffer width proposed is 112.5 feet which is at least 75 percent of the standard width.

2. Specific Provisions: Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainageways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who walk to and from school.

a. Public Health, Safety, and Welfare

There are adequate fire and emergency services to serve the development as conditioned. The development must meet all applicable requirements of the 2018 International Fire Code (IFC).

The Central Pierce Fire and Rescue Department was consulted for comments on the application and emphasized the IFC requirements for fire apparatus access roads and Fire Lane signage. The applicant shows bollards separating the west end of the proposed parking lot from the Foothills Trail; however, the Fire Department prefers an emergency gate with Opticom technology to ensure rapid emergency response times. Also, all dwelling units must be equipped throughout with an approved automatic sprinkler system, in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 (see D107.1 of the IFC) unless a secondary access point is provided and approved by Central Pierce Fire and Rescue. Conditions of approval have been added to ensure all applicable requirements regarding fire safety are met.

b. Drainage

As proposed, the project will be required to provide adequate storm drainage facilities in compliance with Department of Ecology Stormwater Management Manual for Western Washington, Volumes I-V.

c. Streets, Roads, Alleys, or other public ways

The proposed preliminary plat is accessed via Brown Way SE which provides a fully improved roadway connection to the north boundary of the site. There will be a limited access point to Meadow Lane SE for emergency vehicles and pedestrians from the west side of the proposed

parking lot to be located within Charter Park. Removable bollards will block full access to the parking lot from Meadow Lane SE.

The proposal makes adequate provisions for streets and other public ways through the construction of two public roads and one private access road. All driveways will be internal to the project.

The applicant submitted a traffic impact analysis dated September 2022 prepared by Heath & Associates. The report calculates that the average weekday daily trips generated would be approximately 514 per the ITE Trip Generation Manual 11th Edition. Transportation Impact Fees are required and assessed based on criteria in OMC 15-6.

d. Transit

There are no transit services available in the City of Orting. None are proposed by the development. Given the lack of transit services, no provisions for transit access are required.

e. Water & Sewer Service

The City of Orting will provide water and sewer services. City of Orting Public Works staff indicated there are adequate facilities to serve the proposed development. The proposal has been designed in accordance with the City of Orting Development Standards: Special Provisions and Standard Details (Revised July 2013).

The applicant will offset impacts to the City's water and sewer system through payment of General Facility Charges and Facility Enhancement Fees. These fees are due at the time of building permit issuance.

f. Open Space/ Parks and Recreation and playgrounds

Provisions for open space, parks, recreation, and playgrounds for the 41 lots proposed are adequately provided through the payment of park impact fees pursuant to OMC 15-6-7-B. Additionally, the applicant will provide Tract A as a passive open space that will help balance the built environment of the site. The applicant is also providing the construction of improvements within Charter Park to benefit the whole community.

OMC Table 15-6-3 establishes the formula for determining park impact fees in lieu of land dedication. Per OMC 15-6-10, the City will determine the total impact fee at the time of application for building permits.

g. Schools and School Grounds

Adequate provisions for schools are provided through the payment of school impact fees pursuant to OMC 15-6-7-A. Per OMC 15-6-10, the City will determine the total impact fee at the time of application for building permits.

h. Sidewalks

The applicant submitted plans that show sidewalks are provided throughout the proposed development to be located along the dedicated streets.

3. A developer extension agreement, in accordance with title 9, chapter 4 of this code, has been executed.

Adequate provisions for water, sewer, and storm will be satisfied through the execution of an extension agreement to extend water and sewer mains as well as storm drainage facilities.

4. The public use and interest will be served by the platting of such subdivision and dedication.

The public interest will be served by subdividing an underutilized lot in a residential neighborhood to allow for more future housing options for residents. The use of infill development will aid in preventing sprawl and encroachment into protected land, while still allowing the city to grow.

5. As part of the approval, the city and the applicant may enter into a development agreement in accordance with title 15, chapter 15 of this code.

A development agreement is not required.

Recommendation

Based on the Findings of Fact and Conclusions of Law stated above, the Administrator recommends approval of the proposed preliminary plat and PUD, including wetland buffer averaging and subject to the following conditions:

Conditions:

1. The SEPA Determination of Nonsignificance mitigation measures shall be adhered with.
2. On-site facilities shall be designed in accordance with City of Orting Development Standards: Special provisions and Standard Details, Orting Municipal Code, Ecology's Stormwater Management Manual for Western Washington, and approved plans for this project.
3. The dedication of all streets and other areas to the public must be established by noting the dedication on the face of plat and the dedication must include a waiver of all claims for damages against any governmental authority which may be occasioned to the adjacent land by the established construction, drainage, and maintenance of said road to be dedicated (OMC 12-8-1:B).
4. The private roadway shall be designed in accordance with the City of Orting Development Standards: Special provisions and Standard Details.
5. An extension agreement shall be executed in compliance with OMC Title 9 - Chapter 4.
6. All applicable impact fees shall be paid at the time of application for a building permit.

7. Prior to any permit issuance, utility upgrades, proposed improvements, and stormwater design plans must be reviewed and approved by the City. The City allows improvements to be bonded.
8. Prior to recording the plat, the rear setback lines as shown on the preliminary plat for Lots 19 and 20 must be revised to be in compliance with OMC 13-5-1:C.10.
9. All landscaping provided for perimeter areas must be at least the depth of the required yard setback per OMC 13-5-2: E.1. In addition to the perimeter landscaping shown on the landscape plans, lawns and/or grasses may be used to meet this requirement.
10. Per OMC 13-5-2:E.5, root barriers are required for all trees to be planted adjacent to right-of-way, and as required by the Public Works Director.
11. Per OMC 13-5-2:H.1., landscaping required pursuant to an approved site plan shall be installed prior to the issuance of certificate of occupancy or final inspection, unless the applicant submits a performance assurance equal to not less than 110 percent of the construction cost and commits to complete the landscaping within one year.
12. Place a note on the plat stating that the Homeowner's Association (HOA) is responsible for the maintenance of each of the proposed street trees.
13. The applicant/HOA shall be responsible for ownership and maintenance of the proposed storm pond and all vegetation maintenance within the fence and/or boundaries of the storm pond. The City will mow the grass outside of the storm pond fence/boundary. All easements for maintenance and access must be recorded with the Pierce County Auditor prior to final plat.
14. Homeowner's association covenants shall be submitted for City review prior to final subdivision approval.
15. The final recorded subdivision plat must include a notice that part of the property is in the Special Flood Hazard Area (SFHA), riparian habitat zone and/or channel migration area, as appropriate.
16. No ground disturbing activities, no vegetation removal, and no development may occur within shoreline jurisdiction areas including wetlands and their (adjusted) buffers.
17. The Critical Areas Report must show updated information for Wetlands A and B for question D3.3 to indicate "yes" as well as updated Rating Summary scores and the respective section.
18. The applicant shall install permanent split rail fencing along the edge of the wetland buffer adjacent to the proposed development.
19. The applicant shall install permanent signs along the boundary of the wetland buffer.
20. The applicant shall post a performance bond to assure that the wetland buffer fence and signs are maintained.
21. Note the existing and relocated Foothills Trail, its width, tie-in points, and detour information on all plans.
22. The applicant shall provide mailboxes or receptacles as specified by the Orting branch of the U.S. Post Office prior to final plat approval.
23. Confirm and note on the plans that the storm line running from CB#20 to CB#21 to existing SDMH in Brown Street SE is intended to replace the existing storm line. Provide measure down information on the existing SD structure downstream from CB#20 to confirm the

drainage path since it appears on the survey that the storm drainage easement may continue to the NE instead of turning E, out of existing Lot 18, located north of the development.

24. The Lift Station Pump Capacity Calculations must include a capacity analysis that defines the number of existing lots and proposed lots and provides any existing flow data to support the assumed flow rates of 220 gallon/day/unit.
25. An Emergency Vehicle Access Gate with Opticon technology is required to be placed at the west end of the parking lot and new bollards must be placed along the Foothills Trail, north and south of the entrance to the parking lot to limit vehicular access to the trail.
26. All dwelling units must be equipped throughout with an approved automatic sprinkler system, in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 (see D107.1 of the IFC) unless a secondary access point is provided and approved by Central Pierce Fire and Rescue.
27. A final development plan meeting all requirements of OMC 13-6-4 must be submitted to the City for approval within **five years** of the date of preliminary plat approval (OMC 13-6-4: L). Nothing contained in this section shall act to prevent the City from adopting by ordinance procedures which would allow extensions of time that may or may not contain additional or altered conditions and requirements. When deemed reasonable and appropriate, the Administrator may grant an extension of one year for such submittal. If at the date of expiration of the time period provided herein, a final development plan has not been filed for approval, the preliminary PUD approval shall expire, and the applicant shall be required to resubmit an application for preliminary approval to reinstate the project.

Reconsideration

Any party with standing may seek reconsideration of a final decision by filing a written request for reconsideration with the City Administrator within five days of the announcement of the final decision.

Appeal

Appeals from the final decision of the city council involving titles 12, 13, or 15 of the municipal code and for which all other appeals specifically authorized have been timely exhausted, shall be made to Pierce County superior court within 21 days of the date the decision or action became final.

Rainier Meadows Response Matrix

Date of Comment	Contact Info	Comment summary	Date and staff member that responded
<u>Rainier Meadows Division 2 Preliminary Plat/PUD</u> Responses to Notice of Application			
12.27.2022	Beau Harer beau@detentemgmt.com 206.465.2364	Question whether Meadow Lane SE will be widened or improved and about the storm water plan. Also asked to see application materials.	12.28.2022 Danielle Charchenko
12.29.2022	Gerald Wilcox Gpagnw1@yahoo.com	Concern that more building will cause flooding and more traffic.	01.06.2023 MillieAnne V.
12.29.2022	Lindsay Murphy LindsayMurphys@outlook.com	Concern for wildlife and the swamp, lack of infrastructure in the city to support more residents, and public safety.	01.06.2023 MillieAnne VanDevender
01.04.2023	Angelica Relente arelente@thenewstribune.com	A reporter seeking information	01.05.2023-MAV forwarded to SL
01.15.2023	Jennifer Jasmer-Jacobson Jen_coug@yahoo.com	Concern about increases in flooding events and traffic and sees a negative impact in the community affecting flooding, traffic flow, police, fire department and the school district. They asked how more houses being built in the community affects the staffing for the police and fire department, affects the schools, and whether the city is able to handle this growth in the community.	01.17.2023- MillieAnne V.



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

September 26, 2023

MillieAnne VanDevender
Consulting City Planner
City Of Orting
Orting City Hall, 104 Bridge St S
Orting, WA 98360

In future correspondence please refer to:

Project Tracking Code: 2023-04-02599

Property: Rainier Meadows Division 2 Preliminary Plat/PUD, File No. PP PUD-22-02

Re: Archaeology - Concur with Survey; Follow Inadvertent Discovery Plan

Dear MillieAnne VanDevender:

Thank you for contacting the State Historic Preservation Officer (SHPO) and the Department of Archaeology and Historic Preservation (DAHP) with documentation regarding the above referenced project. In response, we concur with the results and recommendations made in the survey report entitled "Cultural Resource Assessment for Rainier Meadows 2, 303 Meadow Lane SE, Orting, Pierce County, WA." Specifically, as no cultural resources were found during the survey we do not recommend further direct archaeological supervision of the project. However, we do recommend that a standard Inadvertent Discovery Plan is followed during all ground disturbing activities.

Please note that the recommendations provided in this letter reflect only the opinions of DAHP. Any interested Tribes may have different recommendations. We appreciate receiving copies of any correspondence or comments from Tribes or other parties concerning cultural resource issues that you receive.

These comments are based on the information available at the time of this review and on behalf of the SHPO pursuant to Washington State law. Please note that should the project scope of work and/or location change significantly, please contact DAHP for further review.

Thank you for the opportunity to review and comment. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is attached to any future communications about this project. Should you have any questions, please feel free to contact me.

Sincerely,

Stephanie Jolivette
Local Governments Archaeologist
(360) 628-2755
Stephanie.Jolivette@dahp.wa.gov





CITY OF ORTING Land Use Permit Information

DEVELOPMENT PERMIT APPLICATIONS

The City issues permits for a number of development-related applications. This packet contains information and forms for the following permits:

- Subdivisions (Preliminary and Final)
- Subdivision Vacations and Alterations
- Short Plats
- Boundary Line Adjustments
- Planned Unit Developments (Preliminary and Final)
- Master Plans
- Conditional Use Permits
- Special Use Permit
- Zoning Variances
- Site Plan Review
- Rezones
- Architectural Design Review
- Flood Damage Prevention Permits*
- Critical Area Exceptions
- Clearing and Grading Permits
- Shoreline Permits

*Permit application materials for building permits are not included in this package. In addition, Flood Damage Prevention Permits may be combined with building permits depending upon the type or work to be done.

Applicants should be aware that many projects may require several permits. The City will make every effort to consolidate the review and approval processes when this occurs, but since there are different approval requirements, this may not always be possible. In order to be as efficient as possible, applicants are encouraged to do the following:

1. Become familiar with the zoning and other regulations that affect your project.
2. Obtain information about your site from the City Hall.
3. Schedule a pre-application meeting with City Staff to go over your project before you have prepared extensive plans. This will help you and the City decide the best way for you to get through the permit process.

This packet is organized into the following sections:

1. Application Cover Sheet – Required information for all applications.
2. Permit Procedures – How the City processes applications.
3. Specific Permit Application Forms.

Further detailed information regarding permit approval procedures can be found in Title 15 OMC.

REQUIRED APPLICATION INFORMATION (All Permits)

If it is necessary to submit applications for more than one permit, just fill out this page once.

Property Owners' Name	Copper Ridge LLC	
Affidavit of Ownership (Attached)		
Address	PO Box 73790, Puyallup, WA 98373	
Phone/Fax	253- 820-7835	
Email	evan@soundbuilthomes.com	
Applicant/Agent's Name	Craig Deaver	
Address	429 29th Street NE Suite D Puyallup, WA 98372	
Phone/Fax	253-848-4282	
Email	cdeaver@cesnwinc.com	
Project Site Address	303 Meadow Lane SE Orting, WA	
Tax Parcel Number(s)	0519321001	
Legal Description (May be on a separate sheet)	See attached	
Project Name (If Applicable)	Rainier Meadows Division 2	
Permits Needed (Check All that Apply)	<input type="checkbox"/> Short Plat <input checked="" type="checkbox"/> Preliminary Plat <input type="checkbox"/> Conditional Use <input type="checkbox"/> Variance <input type="checkbox"/> Clearing & Grading <input type="checkbox"/> Shoreline Variance <input checked="" type="checkbox"/> Planned Development <input type="checkbox"/> Master Plan	<input type="checkbox"/> Boundary Line Adjustment <input type="checkbox"/> Final Plat <input type="checkbox"/> Rezone <input type="checkbox"/> Critical Area Exception <input type="checkbox"/> Shoreline Development <input type="checkbox"/> Shoreline Conditional Use <input type="checkbox"/> Architectural Design Review <input type="checkbox"/> Binding Site Plan <input type="checkbox"/> Special Use Permit

APPLICATION CONSENT
AFFIDAVIT

Project Name: Rainier Meadows Division 2

Property Owner Information:

Project Contact

Name: Copper Ridge LLC Phone: 253- 820-7835

Address: PO Box 73790

City/State: Puyallup, WA Zip: 98373

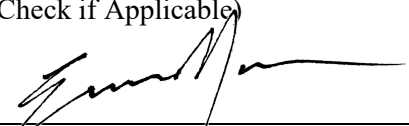
E-mail: evan@soundbuilthomes.com

Property Owner Signature: (required)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work ONLY after I have received all necessary permits.

I hereby grant to the City of Orting or its agents to which this application is made or forwarded, the right to enter the above-described location to inspect the proposed, in-progress, or completed work. I agree to start work only after all necessary permits and approvals have been received.

X I hereby authorize the Applicant and / or Agent to act on my behalf in matters related to this application.
(Check if Applicable)



Property Owner Signature

11/16/2022

Date

Applicant Information (if not the property owner):

Project Contact

Name: Evan Mann Phone: 253-820-7835

Address: PO Box 73790

City/State: Puyallup, WA Zip: 98373

E-mail: evan@soundbuilthomes.com

**Please send all correspondence to the applicant and the agent.

Agent Information:

Project Contact

Name: Craig Deaver Phone: 253-848-4282

Address: 429 29th Street NE Suite D

City/State: Puyallup, WA Zip: 98373

E-mail: cdeaver@cesnwinc.com

Authorized Applicant / Agent Signatures: (required if the Applicant/Agent is not the property owner)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work ONLY after I have received all necessary permits.

Applicant is land owner.

Authorized Applicant Signature

Date

Authorized Agent Signature

Date



11/22/22

Please identify additional parties that you want to receive email regarding this project.

Don Babineau
Name

dbabineau@cesnwinc.com
Email

Jennifer Caldwell
Name

jcaldwell@cesnwinc.com
Email

ORTING PERMIT PROCEDURES

	TYPE 1	TYPE 2	TYPE 2a	TYPE 3	TYPE 3a	TYPE 4	TYPE 5
Recommendation by:	N/A	N/A	Administrator	N/A	N/A	Planning Commission	Planning Commission
Final Decision by:	Administrator	Administrator	Planning Commission	Hearing Examiner	Planning Commission	City Council	City Council
Notice of Application	No	No	No	Yes	Yes	Yes	No
Open record public hearing or open record appeal of final decision	No	Only if appealed. Open record hearing @ Hearing Examiner	Only if appealed. Open record hearing with Hearing Examiner; recommendation made by Hearing Examiner to the City Council	Yes, before Hearing Examiner	Yes, before Planning Commission	Yes, before Planning Commission	Yes, before Planning Commission
Closed record appeal/final decision	No	No, unless appealed to Council	City Council	No, unless appealed to Council	No, unless appealed to Council	Yes, before Council	Yes, or Council may hold another open public hearing
Judicial Appeal	Yes	Yes	Yes	Yes	Yes	Yes	Yes

PERMIT DECISION AUTHORITIES

TYPE 1 (Administrator)	TYPE 2 (Administrator)	Type 2 a (Planning Commission)	TYPE 3 (Examiner)	TYPE 3a (Planning Commission)	TYPE 4 (Council)	TYPE 5 (Council)
Permitted Uses; Boundary Line Adjustments; Minor Amendments to subdivisions and PUD; Special Use Permits*; Temporary Construction Trailer	Short Plats; Land Clearing & Grading; Shoreline Permits; Administrative Variances; Administrative Interpretations; Home Occupations; Landscape Plan Modifications;	Architectural Design Review; Sign Permits	Conditional Use Permits; General Variances; Sign Permit Variances; Certain appeals	Sign Code Hardship Variances; Plat Vacations & Alterations; Site Plans & Major Amendments thereto; Major amendments to PUDs;	Preliminary Plats; Preliminary PUDs; Final Plats; Final PUDs; Certain appeals; Mobile/Manufactured Home Parks or Subdivisions;	Rezone Comprehensive Plan Amendments; Development Regulations; Shoreline Master Program; Zoning Text Amendments; Zoning Map Amendments; Annexations; Development Agreements;

** Note that the Department of Ecology shall approve, approve with conditions, or deny all Shoreline Conditional Use Permits and Variances approved by the City.*

General Process Sequence

The specific sequence of permit approvals varies somewhat. However, in most cases the following steps leading up to public hearings or administrative decisions are typical:

1. The City makes a determination that each application is complete and notifies the applicant by letter;
2. Public notice is made that the application has been made and accepted by the City. This includes advertising in the official newspaper and posting of the subject property.

City of Orting – Land Use Permits

3. A technical staff review of the proposal is initiated;
4. An environmental determination (SEPA) is made and advertised;
5. A staff report is prepared, including a record of the process and findings of the technical and environmental reviews;
6. The pending public hearing or decision procedure and schedule is advertised;
7. An open public hearing is conducted (with decision or recommendation, or an administrative decision is made; and
8. A closed record hearing or appeal hearing is conducted and a final decision is made.

Affidavit/Statement of Ownership

Parcel Information: 0519321001

Parcel Owner of Record: Copper Ridge LLC

Address of Owner of Record: PO Box 73790, Puyallup, WA 98373

Address or legal description of the land

Commencing at the Southeast corner of the Northeast quarter of Section 32, Township 19 North, Range 5 East, W.M., in Pierce County, Washington;

Thence North 80 rods;

Thence West 136 rods to the Cascade Division of the Northern Pacific Railway;

Thence Southeasterly along the line of said Railway, to the South boundary line of the Northeast quarter of said Section 32;

Thence East on said line, to the place of beginning;

EXCEPT that tract conveyed to Norman B. Banister by deed recorded in Book 53 of Deeds at Page 402, under Recording No 28444, records of said County;

EXCEPT that portion lying outside the corporate limits of the Town of Orting;

AND EXCEPT that portion lying within 100 feet of the center line of the Northern Pacific Railway Company's right of way;

Situate in the County of Pierce, State of Washington.

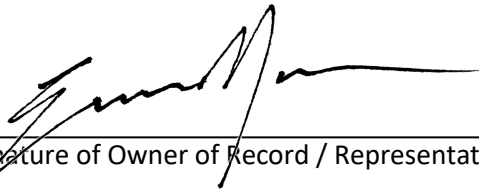
If Applicable:

Representative of Company: **Evan Mann - Manager of Copper Ridge, LLC**

Second Representative of Company (not required):

Agent Information: CES NW Inc., 310 – 29th Street NE, Suite 101, Puyallup, WA 98372

By signing below, I/We verify that I/We are the sole owners of the above listed property and no other parties have rights to the property.



Signature of Owner of Record / Representative

11/16/2022

Date Signed

This statement is invalid if any of the required information is not supplied or is inaccurate.

SUBDIVISION

Issued By:



CHICAGO TITLE INSURANCE COMPANY

Guarantee/Certificate Number:

0248964-16

CHICAGO TITLE INSURANCE COMPANY
a corporation, herein called the Company

GUARANTEES

SoundBuilt Homes

herein called the Assured, against actual loss not exceeding the liability amount stated in Schedule A which the Assured shall sustain by reason of any incorrectness in the assurances set forth in Schedule A.

LIABILITY EXCLUSIONS AND LIMITATIONS

- 1. No guarantee is given nor liability assumed with respect to the identity of any party named or referred to in Schedule A or with respect to the validity, legal effect or priority of any matter shown therein.
- 2. The Company's liability hereunder shall be limited to the amount of actual loss sustained by the Assured because of reliance upon the assurance herein set forth, but in no event shall the Company's liability exceed the liability amount set forth in Schedule A.

Please note carefully the liability exclusions and limitations and the specific assurances afforded by this guarantee. If you wish additional liability, or assurances other than as contained herein, please contact the Company for further information as to the availability and cost.

Chicago Title Company of Washington
701 5th Avenue, Suite 2700
Seattle, WA 98104

Countersigned By:

Kathleen J Hall
Authorized Officer or Agent



Chicago Title Insurance Company

By:

Michael J. Nolan, President

Attest:

Marjorie Nemzura, Secretary

ISSUING OFFICE:

Title Officer: Seattle Builder / Unit 16
 Chicago Title Company of Washington
 701 5th Avenue, Suite 2700
 Seattle, WA 98104
 Phone: (206)628-5623
 Main Phone: (206)628-5623
 Email: CTISeattleBuilderUnit@ctt.com

SCHEDULE A

Liability	Premium	Tax
\$1,000.00	\$350.00	\$35.88

Effective Date: November 14, 2022 at 08:00 AM

The assurances referred to on the face page are:

That, according to those public records which, under the recording laws, impart constructive notice of matter relative to the following described property:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Title to said real property is [vested in](#):

Copper Ridge, LLC, a Washington limited liability company

subject to the matters shown below under Exceptions, which Exceptions are not necessarily shown in the order of their priority.

END OF SCHEDULE A

EXHIBIT "A"
Legal Description

COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 19 NORTH, RANGE 5 EAST OF THE W.M.;
THENCE NORTH 80 RODS;
THENCE WEST 136 RODS TO THE CASCADE DIVISION OF THE NORTHERN PACIFIC RAILWAY;
THENCE SOUTHEASTERLY ALONG THE LINE OF SAID RAILWAY TO THE SOUTH BOUNDARY LINE OF THE NORTHEAST QUARTER OF SAID SECTION 32;
THENCE EAST ON SAID LINE TO THE PLACE OF BEGINNING;

EXCEPT THAT TRACT CONVEYED TO NORMAN B. BANISTER BY DEED RECORDED IN BOOK 53 OF DEEDS AT PAGE 402, UNDER AUDITOR'S FEE NO. 28444, RECORDS OF SAID COUNTY;

EXCEPT THAT PORTION LYING OUTSIDE THE CORPORATE LIMITS OF THE TOWN OF ORTING; AND EXCEPT THAT PORTION LYING WITHIN 100 FEET OF THE CENTER LINE OF THE NORTHERN PACIFIC RAILWAY COMPANY'S RIGHT OF WAY.

SITUATE IN THE COUNTY OF PIERCE, STATE OF WASHINGTON.

SCHEDULE B

GENERAL EXCEPTIONS

H. Reservations and exceptions in United States Patents or in Acts authorizing the issuance thereof.

SCHEDULE B

(continued)

SPECIAL EXCEPTIONS

1. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: State of Washington
 Purpose: Construction, maintenance and operation of drainage main
 Recording Date: December 14, 1951
[Recording No.: 1612618](#)

2. Easement and the terms and conditions thereof:

In favor of: Pierce County
 Purpose: delivering rock or other materials or equipment to the river bank for river bank protection work only. Also for channel clearing or debris and gravel accumulation
 Recorded: February 3, 1955
[Recording No.: 1709195](#)

3. Any question that may arise due to shifting and changing in the course or boundaries of the Carbon River.
4. Rights of the State of Washington in and to that portion, if any, of the Land which lies below the line of ordinary high water of the Carbon River.
5. Any prohibition or limitation of use, occupancy or improvement of the Land resulting from the rights of the public or riparian owners to use any portion which is now or was formerly covered by water.
6. Paramount rights and easements in favor of the United States for commerce, navigation, fisheries and the production of power.
7. General and special taxes and charges, payable February 15, delinquent if first half unpaid on May 1, second half delinquent if unpaid on November 1 of the tax year (amounts do not include interest and penalties):

Year: 2022
 Tax Account Number: 051932-1001
 Levy Code: 084
 Assessed Value-Land: \$378,300.00
 Assessed Value-Improvements: \$205,400.00

General and Special Taxes: Billed: \$5,613.21
 Paid: \$5,613.21
 Unpaid: \$0.00

Affects: Includes other property

The description in the tax rolls appears to include a portion of a gap property to the north

SCHEDULE B
(continued)

8. A deed of trust to secure an indebtedness in the amount shown below,

Amount: \$600,000.00
Dated: July 13, 2022
Trustor/Grantor: Copper Ridge, LLC, a Washington limited liability company
Trustee: Rainier Title, LLC, a Washington limited liability company
Beneficiary: Patricia Schoenbachler
Recording Date: July 14, 2022
Recording No.: [202207140692](#)

9. Notwithstanding the insuring clauses of the policy, the company does not insure against loss or damage by reason of a lack of a right of access to and from the land.

END OF SCHEDULE B

E. O. E. 12-17-51

1612617 - con 1 -

6. If the sp shall at any ti cease to maintain and operate the ad pipe li or shall fail faithfully to perform every part of this inst, the fp may forthwith terminate this permit and may forthwith expel the sp fr its prems; and at the end of the permit the sp will restore the prems of the fp to their former state.

7. The sp shall comply with the fns specificatns dtd 1-14-51 a transcript of wch, identified as Exhibit "A" is attached heto and md a part hereof.

8. All work in install: ad pipe li shall be done under the supervision of sd divn superintendent.

9. The parties have e old these presents this P-20-51.

Northern Pacific Railway Company
By J. T. Moore
Industrial Agent

State of Washington
Dept of Highways
By Wm. Dugan
Director of Highways

Approved as to form
by Harold Doble
Asst Atty General

Northern Pacific Railway Company
Exhibit "A"
Specifications for Sewer, Irrigation and Drain Line
Crossings under Railway Tracks.***

to State Wash Dept Highways

1612618

Benjamin Eche and
Marie E. Eche, his wif
to
State of Washington

Exempt \$1.00 notave
P-26-51
12-16-51 9:10 A M
1005 D 709
no stk - no irx - no Tr Stamp

1170

Witnesseth: That

That the undersigned Stors are the ours of prems hiaf
above, over wgh descd area the stee desires an easent for the
constructn, maintenance and operatn of a drainage main,
To fly from to the stee, its sfa an easent over, across
and upon the sdre sit in the C of P, 3 of W:

A strip of ld 30 ft wide, be 15 ft wide on ea side of a
entr li as surveyed over and across a trt of ld to be hiaf
descd, the sd entr li be def:

Comm on the entr li of Secondary State Hlway 5-E, City of
Orting, Drainage, as shown on sheet 1 of 1 sheets of sd hlway,
the specific details concern: all of wch are to be found on
that ctn map of definite locatu now of recd and on file in the
ofc of the Director of Highways at Olympia and by: date of approval
of P-26-51, sd nt be Hlway Engrs Station 47+83.5 P. O. C.
Back station 0+09.3 ahead on the/entr li be hain descd; th N
of 03' 2 962.7 ft, ml to the true nob of this descriptn; and
the NEly R/W li of the W P Ry Co th continue N 68° 03' E 300 ft,
ml to the N li of the hiaf descd lds and the end of this entr li
descriptn.

1612617 - 1612618 - con

339

U. S. 10-17-51

1612618 - con 1 -

The herein mentioned tract of land is defined: Beginning on the Ely
11 of the City Limits of the Town of Orting and the NE 1/4
of the S 1/2 of the NE 1/4 of Sec 32, Twp 19 N, R 5 E, S 1 E; thence
50' W along the Ely City Limits of Orting, to the Ely r/w 11
of Northern Pacific Railroad Co's r/w; thence W along the Ely
r/w 11 to the Ely 11 of the S 1/2 of the NE 1/4 of sd Sec; thence
along the Ely 11 of the S 1/2 of NE 1/4 of sd Sec to pt.

for the purpose of lay, maintain and operate a drainage main
upon sd prms and the rgt to enter sd prms as way to inspect
and to lay addtl pipe or to repair the drainage main and to
maintain the same, and that the ptors agree that the ptor shall
not be interfered with in the operatn of sd drainage main or
free access to all parts of the drainage main; and that the
drainage main shall be buried in the soil to a depth of not
less than 2 ft; and the ptor shall leave the prms in as good
conditn as the same are now in.

Reservy to the ptors the rgt to use the prms land in
this easent for farm purposes, provide such use does not
interfere with the drainage main or the repair and maintenance
thof.

Benjamin Eche
Marie E. Eche

pcw 8-24-51 by Benjamin Eche and Marie E. Eche Deba his et
of Leslie A. Stone and for Wash. resid; at Orting. No. 1-1-51.
M1 to

1612619

John R. Kotechko and
Esther Kotechko, his wf
to
State of Washington

Percent 51.00 amount
8-24-51
12-14-51 9:10 A M
1005 D 713
no stx - no inv - no r Stone

Witnesseth: That

These, the undersigned ptors are the heirs of prms here
deced, over wch deced area the ptor desires an easent for
constructn, maintenance and operatn of a drainage main.

Do hereby grant to the ptor, its et's an easent over, across,
and upon the fdr sit in the C of P, S of W:

A strip of ld 30 ft wide, by 15 ft wide or on side of
the entr 11, as surveyed over and across a trt of ld to be
herein deced, the sd entr 11 by def: Begin on the entr 11 of
Secondary State Hiway No. 5-8, City of Orting, Washington, as
shown on Sheet 1 of 1 Sheets of sd hiway, the specific
details concerning all of wch are to be found on that sd
map of definite locatn now of recd and on file in the off of
the Director of Hiways of Olympia and bearing date of approval
of 6-26-51, sd pt b: Hiway Engineer's Station 1743.7 P. M. 1.
Back- Station 0809.3 ahead on the entr 11 by main deced; thence
S 27° 44' E 755.7 ft, ml to the S 1/2 r/w 11 of the Northern
Pacific Railroad Co r/w and the end of this entr 11 described.
Excp thfr any portn thof lya within the r/w 11 of Secondary
State Hiway No. 5-8.

The herein mentioned tract of land is defined: Beginning at the
31' E of a stone monument in the entr of the Co rd at the
cor of the Hugin's Sub-41-2 in Sec 32, Twp 19 N, R 5 E, S 1 E;
thence S 27° 44' E pl to the entr 11 of sd rd 138 ft; thence S 27° 11'

1612618 - 1612619 - con

FH
2/7/55

1709194

John P Brady a single man
to
Pierce County Wn a muncpl
corp

Esment \$1. ***
12/20/54
2/3/55 1-09 pm
1079 D 92
no stamps

1212

Witnsth tht for and in consrtn of the sum of \$1. and of the benefits and advantages to accrue to us, we the fps do hby grant unto Pierce Co Wn a muncpl corp sp a perpetual esment allow ingress and egress to the fdp:

In Sec 25, Twp 20 R4 E;
being Lot 7 of the Sumner Garden Tracts and more ptly an Esment up and down stream alg the left bank of the Puyallup Riv brdering the abv Lot 7

for the purpose of haulg rock and other equipment or materials to the left bank of the Puyallup Riv for riv bank protectn workonly_

John P Brady;
pcw 12/20/54 by John P Brady bf Irma H Carnahan np for wn at Sumner ns 1/6/56

Acceptd R F Gleason F M Geiger, Co Comsrs
Pierce Co Wn.

Mail to POBox 568 Puyallup, Wash.

1709195

William F Schoenbachler and
Mary Schoenbachler,
to
Pierce County, Wn a muncpl
corp

Esment \$1.***
11/24/54
2/3/55 1-09 pm
1079 D 93
no stamps

2212
P
28

Witnsth tht for and in consrtn of the sumof \$1. and of the benefits and advantages to accrue to us, we the fps do hby grant unto Pierce Co Wn a muncpl corp sp a perpetual esment allow ingress and egress ovr and across the fdp, *adanty*

in Sec 32, Twp 19 r 5 E
Beg at int of Ely li Cy Limits with N 1/16 li of Sec th swly alg cy limits to nely li N P R/W th NWly alg sd R/W to sd N 1/16 li th E to beg subj to ease cd and more ptly an Easement to enter sd pty alg the left bank of the Carbon Riv pt of entry being from Bridge St and continug upstream the length of pty;

For the purpose of deliverg rock or other materials or equipment to the riv bank for riv bank protectn work only; also for channel clearg or debris and gravel accumulation.

William Schoenbachler; Mary Schoenbachler;

pcw 11/24/54 by William Schoenbachler and Mary Schoenbachler, bf C W Van Scoyoc np for wn at Orting ns 8/21/58

Acceptd R F Gleason, F M Geiger,
Harry Sprinker, Co Comsrs Pierce Co Wn.

Mail to William A. Stancar, Pierce Co Riv Imp
Box 568 Puyallup, Wash.

SITE ADDRESS
303 MEADOW LANE SE
ORING, WA 98566

PARCEL NUMBER
051932100

UTILITIES
SEWER: CITY OF ORING
WATER: COMCAST - CENTURY LINK
TELEPHONE: COMCAST - CENTURY LINK
REFUSE: MURREY'S DISPOSAL
GAS: ORING SCHOOL DISTRICT
SCHOOL: PASET SOUND ENERGY
POWER: CENTRAL PIERCE FIRE & RESCUE
FIRE:

OWNER/DEVELOPER
COPPER RIDGE LLC
PO BOX 73790
PUYALLUP, WA 98373
PHONE: (253) 848-4835

ENGINEER
C.E.S. NW INC
429 - 29TH STREET NE, SUITE D
PUYALLUP, WA 98372
(253) 848-4282

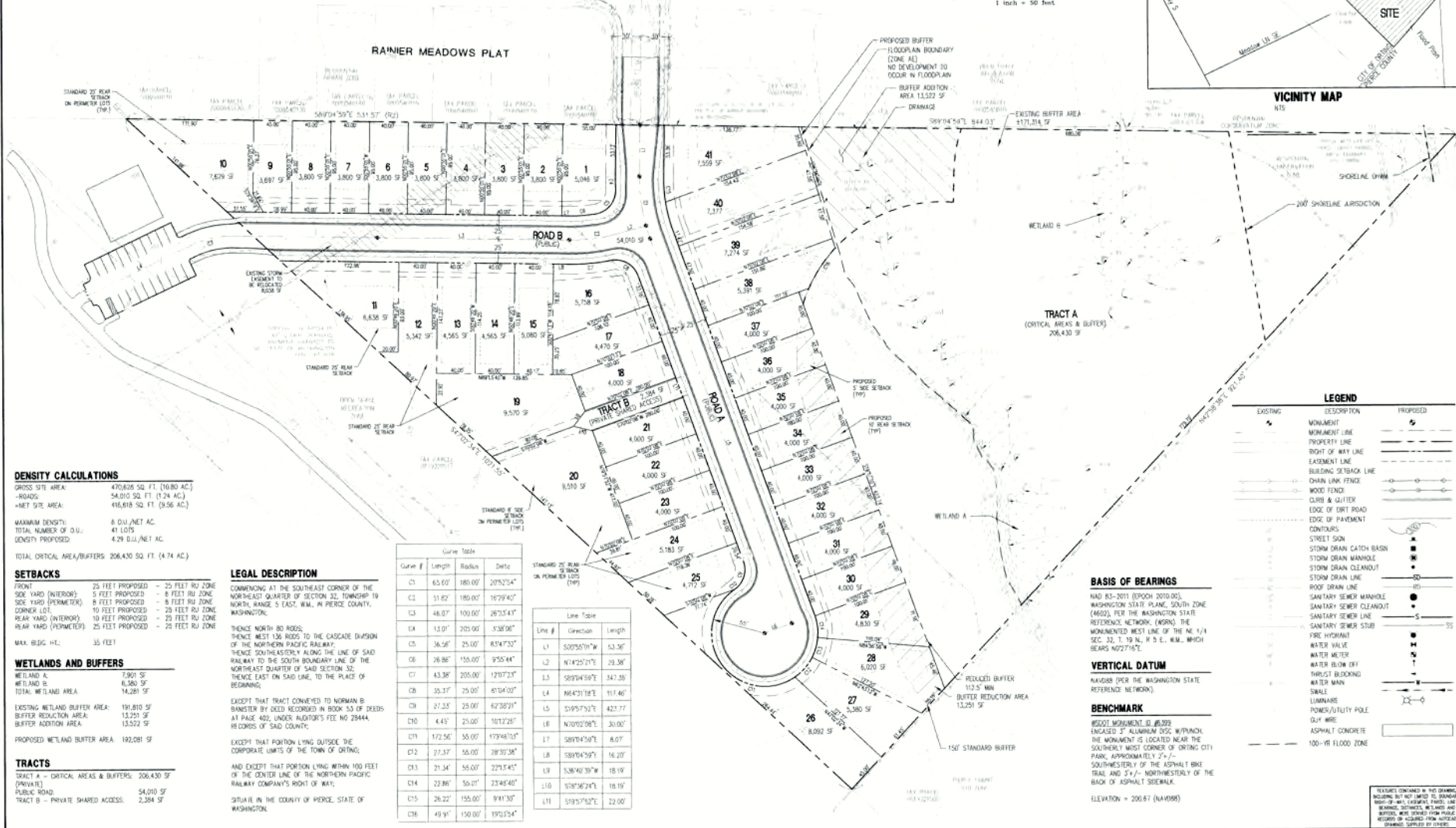
SURVEYOR
C.E.S. NW INC
429 - 29TH STREET NE, SUITE D
PUYALLUP, WA 98372
(253) 848-4282

PROJECT STATISTICS
GROSS SITE AREA: 470,626 SQ. FT. (10.80 AC.)
EXISTING ZONING: RESIDENTIAL-URBAN (RU)
NUMBER OF LOTS: 37 LOTS
MINIMUM LOT SIZE (RU ZONE): 2,000 SF
SMALLEST LOT SIZE (PUD): 3,697 SF
AVERAGE LOT SIZE: 5,068 SF
LARGEST LOT SIZE: 8,510 SF
MINIMUM LOT WIDTH: 40 FEET
MINIMUM STREET FRONTAGE: 20 FEET
MAXIMUM BUILDING COVERAGE: 20 PERCENT (RU ZONE)
MAXIMUM HARD SURFACE COVERAGE: 45 PERCENT (RU ZONE)

RAINIER MEADOWS DIV. 2 - PUD

A PORTION OF THE SW 1/4 AND SE 1/4 OF THE NE 1/4 OF SEC. 32, T19N, R5G SE, W.M.
CITY OF ORING, PIERCE COUNTY, WASHINGTON

- SHEET INDEX**
- P1 PRELIMINARY PLAT/PUD MAP
 - P2 BOUNDARY AND TOPOGRAPHIC SURVEY
 - P3 COMPOSITE UTILITY & GRADING PLAN
 - P4 PLAN & PROFILES
 - P5 TREE INVENTORY & RETENTION PLAN
 - P6 STREET LIGHT PLAN



DENSITY CALCULATIONS
GROSS SITE AREA: 470,626 SQ. FT. (10.80 AC.)
-ROADS: 54,010 SQ. FT. (1.24 AC.)
-NET SITE AREA: 416,616 SQ. FT. (9.56 AC.)
MAXIMUM DENSITY: 8 D.U./NET AC.
TOTAL NUMBER OF D.U.: 41 LOTS
DENSITY PROPOSED: 4.29 D.U./NET AC.
TOTAL CRITICAL AREA/BUFFERS: 206,430 SQ. FT. (4.74 AC.)

SETBACKS
FRONT: 25 FEET PROPOSED - 25 FEET RU ZONE
SIDE YARD (INTERIOR): 5 FEET PROPOSED - 8 FEET RU ZONE
SIDE YARD (PERIMETER): 8 FEET PROPOSED - 8 FEET RU ZONE
CORNER LOT: 10 FEET PROPOSED - 25 FEET RU ZONE
REAR YARD (INTERIOR): 10 FEET PROPOSED - 25 FEET RU ZONE
REAR YARD (ADJACENT): 25 FEET PROPOSED - 25 FEET RU ZONE
MAX. BLDG. HGT.: 30 FEET

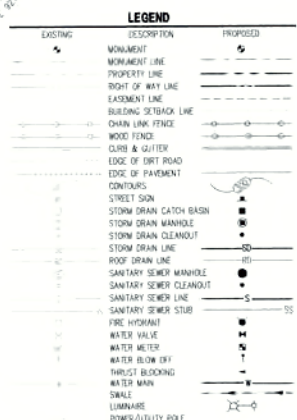
WETLANDS AND BUFFERS
WETLAND A: 7,901 SF
WETLAND B: 6,360 SF
TOTAL WETLAND AREA: 14,261 SF
EXISTING WETLAND BUFFER AREA: 191,810 SF
BUFFER REDUCTION AREA: 13,201 SF
BUFFER ADDITION AREA: 13,522 SF
PROPOSED WETLAND BUFFER AREA: 192,081 SF

TRACTS
TRACT A - CRITICAL AREAS & BUFFERS: 206,430 SF
54,010 SF
PUBLIC ROAD
TRACT B - PRIVATE SHARED ACCESS: 2,394 SF

LEGAL DESCRIPTION
COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 19 NORTH, RANGE 5 EAST, W.M., IN PIERCE COUNTY, WASHINGTON;
THENCE NORTH 80 DEGREES;
THENCE WEST 136 FEET TO THE CASCADE DIVISION OF THE NORTHERN PACIFIC RAILWAY;
THENCE SOUTHWESTERLY ALONG THE LINE OF SAID RAILWAY TO THE SOUTH BOUNDARY LINE OF THE NORTHEAST QUARTER OF SAID SECTION 32;
THENCE EAST ON SAID LINE, TO THE PLACE OF BEGINNING;
EXCEPT THAT TRACT CONVEYED TO NORMAN B. BANISTER BY DEED RECORDED IN BOOK 53 OF DEEDS AT PAGE 402, UNDER AUDITOR'S FEE NO 29444, RECORDS OF SAID COUNTY;
EXCEPT THAT PORTION LYING OUTSIDE THE CORPORATE LIMITS OF THE TOWN OF ORING;
AND EXCEPT THAT PORTION LYING WITHIN 100 FEET OF THE CENTER LINE OF THE NORTHERN PACIFIC RAILWAY COMPANY'S RIGHT OF WAY;
SITING IN THE COUNTY OF PIERCE, STATE OF WASHINGTON.

Curve #	Length	Radius	Data
C1	65.07	189.07	20752.4
C2	51.67	180.07	16729.40
C3	46.07	100.07	2675.41
C4	12.07	205.00	5336.96
C5	36.26	25.00	8747.23
C6	26.86	155.00	9755.44
C7	43.38	205.00	12707.23
C8	35.37	25.00	4534.07
C9	27.23	25.00	62327.1
C10	4.43	25.00	1012.05
C11	172.56	55.00	17944.26
C12	27.37	55.00	39737.36
C13	21.34	55.00	22184.45
C14	22.86	55.00	27484.40
C15	26.22	155.00	9111.30
C16	49.91	150.00	19103.4

Line #	Direction	Length
L1	S00°50'10"W	53.36
L2	N74°25'21"E	29.36
L3	S89°04'59"E	347.36
L4	N64°31'18"E	117.46
L5	S19°57'32"E	427.17
L6	N10°02'08"E	30.00
L7	S89°04'59"E	8.67
L8	S89°04'59"E	16.20
L9	S36°40'39"W	18.19
L10	S78°56'24"E	16.19
L11	S19°57'32"E	22.00



BASIS OF BEARINGS
NAD 83-2011 (EPOCH 2010.00), WASHINGTON STATE PLANE, SOUTH ZONE (4602), FOR THE WASHINGTON STATE REFERENCE NETWORK (WSRN). THE MONUMENTED WEST LINE OF THE NE 1/4 SEC. 32, T. 19 N., R. 5 E., W.M., WHICH BEARS N027°16'12"E.

VERTICAL DATUM
NAVD83 FROM THE WASHINGTON STATE REFERENCE NETWORK.

BENCHMARK
BENCH MARK ID #6792
ENCASED 3" ALUMINUM DISC W/INCH. THE MONUMENT IS LOCATED NEAR THE SOUTHERLY MOST CORNER OF ORING CITY PARK, APPROXIMATELY 2'-0" SOUTHWESTERLY OF THE ASPHALT BIKE TRAIL AND 5'-4" NORTHWESTERLY OF THE BACK OF ASPHALT SIDEWALK.
ELEVATION = 200.87 (NAVD83)

Scale: 1" = 50'

Date: 6/23/2023

Job No: 22152

Sheet No: P1

1 of 6 Sheets

DESIGNED: CAD
DRAWN: CAD
CHECKED: CAD

PROJECT: RAINIER MEADOWS DIV. 2 - PUD PRELIMINARY PLAT/PUD MAP

COPPER RIDGE LLC

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
292 - 29th St. NE, Suite 101
Puyallup, WA 98372
Tel: (253) 848-4835
Fax: (253) 848-4282
www.cesnw.com

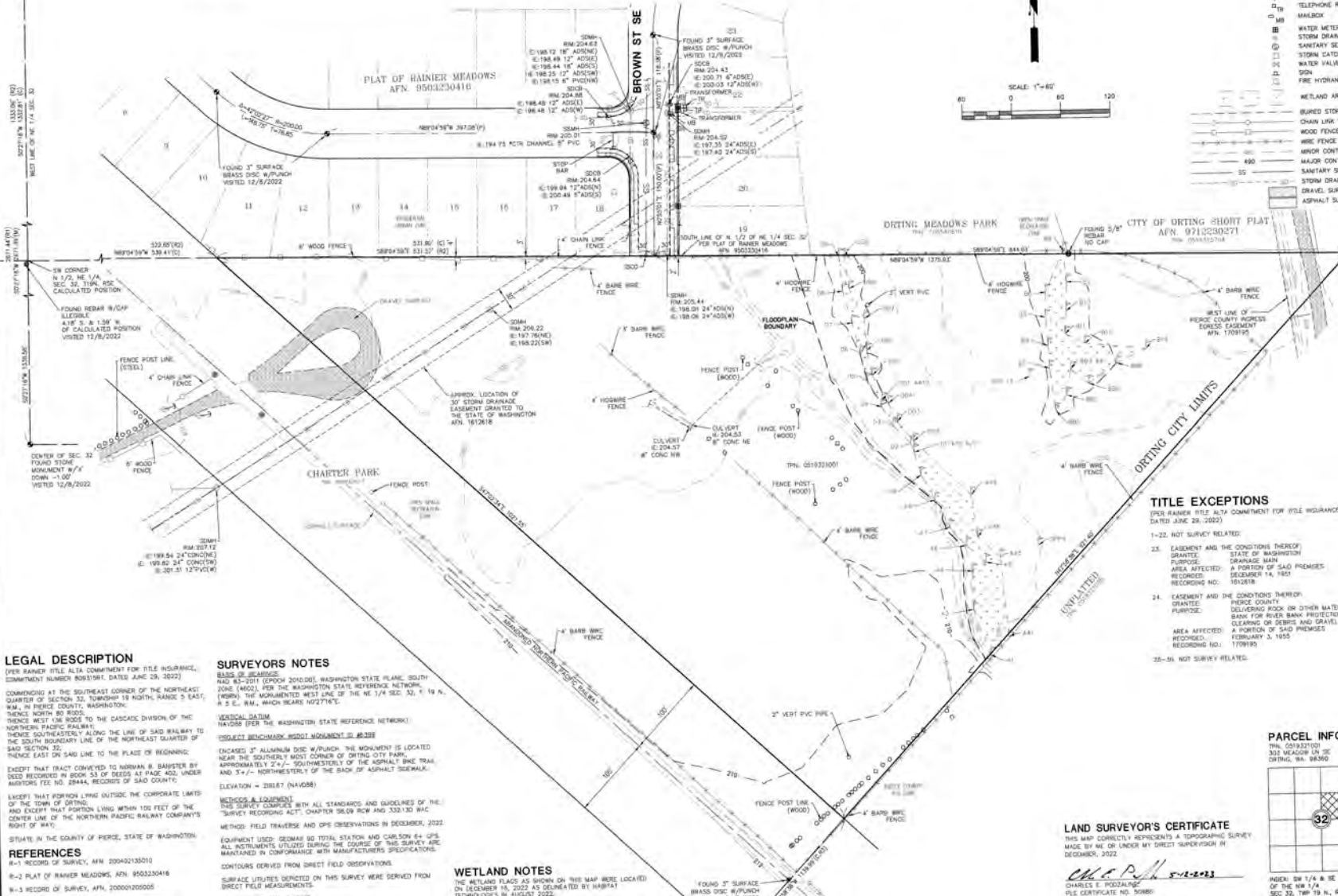
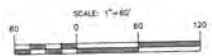
RAINIER MEADOWS DIVISION 2

A PORTION OF THE SW 1/4 AND SE 1/4 OF THE NE 1/4 OF SEC. 32, T19N, R10E, W.M.
CITY OF ORTING, PIERCE COUNTY, WASHINGTON
TOPOGRAPHIC SURVEY

FOUND STONE
MONUMENT W/F
DOWN -1.10'
VISITED 12/8/2022

NE SECTION CORNER
200.00 TYP. HSE. W.M.
CALCULATED POSITION PER
SURVEY RECORDED UNDER
APN. 200402135019
NOT VISITED THIS SURVEY

- ### LEGEND
- MONUMENT FOUND (AS NOTED)
 - REBAR FOUND (AS NOTED)
 - NAIL FOUND (AS NOTED)
 - (C) CALCULATED DIMENSION
 - (V) REFERENCE DIMENSION
 - (P) PLAT DIMENSION
 - ROLLARD
 - LIGHT
 - FENCE POST
 - WETLAND FLAG
 - TELEPHONE RISER
 - MAILBOX
 - WATER METER
 - STORM DRAIN MANHOLE
 - SANITARY SEWER MANHOLE
 - STORM CATCH BASIN
 - WATER VALVE
 - SOH
 - FIRE HYDRANT
 - WETLAND AREA
 - BURIED STORM CULVERT LINE
 - CHAIN LINK FENCE AS NOTED
 - WOOD FENCE AS NOTED
 - WIRE FENCE AS NOTED
 - MINOR CONTOUR
 - MAJOR CONTOUR
 - 490
 - 55
 - SANITARY SEWER LINE
 - STORM SURFACE LINE
 - DRAVEL SURFACE
 - ASPHALT SURFACE



LEGAL DESCRIPTION

(PER RAINIER TITLE ALTA COMMITMENT FOR TITLE INSURANCE, COMMITMENT NUMBER 8051581, DATED JUNE 29, 2022)

COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 19 NORTH, RANGE 3 EAST, W.M., IN PIERCE COUNTY, WASHINGTON;

THENCE NORTH 80 DEGS;

THENCE WEST THE BOUNDARY TO THE CASCADE DIVISION OF THE NORTHERN PACIFIC RAILWAY;

THENCE SOUTHWESTERLY ALONG THE LINE OF SAID RAILWAY TO THE SOUTH BOUNDARY LINE OF THE NORTHEAST QUARTER OF SAID SECTION 32;

THENCE EAST ON SAID LINE TO THE PLACE OF BEGINNING;

THENCE EAST ON SAID LINE TO THE PLACE OF BEGINNING;

EXCEPT THAT TRACT CONVEYED TO MORGAN B. BAUMSTER BY DEED RECORDED IN BOOK 53 OF DEEDS AT PAGE 402, UNDER MORTGAGE TEL NO. 2844, RECORDS OF SAID COUNTY;

EXCEPT THAT PORTION LING OUTSIDE THE CORPORATE LIMITS OF THE TOWN OF ORTING;

AND EXCEPT THAT PORTION LING WITHIN 100 FEET OF THE CENTER LINE OF THE NORTHERN PACIFIC RAILWAY COMPANY'S RIGHT OF WAY;

SITuate IN THE COUNTY OF PIERCE, STATE OF WASHINGTON;

REFERENCES

R-1 RECORD OF SURVEY, APN. 200402135019

R-2 PLAT OF RAINIER MEADOWS, AFX. 950320416

R-3 RECORD OF SURVEY, APN. 20000100008

R-4 CITY OF ORTING SHORT PLAT, AFX. 071230271

R-5 CITY OF ORTING SHORT PLAT, AFX. 9510090264

SURVEYORS NOTES

BASE OF SURVEY
HAD 83-2011 EPOCH 2010(0), WASHINGTON STATE PLANE, SOUTH ZONE (NAD83), PER THE WASHINGTON STATE REFERENCE NETWORK (WRTN); THE MONUMENTED WEST LINE OF THE NE 1/4 SEC. 32, T 19 N, R 3 E, W.M., WHICH BEARS 1027216°.

VERTICAL DATUM
NAVD83 (PER THE WASHINGTON STATE REFERENCE NETWORK);

OBJECT BENCHMARK: BENCH MARK MOUNDED AT #303E
(ENCASED 3" ALUMINUM DISC W/PUNCH. THE MONUMENT IS LOCATED NEAR THE SOUTHERLY MOST CORNER OF DORING CITY PARK, APPROXIMATELY 2 1/4' - SOUTHWESTERLY OF THE ASPHALT BIKE TRAIL, AND 3 1/4' - NORTHWESTERLY OF THE BACK OF ASPHALT SIDEWALK.)
ELEVATION = 206.67 (NAVD83)

METHODS & EQUIPMENT
SURVEY CONFORMS WITH ALL STANDARDS AND SPECIFICATIONS OF THE "SURVEY RECORDING ACT", CHAPTER 36.09 RCW AND 332.10 WAC.

METHOD: FIELD TRAVERSE AND GPS OBSERVATIONS IN DECEMBER, 2022

EQUIPMENT USED: DECAIM 90 TOTAL STATION AND CARLSON 64 GPS. ALL INSTRUMENTS UTILIZED DURING THE COURSE OF THIS SURVEY ARE MAINTAINED IN CONFORMANCE WITH MANUFACTURERS' SPECIFICATIONS.

CONTOURS DERIVED FROM DIRECT FIELD OBSERVATIONS.

SURFACE UTILITIES DETECTED ON THIS SURVEY WERE DERIVED FROM DIRECT FIELD MEASUREMENTS.

CONTOUR INTERVAL: 3' FOOT.

WETLAND NOTES

THE WETLAND AREAS AS SHOWN ON THIS MAP WERE LOCATED ON DECEMBER 14, 2022 AS DETERMINED BY HABITAT TECHNOLOGIES IN AUGUST 2022.

- ### TITLE EXCEPTIONS
- (PER RAINIER TITLE ALTA COMMITMENT FOR TITLE INSURANCE, COMMITMENT NUMBER 8051581, DATED JUNE 29, 2022)
- 11-22. NOT SURVEY RELATED.
 - 23. EASEMENT AND THE CONDITIONS THEREOF
GRANTEE: STATE OF WASHINGTON
PURPOSE: DRAINAGE MAIN
AREA AFFECTED: A PORTION OF SAID PREMISES
RECORDED: DECEMBER 14, 1951
RECORDING NO.: 1501818
 - 24. EASEMENT AND THE CONDITIONS THEREOF:
GRANTEE: PIERCE COUNTY
PURPOSE: DELIVERING ROCK OR OTHER MATERIALS TO RIVER BANK FOR RIVER BANK PROTECTION WORK ONLY, ALSO FOR CHANNEL CLEARING OR DEBRIS AND GRAVEL ACCUMULATION.
AREA AFFECTED: A PORTION OF SAID PREMISES
RECORDED: FEBRUARY 3, 1955
RECORDING NO.: 1170915
 - 25-29. NOT SURVEY RELATED.

PARCEL INFORMATION



LAND SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A TOPOGRAPHIC SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION IN DECEMBER, 2022.

Charles E. Poddalung
C.E.P. INC. 5-12-2023
PLS CERTIFICATE NO. 50988

DATE
NO.
REVISION

RAINIER MEADOWS DIVISION 2

TOPOGRAPHIC SURVEY

C.E.S. NW INC.

CIVIL ENGINEERING & SURVEYING
100000000000000
PULLMAN, WA 99137

PROJECT: RAINIER MEADOWS DIVISION 2 TOPOGRAPHIC SURVEY

COPPER RIDGE LLC

Designed: N/A

Drawn: JHC

Checked: CEP

Date: 5/12/2023

Job No: 22132

Sheet No: P2

Scale: 1"=60'

Date: 5/12/2023

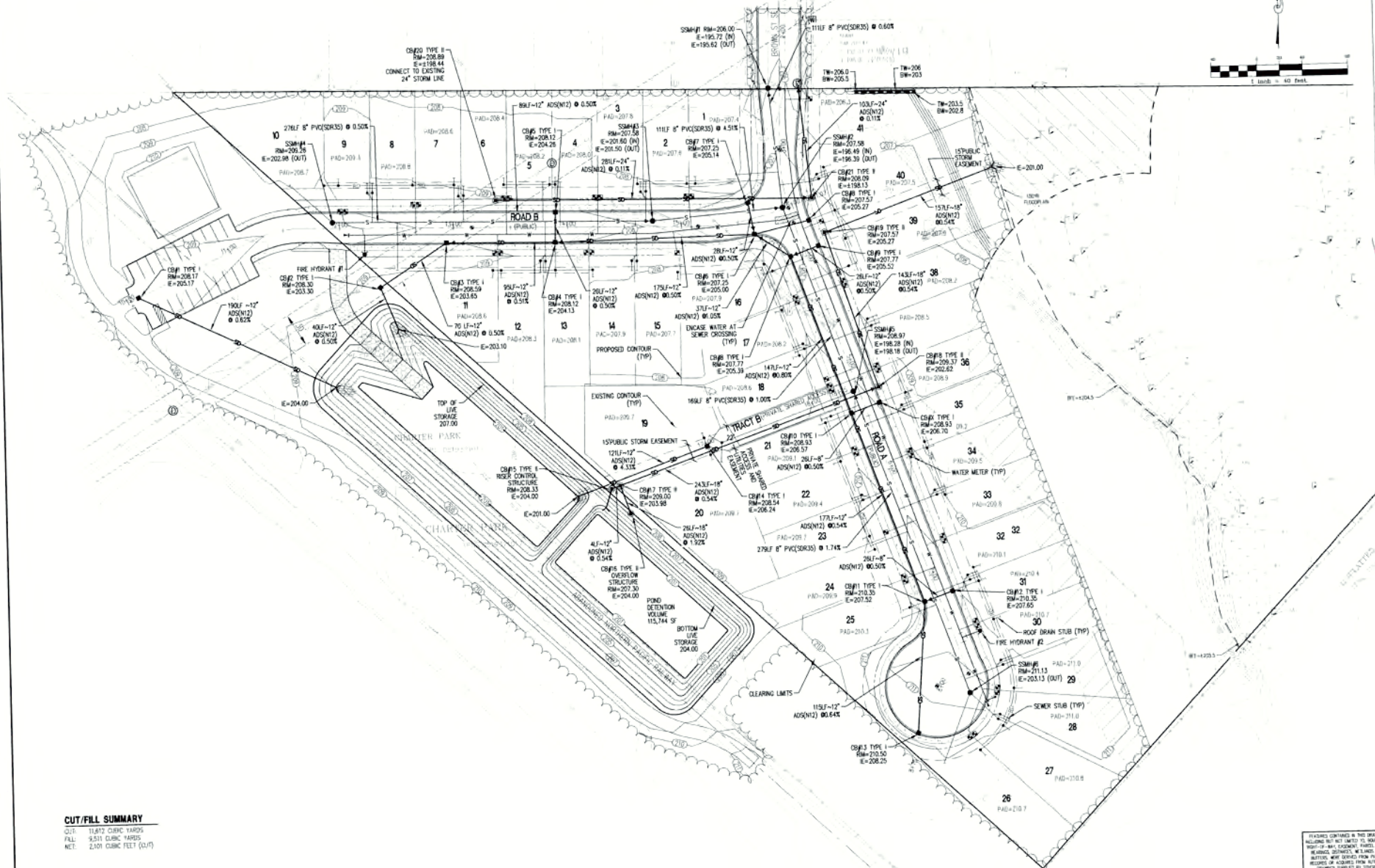
Job No: 22132

P2

2 of 6 Sheets

RAINIER MEADOWS DIV. 2 - PUD

A PORTION OF THE SW 1/4 AND SE 1/4 OF THE NE 1/4 OF SEC. 32, T19N, R9G 5E, W.M.
CITY OF ORTING, PIERCE COUNTY, WASHINGTON



CUT/FILL SUMMARY

CUT:	11,612 CUBIC YARDS
FILL:	9,511 CUBIC YARDS
NET:	2,101 CUBIC FEET (OUT)

Sheet No. **P3**

3 of 6 Sheets

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING

87323

RAINIER MEADOWS DIV. 2 - PUD
PRELIMINARY PLAT
COMPOSITE UTILITY & GRADING PLAN
COPPER RIDGE LLC

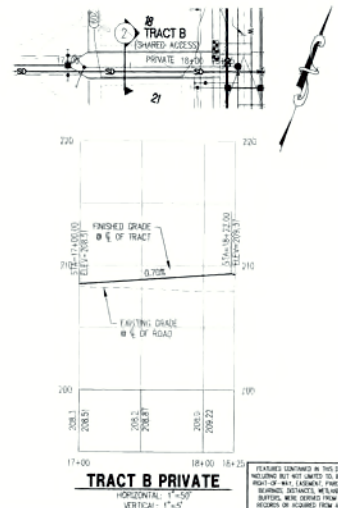
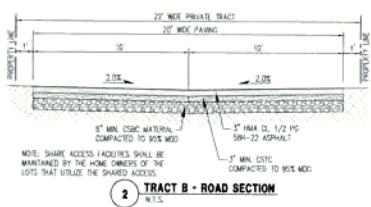
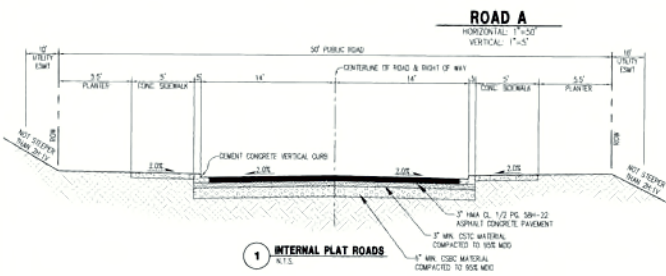
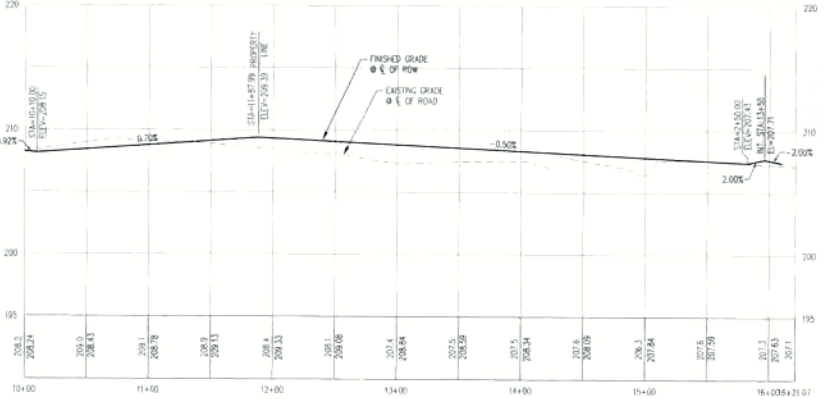
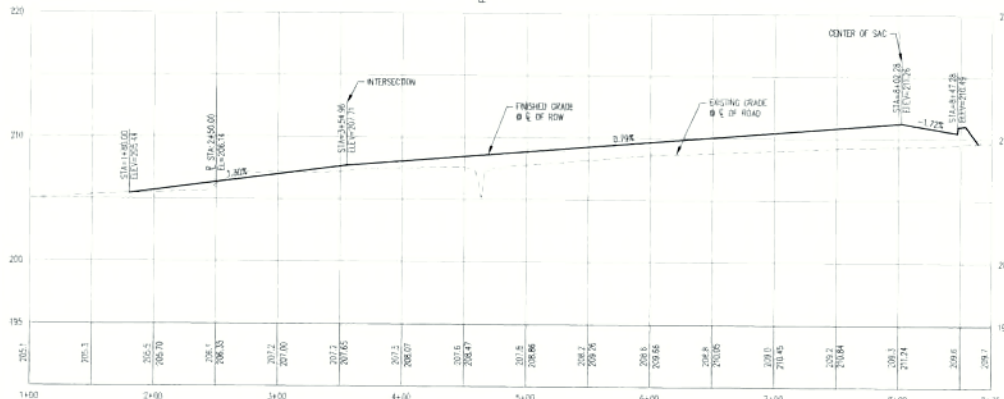
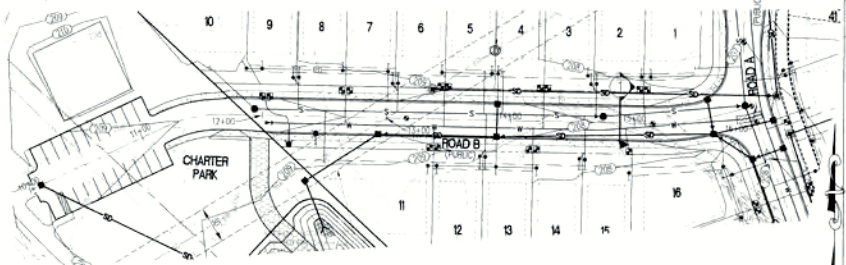
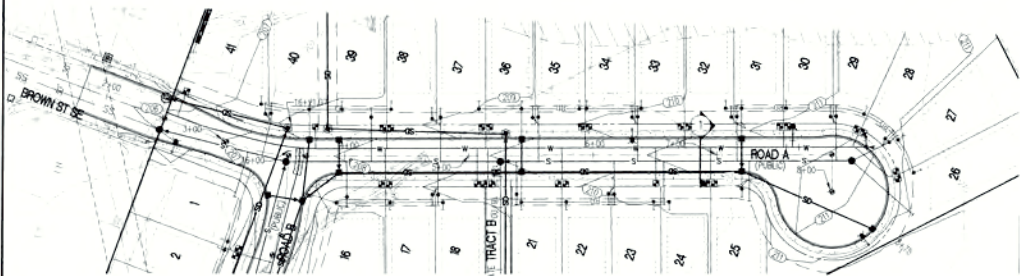
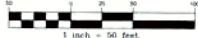
Client: PUD BOX - 23740 INVALUABLE - 04-8923

Designed: RJC
Checked: RJC
Date: 8/23/2023
Job No.: 22732

FILES CONTAINED IN THIS DRAWING INCLUDING BUT NOT LIMITED TO, BOUNDARY SURVEY, AND EXISTING RECORDS, SHALL BE THE PROPERTY OF THE SURVEYOR. NO PART OF THIS DRAWING OR ANY INFORMATION HEREON SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE SURVEYOR.

RAINIER MEADOWS DIV. 2 - PUD

A PORTION OF THE SW 1/4 AND SE 1/4 OF THE NE 1/4 OF SEC. 32, T19N, R9G 5E, W.M.
CITY OF ORTING, PIERCE COUNTY, WASHINGTON



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Brian J. Smith (ES) 848-4282
bjsmith@cesnw.com
16323 825-7835
PO BOX 13780 PUYALLUP, WA 98473

RAINIER MEADOWS DIV. 2 - PUD
PRELIMINARY PLAN
PLAN & PROFILES
COPPER RIDGE LLC
Project: 16323 825-7835
Scale: 1"=50'
Date: 8/123/2023
Job No.: 2133
Sheet No.: 4 of 6
P4

NOTES:
1. FEATURES SHOWN IN THIS DRAWING ARE NOT TO BE CONSIDERED AS A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED HEREON.
2. THE CLIENT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES.
3. THE CLIENT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES.

RAINIER MEADOWS DIV. 2 - PUD

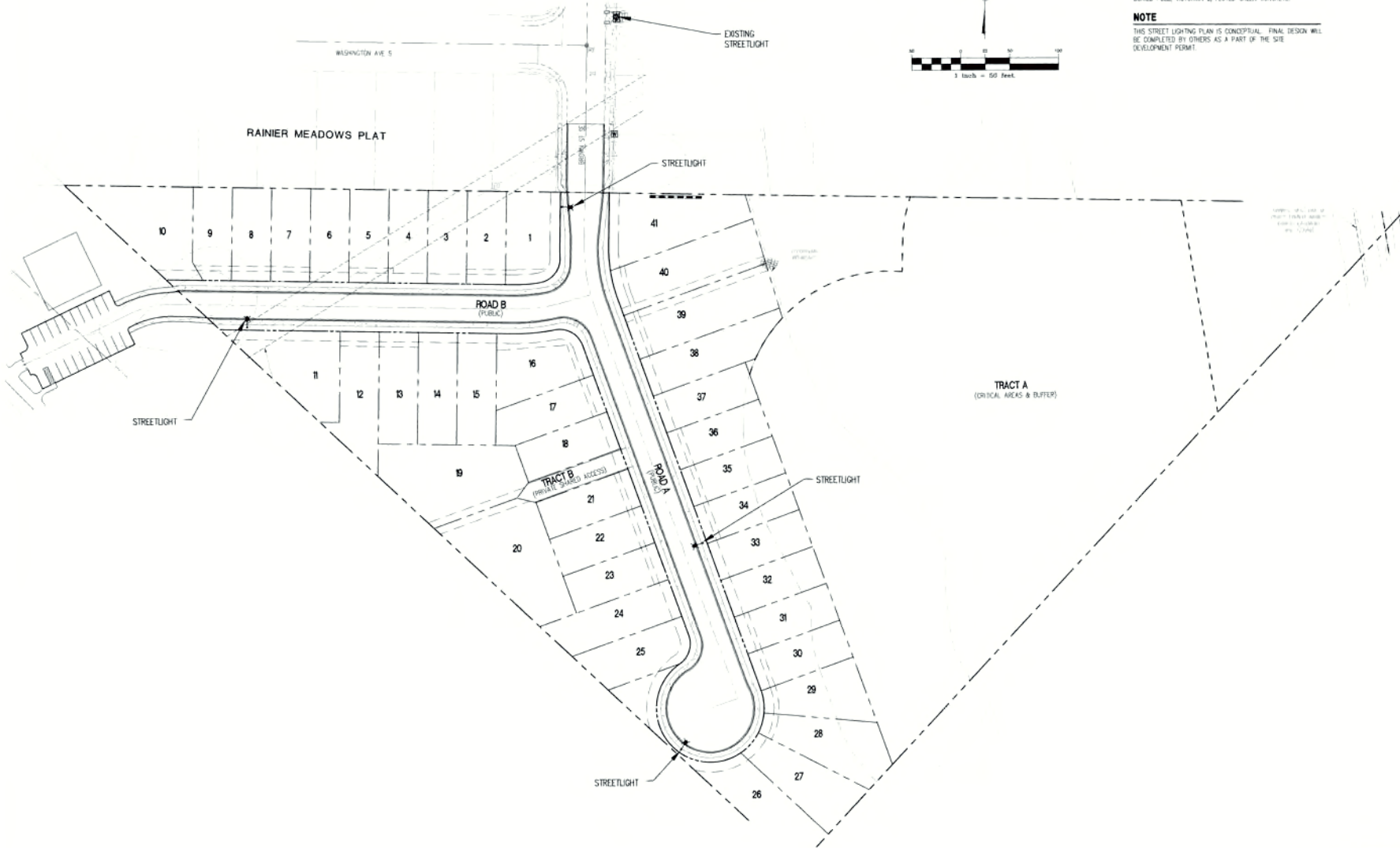
A PORTION OF THE SW 1/4 AND SE 1/4 OF THE NE 1/4 OF SEC. 32, T19N, R9G 5E, W.M.
CITY OF ORTING, PIERCE COUNTY, WASHINGTON

STREETLIGHT SPECIFICATIONS

STREET LIGHTING POLE: PROVIDE LUMINAIRE - KING LUMINAIRE
K23 FALCONROD,
#R023-FISH-@-120-SS2-BK02-120-KPLG-PE-44-04,
100 WATT, 120V, WITH TYPE 3 MEDIUM DISTRIBUTION 4000K, UL
LISTED, HUNTER GREEN, WITH NEMA PHOTOCELL. LIGHT POLE
SHALL BE 15'-0" ABOVE GRADE, 4'-0" BELOW GRADE. DIRECT
BURIED POLE, VICTORIAN 2, FLUATED GREEN CONCRETE.

NOTE

THIS STREET LIGHTING PLAN IS CONCEPTUAL. FINAL DESIGN WILL
BE COMPLETED BY OTHERS AS A PART OF THE SITE
DEVELOPMENT PERMIT.



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
20100 19th St. N.E. Suite 101
Puyallup, WA 98448
Phone: (253) 848-4800
Fax: (253) 848-4878
central@cesnw.com

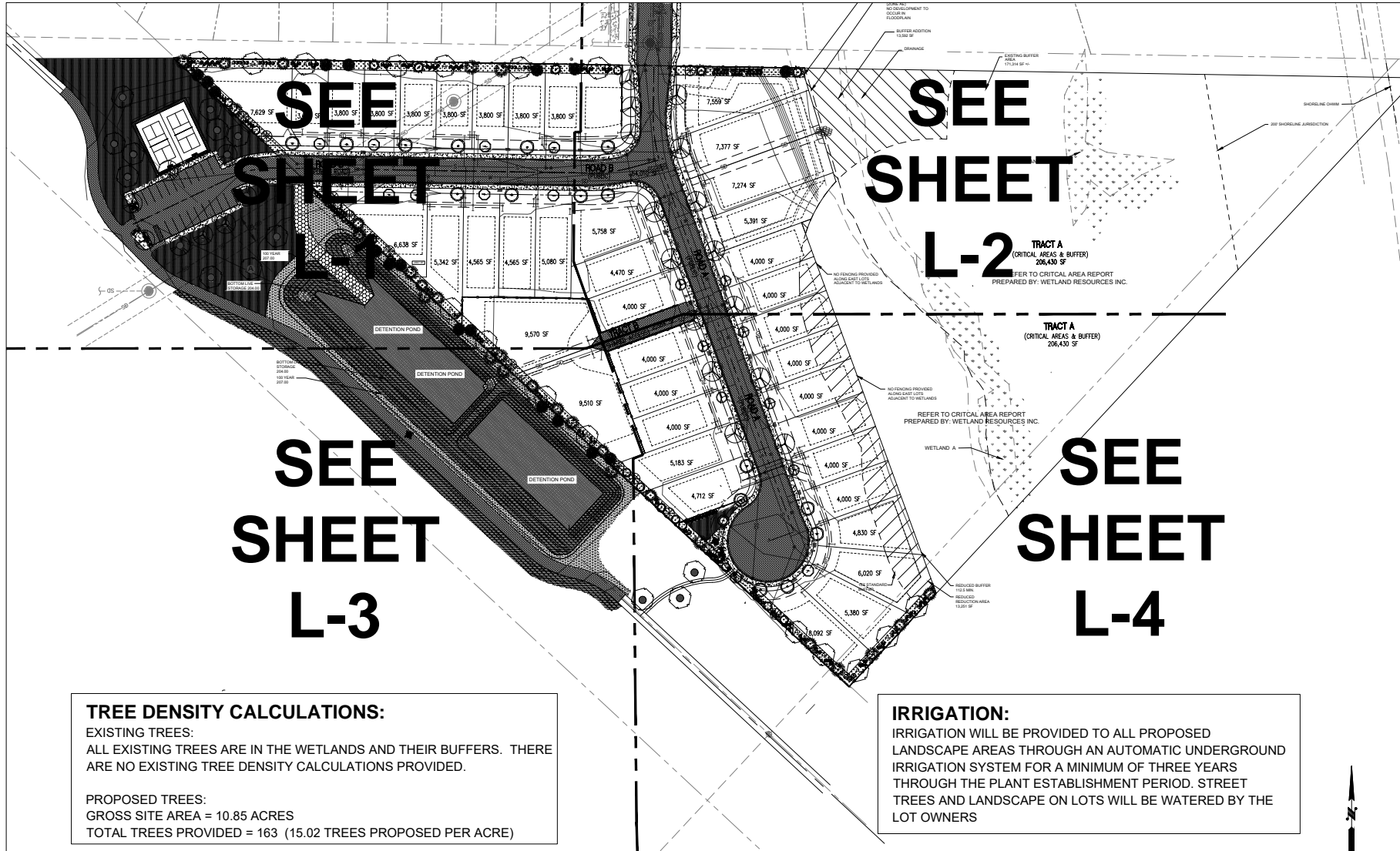
RAINIER MEADOWS DIV. 2 - PUD
CONCEPTUAL STREET LIGHTING PLAN

Client: COPPER RIDGE LLC
PO BOX 22982 PUYALLUP, WA 98473
C529 820-7323

Designed	CAD
Drawn	DAB
Checked	CAD

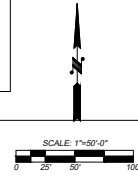
Scale: 1"=50'
Date: 8/23/2023
Job No.: 22132

Approved by: _____
 City Administrator Date _____
 City Engineer Date _____
 Fire Chief Date _____
OFR's review limited to providing input on operational issues only. OFR has not reviewed the plans for Code compliance.



TREE DENSITY CALCULATIONS:
 EXISTING TREES:
 ALL EXISTING TREES ARE IN THE WETLANDS AND THEIR BUFFERS. THERE ARE NO EXISTING TREE DENSITY CALCULATIONS PROVIDED.
 PROPOSED TREES:
 GROSS SITE AREA = 10.85 ACRES
 TOTAL TREES PROVIDED = 163 (15.02 TREES PROPOSED PER ACRE)

IRRIGATION:
 IRRIGATION WILL BE PROVIDED TO ALL PROPOSED LANDSCAPE AREAS THROUGH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM FOR A MINIMUM OF THREE YEARS THROUGH THE PLANT ESTABLISHMENT PERIOD. STREET TREES AND LANDSCAPE ON LOTS WILL BE WATERED BY THE LOT OWNERS



BRADLEY DESIGN GROUP, INC.
 LANDSCAPE ARCHITECTURE + SITE PLANNING

mail 4330 N Lexington St
 Tacoma, WA 98407
 location 455B St Helens Ave
 Tacoma, WA 98402
 T.253.272.4848
 F.253.276.0132
 www.bradtree.com
 info@bradtree.com

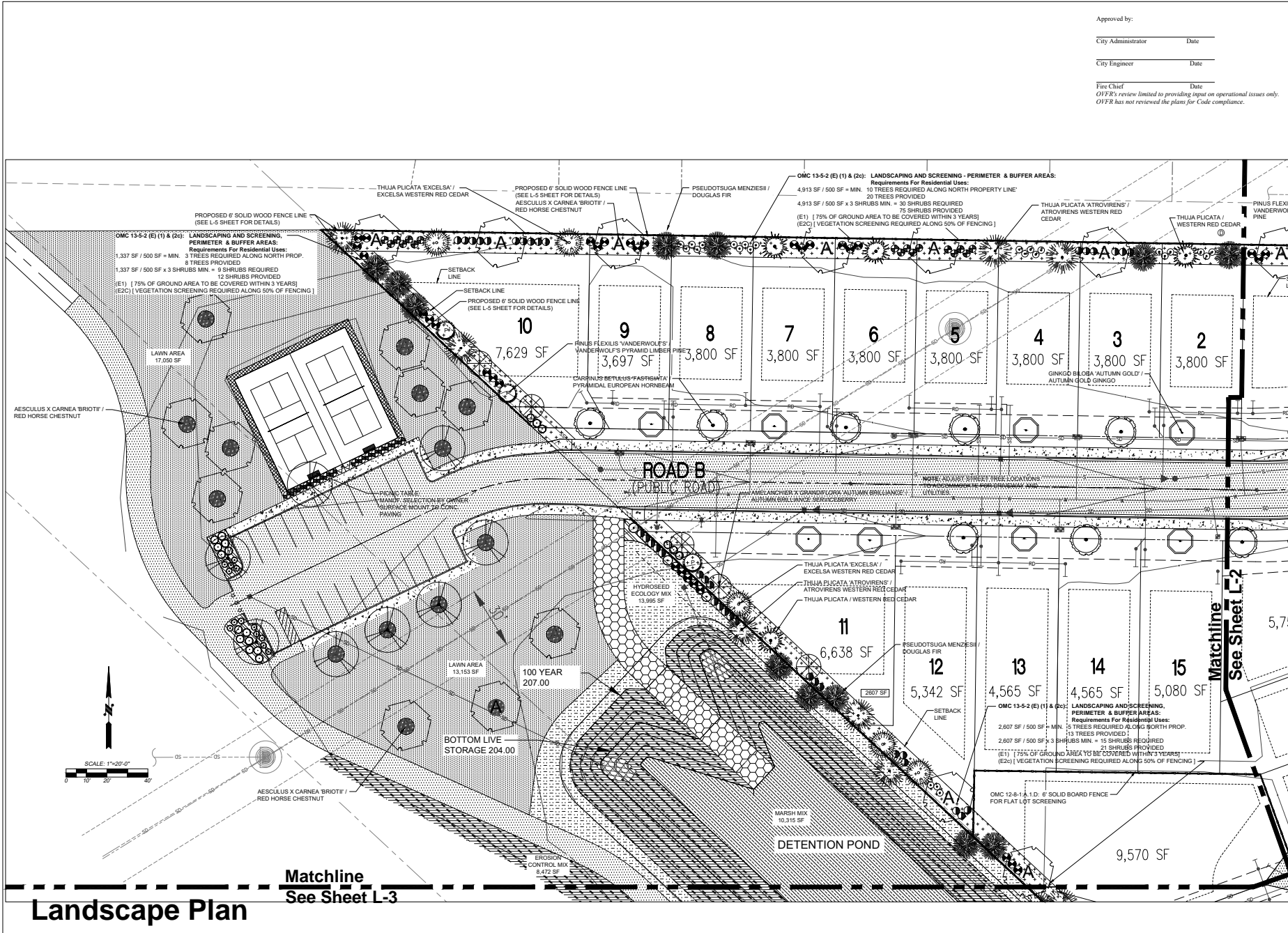


OVERALL SITE PLAN
 Rainer Meadows - Div. 2 At Orting
 Copper Ridge, LLC.
 303 MEADOW LANE SE ORTING, WA 98560

REVISION		
No.	Date	By
1	August 2023	MIK City Comments

Scale: 1"=50'-0"
 Project: JJB & MIK
 Designer: JJB
 Checker: KBR
 Date: 12 MAY 2023
 Title: PRELIM PLAT SUBMITTAL #3
 Sheet No.: L-0
 of 7 Sheets

Overall Site Plan



Approved by: _____ Date _____
 City Administrator _____ Date _____
 City Engineer _____ Date _____
 Fire Chief _____ Date _____
OFPR's review limited to providing input on operational issues only. OFPR has not reviewed the plans for Code compliance.

BRADLEY DESIGN GROUP, INC.
 LANDSCAPE ARCHITECTURE + SITE PLANNING

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 Tacoma, WA 98407
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 Tacoma, WA 98402
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 F.253.276.0132
 www.bradtree.com
 info@bradtree.com



LANDSCAPE PLAN
 Rainer Meadows - Div. 2 At Orting
 Copper Ridge, LLC
 393 MEADOW LANE SE ORTING, WA 98560

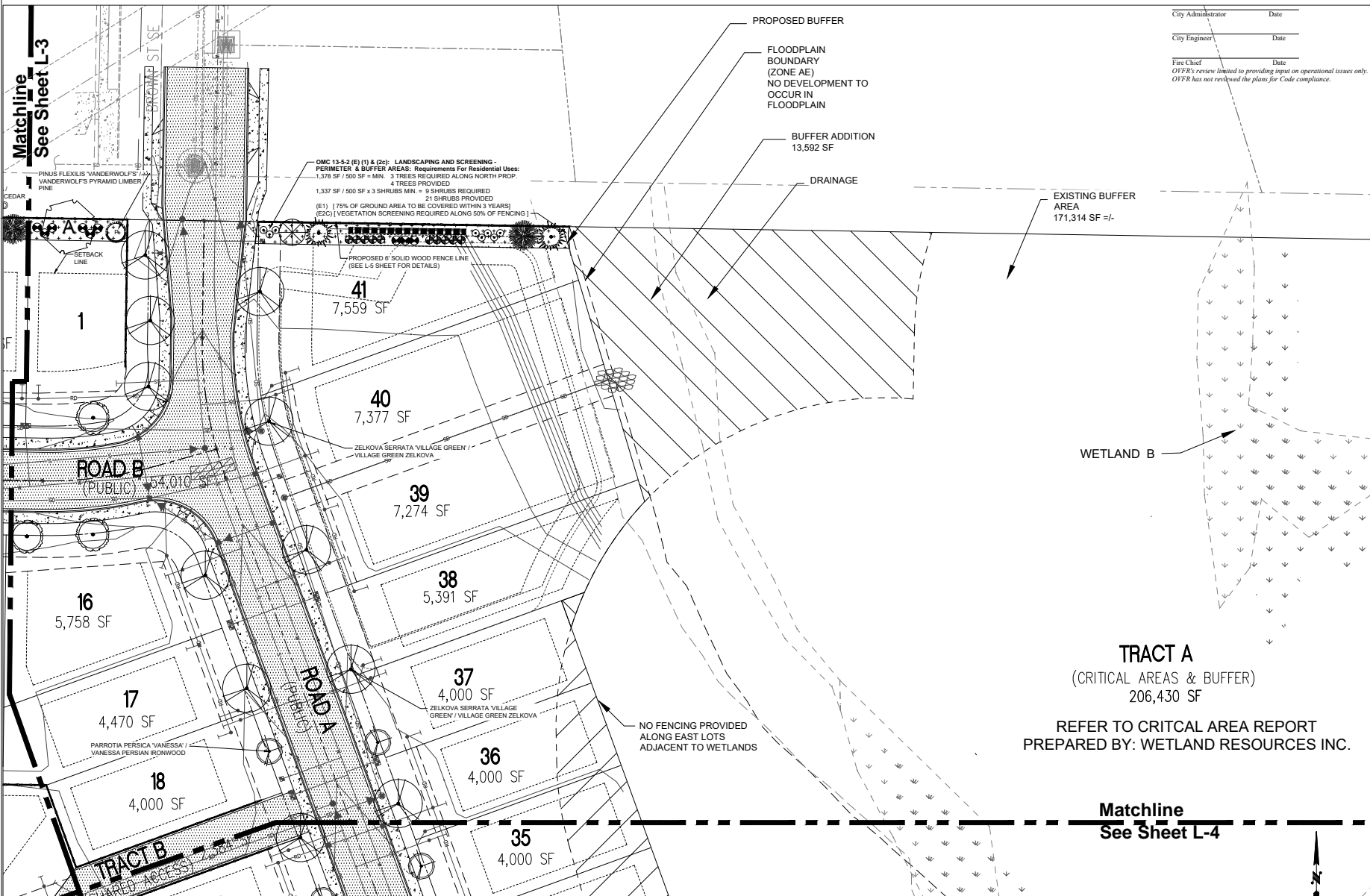
No.	REVISION	Date	By
1	August 2023	MIK	City Comments

1" = 20'-0"

Sheet No. **L-1**
 of 7 Sheets
 12 MAY 2023
 PRELIM PLAT SUBMITTAL #3

Landscape Plan

Matchline See Sheet L-3



Approved by:

City Administrator _____ Date _____

City Engineer _____ Date _____

Fire Chief _____ Date _____

OPFR's review limited to providing input on operational issues only. OPFR has not reviewed the plans for Code compliance.

BRADLEY DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + SITE PLANNING

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location 455B St Helens Ave
Tacoma, WA 98402

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L253.276.0132

www.bradtree.com
info@bradtree.com



LANDSCAPE PLAN

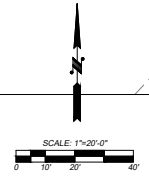
Rainier Meadows - Div. 2 At Orting

Copper Ridge, LLC.

305 MEADOW LANE SE ORTING, WA 98560

REFER TO CRITICAL AREA REPORT
PREPARED BY: WETLAND RESOURCES INC.

Landscape Plan

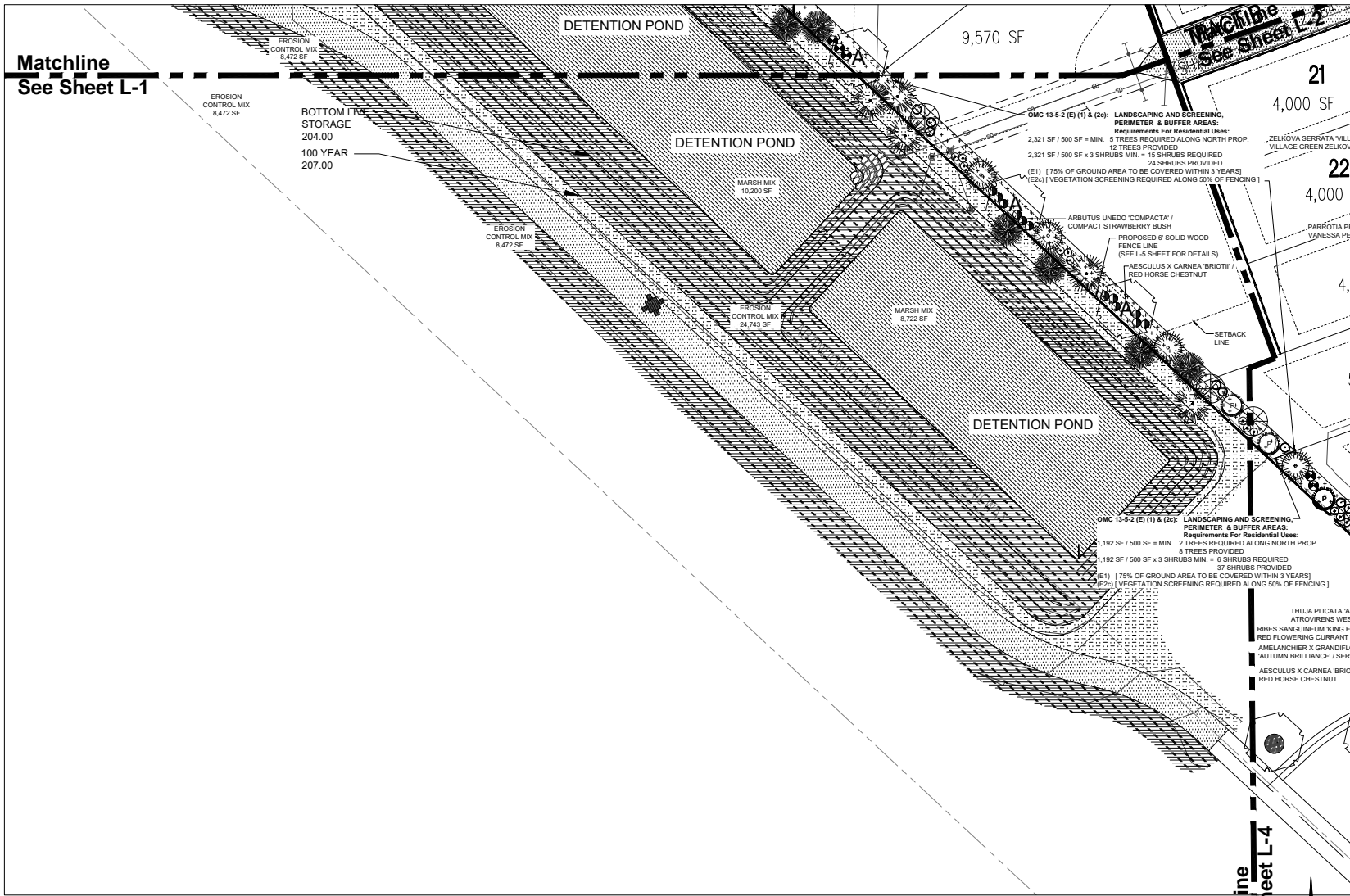


REVISION		
No.	Date	By
1	August 2023	MIK
City Comments		

1"=20'-0"

Sheet No.
JJB & MIK
MFV
KBR
12 MAY 2023
PRELIM PLAT SUBMITTAL #3

L-2
of 7 Sheets



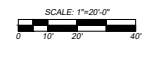
Matchline
See Sheet L-1

Matchline
See Sheet L-2

Matchline
See Sheet L-4

Approved by: _____
City Administrator Date _____
City Engineer Date _____

Fire Chief Date _____
OFR's review limited to providing input on operational issues only.
OFR has not reviewed the plans for Code compliance.



BRADLEY DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + SITE PLANNING

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L253.276.0132
www.bradtree.com
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STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

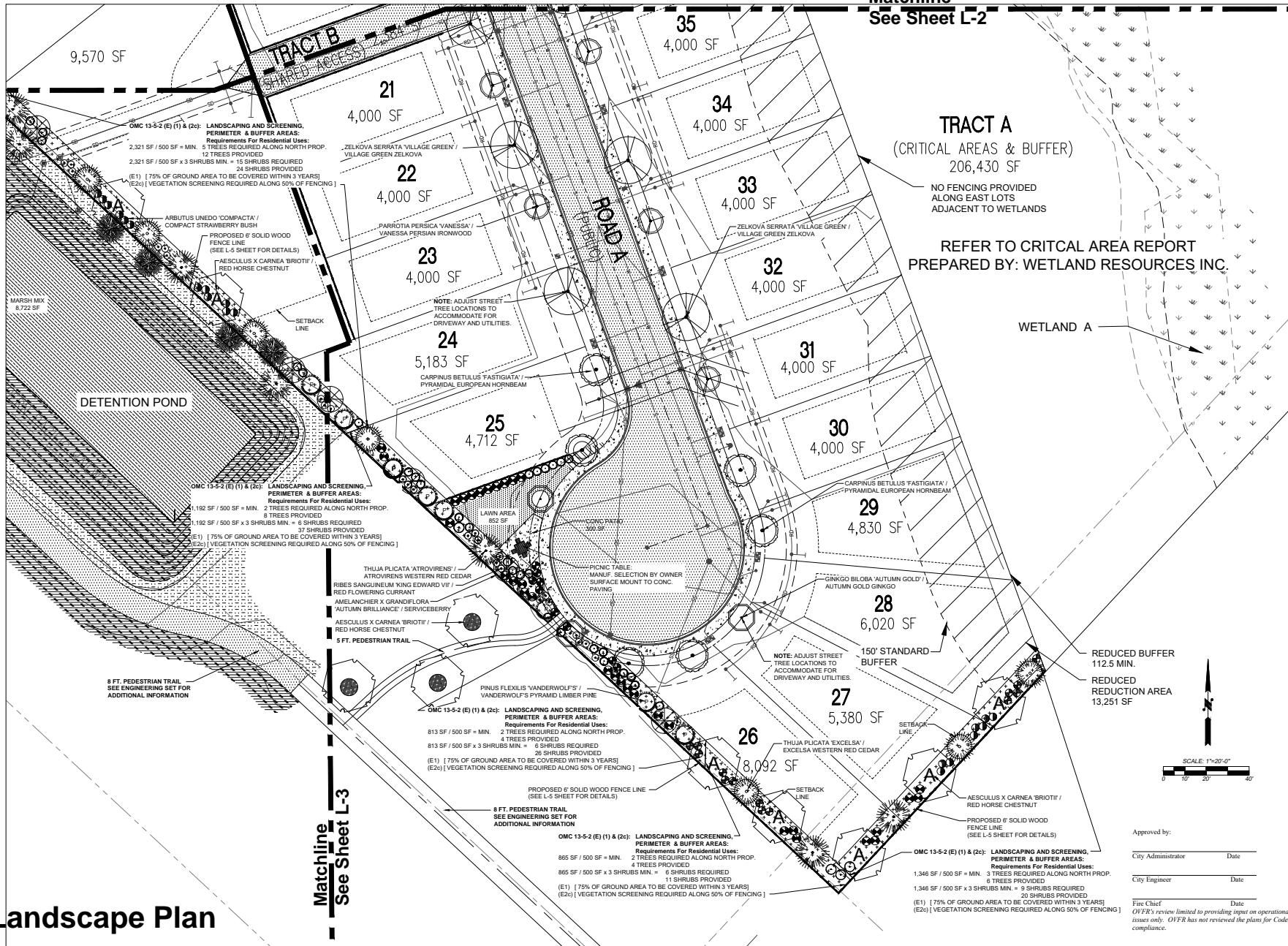
LANDSCAPE PLAN
Rainier Meadows - Div. 2 At Orting
Copper Ridge, LLC.
393 MEADOW LANE SE ORTING, WA 98560

REVISION		
No.	Date	By
1	August 2023	MIK
City Comments		

Scale: 1"=20'-0"	Sheet No.
Drawn: JJB & MIK	L-3
Checked: MFW	of 7 Sheets
Reviewed: KBR	
Date: 12 MAY 2023	
Project: PRELIM PLAT SUBMITTAL #3	

Landscape Plan

Matchline
See Sheet L-2



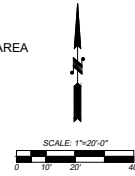
TRACT A
(CRITICAL AREAS & BUFFER)
206,430 SF

NO FENCING PROVIDED
ALONG EAST LOTS
ADJACENT TO WETLANDS

REFER TO CRITICAL AREA REPORT
PREPARED BY: WETLAND RESOURCES, INC.

WETLAND A

REDUCED BUFFER
112.5 MIN.
REDUCED REDUCTION AREA
13,251 SF



Approved by:
City Administrator _____ Date _____
City Engineer _____ Date _____

Fire Chief _____ Date _____
OFFER's review limited to providing input on operational issues only. OFFER has not reviewed the plans for Code compliance.

BRADLEY DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + SITE PLANNING

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4330 N Lexington St
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LANDSCAPE PLAN
Rainier Meadows - Div. 2 At Orting
Copper Ridge, LLC.
393 MEADOW LANE SE ORTING, WA 98560

REVISION	No.	Date	By
1	August 2023	MIK	City Comments

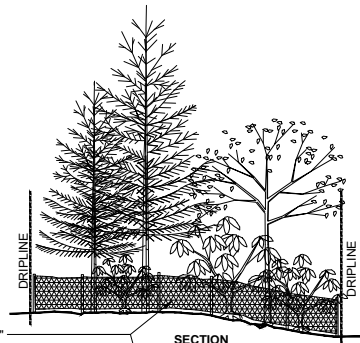
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Sheet No.
JIB & MIK
MFW
KBR
12 MAY 2023
of 7 Sheets
PRELIM PLAT SUBMITTAL #3
2359

Landscape Plan

Matchline
See Sheet L-3

PLANTING DETAILS:

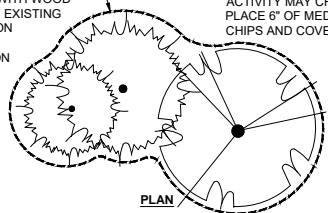
Approved by:
 City Administrator _____ Date _____
 City Engineer _____ Date _____
 Fire Chief _____ Date _____
OFR's review limited to providing input on operational issues only. OFR has not reviewed the plans for Code compliance.



PROVIDE MIN. 4'-0" HIGH PROTECTIVE MESH FENCE AND SUPPORT WITH WOOD POSTS AT DRIPLINE OF EXISTING TREES AND VEGETATION TO BE PROTECTED DURING CONSTRUCTION

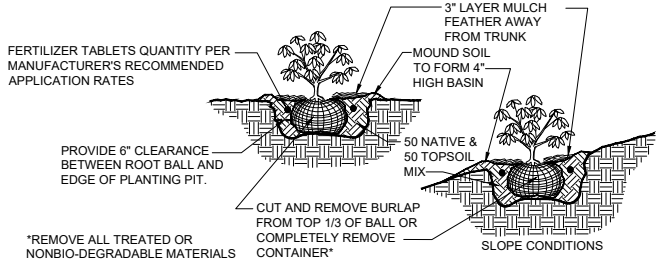
SECTION

IN AREAS WHERE CONSTRUCTION ACTIVITY MAY CROSS INTO DRIPLINE, PLACE 6" OF MEDIUM SIZE WOOD CHIPS AND COVER WITH A METAL PLATE



PLAN

Existing Tree & Vegetation Protection Detail
 (NOT TO SCALE)

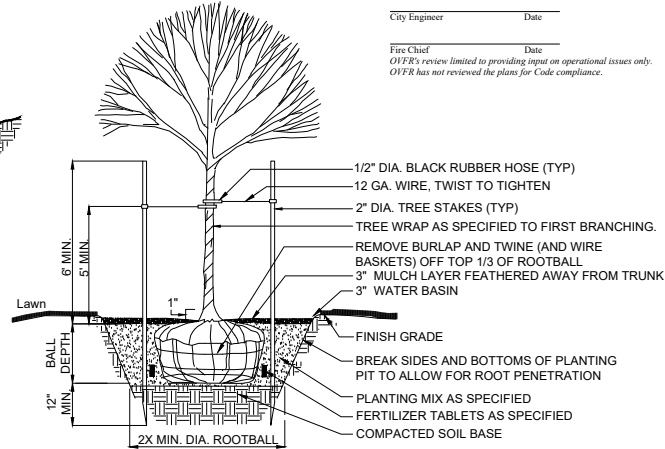


FERTILIZER TABLETS QUANTITY PER MANUFACTURER'S RECOMMENDED APPLICATION RATES

PROVIDE 6" CLEARANCE BETWEEN ROOT BALL AND EDGE OF PLANTING PIT.

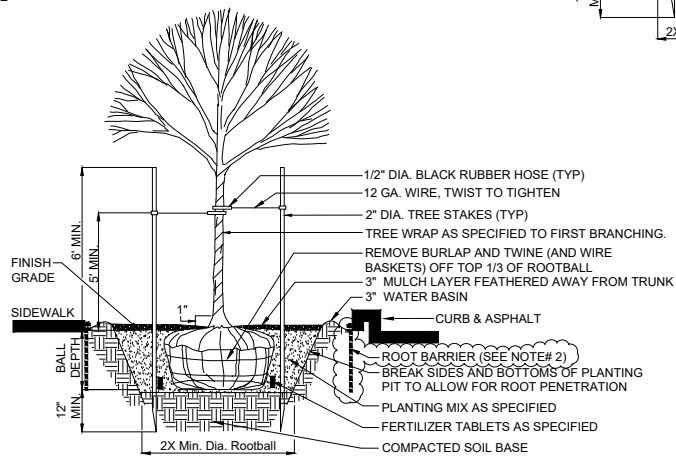
*REMOVE ALL TREATED OR NONBIO-DEGRADABLE MATERIALS

Shrub Planting Detail
 (NOT TO SCALE)



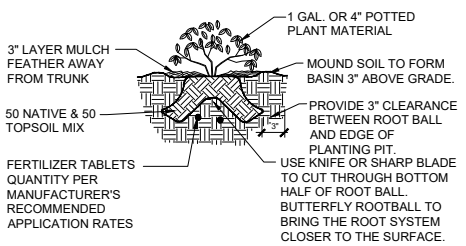
NOTES:
 1. PLANT TREE 1 INCH HIGHER THAN DEPTH GROWN IN NURSERY. TREE PIT SHALL NOT BE LESS THAN (2) TIMES DIAMETER OF ROOTBALL.
 2. ROOTBARRIER SHALL BE 12 IN. DEEP AND 8 L.F. ON EACH SIDE OF ROOTBALL ADJACENT TO CURBS AND PAVED SURFACES.
 3. THERE SHALL BE A MINIMUM ROOTBALL DIAMETER OF 10 IN. PER TRUNK CALIPER INCH AS MEASURED 6 IN. ABOVE ROOTBALL.

Tree in Lawn Planting Detail
 (NOT TO SCALE)

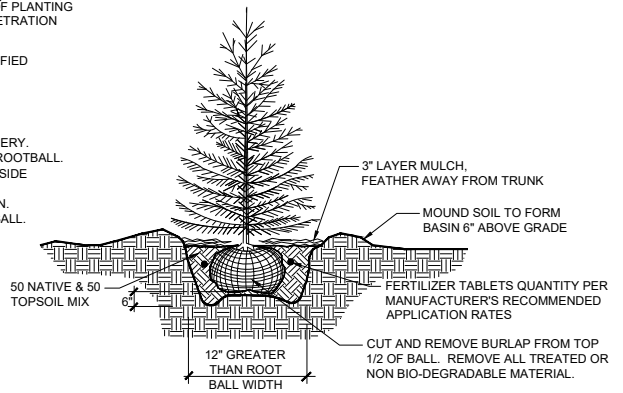
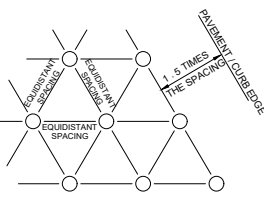


NOTES:
 1. PLANT TREE 1 INCH HIGHER THAN DEPTH GROWN IN NURSERY. TREE PIT SHALL NOT BE LESS THAN (2) TIMES DIAMETER OF ROOTBALL.
 2. ROOT BARRIER SHALL BE 12 IN. DEEP AND 8 L.F. ON EACH SIDE OF ROOTBALL ADJACENT TO CURBS AND PAVED SURFACES.
 3. THERE SHALL BE A MINIMUM ROOTBALL DIAMETER OF 10 IN. PER TRUNK CALIPER INCH AS MEASURED 6 IN. ABOVE ROOTBALL.

Tree w/ Root Barrier Planting Detail
 (NOT TO SCALE)



Groundcover Planting Detail
 (NOT TO SCALE)



Conifer Tree Planting Detail
 (NOT TO SCALE)

BRADLEY DESIGN GROUP, INC.
 LANDSCAPE ARCHITECTURE + SITE PLANNING

mail 4330 N Lexington St
 Tacoma, WA 98407
 location 455B St Helens Ave
 Tacoma, WA 98402
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 F253.276.0132
 www.bradtree.com
 info@bradtree.com



PLANTING NOTES & DETAILS
 Rainier Meadows - Div. 2 At Orting
 Copper Ridge, LLC.
 393 MEADOW LANE SE ORTING, WA 98360

No.	REVISION	Date	By
1	August 2023	MIK	City Comments

As Indicated
 JJB & MIK
 MFV
 KBR
 12 MAY 2023
 PRELIM PLAT SUBMITTAL #3

Sheet No. **L-6**
 of 7 Sheets



Proposed

- 15 Parking Lot Expansion
- 16 Stormwater Facility Modification and Expansion
- 17 Restrooms
- 18 Foothills Trail Realignment
- 19 Pump Track Expansion
- 20 Multi-Purpose Playfield Expansion
- 21 Tennis Courts
- 22 Pickleball Courts
- 23 Parking Lot
- 24 Neighborhood Park

Existing

- 10 Foothills Trail
- 11 Skate Park
- 12 Picnic Shelter
- 13 Open Space



CRITICAL AREA REPORT

FOR

RAINER MEADOWS DIV. 2* *ORTING, WA

Wetland Resources, Inc. Project #22253

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1.0 INTRODUCTION

Wetland Resources, Inc. (WRI) completed a site investigation on October 27, 2022, to verify and evaluate jurisdictional wetlands and streams on and in the vicinity of the subject property located at 303 Meadow Lane SE in the city of Orting, Pierce County, Washington. The 11.63-acre site consists of one Pierce County tax parcel (parcel #: 0519321001) and is further located by the Public Land Survey System as a portion of Section 32, Township 19N, Range 5E, W.M. The intent of this document is to characterize all identified critical areas and buffers on and in the vicinity of the subject property. The property is located within the Lower Carbon River sub-basin of the Puyallup – White watershed (WRIA 10).



Figure 1 Aerial view of the subject site. Not to scale.

1.1 SITE DESCRIPTION

The subject property was previously developed with single family residence, and livestock farming operations. Recently, the site was cleared of all structures. Large, maintained pastures are present on the western half of the property, with sparse forested areas on the eastern half. Past property owners allowed cows and horses to freely graze within the forested portions of the property. Topography of the site is relatively flat with a significant drop in elevation on the eastern portion of the site and undulations throughout.

Land use surrounding the subject property consists of high-density residential development to the north and west. The area to the south consists of maintained agricultural fields and the Foothills Trail which borders the property on its western side. The Carbon River lies off-site to the east, with a levee boarding its left bank.

2.0 PROJECT DESCRIPTION

The applicant proposes to construct a 38-lot residential development on the subject property, with access from the west via Brown Way SE. The development will include residential buildings, access roads, and utilities. To accommodate this proposal, the applicant proposes buffer width averaging pursuant to City Code of Orting (CCO) 11-14-1.3.3.

A total of 13,251 square feet of buffer reductions are required to accommodate the proposed development. As compensatory mitigation, 13,522 square feet of buffer addition area will be created north of Wetland A. Pursuant to CCO 11-14-1.3.3, buffer averaging is only allowed within the outer 25 percent of wetland buffers. The proposed averaging plan meets this standard by reducing buffer areas to no less than 112.5 feet.

3.0 WETLAND DETERMINATION

3.1 STATEMENT OF QUALIFICATIONS

The work for this report was conducted by Jeff Mallahan (Senior Ecologist) at Wetland Resources Inc., a *Qualified Professional* pursuant to CCO 11-1-2.

Wetland Resources, Inc. (WRI) is a full-service, environmental consulting firm located in Everett, Washington. Since 1989, Wetland Resources has established itself as a quality, comprehensive consulting firm that is known for providing honest, timely advice for projects that involve critical areas, fish, and wildlife throughout Washington.

Jeff Mallahan holds a Bachelor of Science degree in Environmental Science (Terrestrial Ecology Focus) from Western Washington University's College of the Environment. Continued education includes an advanced certificate in Wetland Delineation from the Wetland Training Institute, and additional trainings in Forage Fish Survey Techniques, Eelgrass Delineation, and Applied Electrofishing Methods. Additionally, Jeff has completed the Washington State Department of Ecology's "Using the Revised Washington State Wetland Rating System (2014) in Western Washington," "Using the Revised Washington State Wetland Rating System (2014) in Eastern Washington," and "How to Determine the Ordinary High Water Mark" training programs. Jeff has worked as an biologist on projects across the country for over 14 years, including the scientific study of wetlands and streams, environmental restoration and monitoring, endangered species monitoring, as well as salmonid and groundfish population research. He has 8 years of experience as a wetland ecologist, with primary responsibilities including project management, wetland reconnaissance/feasibility, permit coordination, delineation, construction supervision, mitigation

planning, wetland creation and construction design, ecological and aquatic resource monitoring, wildlife analysis, and technical report writing.

4.0 REVIEW OF EXISTING INFORMATION

Prior to conducting the on-site investigation, public resource information was reviewed to identify the presence of wetlands, streams, and other critical areas within and near the project area. These sources include: USDA/NRCS Web Soil Survey; the USFWS National Wetlands Inventory (NWI); WDFW Priority Habitat and Species (PHS) Interactive Map; WDFW SalmonScape Interactive Mapping System; StreamNet Online Mapping Application; and Pierce County PublicGIS Interactive Map.

- *USDA Natural Resources Conservation Service (NRCS) Web Soil Survey:* The Web Soil Survey identifies on-site soils as Aquic Xerofluvents and Orting Loam. Aquic Xerofluvents is a hydric soil.
- *Pierce County PublicGIS:* The Pierce County PublicGIS depicts a large wetland complex in on the eastern boundary of the site associated with the Carbon River. There are no features depicted on-site.
- *US Fish and Wildlife Service National Wetlands Inventory (NWI):* The National Wetland Inventory (NWI) maps a large wetland complex throughout the eastern portion of the site and extending away from the site to the north and south along the river.
- *WDFW Priority Habitats and Species Maps:* The PHS maps depicts one wetland complex on the eastern portion of the property, this wetland complex is associated with the Carbon River adjacent to the site. The greater extent of the area is mapped as priority habitat for little brown bat (*Myotis lucifugus*). The nearest feature depicted is the Carbon River to the east, which is identified as property habitat for Chum, Pink, Cutthroat, steelhead, Coho, Bull trout and chinook.
- *SalmonScape:* The SalmonScape interactive map does not depict any features are on subject property. The Carbon River immediately east of the subject site is documented for presence of Pink, Steelhead, Coho, Chinook, Dolly Varden/Bull trout, Chum and Cutthroat.
- *StreamNet Online Mapping Application:* No features are depicted on the subject property by this resource. The Carbon River immediately to the east is identified to have Chinook and Steelhead.

5.0 WETLAND DETERMINATION

5.1.1 Cowardin System Classifications

According to the Cowardin System, as described in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin 1979), the classifications for the on-site wetlands and streams are as follows:

Wetland A: Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded

Wetland B: Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded

5.1.2 City of Orting Classifications

Pursuant to CCO 11-3-2; Wetlands shall be rated (classified) as either category I, category II, category III, or category IV according to the criteria found in the "Washington State Wetland Rating System For Western Washington" (ecology publication #14-06-029, or as revised). Buffer widths have been determined according to CCO 11-4-1.C.1. Wetland buffer widths vary depending upon the land use, and wetland conditions. The classification and buffer width for the on-site wetlands are as follows:

Wetland A - Category III: Wetland A is hydrogeomorphically classified as a Depressional wetland. Wetland A received a total score for functions of 17 with a habitat score of 6 on the Wetland Rating System for Western Washington: 2014 Update, (Hruby, T., October 2014, or latest edition, Department of Ecology Publication #14-06-029). Wetlands with scores ranging from 16 to 19 points for all functions are classified as Category III wetlands. In the City of Orting, Category III wetlands with moderate habitat scores (5-7 points) adjacent to high intensity land use (as defined in OCC) typically receive 150-foot buffers from their delineated edges, pursuant to CCO 11-4-1.C.1.

Wetland B - Category II: Wetland B is hydrogeomorphically classified as a Depressional wetland. Wetland B received a total score for functions of 20 with a habitat score of 7 on the Wetland Rating System for Western Washington: 2014 Update, (Hruby, T., October 2014, or latest edition, Department of Ecology Publication #14-06-029). Wetlands with scores ranging from 20 to 22 points for all functions are classified as Category II wetlands. In the City of Orting, Category II wetlands with moderate habitat scores (5-7 points) adjacent to high intensity land use (as defined in OCC) typically receive 150-foot buffers from their delineated edges, pursuant to CCO 11-4-1.C.1.

5.2 WETLAND & STREAM DETERMINATION METHODOLOGY

Wetland Resources' staff conducted a site visit on October 27, 2022 to locate wetlands and streams occurring within and near the project site.

The ordinary high-water mark (OHWM) of streams and waterbodies when present were identified using the methodology described in the Washington State Department of Ecology document *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Anderson et al. 2016). The entire left bank of the Carbon River adjacent to the subject property is contained by a levee. Therefore, the OHWM of the Carbon River adjacent to the subject property (off-site) was identified as the eastern edge of the levee.

Wetland conditions were evaluated using routine methodology described in the *Corps of Engineers Wetlands Delineation Manual (Final Report; January 1987)*, except where superseded by the *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0, referred to as 2010 Regional Supplement)*. Our findings are consistent with these manuals. The following criteria descriptions were used in the boundary determination:

- 1.) Examination of the site for hydrophytic vegetation (species present and percent cover);
- 2.) Examination of the site for hydric soils;
- 3.) Determining the presence of wetland hydrology

5.2.1 Hydrophytic Vegetation Criteria

The manuals define hydrophytic vegetation as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present. One of the most common indicators for hydrophytic vegetation is when more than 50 percent of a plant community consists of species rated “Facultative” and wetter on lists of plant species that occur in wetlands.

5.2.2 Soils Criteria and Mapped Description

The manuals define hydric soils as those that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Field indicators are used for determining whether a given soil meets the definition for hydric soils.

5.2.3 Hydrology Criteria

The 2010 Regional Supplement defines wetland hydrology as “areas that are inundated (flooded or ponded) or the water table is less than or equal to 12 inches below the soil surface for 14 or more consecutive days during the growing season at a minimum frequency of 5 years in 10.” During the early growing season, wetland hydrology determinations are made based on physical observation of surface water, a high water table, or saturation in the upper 12 inches. Outside of the early growing season, wetland hydrology determinations are made based on physical evidence of recent inundation or saturation (i.e. water marks, surface soil cracks, water-stained leaves).

5.3 BOUNDARY DETERMINATION & CLASSIFICATION FINDINGS

5.3.1 Wetland A

Hydrogeomorphic Classification: Depressional

Department of Ecology Rating: Category III (6 habitat points)

City of Orting Standard Buffer Width (high land use intensity): 150-feet



Wetland A is a large depressional wetland that is located on the southeastern portion of the property and continues off-site to the southeast. Vegetation within Wetland A is primarily dominated by red alder (*Alnus rubra*; FAC), cottonwood (*Populus balsamifera*; FAC), Himalayan blackberry (*Rubus armeniacus*; FAC), field horsetail (*Equisetum arvense*; FAC), common lady fern (*Athyrium filix-femina*; FAC), piggy-back plant (*Tolmiea menziesii*; FAC), slough sedge (*Carex obnupta*; OBL), reed canary grass (*Phalaris arundinacea*; FACW), and soft rush (*Juncus effusus*; FACW).

Soils within this wetland are generally a very dark brown (10YR 2/2) silt loam from 0 to at least 18 inches, with brown (7.5YR 4/4) redoximorphic concentrations present in the matrix. At the time of the November 2022 site investigation, there was saturation within 10 inches of the surface, and some shallow surface water. Given these findings, soils meet the indicator for redox dark surface (F6). Hydrologic findings meet the indicators for surface water (A1), saturation (A3), and geomorphic position (D2).

5.3.2 Wetland B

Hydrogeomorphic Classification: Depressional

Department of Ecology Rating: Category II (7 habitat points)

City of Orting Standard Buffer Width (high land use intensity): 150-feet



Wetland B is a small depressional wetland that is located on the eastern portion of the property and continues off-site to the north. Vegetation within Wetland B is primarily dominated by red alder (*Alnus rubra*; FAC), cottonwood (*Populus balsamifera*; FAC), Himalayan blackberry (*Rubus armeniacus*; FAC), field horsetail (*equisetum arvense*; FAC), common lady fern (*Athyrium filix-femina*; FAC), slough sedge (*Carex obnupta*; OBL), reed canary grass (*Phalaris arundinacea*; FACW), and soft rush (*Juncus effusus*; FACW).

Soils within this wetland are generally a very dark brown (10YR 2/2) silt loam from 0 to 7 inches, with brown (7.5YR 4/4) redoximorphic concentrations present in the matrix. Cobble refusal was observed at 7 inches. At the time of the November 2022 site investigation, there was saturation at the surface, and some shallow surface water. Given these findings, soils meet the indicator for redox dark surface (F6). Hydrologic findings meet the indicators for surface water (A1), saturation (A3), and geomorphic position (D2).

5.3.3 Non-wetland Area

Within the non-wetland areas, vegetation includes: big-leaf maple (*Acer macrophyllum*; FACU), Douglas fir (*Pseudotsuga menziesii*; FACU), Western red cedar (*Thuja plicata*; FAC), cascara (*Frangula purshiana*; FAC), red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), beaked hazelnut (*Corylus cornuta*; FACU), vine maple (*Acer circinatum*; FAC), osoberry (*Oemleria cerasiformis*; FACU), Himalayan blackberry (*Rubus armeniacus*; FAC), sword fern (*Polystichum munitum*; FACU), bracken fern (*Pteridium aquilinum*; FACU), and various pasture grasses and herbs.



Soils within non-wetland areas are generally very dark grayish brown (10YR 3/2) sandy loam in the top layer. The sublayer extends to a depth of approximately 18 inches and is a dark brown (10YR 3/3) sandy loam. Soils deeper than 8 inches are generally dark yellowish brown (10YR 3/4) sandy loam. Redoximorphic features were not present in the non-wetland areas. Non-wetland soils did not meet any hydric soil indicators and were generally dry. Soils sampled in the areas mapped as non-wetland do not appear to be flooded, ponded, or saturated long enough during the growing season to develop anaerobic conditions in the upper part, and therefore do not appear to meet wetland soils criteria. As direct hydrologic indicators are lacking, and neither hydric soils nor hydrophytic vegetation are present in these areas, it appears that the areas mapped as non-wetland do not meet criteria for wetlands.

6.0 WILDLIFE

Wetlands and their associated buffers contain resources for wildlife such as food, water, thermal cover, and refuge in close proximity. Given the habitat available, the following mammalian species may use the area: bats (*Myotis spp.*), Roosevelt elk (*Cervus canadensis roosevelti*), Columbian black-tailed deer (*Odocoileus hemionus columbianus*), coyotes (*Canis latrans*), deer mice (*Peromyscus maniculatus*), eastern cottontail rabbits (*Sylvilagus floridanus*), moles (*Scapanus spp.*), raccoons (*Procyon lotor*), shrews (*Sorex spp.*), skunks (*Mephitis spp.*), squirrels (*Sciurus griseus*, *Tamiasciurus douglasii*), and Virginia opossums (*Didelphis virginiana*). The following avian species are expected to use the area: American Crow (*Corvus brachyrhynchos*), Stellar's Jay (*Cyanocitta stelleri*), Black-capped Chickadee (*Poecile atricapillus*), Dark-eyed Junco (*Junco hyemalis*), Spotted Towhee (*Pipilo maculatus*), Bushtit (*Psaltriparus minimus*), Northern Flicker (*Colaptes auratus*), Hairy Woodpecker (*Picoides villosus*), Downy Woodpecker (*Dendrocopus villosus*), Red-breasted Nuthatch (*Sitta canadensis*), Brown Creeper (*Certhia americana*), Varied Thrush (*Ixoreus naevius*), and Red-tailed Hawk (*Buteo jamaicensis*). Other wildlife expected to use this site include: northwestern salamander (*Ambystoma gracile*) and rough-skinned newt (*Taricha granulosa*). These lists are not meant to be all-inclusive and may omit species that currently utilize or could utilize the site.

6.1 SHORELINE OF THE STATE REGULATIONS

The subject property is adjacent to the Carbon River which is identified as a shoreline of the state to Type S. Shorelines of the State within city limits are subject to regulations in place by the city of Orting Master Shoreline Program. The shoreline jurisdiction of the Carbon River extends 200 feet from the ordinary high-water mark, 200 feet from floodways and all wetlands and river delta with associated streams, lakes, and tidal water. The shoreline designation for the portion of river adjacent to the subject site is Urban Conservancy. Per the city of Orting Code 11-4-6(B) all development adjacent to the carbon river shall retain a 150-foot buffer of native vegetation measured from the ordinary high-water mark.

6.2 SPECIAL FLOOD HAZARD AREAS

FEMA identifies the 100-year floodplain (Floodway Fringe) of the Carbon River as not within the proposed development area. The proposed development is approximately an average of 70 feet west of the floodplain.

The development proposal does not impact any portion of this floodway fringe, as such a flood hazard permit is not required.

7.0 BUFFER IMPACTS AND MITIGATION PLAN

7.1 WETLAND BUFFER WIDTH AVERAGING PLAN

Buffer width averaging is proposed in the buffer of the on-site Wetland A. Criteria for the utilization of buffer width averaging is set forth in CCO 11-4-1.3.3. Text from the municipal code is below in italics with applicant responses following in standard text.

3. Buffer averaging: The city administrator may allow modification of the standard wetland buffer width in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified wetlands professional demonstrates that :

a. It will not reduce wetland functions or values;

No impacts are proposed to Wetlands A and B as a result of this project. Wetland functions and values will be maintained through buffer averaging.

b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

The functions provided by the on-site wetland and buffer areas will be increased through the buffer width averaging plan. Buffer reduction areas are generally maintained pasture, with low structural and species diversity, while buffer additional areas consist of intact native forest with moderate to dense understory and high species diversity. By reducing low function buffer areas and increasing areas of multi-strata forested area, the values provided to water quality, habitat, erosion protection, and hydrologic flow reduction are increased over time. Buffer areas are heavily dependent on the condition of vegetation in the buffer. Dense vegetation reduces hydrologic flow within the buffer and filters pollutants from the water column. The reduced flow rates in conjunction with dense, deep root structures prevent erosion within on-site slopes. Additionally, dense vegetation provides opportunities such as hiding, foraging, and nesting to wildlife that utilize the site. Overall, the functionality of the on-site buffer areas will be increased. Additionally, the new buffer areas will provide a connected corridor between wetlands and A and B, thereby adding further protection to critical areas on-site.

c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

The proposed buffer reduction area is 13,251 square feet. The proposed buffer addition area is 13,522 square feet, which represent a greater than 1:1 reduction to addition area. Therefore, the requirements of this section are met.

d. *The buffer width is not reduced to less than seventy five percent (75%) of the standard width.*

Buffer width averaging is proposed within the outer 25 percent of the buffer associated with Wetland A. At no point are the buffers of Wetland A reduced to less than 75 percent of the standard buffer width (112.5 feet). No impacts within the inner 75 % will occur.

8.0 USE OF THIS REPORT

This Critical Area Report is supplied to SoundBuilt Homes as a means of determining on-site wetland conditions and mitigating for critical area impacts, as required by the City of Orting during the permitting process. This report is based largely on readily observable conditions and, to a lesser extent, on readily ascertainable conditions.

No attempt has been made to determine hidden or concealed conditions. The laws applicable to wetlands are subject to varying interpretations and may be changed at any time by the courts or legislative bodies. This report is intended to provide information deemed relevant in the applicant's attempt to comply with the laws now in effect.

The work for this report has conformed to the standard of care employed by wetland ecologists. No other representation or warranty is made concerning the work or this report, and any implied representation or warranty is disclaimed.

Wetland Resources, Inc.

A handwritten signature in black ink, appearing to read "Jeff Mallahan". The signature is fluid and cursive, with a large initial "J" and "M".

Jeff Mallahan
Senior Wetland Ecologist

9.0 REFERENCES

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APPENDIX A

ARMY CORPS OF ENGINEERS WETLAND DETERMINATION DATA
FORMS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rainier Meadows Ph2 City/County: Orting Sampling Date: 10/27/22
 Applicant/Owner: Soundbuilt Homes State: WA Sampling Point: S1
 Investigator(s): J. Mallahan Section, Township, Range: S32, T19N, R05E, W.M.
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): LRR-A Lat: 47° 5'31.67"N Long: 122° 11'33.40"W Datum: WGS84
 Soil Map Unit Name: Aquic Xerofluvents NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30-FT</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15-FT</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Herb Stratum (Plot size: <u>5-FT</u>)				
1. <u>Phalaris arundinacea</u>	<u>65</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Juncus effusus</u>	<u>35</u>	<u>Y</u>	<u>FACW</u>	
3. <u>Carex obnupta</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>120</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>5-FT</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤3.0¹

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

SOIL

Sampling Point: S1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-18	10YR 2/2	95	7.5YR 4/4	5	CS	M	SiLo	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

2 cm Muck (A10)
 Red Parent Material (TF2)
 Very Shallow Dark Surface (TF12)
 Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 1	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): surface	
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): surface	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rainier Meadows Ph2 City/County: Orting Sampling Date: 10/27/22
 Applicant/Owner: Soundbuilt Homes State: WA Sampling Point: S2
 Investigator(s): J. Mallahan Section, Township, Range: S32, T19N, R05E, W.M.
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): LRR-A Lat: 47° 5'33.18"N Long: 122° 11'31.27"W Datum: WGS84
 Soil Map Unit Name: Aquic Xerofluvents NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30-FT</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15-FT</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Herb Stratum (Plot size: <u>5-FT</u>)				
1. <u>Juncus effusus</u>	<u>75</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Phalaris arundinacea</u>	<u>15</u>	<u>N</u>	<u>FACW</u>	
3. <u>Carex obnupta</u>	<u>15</u>	<u>N</u>	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>105</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>5-FT</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤3.0¹

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

SOIL

Sampling Point: S2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-7	10YR 2/2	93	7.5YR 4/4	7	CS	M	SiLo	Cobble refusal at 7"

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

2 cm Muck (A10)
 Red Parent Material (TF2)
 Very Shallow Dark Surface (TF12)
 Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>1</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>surface</u>	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rainier Meadows Ph2 City/County: Orting Sampling Date: 10/27/22
 Applicant/Owner: Soundbuilt Homes State: WA Sampling Point: S3
 Investigator(s): J. Mallahan Section, Township, Range: S32, T19N, R05E, W.M.
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 10
 Subregion (LRR): LRR-A Lat: 47° 5'31.19"N Long: 122° 11'34.54"W Datum: WGS84
 Soil Map Unit Name: Aquic Xerofluvents NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: 30-FT)					
1. <u>Alnus rubra</u>		75	Y	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
2. _____					
3. _____					
4. _____					
		75	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15-FT)					
1. <u>Rubus armeniacus</u>		55	Y	FAC	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = _____
2. _____					
3. _____					
4. _____					
5. _____		55	= Total Cover		
Herb Stratum (Plot size: 5-FT)					
1. <u>Conium maculatum</u>		25	Y	FAC	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Lapsana communis</u>		15	Y	FACU	
3. <u>Urtica dioica</u>		15	Y	FAC	
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____		55	= Total Cover		
Woody Vine Stratum (Plot size: 5-FT)					
1. _____					Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____					
		45	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>					
Remarks:					

SOIL

Sampling Point: S3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-4	10YR 3/2						SaLo	Dry
4-18	10YR 3/3						SaLo	Dry

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Histosol (A1)</td> <td><input type="checkbox"/> Sandy Redox (S5)</td> </tr> <tr> <td><input type="checkbox"/> Histic Epipedon (A2)</td> <td><input type="checkbox"/> Stripped Matrix (S6)</td> </tr> <tr> <td><input type="checkbox"/> Black Histic (A3)</td> <td><input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</td> </tr> <tr> <td><input type="checkbox"/> Hydrogen Sulfide (A4)</td> <td><input type="checkbox"/> Loamy Gleyed Matrix (F2)</td> </tr> <tr> <td><input type="checkbox"/> Depleted Below Dark Surface (A11)</td> <td><input type="checkbox"/> Depleted Matrix (F3)</td> </tr> <tr> <td><input type="checkbox"/> Thick Dark Surface (A12)</td> <td><input type="checkbox"/> Redox Dark Surface (F6)</td> </tr> <tr> <td><input type="checkbox"/> Sandy Mucky Mineral (S1)</td> <td><input type="checkbox"/> Depleted Dark Surface (F7)</td> </tr> <tr> <td><input type="checkbox"/> Sandy Gleyed Matrix (S4)</td> <td><input type="checkbox"/> Redox Depressions (F8)</td> </tr> </table>	<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	<p>Indicators for Problematic Hydric Soils³:</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> 2 cm Muck (A10)</td> </tr> <tr> <td><input type="checkbox"/> Red Parent Material (TF2)</td> </tr> <tr> <td><input type="checkbox"/> Very Shallow Dark Surface (TF12)</td> </tr> <tr> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> </table> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>	<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Red Parent Material (TF2)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)																				
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<input type="checkbox"/> Very Shallow Dark Surface (TF12)																					
<input type="checkbox"/> Other (Explain in Remarks)																					

<p>Restrictive Layer (if present):</p> Type: _____ Depth (inches): _____	<p>Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:																																
<p>Primary Indicators (minimum of one required; check all that apply)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Salt Crust (B11)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Aquatic Invertebrates (B13)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</td> </tr> <tr> <td><input type="checkbox"/> Surface Soil Cracks (B6)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td> <td></td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<p>Secondary Indicators (2 or more required)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</td> </tr> <tr> <td><input type="checkbox"/> Drainage Patterns (B10)</td> </tr> <tr> <td><input type="checkbox"/> Dry-Season Water Table (C2)</td> </tr> <tr> <td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td> </tr> <tr> <td><input type="checkbox"/> Geomorphic Position (D2)</td> </tr> <tr> <td><input type="checkbox"/> Shallow Aquitard (D3)</td> </tr> <tr> <td><input type="checkbox"/> FAC-Neutral Test (D5)</td> </tr> <tr> <td><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</td> </tr> <tr> <td><input type="checkbox"/> Frost-Heave Hummocks (D7)</td> </tr> </table>	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____																																
Remarks: _____																																

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Rainier Meadows Ph2 City/County: Orting Sampling Date: 10/27/22
 Applicant/Owner: Soundbuilt Homes State: WA Sampling Point: S4
 Investigator(s): J. Mallahan Section, Township, Range: S32, T19N, R05E, W.M.
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): LRR-A Lat: 47° 5'33.54"N Long: 122° 11'32.68"W Datum: WGS84
 Soil Map Unit Name: Aquic Xerofluvents NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u>	<u>(Plot size: 30-FT)</u>				
1. <u>Alnus rubra</u>		<u>95</u>	<u>Y</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. <u>Crataegus laevigata</u>		<u>15</u>	<u>N</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
4. _____					
		<u>100</u>	= Total Cover		
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: 15-FT)</u>				
1. <u>Rubus armeniacus</u>		<u>15</u>	<u>Y</u>	<u>FAC</u>	Prevalence Index worksheet:
2. _____					Total % Cover of: _____ Multiply by:
3. _____					OBL species _____ x 1 = <u>0</u>
4. _____					FACW species _____ x 2 = <u>0</u>
5. _____					FAC species _____ x 3 = <u>0</u>
		<u>15</u>	= Total Cover		FACU species _____ x 4 = <u>0</u>
<u>Herb Stratum</u>	<u>(Plot size: 5-FT)</u>				UPL species _____ x 5 = <u>0</u>
1. <u>Lapsana communis</u>		<u>25</u>	<u>Y</u>	<u>FACU</u>	Column Totals: <u>0</u> (A) <u>0</u> (B)
2. <u>Urtica dioica</u>		<u>25</u>	<u>Y</u>	<u>FAC</u>	Prevalence Index = B/A = _____
3. <u>Poa spp.</u>		<u>20</u>	<u>Y</u>	<u>FAC</u>	
4. _____					Hydrophytic Vegetation Indicators:
5. _____					<input type="checkbox"/> Rapid Test for Hydrophytic Vegetation
6. _____					<input checked="" type="checkbox"/> Dominance Test is >50%
7. _____					<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
8. _____					<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9. _____					<input type="checkbox"/> Wetland Non-Vascular Plants ¹
10. _____					<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
11. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		<u>70</u>	= Total Cover		
<u>Woody Vine Stratum</u>	<u>(Plot size: 5-FT)</u>				
1. _____					Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____					
		<u>45</u>	= Total Cover		
<u>% Bare Ground in Herb Stratum</u>	<u>0</u>				
Remarks:					

SOIL

Sampling Point: S4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-6	10YR 3/2						SaLo	Dry
6-18	10YR 3/3						SaLo	Dry

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Histosol (A1)</td> <td><input type="checkbox"/> Sandy Redox (S5)</td> </tr> <tr> <td><input type="checkbox"/> Histic Epipedon (A2)</td> <td><input type="checkbox"/> Stripped Matrix (S6)</td> </tr> <tr> <td><input type="checkbox"/> Black Histic (A3)</td> <td><input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</td> </tr> <tr> <td><input type="checkbox"/> Hydrogen Sulfide (A4)</td> <td><input type="checkbox"/> Loamy Gleyed Matrix (F2)</td> </tr> <tr> <td><input type="checkbox"/> Depleted Below Dark Surface (A11)</td> <td><input type="checkbox"/> Depleted Matrix (F3)</td> </tr> <tr> <td><input type="checkbox"/> Thick Dark Surface (A12)</td> <td><input type="checkbox"/> Redox Dark Surface (F6)</td> </tr> <tr> <td><input type="checkbox"/> Sandy Mucky Mineral (S1)</td> <td><input type="checkbox"/> Depleted Dark Surface (F7)</td> </tr> <tr> <td><input type="checkbox"/> Sandy Gleyed Matrix (S4)</td> <td><input type="checkbox"/> Redox Depressions (F8)</td> </tr> </table>	<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	<p>Indicators for Problematic Hydric Soils³:</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> 2 cm Muck (A10)</td> </tr> <tr> <td><input type="checkbox"/> Red Parent Material (TF2)</td> </tr> <tr> <td><input type="checkbox"/> Very Shallow Dark Surface (TF12)</td> </tr> <tr> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> </table> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>	<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Red Parent Material (TF2)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	<input type="checkbox"/> Other (Explain in Remarks)
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<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:																															
<p>Primary Indicators (minimum of one required; check all that apply)</p> <table style="width:100%;"> <tr><td><input type="checkbox"/> Surface Water (A1)</td></tr> <tr><td><input type="checkbox"/> High Water Table (A2)</td></tr> <tr><td><input type="checkbox"/> Saturation (A3)</td></tr> <tr><td><input type="checkbox"/> Water Marks (B1)</td></tr> <tr><td><input type="checkbox"/> Sediment Deposits (B2)</td></tr> <tr><td><input type="checkbox"/> Drift Deposits (B3)</td></tr> <tr><td><input type="checkbox"/> Algal Mat or Crust (B4)</td></tr> <tr><td><input type="checkbox"/> Iron Deposits (B5)</td></tr> <tr><td><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td></tr> <tr><td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td></tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Secondary Indicators (2 or more required)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</td> </tr> <tr> <td><input type="checkbox"/> Salt Crust (B11)</td> <td><input type="checkbox"/> Drainage Patterns (B10)</td> </tr> <tr> <td><input type="checkbox"/> Aquatic Invertebrates (B13)</td> <td><input type="checkbox"/> Dry-Season Water Table (C2)</td> </tr> <tr> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> <td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td> </tr> <tr> <td><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</td> <td><input type="checkbox"/> Geomorphic Position (D2)</td> </tr> <tr> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> <td><input type="checkbox"/> Shallow Aquitard (D3)</td> </tr> <tr> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> <td><input type="checkbox"/> FAC-Neutral Test (D5)</td> </tr> <tr> <td><input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</td> <td><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</td> </tr> <tr> <td><input type="checkbox"/> Other (Explain in Remarks)</td> <td><input type="checkbox"/> Frost-Heave Hummocks (D7)</td> </tr> </table>	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
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<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>		<p>Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>																													
<p>Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:</p>																															
<p>Remarks:</p>																															

APPENDIX B

ECOLOGY WETLAND RATING FORMS & FIGURES

Wetland name or number A

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland A Date of site visit: 10/27/2022
 Rated by JM Trained by Ecology? Yes No Date of training 3/2015
 HGM Class used for rating DEPRESSIONAL Wetland has multiple HGM classes? Y N

NOTE: Form is not complete without the figures requested (*figures can be combined*).
 Source of base aerial photo/map Pierce County GIS

OVERALL WETLAND CATEGORY III (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

- Category I** – Total score = 23 - 27
- Category II** – Total score = 20 - 22
- Category III** – Total score = 16 - 19
- Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
Circle the appropriate ratings				
Site Potential	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	
Landscape Potential	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	
Value	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	<input checked="" type="checkbox"/> M L	TOTAL
Score Based on Ratings	6	5	6	17

Score for each function based on three ratings
(order of ratings is not important)

- 9 = H,H,H
- 8 = H,H,M
- 7 = H,H,L
- 7 = H,M,M
- 6 = H,M,L
- 6 = M,M,M
- 5 = H,L,L
- 5 = M,M,L
- 4 = M,L,L
- 3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	<input checked="" type="checkbox"/>

Wetland name or number A

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	1
Hydroperiods	D 1.4, H 1.2	1
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	1
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 5.2	1
Map of the contributing basin	D 4.3, D 5.3	2
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	4

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number A

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

- 1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – **Saltwater Tidal Fringe (Estuarine)**

YES – **Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3

YES – The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

_The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

_At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

YES – The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

_The wetland is on a slope (*slope can be very gradual*),

_The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

_The water leaves the wetland **without being impounded**.

NO – go to 5

YES – The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

_The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

_The overbank flooding occurs at least once every 2 years.

Wetland name or number A

NO – go to 6

YES – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7

YES – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. **GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide).** Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated		HGM class to use in rating
Slope + Riverine	<input type="checkbox"/>	Riverine
Slope + Depressional	<input checked="" type="checkbox"/>	Depressional
Slope + Lake Fringe	<input type="checkbox"/>	Lake Fringe
Depressional + Riverine along stream within boundary of depression	<input type="checkbox"/>	Depressional
Depressional + Lake Fringe	<input type="checkbox"/>	Depressional
Riverine + Lake Fringe	<input type="checkbox"/>	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	<input type="checkbox"/>	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number A

DEPRESSIONAL AND FLATS WETLANDS		
Water Quality Functions - Indicators that the site functions to improve water quality		
D 1.0. Does the site have the potential to improve water quality?		
D 1.1. Characteristics of surface water outflows from the wetland: <input type="checkbox"/> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3 <input checked="" type="checkbox"/> Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 <input type="checkbox"/> Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 <input type="checkbox"/> Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1		2
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0		0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): <input type="checkbox"/> Wetland has persistent, ungrazed, plants > 95% of area points = 5 <input checked="" type="checkbox"/> Wetland has persistent, ungrazed, plants > ½ of area points = 3 <input type="checkbox"/> Wetland has persistent, ungrazed plants > 1/10 of area points = 1 <input type="checkbox"/> Wetland has persistent, ungrazed plants < 1/10 of area points = 0		3
D 1.4. Characteristics of seasonal ponding or inundation: <i>This is the area that is ponded for at least 2 months. See description in manual.</i> <input type="checkbox"/> Area seasonally ponded is > ½ total area of wetland points = 4 <input checked="" type="checkbox"/> Area seasonally ponded is > ¼ total area of wetland points = 2 <input type="checkbox"/> Area seasonally ponded is < ¼ total area of wetland points = 0		2
Total for D 1		7

Rating of Site Potential If score is: 12-16 = H 6-11 = M 0-5 = L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0		0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0		1
D 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No = 0		0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source _____ Yes = 1 No = 0		0
Total for D 2		1

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0		0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes = 1 No = 0		1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)? Yes = 2 No = 0		0
Total for D 3		1

Rating of Value If score is: 2-4 = H 1 = M 0 = L Record the rating on the first page

Wetland name or number A**DEPRESSIONAL AND FLATS WETLANDS****Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation**

D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. Characteristics of surface water outflows from the wetland:		
<input type="checkbox"/> Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	2
<input checked="" type="checkbox"/> Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
<input type="checkbox"/> Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
<input type="checkbox"/> Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
<input type="checkbox"/> Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
<input type="checkbox"/> Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet	points = 5	
<input type="checkbox"/> Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet	points = 3	
<input type="checkbox"/> The wetland is a "headwater" wetland	points = 3	
<input type="checkbox"/> Wetland is flat but has small depressions on the surface that trap water	points = 1	
<input checked="" type="checkbox"/> Marks of ponding less than 0.5 ft (6 in)	points = 0	
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.		
<input type="checkbox"/> The area of the basin is less than 10 times the area of the unit	points = 5	3
<input checked="" type="checkbox"/> The area of the basin is 10 to 100 times the area of the unit	points = 3	
<input type="checkbox"/> The area of the basin is more than 100 times the area of the unit	points = 0	
<input type="checkbox"/> Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	5

Rating of Site Potential If score is: 12-16 = H 6-11 = M 0-5 = L

Record the rating on the first page

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?		
D 5.1. Does the wetland receive stormwater discharges?	Yes = 1 <input type="checkbox"/> No = <input type="text" value="0"/>	0
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff?	Yes = 1 <input type="checkbox"/> No = <input type="text" value="0"/>	0
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	<input type="checkbox"/> Yes = <input type="text" value="1"/> No = 0	1
Total for D 5	Add the points in the boxes above	1

Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L

Record the rating on the first page

D 6.0. Are the hydrologic functions provided by the site valuable to society?		
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):		
<input type="checkbox"/> • Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	1
<input checked="" type="checkbox"/> • Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
<input type="checkbox"/> Flooding from groundwater is an issue in the sub-basin.	points = 1	
<input type="checkbox"/> The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why _____	points = 0	
<input type="checkbox"/> There are no problems with flooding downstream of the wetland.	points = 0	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?		
	Yes = 2 <input type="checkbox"/> No = <input type="text" value="0"/>	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number A

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- Aquatic bed 4 structures or more: points = 4
 - Emergent **3 structures: points = 2**
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

2

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated **2 types present: points = 1**
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

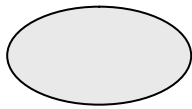
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted:
- > 19 species points = 2
 - 5 - 19 species** **points = 1**
 - < 5 species points = 0

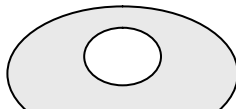
1

H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



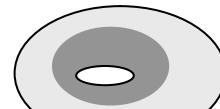
None = 0 points



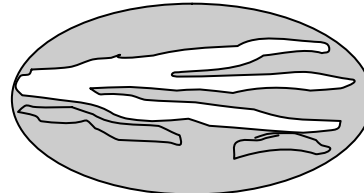
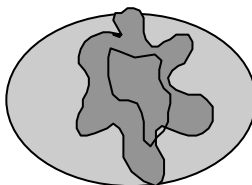
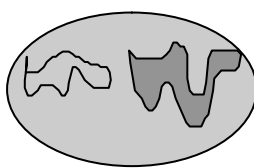
Low = 1 point



Moderate = 2 points



All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number A

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i> <input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). <input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland <input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) <input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>) <input checked="" type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>) <input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)		3
Total for H 1	Add the points in the boxes above	8

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L

Record the rating on the first page

H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). <i>Calculate:</i> % undisturbed habitat <u>1</u> + [(% moderate and low intensity land uses)/2] <u>5</u> = <u>6</u> % If total accessible habitat is:		
<input type="checkbox"/> > 1/3 (33.3%) of 1 km Polygon	points = 3	0
<input type="checkbox"/> 20-33% of 1 km Polygon	points = 2	
<input type="checkbox"/> 10-19% of 1 km Polygon	points = 1	
<input checked="" type="checkbox"/> < 10% of 1 km Polygon	points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. <i>Calculate:</i> % undisturbed habitat <u>31</u> + [(% moderate and low intensity land uses)/2] <u>10</u> = <u>41</u> %		
<input type="checkbox"/> Undisturbed habitat > 50% of Polygon	points = 3	1
<input type="checkbox"/> Undisturbed habitat 10-50% and in 1-3 patches	points = 2	
<input checked="" type="checkbox"/> Undisturbed habitat 10-50% and > 3 patches	points = 1	
<input type="checkbox"/> Undisturbed habitat < 10% of 1 km Polygon	points = 0	
H 2.3. Land use intensity in 1 km Polygon: If		
<input checked="" type="checkbox"/> > 50% of 1 km Polygon is high intensity land use	points = (- 2)	-2
<input type="checkbox"/> ≤ 50% of 1 km Polygon is high intensity	points = 0	
Total for H 2	Add the points in the boxes above	-1

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L

Record the rating on the first page

H 3.0. Is the habitat provided by the site valuable to society?		
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i>		
Site meets ANY of the following criteria:		points = 2
<input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)		2
<input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)		
<input type="checkbox"/> It is mapped as a location for an individual WDFW priority species		
<input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources		
<input type="checkbox"/> It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan		
<input type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m	points = 1	
<input type="checkbox"/> Site does not meet any of the criteria above	points = 0	

Rating of Value If score is: 2 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number A

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here: <http://wdfw.wa.gov/conservation/phs/list/>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** *This question is independent of the land use between the wetland unit and the priority habitat.*

- Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).
- Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).
- Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- Nearshore:** Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page*).
- Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number A**CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? <input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt Yes –Go to SC 1.1 No= Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category I No - Go to SC 1.2	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? <input type="checkbox"/> The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = Category I No = Category II	Cat. I Cat. II
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? Yes – Go to SC 2.2 No – Go to SC 2.3 SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes = Category I No = Not a WHCV SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf Yes – Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? Yes = Category I No = Not a WHCV	Cat. I
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i> SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? Yes – Go to SC 3.3 No – Go to SC 3.2 SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? Yes – Go to SC 3.3 No = Is not a bog SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? Yes = Is a Category I bog No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = Is a Category I bog No = Is not a bog	Cat. I

Wetland name or number A

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p><input type="checkbox"/> Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.</p> <p><input type="checkbox"/> Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).</p> <p style="text-align: right;">Yes = Category I No = Not a forested wetland for this section</p>	Cat. I
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <p><input type="checkbox"/> The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks</p> <p><input type="checkbox"/> The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>)</p> <p style="text-align: right;">Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <p><input type="checkbox"/> The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland is larger than 1/10 ac (4350 ft²)</p> <p style="text-align: right;">Yes = Category I No = Category II</p>	Cat. I Cat. II
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <p><input type="checkbox"/> Long Beach Peninsula: Lands west of SR 103</p> <p><input type="checkbox"/> Grayland-Westport: Lands west of SR 105</p> <p><input type="checkbox"/> Ocean Shores-Copalis: Lands west of SR 115 and SR 109</p> <p style="text-align: right;">Yes – Go to SC 6.1 No = not an interdunal wetland for rating</p> <p>SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = Category II No – Go to SC 6.3</p> <p>SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = Category III No = Category IV</p>	Cat I Cat. II Cat. III Cat. IV
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	N/A

Wetland name or number _____

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RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 1 - WETLAND A



LEGEND

- EMERGENT VEGETATION
- FORESTED VEGETATION
- SATURATED ONLY
- SEASONALLY FLOODED
- 150' FROM WL BOUNDARY

Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
 9505 19th Avenue S.E., Suite 106 Everett, Washington 98208
 Phone: (425) 337-3174
 Fax: (425) 337-3045
 Email: mailbox@wetlandresources.com

WETLAND RATING MAP
Wetland A

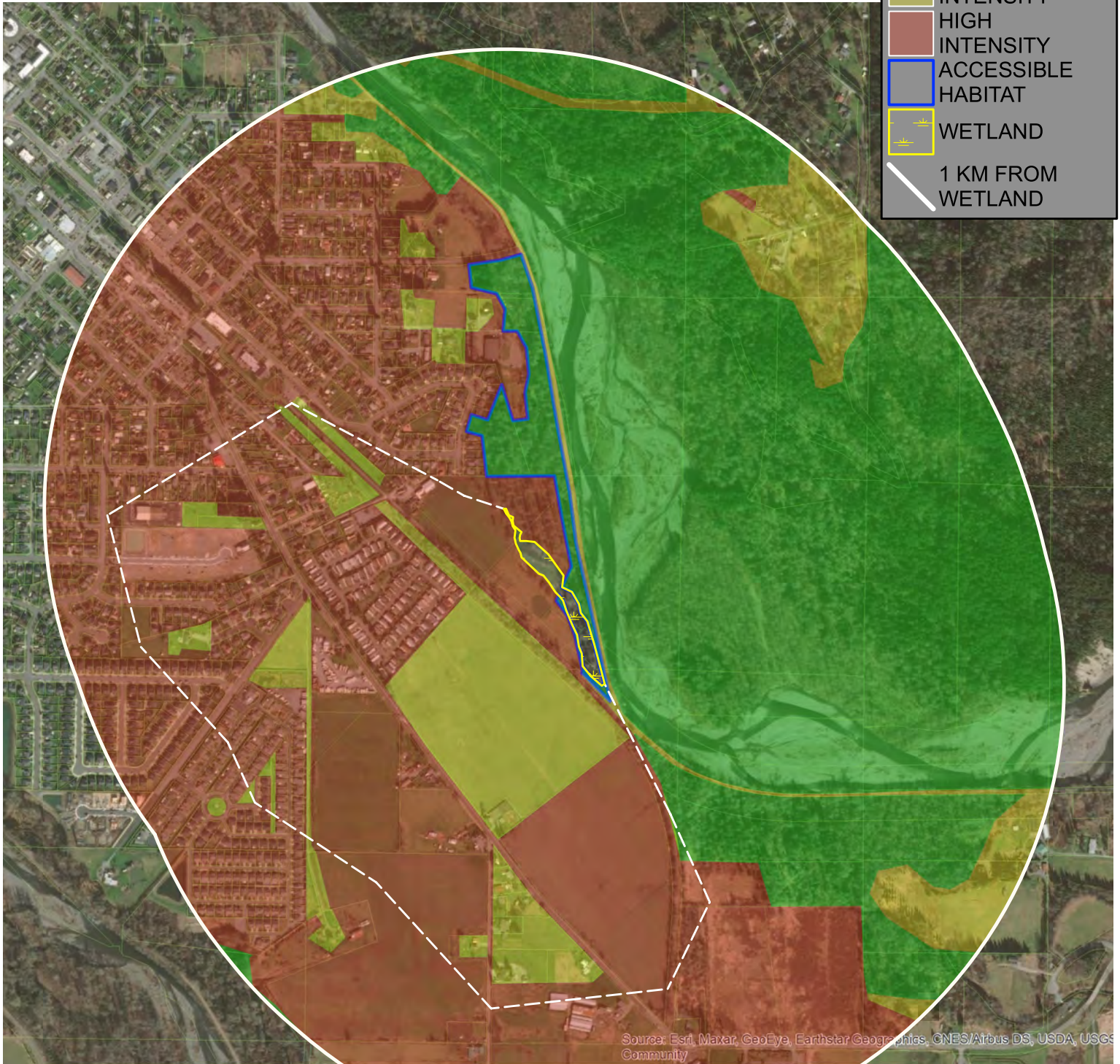
SoundBuilt Homes
 Attn: Evan Mann
 PO Box 73790
 Puyallup, WA 98373

Figure 1/4
 WRI Job # 22253
 Drawn by: JM

RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 2 - WETLAND A

LEGEND

- RELATIVELY UNDISTURBED
- LOW/MOD. INTENSITY
- HIGH INTENSITY
- ACCESSIBLE HABITAT
- WETLAND
- 1 KM FROM WETLAND

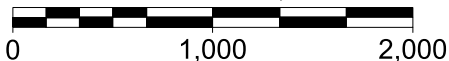


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Community

**CONTRIBUTING BASIN
AREA RELATIVE TO
WETLAND UNIT IS 98.7:1**



Scale 1" = 1,000'



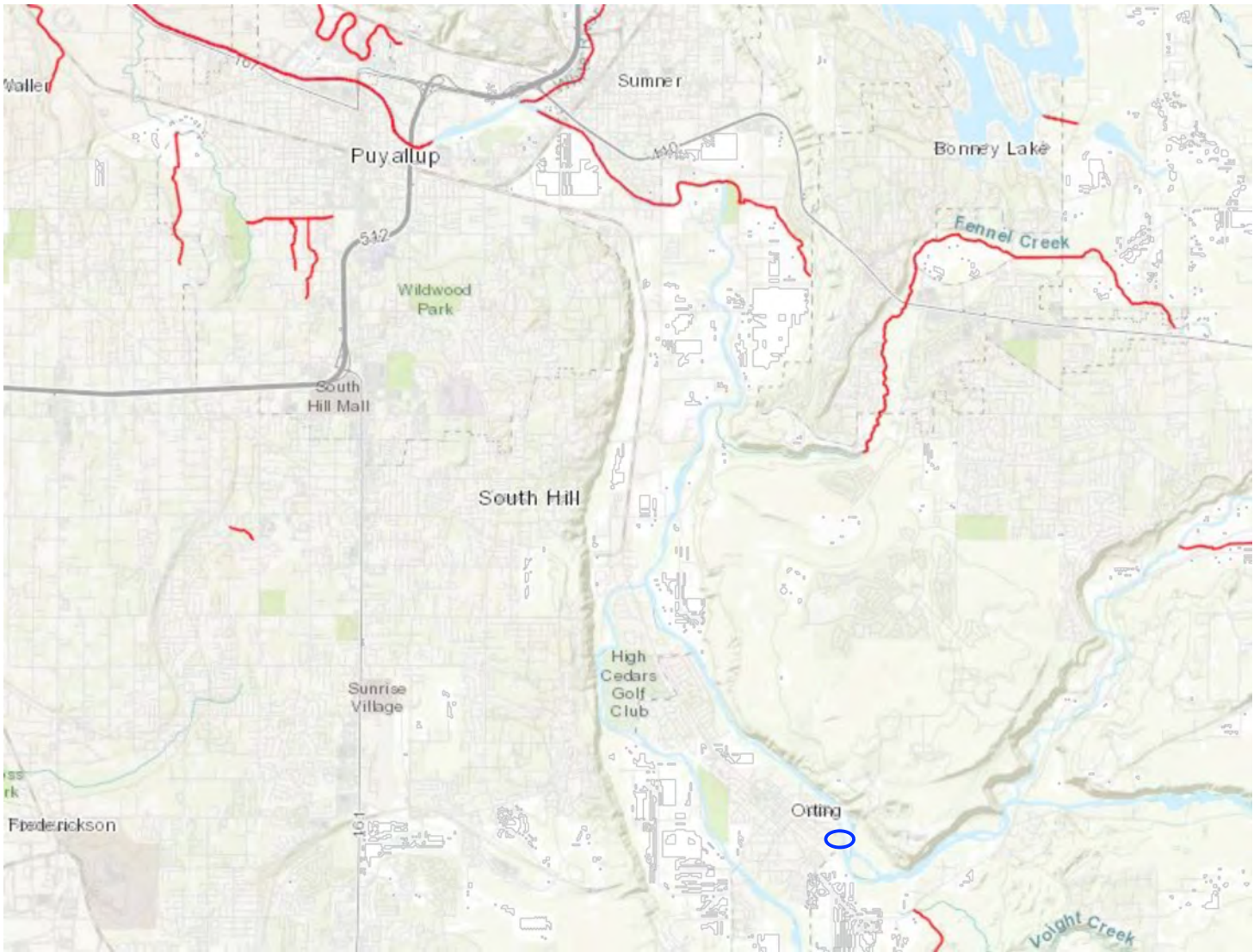
Wetland Resources, Inc.
 Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
 9505 19th Avenue S.E., Suite 106 Everett, Washington 98208
 Phone: (425) 337-3174
 Fax: (425) 337-3045
 Email: mailbox@wetlandresources.com

**CONTRIBUTING BASIN/ 1 KM
FROM WETLAND BOUNDARY MAP
Wetland A**

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 PO Box 73790
 Puyallup, WA 98373

Figure 2/4
 WRI Job # 22253
 Drawn by: JM


RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 3 - WETLAND A



N.T.S.

LEGEND

 WETLAND LOCATION

 AQUATIC RESOURCES ON THE 303(d) LIST

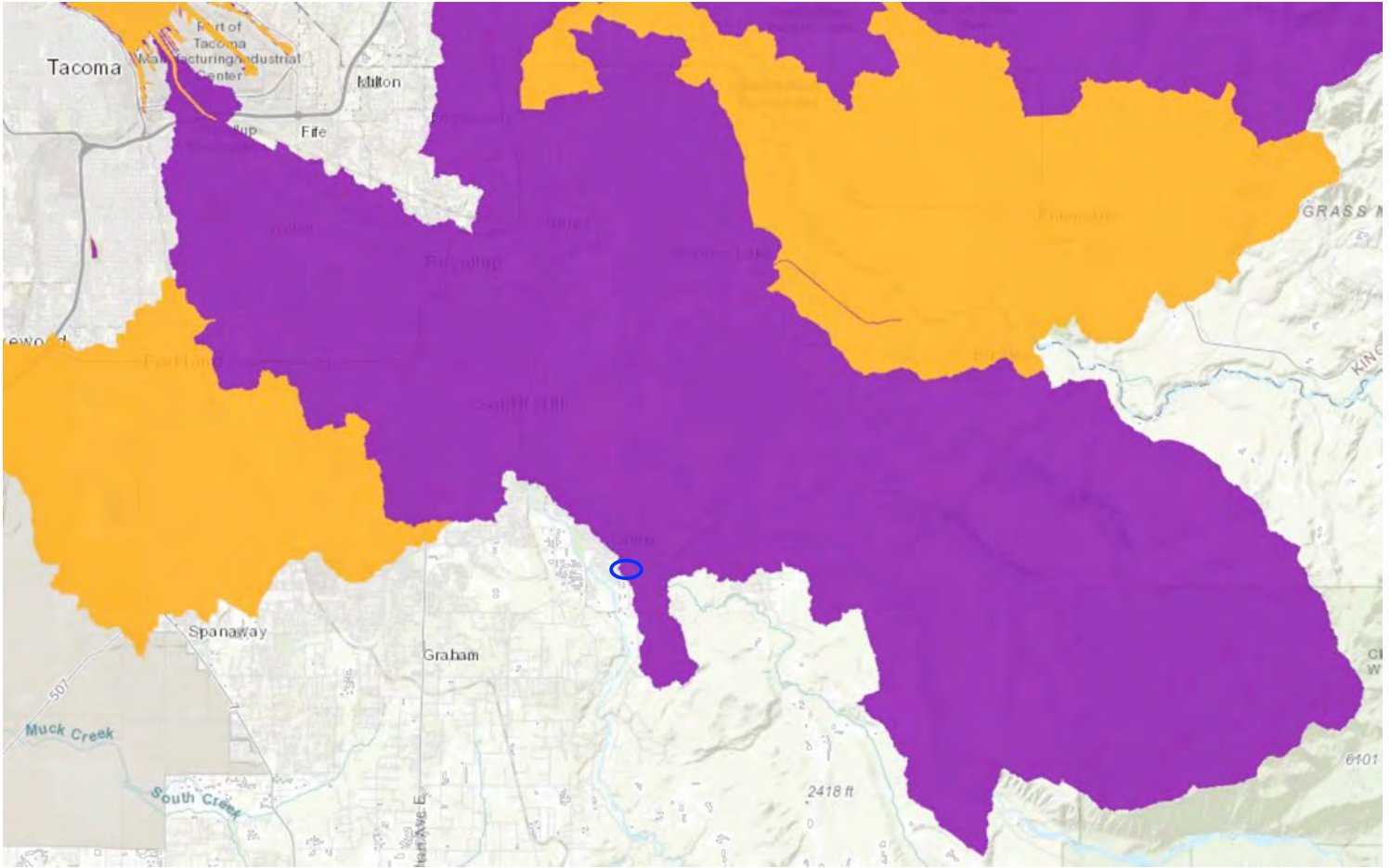
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 Email: mailbox@wetlandresources.com

**Cat 5 - 303d Listed Waters
 Within Basin
 Wetland A**

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 Puyallup, WA 98373

Figure 3/4
 WRI Job # 22253
 Drawn by: JM

RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 4 - WETLAND A



N.T.S.

LEGEND

-  WETLAND LOCATION
-  TMDL IN BASIN APPROVED
-  TMDL IN BASIN IN DEVELOPMENT

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 Fax: (425) 337-3045
 Email: mailbox@wetlandresources.com

List of TMDLs for WRIA in which unit is located
Wetland A

SoundBuilt Homes	Figure 4/4
Attn: Evan Mann	WRI Job # 22253
PO Box 73790	Drawn by: JM
Puyallup, WA 98373	

Wetland name or number B

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland B Date of site visit: 10/27/2022
 Rated by JM Trained by Ecology? Yes No Date of training 3/2015
 HGM Class used for rating DEPRESSIONAL Wetland has multiple HGM classes? Y N

NOTE: Form is not complete without the figures requested (figures can be combined).
 Source of base aerial photo/map Pierce County GIS

OVERALL WETLAND CATEGORY II (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

- Category I – Total score = 23 - 27
 Category II – Total score = 20 - 22
 Category III – Total score = 16 - 19
 Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	H <input type="checkbox"/> <input checked="" type="checkbox"/> L	<input checked="" type="checkbox"/> M L	H <input checked="" type="checkbox"/> L	
Landscape Potential	H <input checked="" type="checkbox"/> L	H <input checked="" type="checkbox"/> L	H <input checked="" type="checkbox"/> L	
Value	H <input checked="" type="checkbox"/> L	H <input checked="" type="checkbox"/> L	<input checked="" type="checkbox"/> M L	TOTAL
Score Based on Ratings	6	7	7	20

Score for each function based on three ratings (order of ratings is not important)

- 9 = H,H,H
- 8 = H,H,M
- 7 = H,H,L
- 7 = H,M,M
- 6 = H,M,L
- 6 = M,M,M
- 5 = H,L,L
- 5 = M,M,L
- 4 = M,L,L
- 3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	<input checked="" type="checkbox"/>

Wetland name or number B

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	1
Hydroperiods	D 1.4, H 1.2	1
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	1
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 5.2	1
Map of the contributing basin	D 4.3, D 5.3	2
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	2
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	3
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	4

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number **B**_____

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

- 1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – **Saltwater Tidal Fringe (Estuarine)**

YES – **Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3

YES – The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

_The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

_At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

YES – The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

_The wetland is on a slope (*slope can be very gradual*),

_The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

_The water leaves the wetland **without being impounded**.

NO – go to 5

YES – The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

_The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

_The overbank flooding occurs at least once every 2 years.

Wetland name or number B**NO** – go to 6**YES** – The wetland class is **Riverine****NOTE:** The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7**YES** – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8**YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. **GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT** (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated		HGM class to use in rating
Slope + Riverine	<input type="checkbox"/>	Riverine
Slope + Depressional	<input checked="" type="checkbox"/>	Depressional
Slope + Lake Fringe	<input type="checkbox"/>	Lake Fringe
Depressional + Riverine along stream within boundary of depression	<input type="checkbox"/>	Depressional
Depressional + Lake Fringe	<input type="checkbox"/>	Depressional
Riverine + Lake Fringe	<input type="checkbox"/>	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	<input type="checkbox"/>	Treat as ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

Wetland name or number B

DEPRESSIONAL AND FLATS WETLANDS		
Water Quality Functions - Indicators that the site functions to improve water quality		
D 1.0. Does the site have the potential to improve water quality?		
D 1.1. Characteristics of surface water outflows from the wetland:		
<input checked="" type="checkbox"/> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3		3
<input type="checkbox"/> Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2		
<input type="checkbox"/> Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1		
<input type="checkbox"/> Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1		
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 <input type="checkbox"/> No = 0		0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):		
<input type="checkbox"/> Wetland has persistent, ungrazed, plants > 95% of area points = 5		3
<input checked="" type="checkbox"/> Wetland has persistent, ungrazed, plants > ½ of area points = 3		
<input type="checkbox"/> Wetland has persistent, ungrazed plants > 1/10 of area points = 1		
<input type="checkbox"/> Wetland has persistent, ungrazed plants < 1/10 of area points = 0		
D 1.4. Characteristics of seasonal ponding or inundation: <i>This is the area that is ponded for at least 2 months. See description in manual.</i>		
<input checked="" type="checkbox"/> Area seasonally ponded is > ½ total area of wetland points = 4		4
<input type="checkbox"/> Area seasonally ponded is > ¼ total area of wetland points = 2		
<input type="checkbox"/> Area seasonally ponded is < ¼ total area of wetland points = 0		
Total for D 1	Add the points in the boxes above	10

Rating of Site Potential If score is: 12-16 = H 6-11 = M 0-5 = L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 <input type="checkbox"/> No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	<input checked="" type="checkbox"/> Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 <input type="checkbox"/> No = 0	0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source _____	Yes = 1 <input type="checkbox"/> No = 0	0
Total for D 2	Add the points in the boxes above	1

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	Yes = 1 <input type="checkbox"/> No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	<input checked="" type="checkbox"/> Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)?	Yes = 2 <input type="checkbox"/> No = 0	0
Total for D 3	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H 1 = M 0 = L Record the rating on the first page

--

Wetland name or number B**DEPRESSIONAL AND FLATS WETLANDS****Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation**

D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. Characteristics of surface water outflows from the wetland:		
<input checked="" type="checkbox"/> Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	4
<input type="checkbox"/> Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
<input type="checkbox"/> Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
<input type="checkbox"/> Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
<input type="checkbox"/> Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	3
<input type="checkbox"/> Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet	points = 5	
<input checked="" type="checkbox"/> Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet	points = 3	
<input type="checkbox"/> The wetland is a "headwater" wetland	points = 3	
<input type="checkbox"/> Wetland is flat but has small depressions on the surface that trap water	points = 1	
<input type="checkbox"/> Marks of ponding less than 0.5 ft (6 in)	points = 0	
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.		
<input checked="" type="checkbox"/> The area of the basin is less than 10 times the area of the unit	points = 5	5
<input type="checkbox"/> The area of the basin is 10 to 100 times the area of the unit	points = 3	
<input type="checkbox"/> The area of the basin is more than 100 times the area of the unit	points = 0	
<input type="checkbox"/> Entire wetland is in the Flats class	points = 5	
Total for D 4		12

Add the points in the boxes above

Rating of Site Potential If score is: 12-16 = H 6-11 = M 0-5 = L

Record the rating on the first page

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?		
D 5.1. Does the wetland receive stormwater discharges?	Yes = 1 <input type="checkbox"/> No = <input type="text" value="0"/>	0
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff?	Yes = 1 <input type="checkbox"/> No = <input type="text" value="0"/>	0
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	<input type="text" value="1"/> Yes = <input type="text" value="1"/> No = <input type="text" value="0"/>	1
Total for D 5		1

Add the points in the boxes above

Rating of Landscape Potential If score is: = H 1 or 2 = M = L

Record the rating on the first page

D 6.0. Are the hydrologic functions provided by the site valuable to society?		
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):		
<input type="checkbox"/> • Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	1
<input checked="" type="checkbox"/> • Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
<input type="checkbox"/> Flooding from groundwater is an issue in the sub-basin.	points = 1	
<input type="checkbox"/> The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why _____	points = 0	
<input type="checkbox"/> There are no problems with flooding downstream of the wetland.	points = 0	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?		
	Yes = 2 <input type="text" value="0"/> No = <input type="text" value="0"/>	0
Total for D 6		1

Add the points in the boxes above

Rating of Value If score is: = H 1 = M = L

Record the rating on the first page

Wetland name or number B

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- Aquatic bed 4 structures or more: points = 4
 - Emergent **3 structures: points = 2**
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

2

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated **2 types present: points = 1**
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

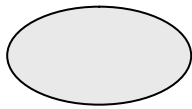
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species** **points = 1**
- < 5 species points = 0

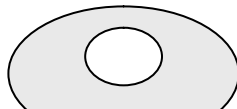
1

H 1.4. Interspersion of habitats

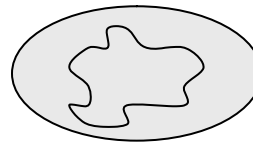
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



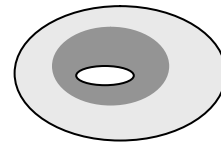
None = 0 points



Low = 1 point

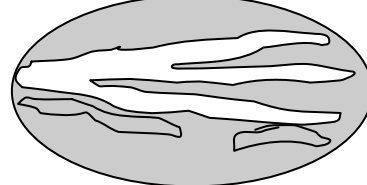
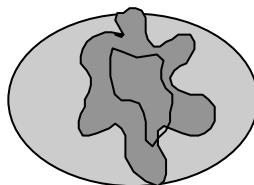
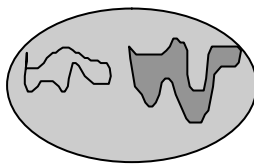


Moderate = 2 points



2

All three diagrams in this row are **HIGH = 3points**



Wetland name or number B

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i> <input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). <input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland <input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) <input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>) <input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>) <input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)		2
Total for H 1	Add the points in the boxes above	8

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L

Record the rating on the first page

H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). <i>Calculate:</i> % undisturbed habitat <u>1</u> + [(% moderate and low intensity land uses)/2] <u>5</u> = <u>6</u> % If total accessible habitat is:		
<input type="checkbox"/> > 1/3 (33.3%) of 1 km Polygon	points = 3	0
<input type="checkbox"/> 20-33% of 1 km Polygon	points = 2	
<input type="checkbox"/> 10-19% of 1 km Polygon	points = 1	
<input checked="" type="checkbox"/> < 10% of 1 km Polygon	points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. <i>Calculate:</i> % undisturbed habitat <u>31</u> + [(% moderate and low intensity land uses)/2] <u>10</u> = <u>41</u> %		
<input type="checkbox"/> Undisturbed habitat > 50% of Polygon	points = 3	1
<input type="checkbox"/> Undisturbed habitat 10-50% and in 1-3 patches	points = 2	
<input checked="" type="checkbox"/> Undisturbed habitat 10-50% and > 3 patches	points = 1	
<input type="checkbox"/> Undisturbed habitat < 10% of 1 km Polygon	points = 0	
H 2.3. Land use intensity in 1 km Polygon: If		
<input type="checkbox"/> > 50% of 1 km Polygon is high intensity land use	points = (- 2)	0
<input checked="" type="checkbox"/> ≤ 50% of 1 km Polygon is high intensity	points = 0	
Total for H 2	Add the points in the boxes above	1

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L

Record the rating on the first page

H 3.0. Is the habitat provided by the site valuable to society?		
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i> Site meets ANY of the following criteria:		
<input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)	points = 2	2
<input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)		
<input type="checkbox"/> It is mapped as a location for an individual WDFW priority species		
<input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources		
<input type="checkbox"/> It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan		
<input type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m	points = 1	
<input type="checkbox"/> Site does not meet any of the criteria above	points = 0	

Rating of Value If score is: 2 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number B

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here: <http://wdfw.wa.gov/conservation/phs/list/>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** *This question is independent of the land use between the wetland unit and the priority habitat.*

- Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).
- Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).
- Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- Nearshore:** Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page*).
- Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number B**CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? <input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt Yes –Go to SC 1.1 No= Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category I No - Go to SC 1.2	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? <input type="checkbox"/> The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = Category I No = Category II	Cat. I Cat. II
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? Yes – Go to SC 2.2 No – Go to SC 2.3 SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes = Category I No = Not a WHCV SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf Yes – Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? Yes = Category I No = Not a WHCV	Cat. I
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i> SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? Yes – Go to SC 3.3 No – Go to SC 3.2 SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? Yes – Go to SC 3.3 No = Is not a bog SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? Yes = Is a Category I bog No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = Is a Category I bog No = Is not a bog	Cat. I

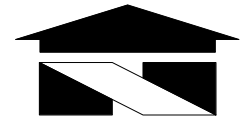
Wetland name or number B

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p><input type="checkbox"/> Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.</p> <p><input type="checkbox"/> Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).</p> <p style="text-align: right;">Yes = Category I No = Not a forested wetland for this section</p>	Cat. I
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <p><input type="checkbox"/> The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks</p> <p><input type="checkbox"/> The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>)</p> <p style="text-align: right;">Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <p><input type="checkbox"/> The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland is larger than 1/10 ac (4350 ft²)</p> <p style="text-align: right;">Yes = Category I No = Category II</p>	Cat. I Cat. II
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <p><input type="checkbox"/> Long Beach Peninsula: Lands west of SR 103</p> <p><input type="checkbox"/> Grayland-Westport: Lands west of SR 105</p> <p><input type="checkbox"/> Ocean Shores-Copalis: Lands west of SR 115 and SR 109</p> <p style="text-align: right;">Yes – Go to SC 6.1 No = not an interdunal wetland for rating</p> <p>SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = Category II No – Go to SC 6.3</p> <p>SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = Category III No = Category IV</p>	Cat I Cat. II Cat. III Cat. IV
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	N/A

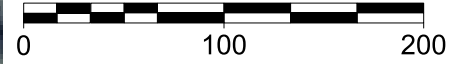
Wetland name or number _____

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RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 1 - WETLAND B



Scale 1" = 100'



LEGEND

-  EMERGENT VEGETATION
-  FORESTED VEGETATION
-  SATURATED ONLY
-  SEASONALLY FLOODED
-  150' FROM WL BOUNDARY

Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
9505 19th Avenue S.E., Suite 106 Everett, Washington 98208
Phone: (425) 337-3174
Fax: (425) 337-3045
Email: mailbox@wetlandresources.com

WETLAND RATING MAP
Wetland B

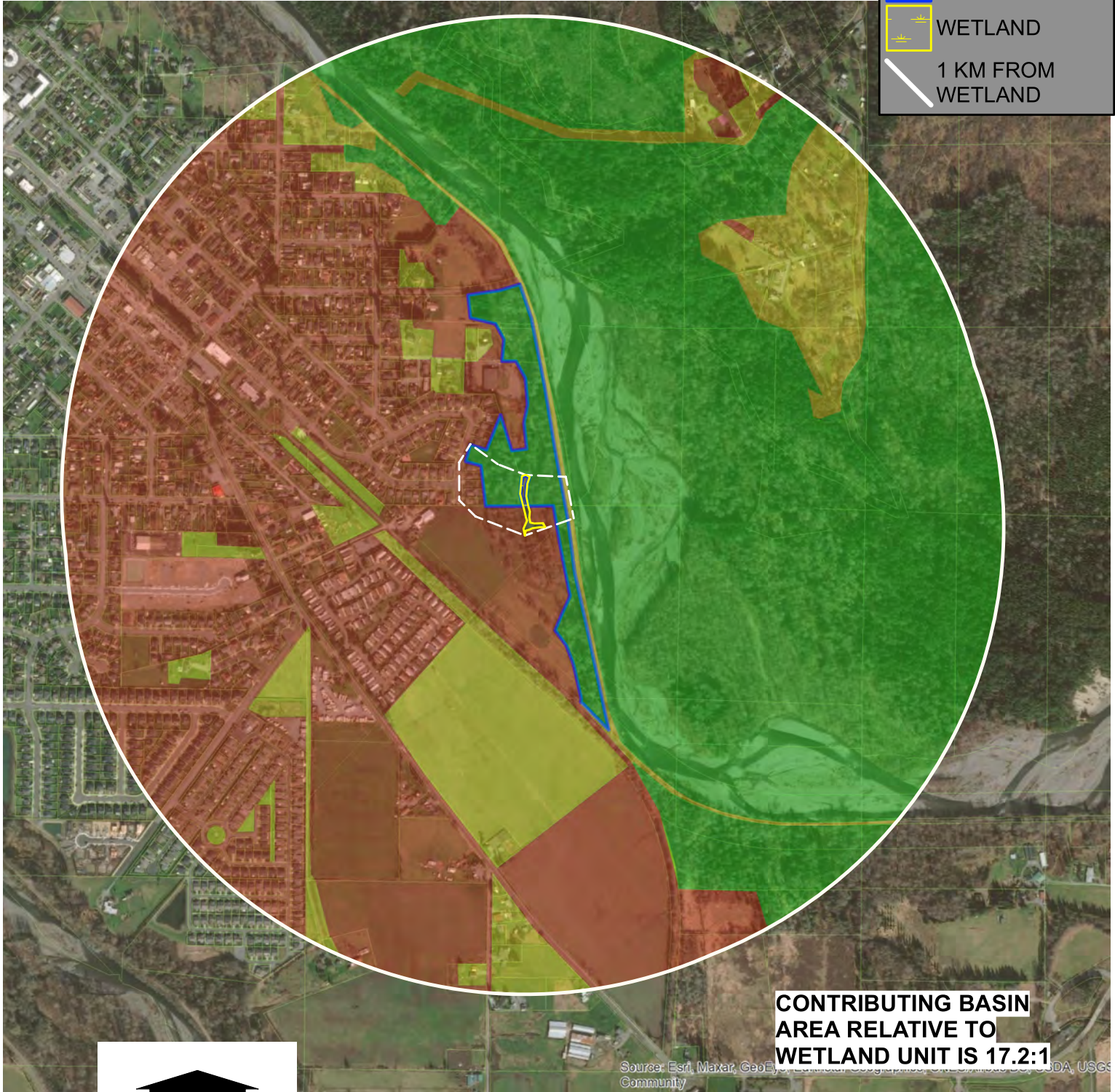
SoundBuilt Homes
Attn: Evan Mann
PO Box 73790
Puyallup, WA 98373

Figure 1/4
WRI Job # 22253
Drawn by: JM

RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 2 - WETLAND B

LEGEND

- RELATIVELY UNDISTURBED
- LOW/MOD. INTENSITY
- HIGH INTENSITY
- ACCESSIBLE HABITAT
- WETLAND
- 1 KM FROM WETLAND

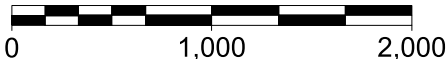


**CONTRIBUTING BASIN
AREA RELATIVE TO
WETLAND UNIT IS 17.2:1**

Source: Esri, Maxar, GeoEye, Earthstar, CNES, Airbus, GeoEye, IGN, Aerogis, AeroGRID, IGN, SDA, USDA, USGS, Community



Scale 1" = 1,000'



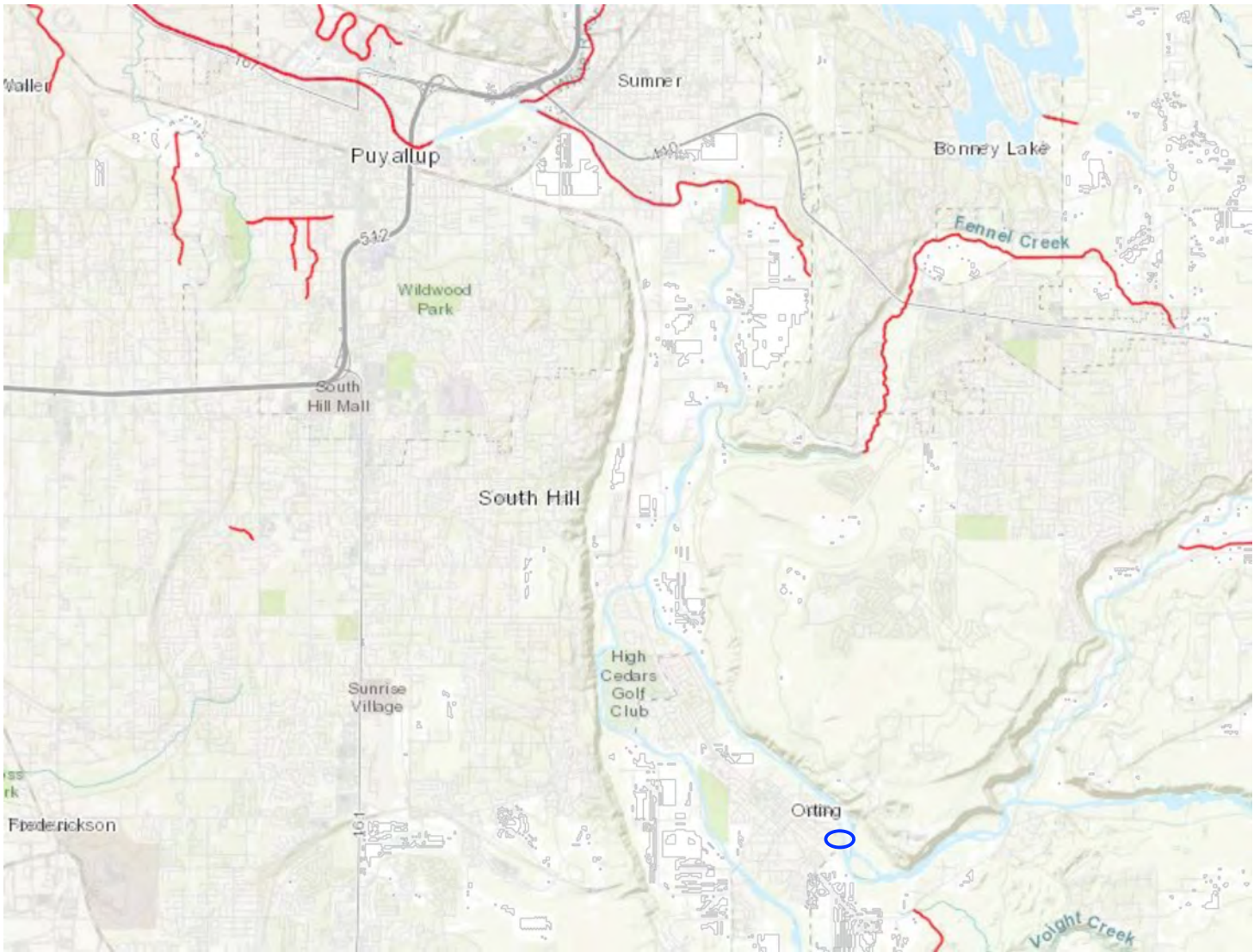
Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
 9505 19th Avenue S.E., Suite 106 Everett, Washington 98208
 Phone: (425) 337-3174
 Fax: (425) 337-3045
 Email: mailbox@wetlandresources.com

**CONTRIBUTING BASIN/ 1 KM
FROM WETLAND BOUNDARY MAP
Wetland B**

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 PO Box 73790
 Puyallup, WA 98373

Figure 2/4
 WRI Job # 22253
 Drawn by: JM


RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 3 - WETLAND B



N.T.S.

LEGEND

 WETLAND LOCATION

 AQUATIC RESOURCES ON THE 303(d) LIST

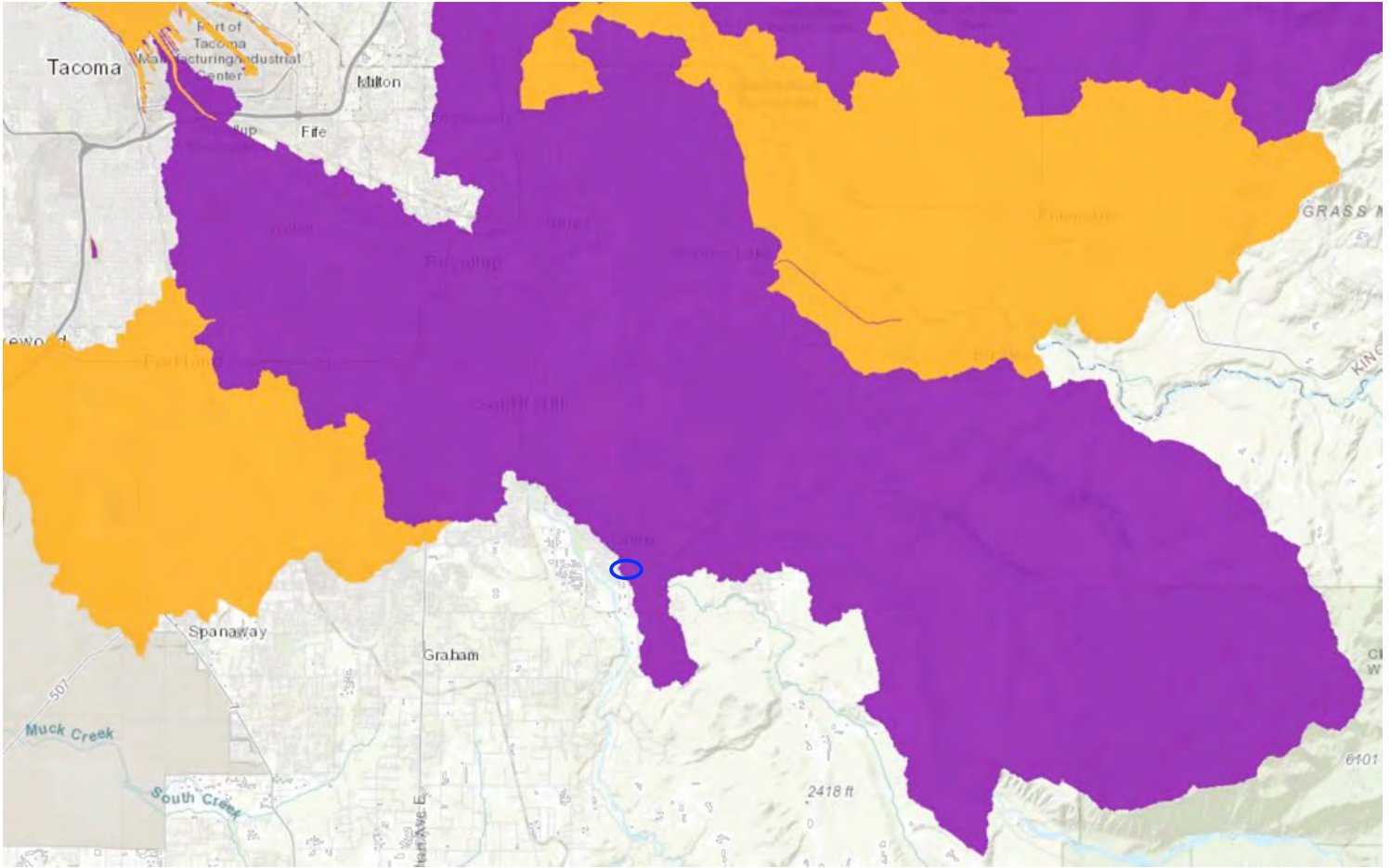
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Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
 9505 19th Avenue S.E. Suite 106 Everett, Washington 98208
 Phone: (425) 337-3174
 Fax: (425) 337-3045
 Email: mailbox@wetlandresources.com

**Cat 5 - 303d Listed Waters
 Within Basin
 Wetland B**

SoundBuilt Homes
 Attn: Evan Mann
 PO Box 73790
 Puyallup, WA 98373

Figure 3/4
 WRI Job # 22253
 Drawn by: JM

RAINIER MEADOWS DIV. 2
WETLAND RATING FIGURE 4 - WETLAND B



N.T.S.

LEGEND

-  WETLAND LOCATION
-  TMDL IN BASIN APPROVED
-  TMDL IN BASIN IN DEVELOPMENT

Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
 9505 19th Avenue S.E. Suite 106 Everett, Washington 98208
 Phone: (425) 337-3174
 Fax: (425) 337-3045
 Email: mailbox@wetlandresources.com

List of TMDLs for WRIA in which unit is located
Wetland B

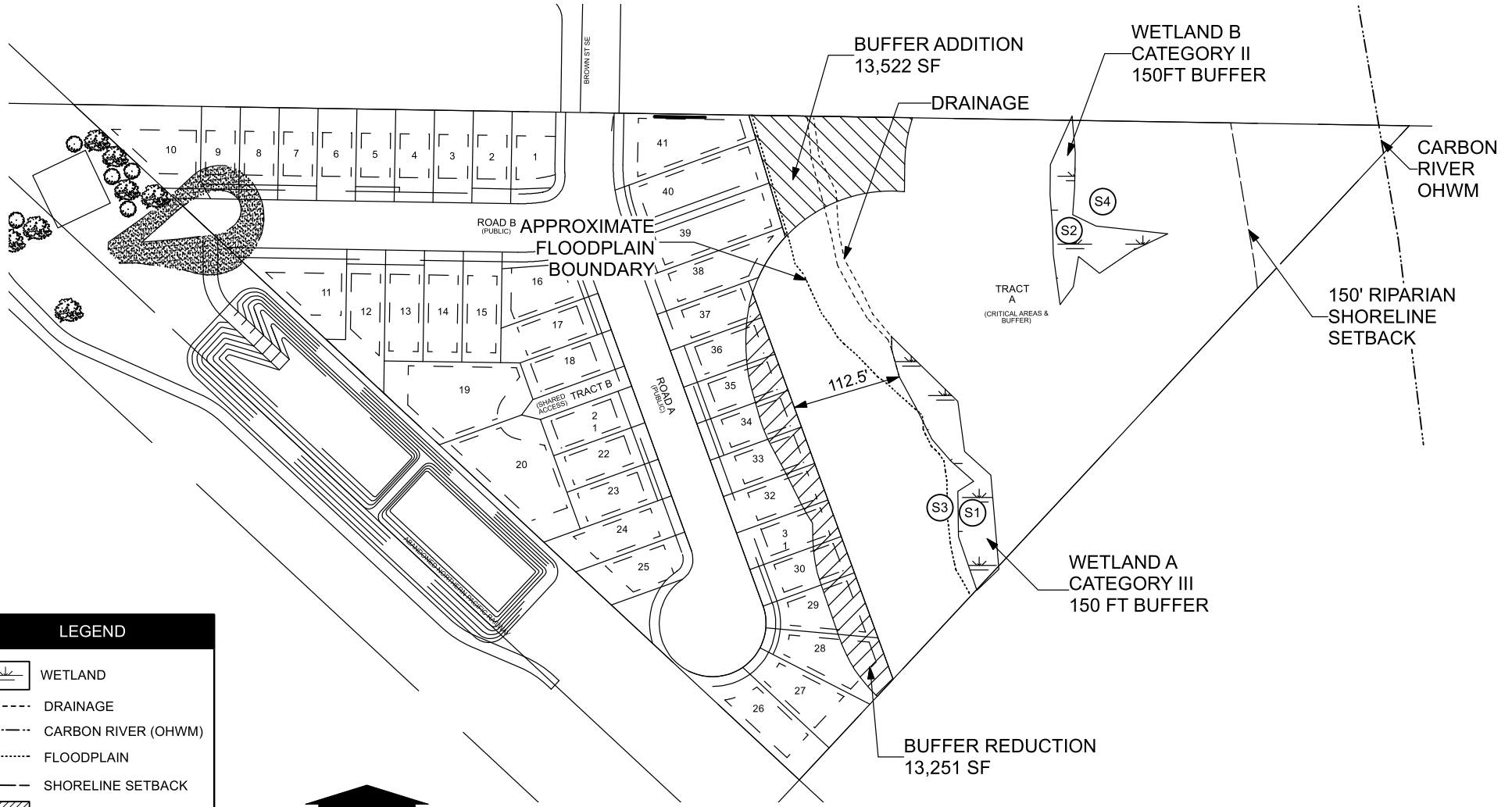
SoundBuilt Homes	Figure 4/4
Attn: Evan Mann	WRI Job # 22253
PO Box 73790	Drawn by: JM
Puyallup, WA 98373	

APPENDIX C

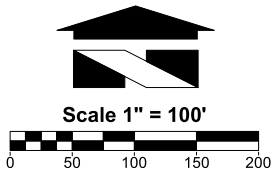
CRITICAL AREAS STUDY AND BUFFER MITIGATION PLAN MAP

CRITICAL AREAS AND MITIGATION PLAN MAP SOUNDBUILT HOMES - RAINIER MEADOWS PHASE 2

PORTION OF SECTION 32, TOWNSHIP 19N, RANGE 5E, W.M.



LEGEND	
	WETLAND
	DRAINAGE
	CARBON RIVER (OHWM)
	FLOODPLAIN
	SHORELINE SETBACK
	BUFFER REDUCTION
	BUFFER ADDITION
	DATA SITES



 9505 19th Avenue S.E. Suite 106 Everett, Washington 98208 Phone: (425) 337-3174 Fax: (425) 337-3045 Email: mailbox@wetlandresources.com	Critical Areas Determination Map Rainier Meadows Div. 2 Oring, WA
	Sheet 1/2 WRI #: 22280 Drawn by: JM Date: 8/18/2023
	Soundbuilt Homes PO Box 73790 Puyallup, WA 98737