Planning and Community Development Department
210 Lottie Street, Bellingham, WA 98225
Phone: (360) 778-8300 Fax: (360) 778-8301 TTY: (360) 778-8382
Email: planning@cob.org Web: www.cob.org

CONSOLIDATED PERMIT FOR DESIGN REVIEW AND CRITICAL AREAS

DR2023-0008/CAP2023-0008/SEP2023-0008
1204 YEW STREET-WELLINGTON PRELIMINARY PLAT
Type I

I. SUMMARY OF DECISION

Proposal: Consolidated permit associated with the Wellington Preliminary Plat for the proposed 3 infill housing Small Lots per Bellingham Municipal Code (BMC) 20.28 and critical area impacts to the onsite wetland buffer. This permit includes a land use decision of the design review and critical areas applications. The associated preliminary plat application is under concurrent review through the Type III review process with a final decision issued by the hearing examiner.

Applicant: Darcy Jones, JEI; 4164 Meridian Street, Suite 304; Bellingham WA 98226; 360-733-8888

Project Location: 1204 Yew Street/ Area 7 of the Whatcom Falls Neighborhood; Residential-single detached/cluster land use designation with a 10,000 square-foot cluster density.

Property Owner: Bradley and Kristina Widman, 1615 Old Samish Road, Bellingham WA 98229.

Decision: Approval with Conditions.

Approved: November 21, 2023

II. PROPERTY DESCRIPTION

Legal Description: Lot 2 of the Alvarado Lot Line Adjustment as recorded under Whatcom County Auditor's file number 901204069.

Whatcom County Assessor ID#: 380333 0384410000

III. PERMIT PLANS AND EXHIBITS

This approval includes the following documents, subject to any modifications and conditions contained in **Section V** of this permit:

Exhibit A - February 15, 2023, application materials and as subsequently amended by the applicant's August 18, 2023 submittal.
Exhibit B - Public Comment
Exhibit C - Tree Retention Plan (NES, 2023)
Exhibit D - Tree Inventory & Tree Protection Plan (Stargell, Oct. 2022)
Exhibit E - Critical Areas Assessment & Mitigation Plan (NEW, Rev. Jan. 2023)

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. The 2.47-acre site is located in Area 7 of the Whatcom Falls Neighborhood and zoned Residential Single, Detached/Cluster, with a 10,000 square foot density and a 7,200 square-foot cluster minimum lot size. The site area yields a maximum of 10 units.
2. The Proposal requires approval of the associated preliminary plat application (SUB2023-0011) to allow the creation of the Small Lots. The hearing examiner issues the final decision regarding the preliminary plat. This permit decision is valid only if appropriately conditioned that the associated preliminary plat application is approved and this permit decision is subject to the hearing examiner's order for the preliminary plat.
3. The proposal includes the retention of the single-family residence located in the eastern portion of the site.
4. All surrounding properties are within the same zoning subarea and developed with single-family residences.
5. The subject site contains critical areas as defined and regulated by Chapter 16.55 BMC.
6. The required pre-application conference with city staff and neighborhood meeting were held on August 2, 2022, and December 19, 2022, respectively. Comments raised at the neighborhood meeting included concerns regarding the loss of habitat as a result of developing the site, drainage, traffic and clearing.
7. February 15, 2023: Applications for this proposal, including infill housing, design review and preliminary plat, land division variance, critical areas and a SEPA checklist, were submitted. The critical areas and design review applications require Type I decisions and are the subject of this consolidated permit. The cluster preliminary plat (SUB2023-0011) is a Type III decision by the hearing examiner and will be reviewed separately. NOTE: The variance application was withdrawn by the applicant as it was found to not be required.
8. March 21, 2023: The City deemed the land use applications complete.
9. March 23, 2023: The City issued a Request for Information (RFI) for additional information specific to compliance with stormwater, street and utility requirements, emergency access, access, infill housing and critical areas.
10. July 26, 2023: The City issued a 30-day extension to allow the applicant additional time to provide a response to the RFI.

11. August 18, 2023: The applicant submitted a response to this RFI. The City determined the information sufficient to continue review of the application.
12. September 5, 2023: The City issued a Notice of Application and Optional DNS establishing a public comment period through September 19, 2023. The City received one public comment in response to this notice concerning the anticipated grading necessary to develop the site, clearing of the site's evergreen trees, and loss of habitat resulting from development . **Exhibit B**

    In response to the issues raised in the public comment letter, staff shares the same concerns regarding clearing, grading and tree retention as it relates to the loss of habitat. The preliminary plat application proposed to retain much of the site's significant trees and as proposed by staff, the grading should also be limited to ensure maximum retention of the significant trees proposed for retention. BMC 16.60.040 defines "significant tree" as any specie that is greater than six inches in diameter measured at breast height.

13. November 14, 2023: The City issued a Temporary Certificate of Multimodal Transportation Concurrency (CON2023-0001) for the proposal.
14. November 21, 2023: The City issued an environmental SEPA threshold Determination of Nonsignificance.
15. November 17: The Public Hearing notice for the preliminary plat was issued by the Hearing Examiner's department staff and mailed in accordance with BMC 21.10.200(D).
16. November 29, 2023: The hearing examiner is scheduled to hold a public hearing to consider the Wellington Preliminary Plat.

Clearing and Tree Retention

1. Clearing associated with development of the proposal is regulated by Chapter 16.60 BMC Land Clearing, BMC 20.06.030, Chapter 20.25 BMC and BMC 23.08.030. The land use applications submitted for this proposal require different review processes and have different decisions makers. To fully evaluate how these code provisions affect the development proposal, they should be consolidated into a single discussion that is consistent among all required land use decisions.
2. BMC 16.60.080(B) requires the submittal of a site plan for City review prior to undertaking any nonexempt clearing activity. The proposed development is a nonexempt activity.
3. The site's zoning lists Clearing as a Special Condition. Pursuant to BMC 20.06.030, a Special Condition is a development concern which has to be addressed and is site-specific in nature. This code provision gives the City authority to condition discretionary land use applications to ensure this site-specific concern is adequately addressed.
4. Design review approval pursuant to Chapter 20.25 BMC and the Multifamily Residential Design Handbook (Handbook) is required for the development of the infill housing Small Lots, Lots 5A, 5B and 5C. Site Design requirement (D) of the Handbook states significant natural features should be retained whenever feasible and changes to the natural topography should be minimized. This design requirement should be consolidated with the other referenced code sections of those other land use applications that are necessary to provide infrastructure for the Small Lots.

5. The Land Division Ordinance, Title 23 BMC, includes performance standards that must be addressed as determined by the Planning and Community Development Director. Two performances standards applicable to the proposal that will be further reviewed and decided on by the Hearing Examiner are BMC 23.08.030 (C. Natural Features) and (D. Clearing and Grading). These performance standards are intended to work in conjunction with the previously identified code sections concerning clearing and tree retention.
6. The application materials identified 123 significant trees on the subject site and provide the level of information needed to evaluate the proposal for general compliance with the code provisions referenced above except the tree retention plan is based on a prior lot design. **Exhibits C and D**
7. The revised lot design shifted the public street to the north and relocated the stormwater management facility to the previous location of Lot 8. These revisions were necessary to comply with access requirements onto an arterial, maximum grade limitations for emergency access and stormwater regulations.
8. This revised design will result in more tree removal in the general locations of Lot 8 and along the northern property line adjacent to the proposed street. However, as a result of the revised design, the remaining lots appear to provide a greater opportunity for tree retention in a manner demonstrated on the Tree Retention Plan. **Exhibit C** This permit should be properly conditioned to require the submittal of a revised Tree Retention Plan and report prepared by an International Society of Arboriculture (ISA)-certified arborist that demonstrates maximum retention and protection of the onsite significant trees and identifies appropriate mitigation ratios for trees proposed for removal.
9. The revised Plan should account for site grading and limit grading in a manner that would result in the removal of significant trees that would otherwise be a candidate for retention. The design standard and land division performance standard for grading are met only if this decision is appropriately conditioned to evaluate and limit grading concurrently, as necessary, to maximize the retention of significant trees associated with the revised Tree Retention Plan. A final grading plan should be reviewed and assessed by the arborist.
10. No significant trees are proposed for removal within regulated critical areas.
11. As conditioned, the proposal is consistent with the purpose and intent of Chapter 16.60 BMC and BMC 20.06.030.

Land Use Analysis-Small Lot

1. The proposed development requires design review approval demonstrating consistency with the Multifamily Residential Design Handbook (Handbook) (Chapter 20.25 BMC) and applicable infill housing provisions (Chapter 20.28 BMC) for Lots 5A, 5B and 5C.
2. Chapter 20.25 BMC established the design review standards that must be met for infill housing. The proposal meets these standards with the exception of the following:
    a. MRDH, I. Site Design (G) concerning lighting is not met. The application materials included a preliminary lighting plan but this plan did not provide sufficient information concerning the type and illumination levels of the proposed lighting. Shielded lighting should be provided for common driveways, entries, walkways and parking areas with lighting levels that provide a safe environment and minimize glare from the lighting on adjacent properties, critical areas and upwards to the sky. A lighting analysis and

fixture cut sheets for the Small Lots should be submitted with the building permit applications for review and approval by the City.

3. Chapter 20.28 BMC establishes the development regulations and design standards for infill Small Lots. The Proposal meets these regulations with the exception of the following:

    a. Compliance with BMC 20.28.050(C), (D) and (E) are applicable to this proposal and will be addressed more thoroughly through demonstrating compliance with the decision criteria for the cluster preliminary plat proceedings.

    b. Pursuant to BMC 20.28.050(G), Lots 5A, 5B and 5C do not provide the required pedestrian-oriented facilities.

    Lots 5A and 5B provide pedestrian connection to the driveway serving Lots 2, 3, 4 and 5C. This driveway does not provide a pedestrian facility abutting Lots 5A and 5B. To meet this code provision the private driveway must be constructed to include a pedestrian facility pursuant to the design shown in Figure 23.08.060(A). A modification from the requirement should not be approved.

    Lot 5C provides pedestrian connection to the private driveway serving Lots 5A, 5B, 6 and 7 necessitating the driveway to be considered a lane for compliance with this code provision. The lane meets the design shown in Figure 23.08.060(A). This lane designation increases the setback requirement for Lots 5A and 5B to 25 feet, which is not met. The site's topography creates physical challenges to developing the Small Lots compliant with code. The overall lot and building design for these Small Lots meets the intent and purpose of the infill housing provisions. A reduced setback should be approved provided the deficiencies discussed in this finding are implemented into the final design of the infrastructure serving the Small Lots.

    c. BMC 20.28.050(H)(5)(c) includes design limitations for maneuvering areas off lanes. The driveways serving Lots 5A and 5B do not comply with this provision and should be amended to comply with this provision to avoid cars parking over the pedestrian facility associated with the lane. A modification from this requirement should not be approved.

    d. Pursuant to BMC 20.28.050(I), the landscaping plan submitted for the Proposal provides sufficient information to determine general compliance with the landscaping requirement except for the lack of trees in the landscape beds in the alley and lack of a physical demarcation of the private open space areas adjacent to public and semi-public areas. This provision can only be met if this permit is appropriately conditioned to require a tree in the landscape beds associated with the alley.

4. As proposed, the provisions for the development of the Small Lots is met, if appropriately conditioned, and the lots are approved by the Hearing Examiner through the land division process. Therefore, the overall design of the proposal can only be found to comply with this code provision if the cluster preliminary plat is approved through the land division review process.

Critical Areas

1. Activities in and near critical areas are regulated by Chapter 16.55 BMC, the Critical Areas Ordinance.
2. Information submitted for review of the Critical Areas Application (CAP2023-0008) under Chapter 16.55 BMC include the following documents:

a. Critical Areas Assessment and Mitigation Plan (Report) (NES, December 2022, and revised January 2023 (**Exhibit E**).

3. The Report provides the following information:
   a. A report prepared by a qualified professional (Northwest Ecological, 2022) in accordance with BMC 16.55.210(A) and .290(B)(1).
   b. One forested palustrine depressional wetland was delineated onsite. The wetland is approximately 8,200 square feet in size.
   c. The wetland was rated in accordance with BMC 16.55.280 and categorized using the Ecology 2014 Wetland Rating System. The wetland is considered a Category III wetland with low (4) habitat points.
   d. The wetland is currently in a moderate intensity landscape position with the existing land use and will change to a high intensity landscape position with the proposed development in accordance with BMC 16.55.510.
   e. For this development as proposed, the wetland requires an 80-foot buffer in accordance with BMC 16.55.340.
   f. Existing development on the site includes a single-family home and driveway. The single-family home is located within the western portion of the wetland buffer. This makes the existing development nonconforming per BMC 16.55.130.
4. The Report provides the following information:
   a. Mitigation sequencing included avoidance and minimization of impacts per BMC 16.55.250 and .350. The site has been designed to avoid direct impacts to wetland areas. Minimization measures include clustering the development in the western portion of the site as far as feasible from the regulated critical area.
   b. The proposed development will result in a calculated 600 square feet of impact to the wetland buffer on Lot 4. Buffer reduction criteria have been met, in accordance with BMC 16.55.340(C)(2), including site design that reduces the adverse effect of adjacent land use as detailed in BMC 16.55(C)(2)(e).
   c. To compensate for buffer impacts and ensure protection of wetland function, compensatory mitigation is proposed in the form of onsite buffer enhancement (BMC 16.55.250, .260, and .350).
   d. Mitigation actions include 5,900 square feet of buffer enhancement between the proposed development and the wetland (BMC 16.55.350). This includes 2,000 square feet of outer perimeter buffer plantings and 3,900 square feet of planting to bring the remainder of the buffer up to a forested standard per BMC 16.55.340(B).
   e. The Mitigation shall implement reasonable measures to reduce adverse effects of adjacent land uses and ensure no net loss of buffer functions and values for the wetland, per BMC 16.55.340(C)e.
   f. Enhancement includes removing non-native plant material, installation of native trees and shrubs. Invasive species will be removed in accordance with recommendations from the Whatcom County Noxious Weed Board.
   g. Lights shall be directed away from the wetland and buffer.
   h. All stormwater from the on-site development will be directed to the on-site stormwater system, maintaining the hydrology in Wetland A.
   i. A Financial surety is proposed to ensure the mitigation requirements are met per BMC.16.55240(D) and.350(G)(j).
5. Permanent signage and fencing are proposed on the modified wetland buffer edge for compliance with BMC 16.55.230.

6. A permanent conservation easement is proposed for long term conservation and protection of the regulated critical areas and buffers per BMC 16.55.190.
7. Cumulative impacts to wetlands resulting from the project are minimized by mitigation sequencing and implementation of the compensatory mitigation plan. Cumulative impacts have been addressed (NW Ecological, 2023) in accordance with BMC 16.55.210(C)(6).
8. The 15-foot building setback from the wetland buffer (BMC 16.55.340(G)) is proposed to be provided.
9. As conditioned, the proposal is consistent with the purpose and intent of BMC 16.55 as it protects the critical area functions and values consistent with the best available science, and it results in no net loss of critical area functions and values.
10. A critical area permit for the proposal should be approved.
11. Any Finding of Fact that should be denominated a Conclusion of Law shall be deemed to be a Conclusion of Law.

Compliance with BMC

Based on the findings of fact and conclusions of law within this permit, the city concludes that the Proposal meets the applicable provisions of Chapters 16.55, 20.25 and 20.28 BMC if appropriately conditioned. Any additional permit required to construct the infrastructure and/or buildings associated with the Proposal must be consistent with this decision and the BMC.

V. DECISION AND CONDITIONS

Based upon the Findings of Fact and Conclusions of Law, the Director of Planning and Community Development, or Designee, approves this combined permit for design review (DR2023-0008) and critical areas (CAP2023-0008), subject to the following conditions:

A. GENERAL

1. All development and use of the property legally described in Sections I and II of this permit shall be generally consistent with the permit plans listed in Section III, except as modified by this permit, and all other conditions contained in the permit.
2. This consolidated permit is granted with the conditions specified below pursuant to the Bellingham Municipal Code. It does not excuse the applicant from compliance with any other federal, state or local statutes, ordinances or regulations that may be applicable to this project.
3. Prior to approval of any building or construction permits, the City shall determine compliance with the terms and conditions of this permit.
4. Legal documents identifying the rights and responsibilities of property owners and/or the homeowners' association for use and maintenance of common facilities shall be submitted for approval by the city and recorded concurrently with the recording of the final plat and referenced on the final plat. The legal documents that are or may be necessary for this proposal include but are not limited to: use and access easements for pedestrian and vehicular access and parking, utility easements, and building easements necessary to comply with the building code. Additionally, adequate measures to ensure the private infrastructure and landscaping will be maintained in perpetuity are needed to ensure compliance with the permit decision.
5. A public facility construction agreement shall be obtained from the City prior to installation of any public infrastructure necessary to support the Proposal.

6. All applicable impact fees approved by City ordinance shall be paid prior to building permit issuance.
7. The City may impose additional conditions if found that sufficient information was not present with the applications to comply with the Bellingham Municipal Code.
8. In the event the owner/applicant/assigns fail to comply with the terms of the conditions herein, this permit may be rescinded. All work shall be completed according to this permit.
9. Development of the property shall be consistent with all applicable conditions of the Wellington Preliminary Plat (SUB2023-0011) and all conditions of this plat shall be deemed conditions of this consolidated permit. The Wellington Preliminary Plat shall be filed for record with the Whatcom County Auditor's office prior to issuing a building permit for any lot included in the proposal.

B. DESIGN REVIEW

The development regulations for the Small Lots, Lots 5A, 5B and 5C, shall comply with BMC 20.28.050 and .070 and as follows:

1. Each single-family residence on a proposed Small Lot, Lots 5A, 5B, and 5C, shall be constructed and finished with the level of detail shown and described on **Exhibit A**, including, but not limited to siding material and direction, roof pitch, window wrap, trim, window size and placement, front porch details and the entries off the lane and the pedestrian walkways.
2. The length of the maneuvering area between the back of the garages on Lots 5A and 5B and the pedestrian facility associated with the private driveway shall be amended to comply with BMC 20.28.050(H)(5)(b).
3. Both private driveways serving the Small Lots shall be constructed compliant with BMC 20.28.050(G).
4. A landscape plan pursuant to BMC 20.28.050(I) and .070(D) shall be submitted prior to or with the first building permit application for review and approval and include the following:
    a. The landscape plan shall include the location, type and specie of the plant material and demonstrate it will not impact existing and proposed public or private infrastructure. Financial sureties may be required by the city for installation and maintenance of all landscaping.
    b. Landscape islands shall be provided off the private driveways to separate each garage approach and include at a minimum a tree, shrubs and ground cover pursuant to BMC 20.28.050(I)(2 and 3).
    c. Street trees shall be provided consistent with BMC 20.28.050(I)(1) along the private driveways. A street tree application shall be submitted for review and approval concurrently with the engineered drawings for the onsite infrastructure.
5. Any outside trash and recycling facilities shall be screened from public view on at least three sides and constructed with durable materials consistent with the architecture of the Small Houses. The final location of these facilities shall be approved by Sanitary Services Company and may not conflict with any performance standards in the Bellingham Municipal Code.
6. All fencing shall be compliant with BMC 20.28.050(I)(4).
7. The Developer shall submit a site lighting plan for review and approval by the city concurrent with the first building permit application for the proposal. Lighting shall be provided for entries, walkways, common areas and parking areas with sufficient lighting

levels to provide a safe environment. All light fixtures shall be directed downward, and bulbs shall not be visible. The lighting plan shall address the applicable design standards and be sized, shielded, and directed to avoid adverse impacts and spillover onto adjacent properties. The lighting plan shall include the following information:

a. A photometric site plan, drawn to scale, showing all buildings, walkways and parking areas, fixture, and pole height, and include all proposed exterior lighting fixtures and foot-candle spread. Outdoor lighting shall not exceed 1.5-foot candles at the property line.

b. Design specifications for all proposed exterior lighting fixtures shall be shielded and include photometric data, cutoff devices, bulb wattage/type, and other descriptive information.

c. The lighting must also be, as much as physically possible, contained to the developed area and not spill over into the regulated wetland areas.

C. CRITICAL AREAS

1. All recommendations presented within the following documents shall be followed in their entirety and incorporated in civil plan review, unless modifications are required during the first construction permit review:
   a. Critical Areas Assessment and Mitigation Plan (Report) (NES, December 2022, and revised January 2023 (**Exhibit E**).
2. Prior to site disturbance and prior to issuance of any construction permits for this subject property:
   a. The critical area reports shall be reviewed with the construction or civil drawings for consistency with Chapter 16.55 BMC, specifically for performance standards for each critical area (BMC 16.55.330, .350, .390, .400, .460(A)(2-7), .490, .500).
   b. A Final Mitigation Plan shall be prepared by the consulting biologist if revisions are required through civil or construction review.
   c. A site inspection with the applicant, professional consultants, the city environmental planner, and the mitigation contractor shall take place. A copy of the Final Mitigation Plan shall be at this site visit. All of the following will be reviewed:
      i. Project clearing and grading limits, location of tree protection, and construction fencing; and
      ii. Pre-construction condition of wetland buffer mitigation areas; and
      iii. Location of equipment and materials staging for duration of the construction project.
   d. A permanent conservation easement for the mitigation area and regulated wetland and modified buffer area shall be recorded with the Whatcom County Auditor. To prepare the conservation easement document, the applicant shall provide a legal description of the property (titled Exhibit A), a legal description of the conservation easement area (titled Exhibit B), and a legal drawing of the conservation easement area (titled Exhibit C) prepared by a licensed surveyor. A lot closure report and current subdivision guarantee (if applicable) shall also be provided with the exhibits for city review. The conservation easement shall be recorded on both Lots 3 and 4.
   e. The financial surety shall be submitted to the PCDD using a form provided by the City for an assignment of funds or surety bond. The surety amount shall be 150% of the estimated construction cost of the mitigation, or as approved in the Final Mitigation Plan estimated to be **$13,923.00.** The party initially providing the surety shall remain responsible for maintaining it through the duration of the mitigation maintenance and monitoring periods required by the City unless the City approves, in writing, the transfer

of responsibility for maintaining the surety to another party. The mitigation and Surety shall be only on Lot 3.

3. Prior to the issuance of a final subdivision by the PCDD:
    a. Implementation of the Final Mitigation Plan shall be accomplished by a mitigation contractor who has at least five years of mitigation installation experience, including site preparation and plant installation BMC16.55.510.
    b. For invasive species removal, the mitigation contractor shall follow the recommendation from the Whatcom County Noxious Weed Board.
    c. Mitigation implementation shall commence within one year of issuance of this permit, between October 15th and March 15th.
    d. If stem protectors ("blue tubes") are not used on the plants, all plants shall be marked on side branches with colored flagging for easy identification for maintenance and monitoring.
    e. A wooden split rail fence shall be installed on the regulated buffer edge corresponding to the conservation easement boundary. The fencing shall be at least three feet high and have at least two horizontal rails if using a wood split-rail fence design.
    f. Native growth protection area (NGPA) signs shall be installed in visible locations every 100 feet on the split rail fence along the modified critical area buffer edge.
    g. No later than four weeks after completing the mitigation work, a mitigation as-built report shall be submitted to the PCDD by the project wetland biologist. The report shall include a narrative of the installation, mitigation installation site plan, color photos of the completed mitigation areas, NGPA signs, and split rail fence, and final planting species and numbers. Prior to the first surety release after receiving the as-built report, a site inspection shall occur by the PCDD environmental planner.
4. The first year of monitoring shall be the year after the first full growing season after full installation of the mitigation components for this project and approval of as-built report.
5. Annual mitigation monitoring reports shall be prepared by project biologists and submitted to the PCDD Environmental Planner for five consecutive years with successful completion of stated goals, objectives, and performance standards. If the Mitigation Plan is not successful for any year, a contingency plan may be proposed and an addendum to the plan submitted to the PCDD Environmental Planner for review.
6. The reports shall be submitted to the PCDD Environmental Planner no later than November 30th each year beginning the year following the first full growing season after all mitigation components are completed. The Monitoring Report shall include all the following elements:
    a. An assessment of the achievement of stated goals, objectives, and performance standards listed in the Final Mitigation Plan (**Exhibit E**); and
    b. A record of the maintenance tasks and the dates performed that year; and
    c. Proposal for future maintenance tasks and contingencies for the next monitoring year.

D. CLEARING AND TREE RETENTION

The application shall submit to the City for review and approval a revised Tree Retention Plan and arborist report prepared by an International Society of Arboriculture (ISA)-certified arborist that demonstrates maximum retention and protection of the onsite significant trees and identifies appropriate mitigation ratios for trees proposed for removal. This plan shall be submitted for concurrent review with the engineered drawings through the Public Facilities Construction Agreement review process. The Tree Retention Plan shall maximize retention of the site's significant trees by identifying buildable areas within each proposed lot that result in the

maximum retention of existing significant trees, unless determined by the arborist that replacement is warranted.

When tree replacement is warranted, significant trees shall be replaced at a ratio no less than 1:1. The arborist shall recommend in the revised report the specie and location of the replacement trees based on the site's physical characteristics.

VI. AMENDMENTS

Amendments to this Permit may be requested by the owner and approved by the Director in writing, provided such amendments do not substantially change or alter major elements of the project.

VII. EXPIRATION

The approval for design review is valid for two (2) years pursuant to BMC 21.10.260(C)(1). The approval for critical areas is valid for five (5) years pursuant to BMC 21.10.260(C)(2).

Pursuant to BMC 21.10.260(C)(3), if a complete building permit application is filed prior to the expiration of the land use permit, the vested status of the permit shall be automatically extended for the time period during which the building permit application is pending prior to issuance; provided, that if the building permit application expires or is cancelled, the vested status of the permit or approval shall also expire or be cancelled. If a building permit is issued and subsequently renewed, the vested status of the subject permit or approval under the permit shall be automatically extended for the period of the renewal.

VIII. EFFECTIVE DATE

The Critical Area Permit shall be effective after the close of the appeal period, or if an appeal is filed, after the withdrawal of, or final decision on an administrative appeal (BMC 21.10.240(C)(3)). Therefore, the effective date of this permit is December 6, 2023, unless an appeal is filed.

VIII. APPEAL

Pursuant to BMC 21.10.110(K), this combined permit may be appealed within 14 days from the date of this decision to the City's Hearing Examiner. Procedures for appeal to the Hearing Examiner are contained within BMC 21.10.250. Any appeal must be filed with the Planning and Community Development Department on the appropriate forms and be accompanied by a filing fee as established by the City Council.

Prepared by:

_____

Kathy Bell, Senior Planner

Approved by:

Kurt Nabbefeld, Development Services Manager
Planning and Community Development Department

Exhibit A

Planning
Permit Center
210 Lottie Street
Bellingham, WA 98225
phone: 360-778-8300
fax: 360-778-8301
www.cob.org

Land Use Application

Check all permits you are applying for in the boxes provided. Submit this application form, the applicable materials listed in the corresponding permit application packet(s) and application fee payment.

☐ Accessory Dwelling Unit	☐ Parking Adjustment Application	**Office Use Only**
☐ Binding Site Plan	☐ Planned Development	Date Rcvd:_____
☐ Clearing Permit	☐ Rezone	Case #:_____
☐ Conditional Use Permit	☐ SEPA	Process Type: _____
☐ Critical Area Permit	☐ Shoreline Permit	Neighborhood: _____
☐ Minor Critical Area Permit	☐ Shoreline Exemption	Area Number: _____
☑ Design Review	☐ Subdivision-Short Plat/Lot Line Adjustment	Zone: _____
☐ Grading Permit	☐ Subdivision-Preliminary Plat	Pre-Ap. Meeting:_____
☐ Home Occupation	☐ Subdivision-Final Plat	Concurrency: _____
☐ Institutional	☐ Variance	
☐ Interpretation	☐ Wireless Communication	
☐ Landmark – Historic Certificate of Alteration	☐ Zoning Compliance Letter	
☐ Legal Lot Determination	☐ Other:_____	
☐ Nonconforming Use Certificate		

Project Information

Project Address: 1204 Yew Street — Zip Code: 98226

Tax Assessor Parcel Number (s): 3803330384410000

Project Description: Infill Housing ("Infill Toolkit") - Small Lot BMC 20.28.070

Applicant / Agent

☑ Primary Contact for Applicant

Name: Jones Engineers, Inc. / Darcy Jones

Mailing Address: 4164 Meridian Street, Suite 304

City: Bellingham — State: WA — Zip Code: 98226

Phone: 360-733-8888 — Email: darcy@jonesengineers.us

Owner (s)

☑ Applicant ☐ Primary Contact for Applicant

Name: Bradley and Kristina Widman

Mailing Address: 1615 Old Samish Road

City: Bellingham — State: WA — Zip Code: 98229-8524

Phone: (360) 220-1990 — Email: brad.widman@gmail.com

Property Owner(s)

I am the owner of the property described above or am authorized by the owner to sign and submit this application. I grant permission for the City staff and agents to enter onto the subject property at any reasonable time to consider the merits of the application and post public notice. I certify under penalty of perjury of the laws of the State of Washington that the information on this application and all information submitted herewith is true, complete and correct.

I also acknowledge that by signing this application I am the responsible party to receive all correspondence from the City regarding this project including, but not limited to, expiration notifications. If I, at any point during the review or inspection process, am no longer the Applicant for this project, it is my responsibility to update this information with the City in writing in a timely manner.

Signature by Owner/Applicant/Agent _____, Date 8/16/2023

City and State where this application is signed: Bellingham (City), WA (State)

Performance & Decision Criteria
Design Review Criteria
Infill Housing Application Criteria

BMC 23.08.030 BMC 23.16.030 BMC 20.25.020 BMC 20.28.050
BMC 20.28.070

For the
Wellington Preliminary Plat Application
at
1204 Yew Street

City of Bellingham Project No. PRE2022-0071

Prepared for:
Bradley & Kristina Widman
1615 Old Samish Road
Bellingham, WA 98229

Prepared by:
Jones Engineers, Inc.
4164 Meridian Street, Suite 304
Bellingham, WA 98226

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APPENDICIES

1.0 INTRODUCTION

This Performance and Decision Criteria Report is provided to satisfy the preliminary plat application form submittal requirements for a "written response to the performance criteria pursuant to BMC 23.08.030," and a "written response to the decision criteria pursuant to BMC 23.16.030." This report also provides the design rationale and supporting information for the infill housing provisions ("infill toolkit" BMC 20.28), and provides responses to selected pre-application meeting comments.

The application proposes the division of a 2.51-acre parcel (the project parcel) located at 1204 Yew Street in the City of Bellingham (Figure 1). The project parcel lies within Section 33, Township 38 North, Range 3 East, W.M. in Whatcom County, Tax Parcel Number 380333-038441-0000. The legal description from the title report is "LOT 2, AS DELINEATED ON ALVARADO LOT LINE ADJUSTMENT, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 22 OF SHORT PLATS, PAGE 89, UNDER AUDITOR'S FILE NO. 901204069, RECORDS OF WHATCOM COUNTY, WASHINGTON. SITUATE IN WHATCOM COUNTY, WASHINGTON."

The project parcel is in Area 7 of the Whatcom Falls Neighborhood and is zoned Residential Single (Figure 2). The Use Qualifier is Detached, Cluster Detached. The minimum density is 10,000 square feet (SF) minimum detached lot size, 1 lot/10,000 SF average cluster density, and a minimum cluster lot size of 7,200 SF (please see Section 3.1.1 below for lot size calculations). The Comprehensive Plan designation is Residential Single. The Infill Housing provisions of the city code can be used because a cluster subdivision is allowed at this location [BMC 20.28.020(A)(1)(a)]. The names of all property owners adjacent to the proposed preliminary plat and all parcels and names of owners within 300 feet are shown in the Preliminary Plat plan set.

2.0 PERFORMANCE CRITERIA – BMC 23.08.030

This section presents the performance criteria from the city code followed by the response.

2.1 Community Design

"The city of Bellingham has adopted neighborhood plans for each of its 25 unique neighborhoods. Each applicant for a subdivision must make reference to the applicable policies for the neighborhood as outlined in the appropriate neighborhood plan and describe how the proposed adjustment or land division addresses the policies within the neighborhood plan."

The Whatcom Falls Neighborhood Land Use for Area 7 is single-family residential, low density (Figure 3). The Neighborhood Plan goals include:

2.1.1 Goal No. 1

"Natural forested areas and significant trees should be preserved and incorporated into future development where feasible."

132 significant trees were identified by an arborist and surveyed by a licensed surveyor. Northwest Ecological Services prepared a Tree Retention Plan as part of the *Critical Areas Assessment and Mitigation Plan*.

The 49 trees proposed for removal will be replaced at the ratio specified by the city. The remaining trees will be preserved.

The grading plan was designed to save two large-diameter trees. On Lot 8, the pad will be graded around the trunk of Tree 05, a 40-inch diameter Douglas-fir. A small retaining wall will be constructed to protect the trunk. This avoidance should allow the tree to survive. On Lot 4, the grading area was reduced to minimize damage to the critical root zone of Tree 59, a 27-inch diameter paper birch.

2.1.2 Goal No. 2

"As development occurs in the southern portion of the neighborhood, one neighborhood park should be established consistent with the Parks, Recreation and Open Space chapter of the Comprehensive Plan."

Not applicable because of location.

2.1.3 Goal No. 3

"As development occurs, environmentally sensitive areas, natural drainage systems, and open space should be maintained and preserved."

The environmentally sensitive area is the wetland in the eastern portion of the property. This will be maintained and preserved.

2.1.4 Goal No. 4

"Pipeline safety regulations should be adopted to minimize the risk to the environment and public in the event of a pipeline rupture and reduce the risk of third-party damage to a pipeline."

The proposed preliminary plat is not located on a pipeline route. The nearest pipeline is about 700 feet to the east according to the Whatcom County Tax Parcel View online.

2.1.5 Goal No. 5

"Preserve and restore functioning riparian buffers along the length of Whatcom Creek and its tributaries."

The proposed preliminary plat is not located along Whatcom Creek or its tributaries.

2.1.6 Goal No. 6

"Open space corridors should be maintained along stream and natural drainage corridors as development occurs."

The proposed preliminary plat places the natural wetland drainage corridor into an open space tract that will not be developed.

2.1.7 Goal No. 7

"Establish a northern gateway for public access to the Galbraith Mountain recreational area south of the neighborhood. This is identified in the Bellingham Greenways Program as "Project S5 – northwest Lookout/Galbraith Mountain Gateway and Community Park/Forest" with an established expenditure guideline for the land acquisition."

The proposed preliminary plat is located in the central portion of the neighborhood, not the southern portion.

2.1.8 Goal No. 8

"Additional public parking should be established for Galbraith Mountain trail-users that lessens on-street parking congestion in the immediate residential areas along Birch Street, Birch Falls Drive, and Riley Street."

The proposed preliminary plat is located on Yew Street, several thousand feet away from the streets mentioned.

2.1.9 Goal No. 9

"Water and sanitary sewer facilities should be sized to adequately serve the neighborhood, especially where new development is occurring."

The proposed preliminary plat includes water and sanitary sewer facilities sized to accommodate the proposed houses.

2.1.10 Goal No. 10

"Open stormwater detention facilities should not be visible from the street and should be designed as an aesthetic feature of the development through the use of vegetation."

The proposed stormwater detention facility will be located underground and will not be visible from the street.

2.1.11 Goal No. 11

"The Whatcom Falls Neighborhood supports the use of Low Impact Development (LID) and Green Infrastructure techniques to manage stormwater as close to its source as possible."

The *2019 Stormwater Manual*, p. 119, says, "in order to meet the LID Performance Standard, the chosen Flow Control BMPs will most likely need to include infiltration." The ability to infiltrate the stormwater is precluded by the soil's drainage class in the project area. The soils are considered Hydrologic Group C, so infiltration potential is very limited.

The *Preliminary Stormwater Site Plan* discusses the potential for infiltration: "When the project moves into final design a site-specific geotechnical investigation will be performed. If the site soils are conducive for infiltration, biofiltration will be evaluated for potential use especially for providing water quality treatment for the site runoff. However, this area of Yew Street typically has a shallow silty sand layer over a dense relatively impervious layer. Should the bottom of a bioretention facility extend into this dense soil layer, the bioretention facility would require an underdrain that would make the benefit negligible with respect to low impact development" (p. 11).

A Filterra filter box will be installed to treat the detained runoff. Filterra is a proprietary storm filter system intended to mimic nature. It should perform the same way as nature does to remove pollutants, such as sediment, toxics, and heavy metals. Lot 8 includes dispersion, which allows the stormwater to disperse across the natural landscape.

2.2 Natural Features

"Natural features, that may or may not be regulated by other code provisions, including but not limited to trees, topography, shorelines, streams, wetlands, habitat, geologically hazardous areas, and associated critical area/shoreline buffers, should be incorporated into the overall land division design through preservation to the extent feasible."

The natural features have been incorporated into the overall land division design through preservation and mitigation pursuant to the wetland report and tree retention plan. The wetland and associated drainage corridor will be preserved in the open space tract, along with the surrounding uplands up to the edge of the functional buffer. Please see the response in *Section 2.1.1 – Goal No. 1*, above, about tree preservation.

2.3 Clearing and Grading

"In addition to demonstrating compliance with the land clearing (Chapter 16.60 BMC), grading (Chapter 16.70 BMC) and Lake Whatcom Reservoir (Chapter 16.80 BMC) regulatory provisions, as applicable, the proposed layout of a land division should include the following standards:

1. Clearing and grading limits are established to avoid impacting critical areas and/or their associated buffers, natural features as identified in subsection (A) of this section and adjacent properties;

2. Good engineering practices have been implemented to ensure the proposed grading:
    a. Is the least necessary to protect slope stability and prevent erosion;
    b. Will not result in the excessive use of retaining walls and/or rockeries along lot lines, project's exterior boundaries, streets and the exterior boundaries of the plat;
    c. Establishes suitable building sites, driveways, public streets, pedestrian corridors, and utilities that are not located on fill. The city may impose a condition of preliminary approval requiring the submittal of a geotechnical report prepared by a Washington State licensed geologist or geotechnical engineer for city review and approval; and
    d. Will not distribute site material resulting from grading to areas within the land division that would cause additional clearing or grading that would otherwise be unnecessary."

No clearing or grading will occur in the open space tract with the wetland. Please see the *Critical Area Assessment and Mitigation Plan* by Northwest Ecological Services for avoidance measures.

All of the four measures above have been implemented to the maximum extent practicable. The slope of the project area requires grading and filling to create level surfaces for building pads and driveways.

2.4 Dedication

"Land dedicated for public infrastructure, including but not limited to right-of-way, utility, and parks and recreation purposes, is incorporated in the land division as necessary to:"

2.4.1 Rights-of-Way and Utilities.

"Serve all lots proposed within the subdivision and to provide for orderly extension of public infrastructure for anticipated development in accordance with BMC Title 13 and the comprehensive plan; except this requirement may be waived if the city engineer determines that additional right-of-way will not be necessary for the future traffic circulation of the city, or for future road widening to accommodate anticipated development in the vicinity."

2.4.2 Parks and Recreation.

"Provide open space, trail, and recreation facilities pursuant to the adopted parks, recreation, and open space plan of the comprehensive plan and construct the facilities according to the city's design standards for park and trail development, as amended."

The project plan proposes all dedications required by the city.

2.5 Pedestrian Features.

"Incorporate pedestrian features into the overall plat design that provide for networks of walking and bicycle facilities that create access to community services and amenities such as schools, parks, shopping centers, public transportation stops, bicycle and pedestrian corridors identified in the city's bicycle and pedestrian master plans within the proposed land division and to adjoining property that is not subdivided. Pedestrian features should be spaced at 500-foot intervals unless such an interval is not feasible due to a physical hardship that is not a result of the overall plat design."

The project proposes sidewalks and private walkways throughout. The proposed sidewalk will connect to the Yew Street sidewalk on the south side of the proposed public road.

2.6 Streets.

"In addition to demonstrating compliance with BMC Title 13, Streets and Sidewalks, and the city's development guidelines and public works standards, the overall street layout for a division of land should incorporate the following:"

2.6.1 Compliance with Comprehensive Plan and Neighborhood Plan.

"The alignment of arterial streets should be included in a location as nearly as possible with that shown in the most recently adopted city of Bellingham comprehensive plan, the appropriate neighborhood plan and zoning table (Chapter 20.00 BMC)."

2.6.2 Vehicular and Pedestrian Circulation.

"Streets and trails proposed within a land division should:"

"Extend to and connect with existing streets abutting its perimeter to provide for the logical extension of streets and utilities for coordinated development of contiguous tracts or parcels of undeveloped land."

"Include a street network that provides multiple routes within and in/out of a proposed division of land with a grid pattern or a network modified grid of curvilinear streets and/or alleys unless there are physical limitations including critical areas, significant natural features, conflicts with the existing built environment, or adverse topography that prevents such a street pattern."

"Avoid single points of access, cul-de-sacs, and dead-end streets, unless the city determines such extension is not necessary due to physical conditions that exist on or adjacent to the site."

"Public and private trails should also be considered in the design of a street network."

The proposed project is on a small tract of land. The proposed road does not connect to another road and would end in a cul-de-sac. The project parcel is

surrounded by single-family homes and lots, so it is not possible to connect the proposed public road through to another existing public road. The cul-de-sac is needed to provide for the fire truck turn-around. There are no nearby trails to connect across the project property.

Fire protection is provided via the cul-de-sac, which is a fire truck turn-around. The proposed private access east of the cul-de-sac (the northern private driveway) will be constructed with a 20-foot unobstructed width to property line separating Lots 5A and 5B (approximately the first 50 feet of the private access). The unobstructed width may be reduced to 12 feet provided this portion of the access road does not exceed 150 feet in length. The 20-foot unobstructed width portion of the private access is within one hose-pull of the proposed building pad on Lot 2.

The proposed stormwater detention structures would be built underneath a fire apparatus access road (the proposed public road) that will be designed to accommodate the point load design criteria for aerial apparatus access roads found in BMC 503.7. Buildings on any lot accessed by a driveway that is greater than 12% grade shall have a NFPA 13D sprinkler permit (maximum grade 15%).

2.6.3 Access to Local and Arterial Streets.
"The land division should show all access locations for all lots and proposed streets to maximize safety consistent with BMC Title 13."

The access locations for all lots and streets are shown on the site plan.

2.6.4 Safety.
"Street layouts shall be designed to maximize safety for all modes of transportation. The applicant shall provide, to the extent feasible, a street layout that promotes visibility and reduces user conflicts through the placement of parking areas and the use of curb bulb-outs, landscaping strips, meandering sidewalks and other means of ensuring pedestrian safety and reducing vehicular speed through residential areas."

The simple layout of the proposed public road promotes visibility. There is only one street proposed, so there are no intersections for curb bulb-outs or crosswalks. The slope of the land precludes a meandering sidewalk, which would require more grading than a straight sidewalk.

2.6.5 Street Trees.
"The overall street network is designed to accommodate street trees that can be evenly spaced through all existing and proposed street frontages. To ensure the location of these trees will not conflict with proposed utilities, the required street tree permit and landscape plan shall be reviewed concurrently with the public facility contract application for the required infrastructure. If a location

conflict arises, the priority is to redesign the utility location first to ensure a consistent planting schedule for the required street trees. An alternative planting plan should only be allowed if the city determines that there are no other alternative utility designs that would avoid a conflict between the utilities and trees."

The street trees will be placed to avoid conflict with utilities. The required street tree permit and landscape plan will be submitted concurrently with the public facility contract application. We do not anticipate any conflicts.

3.0 DECISION CRITERIA – BMC 23.16.030

3.1 A. Conditions of Approval

"Preliminary plats shall be given approval, including preliminary plat approval subject to conditions, upon finding by the hearing examiner that all of the following have been satisfied:

1. It is consistent with the applicable provisions of this title, the Bellingham comprehensive plan and the Bellingham Municipal Code;"

   This project uses the Cluster Provision. The project property is 2.51 acres (109,336 square feet). Divide 109,336 sf by 10,000 sf to get 10.9; ten lots are allowed. BMC 20.00.230 says the minimum cluster lot size is 7,200 square feet.

   BMC 23.08.060(F)(1) says, "Lot Size Transition. When a cluster short or cluster preliminary subdivision abuts or is located across the street from a developed single-family zoned neighborhood, the lots in the proposed subdivision immediately adjacent to the existing single-family zoned neighborhood shall be developed with a similar housing form on a lot no less than the existing neighborhood lot size, or the underlying zoning minimum lot size for the existing neighborhood minus 10 percent, whichever is smaller."

   The proposed lots are no less than the underlying zoning minimum lot size minus 10 percent, which is 7,200 sf – (7,200*0.1) = 6,480 sf minimum lot size.

The table below shows that the minimum lot size of 6,480 square feet has been met.

Proposed Cluster Lot Sizes	
Lot	SF
1	7,753
2	8,940
3	10,130
4	8,081
5 - All	12,825
Infill Lot 5A	4,147
Infill Lot 5B	3,944
Infill Lot 5C	4,734
6	8,783
7	6,563
8	7,670

Lot 1 has frontage along the public right-of-way, which should meet the requirement of BMC 23.08.060. The driveway to Lot 1 will be from the northern driveway (private easement). Lots 2, 3, 4, and 5C have frontage along the northern driveway (private easement). Lots 5A, 5B, and 6 will have frontage on the southern driveway, which will be an infill housing medium lane.

2. "It is consistent with the applicable provisions of Chapter 23.08 BMC;"

   This report addresses the provisions in BMC 23.08.

3. "The division of land provides for coordinated development with adjoining properties or future development of adjoining properties through, where appropriate, the extension of public infrastructure, shared vehicular and pedestrian access, and abutment of utilities;"

   The applicant discussed shared vehicular access with a property owner to the north at the neighborhood meeting. A late-comer's agreement could be proposed to allow for future driveway access to the north from the proposed public road.

4. "Each lot in the proposal can reasonably be developed in conformance with applicable provisions of the BMC, including but not limited to critical areas, setbacks, and parking, without requiring a variance that is not processed concurrently with the subdivision application pursuant to Chapter 23.48 BMC;"

   Each lot in the proposal can be reasonably developed. Please see Section 7.2 for a description of the variance application.

5. "There are adequate provisions for open spaces, drainage ways, rights-of-way, sidewalks, and other planning features that assure safe walking conditions for pedestrians, including students who walk to and from school, easements, water supplies, sanitary waste, fire protection, power service, parks, playgrounds, and schools; and"

   An open space tract is proposed that will protect the existing wetland drainage way. The required rights-of-way have been established. The proposed sidewalk would connect to the Yew Street sidewalk as shown on the site plan, pending approval of the variance application (see Section 7.2 for a description of the variance application). Easements for utilities along the public road are proposed according to code. Water and sewer will be extended to the proposed lots from Yew Street via the proposed public road.

6. "It will serve the public use and interest and is consistent with the public health, safety, and welfare. The director shall be guided by the policy and standards and may exercise the powers and authority set forth in Chapter 58.17 RCW, as amended."

   The proposed project serves the public use and interest by providing extra lots using the Infill Toolkit provisions of the city code. The project is consistent with the public health, safety, and welfare.

3.2 B. Denial (Floods)

"Notwithstanding approval criteria set forth in subsection (A) of this section, in accordance with RCW 58.17.120, as amended, a proposed subdivision may be denied because of flood, inundation or presence of environmentally sensitive areas as regulated by Chapter 16.55 BMC. Where any portion of the proposed subdivision lies within both a flood control zone, as established pursuant to Chapter 86.15 RCW, and the area of special flood hazard as defined in Chapter 17.76 BMC, the city shall not approve the preliminary plat unless it imposes a condition requiring the applicant to comply with the applicable regulations in Chapters 16.55 and 17.76 BMC and any written recommendations from the Washington Department of Ecology. In such cases, no development permit associated with the proposed subdivision shall be issued by the city until flood control problems have been resolved."

We do not anticipate that flooding or inundation will be a problem at this location. The wetland is protected from development in the open space tract.

3.3 C. Modifications

"An applicant for a preliminary plat may request that certain requirements established or referenced by this title be modified. Such requests shall be processed according to the procedures and criteria for administrative modification or variances in Chapter 23.48 BMC."

A subdivision variance will be proposed; please see the response to Section 7.2 for a description of the variance request.

4.0 DESIGN REVIEW REQUIREMENT – BMC 20.25.020 & BMC 20.28.030

This section addresses whether the additional design review process is required, and if so, by which law. The term "design review" refers to an "administrative design review process that will implement design standards and guidelines adopted for various districts and types of development" (BMC 20.25.010). For example, the Fairhaven District is a specifically mapped Design Review District, inside of which projects are judged for compliance with written standards for that particular area (e.g., brick façade in Fairhaven).

The city's Design Review Board oversees the design review process. The design review process occurs in addition to the normal application review required for preliminary plat approval. The infill housing code also has requirements for design review. The infill housing type proposed by the applicant is "Small Lot."

The Bellingham Municipal Code has provisions for design review:

4.1 Applicability – BMC 20.25.020.

"The following areas and developments are subject to design review under this chapter. No building or sign permit shall be issued for projects regulated under this chapter until design review approval has been issued unless the activity is exempt from design review under subsection (A) of this section. Buildings and activities which are exempt from the design review process shall comply with adopted site lighting standards regarding shielded outdoor lighting."

"A. The following activities are exempt from design review:

1. Single-family detached dwelling units unless specified otherwise in an adopted urban village regulated under this chapter or Chapter 20.28 BMC."

No design review is required by BMC 20.25.020 because single-family detached dwelling units are proposed for the preliminary plat, and because the proposed project is not part of an urban village. However, design review may be required by the infill housing code (see below).

4.2 Applicability – BMC 20.28.020.D. – Infill Housing

"If the provisions of this chapter conflict with any other provision in BMC Title 20, 21 or 23, the provisions of this chapter shall apply."

The infill housing provisions take precedence over the previous housing provisions.

4.3 Process – BMC 20.28.030.A.

"Design review applies as outlined in Chapter 20.25 BMC with additional design standards and guidelines as specified under each housing type."

Design review is required for the proposed project by BMC 20.28.030(A). The project is not located in a design review district. However, the design review procedure BMC 20.25.030 is required to evaluate the "additional design standards and guidelines" under the Small Lot housing type [BMC 20.28.070(F-G); see below].

5.0 INFILL HOUSING – GENERAL STANDARDS – BMC 20.28.050

This section provides the project narrative to show compliance with the infill toolkit's general standards. To summarize the infill project, three "Small Lots" would be created from the proposed Lot 5 (Lots 5A, 5B, and 5C). Lot 5 would be surrounded by the proposed standard lots, so the infill project does not share a boundary line with any neighboring parcel. The infill houses will front the northern private drive. The southern private drive will be constructed to Medium Lane standards.

5.1 A. Pedestrian-Oriented Design.

1. "Fronting infill housing units on existing improved streets shall be prioritized over fronting units internally off a new street, lane, or common pedestrian corridor. Gaps may occur as necessary for building setbacks, vehicular and pedestrian access, and features that contribute to the pedestrian realm."

   No existing improved streets are available for infill housing frontage. The front and back of the infill housing units will face private drives. The northern private drive will be the frontage, and the southern private drive will double as a medium lane and walkway.

2. "Parking shall not be located between dwelling units and the street or lane except as allowed in this chapter."

   Please see Section 5.8 for parking details.

3. "Site design shall prioritize locating parking off an alley to minimize pedestrian/auto conflicts with cars backing out across pedestrian facilities such as city sidewalks and lanes."

   Site design cannot accommodate an alley as defined in BMC 20.08.020 for parking. However, the southern private driveway does meet the definition of an "alley, private" in the infill toolkit definitions (BMC 20.28.040).

4. "When alley access is not available or feasible, and street/lane loaded garages are necessary:

a. The width of the garages and driveways accessing a street or lane shall be proportionally less than the width of the dwelling unit. See Figures 20.28.050(A) and (B).
b. The maximum width of a driveway serving an individual unit that crosses a pedestrian facility associated with a street or lane shall not be more than 12 feet. See Figure 20.28.050(A).
c. Architectural and landscaping details shall be embellished to minimize the visual presence of the garages and any open driveway parking. See Figures 20.28.050(B) and (C).
d. Parking shall only be located between the dwelling units and the street or lane when in conjunction with a driveway access to a garage."

Lane-loaded garages are necessary. The garages proposed for Lots 5A and 5B open to the southern private drive which is also a Medium Lane. The Lot 5C driveway would connect to the northern private drive. The width of the proposed driveways would be 12 feet. The width of the garages and driveways is proportionally less than the width of the dwelling unit. Parking between the dwelling units and the access lanes will be in conjunction with a driveway access to a garage.

5.2 B. Density.
"Density shall be as specified in the associated area in the zoning table. If there is more than one density listed, the highest listed density for any housing type specified in the applicable neighborhood subarea pursuant to zoning tables in Chapter 20.00 BMC shall be considered the maximum possible density. The maximum density may be exceeded through the density bonus provisions pursuant to BMC 20.32.040(B)(5) and 23.08.040(C)."

Please see the Introduction, Section 1 for zoning table information. See Performance Criteria Section 3.1 for density calculations.

5.3 C. Lot Requirements
"There are no minimum lot dimensions, lot sizes or minimum street frontage requirements unless otherwise specified in this chapter. All infill housing development shall provide access to a public right-of-way whether directly, by easement, or other means acceptable to the planning director."

The Small Lot design standards and guidelines will be followed to comply with design review. The access to a public right-of-way is provided. Lots 5A and 5B front the driveway to Lot 6 (the southern driveway), which will also be a medium lane that connects to the proposed public road (right-of-way). The medium lane's walkway will be set back two feet from the Lot 5 property line. The medium lane will end just after the driveway to Lot 5B, but the walkway will continue eastward. The walkway will provide the required pedestrian access to Lot 5C.

5.4 D. Subdivision.

1. "Infill housing units approved as part of a cluster subdivision in single-family zoning subareas with a cluster, cluster detached, and cluster attached shall be located on separate, fee simple lots. All cluster subdivisions that include infill housing types shall comply with the lot transition provision pursuant to BMC 23.08.060(F)(1)."

   Infill housing will be located on fee simple lots. The cluster provision was used and complies with the transition provision. Please see Section 3.1 for lot size calculations.

2. "Sites with duplex, triplex, fourplex, cottage, shared court, garden court, and townhouse types in all other zoning areas permitting infill housing types may be subdivided into lots that do not comply with development standards in this title or BMC Title 23 individually, as long as the parent site as a whole complies with this chapter. Where allowed by zoning, this provision also applies to subdivision of individual commercial, multifamily, and other uses onto separate lots when proposed as mixed uses with an infill housing development. Subsequent alterations to buildings are subject to review and approval of plans such that they are consistent with the regulations in this chapter that were previously applied to this site."

   No duplex, triplex, fourplex, cottage, shared court, garden court, or townhouses are proposed. No commercial or multifamily uses are proposed.

3. "The plat shall contain notice of any associated land use approvals."

   These items will be shown on the final plat.

5.5 E. Common Facilities.
"Legal documents identifying the rights and responsibilities of property owners and/or the homeowners' association for use and maintenance of common facilities shall be submitted for approval by the planning director and recorded. When part of a subdivision they shall be noted on the plat."

To be determined.

5.6 F. Encroachments and Common Wall Development.

1. "Encroachments into required yards are allowed as specified in BMC 20.10.080(B)."

   Not applicable. No encroachments are proposed.

2. "For common wall development such as townhouses and detached garages, and encroachments over property lines such as eaves, a joint agreement must be approved as to form by the city of Bellingham and recorded with the Whatcom County auditor's office and thereafter filed with the city."

Not applicable. No common walls are proposed.

3. "Required building setbacks from streets may be reduced to be consistent with that allowed by the underlying zoning for other permitted housing types such as apartments in multifamily zoning."

So noted.

5.7 G. Private Lanes.

"The following applies to the design and development of private transportation facilities within a development:"

1. "Each lot must abut a street, lane, or common pedestrian corridor except lots for individual units in a shared court. Each dwelling unit must abut and have access to a pedestrian facility that provides access to a street or lane."

Infill housing Lots 5A, 5B, and 5C each abut a transportation lane and a pedestrian corridor.

2. "Lanes and common pedestrian corridors shall be considered streets for frontage, setback and design purposes."

So noted.

3. "Lanes, common pedestrian corridors, and alleys must be constructed and maintained to the following minimum improvement standards:" (see Table 20.28.050)

Table 20.28.050

	Travel Lane Width	Pedestrian Path Width	Total Width
Small Lane (one to two dwelling units)	9 feet	N/A	9 feet
Medium Lane (three to five dwelling units)	11 feet	4 feet, one side	15 feet
Large Lane (six plus dwelling units and lanes over 100 feet long)	12 feet	4 feet, both sides	20 feet
Alleys	15 feet	N/A	15 feet
Common Pedestrian Corridor	N/A	4 feet	10 feet

So noted.

4. "Lanes, common pedestrian corridors, and alleys must be:
    a. Surfaced with a hard material such as concrete or asphalt, except that asphalt shall not be used for common pedestrian corridors. Permeable pavement shall be used for hard surface ground cover areas unless infeasible per the infeasibility criteria listed within BMP T5.15 of the Ecology Manual. Projects that include less than 2,000 square feet of new or replaced

impervious surface are exempt from this requirement. Gravel or loose material is prohibited.

b. Maintained to city standards, and legal documents regarding common facilities and maintenance must be submitted to the city for review and approval."

Permeable pavement is not proposed for this project. BMP T5.15 states, "Any of the following circumstances allow the designer to determine permeable pavement as 'infeasible' when applying The List Approach within I-3.4.5 MR5: On-Site Stormwater Management:

- Citation of any of the following infeasibility criteria must be based on an evaluation of site-specific conditions and a written recommendation from an appropriate licensed professional (e.g, engineer, geologist, hydrogeologist)
    - Where professional geotechnical evaluation recommends infiltration not be used due to reasonable concerns about erosion, slope failure, or down gradient flooding" (p. 748).

Infiltration was declared infeasible by the geotechnical engineer. In their Geotechnical Engineering Report dated April 7, 2022, GeoTest Services, Inc. writes,

> **"Standing surface water was observed in the pond within the upslope portion of the project site. In addition, perched groundwater seepage and soil mottling was generally encountered across the site at depths ranging from 2.5 to 8 feet below ground surface. Moreover, the near surface native materials underlying the site generally consist of medium dense to dense or stiff undifferentiated glacial deposits which commonly contained between 18 and 51 percent fines by mass within a couple of feet from the surface. The presence of this material, in our opinion, supports the presence of a "restrictive layer", as defined by the 2019 Stormwater Management Manual for Western Washington. Maintaining a minimum separation from the base of traditional stormwater infiltration systems to this restrictive layer does not appear feasible across most of the project site. Thus, it is our opinion that the site is not suitable for conventional stormwater infiltration" (p. 23).**

5. "Pedestrian paths within a lane must be delineated with a change in material, color or pattern."

   The proposed walkway will be constructed to show a change in material, color, and/or pattern.

6. "Pedestrian paths within a lane or fire apparatus road must be flush with the travel lane."

Walkways will be flush with the travel lane.

7. "No single lane may serve more than eight dwelling units unless emergency access can be provided compliant with BMC Title 17."

Not applicable, only three infill housing units are proposed.

8. "Parking is not allowed within the lane width but may be allowed in a parallel pocket abutting a lane."

No parking is proposed within the lane. If additional parking is desired, a parallel pocket abutting the lane will be proposed.

9. "Pedestrian paths within common pedestrian corridors shall be separated from property lines, fences, walls and hedges by a minimum of two feet. See Figure 20.28.050(G)."

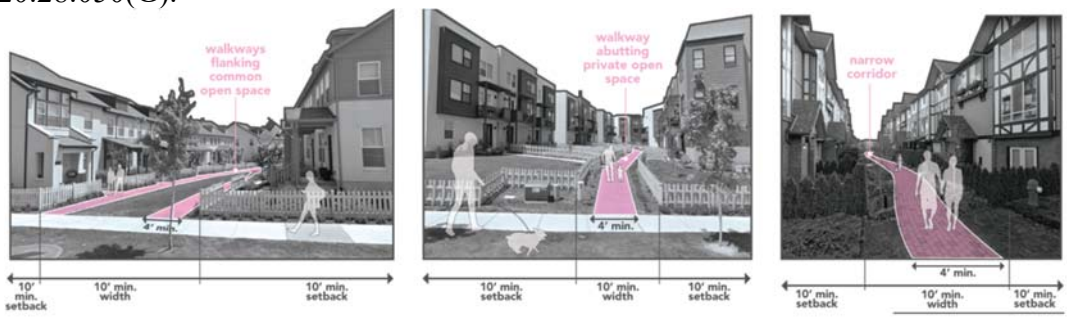


Figure 20.28.050(G)

So noted.

5.8 H. Parking.

"All housing types shall provide parking in accordance with the following standards:

1. "Number of Spaces.
    a. Infill Housing. Dwelling units less than 1,000 square feet shall provide one on-site parking stall. Units of 1,000 square feet or greater shall provide two on-site parking stalls.
    b. Guest Parking. When a site contains 20 or more units and lacks on-street parking abutting or parking within the parent site, the planning director may require additional guest parking. Guest parking may be improved on site, or in the public right-of-way with approval of the city engineer."

The proposed infill housing lots include two on-site parking stalls.

2. "Parking Stall Dimensions. When parking for individual units is in separate garages or carports, parking stalls shall be at least nine feet by 18 feet. Open parking and group parking may use dimensional parking standards in BMC 20.12.010."

Parking stalls for the infill lots are at least 9' by 18' in size.

3. "Parking Setbacks. The required setbacks for open parking are as follows:
    a. Streets: The parking shall be set back at least 25 feet from a front street and 10 feet from a side flanking street, except that one tandem stall may be located in a driveway that provides access to a garage or carport.
    b. Side and rear: five feet, except none for side and rear yard when parking is perpendicular to and accessed directly from the alley.

Tandem parking is proposed for Lots 5A and 5B, so the setbacks for open parking won't apply. A two-car garage is proposed for Lot 5C, so no open parking is proposed for that lot.

4. "Tandem Parking. Tandem parking is allowed when:
    a. No more than two spaces are parked in tandem.
    b. One tandem space per tandem pair is in a structure."

Tandem parking with one tandem stall located in each driveway is proposed for Lots 5A and 5B. The other tandem stalls for those lots are proposed inside the garages.

5. "Access and Maneuvering.
    a. If a platted alley exists, parking shall be accessed via the alley except when the planning director determines that alley access is impractical or environmentally constrained.
    b. If a lane exists, but no alley, parking shall be accessed via the lane.
    c. The maneuvering area between the back of parking (or a garage/carport entry) and an alley or lane shall not be greater than 10 feet or less than 18 feet to prevent parked cars from overhanging into a lane or alley. See Figure 20.28.050(H)."

Figure 20.28.050(H)

No platted alleys exist.

6. "Parking may be consolidated for all housing types except small lot."

   No consolidated parking is proposed.

7. "The planning director may reduce parking requirements based on applicant's demonstration of site-specific factors that justify a lower standard consistent with the purpose and intent of this chapter."

   Not applicable.

5.9 I. Landscaping and Fencing

"Development shall provide landscaping in accordance with BMC 20.12.030 [- Landscaping] except as provided herein and as specified under each housing type."

1. "One tree shall be required for every 40 feet of street or lane frontage. Trees required along a lane or common pedestrian corridor shall be installed adjacent to the lane, or adjacent to or within the pedestrian corridor."

   Street trees will be planted as required.

2. "Landscaping shall be provided between each housing unit and abutting streets, lanes, alleys, and common pedestrian corridors except where driveway and walkway crossings occur."

   Landscaping on the Lots 5A, 5B, and 5C will be provided on the landscape plan.

3. "Along streets, lanes and alleys, landscaping shall be provided to separate the parking and driveways between individual dwelling units, or the director may approve an alternative approach that breaks up parking and provides visual interest to parking facilities. See Figure 20.28.050(I)."

   The area along the southern driveway between the Lot 5A driveway and Lot 5B driveway will be landscaped.

4. "All fences in the front and side street setbacks are limited to 42 inches in height and may be no more than 60 percent opaque. Chain link or cyclone fencing is not allowed in the front or side street setback."

   Permanent fencing is not currently proposed.

6.0 INFILL HOUSING – SMALL LOT – BMC 20.28.070

This section provides the project narrative to show compliance with the infill toolkit's Small Lot provisions. Information that may be required from the Small Lot application is also explained in this section.

6.1 A. Description

"Small lots consist of single-family lots with a site area less than or equal to 5,000 square feet."

Lots 5A, 5B, and 5C meet this definition.

6.2 B. Site Requirements and Setbacks

1. "Lot size: maximum 5,000 square feet."

   The infill housing lot sizes are less than 5,000 square feet.

2. "The required setbacks are as shown in Figure 20.28.070(A), except detached accessory buildings may be located in a rear yard and in the rear 22 feet of an interior side yard. Garages and carports shall be set back at least four feet from the street face of the dwelling unit (excluding front porches). Buildings shall be placed within the shaded areas shown in the figure except as provided above."

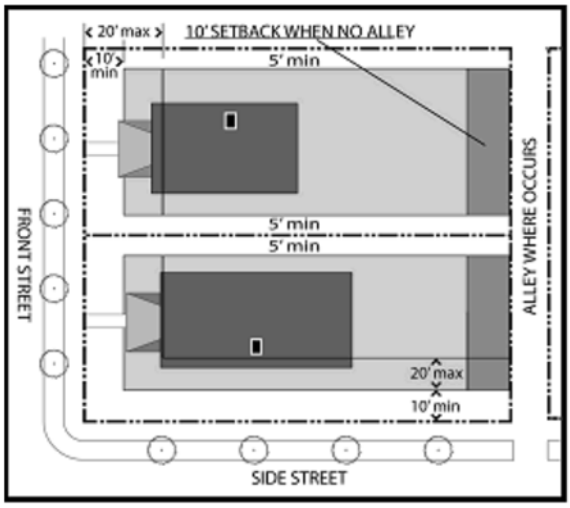


Figure 20.28.070(A) Setbacks – Main Building

The setbacks shown in the figure have been observed.

6.3 C. Bulk and Massing

1. "Maximum floor area ratio (FAR): 0.35, or 1,200 square feet, whichever is greater. An accessory dwelling unit (ADU) pursuant to BMC 20.10.036 is exempt from FAR. For housing under 1,000 square feet, garage floor area in excess of 300 square

feet shall count towards the FAR. For housing at or above 1,000 square feet, garage floor area in excess of 500 square feet shall count towards the FAR."

The architectural plans submitted for the Infill Housing lots are preliminary. Infill Toolkit House Design 1 (Figure 5) is intended for Lots 5A and 5B. House Design 2 (Figure 6) is for Lot 5C, which can accommodate a slightly wider floorplan. All plans shall meet the floor area ratio requirements.

2. "Maximum height is 25 feet under BMC 20.08.020, height definition No. 1, and 20 feet under definition No. 2."

The preliminary building heights are shown on the Building Height Calculation Form in the Infill Housing application.

6.4 D. Useable Space, Open Space and Landscaping.

1. "A minimum of 40 percent of the site area shall be in open space consisting of landscaping and permeable materials (may include permeable paving, landscape-based LID BMPs, and green roofs). Exceptions may be made in erosion hazard zones or areas with shallow bedrock as determined by the planning director."

The open space area is listed on Infill Housing Application Worksheet for each proposed lot.

2. "A green factor landscaping score of 0.3 is required (see BMC 20.12.030)."

The future landscape plan will include green factor scores.

6.5 E. Parking.

"All parking shall be provided pursuant to BMC 20.28.050(H)."

Please see Section 5.8 which addresses BMC 20.28.050(H).

6.6 F. Design Standards

1. "Shall have a covered front porch with an area of 40 square feet or more, with no dimension less than five feet. This is in addition to the open space requirement."

Both proposed infill housing units have front porches of the appropriate size.

2. "Dwelling units that front the public street or lane shall have entrances facing the public street or lane."

The dwelling units and entrances on Lots 5A and 5B front the driveway to Lot 6 that is also a medium lane. The dwelling unit and entrance on Lot 5C fronts the northern driveway.

6.7 G. Design Guidelines

"Use context-sensitive site design and building details to help ensure that new infill development will enhance the neighborhood and respect the scale and character of the existing houses on a street.

The existing house on the project property is a single-family detached home. The existing houses to the south on Alvarado Drive are single-family detached homes. To respect the scale and character of the existing nearby houses, the proposed infill housing type is Small Lot, which will accommodate single-family detached homes.

1. "Building Design.
   a. Single-story massing elements should be emphasized on the front facades, using porches and bays seen from the street or lane.
   b. Roof forms that emphasize vertical proportions and create modulation are strongly encouraged.
   c. The massing should be varied with elements such as bays, dormers, etc.
   d. A change of materials, colors or textures on different elements is encouraged to provide further articulation and adds variety and character.
   e. Homes should minimize the impact of the garage on the streetscape by minimizing blank garage doors, through the use of windows and/or architectural detail on the garage door."

The final architectural plans should address these design parameters.

2. "Site Design.
   a. Back yards should be designed for privacy from neighbors.
   b. Fencing, especially when seen from the street, should be designed to integrate into the architecture of the building and add visual interest in its detail, materials or color."

The final architectural plans should address these design parameters.

7.0 OTHER INFORMATION

7.1 Pre-Application Letter.

"The infill housing units require approval of a Type I design review permit. This decision is administrative and may be processed concurrently or after the preliminary plat decision. It is recommended that the design review permit be processed concurrently to ensure the final design of the infill housing units and the overall site work together" (Kathy Bell, Planning).

The design review application will be submitted concurrently with the preliminary plat application and infill housing application. Design review is required.

7.2 Pre-Application Letter.

"Internal public street will require full improvements 24' wide road with 5 sidewalks both sides. A Cul-de-sac will be required at the end. No hammer head turnaround. See ST-160" (Jessica Bennett, Public Works).

The proposed public street would be 26 feet wide with a 5-foot-wide sidewalk. An application for a subdivision variance to comply with BMC 13.04.070(F) – Residential Access Streets will be submitted concurrently with the subdivision application. The variance application asks to allow the sidewalk to be constructed as shown on the site plan (Figure 4). It requests the elimination of the sidewalk on a portion of the north side of the proposed public road. Eliminating this northern sidewalk segment allows the centerline spacing to Alvarado Drive to be maximized at 190 feet (200 feet required). Please see the variance application for the explanation and legal citations.

7.3 Non-Infill Housing Forms in the Project

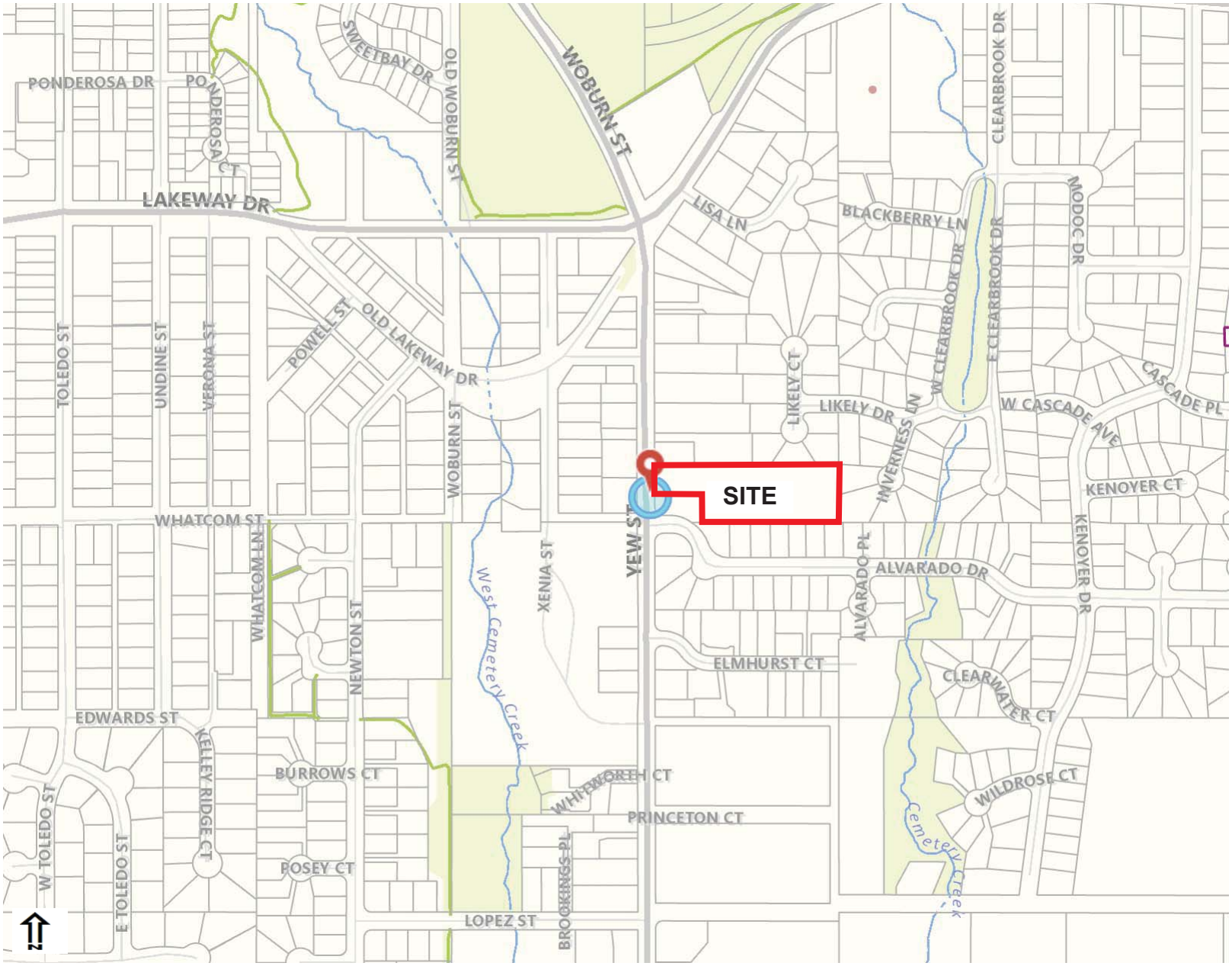
"…but provide a brief description of the housing forms i[n] the narrative" (email from Kurt Nabbefeld, 1/13/23).

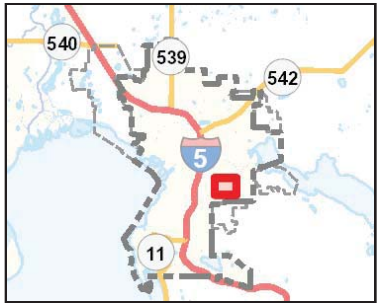
The housing form for the non-infill lots will be single-family detached. The houses for the non-infill lots have not been designed. The site plan shows building pads on each lot show where a house could be constructed.

City of Bellingham WASHINGTON

Vicinity Map
1204 Yew Street

WELLINGTON PRELIMINARY PLAT





Legend

- Tax Parcels
  - Care Facility
  - Hospital
  - Schools
  - <all other values>
- Schools
  - Colleges/Universities
  - Elementary, Middle, High Schools
  - Private School or Preschool
- Fire Stations
- City Boundary
- Urban Growth Area
- Trails
- Railroads
- Ferries
- Interstate Polygons
  - Street
  - Interstate
- Airport
- Open Channel Streams
- Parks

993 0 497 993 Feet

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes

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FIGURE 1

[Ord. 2004-12-087].

20.00.230 Whatcom Falls table of zoning regulations.

WHATCOM FALLS NEIGHBORHOOD ZONING TABLE

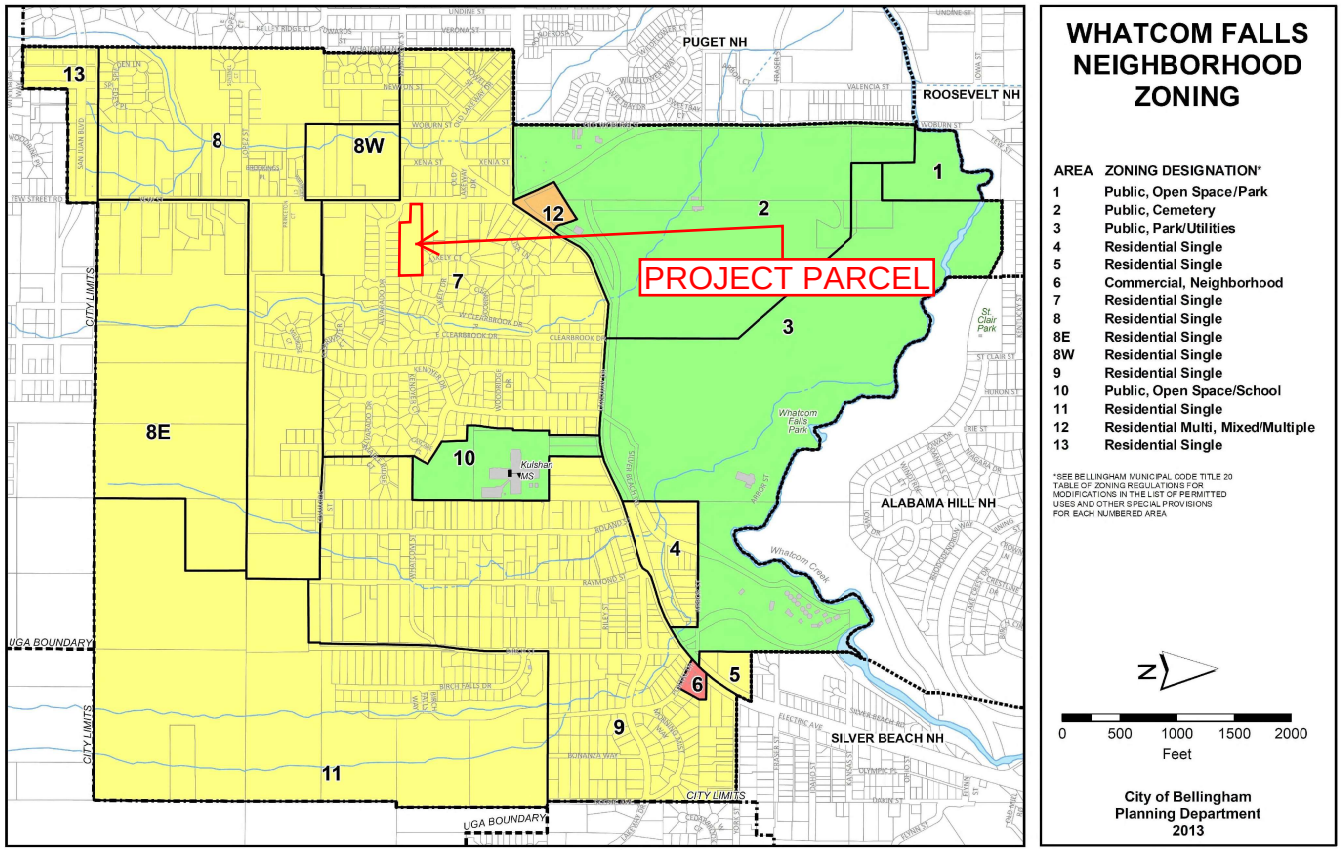


FIGURE 2

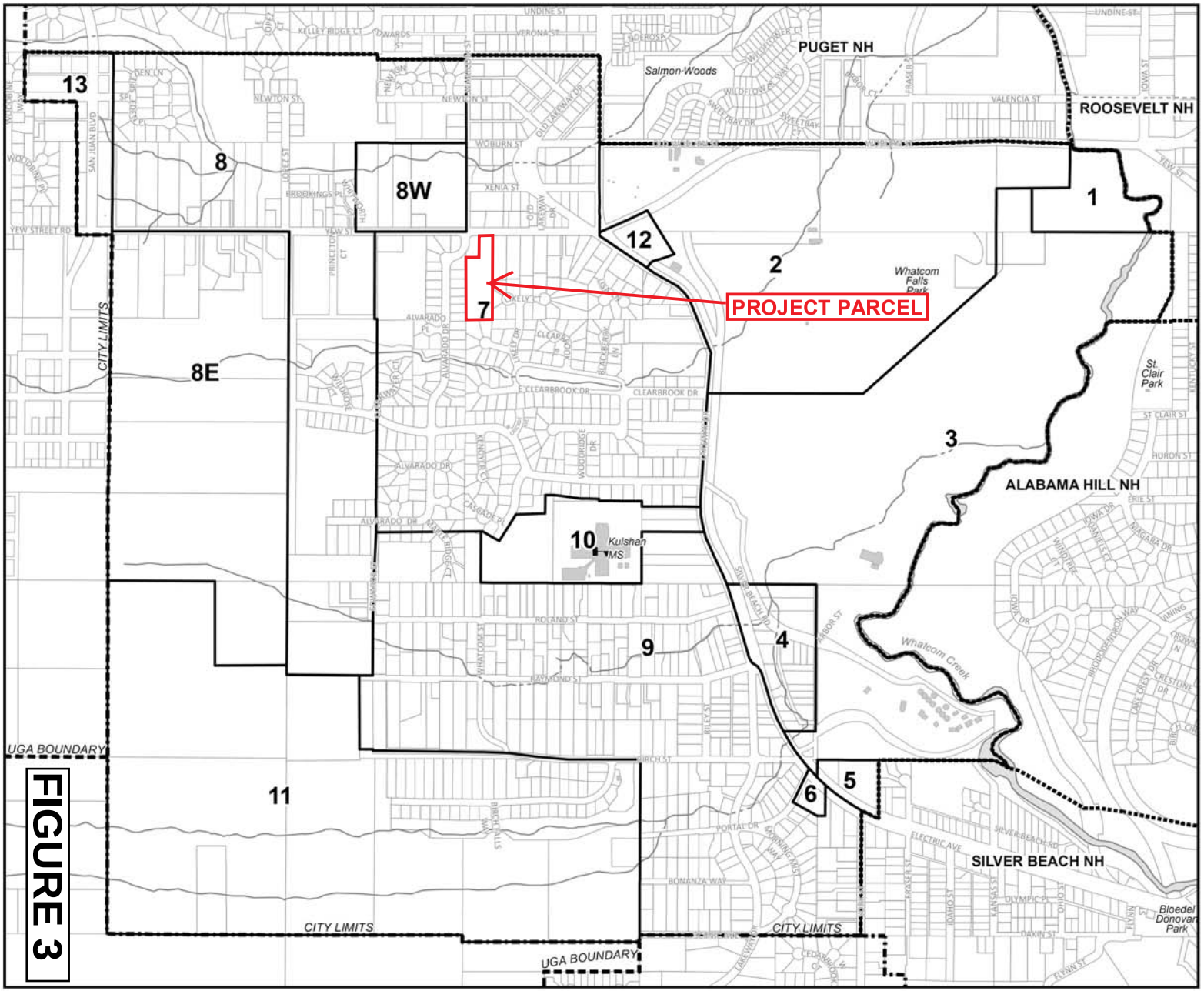


FIGURE 3

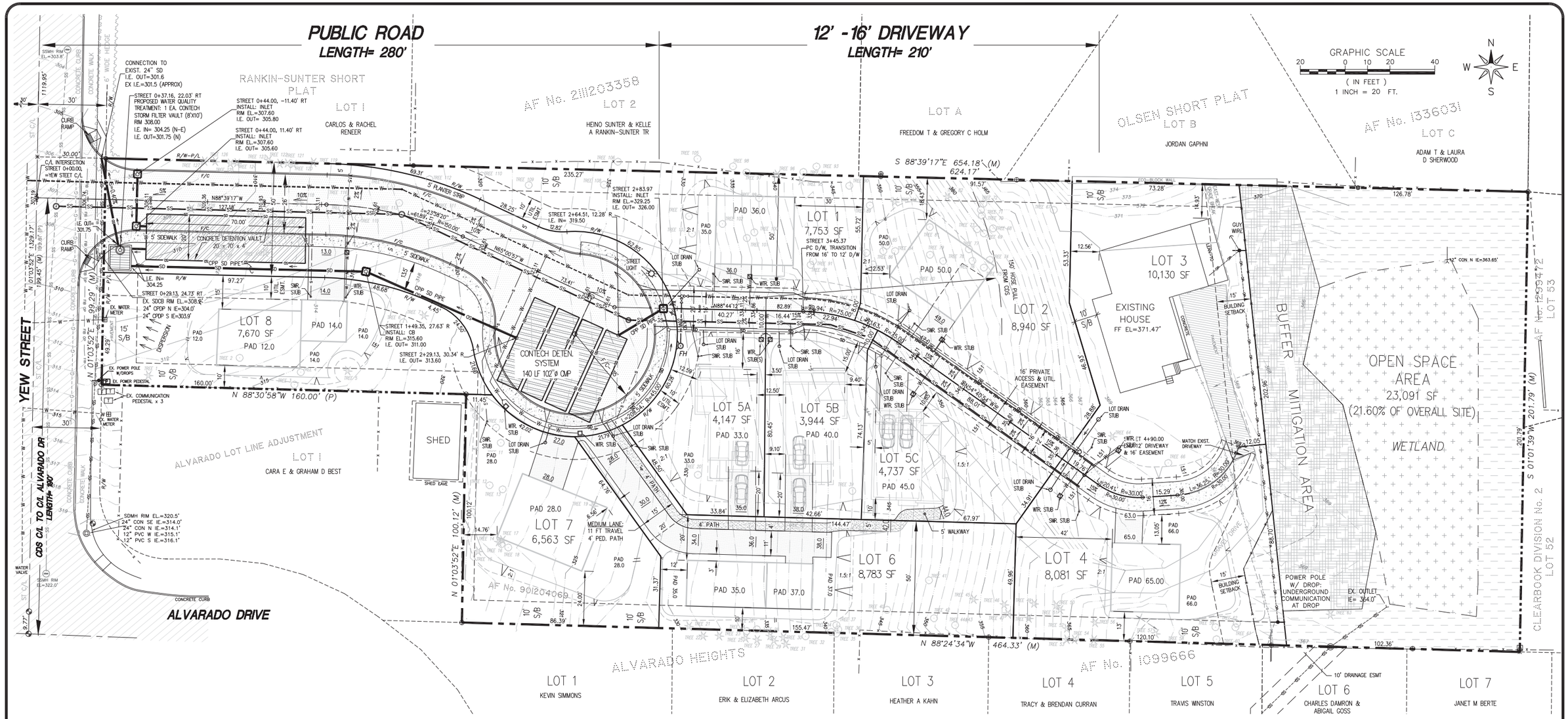
WHATCOM FALLS NEIGHBORHOOD LAND USE

AREA	COMPREHENSIVE PLAN LAND USE DESIGNATION
1	Public
2	Public
3	Public
4	Single Family Res, Med Density
5	Single Family Res, Med Density
6	Commercial
7	Single Family Res, Low Density
8	Single Family Res, Low Density
8E	Single Family Res, Low Density
8W	Single Family Res, Low Density
9	Single Family Res, Low Density
10	Public
11	Single Family Res, Low Density
12	Multi-Family Res, Low Density
13	Single Family Res, Med Density

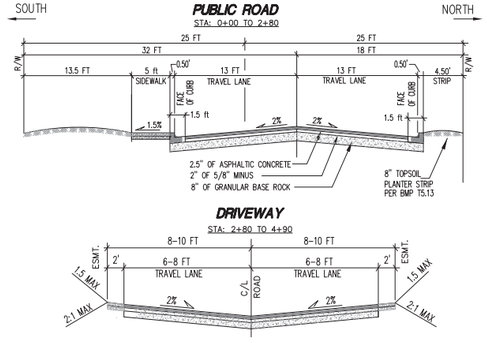
N

0 500 1000 1500 2000
Feet

City of Bellingham
Planning Department
2013



VICINITY MAP



LEGEND

- HARD SURFACE IMPROVEMENTS ARE SHADED
- SIDEWALK OR PATH
- EDGE OF PAVEMENT OR CURB LINE
- RIGHT OF WAY
- SECTION SUBDIVISION
- DIVISION/BOUNDARY
- LOT LINE
- CENTERLINE
- EASEMENT
- OTHER PROPERTY
- LOT 4 — LOT NUMBER
- EXISTING MANHOLE
- EXISTING CLEANOUT
- EXISTING SEWER SERVICE
- EXISTING CATCHBASIN
- EXISTING STORM DRAIN
- EXISTING WATERMAIN
- EXISTING SINGLE WATER SERVICE
- EXISTING FIRE HYDRANT
- EXIST. COMMUNICATION PEDESTAL
- EXISTING WATER METER
- EXIST. TREES
- PROPOSED CATCH BASIN
- PROPOSED STORM DRAIN
- PROPOSED LOT DRAIN STUB
- PROPOSED SEWER STUB
- PROPOSED WATER STUB
- FUNCTIONAL BUFFER
- WETLAND
- BUFFER MITIGATION AREA
- 15' BUFFER SETBACK
- SPLIT RAIL FENCE

STREET & UTILITY SERVICE PLAN

REVISION

NO	DATE	BY	NOTE
1.			
2.			
3.			
4.			

LEGAL DESCRIPTION

LOT 2, AS DELINEATED ON ALVARADO LOT LINE ADJUSTMENT, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 22 OF SHORT PLATS, PAGE 89, UNDER AUDITOR'S FILE NO. 901204069, RECORDS OF WHATCOM COUNTY, WASHINGTON. SITUATE IN WHATCOM COUNTY, WASHINGTON.

DRAWN BY_____ DATE_____

CHECKED BY____ DATE_____

JOB# 22001

WELLINGTON PRELIMINARY PLAT

FOR: **BRADLEY & KRISTINA WIDMAN**

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS DOCUMENT, CONSISTING OF PLANS, DESIGNS, AND SPECIFICATIONS, WAS PREPARED UNDER MY PERSONAL SUPERVISION AND MEETS CITY OF BELLINGHAM CODES AND STANDARDS AND FURTHER THAT SAID PLANS MEET THE GENERALLY ACCEPTED STANDARDS OF PRACTICE WITHIN THE STATE OF WASHINGTON.

RYAN A. LONG, P.E. _____ DATE _____

JONES ENGINEERS
phone 360-733-8888, www.jonesengineers.us
4164 Meridian Street · Suite 304 · Bellingham, Wa. 98226

1204 YEW STREET

PRELIMINARY STREET & UTILITY SERVICE PLAN

SHEET 4 OF 5

JOB 1204 YEW STREET SUBDIVISION

DRAWN BY TODD FULLER DATE 6-13-22

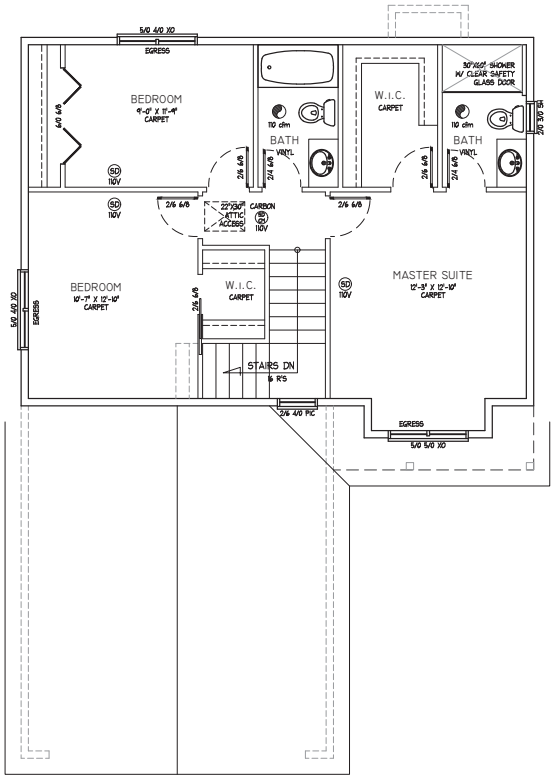
CHECKED BY _____ SCALE NTS

INFILL TOOLKIT HOUSE DESIGN 1

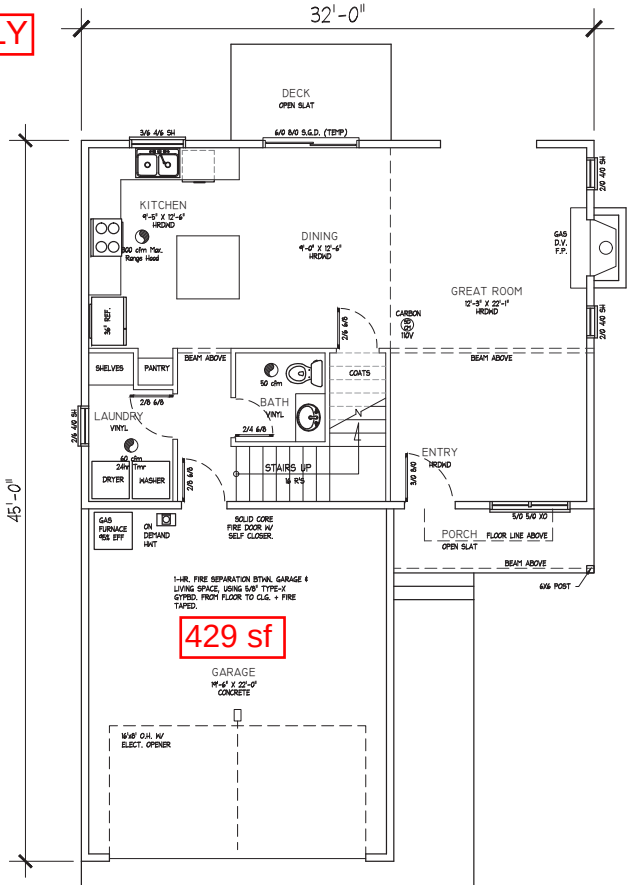
LOTS 5A, 5B

FULLER BUILDING DESIGN
Residential Commercial Remodel
PO Box 1075, Bellingham, WA 98227-1075
Telephone and FAX: 360.393.3131
Website: www.fullerbd.com

CONCEPTUAL DESIGN - PRELIMINARY ONLY



UPPER FLR UPPER FLOOR 660 SQ. FT.



MAIN FLR MAIN FLOOR 653 SQ. FT.

TOTAL BLD SIZE
1,313 SQ. FT.

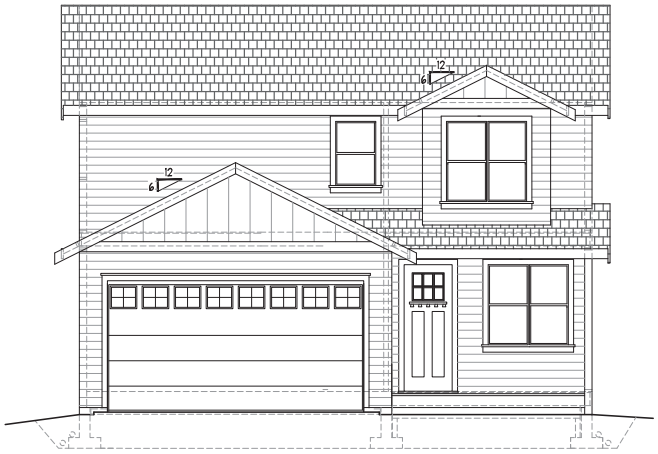


FIGURE 5

JOB 1204 YEW STREET SUBDIVISION

DRAWN BY TODD FULLER DATE 6-13-22

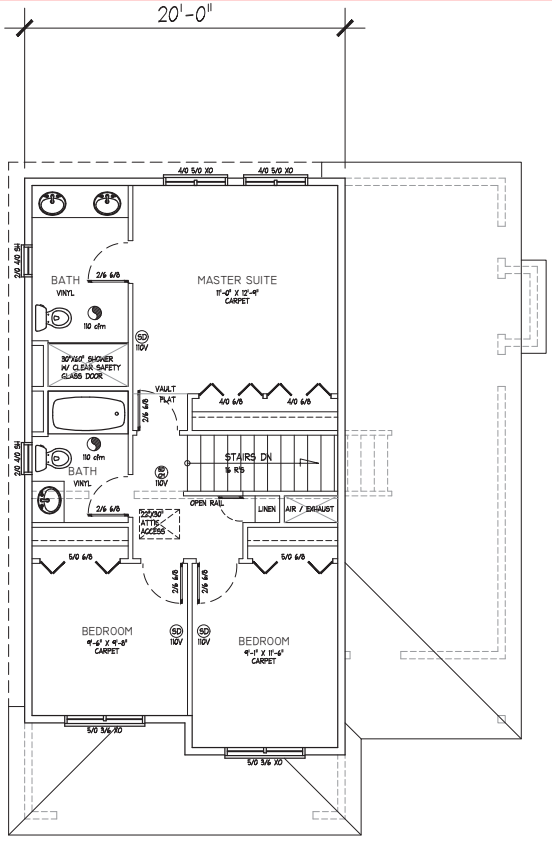
CHECKED BY _____ SCALE NTS

INFILL TOOLKIT HOUSE DESIGN 2

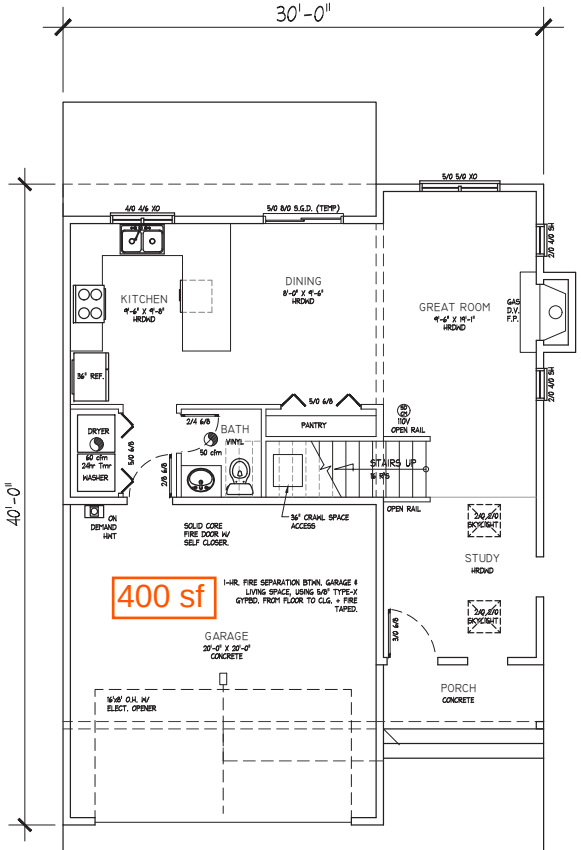
LOT 5C

CONCEPTUAL DESIGN - PRELIMINARY ONLY

FULLER BUILDING DESIGN
Residential Commercial Remodel
PO Box 1075, Bellingham, WA 98227-1075
Telephone and FAX: 360.393.3131
Website: www.fullerbd.com



SECOND FLOOR PLAN VIEW
700 SQ. FT.



MAIN FLOOR PLAN VIEW
652 SQ. FT.

TOTAL BLD SIZE
1,352 SQ. FT.

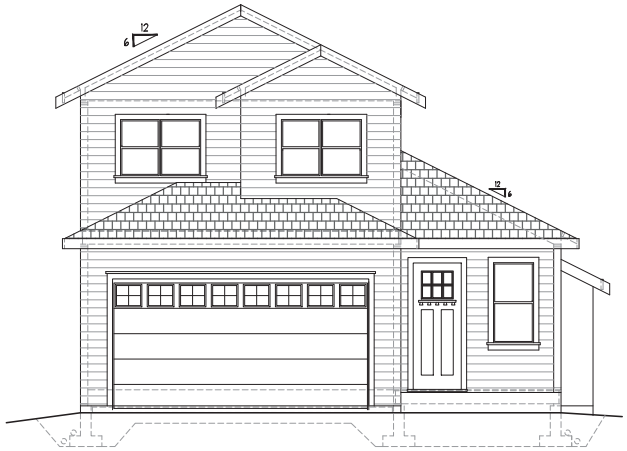


FIGURE 6

Appendix A

PHOTOGRAPHS – Infill Housing Application

Photo 1. View of the block face looking north from the gravel drive at 1204 Yew Street.

Photo 2. View of block face across the street from the project parcel.

Photo 3. View of project parcel frontage at Yew Street looking southerly at the block face.

Photo 4. View of frontage across the street from the project parcel looking southerly.

JONES ENGINEERS

September 21, 2022

Brad Widman
1615 Old Samish Road
Bellingham, WA 98229

Re: Stormwater Qualitative Downstream Analysis
1204 Yew Street, Bellingham, Washington

Mr. Widman:

On August 26, 2022, our firm performed a stormwater Qualitative Downstream Analysis for the proposed development at 1204 Yew Street (parcel no. 3803330384410000) (Figure 1). There are two basins on the property, the east basin and the west basin. Only the west basin is proposed for development. The east basin is not proposed for development. Both basins drain to the same place, West Cemetery Creek.

The west basin contains the entire proposed development and drains west to Yew Street. The proposed stormwater system would mitigate flows from this west basin and would discharge to the existing Yew Street storm drain pipe. The proposed discharge point to the Yew Street storm drain is in the northwest corner of the project property.

The study for the west basin began at the proposed stormwater discharge point in the northwest corner of the property. The probable surface flow path of the stormwater was followed downhill to identify the receiving body and flow route. Where the downhill route intersected catch basins, the direction of the flow was then assumed to follow the down-gradient storm drain pipes in the catch basins. Each catch basin along the route was photographed.

From the northwest corner of the property, if the proposed storm system connects to the Yew Street storm drain, then the water would flow about 320 feet northward to a catch basin near the intersection of Yew Street and Old Lakeway Drive (Figure 2). The slope along this segment is the steepest grade in the route. The remaining segments are less sloped.

From this first catch basin, the stormwater would drain forty feet to the northwest via a pipe under the street to the sewer catch basin across the street. From that second catch basin, the water would drain about 185 feet to the west-northwest through a pipe under the street to a third catch basin on the north side of Old Lakeway Drive. From this third catch basin, the land slopes downhill to the west toward West Cemetery Creek, which was identified by a sign along the road. The water likely drains about 125 feet through a pipe to the creek area. The thick vegetation obscured the probable discharge point in the creek channel, but it was confirmed on the CityIQ storm drain map (Figure 3).

The east basin drains to the east end of the subject property, then to the south. This basin contains the only on-site wetland. The wetland itself drains to the south via a six-inch clay pipe at the wetland edge. The pipe extends through a drainage easement (Figure 4) to a catch basin on Alvarado Drive. The ten-foot wide by 130-foot long drainage easement is located between Lot 5 (2509 Alvarado

Drive) and Lot 6 (2515 Alvarado Drive). The easement extends northward from Alvarado Drive straddling the property line, then turns to the northeast across the top of Lot 6 to the project parcel, ending at the wetland edge about 180 feet from Alvarado Drive. The drain pipe is in the easement, and is estimated to be 180 feet in length.

From the catch basin on Alvarado Drive, the water drains west via the existing storm drain pipe down the hill about 300 feet to a second catch basin (Figure 2). From the second catch basin, the water drains about 200 feet toward Yew Street to a third catch basin. There is a hill between the last observed catch basin on Alvarado Drive and Yew Street. The CityIQ map of the storm drain system (Figure 3) shows a pipe from this last catch basin going to the south across Alvarado Drive to another catch basin. From there, the pipe then goes northwest under the hill and connects to the Yew Street storm drain, where it would flow downhill to the north, right in front of the project parcel. Here the water meets up with the west basin's proposed stormwater system discharge point in the northwest corner of the property, and follows the path previously described.

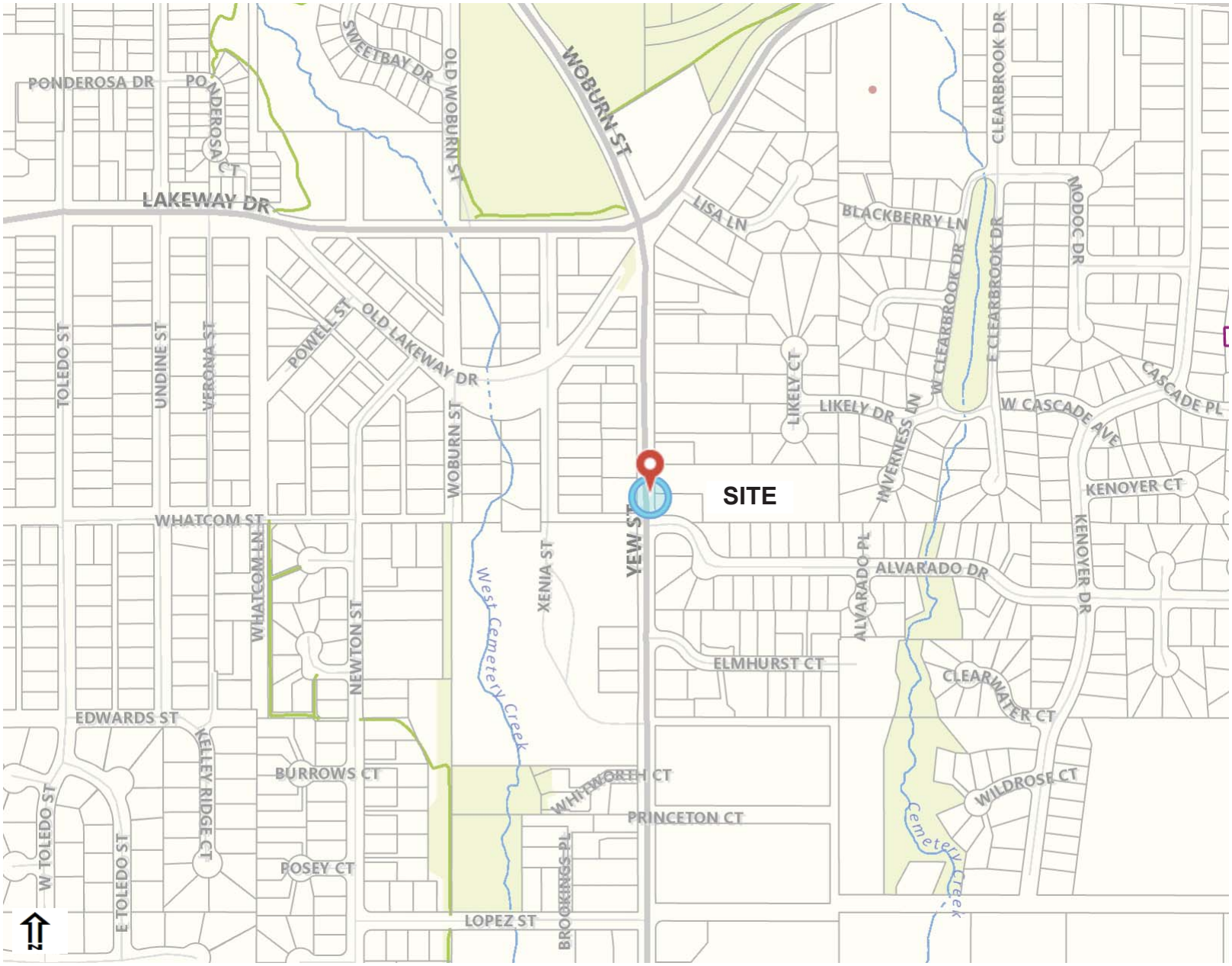
If all the roads and improvements were theoretically removed, any surface water flowing from the northwest corner of the project property would follow essentially the same route across the natural landscape to West Cemetery Creek. The pipes appear to direct the water about the same way as the natural landscape would drain.

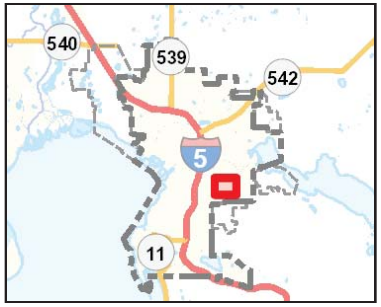
Best regards,

Darcy Jones
Jones Engineers, Inc.

City of Bellingham WASHINGTON

Vicinity Map
1204 Yew Street





Legend

- Tax Parcels
  - Care Facility
  - Hospital
  - Schools
  - <all other values>
- Schools
  - Colleges/Universities
  - Elementary, Middle, High Schools
  - Private School or Preschool
- Fire Stations
- City Boundary
- Urban Growth Area
- Trails
- Railroads
- Ferries
- Interstate Polygons
  - Street
  - Interstate
- Airport
- Open Channel Streams
- Parks

993 0 497 993 Feet

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes

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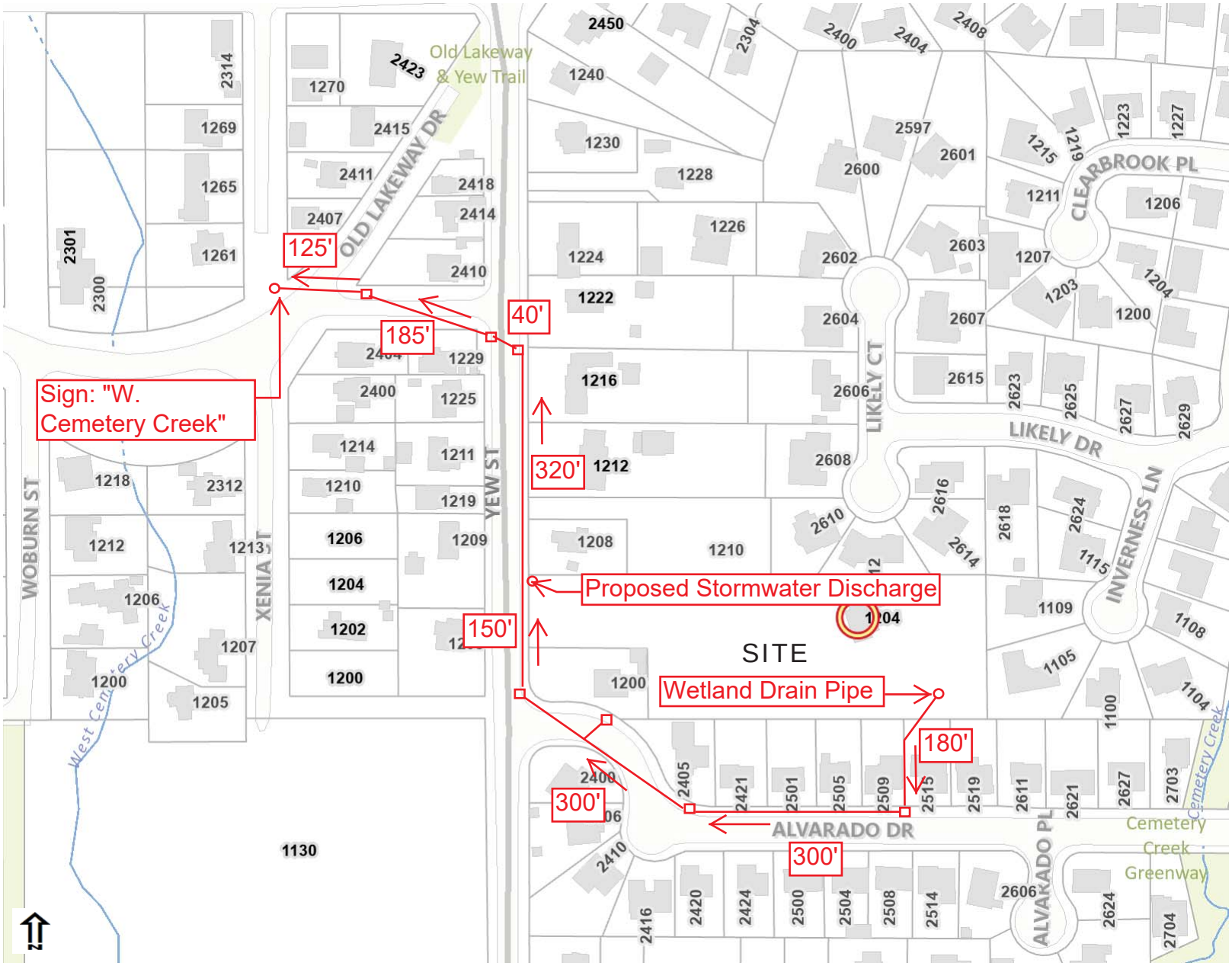
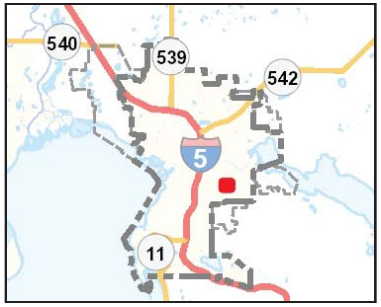
FIGURE 1

Qualitative Downstream Analysis
1204 Yew Street





Legend

- Buildings
- Docks
- Tax Parcels
  - Care Facility
  - Hospital
  - Schools
  - <all other values>
- Schools
  - Colleges/Universities
  - Elementary, Middle, High Schools
  - Private School or Preschool
- Fire Stations
- City Boundary
- Urban Growth Area
- Trails
- Railroads
- Ferries
- Street
- Interstate
- Airport
- Open Channel Streams
- Parks
- Stormwater Discharge Point
- Existing Catch Basin
- Existing Storm Drain Pipe

400 0 200 400 Feet

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes

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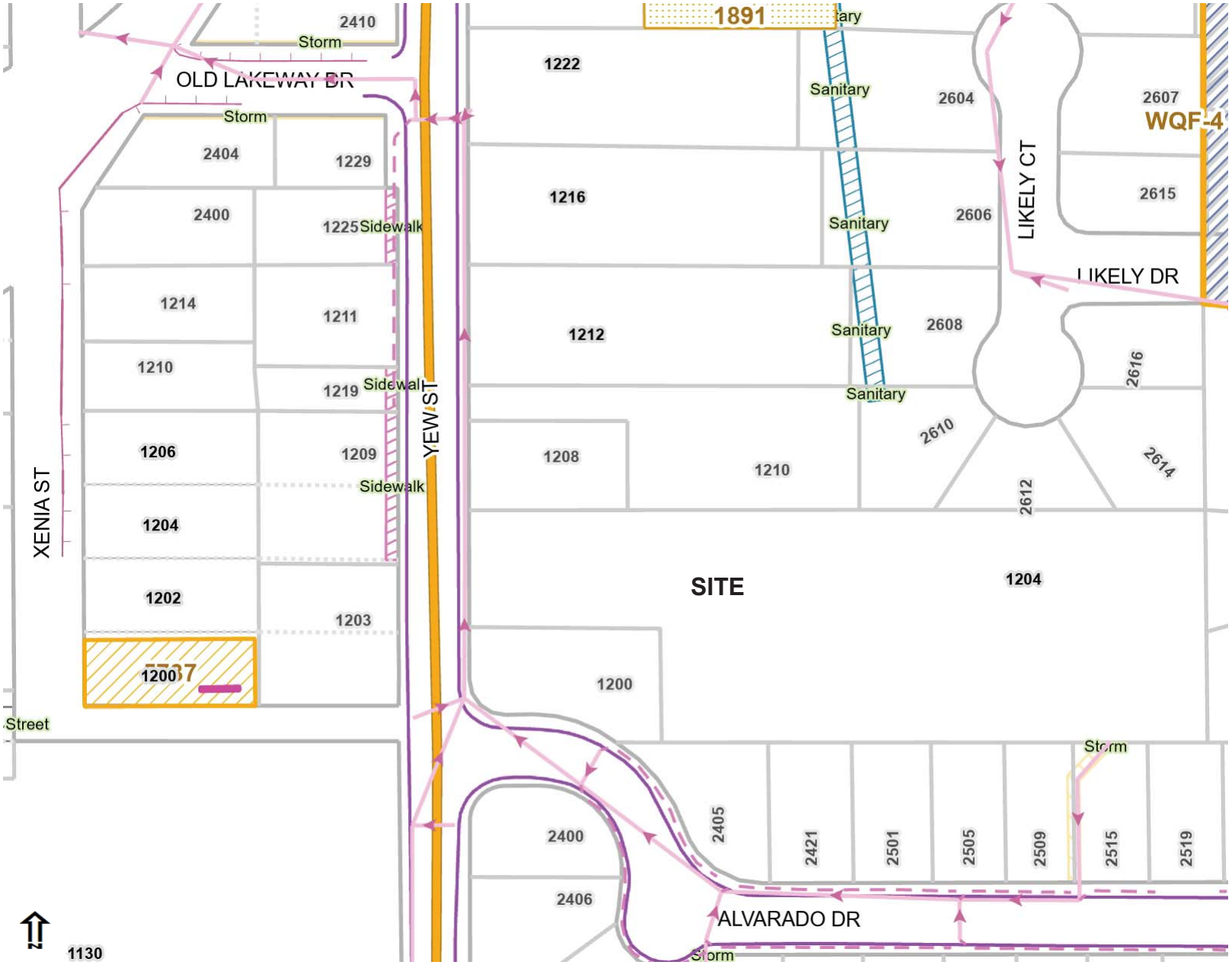
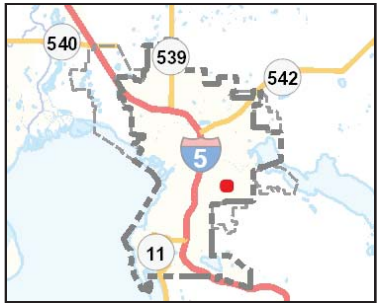
FIGURE 2

Storm Drain Map





Legend

- City and UGA
  - City Boundary
  - Urban Growth Area
- Lateral Lines
  - Collector
  - Domestic
  - Drain
- Culvert
- Storm Main
  - City Mains, Active
  - City Mains, Under Construction
  - Private Mains, Active
  - Private Mains, Under Construction
- Ditch
- Storm Access Points
  - Access Cover
  - Observation Well
- Storm Control Structures
- Storm Other Components
  - COB - Public Works
- Storm Water Sites
  - Active Inspection
  - Inactive Inspection
  - NPDES
  - Public Works
- Open Channel Streams
- Washington Roads Labels
- Bellingham Streets Street View
- Bellingham Streets Detail View
- County Roads Detail
- Streets by Classification (Small scale)
  - Principal Route
  - Secondary Route
  - Collector Route
- Pedestrian Master Plan
  - YES, Complete
  - YES, Incomplete

248 0 124 248 Feet

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes

Printed: 9/21/2022 9:57:55 AM

FIGURE 3

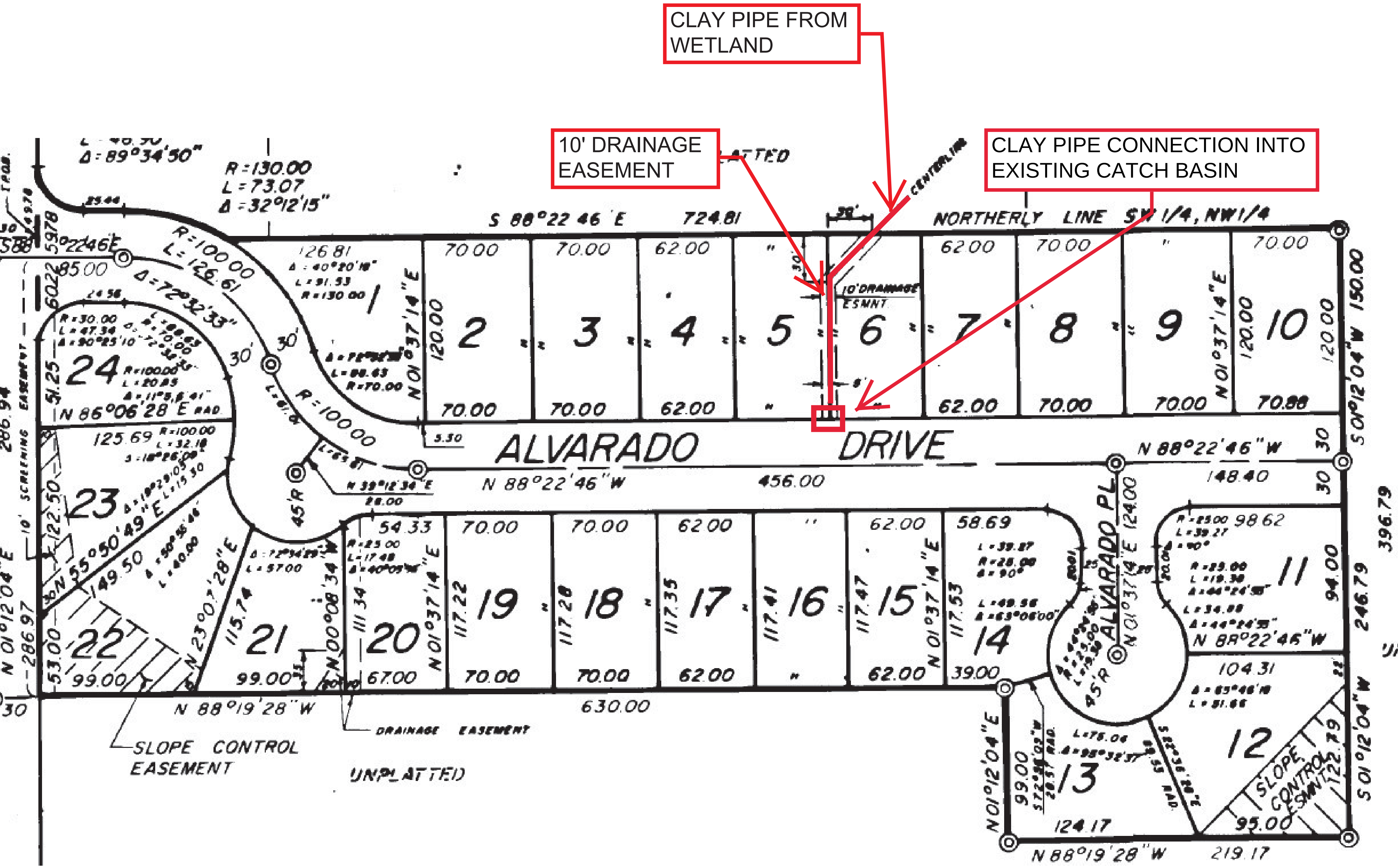

CLAY PIPE FROM WETLAND
10' DRAINAGE EASEMENT
CLAY PIPE CONNECTION INTO EXISTING CATCH BASIN
ALVARADO DRIVE
ALVARADO PL
NORTHERLY LINE SW 1/4, NW1/4
S 88°22 46 E
724.81
N 88°22'46"W
456.00
N 88°19'28"W
630.00
219.17
10' DRAINAGE ESMNT
SLOPE CONTROL EASEMENT
DRAINAGE EASEMENT
UNPLATTED
CENTERLINE
SLOPE CONTROL ESMNT
10' SCREENING EASEMENT

FIGURE 4

PHOTOGRAPHS

Photo 1. View east of the existing driveway at 1204 Yew Street.

Photo 2. View southeast from northwest property corner.

Photo 3. View north on Yew Street of northwest property corner, sidewalk, curb, and gutter.

Photo 4. View northwest from Yew Street at Old Lakeway Drive of the first two grates.

Photo 5. View west on Old Lakeway Dr. from the second grate.

Photo 6. View east on Old Lakeway Dr. from third grate.

Photo 7. View west of third grate, across Old Lakeway Dr. at the creek channel.

Photo 8. View west and downward at water in the West Cemetery Creek channel.

INFILL HOUSING APPLICATION CHECKLIST

(PLEASE TYPE OR PRINT CLEARLY IN BLUE OR BLACK INK)

An Infill Housing Worksheet is required for all Infill Housing types. The following materials must be submitted in order to have a complete application. **Planning staff will help you determine which of these requirements are applicable. See instructions in this packet.**

RETURN THIS CHECKLIST WITH THE APPLICATION

Applicant to Check if Submitted

- ☑ Pre-application conference or waiver
- ☑ Pre-application neighborhood meeting or waiver (if required)
- ☐ Transportation certificate of consistency (if required)
- ☐ Land Use Application
- ☐ Filing fee (Applicable fee as calculated by Planning staff. See separate Fee Schedule.)
- ☑ Mailing list and labels (Complete the attached Names and Mailing Addresses of Surrounding Property Owners for property within 500 feet.)
- ☑ Environmental checklist (SEPA) (if required)
- ☑ Infill Housing Application Worksheet(s)
- ☑ Legal description of the property (attach separate page if lengthy):

LOT 2, AS DELINEATED ON ALVARADO LOT LINE ADJUSTMENT, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 22 OF SHORT PLATS, PAGE 89, UNDER AUDITOR'S FILE NO. 901204069, RECORDS OF WHATCOM COUNTY, WASHINGTON.

SITUATE IN WHATCOMCOUNTY, WASHINGTON.

- ☑ Associated land use permit applications. (Consult with Planning staff to determine if other land use permits are required. All Type II applications must be submitted concurrently.)
- ☑ Site plan (see attached Site Plan Checklist)
- ☑ Photos of the site context showing the subject site and adjacent buildings, including the block face and the block face across the street
- ☐ Other required information: _____

NOTE: After staff review of the application, additional materials may be required to fully illustrate the building and design features proposed.

CITY OF BELLINGHAM PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT
SITE PLAN REQUIREMENTS CHECKLIST

Provide a site plan containing the following information. Provide the information under each heading that applies to your project.

The Planning & Community Development Department may require additional information when necessary to evaluate the proposal.

☑ Scale shall be standard architectural or engineering. The scale must allow clear depiction of all required information, typically between 1" = 10' and 1" = 20'.

☑ **Submit one (1) full set of scaled plans folded to 8.5" x 11" size, and two (2) 11" x 17" reduction illustrating the following:**

New buildings and additions:

☑ Vicinity map

☐ Site plan (see attached Site Plan Checklist)

☐ Building elevations drawn at 1/8" = 1' or comparable scale showing all facades with shadowing to show modulation of wall and roof. Include design details such as door and window treatments, awnings, artwork, exterior lighting, building materials, type of window glazing, mechanical equipment screening methods, colors, etc. Dimension building height and floor to floor heights. Clearly identify new work and existing features to be retained.

☐ Contextual street elevation showing the proposed building in relation to adjacent buildings

☐ Perspective drawings, color renderings or other three-dimensional representations to adequately illustrate the proposal. Models and/or material and color boards may be included.

☐ Dimensioned floor plans with uses labeled; include parking garage layout

☐ Signs

Existing Site Conditions

☑ All lot lines and site boundary dimensions.

☑ Location, dimensions, gross floor area, floor plans and use of existing structures. Indicate all structures to be demolished.

☑ Distances between structures and property lines.

☑ Location and design of all paving.

☑ Walkways and bicycle paths.

New Development

☑ Proposed lot lines.

☑ Existing and proposed easements and maintenance agreements for any shared access among lots.

☐ Proposed legal documents for maintenance of any common areas if condo or fee simple.

☑ Location, dimensions, and use of proposed buildings and structures. Include decks, patios, fences and signs.

☑ Distances between proposed buildings, parking areas and property lines.

☑ Scaled floor plan (1/4"=1' or 1/8"=1') of existing and proposed buildings.

☑ Existing and proposed elevation contours at intervals of not greater than 5 feet. Provide 2-foot contours when requested by the Planning & Community Development Department.

☑ Location, height, top elevation, width and design of existing and proposed retaining walls and rockeries. Cross sections may be required.

☑ Location, dimension and number of parking spaces (including accessible spaces), bicycle parking, drop-off areas and driveway access.

☑ Proposed and existing pedestrian walkways and surfacing.

☑ All significant man-made or natural features (ponds, woodlands, streams, etc.)

☑ Proposed storm water detention and treatment features (swales, ponds, vaults, etc.) Size, location and type of facilities on this preliminary plan shall be consistent with City, State and Federal requirements for storm water management.

(Note: The preliminary plan shall be designed or reviewed by a Civil Engineer registered with the State of Washington for conformance with regulations. The City may ask for information to corroborate the preliminary design. Any regulatory deficiencies in the proposed storm water plan are wholly the responsibility of the proponent and/or the engineer. You may be required to apply for amendments to land use and design permits if there are changes in the final storm water facilities that affect the site design.)

☑ All existing street and alley rights of way abutting the site. Include street name, width of right of way and location of existing improvements such as sidewalk, curb, medians, bus stops, overhead utility lines, street trees, street lights and street improvement width. Note any proposed changes to the street design.

☑ Location, dimensions, and design of proposed lanes.

☑ Location of existing and proposed utilities within the site such as sewer, water, gas and electricity.

☑ Location of existing fire hydrants.

☐ Proposed garbage/recycling collection areas, including design and dimensions.

☑ Location and type of proposed exterior lighting.

☐ Location of proposed signs.

☑ Land uses, lot lines and approximate location of structures and pavement on abutting properties.

☐ **Landscaping Plan**. Include the following:

- scale
- abutting street right of way to the curb
- rockeries, retaining walls, fences, arbors and trellises
- surface storm water facilities
- buildings and paving
- topographic contours
- wetlands, ponds, streams and proposed buffers
- existing vegetation to be retained
- general location and type of proposed trees, shrubs and ground cover

Environmentally Sensitive Areas on or Adjacent to the Site

☐ Areas of flood hazard (FEMA floodplain or floodway).

☑ Wetlands on site and within 100 feet of the project boundary.

☐ Streams, ponds or lakes on site and within 200 feet of the project boundary.

☐ Marine shoreline within 200 feet of the project site.

☑ Proposed wetland and water body setbacks and buffers.

☐ Conservation easements or other development restrictions affecting the site.

☑ Steep slopes

Design Review Criteria

Please consult with Planning staff if a project is subject to design review criteria for any of the following:

☑ Infill Housing (specify housing types(s)): Small Lot

☐ Multifamily Residential.

☐ City Center.

☐ Fairhaven.

☐ Urban Village (Specify):_____

Other (Specify): _____

Planning

Permit Center
210 Lottie Street
Bellingham, WA 98225
phone: 360-778-8300
fax: 360-778-8301
www.cob.org

SPECIFIC INFILL HOUSING APPLICATION WORKSHEET
~~**SMALL AND SMALLER HOUSE**~~ SMALL LOT

(PLEASE TYPE OR PRINT CLEARLY IN BLUE OR BLACK INK)

Application Requirements:

- ☑ A completed Land Use Application form
- ☐ All of the materials and information required on the Infill Housing Application Checklist
- ☐ All of the materials and information required on the Site Plan Requirements Checklist
- ☑ All of the materials and information required by this worksheet
- ☑ Subdivision Application

Project Data:

Fill out a separate Application Worksheet for each lot and house that is not of common size or design.

1. Zoning: Neighborhood: Whatcom Falls Area: 7

   General Use Type: Residential Single Use Qualifier: Detached, Cluster De Density: 1/10000; min. 6,480

2. Housing Type (check one): ☐ Smaller House ☐ Small House ☒ SMALL LOT

3. Parent parcel size: 12,825. Lot # 5A of 8. Lot size: 3770 sf.

4. Floor area (including attached garage) of dwelling unit:

   Basement: 0. 1st floor: 622. 2nd floor: 660. Total: 1,282 sf.

5. Square Footage of all detached accessory buildings/garages: 0.

6. Floor area ratio: 0.28

7. Number of Bedrooms: 3

8. Number of Parking Spaces provided on site: 2

9. Building Height is 20' 11" as measured from Height Definition # 1.
   - Please fill out and attach a height worksheet for the proposed building.

10. Square footage (and %) of site that is open space: 2,070 SF = 54.91 %.

11. Square footage (and %) of open space that is pervious material: 2,070 SF = 54.91 %.

Depending on the nature of the project, additional information may be required.

Planning

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Depending on the nature of the project, additional information may be required.

WIDMAN / YEW ST.

(1) LOT 5A

LOT AREA	3,770 SQ.FT.	PREVIOUS/OPEN = 2,070 = 54.91%
HSE ROOF AREA	1,226 SQ FT.	IMPERVIOUS 1,700 = 45.09%
DRIVEWAY	362 SQ FT.	
WALK	112 SQ FT.	
ROOF HEIGHT	20'-11"	

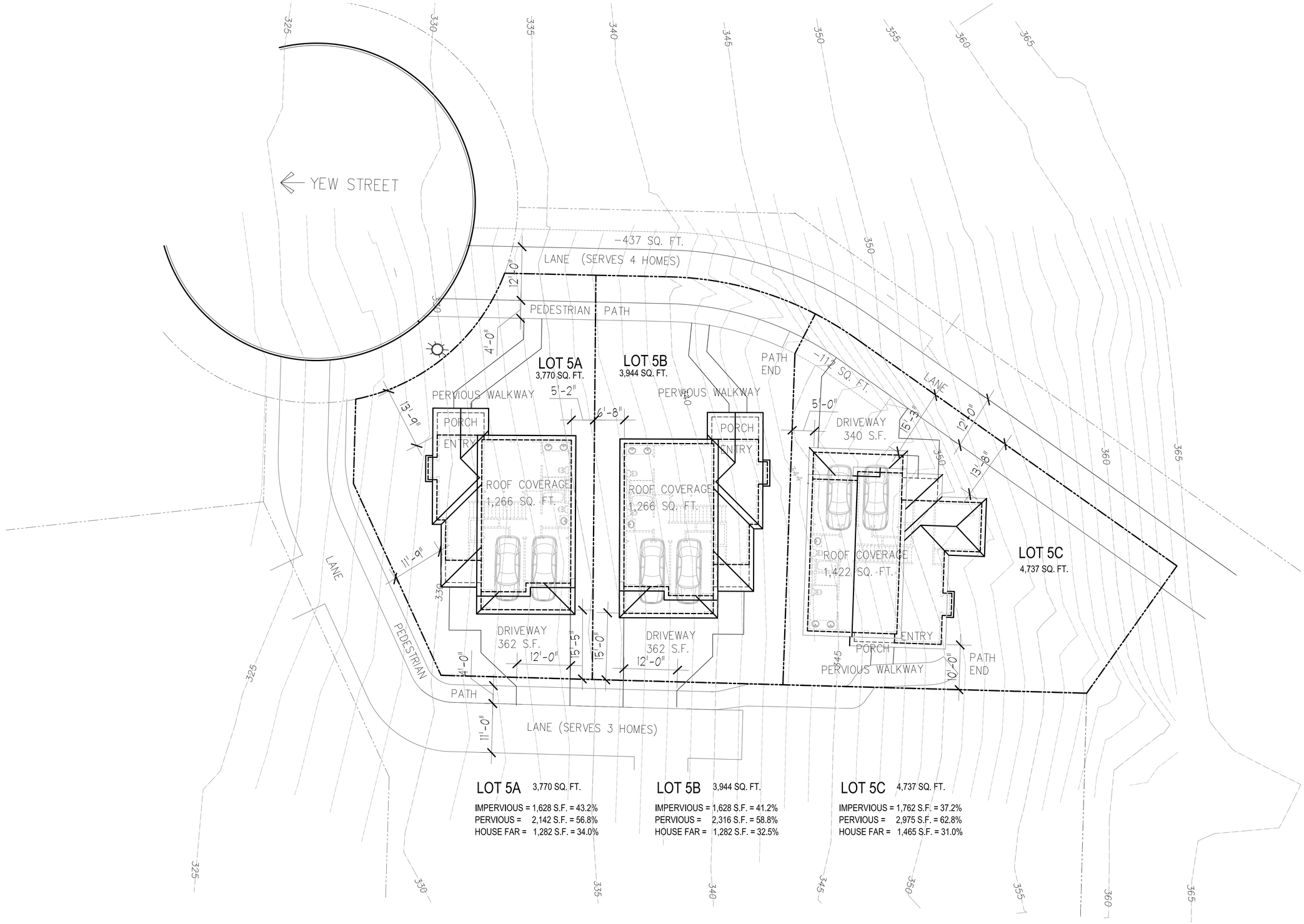
(2) LOT 5 B

LOT AREA	3,994 SQ FT.	PREVIOUS / OPEN = 2,276 = 56.99%
HSE ROOF AREA	1,266 SQ FT	IMPERVIOUS 1,718 = 43.01%
DRIVEWAY	362 SQ FT.	
WALK	90 SQ FT.	
ROOF HEIGHT	20'-11"	

(3) LOT 5C 4,757 SQ. FT.

PERVIOUS / OPEN 3,315 = 62.18

HSE ROOF AREA	1,422 SQ. FT.	IMPERVIOUS 1,792 = 37.82%
DRIVEWAY	340 SQ. FT.	
WALK	30 SQ. FT.	
ROOF HEIGHT	23'-1"	



LOT 5A 3,770 SQ. FT.

IMPERVIOUS = 1,628 S.F. = 43.2%
PERVIOUS = 2,142 S.F. = 56.8%
HOUSE FAR = 1,282 S.F. = 34.0%

LOT 5B 3,944 SQ. FT.

IMPERVIOUS = 1,628 S.F. = 41.2%
PERVIOUS = 2,316 S.F. = 58.8%
HOUSE FAR = 1,282 S.F. = 32.5%

LOT 5C 4,737 SQ. FT.

IMPERVIOUS = 1,762 S.F. = 37.2%
PERVIOUS = 2,975 S.F. = 62.8%
HOUSE FAR = 1,465 S.F. = 31.0%

2 | NEW SITE PLAN

SCALE:1" = 10'-0"

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Residential Commercial Remodel
PO Box 1075, Bellingham, WA 98227-1075
Telephone and FAX: 360.393.3131
Website: www.fullerbd.com

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REVIEW SET

APPROVED FOR DESIGN REVIEW

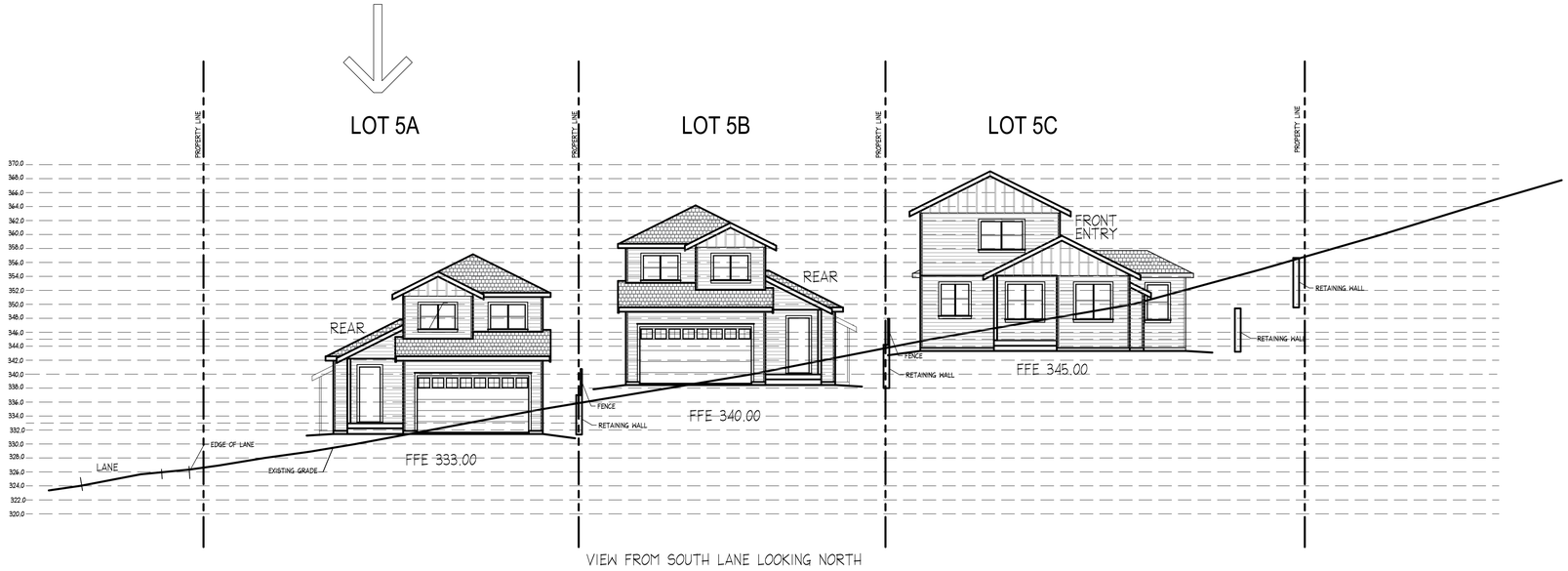
Prepared By: CRF	Approved By: TNF
Date: 7-10-23	Date: 7-10-23

CUSTOM RESIDENTIAL DESIGN FOR:
BRAD WIDMAN
1204 YEW STREET / LOT 5A
BELLINGHAM, WA

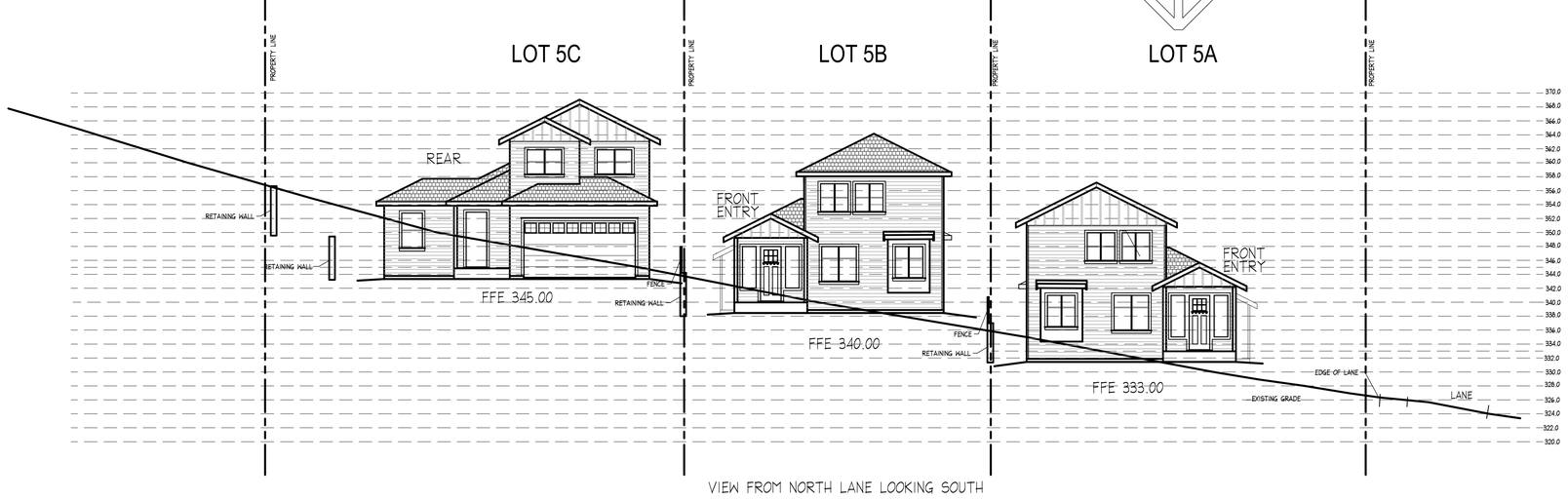
CLIENT:	WIDMAN
PROJECT #:	FBD# 23-026
DRAWN BY:	TNF
CHECKED BY:	CRF
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

SITE PLAN

A1.1



VIEW FROM SOUTH LANE LOOKING NORTH



VIEW FROM NORTH LANE LOOKING SOUTH

2 NEW SITE PLAN

SCALE:1" = 10'-0"

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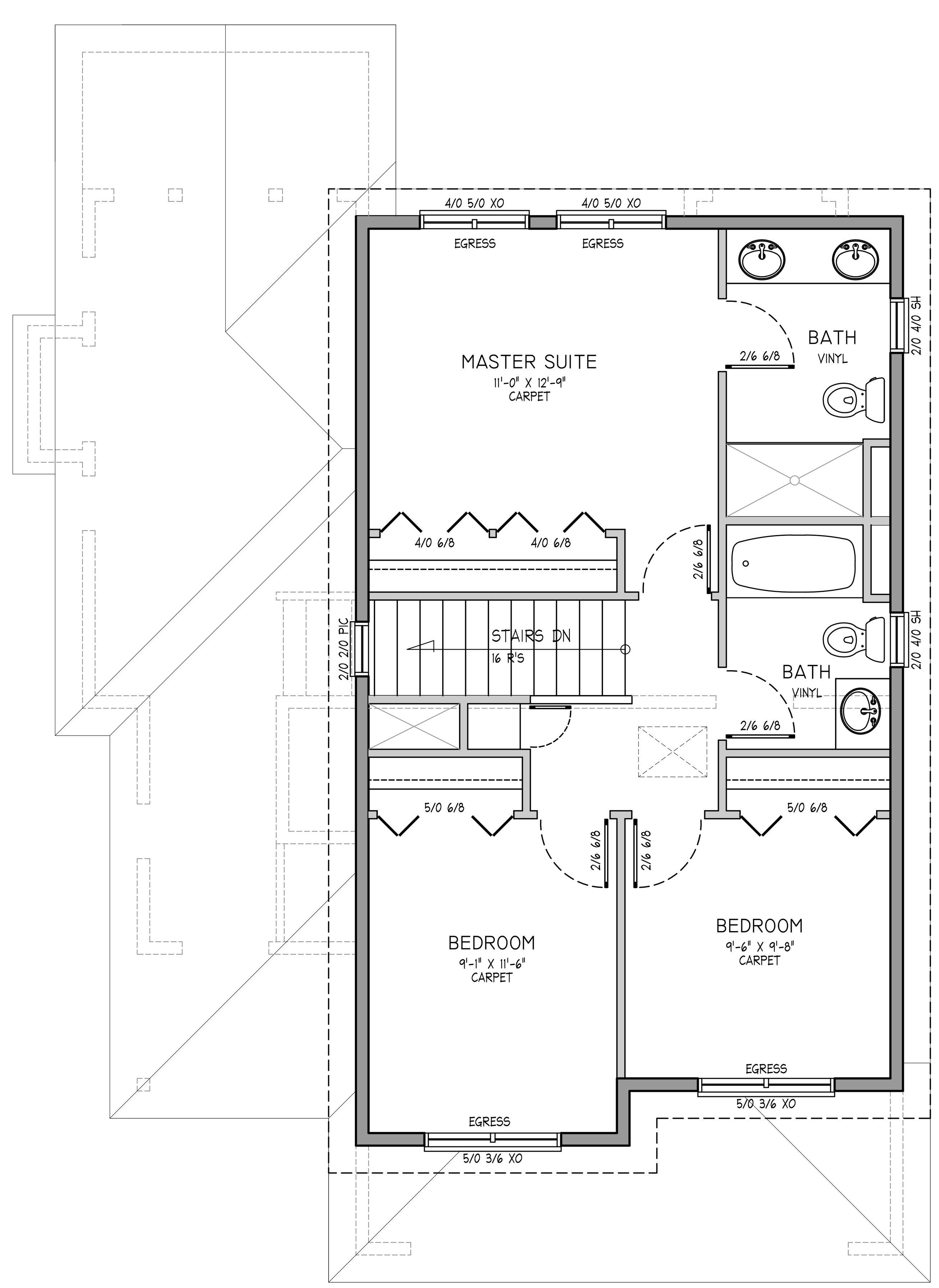
CUSTOM RESIDENTIAL DESIGN FOR:

BRAD WIDMAN
1204 YEW STREET / LOT 5A
BELLINGHAM, WA

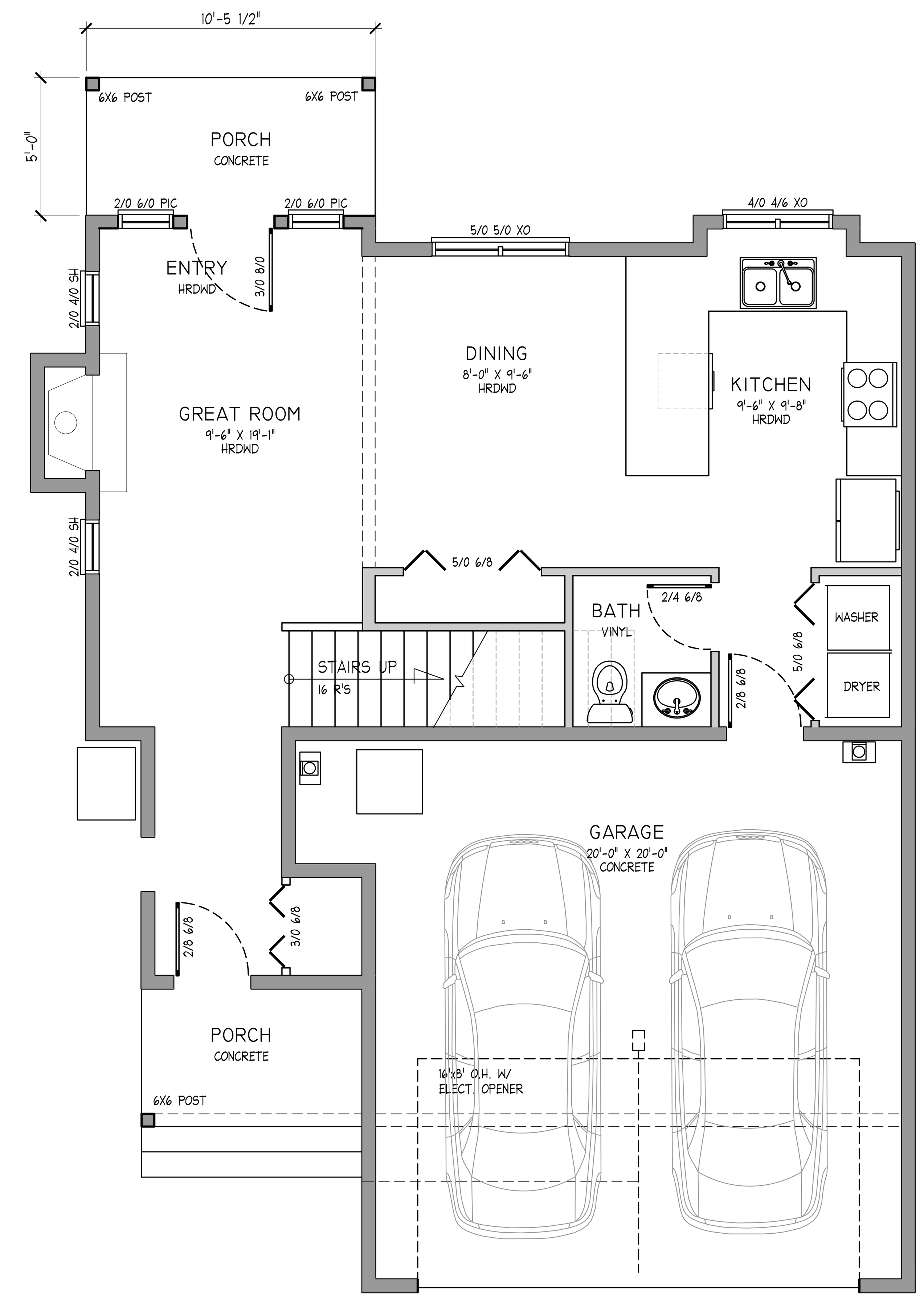
CLIENT:	WIDMAN
PROJECT #:	FBD# 23-028
DRAWN BY:	TNF
CHECKED BY:	CRF
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

SITE PLAN

A1.2



UPPER FLOOR 660 SQ. FT.



MAIN FLOOR	622 SQ. FT.
TOTAL HOUSE	1,282 SQ. FT.
GARAGE	408 SQ. FT.
PORCH	40 SQ. FT.

ROOF COVERAGE 1,266 SQ. FT.

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BELLINGHAM, WA

CLIENT:	WIDMAN
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DRAWN BY:	TNF
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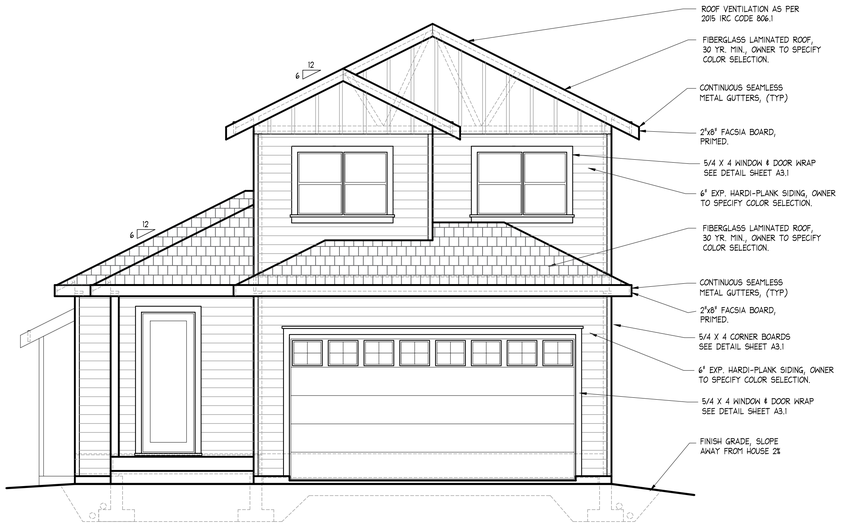
MAIN FLOOR PLAN VIEW

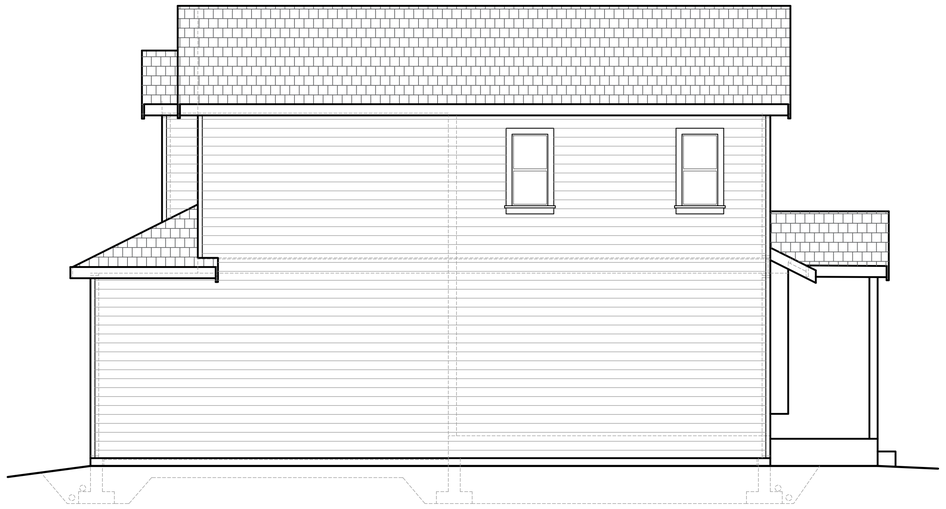
0 2' 4' 8'
SCALE: 1/4" = 1'-0"

A2.0



1 | SOUTH (REAR) ELEVATION

SCALE:1/4" = 1'-0"



2 | WEST (SIDE) ELEVATION

SCALE:1/4" = 1'-0"

3 | NORTH (FRONT) ELEVATION

SCALE:1/4" = 1'-0"

4 | EAST (SIDE) ELEVATION

SCALE:1/4" = 1'-0"

0 2' 4' 8'

SCALE: 1/4" = 1'-0"

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THIS DOCUMENT, CONSISTING OF PLANS, DRAWINGS AND SPECIFICATIONS WAS PREPARED UNDER MY PERSONAL SUPERVISION AND MEETS THE CURRENT VERSION OF THE INTERNATIONAL RESIDENTIAL CODE AS ADOPTED BY THE CITY OF BELLINGHAM AND ADOPTED STANDARDS OF PRACTICE WITHIN THE STATE OF WASHINGTON.

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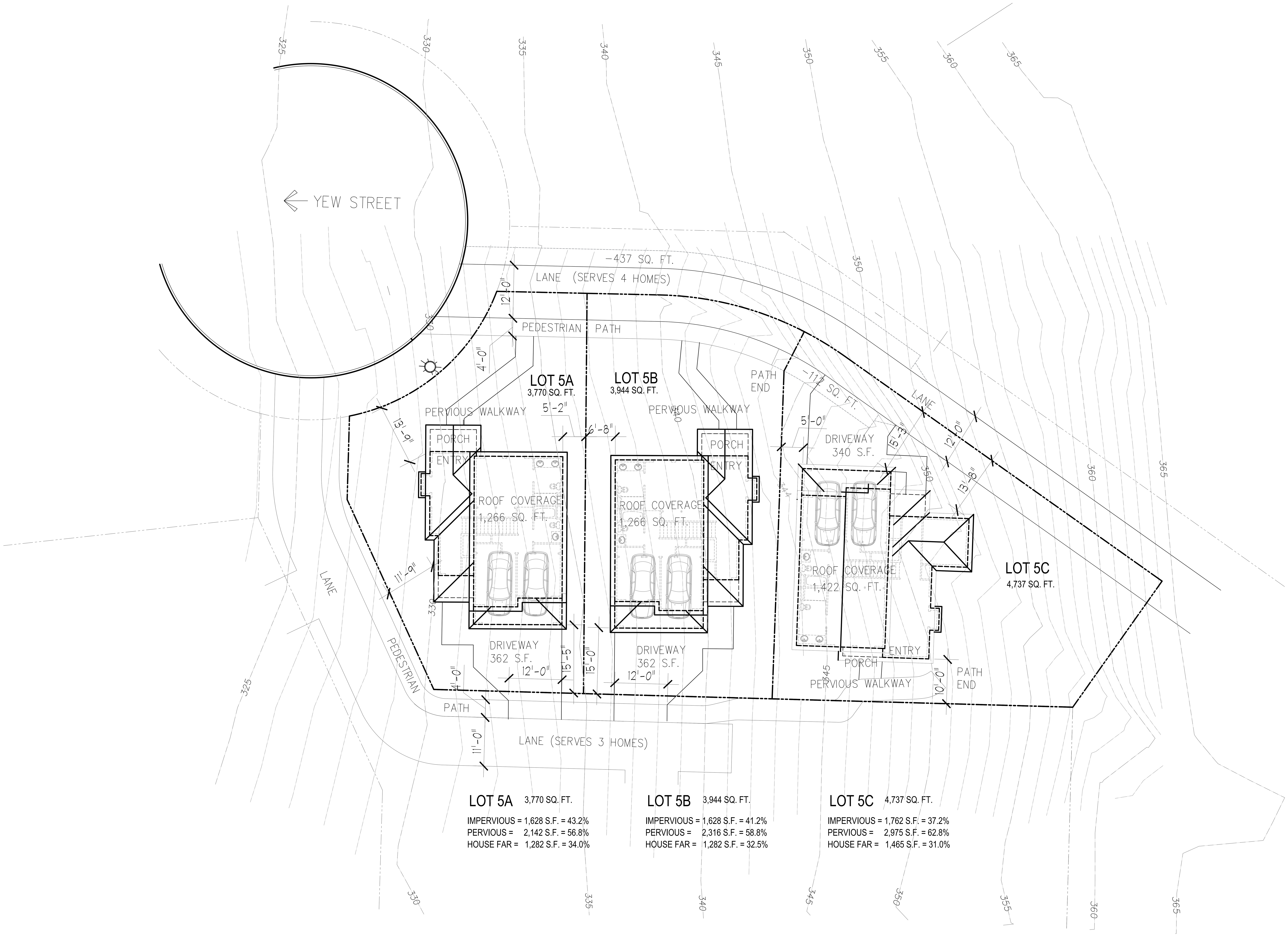
CUSTOM RESIDENTIAL DESIGN FOR:

BRAD WIDMAN
1204 YEW STREET / LOT 5A
BELLINGHAM, WA

CLIENT:	WIDMAN
PROJECT #:	FBD# 23-028
DRAWN BY:	TNF
CHECKED BY:	CRF
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

BUILDING ELEVATIONS

A3.0



LOT 5A 3,770 SQ. FT.
IMPERVIOUS = 1,628 S.F. = 43.2%
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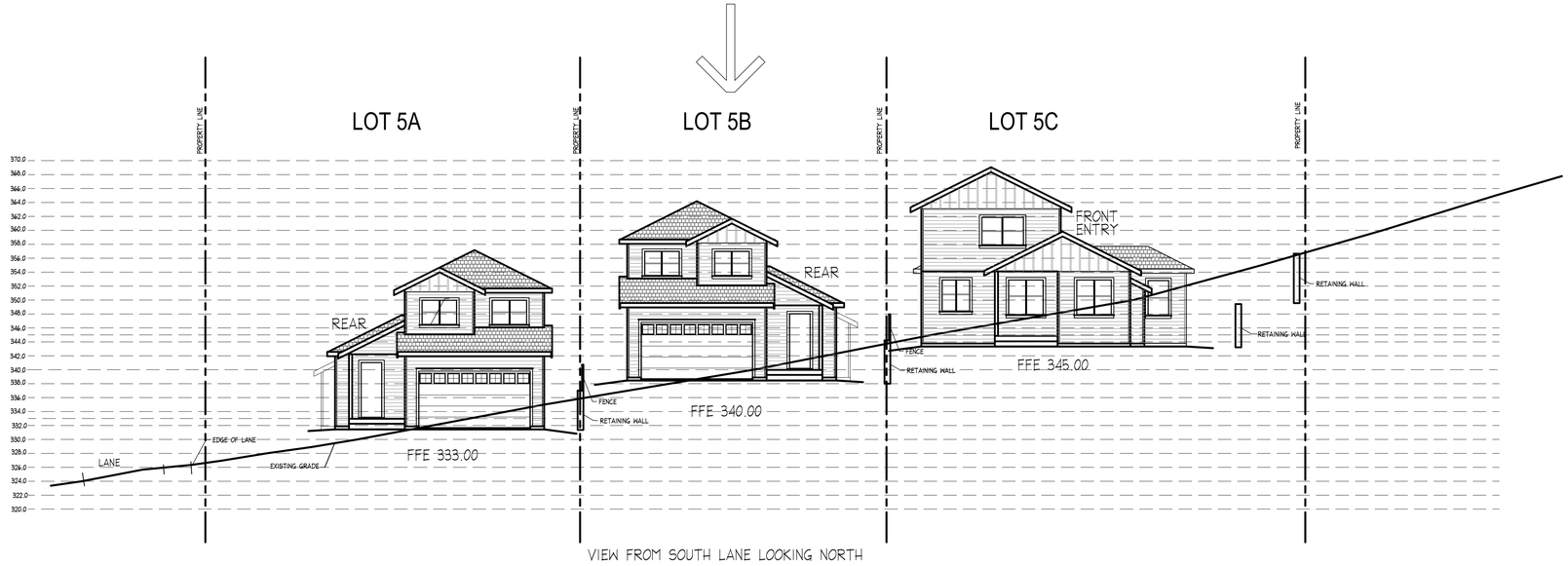
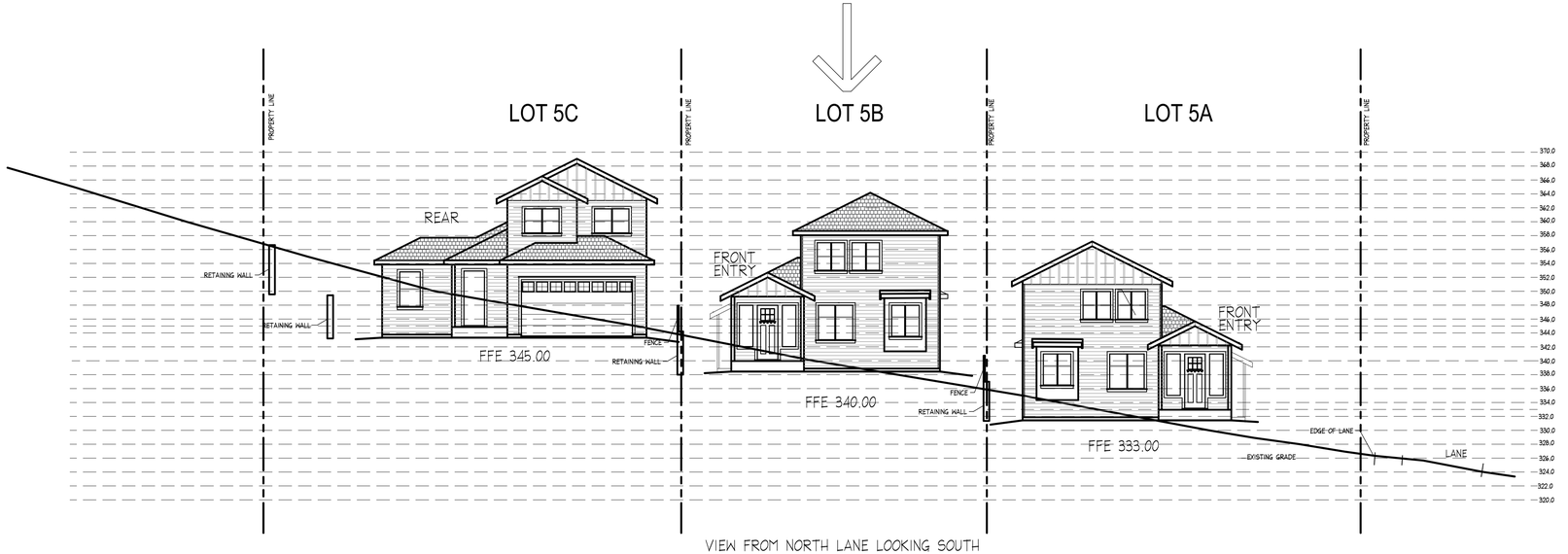


VIEW FROM SOUTH LANE LOOKING NORTH



VIEW FROM NORTH LANE LOOKING SOUTH

2 | NEW SITE PROFILE

SCALE:1" = 10'-0"

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THIS DOCUMENT, CONSISTING OF PLANS, DRAWINGS AND SPECIFICATIONS WAS PREPARED UNDER MY PERSONAL SUPERVISION AND MEETS THE CURRENT VERSION OF THE INTERNATIONAL RESIDENTIAL CODE AS ADOPTED BY THE BUILDING CODE COUNCIL AND ADOPTED STANDARDS OF PRACTICE WITHIN THE STATE OF WASHINGTON.

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FULLER BUILDING DESIGN
Residential Commercial Remodel
PO Box 1075, Bellingham, WA 98227-1075
Telephone and FAX: 360.393.3131
Website: www.fullerbd.com

MEMBER
AIBD
AMERICAN INSTITUTE of BUILDING DESIGN

REVIEW SET

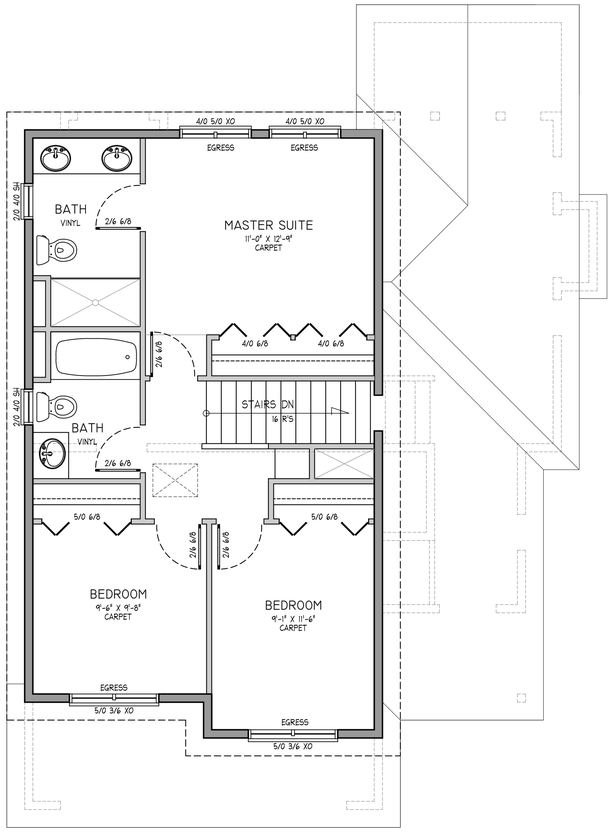
APPROVED FOR DESIGN REVIEW	
Prepared By: CRF	Approved By:TNF
Date: 7-10-23	Date: 7-10-23

CUSTOM RESIDENTIAL DESIGN FOR:
BRAD WIDMAN
1204 YEW STREET / LOT 5B
BELLINGHAM, WA

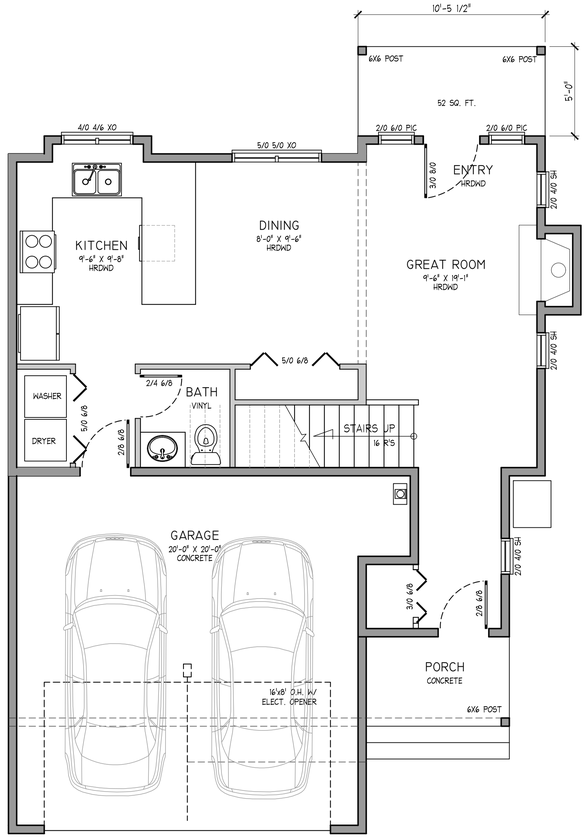
CLIENT:	WIDMAN
PROJECT #:	FBD# 23-028
DRAWN BY:	TNF
CHECKED BY:	CRF
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

SITE PROFILE

A1.2



UPPER FLOOR 660 SQ. FT.



MAIN FLOOR	622 SQ. FT.
TOTAL HOUSE	1,282 SQ. FT.
GARAGE	408 SQ. FT.
PORCH	40 SQ. FT.

ROOF COVERAGE 1,266 SQ. FT.

FULLER BUILDING DESIGN
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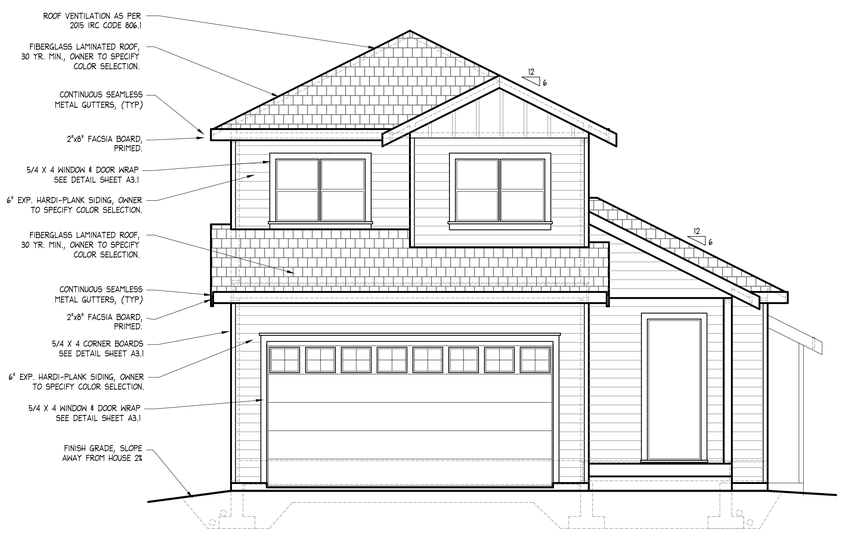
BRAD WIDMAN
1204 YEW STREET / LOT 5B
BELLINGHAM, WA

CLIENT:	WIDMAN
PROJECT #:	FBD# 23-028
DRAWN BY:	TNF
CHECKED BY:	CRF
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

MAIN FLOOR PLAN VIEW

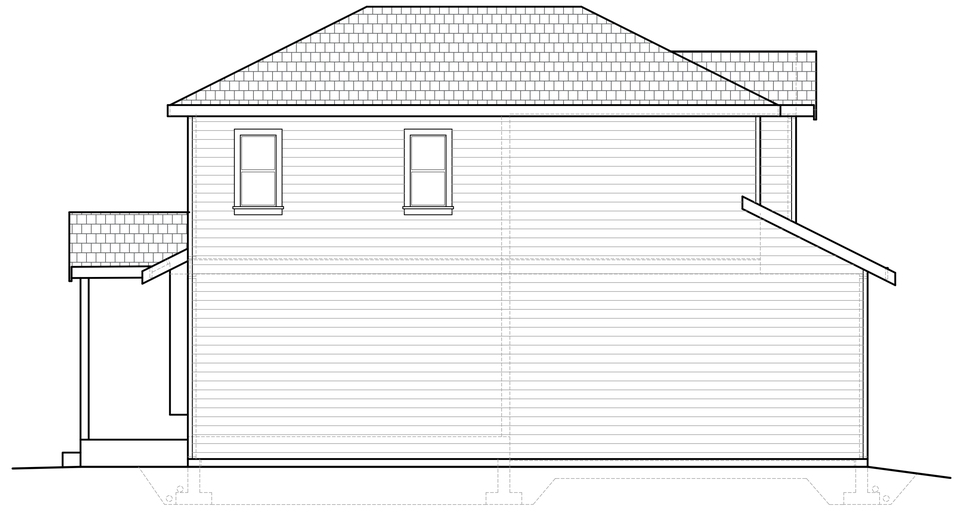
0 2' 4' 8'
SCALE: 1/4" = 1'-0"

A2.0



1 | SOUTH (REAR) ELEVATION

SCALE:1/4" = 1'-0"



2 | WEST (SIDE) ELEVATION

SCALE:1/4" = 1'-0"

3 | NORTH (FRONT) ELEVATION

SCALE:1/4" = 1'-0"

4 | EAST (SIDE) ELEVATION

SCALE:1/4" = 1'-0"

FULLER BUILDING DESIGN
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BRAD WIDMAN
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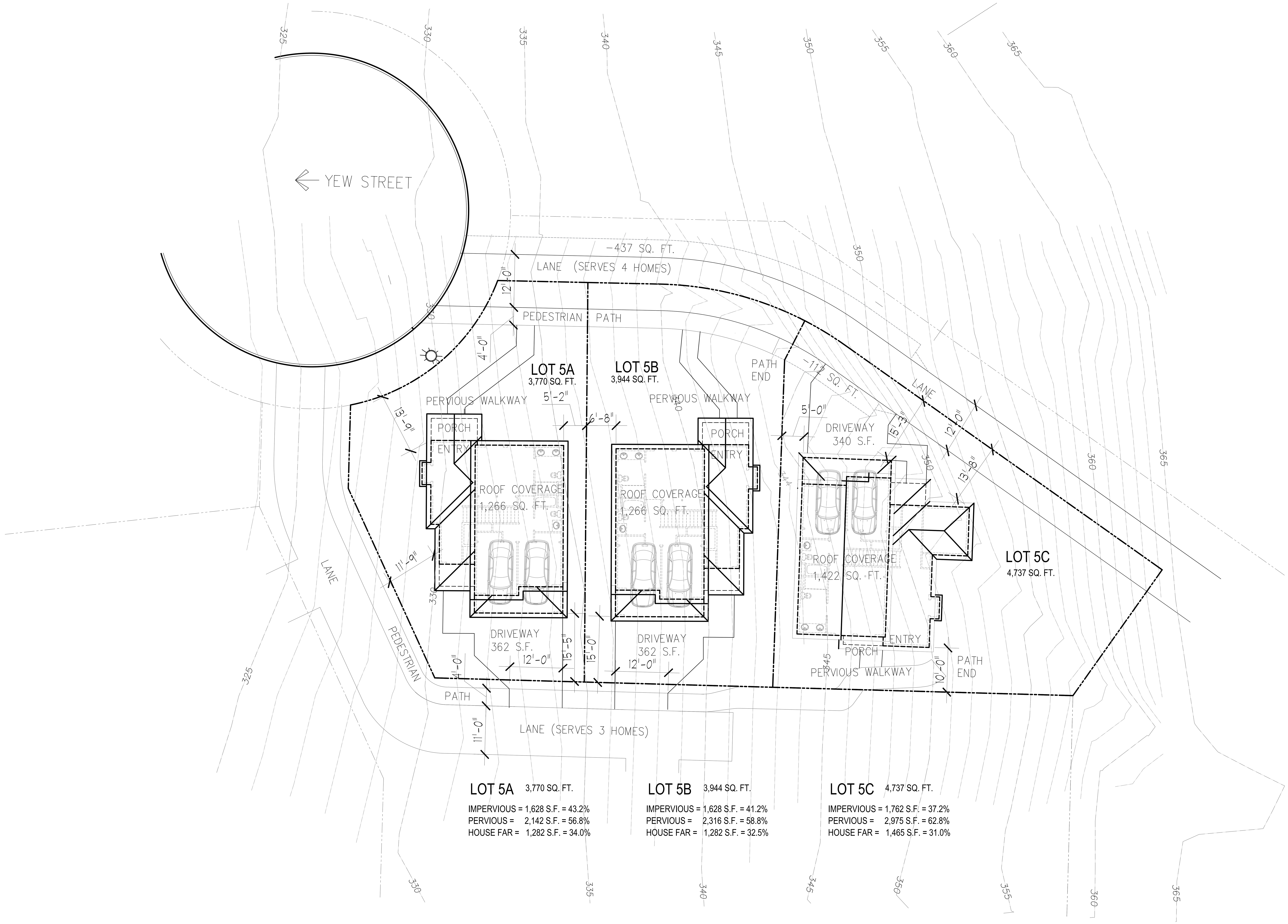
BELLINGHAM, WA

CLIENT:	WIDMAN
PROJECT #:	FBD# 23-028
DRAWN BY:	TNF
CHECKED BY:	CRF
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

BUILDING ELEVATIONS

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

A3.0



LOT 5A 3,770 SQ. FT.

IMPERVIOUS = 1,628 S.F. = 43.2%
PERVIOUS = 2,142 S.F. = 56.8%
HOUSE FAR = 1,282 S.F. = 34.0%

LOT 5B 3,944 SQ. FT.

IMPERVIOUS = 1,628 S.F. = 41.2%
PERVIOUS = 2,316 S.F. = 58.8%
HOUSE FAR = 1,282 S.F. = 32.5%

LOT 5C 4,737 SQ. FT.

IMPERVIOUS = 1,762 S.F. = 37.2%
PERVIOUS = 2,975 S.F. = 62.8%
HOUSE FAR = 1,465 S.F. = 31.0%

2 | NEW SITE PLAN

SCALE:1" = 10'-0"

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS DOCUMENT, CONSISTING OF PLANS, DESIGNS AND SPECIFICATIONS WAS PREPARED UNDER MY PERSONAL SUPERVISION AND MEETS THE CURRENT VERSION OF THE IRC/IBC CODE. ALL PLANS & CALCULATIONS MEET THE GENERALLY ACCEPTED STANDARDS OF PRACTICE WITHIN THE STATE OF WASHINGTON.

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BRAD WIDMAN
1204 YEW STREET / LOT 5C
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CLIENT:	WIDMAN
PROJECT #:	FBD# 23-028
DRAWN BY:	TNF
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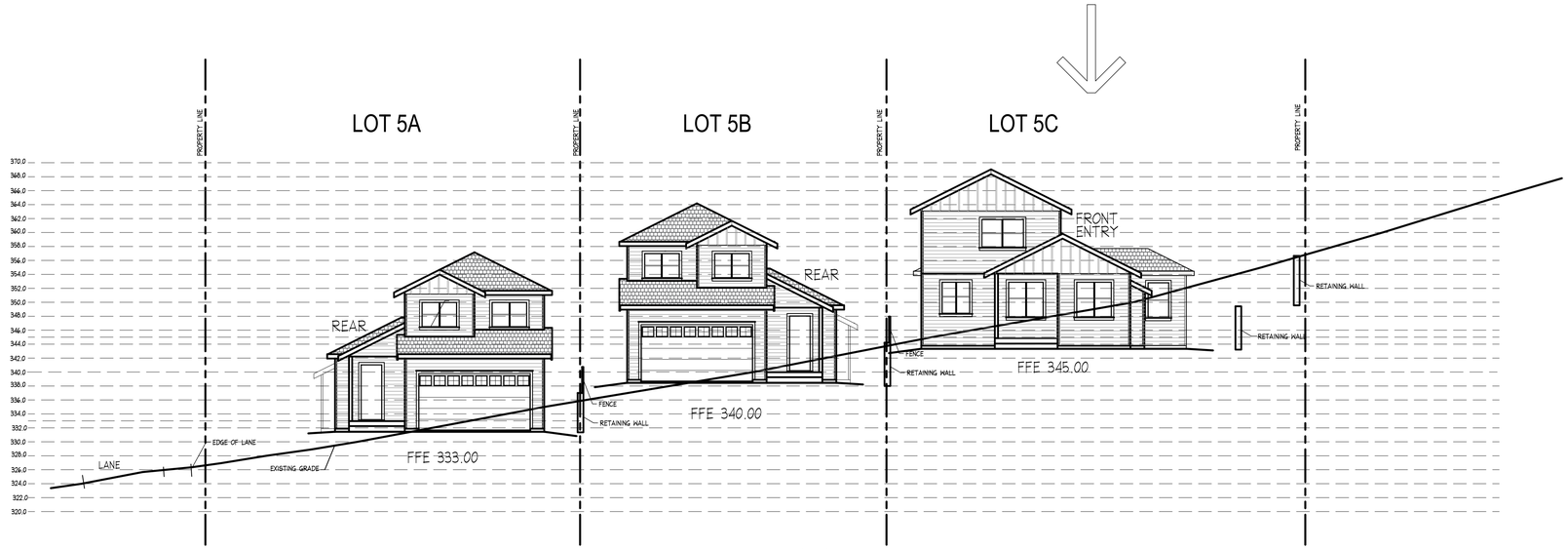
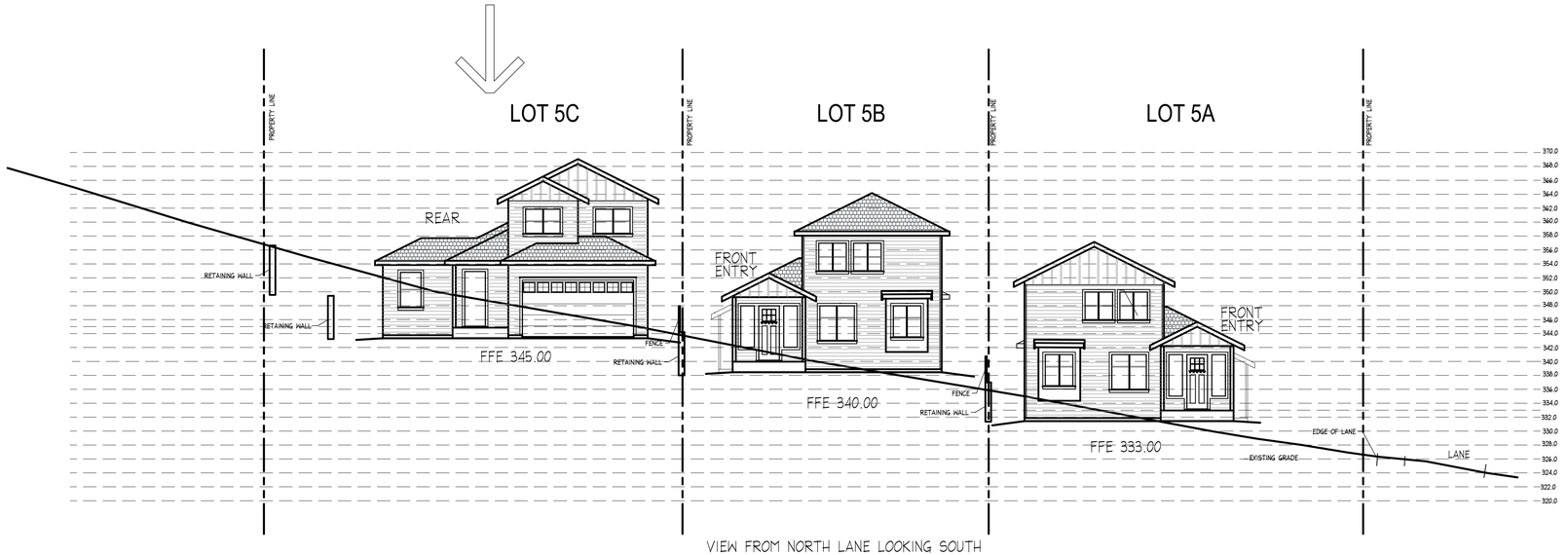
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

SITE PLAN

A1.1



VIEW FROM SOUTH LANE LOOKING NORTH



VIEW FROM NORTH LANE LOOKING SOUTH

2 | NEW SITE PROFILE

SCALE:1" = 10'-0"

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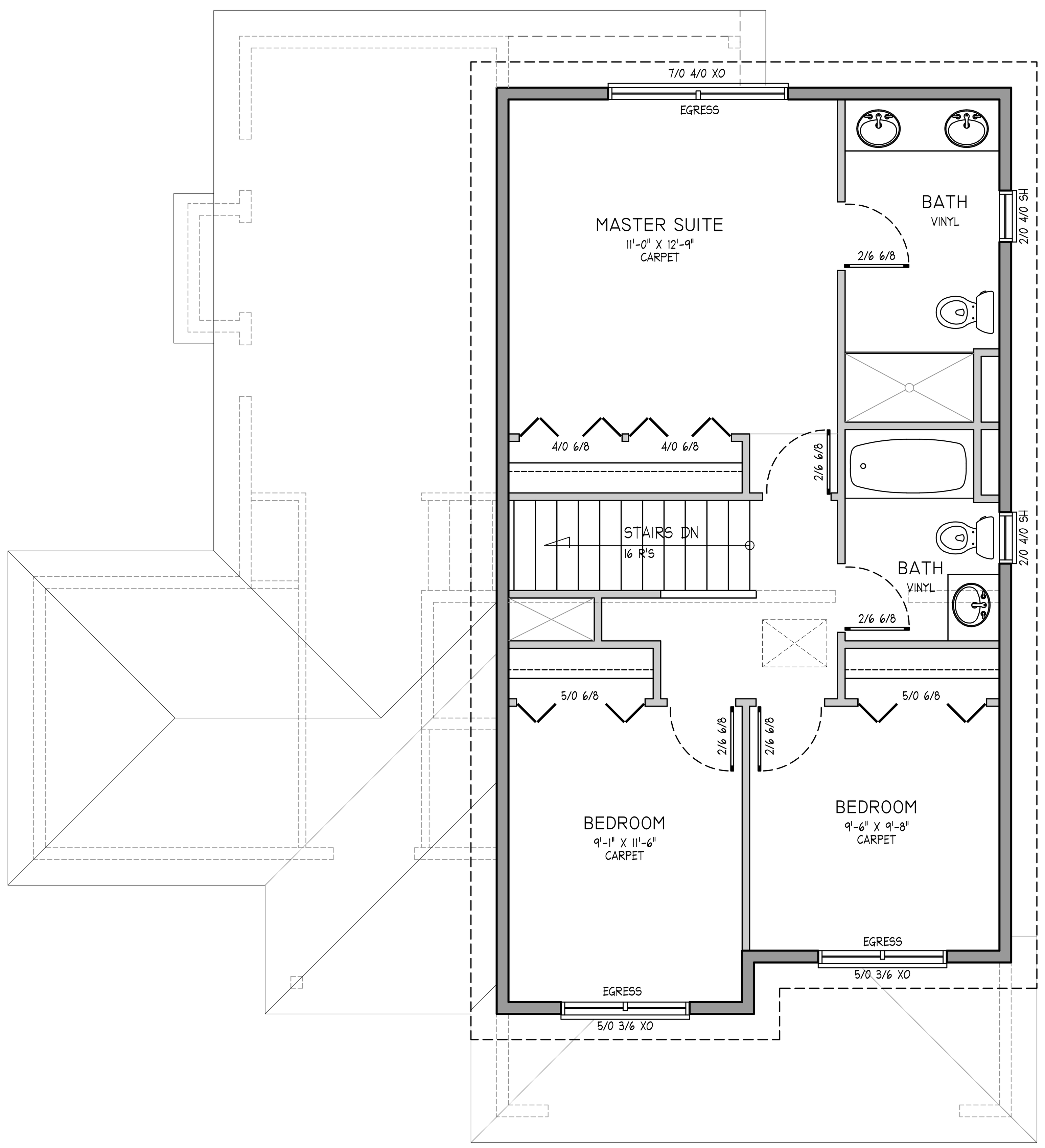
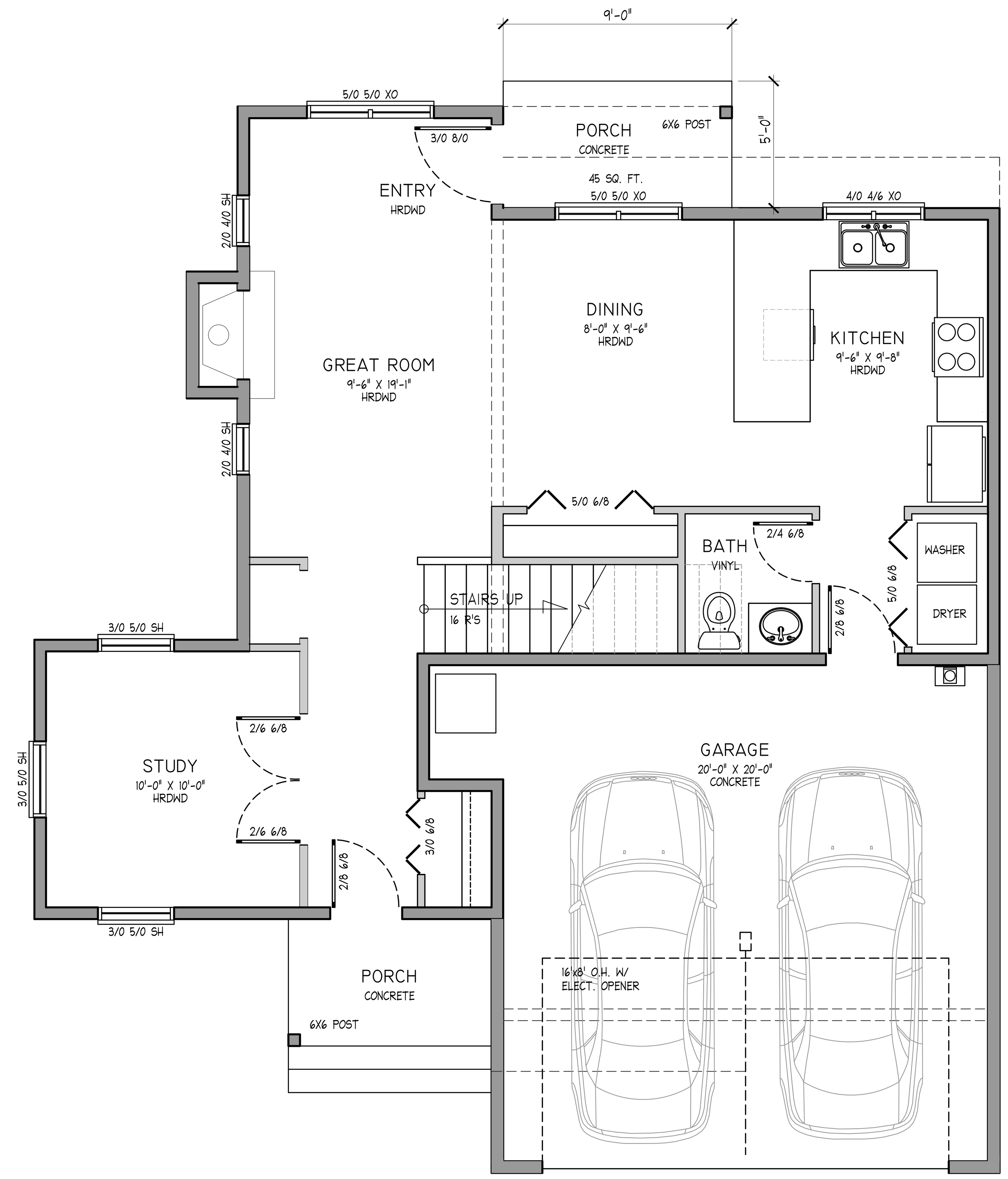
SITE PROFILE

A1.2



UPPER FLOOR 700 SQ. FT.



MAIN FLOOR	765 SQ. FT.
TOTAL HOUSE	1,465 SQ. FT.
GARAGE	408 SQ. FT.
PORCH	40 SQ. FT.

ROOF COVERAGE 1,422 SQ. FT.

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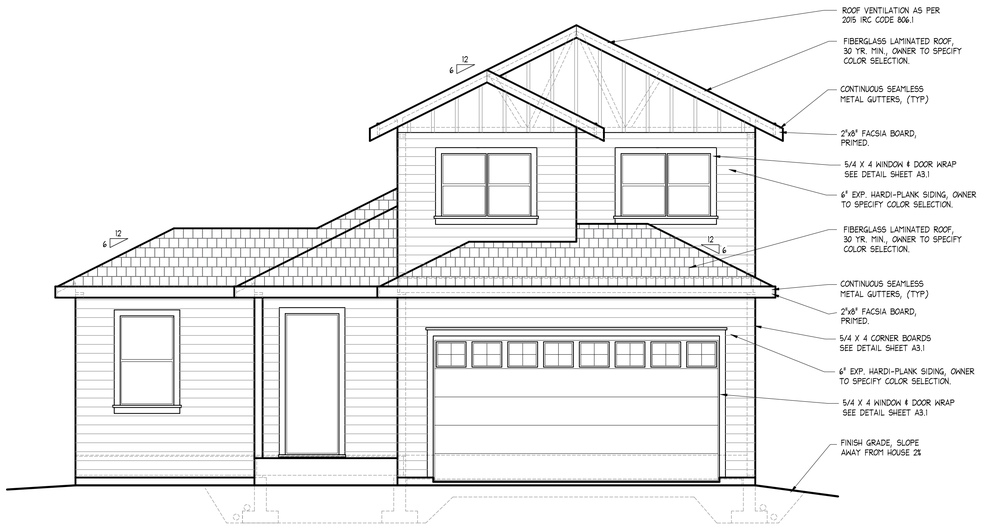
MAIN FLOOR PLAN VIEW

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

A2.0



1 | NORTH (REAR) ELEVATION

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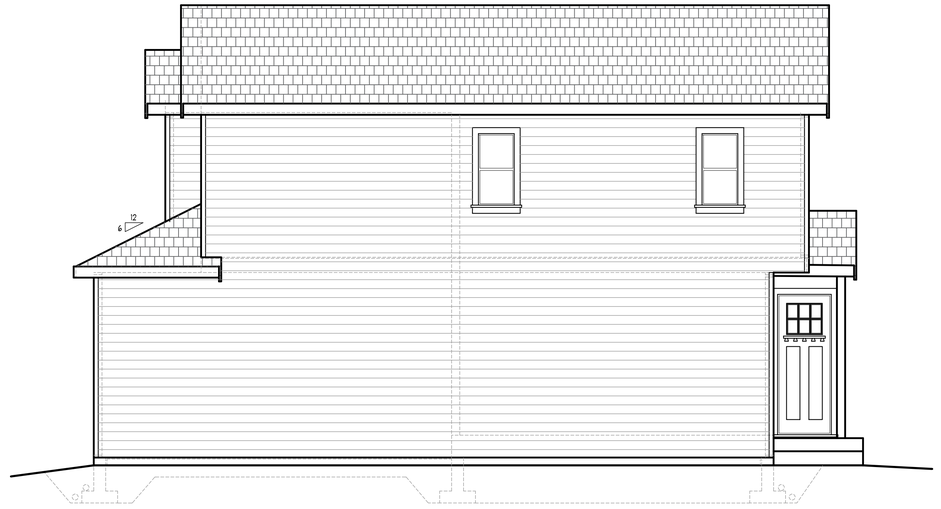

2 | WEST (SIDE) ELEVATION

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SCALE:1/4" = 1'-0"

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CLIENT:	WIDMAN
PROJECT #:	FBD# 23-028
DRAWN BY:	TNF
CHECKED BY:	CRF
ISSUED PLAN DATES & REVISIONS:	
REVIEW SET	7-10-23

BUILDING ELEVATIONS

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

A3.0

August 1, 2023

City of Bellingham
Permit Center
210 Lottie Street
Bellingham, WA 98225

RE: **Wellington Preliminary Plat**
Response to March 23, 2023 Request For Information
SUB2023-0011, DR2023-0008, CAP2023-0008, VAR2023-0004, SEP2023-0008

Dear Permit Center:

This letter presents our responses to the city's Request for Information letter (RFI) and redlines, both dated March 23, 2023, regarding the Wellington Preliminary Plat application. We have reviewed and responded to all the redline markups. Please refer to the revised preliminary plat materials submitted with this letter.

For each section of the RFI letter, each city comment appears in *italics and* is followed by our response in **bold face.**

PUBLIC INFRASTRUCTURE
The City has reviewed the preliminary engineering drawings submitted with the application and determined the overall plan does not comply with City-regulations. Staff anticipates that compliance with these regulations is likely to result in a revised plat design.

Stormwater
The Preliminary Stormwater Site Plan (JEI, February 2023) does not comply with the City's stormwater regulations pursuant to Chapter 15.42 BMC. Stormwater facilities for single-family uses must be designed for public ownership and in a manner they minimizes the City's burden for maintenance. The following comments concern the overall design of the proposed stormwater facility and necessitate a redesign:

The proposed two-detention system design increases the City's burden for stormwater maintenance. Consolidating the two systems into one detention system is necessary to reduce the City's maintenance burden.

The system is now consolidated into one detention vault.

Stormwater facilities are not generally permitted in public rights of way, specifically when located under driving surfaces and/or sidewalks. The stormwater facility should be relocated outside of the public right of way or revise its location to avoid placement under the street and/or sidewalk.

The proposed detention vault has been relocated outside of the city right of way.

The revised design should identify the detention system's access location(s). This is an important design element that may affect it location.

The detention vault access and other details are presented on the plans and in the Storm Water Site Plan (SWSP).

The City has been experiencing water-tightness issues with the proposed use of CMP and will not accept the design unless it can be demonstrated that there is a clear and ready solution to prevent both leaks and corrosion at the pipe joints.

Comment noted. CMP is no longer proposed. The proposed detention vault would be concrete.

Street
The Land Division Ordinance requires development to provide for the orderly extension of public infrastructure to serve adjacent properties. To satisfy these provisions, the dedication of additional land for right of way to serve the abutting parcel to the north is necessary to provide this parcel with an alternative access location on a residential street rather than an arterial. The dedication will also allow the opportunity to extend public water and sewer mains for the future development of this lot.

The public street has been re-located to abut the northerly property line. This location will provide the requested alternative access on a residential street.

The City recommends the sidewalk be set back 5 feet from the curb, where feasible, to establish planting strips for the placement of street trees.

It is not feasible to set the sidewalks back 5 feet from the curb along the tangent sections of the north and south right of way lines . The sidewalks have been designed to abut the street in order to keep the proposed street as far north of the intersection of Alvarado Drive as possible.

Along the northerly right of way it is intended to contain the roadway grading within the right of way and to minimize the impact to the existing Grand Fir trees located along the northern property line. Moving the sidewalk northerly from the street would increase the potential for impact to these trees.

Along the southerly right of way it is intended to contain the roadway grading within the right of way and also propose a 10' wide non-exclusive utility easement which would overlay 7' within the proposed right of way and 3' outside the right of way. This configuration would maximize the area available for the stormwater vault facility.

Street trees plans have been developed with the above design parameters, please refer to the associated landscape plans.

Sewer and water
There is insufficient separation between the utilities to comply with DOE requirements.

INFORMATIONAL: Additional review comments are provided on the attached Sheet 4 of 5 of the preliminary engineering plans. Many of these comments are more appropriately addressed when construction plans are submitted for review by the City. However, the City is providing review comments at this time to ensure compliance with any of these comments will not result in additional plat design revisions.

The utility line separation has been revised.

Variance
The requested variance allowing sidewalks on only one side of the newly dedicated street will likely not be supported by City staff. The requested variance does not appear to meet the variance criteria and with the potential for the newly dedicated right of way to serve additional development, pedestrian facilities are warranted and should be provided to fullest extent.

ACTION ITEM: Information only.

Pursuant to the revised design, a variance for public sidewalk would not be necessary. We have adjusted the proposed street location with a sidewalk along the northern edge. It is our continued intent to locate the proposed intersection as far north as possible to maximize the distance from the intersection at Yew Street and Alvarado Drive.

EMERGENCY ACCESS
Per BMC 503.2.1, fire apparatus access roads shall have a minimum unobstructed width of 20 feet and an unobstructed vertical clearance of 13' 6", be capable of withstanding imposed loads of 75,000 lbs., and allow fire apparatus staging within 150 feet of all points of the first-floor exterior of each structure. At the point where the access road serves two or fewer single-family residences, the unobstructed width may be reduced to 12 feet provided this portion of the access road does not exceed 150 feet in length. The proposed public road appears to meet these requirements. The proposed private access east of the cul-de-sac does not and will need to be constructed with a 20-foot unobstructed width to the point where it only serves 2 single family residences. It appears this will be past the Lot 2 access.

The proposed private access east of the cul-de-sac has been widened to 20 feet to a point beyond the Lot 2 access.

Per BMC 503.2.7, fire apparatus access roads shall not exceed a grade of 12% unless the buildings served by the access road are equipped with NFPA 13D sprinkler systems (the existing

home will not require retrofitting with a sprinkler system). Approved sprinkler systems allow access road grades to be increased to 15%. Fire apparatus access roads shall also consider approach and departure angles (max. 8%) as well as breakover angles.

Comment noted.

An NFPA 13D sprinkler system does not require a private fire service main. Instead, it is a "flow- through" system plumbed into your domestic water and may require an increased water meter size.

Comment noted.

As mentioned above, apparatus access roads must be designed and maintained to support imposed loads of 75,000 lbs. and surfaced with an all-weather material. As an alternative to the 75,000 lb. load rating, you may demonstrate that the driveway meets HS-20 standards or the Public Works Residential Road standard. The portion of the private access road serving Lots 3 and 4 may be constructed of engineered gravel.

The private access road results in a dead end greater than 150 feet in length, which requires an approved turnaround to serve Lots 3 and 4. This length may be increased to 300' provided the access road is redesigned to be substantially straight having a minimum inside diameter turn radii of 28' is the minimum for roads less than 24' in width.

Pursuant to direction from the City Fire Marshall no apparatus turnaround in proposed at the east end of the private access road between lots 3 and 4.

The proposed cul-de-sac with a minimum diameter of 70 feet meets one of the four approved turnaround designs and will serve as a fire apparatus turnaround from Yew St. but does not meet the grade requirements. Turnarounds, including that discussed above, shall not be constructed on a grade and be designed with approach and departure angles discussed above.

Pursuant to direction from the City Fire Marshall the maximum gradient through the proposed cul-de-sac is 6%.

Stormwater detention vault or other underground structures beneath or near the fire apparatus access road must comply with BMC 503.2.10. This states that underground structures under or within 10 feet of a fire apparatus access road must be designed to accommodate the point load design criteria for aerial apparatus access roads found in BMC 503.7.

The proposed stormwater detention vault is located outside of the proposed fire apparatus access (public road). The proposed stormwater vault is located more than 10' southerly of the edge of pavement within the proposed public road.

Please note that structures 30' or greater in height measured from the level access of an eave line require aerial apparatus access.

Comment noted.

LAND DIVISION
The Land Division Ordinance limits the number of residences that may be served by a private driveway to 4 lots. As proposed, the plat design suggests that the northern driveway will serve 5 lots.

Private driveways serving more than 2 lots must be designed pursuant to Figure 23.08.060(A). The northern driveway does not meet this design provision.

As depicted on the proposed revised Preliminary Plat design the northern driveway would serve four lots.

A 10-foot easement for private utility providers shall be dedicated adjacent to all dedicated rights of way. This easement is not shown on either Yew Street or the northern extent of the newly dedicated right of way.

A proposed 10-foot utility easement along Yew Street is depicted on the revised Preliminary Plat. The northern right of way of the proposed public street has been relocated to coincide with the project's northern property line. In the event of subdivision of the property to the north the developer of the abutting property to dedicate a 10-foot private utility easement.

INFILL HOUSING
The application materials did not include sufficient information to determine full compliance with the infill housing provisions (Chapter 20.28 BMC) for Lots 5A-5C. Without the full submittal of architectural and landscaping plans for the residences, the City cannot issue a decision for the design review application. A design review decision is administrative and is not necessary to proceed with the preliminary plat application review. If a complete application is not submitted for the infill housing portion of the proposal, staff would forward a recommendation to the Hearing Examiner to condition the proposal to limit development of Lots 5A-5C with infill housing units.

ACTION ITEM: If the preferred option is to defer the land use decision of the infill housing units until after the preliminary plat decision, the design review application must be placed on hold to avoid the applications expiration due to being incomplete. Otherwise, submittal of architectural and landscape plans must be submitted for concurrent review and approval with the preliminary plat.

See attached Infill Toolkit submittal materials and plans provided by the building designer.

CRITICAL AREAS
The geohazards onsite (erosion hazard and/or landslide hazard) should be mapped and addressed in a geotechnical report. Geohazards are considered critical areas and are defined in BMC 16.55.420. The geotechnical report should also include BMC 16.55.430-16.55.460 if the slopes onsite meet the definition of geohazard in BMC 16.55.420.

ACTION ITEM: Submit a geotechnical report compliant with Chapter 16.55 BMC.

A geotechnical report was submitted as an appendix to the preliminary stormwater site plan. The geotechnical report will be submitted as a stand-alone item for review.

SEPA
ACTION ITEM: Revise the SEPA checklist as necessary to incorporate the above action items.

We have revised the SEPA checklist to reflect changes to the project as appropriate.

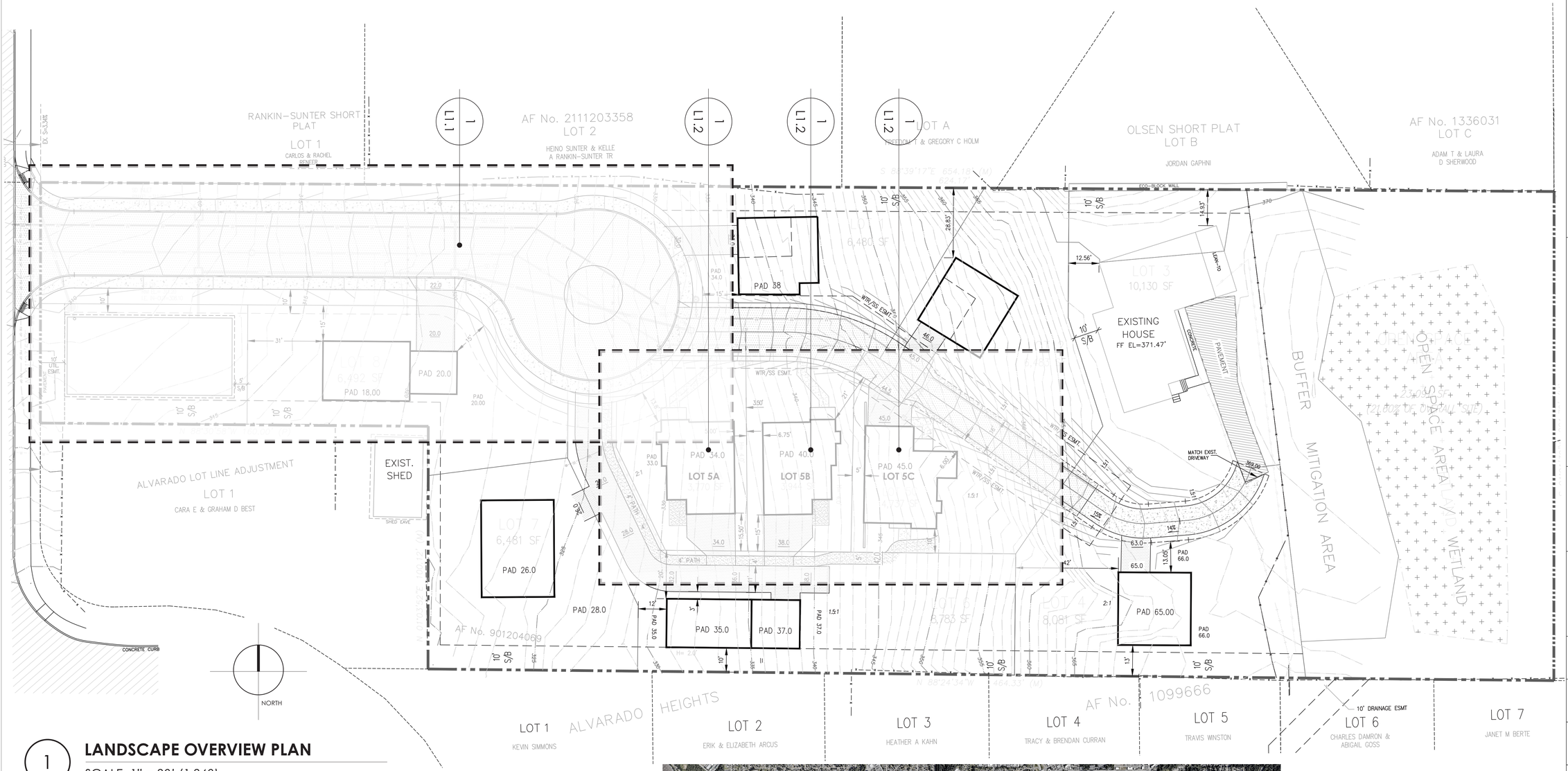
Review of these application(s) cannot continue until this information is received and determined to be sufficient. Within 14 days of submitting the above information, the City will either determine that the information is sufficient or specify in writing what additional information is required. If the information is sufficient, processing of the application(s) will resume in accordance with Chapter 21.10 BMC. This request for additional information is accordance with BMC 21.10.190(B)(4).

Pursuant to BMC 21.10.190(C), the application(s) will expire and become null and void if all of the requested information is not submitted within 120 days from the date of this notice for request for information. At the applicant's request, the PCDD director may extend this 120-day period in accordance with BMC 21.10.080(A). No further notice will be sent concerning this 120- day expiration timeline.

On July 17, 2023, the applicant requested an extension of the 120-day deadline. The extension was granted for 30 days as requested.

Best regards,

Darcy Jones
Jones Engineers, Inc.



1

LANDSCAPE OVERVIEW PLAN

SCALE: *1" = 20' (1:240)*

SHEET INDEX:

2

CONTEXT MAP

NTS

STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

PAUL M GEORGE
CERTIFICATE NO. 641

CASCADE DESIGN GROUP
BOX 5938
BELLINGHAM, WA 98227

OWNER: PAUL GEORGE, LANDSCAPE ARCHITECT
paulgeorge.cascade@gmail.com
360.715.2119

PROJECT IDENTIFICATION:

YEW STREET SUBDIVISION

PROJECT LOCATION:

1204 YEW STREET
BELLINGHAM, WA

PROJECT START DATE //
7.17.2023

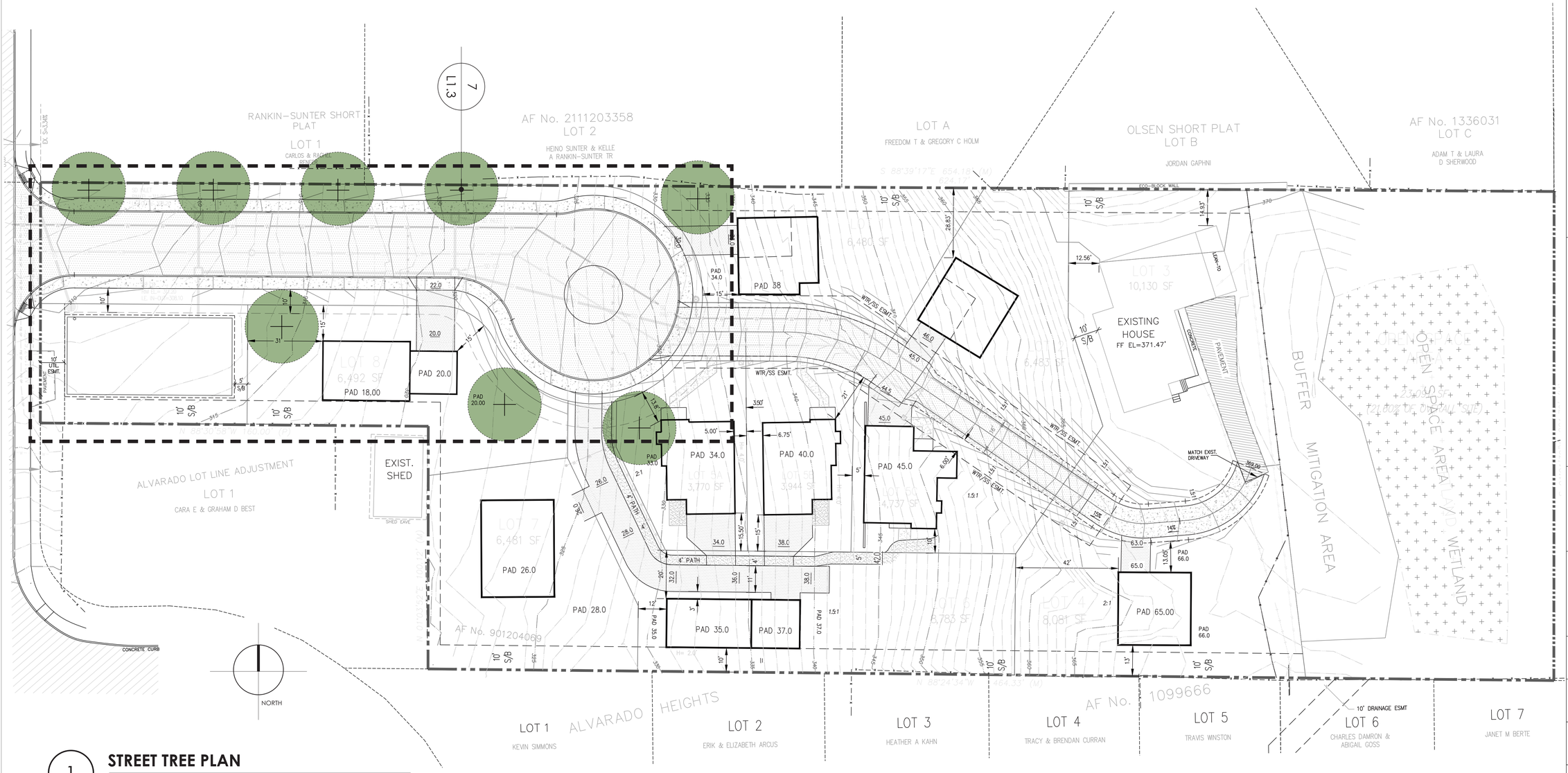
REVISIONS //
X.X.XXXX

FORMAT //
ARCH D (24 X 36 INCH)

DESIGNER //
ZW

DRAWING //
LANDSCAPE OVERVIEW PLAN

L1.0



1

STREET TREE PLAN

SCALE: *1" = 20' (1:240)*

STREET TREE IDENTIFICATION

TYPE	QUANTITY	COMMON NAME	LATIN NAME	SPCES
SMALL/ MEDIUM STREET TREE	8	WASHINGTON HAWTHORN	*CRATAGUS PHAENOPYRUM*	10' TALL, 2.5" CALIPER

STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

PAUL M GEORGE
CERTIFICATE NO. 641

CASCADE DESIGN GROUP
BOX 5938
BELLINGHAM, WA 98227

OWNER: PAUL GEORGE, LANDSCAPE ARCHITECT
paulgeorge.cascade@gmail.com
360.715.2119

PROJECT IDENTIFICATION:

YEW STREET SUBDIVISION

PROJECT LOCATION:

1204 YEW STREET
BELLINGHAM, WA

PROJECT START DATE //
7.17.2023

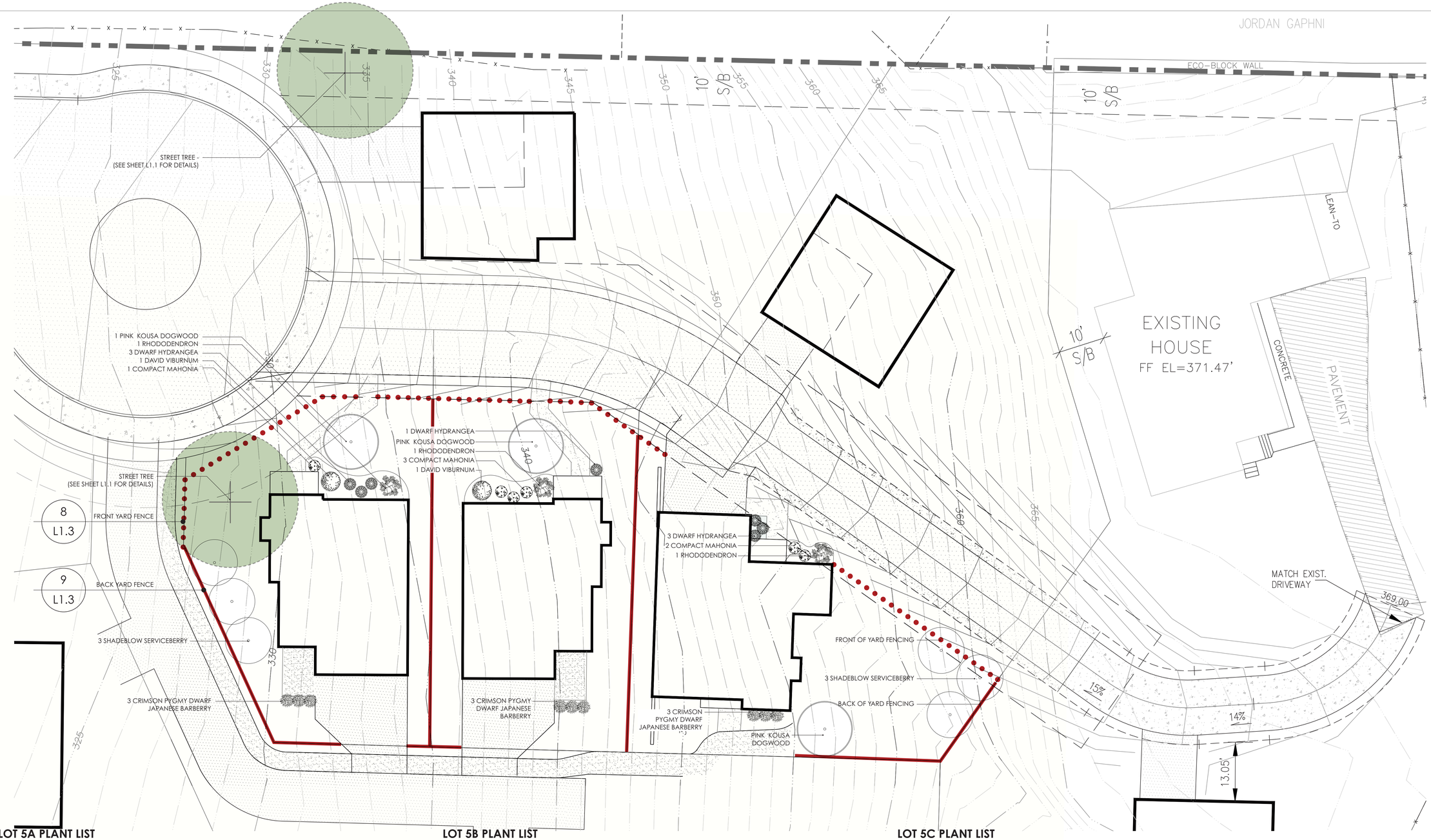
REVISIONS //
x.x.xxxx

FORMAT //
ARCH D (24 X 36 INCH)

DESIGNER //
ZW

DRAWING //
STREET TREE PLAN

L1.1



LOT 5A PLANT LIST

TYPE	QUANTITY	COMMON NAME	LATIN NAME	SPCES
DECIDUOUS TREE	1	PINK KOUSA DOGWOOD	*CORNUS KOUSA VAR. CHINESIS*	1.5" CALIPER, B&B
DECIDUOUS TREE	3	SHADBLOW SERVICEBERRY	*AMELENCHIER CANADENSIS*	5 - 6' TALL MULTI STEM, B&B
SHRUB	3	CRIMSON PYGMY DWARF JAPANESE BARBERRY	*BERBERIS THUNBERGII 'CRIMSON PYGMY'*	2 - 3 GAL CONTAINER
SHRUB	1	RHODODENDRON	*RHODODENDRON*	4 - 5' TALL
SHRUB	3	DWARF HYDRANGEA	*HYDRANGEA QUERCIFOLIA*	2 - 3 GAL CONTAINER
SHRUB	1	DAVID VIRBURNUM	*VIBURNUM DAVIDII*	3 - 5 GAL CONTAINER
SHRUB	1	COMPACT MAHONIA	*MAHONIA AQUIFOLIUM*	2 - 3 GAL CONTAINER

GREEN FACTOR SCORE **.483**

Project title: LOT 5A

Parcel size (enter this value first) * — enter sq ft of parcel: 5,775 — Enter Minimum Required Score: X.XX — SCORE: 0.483

	Landscape Elements**	Square Feet	Factor	Total
A	**Landscaped areas (select one of the following for each area)**			
1	Landscaped areas with a soil depth of less than 24"	enter sq ft: 0	0.1	-
2	Landscaped areas with a soil depth of 24" or greater	enter sq ft: 2147	0.8	1,717.6
3	Bioretention facilities	enter sq ft: 0	1.0	-
B	**Plantings (credit for plants in landscaped areas from Section A)**			
1	Mulch, ground covers, or other plants less than 2' tall at maturity	enter sq ft: 0	0.2	-
2	Plants 2' or taller at maturity - calculated at 16 sq ft per plant (typically planted no closer than 18" on center)	enter number of plants: 9 — 144	0.3	43
3	Tree canopy for "small trees" in _____'s Street Tree Planting Schedule or equivalent (canopy spread of 15') - calculated at 50 sq ft per tree	enter number of plants: 4 — 200	0.3	60
4	Tree canopy for "small/medium trees" in Street Tree Planting Schedule or equivalent (canopy spread of 20') - calculated at 100 sq ft per tree	enter number of plants: 0 — 0	0.3	-

LOT 5B PLANT LIST

TYPE	QUANTITY	COMMON NAME	LATIN NAME	SPCES
DECIDUOUS TREE	1	PINK KOUSA DOGWOOD	*CORNUS KOUSA VAR. CHINESIS*	1.5" CALIPER, B&B
SHRUB	3	CRIMSON PYGMY DWARF JAPANESE BARBERRY	*BERBERIS THUNBERGII 'CRIMSON PYGMY'*	2 - 3 GAL CONTAINER
SHRUB	1	RHODODENDRON	*RHODODENDRON*	4 - 5' TALL
SHRUB	1	DWARF HYDRANGEA	*HYDRANGEA QUERCIFOLIA*	2 - 3 GAL CONTAINER
SHRUB	1	DAVID VIRBURNUM	*VIBURNUM DAVIDII*	3 - 5 GAL CONTAINER
SHRUB	3	COMPACT MAHONIA	*MAHONIA AQUIFOLIUM*	2 - 3 GAL CONTAINER

GREEN FACTOR SCORE **.494**

Project title: LOT 5B

Parcel size (enter this value first) * — enter sq ft of parcel: 1,944 — Enter Minimum Required Score: X.XX — SCORE: 0.494

	Landscape Elements**	Square Feet	Factor	Total
A	**Landscaped areas (select one of the following for each area)**			
1	Landscaped areas with a soil depth of less than 24"	enter sq ft: 0	0.1	-
2	Landscaped areas with a soil depth of 24" or greater	enter sq ft: 2365	0.8	1,892.0
3	Bioretention facilities	enter sq ft: 0	1.0	-
B	**Plantings (credit for plants in landscaped areas from Section A)**			
1	Mulch, ground covers, or other plants less than 2' tall at maturity	enter sq ft: 0	0.2	-
2	Plants 2' or taller at maturity - calculated at 16 sq ft per plant (typically planted no closer than 18" on center)	enter number of plants: 9 — 144	0.3	43
3	Tree canopy for "small trees" in _____'s Street Tree Planting Schedule or equivalent (canopy spread of 15') - calculated at 50 sq ft per tree	enter number of plants: 1 — 50	0.3	15
4	Tree canopy for "small/medium trees" in Street Tree Planting Schedule or equivalent (canopy spread of 20') - calculated at 100 sq ft per tree	enter number of plants: 0 — 0	0.3	-

LOT 5C PLANT LIST

TYPE	QUANTITY	COMMON NAME	LATIN NAME	SPCES
DECIDUOUS TREE	1	PINK KOUSA DOGWOOD	*CORNUS KOUSA VAR. CHINESIS*	1.5" CALIPER, B&B
DECIDUOUS TREE	3	SHADBLOW SERVICEBERRY	*AMELENCHIER CANADENSIS*	5 - 6' TALL MULTI STEM, B&B
SHRUB	3	CRIMSON PYGMY DWARF JAPANESE BARBERRY	*BERBERIS THUNBERGII 'CRIMSON PYGMY'*	2 - 3 GAL CONTAINER
SHRUB	1	RHODODENDRON	*RHODODENDRON*	4 - 5' TALL
SHRUB	3	DWARF HYDRANGEA	*HYDRANGEA QUERCIFOLIA*	2 - 3 GAL CONTAINER
SHRUB	2	COMPACT MAHONIA	*MAHONIA AQUIFOLIUM*	2 - 3 GAL CONTAINER

GREEN FACTOR SCORE **.549**

Project title: LOT 5C

Parcel size (enter this value first) * — enter sq ft of parcel: 4,797 — Enter Minimum Required Score: X.XX — SCORE: 0.549

	Landscape Elements**	Square Feet	Factor	Total
A	**Landscaped areas (select one of the following for each area)**			
1	Landscaped areas with a soil depth of less than 24"	enter sq ft: 0	0.1	-
2	Landscaped areas with a soil depth of 24" or greater	enter sq ft: 3118	0.8	2,495.2
3	Bioretention facilities	enter sq ft: 0	1.0	-
B	**Plantings (credit for plants in landscaped areas from Section A)**			
1	Mulch, ground covers, or other plants less than 2' tall at maturity	enter sq ft: 0	0.2	-
2	Plants 2' or taller at maturity - calculated at 16 sq ft per plant (typically planted no closer than 18" on center)	enter number of plants: 9 — 144	0.3	43
3	Tree canopy for "small trees" in _____'s Street Tree Planting Schedule or equivalent (canopy spread of 15') - calculated at 50 sq ft per tree	enter number of plants: 4 — 200	0.3	60
4	Tree canopy for "small/medium trees" in Street Tree Planting Schedule or equivalent (canopy spread of 20') - calculated at 100 sq ft per tree	enter number of plants: 0 — 0	0.3	-

NORTH

1 **LAYOUT / PLANTING PLAN**

SCALE: *1" = 10' (1:480)*

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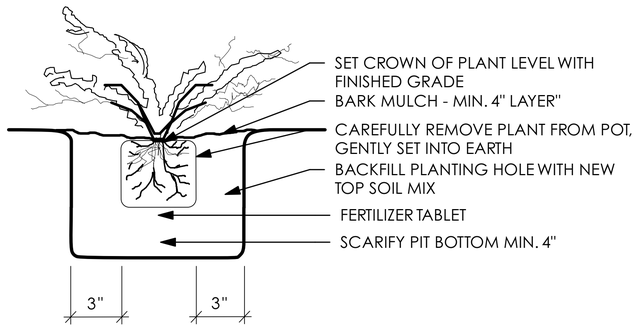
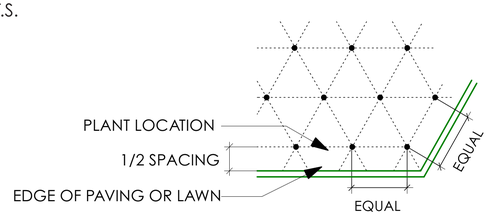
DRAWING //
LAYOUT / PLANTING PLAN

L1.2



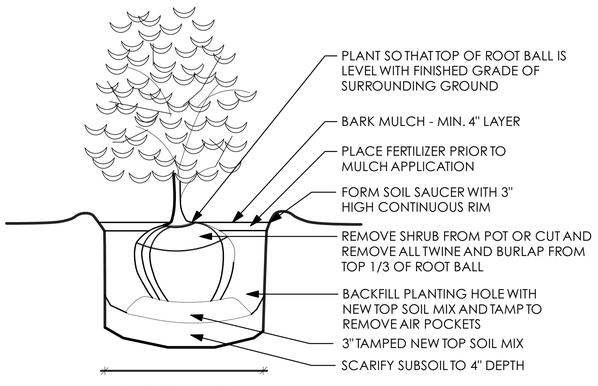
1 GROUND COVER PLANTING DETAIL

N.T.S.



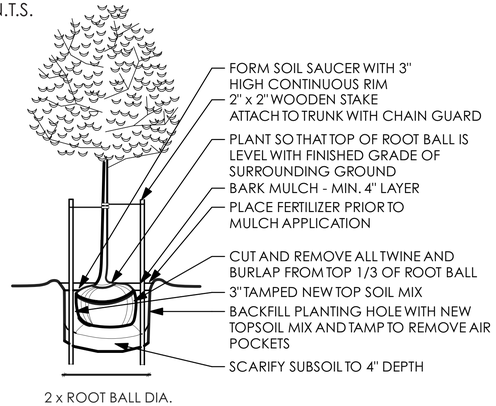
2 TRIANGULAR SPACING DETAIL

N.T.S.



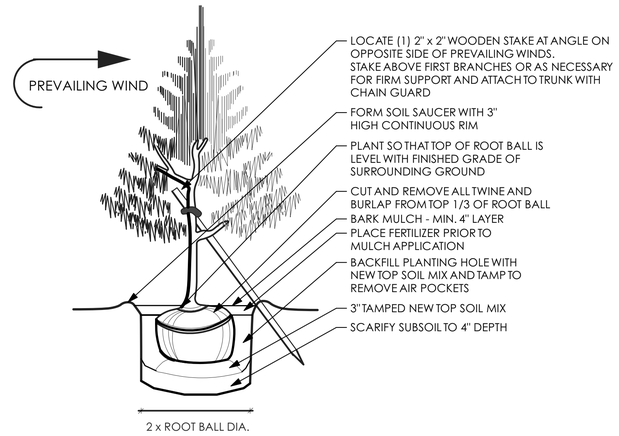
3 SHRUB PLANTING DETAIL

N.T.S.



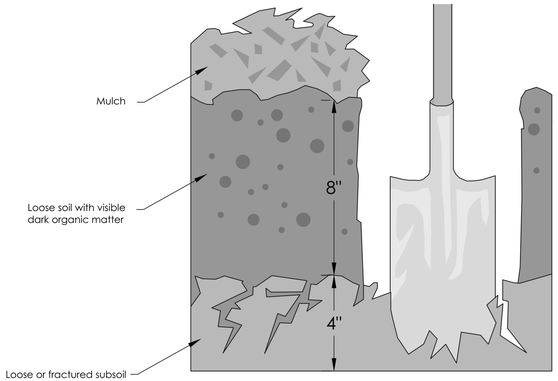
4 DECIDUOUS TREE PLANTING DETAIL

N.T.S.



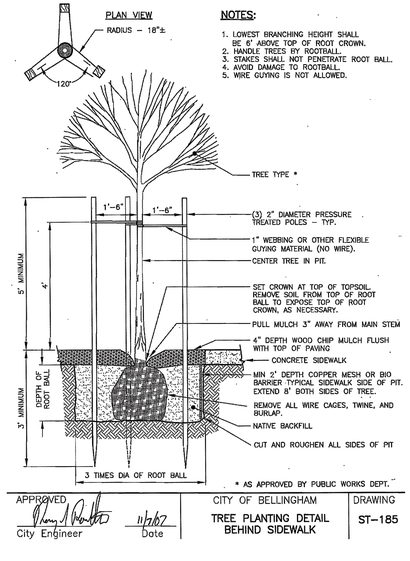
5 EVERGREEN TREE PLANTING DETAIL

N.T.S.



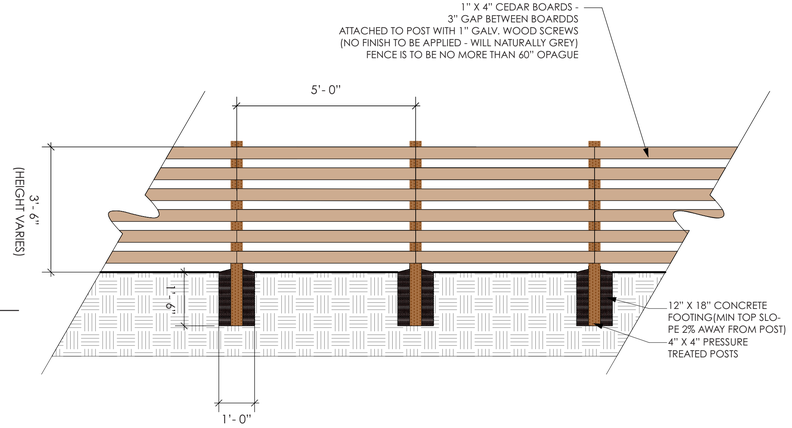
6 PLANTING BED CROSS-SECTION

N.T.S.



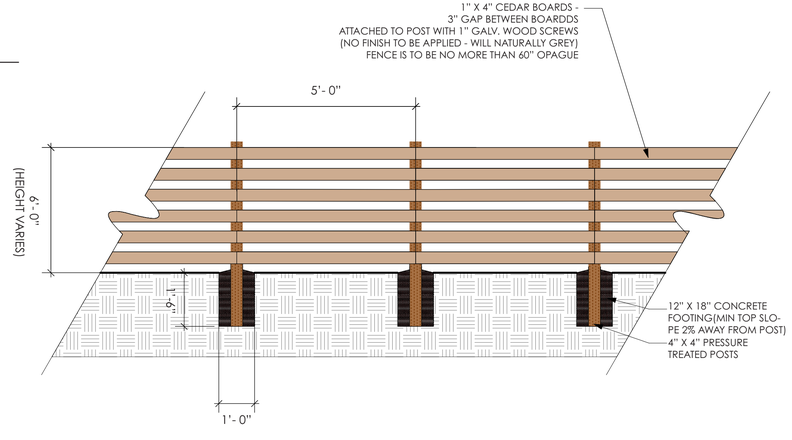
7 CITY OF BELLINGHAM STREET TREE PLANTING DETAIL

N.T.S.



8 42" FENCE DETAIL

N.T.S.



9 72" FENCE DETAIL

N.T.S.

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DRAWING //
DETAILS

L1.3

LANDSCAPE SPECIFICATIONS

PART 1 – GENERAL

1.1 WORK INCLUDED: Furnish all materials, equipment and labor necessary to complete all landscape work including lawns and seeding as shown on the drawings and as specified.

1.2 RELATED SECTIONS:

1.3 QUALITY ASSURANCE
A. Only licensed, bonded Contractors carrying liability insurance in an amount to cover any incident that the Contractor might encounter while on the site or related activity may submit a construction bid.
B. The Contractor shall become familiar with all conditions of the site as they pertained to the work to be performed and verify all dimensions and conditions throughout the progress of the work. Any discrepancies between items shown on the drawings and those existing on the site are to be brought to the attention of the Landscape Architect.
1.4 PROTECTION OF EXISTING CONDITIONS: Protect all existing utilities, structures, and plants from damage of any kind; any such damage must be repaired by the contractor at no extra cost to the owner.

1.5 FIELD QUALITY CONTROL AND INSPECTIONS
A. Notification: The Contractor shall give 48 hours notice to the Architect when an inspection is desired.
B. Upon completion of all planting and all other work required under this Contract, the Contractor shall request a provisional inspection (punch list).
C. The Contractor shall request a final inspection upon satisfactory completion of all punch list items and any other work required under this Contract. Final inspection and acceptance of the work shall establish the beginning of the guarantee period.

1.5 GUARANTEE, REPLACEMENT
A. The survival and health of all plants shall be guaranteed for 1 full year, starting the date of planting completion.
i. Any plants that need replacement shall be installed mid September following the 1 year period.
B. The Contractor shall maintain all plants and lawn through final inspection date.
C. All site furnishings that are proven to be defective within the 1 year warranty period shall be replaced at the cost of the Contractor.

PART 2 – PRODUCTS

2.1 PLANT MATERIALS
A. All plant material shall be ordered immediately following the award of Contract. Contractor is responsible for assuring that plant material installed is of specified size and quantity.
B. All plants are to be healthy, vigorous and of normal habit of growth for the species and varieties named.
C. Plant sizes shall be in accordance with "American Standard for Nursery Stock" as published by the American Association of Nurserymen, Inc.
D. Planting Soil:
i. Planting soil shall be sandy loam topsoil, free from noxious weeds as approved by the Landscape Architect. If existing soil is primarily clay-like, 100% purchased topsoil should be used for all planting.
ii. All raised garden planters shall receive sandy loam topsoil or equal, able to percolate water throughout the year.
E. Fertilizers and Soil Amendments:
i. General: Approved brands conforming to applicable State fertilizer laws. Uniform in composition, dry, free-flowing, delivered to the site in original, unopened containers, each bearing the manufacturer's guaranteed analysis.
F. Fertilizer for trees, shrubs and groundcover:
i. Agriform Tablets: Planting tablets, 21-gram size, or equiv. 20-10-5 analysis. Apply at rate of:
1. Trees: 4 tablets each
2. Shrubs:2 tablets each
3. Groundcover: 1 tablet each
G. Stakes and Guys: Material as per detail on plan.
H. Mulch: Medium bark mulch of fir or hemlock, uniform in color, free from weeds, seeds and shall not contain resin, tannin, wood fiber, salts, or other compounds detrimental to plant life.
I. Herbicide: Treat all planting beds with a selective pre-emergent herbicide according to manufacturer's recommendations. Remove all foreign weeds by roots prior to acceptance.

2.2 TOP SOIL: Good quality sandy loam free from weeds with visible dark organic matter, with a minimum of 8" placed over 4" prepared subgrade (See Figure V-5.3.3) with a minimum of 5% organic matter content for lawn areas and 10% organic matter content in planting beds, and a pH from 6.0 to 8.0 or matching the pH of the undisturbed soil. Prepared soils must also be free of stones 1" inch or larger and other materials harmful to plant growth. The 8" topsoil requirement can be achieved several ways including preserving existing soil, removing, stockpiling and reapplying stored topsoil, or importing soils to achieve 8" depth. Please refer to BMP T5.13 In the Stormwater Management Manual for Western Washington for further details.

PART 3 - INSTALLATION

3.1 TREES, SHRUBS AND GROUNDCOVER PLANTING
A. All tree holes shall be excavated to twice the diameter of the root ball, normal spread of roots, or the plant container, except that if clay or hardpan is found at the bottom of the hole, it shall be excavated an additional 18" and the bottom 12" filled with pit run gravel to provide an excess moisture sump.
B. All shrub holes shall be excavated to twice the diameter of the root ball or plant container.
C. Set trees, shrubs, and groundcovers in their natural growing positions and at the grade level at which they were originally grown.
D. Backfill with planting soil mix.
E. Plant groundcover plants at spacing indicated in straight evenly spaced rows.
F. All planting pits shall be thoroughly soaked with water by hand while backfilling to complete fill all voids around roots.
G. Stake all trees as shown in details on plan.
H. Fertilizer Application:
i. Apply transplanter at the specified rate uniformly around the circumference of the root spread under a cover of 2" of planting mix.
ii. Place plant tablets on sides of planting pits prior to backfilling.
I. Mulching:
i. Immediately after completion of all planting, mulch all planted areas to a minimum depth of 3" with medium bark.
ii. Do not allow mulch to smother trees, shrubs or groundcover trunks or stems.
J. Clean Up: A general clean up shall be made immediately after and as part of all work done in the area.

3.2 LAWNS (HYDRO-SEEDED AND SOD)
A. Subgrade Preparation: Rotovate all compacted subgrades as noted to promote proper drainage for plant growth. Remove debris from areas. Float or drag subgrades to produce smooth, uniform surfaces. Distribute excess soil evenly throughout areas to be seeded.
B. Grading: Crown all planting and lawn areas at center, slope away from buildings at the rate of _" per foot. Flow grades smoothly into one another and produce positive drainage.
C. Plant at any time when conditions are favorable for germination of seed and proper working of the soil. Calendar dates for favorable conditions are generally between April 15th and October 1st.
D. Install 10-20-20 fertilizers at the rate of 15 lbs. per 1,000 square feet.
E. After seeding has been completed, water all areas systematically to promote seed germination and protect new growth.
F. Reseeding: Approximately 21 days after germination, any barren area four (4) feet in diameter or larger shall be reseeded at the specified application rate. In the event of unusual weather, overseeding may be required at a time when weather conditions are suitable for germination. Application rate for overseeding shall be determined by the Landscape Architect but shall not exceed original rate.
G. Watering: Once germination is consistent over the field and the seedlings are averaging 1" in height, the watering schedule may be reduced to less frequent intervals. Maintain soil moisture without puddling. The soil surface can be allowed to dry between waterings at this point.
H. Fertilizing: Fertilize all areas again six (6) weeks after seeding with Lilly Miller 18-3-6 "Royal Green Optimum Soil Supplement" at the rate of 5 lbs. per 1,000 square feet, or Par Ex 24-4-12 at the rate of 6.25 lbs. per 1,000 per square feet.
I. Lawn Maintenance: Contractor shall be responsible for maintenance of lawn area until Final Completion. Maintenance shall begin following installation and include watering, reseeding, mowing, edging, fertilizing, repair of erosion damage and other operations necessary for proper maintenance of the Project. The contractor shall be responsible for the first mowing of the lawn and subsequent mowings on a regular basis until Final Completion. If the Contractor fails to cut the lawn on a regular basis, the Owner will cut the lawn and backcharge the Contractor.
J. Acceptance of Lawn: Final acceptance of hydro-seed lawn areas shall be based on a uniform stand of grass with 90% germination and 95% control of broadleaf weeds. Final acceptance of seeded lawn shall also be based on uniform, healthy, vigorous growth with no dry or dead spots in any areas. Lawn shall have been mowed a minimum of one time.
K. Identification of Continuing Maintenance Requirements: It shall be the responsibility of the Contractor to identify any and all maturation of this project. Maintenance tasks outlined shall be submitted in writing to the Owner prior to Final Completion and shall identify special needs, time requirements, and duration of maintenance within the next one year to Owner.

3.3 HYDROSEEDING APPLICATION: Hydraulically apply cellulose fiber mulch material with grass seed homogeneously in emulsion slurry. The equipment shall have an integral agitation system capable of mixing and maintaining materials homogeneously in solution. Hydroseed may be applied to native soil as directed.

3.4 SOD: A sun shade locally grown sod will be installed. Please contact landscape architect to approve material's source.

BMP T5. 13: POST-CONSTRUCTION SOIL QUALITY AND DEPTH

Purpose and Definition
Naturally occurring (undisturbed) soil and vegetation provide important stormwater functions including: water infiltration; nutrient, sediment, and pollutant adsorption; sediment and pollutant biofiltration; water interflow storage and transmission; and pollutant decomposition. These functions are largely lost when development strips away native soil and vegetation and replaces it with minimal topsoil and sod. Not only are these important stormwater functions lost, but such landscapes themselves become pollution generating pervious surfaces due to increased use of pesticides, fertilizers and other landscaping and household/industrial chemicals, the concentration of pet wastes, and pollutants that accompany roadside litter.

Establishing soil quality and depth regains greater stormwater functions in the post development landscape, provides increased treatment of pollutants and sediments that result from development and habitation, and minimizes the need for some landscaping chemicals, thus reducing pollution through prevention.

Applications and Limitations
Establishing a minimum soil quality and depth is not the same as preservation of naturally occurring soil and vegetation. However, establishing a minimum soil quality and depth will provide improved on-site management of stormwater flow and water quality.

Soil organic matter can be attained through numerous materials such as compost, composted woody material, biosolids, and forest product residuals. It is important that the materials used to meet this BMP be appropriate and beneficial to the plant cover to be established. Likewise, it is important that imported topsoils improve soil conditions and do not have an excessive percent of clay fines.

This BMP can be considered infeasible on till soil slopes greater than 33 percent.

Design Guidelines

Soil Retention
Retain, in an undisturbed state, the duff layer and native topsoil to the maximum extent practicable. In any areas requiring grading, remove and stockpile the duff layer and topsoil on site in a designated, controlled area, not adjacent to public resources and critical areas, to be reapplied to other portions of the site where feasible.

Soil Quality
All areas subject to clearing and grading that have not been covered by impervious surface, incorporated into a drainage facility or engineered as structural fill or slope shall, at project completion, demonstrate the following:

A topsoil layer with a minimum organic matter content of 10% dry weight in planting beds, and 5% organic matter content in turf areas, and a pH from 6.0 to 8.0 or matching the pH of the undisturbed soil. The topsoil layer shall have a minimum depth of eight inches except where tree roots limit the depth of incorporation of amendments needed to meet the criteria. Subsoils below the topsoil layer should be scarified at least 4 inches with some incorporation of the upper material to avoid stratified layers, where feasible.

Mulch planting beds with 2 inches of organic material.

Use compost and other materials that meet the following organic content requirements:

The organic content for "pre-approved" amendment rates can be met only using compost meeting the compost specification for BMP T7.30: Bioretention, with the exception that the compost may have up to 35% biosolids or manure.

The compost must also have an organic matter content of 40% to 65%, and a carbon to nitrogen ratio below 25:1.

The carbon to nitrogen ratio may be as high as 35:1 for plantings composed entirely of plants native to the Puget Sound Lowlands region.

Calculated amendment rates may be met through use of composted material meeting (a.) above; or other organic materials amended to meet the carbon to nitrogen ratio requirements, and not exceeding the contaminant limits identified in Table 220-B, Testing Parameters, in WAC 173-350-220.

The resulting soil should be conducive to the type of vegetation to be established.

Implementation Options
The soil quality design guidelines listed above can be met by using one of the methods listed below:

Leave undisturbed native vegetation and soil, and protect from compaction during construction.

Amend existing site topsoil or subsoil either at default "pre-approved" rates, or at custom calculated rates based on tests of the soil and amendment.

Stockpile existing topsoil during grading, and replace it prior to planting. Stockpiled topsoil must also be amended if needed to meet the organic matter or depth requirements, either at a default "pre-approved" rate or at a custom calculated rate.

Import topsoil mix of sufficient organic content and depth to meet the requirements.

More than one method may be used on different portions of the same site. Soil that already meets the depth and organic matter quality standards, and is not compacted, does not need to be amended.

Planning/Permitting/Inspection/Verification Guidelines & Procedures
Local governments are encouraged to adopt guidelines and procedures similar to those recommended in Building Soil: Guidelines and Resources for Implementing Soil Quality and Depth BMP T5.13 in WDOE Stormwater Management Manual for Western Washington (Stenn et al., 2016).

Maintenance
Establish soil quality and depth toward the end of construction and once established, protect from compaction, such as from large machinery use, and from erosion.

Plant vegetation and mulch the amended soil area after installation.

Leave plant debris or its equivalent on the soil surface to replenish organic matter.

Reduce and adjust, where possible, the use of irrigation, fertilizers, herbicides and pesticides, rather than continuing to implement formerly established practices.

Runoff Model Representation
All areas meeting the soil quality and depth design criteria may be entered into approved runoff models as "Pasture" rather than "Lawn/Landscaping".

Washington State Department of Ecology

2019 Stormwater Management Manual for Western Washington (2019 SWMMWW)

Publication No.19-10-021

NOTES FOR CONTRACTOR

01. CASCADE DESIGN GROUP MAKES NO VERBAL OR IMPLIED WARRANTIES IN RELATION TO PLANT MATERIALS SPECIFIED IN THESE PLANS OR ON THIS PROJECT. THE LANDSCAPE INSTALLATION CONTRACTOR, AT THEIR DISCRETION, WILL BE RESPONSIBLE FOR ANY AND ALL WARRANTIES REGARDING THE SPECIFIED PLANTS.

IRRIGATION

01. LANDSCAPE CONTRACTOR TO DESIGN & INSTALL FULLY AUTOMATED IRRIGATION SYSTEM EQUIPPED WITH RAIN GAUGE SHUT OFF THAT PROVIDES 100% COVERAGE TO ALL LANDSCAPE AREAS SHOULD THE OWNER REQUEST IRRIGATION.

02. THE LANDSCAPE IRRIGATION CONTRACTOR WILL PROVIDE A SIMPLE IRRIGATION PLAN INCLUDING LOCATION OF THE AUTOMATIC CONTROLLER, RAIN GAUGE, MAINLINE, VALVES, SPRINKLER LOCATIONS, AREAS THAT WILL BE DRIP IRRIGATED, AND THE SPECIFIC BRANDS OF IRRIGATION PRODUCTS TO BE INSTALLED TO THE LANDSCAPE ARCHITECT FOR APPROVAL.

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CERTIFICATE NO. 641

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1204 YEW STREET
BELLINGHAM, WA

PROJECT START DATE //
7.17.2023

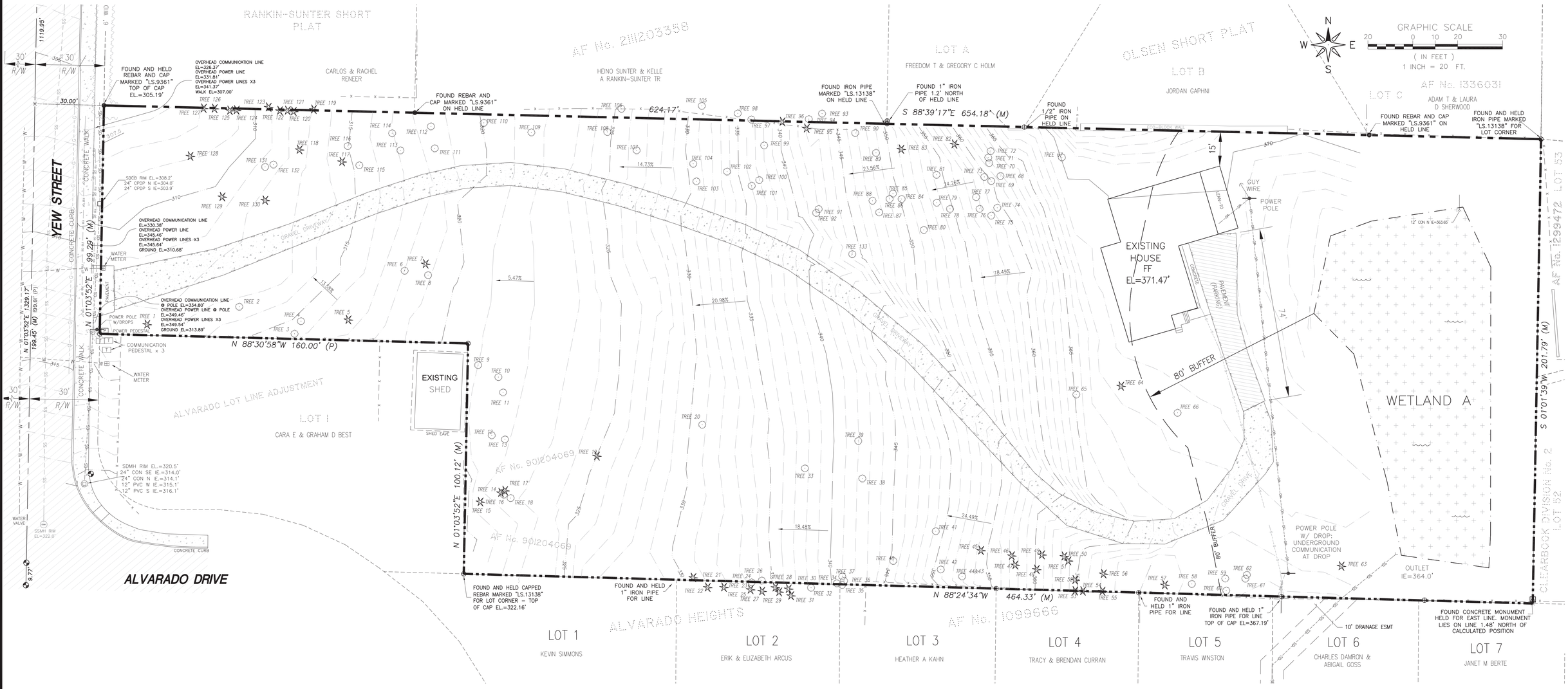
REVISIONS //
x.x.xxxx

FORMAT //
ARCH D (24 X 36 INCH)

DESIGNER //
ZW

DRAWING //
NOTES

L1.4



VICINITY MAP

LEGEND

- EXISTING GROUND CONTOUR
- EDGE OF PAVEMENT OR CURB LINE
- RIGHT OF WAY
- SECTION SUBDIVISION
- PROJECT/BOUNDARY
- LOT LINE
- CENTERLINE
- EASEMENT
- OTHER PROPERTY
- PARCEL B — LOT NUMBER
- EXISTING MANHOLE
- EXISTING CLEANOUT
- WETLAND
- 80' BUFFER
- EXISTING SEWER SERVICE
- EXISTING CATCHBASIN
- EXISTING STORM DRAIN
- EXISTING WATERMAIN
- EXISTING SINGLE WATER SERVICE
- EXISTING FIRE HYDRANT
- EXISTING FIRE HYDRANT
- EXIST. COMMUNICATION PEDESTAL
- EXISTING WATER METER
- EXIST. TREES
- GRAVEL DRIVEWAY

EXISTING CONDITIONS

REVISION

NO	DATE	BY	NOTE
1.			
2.			
3.			
4.			

EXISTING EASEMENT NOTE:
NOT PLOTTED ON PLAN

Recorded: February 6, 1890
Recorded in: Vol. 11 of Deeds, Page 60
Records of: Whatcom County, Washington
In favor of: BELLINGHAM BAY WATER COMPANY

Recorded: June 30, 1988
Recording No. 1606486
Records of: Whatcom County, Washington
In favor of: PACIFIC NORTHWEST BELL TELEPHONE

DRAWN BY____ DATE____
CHECKED BY____ DATE____

JOB# 22001

WELLINGTON PRELIMINARY PLAT

FOR: BRADLEY & KRISTINA WIDMAN

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS DOCUMENT, CONSISTING OF PLANS, DESIGNS, AND SPECIFICATIONS, WAS PREPARED UNDER MY PERSONAL SUPERVISION AND MEETS CITY OF BELLINGHAM CODES AND STANDARDS AND FURTHER THAT SAID PLANS MEET THE GENERALLY ACCEPTED STANDARDS OF PRACTICE WITHIN THE STATE OF WASHINGTON.

PRELIMINARY

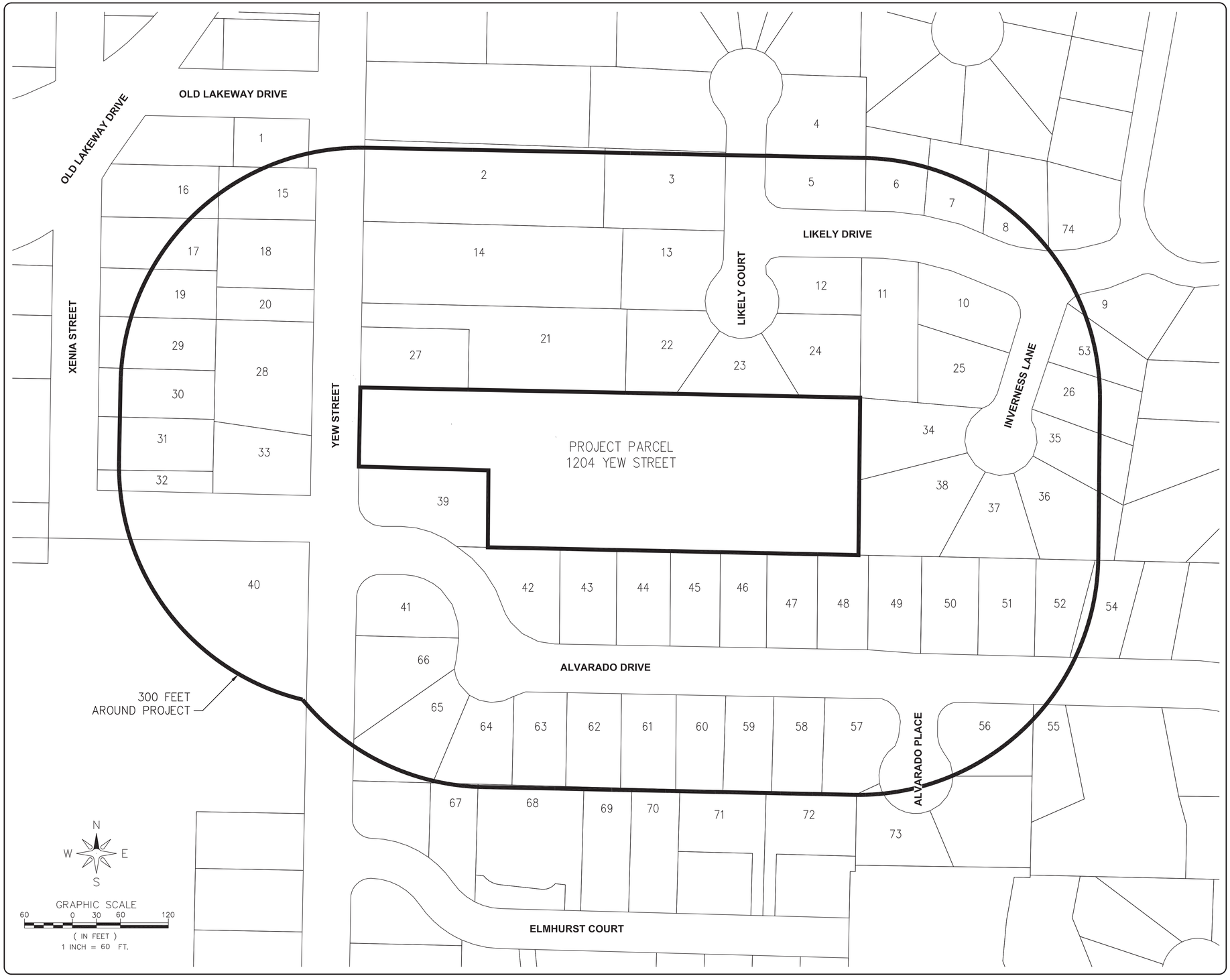
RYAN A. LONG, P.E. DATE

JONES ENGINEERS
phone 360-733-8888, www.jonesengineers.us
4164 Meridian Street · Suite 304 · Bellingham, Wa. 98226

1204 YEW STREET

EXISTING CONDITIONS

SHEET 1 OF 5



VICINITY MAP

Map ID	Owner Name	Site Address
1	DONALD L & KATHRYN J RICHARDSON	1229 YEW ST
2	J TIMOTHY & MARGUERITE R HUTTON	1216 YEW ST
3	LAURIE L RUSSELL	2606 LIKELY CT
4	SEAN M & ROBIN STIMAC JT	2607 LIKELY CT
5	CHIU-HSIUNG & SHU-YIN YANG	2615 LIKELY CT
6	DEBORAH C & HENRY J NATCHTSHEIM	2623 LIKELY DR
7	TIM M & VIRGINIA L FISHER	2625 LIKELY DR
8	WILLIAM D WEGNER	2627 LIKELY DR
9	CHARLES P & JANET BUNCH	2628 LIKELY DR
10	JACOB N JR & ROSEMARY A S VOHS	2624 LIKELY DR
11	LEANNE B & JAMES A STRALKA	2618 LIKELY DR
12	DEREK S & JENNIFER E KOELLMANN	2616 LIKELY CT
13	DANIEL RAY REV LIVING TRUST/TR	2608 LIKELY CT
14	PATRICK J & ANN M BALFOUR	1212 YEW ST
15	BRIAN COREY & MARLENA M DZIS	1225 YEW ST
16	SHARI C SKINNER	2400 OLD LAKEWAY DR
17	STEVEN F & M KATRINA JACKSON	1214 XENIA ST
18	PATRICIA L MCCAULEY	1211 YEW ST
19	JON & GINNY HANSEN	1210 XENIA ST
20	KATRINA L SCHWERDTFEGER	1219 YEW ST
21	HEINO SUNTER & KELLE A RANKIN-SUNTER TR	YEW ST
22	FREEDOM T & GREGORY C HOLM	2610 LIKELY CT
23	JORDAN GAPHNI	2612 LIKELY CT
24	ADAM T & LAURA D SHERWOOD	2614 LIKELY CT
25	NILS & COURTNEY SCHOUTLZ	1115 INVERNESS LN
26	ANNE L CALICO	1112 INVERNESS LN
27	CARLOS & RACHEL RENEER	1208 YEW ST
28	WALLACE FAMILY TRUST	1209 YEW ST
29	CRIS L & GREGORY E KOMOROWSKI	1206 XENIA ST
30	SARAH H & JOEL WARD & MARY & BRENT FOSTER	1204 XENIA ST
31	DONALD E & CATHERINE A REDEKOP	1202 XENIA ST
32	RALPH H & LOIS R PENICK	1200 XENIA ST
33	JENNIFER JOHNSON	1203 YEW ST
34	GLEN W & TARA L HENDRICKS	1109 INVERNESS LN
35	MELISSA A BERTOCCHINI & SANDRA L POLIACHIK	1108 INVERNESS LN
36	RYAN J & LEANNA M KUTTEL	1104 INVERNESS LN
37	SHAWN CHIDESTER & DYLAN GRAFMYRE	1100 INVERNESS LN
38	PAUL MIRANDA & JEAN LAUER-MIRANDA JT	1105 INVERNESS LN
39	CARA E & GRAHAM D BEST	1200 YEW ST
40	SKEERS CONSTRUCTION HOLDINGS INC	1021 YEW ST
41	TIMOTHY D SCHERMETZLER & KAITLYN A ALIOTA	2400 ALVARADO DR
42	KEVIN SIMMONS	2405 ALVARADO DR
43	ERIK & ELIZABETH ARCUS	2421 ALVARADO DR
44	HEATHER A KAHN	2501 ALVARADO DR
45	TRACY & BRENDAN CURRAN	2505 ALVARADO DR
46	TRAVIS WINSTON	2509 ALVARADO DR
47	CHARLES DAMRON & ABIGAIL GOSS	2515 ALVARADO DR
48	JANET M BERT	2519 ALVARADO DR
49	DONALD L MOORE	2611 ALVARADO DR
50	FRANK H CRATSENBERG	2621 ALVARADO DR
51	JAMES F & DARCY A WALTERS	2627 ALVARADO DR
52	ARTHUR ROBERTSON &	2703 ALVARADO DR
53	DANIEL LEVITIN & HEATHER BORTFELD	1116 INVERNESS LN
54	CITY OF BELLINGHAM FINANCE DEPT	ALVARADO DR
55	MARK E & JULIE A BROVAK	2704 ALVARADO DR
56	LORNA J KIELY	2624 ALVARADO DR
57	SPENCER D CUTSFORTH	2606 ALVARADO PL
58	MARY E KOOISTRA	2514 ALVARADO DR
59	RICHARD S LARSON &	2508 ALVARADO DR
60	JAMES & STEPHENIE BURGESS	2504 ALVARADO DR
61	SETH & JESSICA BURWASH	2500 ALVARADO DR
62	ROGER D SHANK III &	2424 ALVARADO DR
63	E TAYLOR JONES &	2420 ALVARADO DR
64	STEPHEN H & SHARON B SWANSON	2416 ALVARADO DR
65	CHELSEE A HENDERSON & TRENT J MACALLISTER	2410 ALVARADO DR
66	ANTJE M THIESSEN	2406 ALVARADO DR
67	WILLIAM & JENNIFER KERR	2405 ELMHURST CT
68	GREENBRIAR CONSTRUCTION CORP	ELMHURST CT
69	GREG S & JESSICA J ROBERTSON	2501 ELMHURST CT
70	DAVID & KIM WAGNER	2505 ELMHURST CT
71	BRIAN L & ANN C P HELGESON	2513 ELMHURST CT
72	NICOLE & ANDREW JACKSON	2517 ELMHURST CT
73	ALEXANDRA K DELANTY & RYAN D COBB	2610 ALVARADO PL
74	JOHN F GILLESPIE III & KIMBERLY L COOK	2629 LIKELY DR

DRAWN BY____ DATE____

CHECKED BY____ DATE____

JOB# 22001

WELLINGTON PRELIMINARY PLAT

FOR: BRADLEY & KRISTINA WIDMAN

PROFESSIONAL CERTIFICATION

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PRELIMINARY

RYAN A. LONG, P.E. DATE

JONES ENGINEERS
phone 360-733-8888, www.jonesengineers.us
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1204 YEW STREET

NAMES OF ADJACENT PROPERTY OWNERS WITHIN 300 FT.

SHEET 2 OF 5

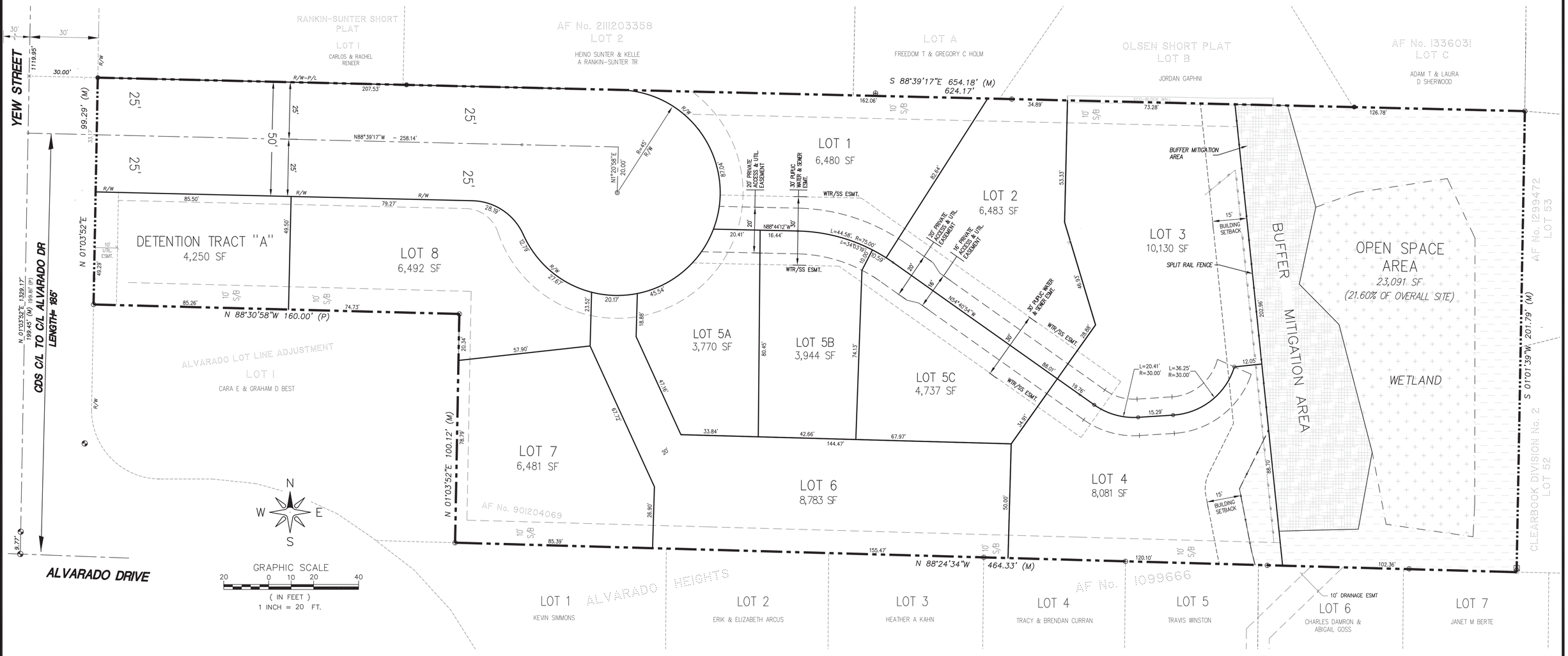

Table 20.30.045 Cluster Residential Single Minimum Yards

Table 20.30.045 –		
Yards	**Setbacks**	**Measurements**
Front Yard Setback	15 feet PL	Setback measure from the front property line (PL).
Side Yard on a Flanking Street	10 feet PL	Setback measured from the property line (PL) abutting the side flanking street.
Side Yard Setback	Five feet PL	Setback measured from each side property line (PL).
Side Yard Setback (attached)	0 feet PL	Setback measured from the side property line (PL).
Rear Yard Setback	10 feet PL	Setback measured from the rear property line (PL).

VICINITY MAP

LEGEND

- RIGHT OF WAY
- SECTION SUBDIVISION
- DIVISION/BOUNDARY
- LOT LINE
- CENTERLINE
- EASEMENT
- OTHER PROPERTY
- LOT 5A 4,147 SF — LOT NUMBER
- FUNCTIONAL BUFFER
- WETLAND
- BUFFER MITIGATION AREA
- 15' BUFFER SETBACK
- SPLIT RAIL FENCE

PRELIMINARY PLAT PLAN

REVISION

NO	DATE	BY	NOTE
1.			
2.			
3.			
4.			

LEGAL DESCRIPTION

LOT 2, AS DELINEATED ON ALVARADO LOT LINE ADJUSTMENT, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 22 OF SHORT PLATS, PAGE 89, UNDER AUDITOR'S FILE NO. 901204069, RECORDS OF WHATCOM COUNTY, WASHINGTON. SITUATE IN WHATCOM COUNTY, WASHINGTON.

DRAWN BY____ DATE____

CHECKED BY____ DATE____

JOB# 22001

WELLINGTON PRELIMINARY PLAT

FOR: **BRADLEY & KRISTINA WIDMAN**

PROFESSIONAL CERTIFICATION

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RYAN A. LONG, P.E. DATE

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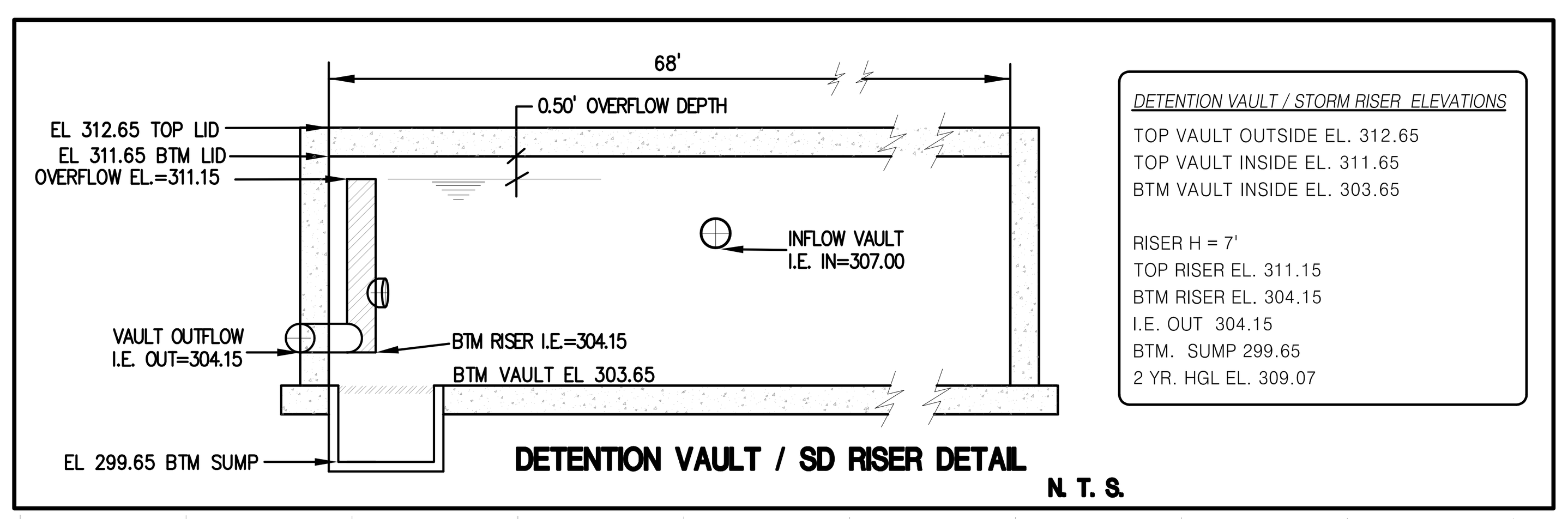
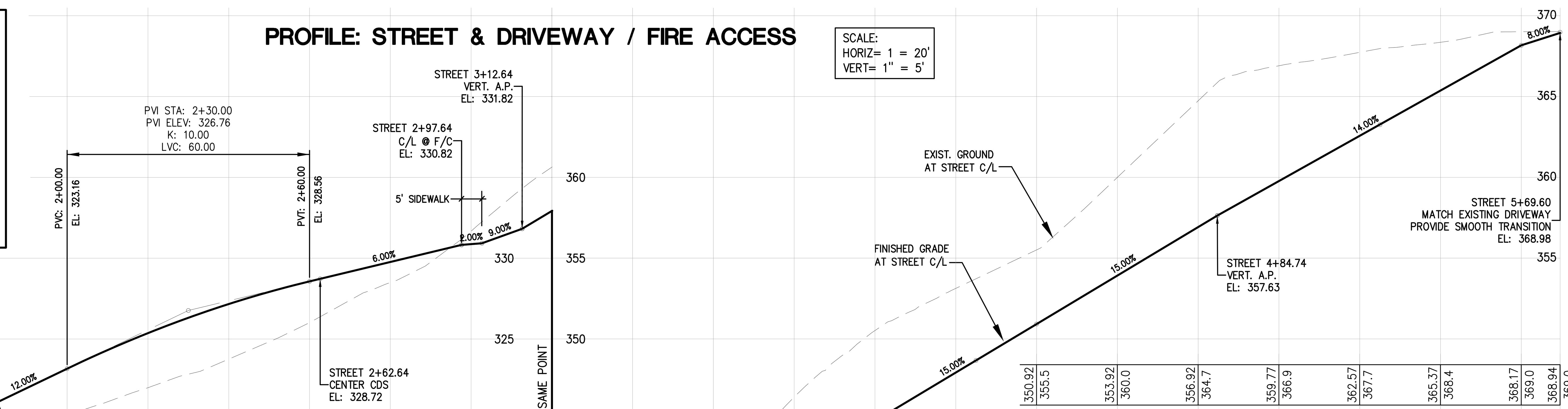
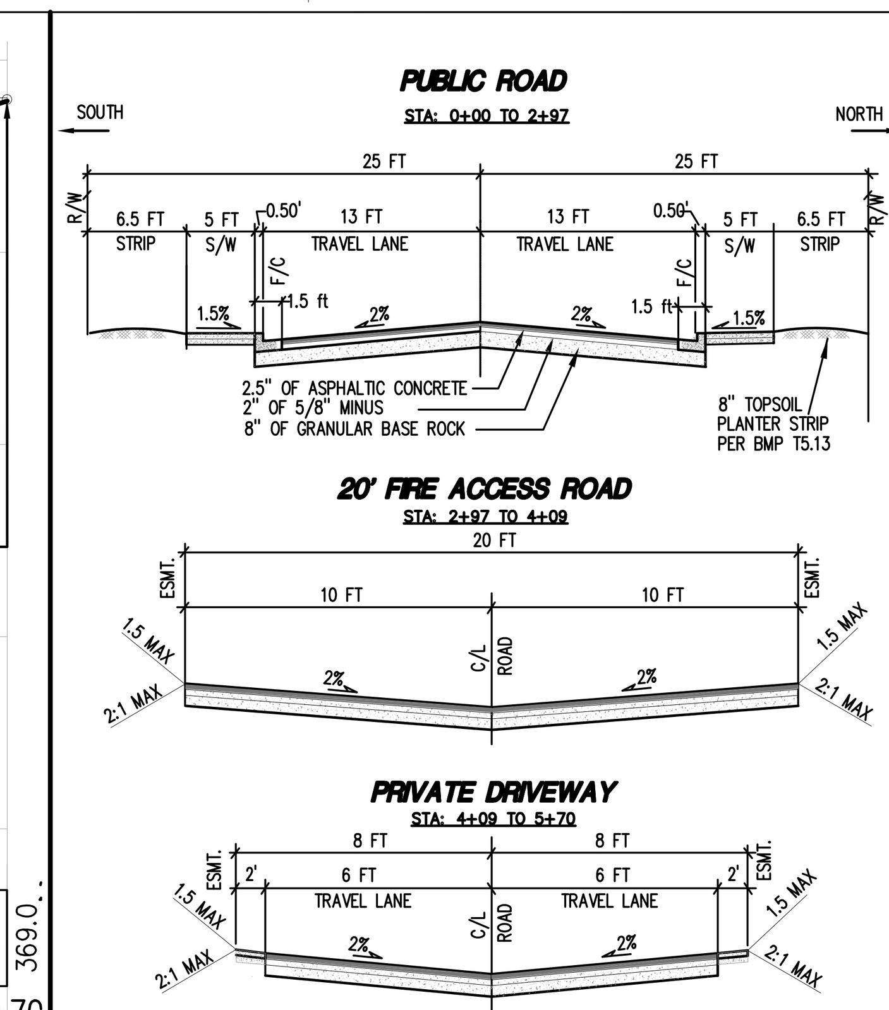
1204 YEW STREET

PRELIMINARY PLAT PLAN

SHEET 3 OF 5







VARIANCES REQUESTED

A) PUBLIC UTILITY EASEMENT WITHIN R/W
B) SEPERATON INT. DISTANCE TO ALVADADO

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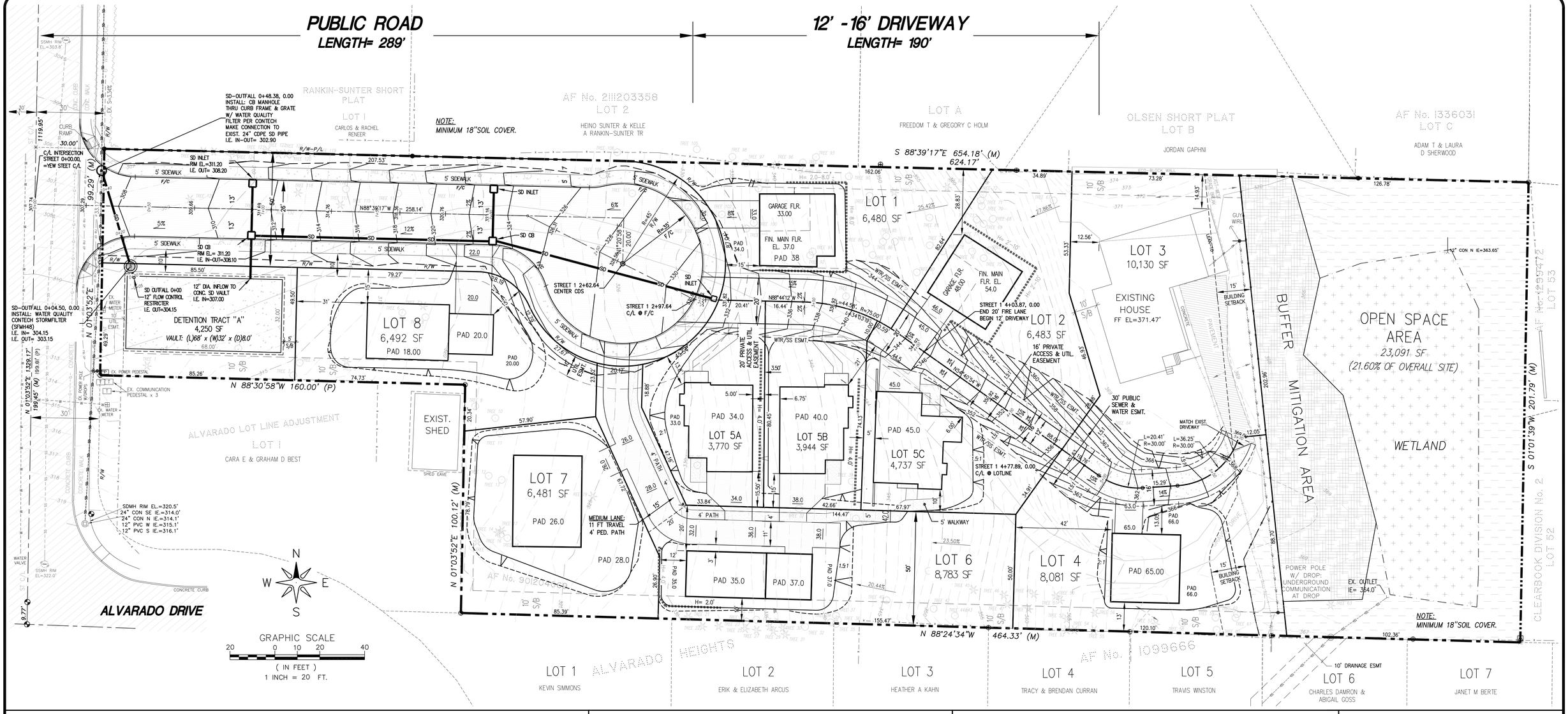
RYAN A. LONG, P.E. DATE

1204 YEW STREET

PRELIMINARY STREET & UTILITY SERVICE PLAN

SHEET 4 OF 5



VICINITY MAP

LEGEND

- HARD SURFACE IMPROVEMENTS ARE SHADED
- SIDEWALK OR PATH
- EDGE OF PAVEMENT OR CURB LINE
- RIGHT OF WAY
- SECTION SUBDIVISION
- DIVISION/BOUNDARY
- LOT LINE
- CENTERLINE
- EASEMENT
- OTHER PROPERTY
- LOT NUMBER
- EXISTING GROUND CONTOUR
- EXISTING MANHOLE
- EXISTING CLEANOUT
- EXISTING SEWER SERVICE
- EXISTING CATCHBASIN
- EXISTING STORM DRAIN
- EXISTING WATERMAIN
- EXISTING FIRE HYDRANT
- EXIST. COMMUNICATION PEDEST
- EXISTING WATER METER
- EXIST. TREES
- PROPOSED CATCH BASIN
- FUNCTIONAL BUFFER
- WETLAND
- BUFFER MITIGATION AREA
- 15' BUFFER SETBACK
- SPLIT RAIL FENCE
- PAD GRADING
- RETAINING WALL

CLEARING / GRADING PLAN

REVISION

NO	DATE	BY	NOTE
1.			
2.			
3.			
4.			

CLEARING NOTE REFER TO:

CRITICAL AREAS ASSESSMENT AND MITIGATION PLAN.
BY: NORTHWEST ECOLOGICAL SERVICES
RE: TREE RETENTION PLAN
DATED: DECEMBER 2020, REVISED JANUARY 2023

LEGAL DESCRIPTION

LOT 2, AS DELINEATED ON ALVARADO LOT LINE ADJUSTMENT, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 22 OF SHORT PLATS, PAGE 89, UNDER AUDITOR'S FILE NO. 901204069, RECORDS OF WHATCOM COUNTY, WASHINGTON. SITUATE IN WHATCOM COUNTY, WASHINGTON.

DRAWN BY____ DATE____
CHECKED BY____ DATE____

JOB# 22001

WELLINGTON PRELIMINARY PLAT

FOR: BRADLEY & KRISTINA WIDMAN

PROFESSIONAL CERTIFICATION

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RYAN A. LONG, P.E. ____ DATE

JONES ENGINEERS
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4164 Meridian Street · Suite 304 · Bellingham, Wa. 98226

1204 YEW STREET

CLEARING / GRADING PLAN

SHEET 5 OF 5

Exhibit B

Written Comments
1204 Yew Street
Proposed project: Wellington Preliminary Plat
To whom it may concern,

This letter is regarding the proposed housing development of Wellington Preliminary Plat (currently 1204 Yew Street).

Section B: Environmental Elements

The proposed development area requires significant grading likely to cause erosion (as stated in section B.1.f). The wetland and the proposed development both drain to West Cemetery Creek (section 3.a.1) an area already experiencing drastic canopy removal due to ongoing development of Xenia Street property just above the creek where 30 homes are currently being built. Removal of all canopy coverage threatens this creek. Figure 2, Page 1 of the proposal shows an aerial photo of the neighborhood, with 1204 Yew and Xenia Street projects shown as green spaces. The Xenia Street project is projected to add 30 single-family homes to the Xenia property and has already been denuded of most of its mature trees. The loss of trees from 1204 Yew significantly impacts runoff to West Cemetery Creek. The Whatcom Falls Neighborhood Plan Goal 3 (https://cob.org/wp-content/uploads/whatcom-falls.pdf) states "environmentally sensitive areas, natural drainage systems, and open space should be maintained and preserved." Please try to imagine both properties without trees when viewing this image for an accurate representation of what this area will look like should this project move to completion.

Section B.4: Plants

The mature stand of evergreen trees along the lot line of 2505 Alvarado (Trees # 52-56 behind Alvarado Lot 3 and Lot 4, on proposed Lots 6 and 4 of Wellington Plat) provide a natural windbreak and vital habitat for local wildlife. Trees #21-61 that fall between the proposed Wellington Preliminary Plat and the already existing properties on Alvarado Drive should be protected to afford climate resiliency to both groups of homes.

Emphasis must be placed on retaining mature trees. This neighborhood is experiencing significant habitat and canopy loss from the previous development of Elmhurst Court, across Yew Street at the Xenia Street Development, and now the proposed Wellington Preliminary Plat.

Mature trees are crucial to climate resiliency. 2023 is projected to be the hottest year ever recorded, now more than ever we must work to protect vital canopy coverage for the health and well-being of people and the planet.

The Whatcom Falls Neighborhood Plan (https://cob.org/wp-content/uploads/whatcom-falls.pdf) states "Goal No. 1. Natural forested areas and significant trees should be preserved and incorporated into future development where feasible," but planting young trees to replace felled mature trees does not meet this goal."

Section B. 5: Animals

The permit for Wellington Preliminary Plat does not adequately outline the species impacted by development. In addition to the species listed in the proposal (songbirds, deer likely) this property also serves as a habitat for other avian species including but not limited to hawks, eagles, herons, corvids, and woodpeckers. Multiple species of ducks and geese use this property annually in their migration and mating. Mammals on the site include bats, deer, raccoons, native grey squirrels, and opossums.

Written Comments
1204 Yew Street
Proposed project: Wellington Preliminary Plat
This property serves as a major wildlife corridor, particularly for numerous deer, between East Cemetery Creek and West Cemetery Creek.

Section B. 8. I states “approximately 20” people are expected to reside in the completed area. The proposal of 11 single-family homes suggests that an estimate of 20 individuals is low. The state average is 2.5 persons per domicile, which would suggest that the proposed area would be closer to 27 persons. These averages, however, include studio apartments and condos, not intended to house multiple persons. If each of the proposed single-family homes contains a family of just 3, this neighborhood size balloons from the estimated 20 persons to 33. The proposed Wellington Preliminary Plat will be in the same neighborhood as Kulshan Middle School and is likely to draw larger families with school-aged children making the estimate of 20 persons seem woefully inadequate.

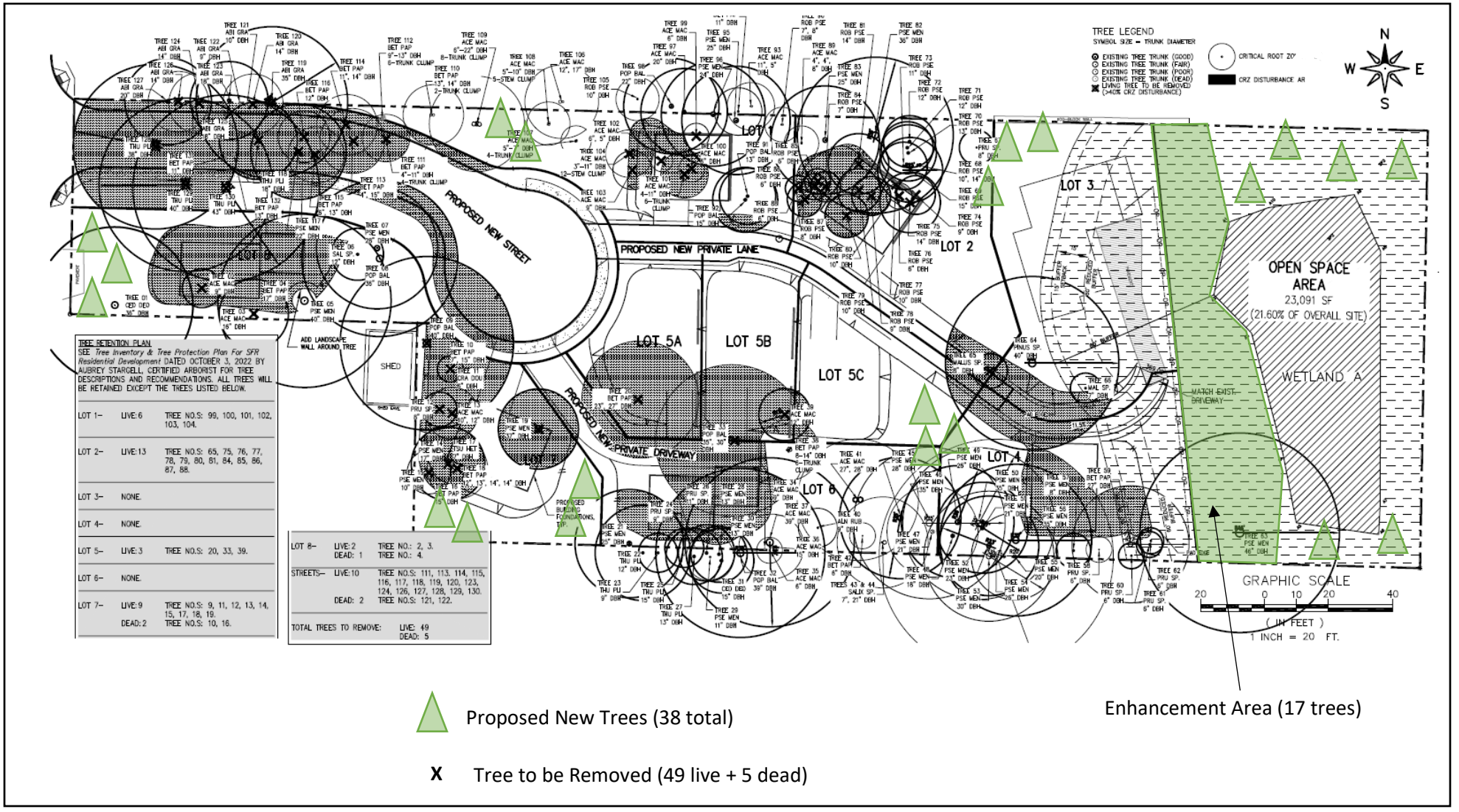
Please reconsider the size and scope of the proposed development of 1204 Yew Street. Should the development of the property take place, the City of Bellingham must ensure climate resiliency for the people and wildlife already living in this neighborhood and preserve mature trees on the property of 1204 Yew.

Sincerely,

Stephenie Burgess

2504 Alvarado Drive

Exhibit C



ECOLOGICAL NORTHWEST	**Tree Retention Plan** **(Tree inventory by Aubrey Stargell and base map by Jones Engineers)** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 8** **JAN 2023**

Exhibit D

Tree Inventory & Tree Protection Plan
For SFR Residential Development

at 1204 Yew St.
Bellingham, WA 98225
Parcel 380333038441

Prepared for
Brad Widman
1615 Old Samish Rd.
Bellingham, WA 98229

Aubrey Stargell
PN6860A

Prepared by Aubrey J. Stargell
Forester, Certified Arborist PN 6860A
TRAQ

October 3, 2022

Background Information

Brad Widman is proposing the construction of an 8-lot single-family residential development on 2.15 acres at 1204 Yew St. Bellingham, WA. This report serves to inventory the existing site significant trees (trees = >6" dbh) and provide a Tree Protection Plan for the trees to be retained. The City of Bellingham Planning and Development Services has requested an analysis of expected impacts to the retention trees from the proposed development and provide construction guidance to help preserve the trees to be retained.

Existing Conditions

There are 132 significant trees inventoried on the subject area of 2.15 acres. The site is a mix of forested and open areas. Trees are a variety of native and non-native species from young ages to ~ 60 years old. Topography is flat to gently sloping with elevation increasing going easterly with western aspect. Table 1 below details the inventory. The trees are mostly in clusters scattered around the property. The Tree Inventory begins in the southwest corner of the property immediately east of Yew St. and travels easterly recording all significant trees. Trees 1-66 are all south of the existing gravel road traversing the property west to east except for trees 64, 65. The remaining trees are north of the existing gravel road. Many of these trees are near suspected property lines and may/may not be on the subject property. This would have to be determined by a Professional Land Surveyor.

Table 1 below provides an inventory of existing site trees.

Tree	Species	Dbh	Location & Comments
1	*Cedrus deodara,*Deodar cedar	36"	SW cor prop. Few feet e. of Yew St., appears healthy/stable
2	*A. macrophyllum*, bigleaf maple	9"	12' n of s. fence, appears healthy/stable
3	*A. macrophyllum*, bigleaf maple	16"	2' n of s. fence, appears fair to good cond.
4	*B. papyrifera*, paper birch	17"	6' n of s fence, dead tree w/high decay
5	*P. menziesii*, Douglas fir	40"	7' n of s. fence, heavy ivy, fair to good cond.,
6	*Salix* sp., willow	12"	trunk scar, broken scaffold branches
7	*P. menziesii,* Douglas fir	28"	base wrapped in cottonwood roots, good cond.
8	*P. trichocarpa,* black cottonwood	36"	large root flare scar, otherwise good cond.
9	*P. tricocarpa,* black cottonwood	40"	5' e. of neighbor garage, good cond.
10	*B. papyrifera,* paper birch	7", 15"	dead clump, high decay
11	*Crataegus douglasii*, hawthorn	6"	good cond.
12	*Prunus sp.*, cherry	8"	good cond.
13	*A. macrophyllum,* bigleaf maple	10", 12"	lean e., old branch breaks, fair cond.
14	*P. menziesii*, Douglas fir	17"	fair to good cond.
15	*P. menziesii*, Douglas fir	10"	poor to fair cond., suppressed near sw prop cor
16	*B. papyrifera, paper birch*	15"	nearly dead
17	*Tsuga heterophylla, W.hemlock*	7"	nearly dead, 1 live branch
18	*B. papyrifera,* paper birch	12", 13, 14", 14"	poor condition clump
19	*P. menziesii*, Douglas fir	37"	limby, open-grown, good cond.
20	*B. papyrifera,* paper birch	23", 26	large prune wounds, dead top, poor to fair cond.

Table 1 Continued

21	*P. menziesii*, Douglas fir	25”	16’ ne. of neighbor deck, good cond.
22	*Thuja plicata,* W. red cedar	12”	good cond.
23	*Thuja plicata*, W. red cedar	9”	good cond.
24	*Prunus* sp., cherry	9”	fair cond.
25	*Thuja plicata*, W. red cedar	15”	dead
26	*Prunus* sp., cherry	11”	dead, decayed
27	*Thuja plicata*, W. red cedar	13”	good cond.
28	*P. menziesii*, Douglas fir	13”	good cond.
29	*P. menziesii*, Douglas fir	11”	poor cond., top break, suppressed
30	*P. menziesii*, Dougals fir	13”	good cond.
31	*Cedrus deodara*, Deodar cedar	15”	good cond., crown hvy to s., neighbor’s tree?
32	*P. trichocarpa*, black cottonwood	39”	fair to good cond., sweep to west
33	P. trichocarpa, black cottonwood	35”, 30”	poor to fair cond.
34	*A. macrophyllum*, bigleaf maple	9”	nearly dead
35	*A. macrophyllum*, bigleaf maple	6”	poor cond., suppressed
36	*A. macrophyllum*, bigleaf maple	15”	poor cond., nearly dead
37	*A. macrophyllum*, bigleaf maple	39”	fair to good cond.
38	*B. papyrifera*, paper birch	8”-14”	6 trunk clump, poor to fair cond.
39	*A. macrophyllum*, bigleaf maple	12”	top break, fair cond.
40	*Alnus rubra*, red alder	9”	poor to fair cond.
41	*A. macrophyllum*, bigleaf maple	27”, 28”	fair to good cond.
42	*B. papyrifera*, paper birch	6”	poor cond., suppressed
43	*Salix* sp. willow	7”	fair cond., suppressed, lean s. over fence
44	*Salix* sp. Willow	21”	basal rot, fair cond., lean s. over fence
45	*P. menziesii*, Douglas fir	28”	good cond.
46	*P. menziesii*, Douglas fir	35”	basal rot, fair cond.
47	*P. menziesii*, Douglas fir	21”	broken out top, poor cond.
48	*P. menziesii*, Douglas fir	18”	fair to good cond.
49	*P. menziesii*, Douglas fir	26”	fair to good cond.
50	*P. menziesii*, Douglas fir	35”	pitted bark, old break @ 40’/kink, 5’ s of road cut, fair cond.
51	*P. menziesii*, Douglas fir	21”	good cond.
52	*P. menziesii*, Douglas fir	23”	fair to good cond. some suppressed
53	*P. menziesii*, Dougals fir	30”	poor to fair, top break, suppressed
54	*P. menziesii*, Douglas fir	26”	poor cond., fungal conk, mild resin flow
55	*P. menziesii*, Douglas fir	20”	poor to fair cond., top break, suppressed
56	*P. menziesii*, Douglas fir	35”	6’ s. of road cut, fair to good cond.
57	*P. menziesii*, Douglas fir	8”	crest of slope/driveway turn, good cond.
58	*Prunus*, sp., cherry	6”	poor cond., diseased leaves, string girdle
59	*B. papyrifera*, paper birch	27”	fair to poor cond., dead top portions
60	*Prunus* sp., cherry	6”	good cond.
61	*Prunus* sp., cherry	6”	good cond.
62	*Prunus* sp., cherry	6”	good cond.
63	*P. menziesii*, Douglas fir	46”	good cond., 21’ e. of power pole
64	*Pinus* sp., Pine	40”	4 tops, large branch breaks, 20’ s. of exist home, fair to good
65	*Malus* sp., apple	8”	good cond.
66	*Malus* sp., apple	7”	good cond.
67	Prunus sp., cherry	7”	20’ nw of exist home, fair cond.
68	*Robinia pseudoacacia*, black locust	10”, 14”	Good cond.
69	*Robinia pseudoacacia*, black locust	15”	Good cond.
70	*Robinia pseudoacacia*, black locust	13”	Good cond.
71	*Robinia pseudoacacia*, black locust	12”	Good cond.
72	*Robinia pseudoacacia*, black locust	12”	Good cond.
73	*Robinia pseudoacacia*, black locust	11”	Good cond.
74	*Robinia pseudoacacia*, black locust	9”	Good cond.
75	*Robinia pseudoacacia*, black locust	14”	Good cond.

Table 1 Continued

76	*Robinia pseudoacacia*, black locust	6”	Fair cond., suppressed
77	*Robinia pseudoacacia*, black locust	10”	Good cond.
78	*Robinia pseudoacacia*, black locust	9”	Good cond.
79	*Robinia pseudoacacia*, black locust	10”	Good cond.
80	*Robinia pseudoacacia*, black locust	10”	Good cond.
81	*Robinia pseudoacacia*, black locust	14”	Good cond.
82	*P. menziesii*, Douglas fir	36”	Good cond., liner tree?
83	*P. menziesii*, Douglas fir	25”	Good cond., liner tree?
84	*Robinia pseudoacacia*, black locust	7”	Good cond.
85	*Robinia pseudoacacia*, black locust	6”	Good cond.
86	*Robinia pseudoacacia*, black locust	6”	Good cond.
87	*Robinia pseudoacacia*, black locust	8”	Good cond.
88	*Robinia pseudoacacia*, black locust	7”	Good cond.
89	*A. macrophyllum*, bigleaf maple	4”, 4”, 8”	3 trunk clump, Fair Cond.
90	*Robinia pseudoacacia*, black locust	8”, 7”	Poor cond., near dead, suppressed
91	*P. trichocarpa*, black cottonwood	13”	Good cond.
92	*P. trichocarpa*, black cottonwood	15”	Good cond.
93	*A. macrophyllum*, bigleaf maple	11”, 5”	Poor cond., suppressed
94	*B. papyrifera*, paper birch	11”	Fair cond., suppressed top
95	*P. menziesii*, Douglas fir	25”	Good cond. but unbalanced crown
96	*P. menziesii*, Douglas fir	24”	Good cond., liner tree?
97	*A. macrophyllum*, bigleaf maple	20”	Good cond.
98	*P. trichocarpa*, black cottonwood	22”	Good cond., liner tree?
99	*A. macrophyllum*, bigleaf maple	6”	Fair cond., suppressed
100	*A. macrophyllum*, bigleaf maple	6”	Poor cond., suppressed
101	*A. macrophyllum*, bigleaf maple	4”-11”	6 trunk clump, Fair cond.
102	*A. macrophyllum*, bigleaf maple	6”, 5”	Poor cond., suppressed
103	*A. macrophyllum*, bigleaf maple	9”	Fair cond., broken top
104	*A. macrophyllum*, bigleaf maple	3”-11”	12 stem clump, Fair cond.
105	*Robinia pseudoacacia*, black locust	10”	Poor cond., 90 deg trunk bend, die-back
106	*A. macrophyllum*, bigleaf maple	12”, 17”	inter-wrapped trunks, hvy ivy, wire in wood, poor cond.
107	*A. macrophyllum*, bigleaf maple	5”-7”	4 trunk clump, Fair cond.
108	*A. macrophyllum*, bigleaf maple	5”-10”	5 stem clump, Poor cond., nearly dead
109	*A. macrophyllum*, bigleaf maple	6”-22”	8 trunk clump, Fair cond., heavy ivy
110	*B. papyrifera*, paper birch	13”, 14”	2 trunk clump, Poor cond., dead top portions
111	*B. papyrifera*, paper birch	4”-11”	4 trunk clump, Poor to Fair cond. suppressed
112	*B. papyrifera*, paper birch	9”-13”	6 trunk clump, all dead/decayed
113	*B. papyrifera*, paper birch	4”, 15”	Poor cond., broken out top
114	*B. papyrifera*, paper birch	11”, 14”	Fair cond., suppressed
115	*B. papyrifera*, paper birch	6”, 13”	Fair cond.
116	*B. papyrifera*, paper birch	12”	Fair cond.
117	*P. menziesii*, Douglas fir	22”	Good cond.
118	*Thuja plicata*, W. red cedar	18”	Good cond.
119	*Abies grandis*, Grand fir	35”	Good cond., liner tree?
120	*Abies grandis*, Grand fir	14”	Poor cond., weak crown, liner tree?
121	*Abies grandis*, Grand fir	10”	dead tree, liner tree?
122	*Abies grandis*, Grand fir	9”	dead tree, liner tree?
123	*Abies grandis*, Grand fir	18”	Good cond., liner tree?
124	*Abies grandis*, Grand fir	14”	Poor cond., weak/dead top, liner tree?
125	*Abies grandis*, Grand fir	18”	dead tree, liner tree?
126	*Abies grandis*, Grand fir	14”	Poor cond. dead/weak top, liner tree?
127	*Abies grandis*, Grand fir	20”	Good cond. liner tree?
128	*Thuja plicata*, W. red cedar	38”	Good cond.
129	*P. menziesii*, Douglas fir	40”	18’ n of exist road,
130	*Thuja plicata*, W. red cedar	43”	9’ n of exist road

Table 1 Continued

131	*B. papyrifera*, paper birch	11”	dead tree
132	*B. papyrifera*, paper birch	13”	dead tree

132 significant trees

Tree Survival/Structural Stability

Development of this site for residential construction will require significant site alteration pursuant to access road construction/relocation, stormwater infrastructure, utilities installation, and building footprint excavation. Likelihoods of survival/structural stability are based upon tree species tolerance to disturbance and percentage/proportion of CRZ disturbance. The International Society of Arboriculture has defined the Critical Root Zone of a tree as having 1’ of radius from the trunk for every inch of diameter at breast height (dbh). Thus, a 20” dbh tree would have a CRZ with a radius of 20’. CRZ disturbance is defined as significant soil compaction and/or excavation/root damage. In general, trees having > 40% CRZ disturbance are deemed to have a Low likelihood of long term survival/structural stability. This is due to loss of water and nutrient absorbing roots and loss of mechanical/physical anchorage to the soil.

In the interest of preserving the viability of the site trees to be retained, please see Tree Protection Recommendations enumerated below.

Recommendations

The following are recommendations for construction of the necessary infrastructure to preserve the long-term safety of the site and viability of the trees to be retained in the context of the proposed work. Given that none of the subject trees observed will have > ~ 10% CRZ impacts the steps below will not likely be required but are listed for informational purposes.

Recommendation 1

Place secure and sturdy construction fencing around the CRZ’s of trees to be retained. Secure the fencing with methods that do not damage near surface roots.

Recommendation 2

Remove any tree with more than 40% of the CRZ impacted by the site activities and replace with site appropriate trees on a 2:1 replacement ratio.

Recommendation 3
Avoid any grade changes, placement of fill, vehicle parking, heavy equipment traffic, or underground utility work within the CRZ of each tree to minimize root disturbance and soil compaction. Efforts should be made to go over or under with utility lines when roots larger than 2" diameter are encountered in the utility trench. Hand excavation is recommended around larger roots. Where roots have to be cut they should be severed cleanly using sharp tools at right angles to the root length to minimize surface area damage and exposure and facilitate compartmentalization. Do not cut any roots larger than 3" in diameter.

Recommendation 4
Provide additional watering to the retained trees that have soil disturbance within the CRZ for the first three years following construction during the dryer summer months that is the equivalent to 1" water per week. A slower but deep soaking is more beneficial than a quick heavy application of water. Apply 4" of mulch around the CRZ to preserve soil moisture, suppress weeds, and attenuate temperature extremes.

Recommendation 5
Apply 6" depth of organic mulch to the CRZ of any tree that has activity/soil disturbance within the CRZ.

Recommendation 6
Avoid any changes in drainage patterns from excavation, irrigation or otherwise within the root zone.

Recommendation 7
Avoid any above ground tree contact (trunk or limbs) by equipment booms, delivery trucks, or other contact.

Recommendation 8
Prohibit concrete washout, herbicides/pesticides application, heat sources within the root zone and any tree attachments (hardware, rope etc.).

Recommendation 9
Monitor the trees for 3 years for signs of decline and consideration of remediation steps if necessary.

These recommendations are in no way a guarantee of tree health and survival in the future due to potential unforeseen circumstances and acts of God/force majeure. However, they do represent responsible steps in promoting the continued viability of the trees.

Respectfully,

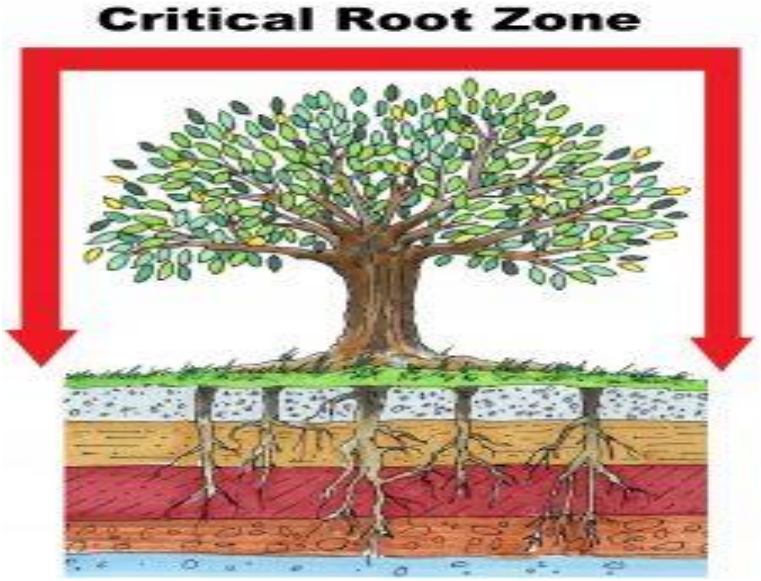
Aubrey Stargell
Forester, Certified Arborist PN 6860A

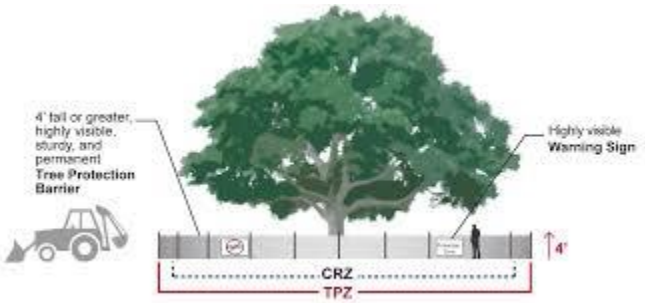
References:

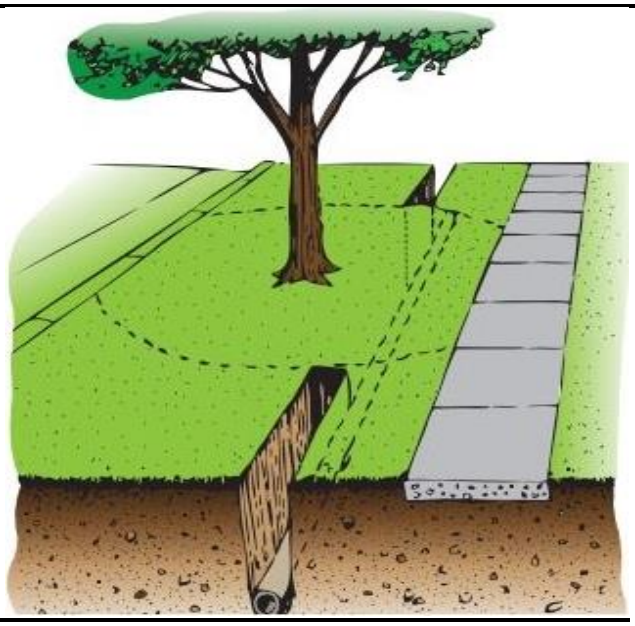
Pacific Northwest ISA Tree Protection Measures

Tree Protection on Construction and Development Sites, Oregon State University, December 2009.

Exhibit A


Critical Root Zone


4' tall or greater, highly visible, sturdy, and permanent
Tree Protection Barrier
Highly visible
Warning Sign
4'
CRZ
TPZ



Planning

Exhibit E

Permit Center
210 Lottie Street
Bellingham, WA 98225
phone: 360-778-8300
fax: 360-778-8301
www.cob.org

Land Use Application

Check all permits you are applying for in the boxes provided. Submit this application form, the applicable materials listed in the corresponding permit application packet(s) and application fee payment.

☐ Accessory Dwelling Unit	☐ Parking Adjustment Application	**Office Use Only**
☐ Binding Site Plan	☐ Planned Development	Date Rcvd:
☐ Clearing Permit	☐ Rezone	Case #:
☐ Conditional Use Permit	☐ SEPA	Process Type:
☑ Critical Area Permit	☐ Shoreline Permit	Neighborhood:
☐ Minor Critical Area Permit	☐ Shoreline Exemption	Area Number:
☐ Design Review	☐ Subdivision-Short Plat/Lot Line Adjustment	Zone:
☐ Grading Permit	☐ Subdivision-Preliminary Plat	Pre-Ap. Meeting:
☐ Home Occupation	☐ Subdivision-Final Plat	Concurrency:
☐ Institutional	☐ Variance	
☐ Interpretation	☐ Wireless Communication	
☐ Landmark – Historic Certificate of Alteration	☐ Zoning Compliance Letter	
☐ Legal Lot Determination	☐ Other:	
☐ Nonconforming Use Certificate		

Project Information

Project Address: 1204 Yew Street — Zip Code: 98226

Tax Assessor Parcel Number (s): 3803330384410000

Project Description: Preliminary Plat with Infill Housing

Applicant / Agent

☑ Primary Contact for Applicant

Name: Jones Engineers, Inc. / Darcy Jones

Mailing Address: 4164 Meridian Street, Suite 304

City: Bellingham — State: WA — Zip Code: 98226

Phone: 360-733-8888 — Email: darcy@jonesengineers.us

Owner (s)

☑ Applicant ☐ Primary Contact for Applicant

Name: Bradley and Kristina Widman

Mailing Address: 1615 Old Samish Road

City: Bellingham — State: WA — Zip Code: 98229-8524

Phone: (360) 220-1990 — Email: brad.widman@gmail.com

Property Owner(s)

I am the owner of the property described above or am authorized by the owner to sign and submit this application. I grant permission for the City staff and agents to enter onto the subject property at any reasonable time to consider the merits of the application and post public notice. I certify under penalty of perjury of the laws of the State of Washington that the information on this application and all information submitted herewith is true, complete and correct.

I also acknowledge that by signing this application I am the responsible party to receive all correspondence from the City regarding this project including, but not limited to, expiration notifications. If I, at any point during the review or inspection process, am no longer the Applicant for this project, it is my responsibility to update this information with the City in writing in a timely manner.

Signature by Owner/Applicant/Agent: [signature] Date: 02/03/23

City and State where this application is signed: Bellingham (City), WA (State)

Permit Center
210 Lottie Street, Bellingham, WA 98225
Phone: (360) 778-8300 Fax: (360) 778-8301 TTY: (360) 778-8382
Email: permits@cob.org Web: www.cob.org/permits

CRITICAL AREA PERMIT

(PLEASE PRINT CLEARLY OR TYPE IN BLUE OR BLACK INK)

The intent of the Critical Area Ordinance (Bellingham Municipal Code 16.55) is to designate and classify environmentally sensitive and hazardous areas and to protect, maintain, and restore these areas and their functions and values while also allowing for reasonable use of public and private property. To determine if a proposed activity or area is subject to the ordinance contact the Planning Division staff.

SUBMITTAL CHECKLIST – Your application will not be accepted unless all of the following are submitted:

■ Pre-Application conference or waiver
- Required for applications that include a SEPA checklist (*Type II*).

■ Land Use Application form and associated information outlined in the Critical Area Permit Packet
- All requested information must be provided.

☐ Filing fee
- Applicable fee as calculated by Planning staff. (*See separate Fee Schedule*)

■ List of surrounding property owners *(For Type II & Type III-A applications only)*
- Complete the attached Names and Mailing Addresses of Surrounding Property Owners for property **within 500 feet**.

■ SEPA Environmental checklist
- Submit if required (*including any wetland impacts – consult Planning Staff*)

■ Critical Area Report & Maps (*Two 11" x 17" or larger scaled copies and one 8 ½" x 11" reduction*)
- See the attached Critical Area Report and Map Checklist for requirements.

■ Specific Report
- The following reports are required depending on the type of critical area(s) impacted:

  ■ Wetlands and their buffers ☐ Frequently flooded areas ☐ Geologically hazardous areas

  ☐ Fish and wildlife habitat conservation areas (*including streams*)
- Reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area. (*See the specific checklist for report requirements*)

■ Associated Land Use Applications
- Consult with Planning staff to determine if other land use permits are required.
- <u>All Type II applications must be submitted concurrently.</u>

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CRITICAL AREA REPORT CHECKLIST

A Critical Area Report is required for all applications (BMC 16.55.210). The report must be prepared by a "qualified professional", as defined in BMC 16.55.510. All reports may require additional information as determined by the Planning Director. The Planning Director may approve a Critical Area Report supplemented by or composed of any previous studies required by other laws and regulations.

At a minimum, the report shall contain the following (BMC 16.55.210 C):

- ☐ The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
- ☐ Maps and site plans (*Two 11" x 17" or larger scaled copies and one 8 ½" x 11" reduction*)
  - Vicinity map clearly showing the location of the property.
  - Critical areas map showing all critical areas, required buffers, and existing topography based on City or surveyed data.
  - Site plan detailing the development proposal (including stormwater facilities) and the limits of construction. This map should be overlaid on the critical area/topographical map.
  - Topography map showing the location and extent of all grading, cut and fill, and post construction contours.
- ☐ The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;
- ☐ Identification and characterization of all critical areas, water bodies, and buffers adjacent to the proposed project area;
- ☐ A statement specifying the accuracy of the report, and all assumptions made and relied upon;
- ☐ An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;
- ☐ An analysis of site development alternatives including a no development alternative;
- ☐ A description of reasonable efforts made to apply mitigation sequencing pursuant to *Mitigation Sequencing* [Section 16.55.250] to avoid, minimize, and mitigate impacts to critical areas;
- ☐ Plans for adequate mitigation to offset any impacts, in accordance with *Mitigation Plan Requirements* (BMC 16.55.260) and additional requirements specified for each critical area.
- ☐ A discussion of the performance standards applicable to the critical area and proposed activity;
- ☐ Financial guarantees to ensure compliance; and
- ☐ Any additional information required for the critical area as specified in the corresponding chapter.

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Phone: (360) 778-8300 Fax: (360) 778-8301 TTY: (360) 778-8382
Email: permits@cob.org Web: www.cob.org/permits

MITIGATION REPORT REQUIREMENTS

See each Critical Area section for specific mitigation requirements. When mitigation is required, the applicant shall also submit a mitigation plan, prepared by a "qualified professional", as defined in BMC 16.55. The mitigation plan shall include:

- ■ Detailed summary of the project, including the impacts to the critical area, and the proposed mitigation to compensate for lost functions and values to appear in the beginning of the report.
- ■ Rationale for selecting the mitigation site.
- ■ Complete site characterization of the proposed mitigation site to include parcel size, ownership, soils, vegetation, hydrology, topography, and wildlife.
- ■ Goals, objectives, performance standards and dates of completion of the mitigation proposal.
- ■ Report and maps of the critical area to be impacted.
- ■ Monitoring, maintenance, and contingency plan. The monitoring schedule (dates, frequencies and protocols) must be included and a monitoring report submitted accordingly. Monitoring and maintenance shall be required for at least five years unless otherwise stipulated by another government agency.
- ■ Map of development, with scale, shown in relation to critical area.
- ■ Financial guarantees ("surety") for 150 percent of the total costs to ensure the mitigation plan is fully implemented, including, but not limited to, the required monitoring and maintenance periods.

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SPECIFIC REPORT REQUIREMENT – WETLANDS AND WETLAND BUFFERS

In addition to the Critical Area Report and associated maps, submit a specific report based on the type of critical area. This supplemental report must also be prepared by a "qualified professional", as defined in BMC 16.55.510. All reports may require additional information as determined by the Planning Director.

A wetland delineation report shall provide an analysis of all wetlands and buffers on site and within one hundred fifty (150) feet of the lot or parcel boundaries including, at a minimum, the following information:

■ Critical Area Report and Maps (See separate checklist for requirements)

■ Wetland Delineation Report

- The wetland boundaries shall be surveyed by a licensed surveyor or using an equivalent method with an accuracy of +/- one (1) foot of a survey.
- Determination of each wetland size.
- Description of each wetland class and category.
- Description of overall water sources and drainage patterns on site.
- Description of vegetation, hydrologic conditions, and soil and substrate conditions.
- Description of wildlife and habitat.
- Topographic elevation, at two-foot contours.
- Functional assessment of the wetland and adjacent buffer using a local or state agency-recognized method and including the reference of the method and all data sheets.
- Show the standard buffer requirements for each wetland.

■ Wetland Mitigation Requirements – provide information described in BMC 16.55.350 in addition to the Mitigation Report Requirements Checklist.



CRITICAL AREAS ASSESSMENT & MITIGATION PLAN

1204 YEW STREET
PARCEL #380333 038441
BELLINGHAM, WA

DECEMBER 2022 (REVISED JAN 2023)

NW ECOLOGICAL SERVICES
2801 Meridian St, Suite 202, Bellingham, WA 98225
nwecological.com | t 360.734.9484

EXECUTIVE SUMMARY

Northwest Ecological Services, LLC (NES) was retained to complete a critical areas assessment and mitigation plan for proposed subdivision of parcel #380333 038441 in the city of Bellingham, Washington. The assessment performed by NES included identification of any wetlands, streams, protected fish and wildlife habitats, frequently flooded areas, and shorelines as observed within the review area. It did not include identification of the following critical areas: geologically hazardous areas or critical aquifer recharge areas. This report describes existing conditions, analyzes proposed impacts, and presents mitigating actions based on the current design that will maintain, protect and/or enhance existing wetland habitat and associated buffer functions in accordance with applicable environmental regulations.

All information contained in this report is based on available information and site conditions at the time of the site visit(s). This report is intended for inclusion with future wetland, stream, and wildlife habitat permit applications to the City of Bellingham (COB), Washington State Department of Ecology (Ecology), Washington State Department of Fish and Wildlife (WDFW), and the U.S. Army Corps of Engineers (Corps), as may be required.

Molly Porter (Professional Wetland Scientist [PWS] #2064) and Candice Trusty (Wetland Professional in Training [WPIT]), NES ecologists, conducted a site visit on October 12th of 2022 to document site conditions. NES identified one wetland (Wetland A) within the subject parcel. Under the Ecology 2014 Wetland Rating System, Wetland A is Category III with low levels of wildlife habitat function (habitat rating score of 4).

No streams, ponds, lakes, shorelines, or frequently flooded areas were observed or mapped on the subject parcel or within 150 feet.

NES did not observe any federal or state Threatened, Endangered, or Candidate species or state Priority species or associated habitat (other than the wetland) within the subject parcel. Potential populations of big brown bat (*Eptesicus fuscus*) are mapped within the township. However, no habitat features suitable for this species were observed on site.

Wetland A is expected to be regulated by one or more of the following agencies: COB, Ecology, and/or the Corps. The COB critical areas ordinance (CAO) requires protective buffers on regulated features. Wetland buffers are based on proposed land use intensity, wetland category, and wildlife habitat points from the Wetland Rating System. Future development on site would be considered high intensity land use under COB CAO and Wetland A is anticipated to require an 80-foot protective buffer.

The project proposal seeks to subdivide the subject parcel into eight lots for future single-family residential development. No wetland impacts are proposed. However, in order to achieve maximum density on site, a small amount of wetland buffer impact is necessary. The project proposes a 25 percent reduction to a portion of the functional buffer of Wetland A, for a total of 600 square feet (sq. ft.) of buffer impact.

To compensate for wetland buffer impacts and to ensure no net loss of buffer functions, mitigation in the form of on-site buffer enhancement is proposed. The existing wetland buffer is currently degraded and the functional buffer ends at existing on-site development. Planting the entire remaining functional buffer is proposed for a total of 5,900 sq. ft. of buffer enhancement. Enhancement will include removal of non-native plant material and trash, de-compacting soils, and installation of native trees and shrubs.

Fencing and signage will be installed along the outer perimeter of the on-site critical area and retained buffer. A conservation easement will be filed to protect the mitigation areas and remaining critical areas from future development. Maintenance and monitoring of the mitigation project shall be provided for a minimum of five years, after the as-built report is approved, to determine project success.

NES QUALIFICATIONS

NES is a specialized service-oriented environmental consulting firm based in Bellingham, Washington. We provide a range of biological services to both the public and private sectors. Our services include wetland assessments, stream and shoreline assessments, restoration and mitigation plans, natural resource analysis, environmental regulatory compliance, and endangered species assessments of for State and Federal endangered, threatened, and sensitive plant and wildlife species. NES professionals have performed wetland and biological assessments over 35,000 acres [1991-2022] in Whatcom, Skagit, Island, and San Juan counties.

NES staff qualifications summary:

- Molly Porter is an ecologist with NES and has provided environmental services within the north Puget Sound area since 2004. Ms. Porter obtained a Bachelor of Science in Environmental Science from Huxley College of the Environment at Western Washington University (WWU). She is certified through SWS as a PWS, #2064.
- Collin Van Slyke is an ecologist with NES, providing environmental services for projects throughout north Puget Sound since 2014. Mr. Van Slyke obtained a Bachelor of Science in Environmental Science from Huxley College of the Environment at WWU. He is certified through SWS as a PWS, #3129.
- Candice Trusty is an ecologist with NES and has been providing environmental services within the north Puget Sound since 2019. Ms. Trusty obtained a Bachelor of Science in Environmental Science from Huxley College of the Environment at Western Washington University. Her experience includes the assessment of wetland and fish & wildlife critical areas, fish removal, biological surveying, and habitat restoration. She is certified through SWS as a WPIT.
- Michael Whitehurst is an ecologist with NES. Mr. Whitehurst obtained a Bachelor of Science in Marine Biology from the University of West Florida and certificate in wetland science and management from the University of Washington. His experience includes marine and freshwater organism identification, marine and terrestrial botany, and water quality sampling and analysis.
- Alexandre Pederson is an ecologist with NES. Mr. Pederson obtained a Bachelor of Science in Ecological Engineering from Oregon State University. His experience includes bioremediation, watershed and stormwater management, and sampling and analysis of biological, chemical, and physical properties of soils.

DISCLAIMER

Wetland, stream, and lake delineations and determinations are based upon protocols defined in manuals and publications produced by federal, state and local agencies. The wetland methodology used in this report is consistent with methods described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast* Region (Corps, 2010) and the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), as required by WAC 173-22-035. The findings were based on observations of conditions at the time of the site visit(s).

Mitigation plans are developed to meet local, state, and federal regulations. This plan requires agency concurrence prior to implementation. The recommendations are based on conditions at the time of the site visit(s) and development plans provided by the Client and Client representatives. Although the plan is carefully designed to facilitate success, no guarantees are given that the project will meet all performance standards. Project success depends on many unforeseen and uncontrollable events, achieving success can be greatly improved through:

- Ensuring a qualified ecologist is on site during mitigation project construction,
- Installing the mitigation project as specified in this report,
- Maintaining the mitigation project as specified in this report (ideally by a landscape professional that specializes in restoration and/or wetland mitigation), and
- Implementing any recommended contingency measures in a timely manner.

Findings within this report are based on observations of conditions at the time of the stated site visit(s). This report is provided for the use of the named recipient only and is not intended for use by other parties for any other purpose. This report does not guarantee agency concurrence or permit approval.

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Scope of Work

Northwest Ecological Services, LLC (NES) was retained to complete a critical areas assessment and mitigation plan for a parcel subdivision in the city of Bellingham, Washington. The assessment performed by NES included identification of any wetlands, streams, protected fish and wildlife habitats, frequently flooded areas, and shorelines as observed within the review area. It did not include identification of the following critical areas: geologically hazardous areas or critical aquifer recharge areas. This report describes existing conditions, analyzes proposed impacts, and presents mitigating actions based on the current design that will maintain, protect and/or enhance existing wetland habitat and associated buffer functions in accordance with applicable environmental regulations.

All information contained in this report is based on available information and site conditions at the time of the site visit(s). This report is intended for inclusion with future wetland, stream, and wildlife habitat permit applications to the City of Bellingham (COB), Washington State Department of Ecology (Ecology), Washington State Department of Fish and Wildlife (WDFW), and the U.S. Army Corps of Engineers (Corps), as may be required.

Project Contact:
Darcy Jones, Jones Engineering
4164 Meridian St, #304
Bellingham WA, 98226
T: 360.733.8888

Property Owner:
Brad Widman
1615 Old Samish Rd
Bellingham WA, 98229
T: 402.915.2925
Email: bradwidman@gmail.com

Critical Areas Assessment Report prepared by NES staff:
Molly Porter, PWS
Candice Trusty, WPIT
Northwest Ecological Services, LLC
2801 Meridian Street, Suite 202
Bellingham, WA 98225
T: 360.743.9484
Email: molly@nwecological.com
candice@nwecological.com

1.2 Review Area/Project Location

The review area and project area include the entirety of the 2.51-acre parcel (#380333 038441), located at 1204 Yew Street in Bellingham, Washington (Section 33, Township 38N, Range 03E W.M.) and accessible areas within 150 feet per City code (BMC 16.55.290B). The site is located east of Yew St, within the City limits (Figure 1- all referenced figures are located in Appendix B). An aerial photograph of the parcel and surrounding landscape is included as Figure 2.

1.3 Project Overview

The project proposal seeks to subdivide the subject parcel into eight lots. The site plan for the plat is depicted in Figure 3. The proposed project includes the following elements:

- Lots. The subject parcel will be divided into eight lots designated for future development of single-family residences. Lot 5 is further divided into 3 sub-lots (5A-5C) for smaller single-family residence footprints.
- Public Road. A public road and cul-de-sac will be developed off Yew Street, providing access to the on-site lots.
- Driveways. Two driveways will be constructed off the public road. The northern driveway provides access to lots 1, 2, 3, 4, and 5C. The southern driveway provides access to lots 5A, 5B, and 6.
- Stormwater. On-site stormwater management shall occur in accordance with the 2019 Ecology Stormwater Management Manual for Western Washington and COB Municipal Code (BMC). An underground stormwater detention and infiltration system will be installed on site to service lots 1 thru 7. Lot 8 will allow for dispersion of stormwater into lawn areas. On-site stormwater flows west and does not enter the site wetland or buffer. Hydrology on-site will be maintained at current conditions.
- Impacts. No direct wetland impacts are proposed for this project. However, in order to achieve maximum density on site, a small amount of wetland buffer impact is necessary. The project proposes a 25 percent reduction to the functional buffer on Lot 4 for a total of 600 square feet (sq. ft.) of buffer impact. Proposed impacts will not encroach beyond the maximum buffer reduction allowed by COB code (25%).
- Mitigation. Compensatory mitigation for buffer encroachment is proposed in the form of buffer enhancement. The existing wetland buffer is currently degraded and the functional buffer ends at the existing on-site development. Planting the entire retained functional buffer is proposed for a total of 5,900 sq. ft. of buffer enhancement. The proposed enhancement area exceeds the 1:1 (impact to mitigation) ratio required in the COB critical areas ordinance (CAO) and the additional enhancement is proposed in order to fully vegetate the buffer to meet BMC 16.55.340(B).

2.0 Assessment Methods

The wetland delineation and critical areas assessment included an office review of existing publicly available natural resource data followed by a site visit(s). NES then completed a functional assessment for any identified critical areas. NES conducted the site investigation and assessments in accordance with methodology specific to each resource area (wetlands, fish and wildlife habitats, frequently flooded areas, and shorelines), as described below.

2.1 Document Review

NES reviewed publicly available maps and applicable reports pertaining to the project area. Specifically, NES reviewed existing documents related to soils, hydrology, vegetation, wetlands, fish and wildlife habitats, shorelines, and frequently flooded areas.

2.2 Field Methods

2.2.1 Wetlands

The wetland delineation was conducted in accordance with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Corps, 2010) and the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987). To make a positive wetland determination, this methodology requires evidence that at least one positive wetland indicator be found for each of three parameters (vegetation, soils, and hydrology). An area is not considered a regulatory wetland if the area lacks indicators for any one of these three parameters under normal environmental conditions. Upland/wetland boundaries are delineated by locating the transition where soils, vegetation, or hydrology no longer indicate that wetland parameters are met.

2.2.2 Streams and Lakes

If streams or lakes were identified on the property, NES marked the ordinary high water mark (OHWM) consistent with state law as defined in RCW 90.58.030. NES used field indicators to determine the OHWM based on the methodology contained in *Determining the Ordinary High Water Mark on Streams in Washington State* (Olson and Stockdale, 2010), Ecology Publication #08-06-001. During the site visit, the investigating ecologists also completed a stream characterization of basic stream attributes including average depth, vegetation, substrate, and habitat features. If lakes were present, NES documented basic lake attributes including size, surrounding vegetation, and hydrologic connectivity.

2.2.3 Fish and Wildlife

NES documented observations of any state Priority species or federal Threatened, Endangered, or Proposed species protected under the Endangered Species Act (ESA) during the site visit. NES also reviewed the site for general wildlife habitat conditions and habitat connectivity. If streams were present, NES documented any obvious fish passage barriers, characterized general stream attributes (as described above), and documented any observations of fish during the site visit.

2.2.4 Shorelines

NES reviewed the local shoreline management program (SMP) text and maps to determine the potential presence of a regulated shoreline within the review area. During the site visit, NES field verified the presence of any shoreline and determined the extent of SMP jurisdiction based on SMP mapping, OHWM, floodways, wetlands, and floodplains. If shorelines were present, NES determined the OHWM consistent with state law as defined in RCW 90.58.030 and described under Section 2.2.2.

2.2.5 Frequently Flooded Areas

NES reviewed Federal Emergency Management Agency (FEMA) mapping to determine if frequently flooded areas are documented on site.

2.2.6 Mapping

During the site visit, NES staff flagged the identified critical areas with pink flagging and recorded their locations using a GPS/GNSS unit with reported sub-meter accuracy and 95% precision. The boundaries of the identified wetland was surveyed by Jones Engineers, Inc. A surveyed map of the wetland, produced by Jones Engineers, is included as Figure 3. NES georeferenced this surveyed map to create Figure 4. **However, Features shown in Figure 4 should be considered approximate.**

3.0 FINDINGS

Molly Porter (Professional Wetland Scientist [PWS] #2064) and Candice Trusty (Wetland Professional in Training [WPIT]), NES ecologists, conducted a site visit on October 12th of 2022 to document site conditions. The following descriptions are based on observations from the site visit and information gathered during the document review. Photographs taken at the time of the site visit are included in Appendix C.

3.1 Landscape Setting, Watershed, and Parcel Overview

3.1.1 Document Review

The following provides a summary of the findings contained within documents reviewed:

- **Aerial Photograph: City of Bellingham City IQ (COB, 2022) (Figure 2)**
  The subject parcel is located east of Yew St, south of Lakeway Drive, and north of Alvarado Dr. The parcel is currently developed with a single-family residence and what appears to be a gravel driveway off Yew St. The site contains scattered trees and open field.

  Land use in the immediate vicinity of the subject parcel is high-density, single-family residential development. North of the site is one undeveloped, forested lot. Southeast of the site, across Yew St, is an 11-acre forested parcel.

- **United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) *Soil Survey of Whatcom County Area, Washington* (USDA, NRCS, 2022) (Figure 5)**

  The NRCS soil survey maps two soil series within the review area: Chuckanut-Urban land complex, 5 to 20 percent slopes (Map unit #29); and Squalicum-Urban land complex, 5 to 20 percent slopes (#159).

  The Chuckanut-Urban land complex series is mapped in the eastern portion of the review area. This soil series contains 50 percent Chuckanut and similar soils, 35 percent land complex, and 15 percent other minor soil components (4 percent hydric components). Chuckanut soils are non-hydric and are typically found on hillslopes. These soils are well drained and have a moderate rate of water transmission. The typical depth to the water table is more than 80 inches.

  The Squalicum-Urban land complex series is mapped in the western portion of the review area and a small portion of the southeast corner. This soil series contains 50 percent Squalicum and similar soils, 30 percent land complex, and 20 percent minor components (4 percent hydric components). Squalicum soils are non-hydric and typically found on hillslopes. These soils are moderately well drained and have a moderate rate of water transmission. The typical depth to the water table is about 39 to 59 inches.

- **Ecology Water Quality Atlas (Ecology, 2022)**
  The review area is located in Water Resource Inventory Area 1 (WRIA 1) – Nooksack. The sub watershed (12 digit HUC) is Whatcom Creek. Topography onsite slopes from the east down to the west at an approximately 14 percent gradient. On-site stormwater flows down gradient to Yew St and into West Cemetery Creek, a tributary to Whatcom Creek, approximately 0.10 miles northwest of the review area. Whatcom Creek flows into Bellingham Bay.

3.1.2 Field Observations

At the time of the site investigation, conditions were generally consistent with the reviewed documents. The site was accessed via a crushed gravel driveway off Yew St at the western boundary of the review area. The driveway provides access to the eastern portion of the site which is approximately 60 feet higher in elevation. The eastern portion of the site is up on a terrace and is the location of the existing single-family residence. Areas around the residence are composed of lawn (a mix of pasture grasses), which are partially maintained, and partially scattered trees and shrubs. The eastern boundary of the subject parcel is forested and contains a topographic depression (location of Wetland A).

The remainder of the site is situated on a hillslope (approximately 14 percent gradient sloping to the west) and is sparsely vegetated with well-established native and ornamental trees but little shrubs or understory. Several large Douglas fir (*Pseudotsuga menziesii*) and western red cedar (*Thuja plicata*) may qualify as WDFW mature trees. The understory has mostly been cleared but small native shrubs are growing back, intermixed with Himalayan blackberry (*Rubus armeniacus*) sprouts.

The review area contains uplands and a wetland, as described below.

3.2 Wetlands

NES identified one wetland, Wetland A, within the review area (Figure 4).

3.2.1 Document Review

The following resources were reviewed and none map wetlands in the review area or within 150 feet:

- **City of Bellingham CityIQ Environmental Information (COB, 2022)**
- **United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Wetlands Mapper (USFWS, 2022)**
- **WDFW Priority Habitats and Species (PHS) Mapping (WDFW, 2022a) (Figure 6)**

However, the subject parcel was reviewed for critical areas in 2017 by Cantrell & Associates, Inc (CAi, 2017) and one wetland, which corresponds to Wetland A, was delineated on site.

3.2.2 Field Observations

NES identified one wetland (Wetland A) within the review area. The approximate location of Wetland A is depicted in Figure 4.

NES documented wetland conditions at Sample Plot (SP) 1. Sample plot locations are shown in Figure 4. Data sheets from the delineation are located in Appendix D of this report. Wetland A is summarized in Table 1 and described below.

Table 1. Wetland Classification Summary

Wetland	Hydrogeomorphic Class	Cowardin Classification	Approximate Size* (sq. ft.)
A	Depressional	PFO	8,200

PFO = Palustrine Forested
*Total area is estimated

Wetland A

Wetland A is a palustrine forested (PFO), depressional wetland located along the eastern boundary of the subject parcel. The wetland is situated within a topographic depression on the terrace at the top of the hillslope. Wetland A is forested, contains a dense shrub understory, and has sparse groundcover. The wetland is dominated by Pacific willow (*Salix lasiandra*), red alder (*Alnus rubra*), and hardhack (*Spiraea douglasii*). Additional vegetation observed includes Sitka willow (*S. sitchensis*), Hooker's willow (*S. hookeriana*), paper birch (*Betula papyrifera*), salmonberry (*Rubus spectabilis*), Himalayan blackberry, horsetail (*Equisetum arvense*), deadly nightshade (*Solanum dulcamara*), and patches of slough sedge (*Carex obnupta*).

Wetland A is seasonally ponded (6-8 inches deep) over the majority of the wetland area and has a fringe of seasonally saturated soils. No water was observed during the site assessment, however, large areas of sparsely vegetated concave surfaces indicate sustained periods of ponding during the growing season. Additionally, water lines and morphological adaptations on plants within the wetland indicate sustained inundation. Many of the trees were displaying adventitious roots. A narrow stormwater pipe is perched above the bottom of the wetland at the southern boundary. This pipe allows for intermittent outflow from the wetland when

significant ponding occurs. According to CityIQ, the pipe outlets to a stormwater catch basin on Alvarado Dr, which eventually outlets to West Cemetery Creek.

Soils were documented within Wetland A at SP 2. Soils within the wetland are generally dark mucky silty loam and has decomposing organics including wood intermixed in the soil profile. Soils at SP 2 met NRCS hydric soil indicator Loamy Mucky Mineral (F1). Detailed soil conditions are documented in the field data sheets (Appendix D).

Offsite Wetlands

No other wetlands were observed or mapped within 150 feet of the subject parcel.

3.2.3 Wetland Categorization and Functional Assessment

NES categorized the identified wetland using the Ecology Wetland Rating System for Western Washington: 2014 Update (Rating System) (Hruby, 2014) and the associated wetland rating form (January 2015). The Washington State Wetland Rating System categorizes wetlands based on specific attributes based on rarity, sensitivity to disturbance, and the functions they provide. This methodology identifies and quantifies the potential of various functions operating within a wetland. This determination is based on the physical characteristics of water quality, hydrologic, and habitat functions in the wetland and its buffers. Using this system, wetlands are given a score based on the functions provided by the wetland, and are classified as Category I (highest) through Category IV (lowest). A Category I rating is assigned to wetlands that have the highest value, opportunity and potential to provide functions, and are most difficult to replace.

The Rating System scores wetland function for three categories: water quality, hydrology, and habitat. Each functional category is rated for site potential, landscape potential, and value. Rating scores are given as either "High," "Medium," and "Low."

Wetlands that rate "high" for water quality site potential typically have physical features that give the wetland the potential to provide water quality treatment. Wetlands that rate "high" for water quality landscape potential typically are in a position in the landscape that may receive potentially polluted runoff and therefore the wetlands has the opportunity to provide treatment. Wetlands that rate "high" for water quality value are typically valuable to society because they improve water quality in a basin with documented water quality impairment.

Wetlands that rate "high" for hydrologic site potential typically have physical characteristics that enable the wetland to reduce flooding and erosion by providing water storage. Wetlands that rate "high" for hydrologic landscape potential typically are in a setting where the wetlands receive runoff from developed or partially developed areas. Wetlands that rate "high" hydrologic value are typically valuable to society because they provide functions in a basin where flooding occurs.

Wetlands that rate "high" for wildlife habitat site potential typically have the physical features that provide breeding habitat, cover, and/or foraging habitat for a variety of species. Wetlands that rate "high" for habitat landscape potential are typically in a landscape position where little habitat fragmentation or loss has occurred, and the wetland has the opportunity to provide wildlife habitat as multiple species may be present. Wetlands that rate "high" for habitat value

typically provide value to society because the wetlands are adjacent to habitats or species that are protected by local, state, or federal regulations.

Functions with a "medium" rating provide the above functions to a lesser degree. Functions with a "low" rating are typically in wetlands that are degraded, are not supported by the surrounding landscape, or do not provide functions that are a value to society.

The Ecology Rating Forms for Wetland A are included at the end of this report (Appendix E). A summary of the 2014 Ecology rating and scores are shown in Table 2.

Table 2. 2014 Wetland Functional Assessment

Wetland	Improving Water Quality	Hydrologic	Habitat	Total Score	Ecology Category
A	M/M/H (7)	M/M/M (6)	L/L/M (4)	17	III

H: High; M: Medium, L: Low; (Total Score)

Water Quality Functions

Wetland A has moderate potential to improve water quality. The wetland is situated within a topographic depression and has the potential to retain or slow stormwater runoff, allowing for settling of particulates and pollutants associated with particulates. The majority of the wetland area contains dense, uncut vegetation which allows for filtering of pollutants within surface water flowing through the wetland. The wetland experiences seasonal ponding over the majority of the area which allows the wetland to perform water quality improving functions, primarily nitrogen removal.

Land uses surrounding Wetland A are pollutant generating (residential development), which increases the value of the wetland to perform water quality improvement on site. Surface water that outlets the wetland flows to West Cemetery Creek. The lower reach of West Cemetery Creek is 303(d) listed for low dissolved oxygen and high fecal coliform. West Cemetery Creek is a tributary of Whatcom Creek, the majority of which is 303(d) listed. The site is also within the Whatcom, Squalicum, and Padden Creek TMDL water quality improvement project (Ecology, 2022). Therefore, Wetland A has the opportunity to improve water quality of already highly impaired water within the watershed.

Hydrologic Functions

Wetland A has moderate potential to perform hydrologic functions. The wetland is depressional and has an intermittently flowing outlet. These conditions allow the wetland to retain and/or slow surface water during storm events. However, the wetland does not have significant capacity for live storage. Land uses adjacent to Wetland A (residential development) generate excess stormwater runoff. Therefore, Wetland A has the opportunity to provide hydrologic functions on site. Whatcom Creek, further down gradient from the wetland, has had flooding issues in the recent past. Therefore, any hydrologic functions provided by the wetland are valuable within the watershed.

Wildlife Habitat Functions

Wetland A has low potential to provide habitat functions overall. Conditions within the wetland have some potential to support wildlife as the wetland is seasonally ponded, has low cover of invasive plant species, and contains habitat features including large downed woody debris and snags. However, the wetland is highly disconnected from quality habitat due to the

surrounding high intensity land uses. Therefore, wildlife use of the site is likely very limited due to lack of access and is likely restricted to species that are well adapted to human disturbance such as deer and songbirds.

3.3 Upland Areas

3.3.1 Field Observations

Uplands on site are vegetated with scattered trees, a sparse understory, and groundcover that includes pasture grasses and other native and non-native herbaceous species. Trees on site are primarily Douglas fir and big leaf maple (*Acer macrophyllum*), but also include paper birch, western red cedar, black cottonwood (*Populus balsamifera*), Pacific dogwood (*Cornus nuttallii*), shore pine (*Pinus contorta*), and other non-native species. The shrub understory has mostly been removed but is sprouting back in many areas. Shrubs observed on site include oceanspray (*Holodiscus discolor*), snowberry (*Symphoricarpos albus*), salal (*Gaultheria shallon*), beaked hazelnut (*Corylus cornuta*), and low Oregon grape (*Mahonia nervosa*). Herbaceous species observed on site include sword fern (*Polystichum munitum*), bracken fern (*Pteridium aquilinum*), trailing blackberry (*Rubus ursinus*), creeping buttercup (*Ranunculus repens*), willow herb (*Epilobium sp.*), herb Robert (*Geranium robertianum*), orchardgrass (*Dactylis glomerata*), bentgrass (*Agrostis spp.*), and rye grass (*Lolium spp.*). Invasive vegetation observed on site includes English holly (*Ilex aquifolium*), Himalayan blackberry, Canada thistle (*Cirsium arvense*), common tansy (*Tanacetum vulgare*), and English ivy (*Hedera helix*).

NES documented upland soils at SP 1 and 3 (Figure 4). Upland soils were generally gravelly silt loams and did not meet NRCS hydric soil indicators (see data sheets in Appendix D).

No wetland hydrology was observed within the site uplands.

3.4 Habitat Conservation Areas (HCAs)

No streams, ponds, or lakes were observed or mapped on the subject parcel or within 150 feet.

NES did not observe any federal or state Threatened, Endangered, or Candidate species or state Priority species or associated habitat (other than the wetland) within the subject parcel. Potential populations of big brown bat (*Eptesicus fuscus*) are mapped within the township. However, no habitat features suitable for this species were observed on site.

3.4.1 Document Review

The following provides a summary of the findings contained within documents reviewed:

- **WDFW SalmonScape (WDFW, 2022b)**
  No streams are mapped within 150 feet of the review area. Cemetery Creek is mapped approximately 240 feet to the southeast of the review area. West Cemetery Creek is mapped approximately 515 feet west of the review area. Both are perennial, salmon-bearing streams.
- **WDFW PHS (WDFW, 2022a) (Figure 6)**
  PHS stream mapping is consistent with SalmonScape. Big brown bat occurrence is mapped in the township of the review area. Mapping is not site specific.

- **City of Bellingham CityIQ (COB, 2022)**
  The Bellingham Habitat Restoration Technical Assessment does not map forested blocks or Important Wildlife Habitat Areas on site.
- **Cantrell & Associates, Inc. Wetland Delineation Memo (CAi, 2017)**
  No streams or protected wildlife species were documented on site.

3.4.2 Field Observations

Streams

No streams were observed or mapped in the subject parcel or within 150 feet.

Surface water from the review area flows to West Cemetery Creek, which is mapped approximately 515 feet west of the review area. West Cemetery Creek is mapped as a perennial, fish bearing stream containing multiple Priority salmonid species.

Lakes and Ponds

No lakes or ponds were observed in the subject parcel or within 150 feet.

Fish and Wildlife

NES did not observe any federal or state Threatened, Endangered, or Candidate species or state Priority species or associated habitat (other than the wetland) within the subject parcel.

WDFW maps the occurrence of big brown bat within the township of the review area. Big brown bat is a habitat generalist that will occupy a variety of forest types, rangeland, and urban areas. The species uses buildings, trees, snags, caves, mines, crevices in cliffs, and bridges as day roosts. Occupation of trees and snags depends on the presence of cavities, hollow trunks, crevices, loose exfoliating bark, and dead or broken tops; cavity volume; openness from surrounding vegetation; and older age of the forest stand. Hibernacula includes buildings, caves, mines, rock crevices, and potentially other natural sites such as hollow trees. Protection of maternity roosts and sizeable hibernacula is a conservation priority for this species (WDFW, 2022c). No habitat features that would be used by this species were present in the review area. Multiple snags were observed on site, however they were not very large and are not anticipated to support big brown bat roosting or hibernating.

On-site wildlife habitat is limited by the surrounding roads and development that disconnect it from other habitat. The site likely only provides habitat for species well adapted to human presence such as songbirds, amphibians, deer, and other small mammals such as squirrels and racoons.

3.5 Frequently Flooded Areas

There are no frequently flooded areas within the review area.

3.5.1 Document Review

The following provides a summary of the findings contained within documents reviewed:

- **FEMA Flood Map Service Center (FEMA, 2022)**
  The review area is mapped within an area of minimal flood hazard (Zone X).

- **City of Bellingham CityIQ (COB, 2022)**
  The review area is outside of City mapped FEMA flood zones.

3.6.2 Field Observations

Field observations confirm background resources.

3.6 Shorelines

The review area is outside of the COB SMP jurisdiction.

3.6.1 Document Review

The following provides a summary of the findings contained within documents reviewed:

- **City of Bellingham SMP and Map**
  The review area is not mapped within COB SMP jurisdiction.

3.7.2 Field Observations

Field observations confirm COB mapping.

4.0 REGULATIONS

Agencies with regulatory authority over site wetlands, streams, fish and wildlife habitats, shorelines, and/or frequently flooded areas are summarized in Table 3 below.

Table 3. Critical Areas Summary

Feature	2014 Ecology Category	Regulatory Authority				Regulated Buffer* (ft)
		COB	Corps	Ecology	WDFW	
Wetland A	III	X	X	X		80

* Buffer based on High intensity land use

4.1 City of Bellingham

The COB CAO states that no activity may be conducted within a regulated wetland, stream, or buffer without critical areas review and approval. Activities impacting regulated wetlands generally must provide mitigation sufficient to maintain or enhance the wetland functions. The following wetlands, streams, and HCAs under the jurisdiction of the COB CAO are located within or in the immediate vicinity of the review area:

- Wetland A

The COB regulates all wetlands, regardless of size, provided that Category III or IV wetlands smaller than 1,000 sq. ft. that do not provide suitably significant or unique characteristics, as defined by the CAO (BMC 16.55.270), are exempt from buffer provisions and mitigation sequencing as specified in BMC 16.55.250.

The COB requires a buffer around regulated critical areas to protect functions. The buffer must remain naturally vegetated except where it can be enhanced to improve the functions. Wetland

buffers are measured from the wetland edge. Standard wetland buffer widths are determined according to proposed or existing land use intensity, the overall wetland category, and the habitat rating.

Proposed future development on site would be considered high intensity land use under COB CAO. Based on high intensity land use and a low level of wildlife habitat function (habitat rating score of 4), **Wetland A is anticipated to require a protective buffer of 80 feet.**

The COB requires that buildings and other structures be **setback a minimum of 15 feet from the edge of critical area buffers**, or from the critical areas where no buffer is required (BMC 16.55.340(G)). Uses allowed within the 15-foot setback include: landscaping; uncovered decks; building overhangs; impervious surfaces such as driveways, roads, parking lots, and patios, provided that they conform to applicable water quality standards and that construction equipment does not enter or damage the buffer or critical area. Clearing and grading, and wells are also allowed within the setback.

4.2 Washington State Department of Ecology

Ecology has authority over discharge into all waters of the state, which includes wetlands (including isolated wetlands) and streams, and can impose buffers and compensatory mitigation for impacts (RCW 90.48.080).

Under Section 401 of the Clean Water Act (CWA), any activity involving a discharge into waters of the U.S. authorized under a Federal permit must receive CWA Section 401 Water Quality Certification (WQC). WDOE is authorized to make WQC decisions on federal, public and privates lands in Washington, with a few exceptions (where EPA or Tribes have authority). WDOE reviews all CWA Section 404 permit applications received by the Corps for WQC. WDOE requires an "individual" review of all wetland disturbances greater than one-half acre, projects in tidal waters, or where impacts to wetlands and streams are determined to require additional review.

State laws that protect wetlands are broader than current federal regulations. The state can establish protocols for managing wetlands falling outside federal jurisdiction. For non-federally regulated wetlands, applicants must submit a request for an Administrative Order to comply with the state Water Pollution Control Act (Chapter 90.48 RCW).

4.3 Washington State Department of Fish and Wildlife

The WDFW requires issuance of a Hydraulic Project Approval (HPA) prior to any activities that may directly or indirectly affect waters of the state, including streams or associated wetlands. **The WDFW is not expected to have jurisdiction over Wetland A, as it does not have direct connection to a stream.** Therefore, no HPA is anticipated to be required for work proposed in or around Wetland A. However, only WDFW has the authority to make this determination.

4.4 U.S. Army Corps of Engineers

The Corps regulates the discharge of dredged or fill material into wetlands, streams, and other drainages that connect to Waters of the United States under Section 404 of the CWA. The Corps regulates structures and/or work in or affecting the course, condition, or capacity of navigable

Waters of the United States under Section 10 of the Rivers and Harbors Act of 1899. The Corps requires pre-construction notification for **all** disturbances to wetlands, streams, and potentially to other drainages (ditches) prior to commencing any work. It is incumbent upon the landowner to disclose disturbances.

The Corps regulates the discharge of dredged or fill material into wetlands, streams, and other drainages that connect to Waters of the United States (WOTUS) under Section 404 of the CWA. The Corps regulates structures and/or work in or affecting the course, condition, or capacity of WOTUS under Section 10 of the Rivers and Harbors Act of 1899. The Corps requires notification for all disturbances to wetlands, streams, and potentially to other drainages (ditches). It is incumbent upon the landowner to disclose disturbances.

The Environmental Protection Agency (EPA) and the Corps have published a final rule defining the scope of waters federally regulated under the Clean Water Act. Jurisdictional waters include Traditional Navigable Waters (TNWs), tributaries, impoundments of jurisdictional waters (lakes and ponds), and adjacent wetlands (CFR Title 33 Chapter II Part 328) (40 CFR 122.2).

The Corps will automatically assert jurisdiction over: TNWs; wetlands adjacent to TNWs, non-navigable tributaries of TNWs that are relatively permanent (RPWs), and wetlands which directly abut RPWs.

Additionally, the Corps will assert jurisdiction over waters on a case-by-case basis when there is a significant nexus with other jurisdictional waters including non-RPW tributaries, wetlands adjacent to non-RPWs, and wetlands adjacent to, but not directly abutting RPWs. The significant nexus depends on the degree of connection to other jurisdictional waters, the hydrologic classification of these associated waters, and their significance in the larger drainage basin.

Wetland hydrologic classification and connectivity is described in this report as the "Corps hydrologic classification" using definitions provided in current Corps guidance documents.

Only the Corps has the authority to make jurisdictional determinations; however, the following is a description of the anticipated determinations. Wetland A outlets surface water, via the city stormwater system, to the south which flows into West Cemetery Creek (an RPW). West Cemetery Creek is a tributary of Whatcom Creek (an RPW), which flows into Bellingham Bay (a TNW). Therefore, **Wetland A appears to qualify as an adjacent wetland and the Corps is likely to exert jurisdiction. A Jurisdictional Determination (JD) would be required to confirm its regulatory status.**

Activities in Waters of the United States that require Corps authorization may qualify for authorization under one of the general Nationwide Permits (NWPs) if the activities meet the criteria. In the more commonly used NWPs, discharge (fill) is limited to under 1/2 acre of wetland, 300 linear feet of stream, and 1/3 acre of tidal waters. Discharge exceeding the NWP thresholds requires an Individual Permit from the Corps. Mitigation is required for most activities. The Corps also has discretion to prohibit disturbance to high quality wetlands. As part of their permit review, the Corps must verify the project complies with Section 7 of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, and Section 106 of the National Historic Preservation Act, (including archeological sites).

5.0 IMPACT ASSESSMENT

5.1 Proposed Project

As described in section 1.3, the proposed project includes the subdivision of an existing parcel into eight separate lots. Figure 3 details the proposed site design.

5.2 Proposed Critical Areas Impacts

Proposed impacts are described below and are shown in Figure 7.

5.2.1 Wetland Impact

No direct wetland impacts are proposed.

5.2.2 Buffer Impact

The project includes 600 sq. ft. of wetland buffer impacts within proposed lot 4. Development will not encroach beyond the 25 percent buffer reduction allowed by City code.

5.3 Impact Analysis

The following sections provide an analysis of proposed impacts to the functional components of Wetland A and the associated buffer.

5.3.1 Water Quality Improvement/ Run-off Filtration

Existing Condition:

The functional buffer of Wetland A ends at the edge of the existing on-site driveway. The majority of the functional buffer lacks dense vegetation and is primarily composed of gravel or mowed grasses and weedy herbaceous species over compacted soils. The buffer area proposed for reduction is also disturbed and generally lacks tree and shrub vegetation. The impact area is abutting the existing driveway and contains one birch tree. Surface water within this buffer area drains to Wetland A.

Potential Impact:

The proposed project has the potential to result in a minor reduction of the water quality improvement function due to the proposed buffer reduction and increased use of the site. As with all projects, temporary disturbances for clearing and grading have the potential to increase turbidity during construction. Construction best management practices (BMPs) and temporary erosion and sediment control (TESC) measures are expected to minimize the potential for temporary erosion and sedimentation.

Mitigated Determination:

Potential water quality impacts are anticipated to be offset through on-site stormwater management and the proposed buffer enhancement plantings. Proposed mitigation includes planting the remaining buffer areas of Wetland A that lack native trees and shrubs. Increased woody vegetation is anticipated to improve water quality by trapping and filtering pollutants in runoff and by reducing runoff through rainwater interception and evapotranspiration. The

proposed buffer enhancement is anticipated to maintain, and potentially improve, year-round water quality improvement functions in the buffer.

Therefore, with the proposed mitigation plantings, no net loss of water quality functions are anticipated on site.

5.3.2 Hydrology Function Impact

Existing Condition:

The existing conditions within the functional buffer of Wetland A are not conducive to reducing or slowing stormwater runoff. The majority of the buffer lacks dense vegetation and the groundcover is regularly mowed. Soils are compacted, which increases runoff.

Current best available science (BAS) does not provide clear evidence that wetland buffers protect the hydrologic functions within wetlands, since many of these functions are controlled at a larger landscape scale (Sheldon et al., 2005 and Hruby, 2013).

Potential Impact:

The proposed project has the potential to result in a minor reduction of hydrologic function due to the proposed buffer reduction and increase in impervious surfaces. No changes to the hydrology of Wetland A are anticipated from the proposed project.

Mitigated Determination:

The installation of woody vegetation within the buffer of Wetland A is anticipated to increase hydrologic functions of the buffer through rainwater interception and evapotranspiration, water uptake within plant biomass, and impeding surface flows during storm events.

Therefore, with the proposed mitigation plantings, no net loss of hydrologic functions are anticipated on site.

5.3.3 Fish and Wildlife Function Impact

Existing Condition:

Wetland A has low potential to provide habitat functions overall and is isolated from areas of relatively undisturbed habitat. Therefore, wildlife use of the site is likely very limited due to lack of access and is likely restricted to species that are well adapted to human disturbance. The functional buffer of the wetland is degraded. It lacks dense vegetation, does not provide structural complexity capable of supporting a variety of wildlife species, and does not offer screening between the wetland and existing development.

Potential Impact:

The proposed project has the potential to result in a reduction in wildlife habitat function on site due to increased human presence on site. However, the impact is anticipated to be very limited due to degraded conditions of the buffer and the current isolation of the wetland from undisturbed habitat.

Mitigated Determination:

The proposed buffer enhancement will increase the habitat function of the on-site wetland buffer by increasing native trees and shrubs. The plantings will provide foraging and refuge

opportunity to wildlife and offer some screening of the wetland from the existing and proposed development on site. Therefore, with the proposed enhancement, no net loss of habitat function is anticipated and the habitat function of this site is anticipated be maintained or slightly increased.

5.3.4 Cumulative Impacts

Development throughout the city of Bellingham has the potential to result in cumulative impacts through the aggregation of many small projects/ impacts. Such impacts may include water quality issues downstream within the watershed, loss of live storage resulting in an increased risk of damage due to flooding, and habitat fragmentation.

The project site is located within the Whatcom Creek watershed. Whatcom Creek and its tributaries are 303(d) listed for high levels of fecal coliform bacteria and low levels of dissolved oxygen. The site is upgradient from Whatcom Creek and West Cemetery Creek (a tributary) and, therefore water quality improvement provided on site is important within the watershed. As described previously, the project does not include any direct wetland impacts and complies with all applicable storm water requirements. Due to the very small size of the buffer impact and the degraded condition of the buffer, the proposed buffer reduction is not anticipated to significantly reduce water quality improvement functions on site and therefore is not anticipated to contribute to the cumulative water quality issues present in the watershed.

One of the primary concerns with development within the COB is the potential to result in habitat fragmentation through removal of habitat and severance of migration routes. Wetland A and its associated buffer are isolated from areas of relatively undisturbed habitat. The site is not within a COB mapped important wildlife habitat area. The nearest mapped important wildlife habitat is approximately 600 feet south of the site, with dense single-family housing in between. Therefore, the proposed project is not expected to contribute to habitat fragmentation.

5.3.5 Impact Summary

Overall, with the proposed mitigation, no significant reduction to water quality, hydrologic, or wildlife habitat functions are anticipated to result on site from the proposed project. The proposed mitigation detailed below serves to maintain these functions at or above the current site conditions. The proposed project is not expected to contribute significantly to cumulative impacts within the greater watershed.

6.0 MITIGATION

The wetland associated with the proposed project is under the regulatory authority of one or more permitting agencies (COB, Ecology, and Corps). The following section describes mitigating actions that have been proposed to compensate for any loss of buffer functions. The mitigation plan has been designed to meet the COB CAO and the Corps and Ecology's Wetland Mitigation in Washington State guidance document (Ecology, 2021) to the greatest extent possible.

6.1 Mitigation Sequencing

All permitting agencies require that projects demonstrate adherence to a specific sequence of actions termed "mitigation sequencing" before impacting wetlands, streams, or their buffers.

Mitigation sequencing is a process where applicants show they have avoided all impacts to regulated areas and their buffers to the furthest extent possible. In some cases, if alteration to the regulated feature is deemed unavoidable, impacts may be allowed if all adverse impacts resulting from the development proposal are mitigated using best available science so as to result in no net loss of critical area functions and values. When alteration or impact to a regulated area is proposed, the applicant must demonstrate that all reasonable efforts have been taken to mitigate impacts in the following prioritized order: 1) Avoid, 2) Minimize, 3) Rectify, 4) Reduce, 5) Compensate. Mitigation sequencing applied to the proposed project is summarized in Table 4.

Table 4. Mitigation Sequencing

Sequencing	Project Elements
Avoid	The proposed project avoids all direct impacts to wetlands. The proposed project avoids the wetland buffer to the greatest extent while also achieving the density necessary on site to make the proposed project financially feasible.
Minimize	The project proposes a small amount of buffer impact (600 sq. ft.) and will not encroach beyond the 25 percent maximum buffer reduction allowed by COB code. One main reason of buffer reduction is to maintain and protect a stand of mature trees on the west edge of proposed Lot 4. Buffer reduction allows for retaining trees.
Rectify	The project complies with City stormwater requirements and adheres to BMPs.
Reduce or eliminate through preservation or maintenance	Fencing and signage to protect the retained critical areas will be installed and maintained. A conservation easement will provide protection to the critical areas and retained buffer in perpetuity.
Compensate	To address the proposed buffer encroachment, compensatory mitigation is proposed in the form of wetland buffer enhancement. Enhancement will exceed the 1:1 (mitigation to impact) ratio required by the City.

6.2 Alternatives Analysis

In order to further minimize impacts to the wetland buffer, the number of lots would need to be reduced. However, the sizes of the proposed lots are consistent with lots in the surrounding neighborhood and the project adheres to the goals of the Washington State Growth Management Act by increasing housing density within City limits to avoid suburban sprawl. The proposed project provides dense housing, avoids direct impacts to critical areas, minimizes buffer impacts to the greatest extent practicable, and minimizes removal of mature tree on site (described in tree retention section) while also achieving the intent of the project. Additionally, demand for housing is high in the surrounding area. Therefore, the proposed project is believed to be necessary to meet the needs of the community while also being minimally environmentally impactful.

6.3 Buffer Reduction Criteria

A 25 percent wetland buffer reduction is proposed within Lot 4. Consistent with the buffer reduction criteria detailed in BMC 16.55.340.C.2.e, all reasonable measures will be employed to reduce the adverse impacts and ensure no new loss of buffer functions and values.

- Lights will be directed away from the wetland and buffer.
- All stormwater from the on-site development will be directed to the on-site stormwater detention system. Hydrology of Wetland A will be maintained.
- Wildlife permeable fencing will be installed on the outer edge of the retained wetland buffer and Native Growth Protection Area (NGPA) signs will be posted in strategic locations along the fence.
- The wetland buffer will be enhanced to provide increased screening and protection of the wetland.
- A permanent conservation easement will provide protection to the on-site portions of the wetland and retained buffer.

6.4 Tree Retention Plan

Numerous trees of various species, both native and nonnative, and various age classes exist onsite. Per BMC 16.16 Land Clearing requirements, a tree inventory was conducted by Aubrey Stargell, an ISA Certified Arborist, in order to document all significant trees (trees over six inches diameter at breast height) located onsite. A base map detailing each tree with driplines shown has been provided by Jones Engineers (Figure 8).

The project attempts to retain as many significant trees as possible. However, 49 live trees and five (5) dead trees/ snags will need to be removed to accomplish the project as proposed. Those scheduled for removal are shown in Figure 8.

Trees to be retained shall be protected during construction by installing fencing, either tree protection fencing around the drip line, or by construction or silt fencing further away depending on the location onsite.

To maintain forest canopy onsite in the long term, a total of 38 new trees shall be installed. This includes 17 in the buffer enhancement area, an additional six (6) within the conservation easement tract, and an additional 15 within the overall projects site. Conceptual locations for planting are also shown in Figure 8. Planting specifications and species are detailed below in Section 7.7.

6.5 Mitigation Strategy

The following is a summary of the proposed on-site mitigation. Figure 7 depicts the mitigation areas. The proposed mitigation is intended to increase the functions of the site wetlands and wetland buffers in order to offset impacts associated with the proposed buffer encroachment. A total of 5,900 sq. ft. of buffer enhancement is proposed. The following mitigation elements are proposed:

- Buffer Enhancement. A total of 5,900 sq. ft. of buffer enhancement will occur within the buffer of Wetland A as shown in Figure 7. Enhancement will include removal of noxious weeds, de-compacting and amending soils, and installing native trees and shrubs.
    - **Buffer Enhancement Zone 1:** 2,000 sq. ft. of the outer buffer perimeter will be planted with dense roses in order to deter human encroachment into the buffer and wetland.
    - **Buffer Enhancement Zone 2:** 3,900 sq. ft. will be planted with additional native trees and shrubs.
- On-Site Protection. The following measures are proposed to ensure permanent protection of on-site critical areas and retained buffers:
    - Wildlife permeable fencing will be installed along the outer boundary of the retained on-site wetland buffer, as shown in Figure 7.
    - Two (2) NGPA signs shall be installed on the fence along the outer boundary of the retained wetland buffer, as shown in Figure 7. One sign will be within Lot 3 and one sign will be within Lot 4.
    - A conservation easement encompassing the remaining on-site wetland and buffer will be established.

7.0 MITIGATION METHODS AND PROCEDURES

7.1 Mitigation Site Selection

On-site mitigation was chosen as the most appropriate form of mitigation for the proposed project due to the currently disturbed conditions of the wetland buffer. The majority of the functional buffer is disturbed, lacks trees and shrubs, and is primarily mowed grass over compacted soils. The majority of the remaining buffer will be planted with trees and shrubs. This location will maximize the functional improvement of the buffer and provide screening between the development and wetland. The proposed mitigation site location is based on guidance in the COB CAO and best professional judgment.

7.2 Contractor Qualifications

Actions and tasks defined in this Mitigation Plan (including site preparation and planting) shall be either:

1) Conducted by a qualified contractor that can demonstrate a minimum of five years of experience with restoration or wetland mitigation installation projects in Whatcom or Skagit County. They must be able to provide an on-site staff member that can identify native plants.

OR

2) The general contractor shall have a signed contract with NES or another PWS to provide oversight during all excavation, contouring, material placement, and plant installation activities.

7.3 Biological Construction Oversight

The general contractor shall contact NES or the project PWS prior to start of work. At a minimum, a PWS must be on-site for a pre-construction meeting prior to any work on site**.**

7.4 Site Preparation

Thorough site preparation is vital to project success. All site preparation tasks (mitigation or otherwise) must be conducted in coordination with NES or another qualified biologist. The following are the required construction tasks associated with the compensatory mitigation:

- **The general contractor shall notify NES and schedule a pre-construction meeting prior to starting ANY work on the development or mitigation site.** Work includes but is not limited to earthwork, clearing, or BMP installation for the development site and/or mitigation sites.
- Construction Entrance/Stockpile Area. A construction entrance(s) and stock-pile location(s) shall be designated prior to construction and located outside of on-site wetlands and as far from the edge as possible.
- Construction Fence/Silt Fence. Construction work limits shall be clearly marked with orange construction fencing and silt fencing prior to clearing, grading, and/or excavation. Alternatively, the orange construction fence can be eliminated if the contractor installs an orange silt fence. The fences will help provide water quality protection and define the active work area. Fences must be removed once construction is complete, and erosion is stabilized. Compost and/or mulch berms may be used in some areas in lieu of silt fencing, but not construction fencing.

  During construction, if any disturbance occurs outside the work limits, NES shall be notified to make an assessment. The contractor, in coordination with NES, shall restore the disturbed area to naturally occurring grades with the goal of restoring pre-construction surface storm flows as much as possible and protecting soil conditions.
- Dry Conditions. Equipment use within the mitigation areas shall be conducted when soils are dry and precipitation events are minimal.
- Equipment Maintenance. Equipment shall be maintained in good working condition such that petroleum products or other harmful chemicals are not leaked into the mitigation area.
- BMPs. The contractor shall adhere to BMPs outlined in this mitigation plan and any other BMPs listed in the construction documents which may include, but are not limited to, silt fences, mulch or compost berms, straw rolls, temporary construction entrances, catch basin inserts, and tree protection.
- Soil decompaction. All gravel will be removed from mitigation site. Soils within the mitigation area shall be de-compacted to a depth of 10-12 inches. Soils within the mitigation site have been heavily compacted in the past and will inhibit plant root growth if left in the existing state. Topsoil will be added if 10 inches of topsoil is not present. Entire area should be covered with mulch after completion.

7.5 Invasive Plant Control

Remove any invasive weeds from the planting area prior to plant installation. Invasive vegetation observed on site that may be within the mitigation area includes English holly, Himalayan blackberry, Canada thistle, common tansy, and English ivy. Himalayan blackberry should be cut and roots should be hand-removed. **Vegetation removal shall be limited to invasive species only. All efforts should be made to avoid disturbing native volunteer species and promote their growth.**

7.6 Mulch & Soil Amendments

Mulch and soil amendments should be added after soil decompaction (section 7.4). All plant material shall be installed with wood chip mulch as detailed below.

- The installer shall apply mulch in a three (3)-foot diameter ring around all installed woody plant material in the buffer enhancement area. Mulch shall be applied in a "donut" around each plant with a depth of six (6) inches at the center grading to a depth of three (3) inches at each edge.
- No mulch shall be placed within one (1) inch of the plant stems but shall cover the root balls to the maximum possible extent.
- Mulch shall consist of clean hogfuel, woodchips with greens, woodchips with no greens, or coarse shredded bark (no beauty bark or stump grindings).
- Woodchip size shall average between 1/4 and 1/2 inches thick and one (1) to three (3) inches long (thin cut pulp chips are ideal).
- Mulch must be clean, free of materials detrimental to plant health, and free of invasive plant seeds and soil.

7.7 Plant Installation

<u>Installation Standards</u>

- Installation must be done according to the agency-approved mitigation plan. Any changes must be approved by the project biologist.

<u>Plant Installation Timing</u>

- Preferred planting timing is during the dormant season (between October 15th and April 1st). Bare root material may only be used between December 1st and March 15th.
- If planting occurs outside of this window, additional care (watering) will be necessary to ensure plant survival.
- The contractor shall contact the project biologist to inspect plant material prior to installation.
- The contractor shall contact the project biologist **prior** to installation to consult on placement.

Source of Plant Material

- Plant material shall be obtained from native plant nurseries growing stock from the Puget Sound lowlands. When possible, obtain plants from a local, Whatcom or Skagit County nursery. **Provide the project biologist staff written documentation from the plant supplier verifying plant origination and quantities PRIOR to plant installation.**
- Any species substitutions must be approved by the project biologist.
- Container plants are preferred for this project, however **if bare-root stock is used the plants numbers should be increased by 20% to compensate for increased mortality.**

Planting Guidelines

- Remove all garbage and debris from planting areas.
- Actual planting shall follow the digging of holes as closely as possible to prevent drying excavated soil. Each plant shall be placed in a hole 1 and half times the size of its container and backfilled with native soil. Backfill shall be tamped firmly to remove voids in soil. Excess soil shall be smoothed and firmed around plants leaving a slight depression to collect water.
- All plants shall be watered immediately after planting unless soils are heavily wet.
- Mulch shall be installed around all plants per above specifications.
- After installation, the contractor shall coordinate with NES to schedule a site inspection to verify all plants were installed according to design and are in good health.

Actual size of plant material may vary depending on availability. Table 5 details the planting specifications for the mitigation areas.

Table 5. Planting Specifications for Buffer Enhancement Area (5,900 sq. ft.)

Scientific Name	Common Name	Condition	Grade (min.size)	Spacing	# Plants (if C)	# Plant (if B)
Zone 1 (2,000 sq. ft.)						
Shrubs *Rosa nutkana*	Nootka rose	B/C	2 yrs 18" minimum/ one gallon	4' OC	60	72
Rosa gymnocarpa	Baldhip rose	B/C			60	72
Zone 2 (3,900 sq. ft.)						
Trees *Pseudotsuga menziesii*	Douglas fir	C	2 yrs 18" minimum/ one gallon	15' OC	5	-
Abies grandis	Grand fir	C			5	-
Picea sitchensis	Sitka spruce	C			4	-
Pinus contorta	Shore pine	C			3	-
Shrubs *Acer circinatum*	Vine maple	B/C		6' OC	15	18
Oemleria cerasiformis	Osoberry	B/C			15	18
Corylus cornuta	Beaked hazelnut	B/C			15	18
Holodiscus discolor	Oceanspray	B/C			15	18
Symphoricarpos albus	Snowberry	B/C			15	18
Mahonia nervosa	Low Oregon grape	B/C			15	18
				Total	**227**	**252 + 17 trees**

OC = On-center, B = bare-root, C = container

Table 5. Planting Specifications for tree replacement

Scientific Name	Common Name	Condition	Grade (min.size)	Spacing	# Plants
Trees *Pseudotsuga menziesii*	Douglas fir	C	2 yrs 18" minimum/ one gallon	15' OC	10
Abies grandis	Grand fir	C			10
Pinus contorta	Shore pine	C			10
Acer glabrum	Douglas maple	C			8
				Total	**38**

OC = On-center, C = container

7.8 As-Built, Monitoring, and Maintenance

7.8.1 As-Built Documentation

After plant installation is complete, the contractor shall contact the project PWS to conduct an as-built inspection. An as-built report shall be provided to jurisdictional agencies within 90 days after the planting phase of the project is complete. The as-built report shall be prepared by the project PWS and the summary memorandum shall document; where minor site design changes to the mitigation plan were necessary, the final planting schedule, receipts of all installed plants, and photographs.

The as-built shall include documentation of completion of the following tasks per this mitigation plan:

- Installation of all plants and mulch (including receipts)
- Record of conservation easement
- Installation of fencing and signage

Note- the 38 replacement trees are not part of the compensatory mitigation for the buffer reduction, and will not be considered in monitoring or the surety amount, but will be documented as installed during the as built.

7.8.2 Monitoring

Monitoring shall occur annually for a five-year period following completion and acceptance of the as-built. A monitoring report will be produced for each sampling year by a qualified biologist or by the applicant. The monitoring report shall evaluate the project's success based on the project performance standards contained in this report. Data collected during monitoring visits will be summarized in a technical memo and provided to regulatory agencies no later than October 1st of each monitoring year.

<u>Vegetation Monitoring</u>

Vegetation monitoring shall include qualitative (general site observations) data collection. Data in the monitoring report shall include at minimum:

- Percent survivorship and cover of installed plant material
- A species list of volunteer native species
- Species list and management recommendations for invasive plant cover
- An overall qualitative assessment of plant material
- An assessment of how the project is meeting mitigation goals
- Recommendations for any additional work or maintenance needed in order to meet project goals and/or performance standards.

The following are the goals, objectives, and performance standards for the compensatory mitigation. The following performance standards shall be used to measure project success during the five-year monitoring period.

Goal 1. Enhance the buffer functions of Wetland A through installation of native trees and shrubs.

Objective 1.1. Increase percent cover of native trees and shrub within the buffer.

Performance Standard 1.1.a Vegetation in the buffer enhancement area shall meet the vegetation cover or survival standards in Table 6. Survival in Year 1 is measured against the container quantity.

Table 6. Performance standards for installed vegetation in the Buffer Enhancement Area

Rated Item	Year 1	Year 2	Year 3	Year 4	Year 5	Long Term
Survival (%) (using container plant material quantity)	100	≥80				Natural Mortality
Mean % cover (trees+shrubs)	NA	≥5	≥20	≥30	≥50	80

Standard 1.1.b Class A noxious weeds shall comprise no more than 5 percent of the woody plant community and no more than 10 percent of the herbaceous community within the enhancement area. Class B and C noxious weeds shall cover no more than 10 percent of the vegetation. Weed classifications are based on the current Whatcom County Noxious Weed List by the Whatcom County Noxious Weed Control Board.

Goal 2. Preserve retained critical areas and associated buffers on site.

Objective 2.1. Preserve the on-site critical areas and retained buffers by placing the areas under a protective conservation easement and installing fencing and signage.

Performance Standard 2.1a. The remaining onsite critical areas and retained buffers shall either be placed under a permanent conservation easement recorded at the Whatcom County Auditor's office prior to submittal of the as-built or a covenant or similar instrument shall be in place that protects the critical areas in perpetuity. Copies of the recorded document(s) shall be submitted to the COB.

Performance Standard 2.1b. Wildlife permeable, split rail fencing shall be installed on the outer perimeter of the retained wetland buffer. Two (2) NGPA signs shall be installed between the development and retained buffers as detailed in Figure 7. These features shall be maintained in good condition.

7.8.3 Long-Term Site Management

Once successfully installed the mitigation should be self-sustaining. No long-term maintenance of the mitigation area is anticipated at this time. Any necessary long-term management and maintenance recommendations shall be made in the final monitoring report.

7.9 Mitigation Protection

Pursuant to the COB CAO the mitigation areas will be identified with wildlife permeable fencing and NGPA signage. Two metal signs a minimum of 12 inches by 18 inches (12″x18″) in size, will be placed in the approximate locations shown in Figure 7. The signs shall indicate the area is a protected area where vegetation removal and dumping are prohibited.

The on-site portions of wetland and retained buffers will be protected through establishment of a conservation easement.

7.10 Maintenance

The applicant shall perform the maintenance activities detailed in this report and subsequent annual monitoring memos. Maintenance shall be performed as specified throughout the five-year monitoring period. Table 7 details general maintenance tasks. Additional tasks shall be defined in annual monitoring reports as needed.

Table 7. Maintenance Tasks

Task	Description	Schedule
Invasive species removal	Remove invasive plant material	As needed to meet performance standards
Weed suppression	Remove herbaceous weeds around installed plants as needed during the growing season (May to Sept.). Do not remove volunteer native shrub or tree sprouts.	3 times per growing season in Years 1 and 2 2 times per growing season in Year 3 Annually in Years 4 and 5
Replace dead plants	Request plant substitutions if necessary	Replace **ALL** dead plants in Year 1 Replace as needed in remaining years to meet performance standards
Irrigation	New plant material shall be irrigated once per week whenever less than one inch of rainfall occurs over any two-week period from June 1 through August 15; once every other week from August 6 through September 30	Year 1

7.11 Contingency Plans

If there is a significant problem with the mitigation achieving its performance standards, the project proponent shall work with NES or another qualified biologist to develop a Contingency Plan. Contingency Plans can include, but are not limited to: additional plant installation, erosion control, modifications to hydrology (excavation work), and plant substitutions of type, size, quantity, and location. Such Contingency Plan shall be submitted to applicable regulatory agencies by October 1st of any year when deficiencies are discovered.

7.12 Surety

As required by the City of Bellingham, a bond will be posted for 150% of the estimated construction costs of the mitigation plan. The following items are included in the bond amount for this project:

• Plants-installed: (227 plants x $7/plant)		$ 1,589.00
• Mulch-installed: (227 plants x $4/plant)		$908.00
• NGPA Sign (2 signs x $50)		$100.00
• As-built Report		$675.00
• Monitoring (Year 1= $810, Years 2-5 = $675)		$3,510.00
• Maintenance ($500/ year for 5 years)		$ 2,500.00
	subtotal	$ 9,282.00
	x (50%)	$ 4,641.00
	Total Bond:	**$ 13,923.00**

APPENDIX A: REFERENCES

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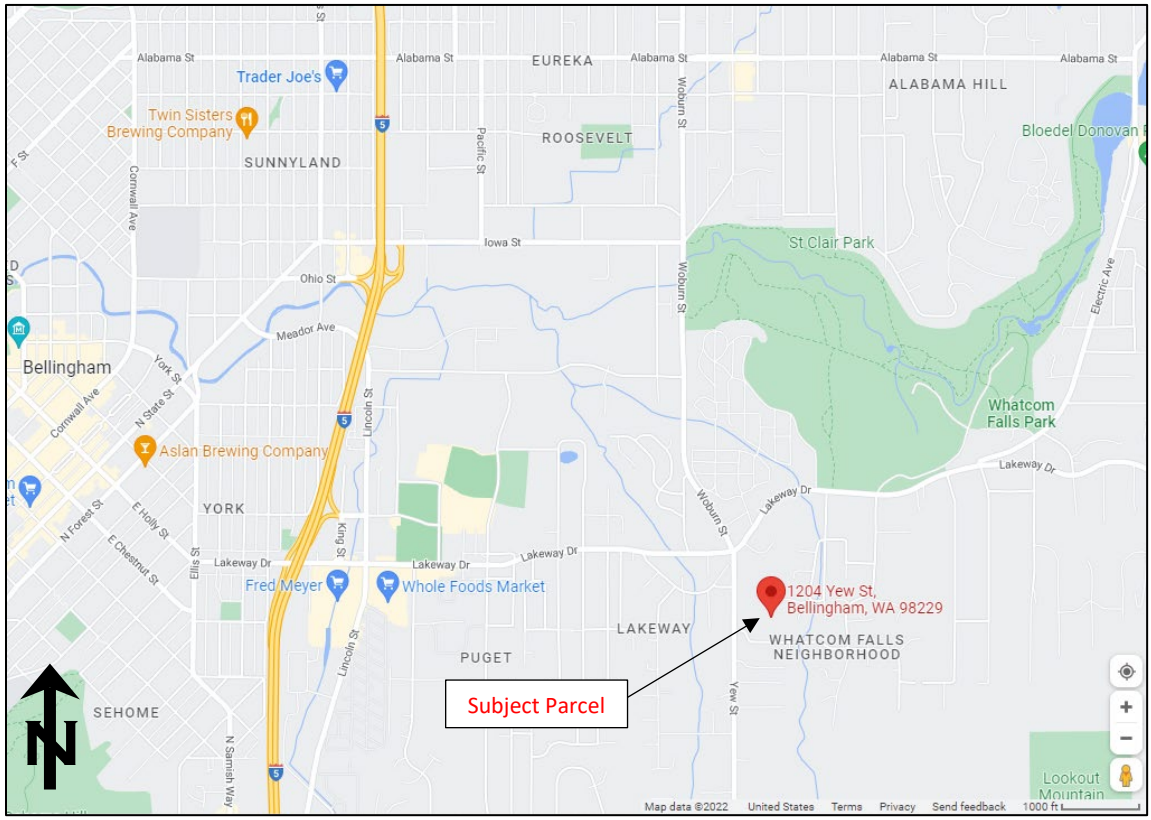
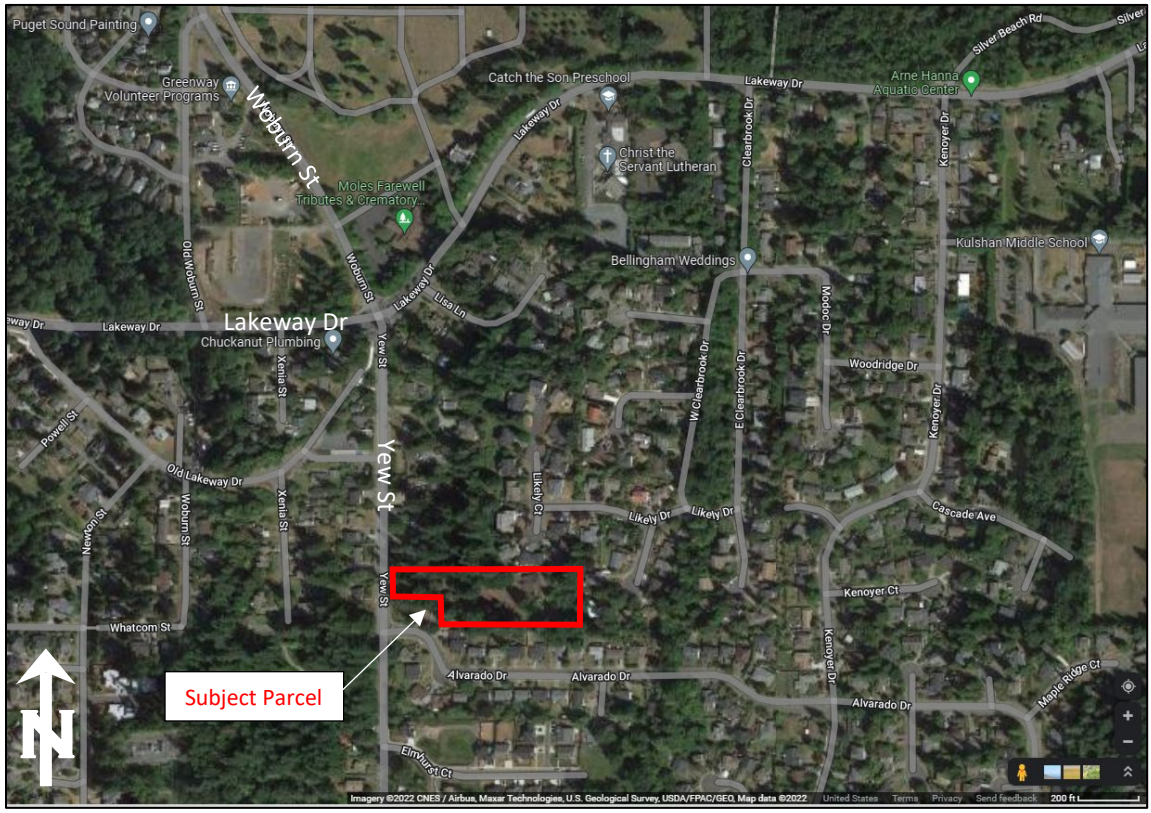
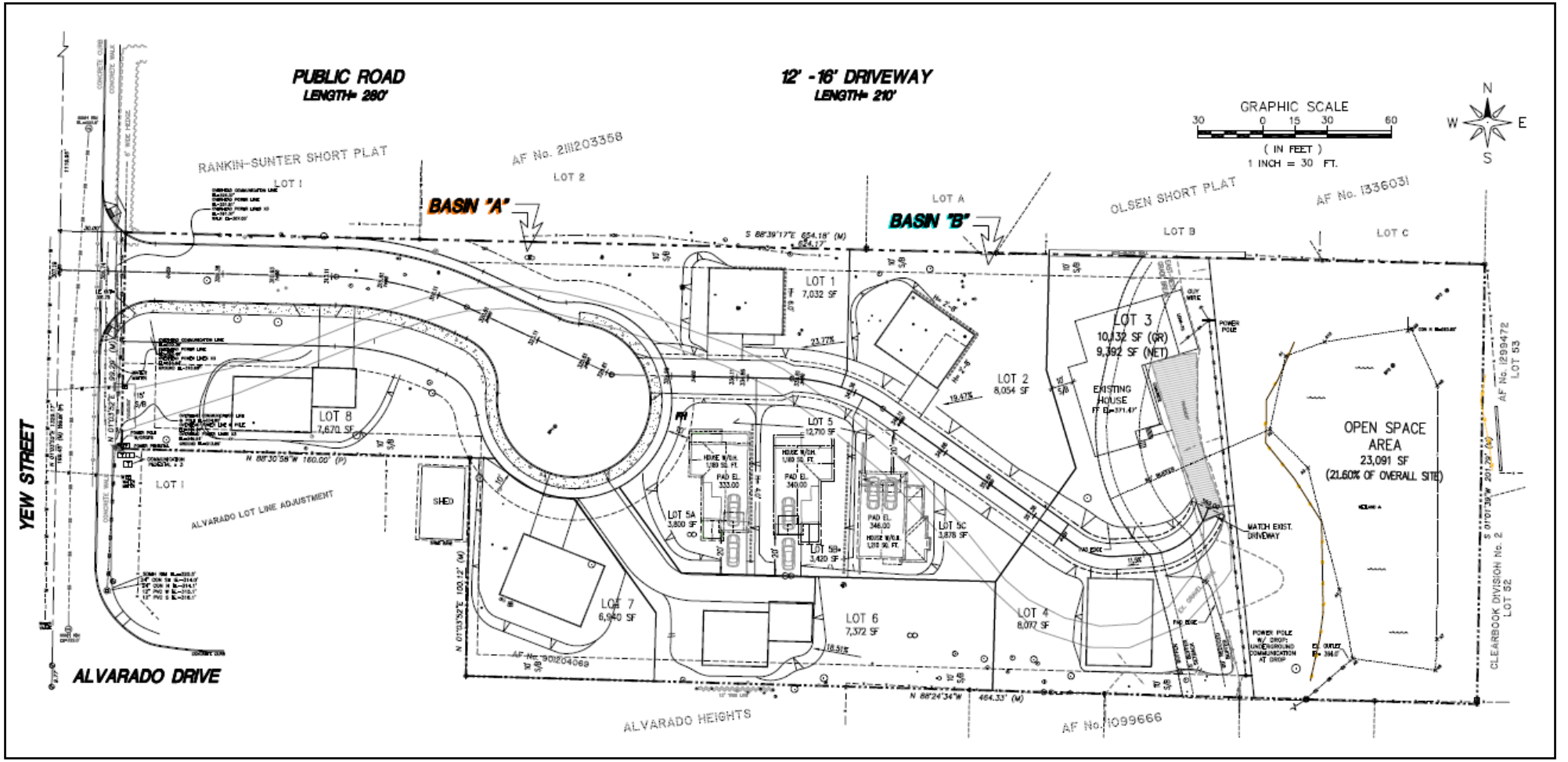
APPENDIX B: FIGURES



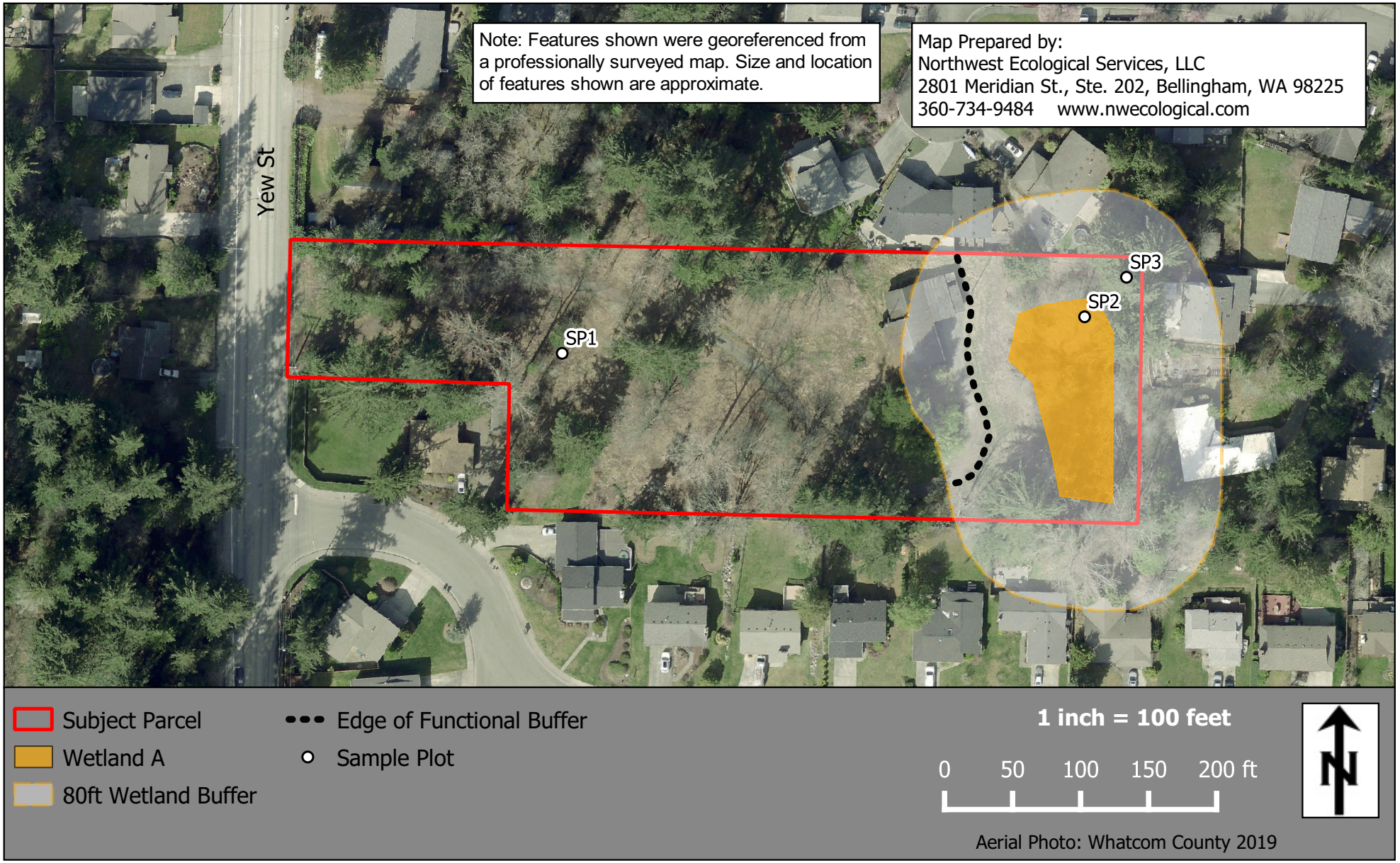


ECOLOGICAL NORTHWEST	**Vicinity Map (Google Maps)** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 1** **DEC 2022**

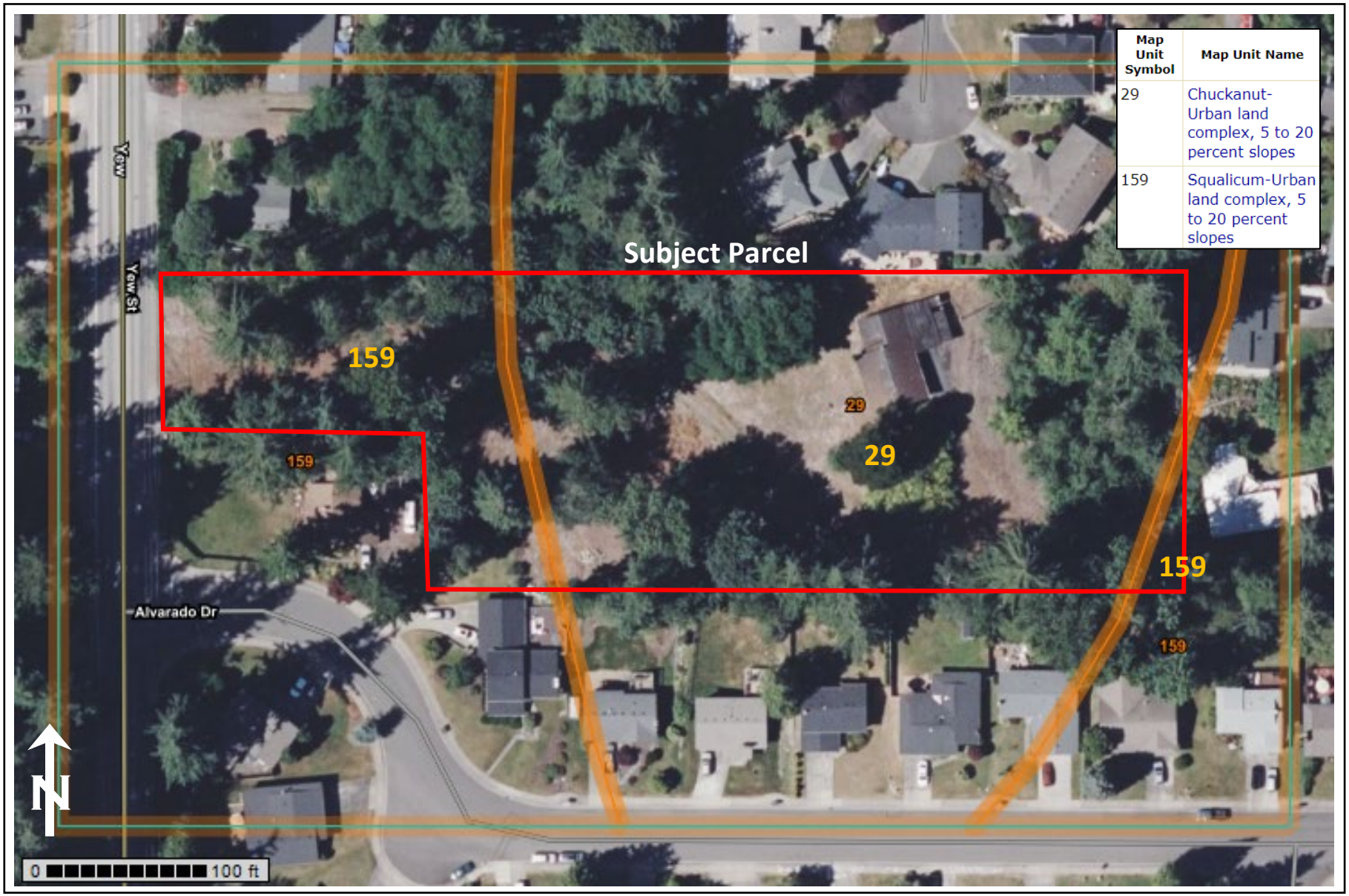
ECOLOGICAL NORTHWEST	**2019 Aerial Photograph (COB City IQ)** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 2** **DEC 2022**



ECOLOGICAL NORTHWEST	**Site Plan (Jones Engineers)** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 3** **DEC 2022**

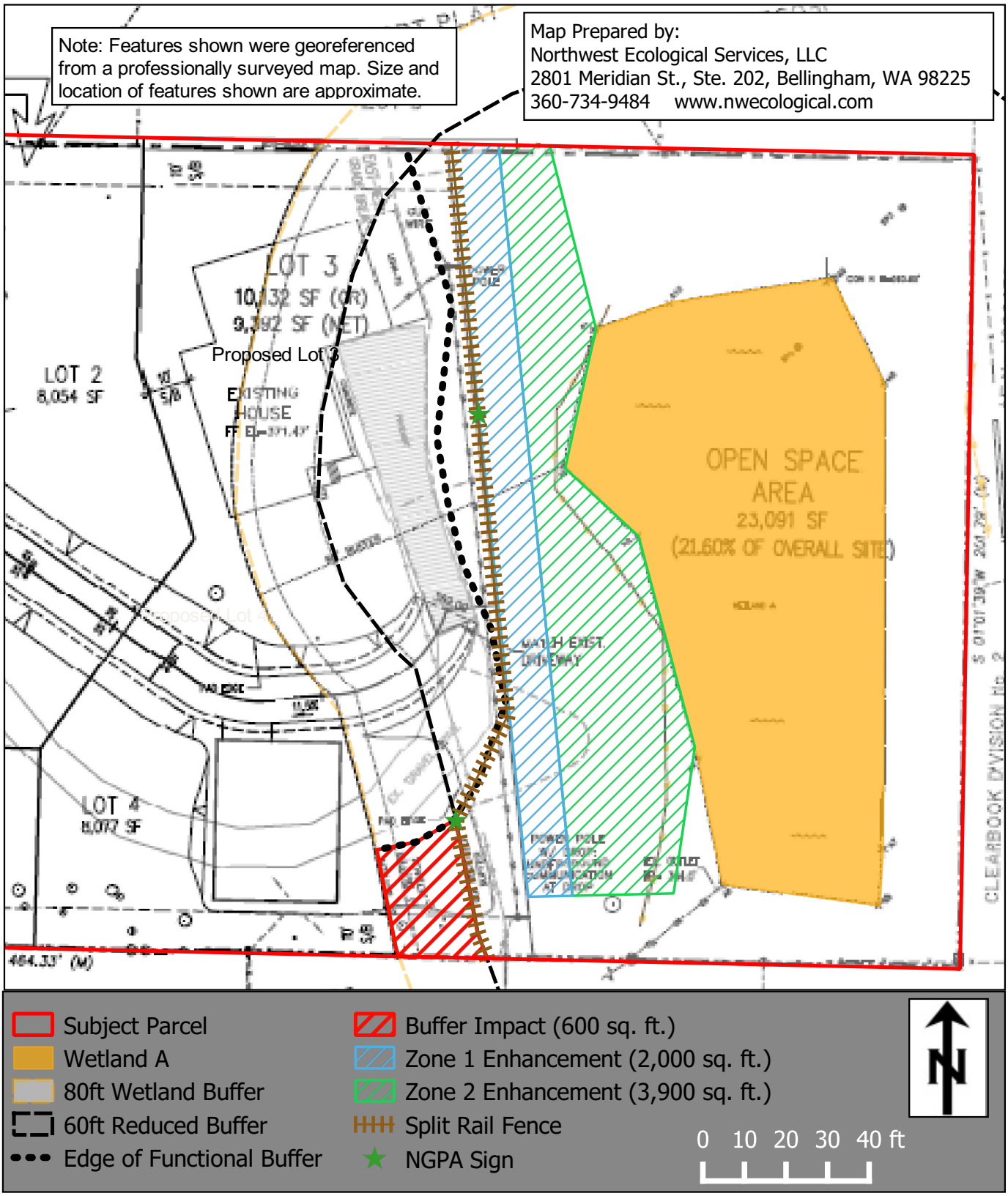


Ecological Northwest	**Wetland Map** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 4** **DEC 2022**

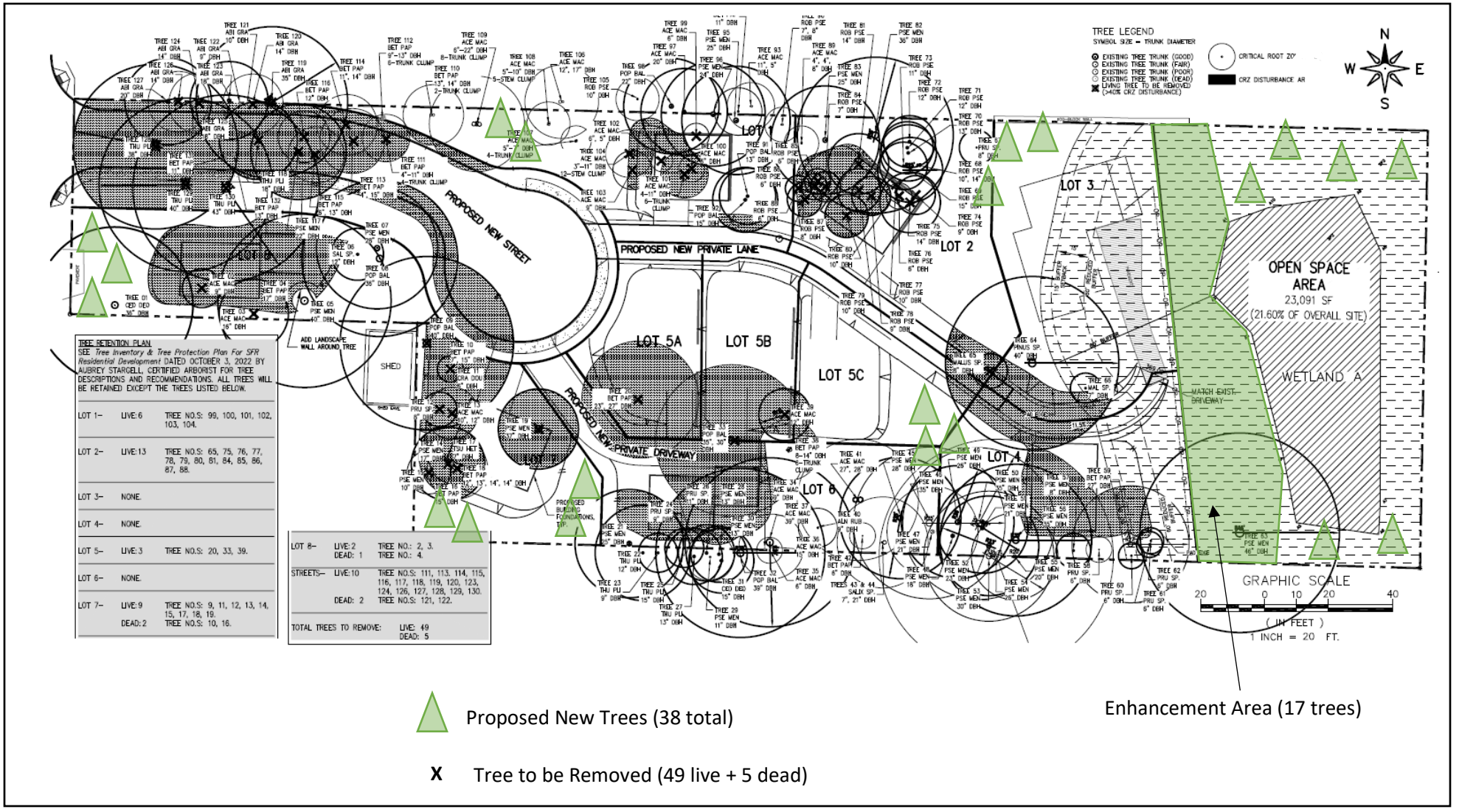


ECOLOGICAL NORTHWEST	**Soil Map** **(USDA, NRCS)** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 5** **DEC 2022**

ECOLOGICAL NORTHWEST	**PHS Map (WDFW)** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 6** **DEC 2022**



ECOLOGICAL NORTHWEST	**Buffer Impact and Mitigation Map** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 7** **DEC 2022**



ECOLOGICAL NORTHWEST	**Tree Retention Plan** **(Tree inventory by Aubrey Stargell and base map by Jones Engineers)** **1204 Yew Street (Parcel #380333038441)** **Critical Areas Assessment & Mitigation Plan**	**Figure 8** **JAN 2023**

APPENDIX C: PHOTOGRAPHS

On-site SFR and gravel/paved driveway
(Wetland A in forested area on the right)

Upland hillslope west of SFR

Near SP 1 (upland plot) facing east, upslope

Near SP 1 facing west, downslope

Overview of Wetland A from driveway near SFR

Detail of Wetland A near wetland flag A5

Location of SP 3 (upland plot) adjacent to Wetland A

From SP 3 facing west, fill area adjacent to Wetland A

APPENDIX D: DATA SHEETS

WETLAND DETERMINATION DATA FORM – Western Mountain, Valley Coast Region

Project Site: 1204 Yew St	City/County: Bellingham	Sample Date: 10/12/2022
Applicant/Owner: Brad Widman	State: WA	Sample Point: 1
Investigator: Porter, Trusty	Section/Township/Range: 33/38N/03E	
Landform (hillslope, terrace, etc): Hillslope	Local Relief (concave, convex, none):	Subregion: LRR A
Soil Map Unit Name: Squalicum-Urban land complex, 5 to 20 percent slopes (#159)	NWI Classification: none	

Are climatic/hydrologic conditions on the site typical of 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 ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** **Yes ☐ No ☒**
Remarks: Upland on hillslope. No wetland parameters were met at this location.	

VEGETATION

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Indicator Status	Dominant Species?
Populus balsamifera	5	FAC	☒
		-	☐
		-	☐
		-	☐
Total Cover:	5		
Sapling/Shrub Stratum (Plot size: 15 feet)			
Holodiscus discolor	15	FACU	☒
Symphoricarpos albus (cut)	15	FACU	☒
Unknown non-native	15	FACU	☒
Gaultheria shallon	5	-	☐
		-	☐
Total Cover:	50		
Herb Stratum (Plot size: 5 feet)			
Rubus ursinus	10	FACU	☒
		-	☐
		-	☐
		-	☐
		-	☐
		-	☐
Total Cover:	10		
Woody Vine Stratum (Plot size: 30 feet)			
		-	☐
		-	☐
Total Cover: % Bare Ground in Herb Stratum: 90	0		

Dominance Test worksheet Number of Dominant Species that are OBL, FACW, or FAC:	1 (A)
Total number of dominant species across all strata:	5 (AB)
Percent of dominant species that or OBL, FACW, FAC:	20 (A/AB)

Prevalence Index worksheet	
OBL species:	x 1=
FACW species:	x 2=
FAC species:	x 3=
FACU species:	x 4=
UPL species:	x 5=
Total: (A)	(B)
Prevalence Index = B/A =	

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is > 50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Remarks: The majority of dominant species observed at this location were facultative upland species.

Hydrophytic Vegetation Present?

Yes ☐ No ☒

SOIL

Sample Point: 1

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

Depth	Soil Color		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100			-	-	gravelly loam	
4-11	7.5YR 4/6	100			-	-	gravelly loam	
					-	-		
					-	-		
					-	-		
					-	-		

[1]Type: C=concentration D=depletion RM=reduced matrix [2]Location: PL=pore lining RC=root channel M=matrix

Hydric Soil Indicators: (applicable to all LRRs unless otherwise noted)

- ☐ Histosol (A1)
- ☐ Histic Epidedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red parent material (TF2)
- ☐ Very shallow dark surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☐ No ☒

Remarks: Soil at this location did not meet NRCS hydric soil indicators.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-stained Leaves (B9) (**except MLRA 1, 2, 4A and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along living roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained (B9) **(MLRA 1,2,4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Frost-heave Hummocks (D7)
- ☐ FAC-neutral (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):

Water Table Present? Yes ☐ No ☒ Depth (inches):

Saturation Present? Yes ☐ No ☒ Depth (inches): (include capillary fringe)

Wetland Hydrology Present?

Yes ☐ No ☒

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

Remarks: No wetland hydrology indicators were observed at this location. Soils dry.

WETLAND DETERMINATION DATA FORM – Western Mountain, Valley Coast Region

Project Site: 1204 Yew St	City/County: Bellingham	Sample Date: 10/12/2022
Applicant/Owner: Brad Widman	State: WA	Sample Point: 2
Investigator: Porter, Trusty	Section/Township/Range: 33/38N/03E	
Landform (hillslope, terrace, etc): Terrace	Local Relief (concave, convex, none): concave	Subregion: LRR A
Soil Map Unit Name: Chuckanut-Urban land complex, 5 to 20 percent slopes (Map unit #29)	NWI Classification: none	

Are climatic/hydrologic conditions on the site typical of 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 ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	**Is the Sampled Area within a Wetland?** **Yes ☒ No ☐**
Remarks: Wetland A. Positive indicators for all three parameters were observed at this location.	

VEGETATION

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Indicator Status	Dominant Species?
Alnus rubra	70	FAC	☒
Salix lasiandra	10	FACW	☐
		-	☐
		-	☐
Total Cover:	80		
Sapling/Shrub Stratum (Plot size: 15 feet)			
Spiraea douglasii	70	FACW	☒
		-	☐
		-	☐
		-	☐
		-	☐
Total Cover:	70		
Herb Stratum (Plot size: 5 feet)			
Solanum dulcamara	10	FAC	☒
		-	☐
		-	☐
		-	☐
		-	☐
		-	☐
Total Cover:	10		
Woody Vine Stratum (Plot size: 30 feet)			
Rubus armeniacus	5	FAC	☒
		-	☐
Total Cover: % Bare Ground in Herb Stratum: 90	5		

Dominance Test worksheet Number of Dominant Species that are OBL, FACW, or FAC:	4 (A)
Total number of dominant species across all strata:	4 (AB)
Percent of dominant species that or OBL, FACW, FAC:	100 (A/AB)

Prevalence Index worksheet

OBL species:	x 1=
FACW species:	x 2=
FAC species:	x 3=
FACU species:	x 4=
UPL species:	x 5=
Total: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is > 50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Remarks: The majority of dominant species observed at this location were hydrophytic.

Hydrophytic Vegetation Present?

Yes ☒ No ☐

SOIL

Sample Point: 2

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

Depth	Soil Color		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/2	80	7.5YR 3/3	5	-	-	mucky silt loam	decomposing organics including wood chunks
	10YR 2/1	15			-	-		
					-	-		
					-	-		
					-	-		
					-	-		

[1]Type: C=concentration D=depletion RM=reduced matrix [2]Location: PL=pore lining RC=root channel M=matrix

Hydric Soil Indicators: (applicable to all LRRs unless otherwise noted)

- ☐ Histosol (A1)
- ☐ Histic Epidedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☒ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red parent material (TF2)
- ☐ Very shallow dark surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks: Soil at this location met NRCS hydric soil indicators.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-stained Leaves (B9) **(except MLRA 1, 2, 4A and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along living roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained (B9) **(MLRA 1,2,4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Frost-heave Hummocks (D7)
- ☐ FAC-neutral (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):

Water Table Present? Yes ☐ No ☒ Depth (inches):

Saturation Present? Yes ☐ No ☒ Depth (inches): (include capillary fringe)

Wetland Hydrology Present?

Yes ☒ No ☐

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

Remarks: Wetland hydrology indicators were observed at this location.

WETLAND DETERMINATION DATA FORM – Western Mountain, Valley Coast Region

Project Site: 1204 Yew St	City/County: Bellingham	Sample Date: 10/12/2022
Applicant/Owner: Brad Widman	State: WA	Sample Point: 3
Investigator: Porter, Trusty	Section/Township/Range: 33/38N/03E	
Landform (hillslope, terrace, etc): Terrace	Local Relief (concave, convex, none): convex	Subregion: LRR A
Soil Map Unit Name: Chuckanut-Urban land complex, 5 to 20 percent slopes (Map unit #29)	NWI Classification: none	

Are climatic/hydrologic conditions on the site typical of 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 ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒ Wetland Hydrology Present? Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** **Yes ☐ No ☒**
Remarks: Upland adjacent to Wetland A.	

VEGETATION

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Indicator Status	Dominant Species?
Thuja plicata	70	FAC	☒
Betula papyrifera	10	FAC	☐
Pseudotsuga menziesii	10	FACU	☐
		-	☐
Total Cover:	90		
Sapling/Shrub Stratum (Plot size: 15 feet)			
Mahonia nervosa	5	FACU	☒
Ilex aquifolium	1	FACU	☐
Corylus cornuta	1	FACU	☐
		-	☐
		-	☐
Total Cover:	7		
Herb Stratum (Plot size: 5 feet)			
Rubus ursinus	5	FACU	☒
		-	☐
		-	☐
		-	☐
		-	☐
		-	☐
Total Cover:	5		
Woody Vine Stratum (Plot size: 30 feet)			
		-	☐
		-	☐
Total Cover:	0		
% Bare Ground in Herb Stratum: 90			

Dominance Test worksheet Number of Dominant Species that are OBL, FACW, or FAC:	1 (A)	
Total number of dominant species across all strata:	3 (AB)	
Percent of dominant species that or OBL, FACW, FAC:	33 (A/AB)	
Prevalence Index worksheet		
OBL species:	x 1=	
FACW species:	x 2=	
FAC species:	x 3=	
FACU species:	x 4=	
UPL species:	x 5=	
Total: (A)	(B)	
Prevalence Index = B/A =		

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is > 50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1]

[1]Indicators of hydric soil and wetland hydrology must be present.

Remarks: The majority of dominant species observed at this location were facultative upland.

Hydrophytic Vegetation Present?

Yes ☐ No ☒

SOIL

Sample Point: 3

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

Depth	Soil Color		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100			-	-	gravelly loam	
5-11	10YR 3/4	100			-	-	gravelly loam	
					-	-		
					-	-		
					-	-		
					-	-		

[1]Type: C=concentration D=depletion RM=reduced matrix [2]Location: PL=pore lining RC=root channel M=matrix

Hydric Soil Indicators: (applicable to all LRRs unless otherwise noted)

- ☐ Histosol (A1)
- ☐ Histic Epidedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red parent material (TF2)
- ☐ Very shallow dark surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ☐ No ☒

Remarks: Soil at this location did not meet NRCS hydric soil indicators.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-stained Leaves (B9) (**except MLRA 1, 2, 4A and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along living roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-stained (B9) **(MLRA 1,2,4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Frost-heave Hummocks (D7)
- ☐ FAC-neutral (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):

Water Table Present? Yes ☐ No ☒ Depth (inches):

Saturation Present? Yes ☐ No ☒ Depth (inches): (include capillary fringe)

Wetland Hydrology Present?

Yes ☐ No ☒

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

Remarks: No wetland hydrology indicators were observed at this location. Soils dry.

APPENDIX E: ECOLOGY RATING FORMS

Wetland name or number A

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland A Date of site visit: 10/12/22

Rated by Porter, Trusty Trained by Ecology? X Yes ___No Date of training 2014, 2020

HGM Class used for rating Depressional Wetland has multiple HGM classes? ___Y X N

NOTE: Form is not complete without the figures requested *(figures can be combined).*

Source of base aerial photo/map Whatcom County 2019

OVERALL WETLAND CATEGORY III (based on functions X or special characteristics___)

1. Category of wetland based on FUNCTIONS

_____**Category I** – Total score = 23 - 27

_____**Category II** – Total score = 20 - 22

__X__**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○ M⊙ L○	H○ M⊙ L○	H○ M○ L⊙	
Landscape Potential	H○ M⊙ L○	H○ M⊙ L○	H○ M○ L⊙	
Value	H⊙ M○ L○	H○ M⊙ L○	H○ M⊙ L○	**TOTAL**
Score Based on Ratings	7	6	4	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	☒	

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	A
Hydroperiods	D 1.4, H 1.2	B
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	B
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	A
Map of the contributing basin	D 4.3, D 5.3	B
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	C
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	D
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	D

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 *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	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 *(can be added to another figure)*	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 *(can be added to figure above)*	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	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.

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 X **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	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	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: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 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): Wetland has persistent, ungrazed, plants > 95% of area points = 5 Wetland has persistent, ungrazed, plants > ⅓ of area points = 3 Wetland has persistent, ungrazed plants > $^{1}/_{10}$ of area points = 1 Wetland has persistent, ungrazed plants < $^{1}/_{10}$ of area points = 0	5
D 1.4. Characteristics of seasonal ponding or inundation: *This is the area that is ponded for at least 2 months. See description in manual.* Area seasonally ponded is > ½ total area of wetland points = 4 Area seasonally ponded is > ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0	4
Total for D 1 Add the points in the boxes above	11

Rating of Site Potential If score is: ___ **12-16 = H** X **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 Add the points in the boxes above	1

Rating of Landscape Potential If score is: ___ **3 or 4 = H** X **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	1
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	2
Total for D 3 Add the points in the boxes above	4

Rating of Value If score is: X **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: Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet points = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	2
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.* Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in) points = 0	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.* The area of the basin is less than 10 times the area of the unit points = 5 X The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	5
Total for D 4 Add the points in the boxes above	7

Rating of Site Potential If score is: ___ **12-16 = H** X **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 No = 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 No = 0	1
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.)? Yes = 1 No = 0	1
Total for D 5 Add the points in the boxes above	2

Rating of Landscape Potential If score is: ___ **3 = H** X **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): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 X Flooding from groundwater is an issue in the sub-basin. points = 1 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 There are no problems with flooding downstream of the wetland. points = 0	1
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0
Total for D 6 Add the points in the boxes above	1

Rating of Value If score is: ___ **2-4 = H** X **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
_X_	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

0

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
_X_	Seasonally flooded or inundated	3 types present: points = 2
____	Occasionally flooded or inundated	2 types present: points = 1
_X_	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 ft^2.

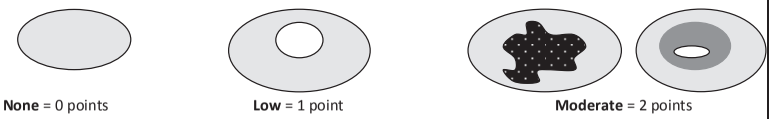
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

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

0

Wetland name or number A

H 1.5. Special habitat features:

Check the habitat features that are present in the wetland. *The number of checks is the number of points.*

- _X_ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).
- _X_ Standing snags (dbh > 4 in) within the wetland
- ____ 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)
- ____ 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 *(cut shrubs or trees that have not yet weathered where wood is exposed)*
- ____ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)*
- _X_ Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)

3

Total for H 1 — Add the points in the boxes above: 5

Rating of Site Potential If score is: ___**15-18 = H** ___**7-14 = M** _X_**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 *only habitat that directly abuts wetland unit*).

Calculate: % undisturbed habitat 0 + [(% moderate and low intensity land uses)/2] 0 = 0 %

If total accessible habitat is:

> 1/3 (33.3%) of 1 km Polygon	points = 3
20-33% of 1 km Polygon	points = 2
10-19% of 1 km Polygon	points = 1
< 10% of 1 km Polygon	points = 0

0

H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.

Calculate: % undisturbed habitat 14 + [(% moderate and low intensity land uses)/2] 11 = 25 %

Undisturbed habitat > 50% of Polygon	points = 3
Undisturbed habitat 10-50% and in 1-3 patches	points = 2
Undisturbed habitat 10-50% and > 3 patches	points = 1
Undisturbed habitat < 10% of 1 km Polygon	points = 0

1

H 2.3. Land use intensity in 1 km Polygon: If

> 50% of 1 km Polygon is high intensity land use	points = (- 2)
≤ 50% of 1 km Polygon is high intensity	points = 0

-2

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** _X_**< 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? *Choose only the highest score that applies to the wetland being rated.*

Site meets ANY of the following criteria: points = 2

- — It has 3 or more priority habitats within 100 m (see next page)
- — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
- — It is mapped as a location for an individual WDFW priority species
- — It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
- — 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

Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1

Site does not meet any of the criteria above points = 0

1

Rating of Value If score is: ___**2 = H** _X_**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 *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — 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? — 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 *Spartina*, see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — 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? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** 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** ☐

SC 4.0. Forested Wetlands Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.*** — **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. — **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). Yes = **Category I** No = **Not a forested wetland for this section**	**Cat. I** ☐
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — 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 — 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 *(needs to be measured near the bottom)* Yes – Go to **SC 5.1** No = **Not a wetland in a coastal lagoon**	**Cat. I** ☐
SC 5.1. Does the wetland meet all of the following three conditions? — 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). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than $^{1}/_{10}$ ac (4350 ft^2) Yes = **Category I** No = **Category II**	**Cat. II** ☐
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.*** In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to **SC 6.1** No = **not an interdunal wetland for rating**	**Cat I** ☐
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**	**Cat. II** ☐
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**	**Cat. III** ☐
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**	**Cat. IV** ☐
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	-

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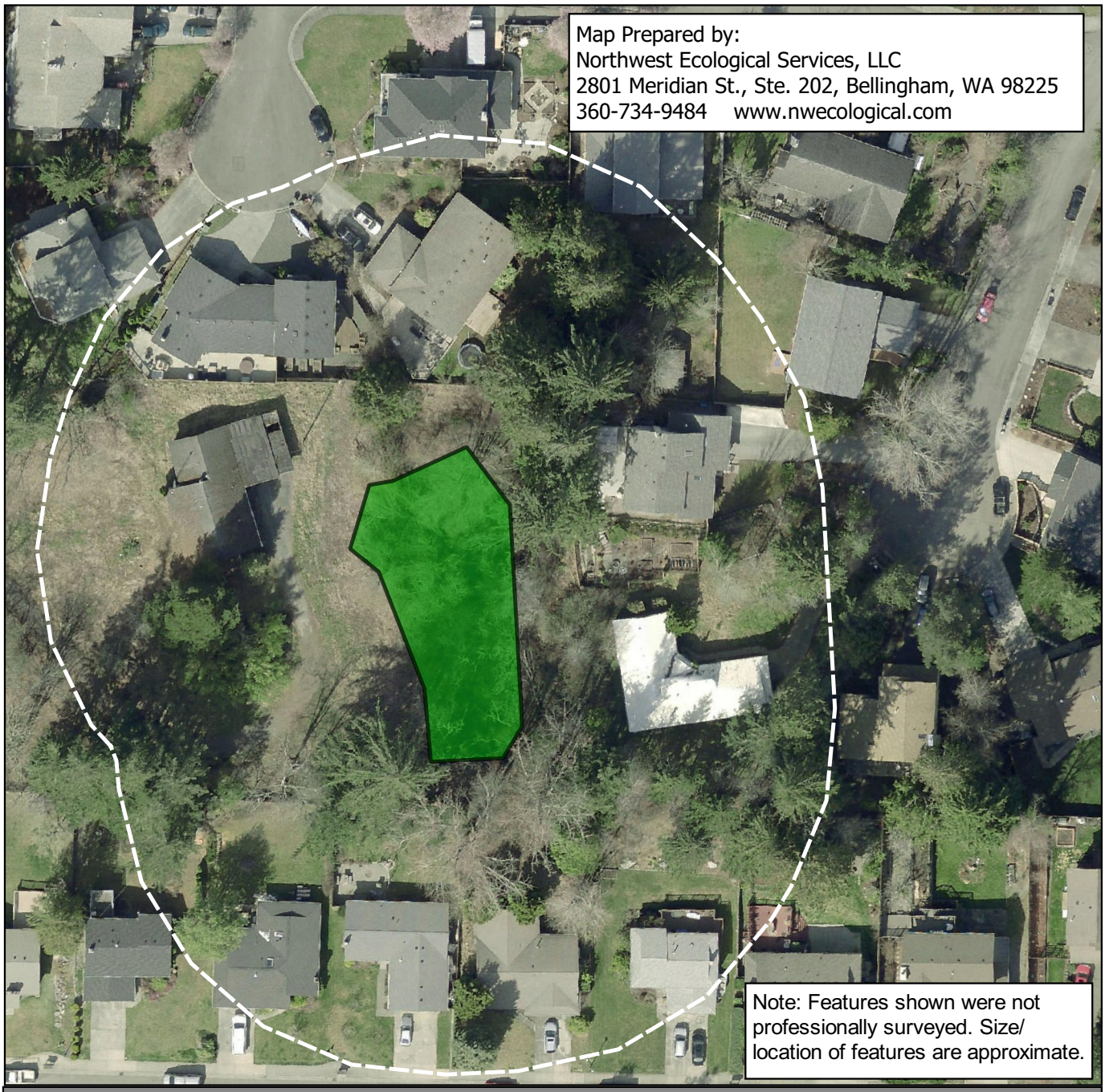
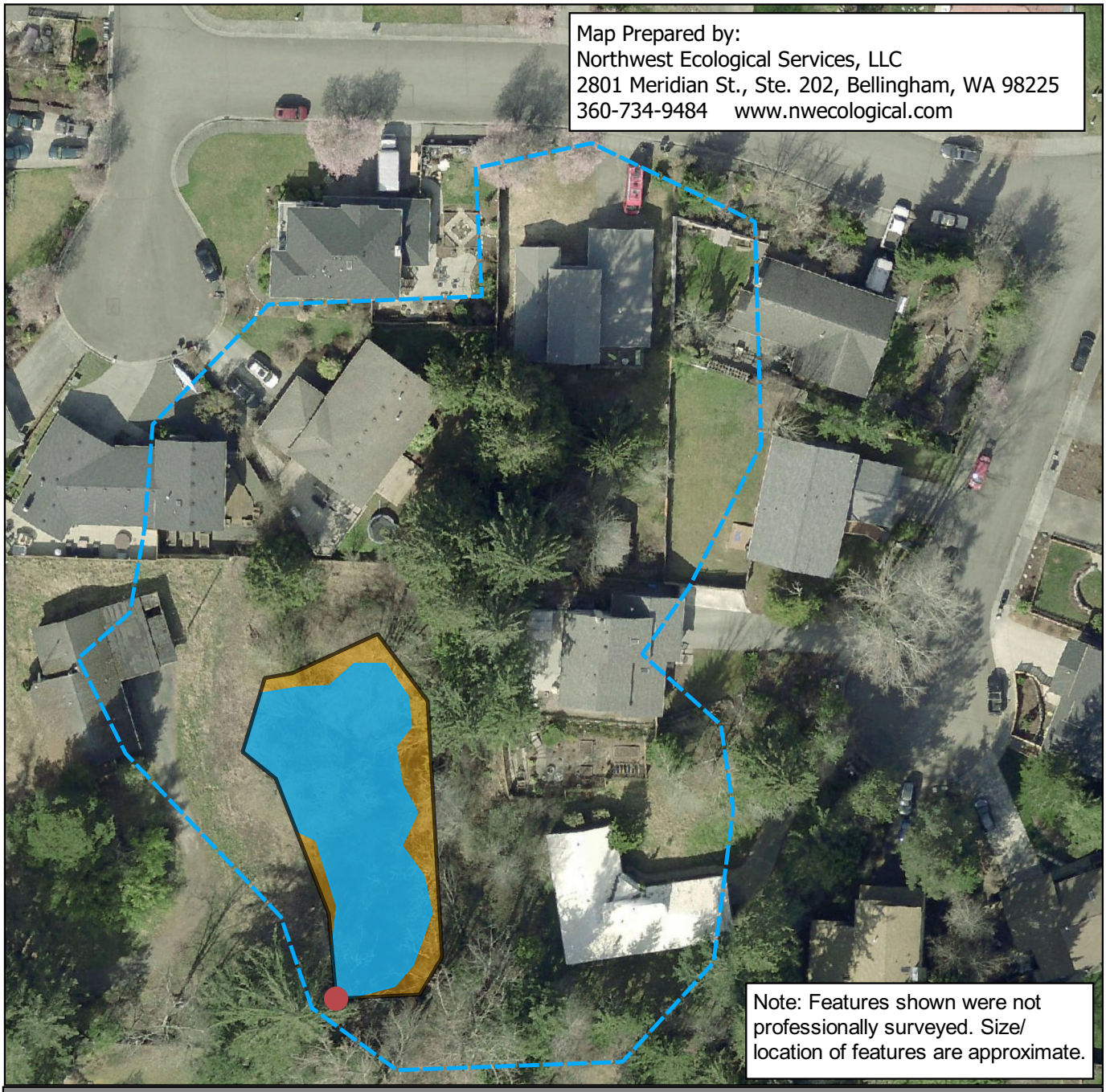
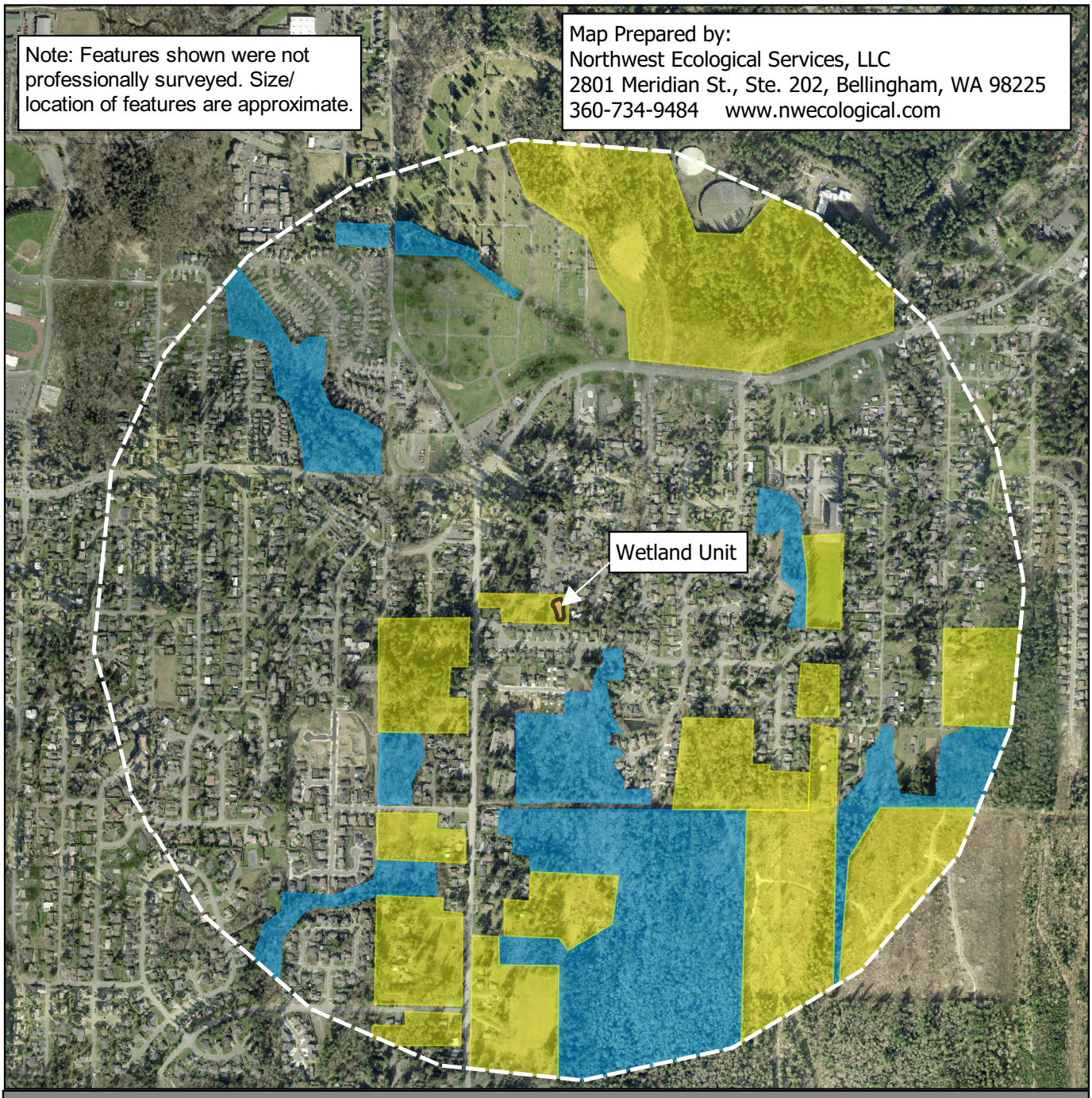


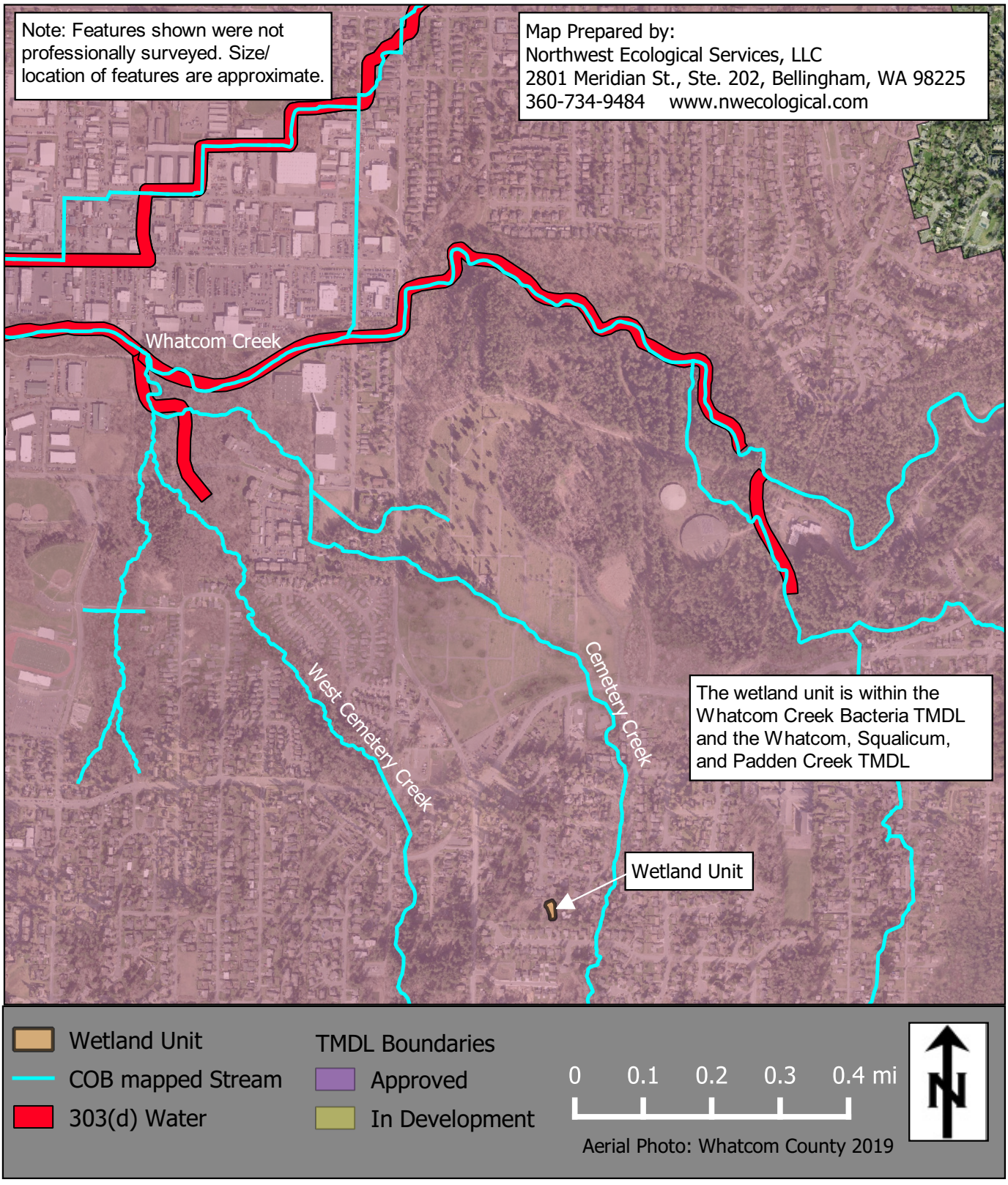
Ecological Northwest	**Wetland Rating Figure: Vegetation Map** **1204 Yew Street** **Critical Areas Assessment**	**Attachment A** **OCT 2022**



Ecological Northwest	**Wetland Rating Figure: Hydrology Map** **1204 Yew Street Critical Areas Assessment**	**Attachment B** **OCT 2022**



Ecological Northwest	**Wetland Rating Figure: Land Use Map** **1204 Yew Street Critical Areas Assessment**	**Attachment C** **OCT 2022**



Ecological Northwest	**Wetland Rating Figure: Water Quality Map** **1204 Yew Street** **Critical Areas Assessment**	**Attachment D** **OCT 2022**

APPENDIX F: CONTRACTORS CHECKLIST

CONTRACTOR'S CHECK LIST

To: Brad Widman, Property Owner

City of Bellingham – Planning & Community Development Department

From: Molly Porter, Northwest Ecological Services, LLC (NES)

Date: December 12, 2022

RE: Mitigation Plan for 1204 Yew Street, Bellingham, WA

This memorandum is intended to help you proceed with successful installation of your mitigation project.

- The checklist is intended to be a summary of details from the mitigation plan and a proposed timeline. **This is not a replacement for details in the mitigation plan, please read it in its entirety for all information.**
- Tasks should take place after receiving approval of your mitigation plan, and appropriate permits.
- Tasks in this checklist should be completed in order.
- Please contact Molly Porter at NES (360.734.9484) at any time with questions on installation.

Approximate Date	Task	Comments
Prior to any clearing and grading (Anticipated spring 2023)	Mark work limits in the field. NO equipment access within wetlands and limit access in all mitigation areas to limit soil compaction.	COB and NES staff sign-off required
	Install required erosion control, wetland protection, and tree protection before earthwork begins.	
Dry season (2023 June to Sept)	Begin invasive species removal per mitigation plan. De-compact and stabilize soils within mitigation area.	
	Order plants for fall/winter installation. Order in June/July to ensure availability.	NES staff must approve any species substitutions.
Fall 2023	Cut the grass and weeds in all mitigation areas, as needed (beginning in early September). Continue invasive species removal.	
	Record the conservation easement.	

Fall 2023/Winter 2024	Call NES to set up a site inspection of material BEFORE plant installation.	
	Install plant material and mulch.	
	Install split-rail fencing and NGPA signs.	Contact NES upon completion
	Call NES to schedule as-built site inspection. Inspection and report to be prepared by NES upon completion of the above tasks.	