



PLANNING AND ECONOMIC DEVELOPMENT

200 NE Moe Street | Poulsbo, Washington 98370
(360) 394-9748 | fax (360) 697-8269
www.cityofpoulsbo.com | plan&econ@cityofpoulsbo.com

MEMO

To: Edward Rose & Sons Attn: Mark Perkoski
Axis Land Consulting: Berni Kenworthy

From: Marla Powers, Associate Planner

Subject: Oslo Bay Apartment Site Plan Review Planning File#: P-12-05-19-01
Request for Revisions-On Hold

Date: February 2, 2021

The Planning & Economic Development Department has completed a fourth review of the resubmittal packet received on December 3, 2020. Peer review Technical Memorandums for PED are attached and include the following:

1. Please see the attached Critical Area Peer Review by Grette Associates dated January 20, 2021 and respond to comments.

Follow up comments from Grette Associates from the site visit on January 22, 2021:

In response to our recent review and compliance with the City's CAO, the comments in our January 2021 review are still applicable. The HMP will need to be revised to address the features in the critical area buffer associated with the West Pond which should include, at a minimum, a brief analysis demonstrating that proposed diffusors will not result in any adverse impacts (erosion, scouring, etc.) and revised plans for consistency. While the diffusor for the East Pond will be relocated outside of Wetland A's buffer, I would recommend that the analysis also include the one for the East Pond so it demonstrates that the proposed will not have an indirect to the wetland, Dogfish Creek, and/or the buffers.

2. Please see the attached Geologically Hazardous and Clearing & Grading Peer Review by Aspect dated January 12, 2021 and respond to comments.
3. Please see the attached Tree Inventory and Retention Peer Review by Sound Urban Forestry dated January 20, 2021 and respond to comments.

City Comments are as follows:

General Comments:

4. Please describe the access Parcel ID 055 and 023 will have once their existing access is modified. Is the approach and access design amenable to the commercial development of these properties?

5. As noted in the Technical Memorandum from Sound Urban Forestry, please provide the Construction Sequencing Plan or state where it is provided, as this will be needed for many other review components of the project.
6. Please describe where stockpiling of materials is addressed in the application documents.

Site Plan Review:

7. West Basin Stormwater Pond access and retaining walls on Civil Plans Sheet 19 are inconsistent with Landscaping Plans Sheet 11. Where the Landscape Plan shows more retaining walls and less access road than the Civil Plans. Please ensure plans sets are consistent.
8. Include the East Basin Stormwater Pond and access in the Landscape Plans.

SEPA Checklist:

9. Checklist Item 3.a.2. Overwater work will occur with Road L crossing. Please revise.
10. Checklist Item 3.a.3 Amount of fill/dredge may be applicable for construction of culvert and road crossing for Road L. Please revise.
11. Ensure all requested revisions are included in the revised SEPA Checklist.

Critical Area Ordinance PMC 16.20:

12. See Technical Memorandum from Grette Associates, attached.

Boundary Line Adjustment:

13. The west stream (unnamed stream) has been shown on Civil Site Plan Sheet 2 of 61. The proposed parcels have been included on Sheet 2. These two items show that proposed Parcel II will be fully encumbered by the stream and stream buffers, where the parcel was not fully encumbered prior to the property line reconfigurations.
 - a. Is the intent to designate Parcel II as the required open space, per PMC 16.20.315.C? If this is not the purpose, then Parcel II would not meet the standard in PMC 17.330.040.I and must be revised.
 - b. Proposed Parcel IV has a very similar circumstance, where the existing stormwater features for the old recycle center seem to remain and perhaps artificially reduce the 75' buffer and 25' buffer setback, leaving approximately 11,000 square feet (of a total proposed ~39,000 square feet) of a parcel available for development that is located on the corner of a soon to be busy road. Is this the buildable size the applicant desires for future development?
 - c. Existing stormwater pond for the old recycling center is proposed to be split between property ownership. It is unclear if the stormwater pond is going to remain short or long term? Ensure the stormwater pond is on one property or identify easements that will be in place for future maintenance. If the stormwater will be reconstructed or modified, it must meet current standards.



Memo

To: Marla Powers, City of Poulsbo Planning & Economic Development
From: Kevin M. McFarland, City of Poulsbo Contracted Arborist
Date: 1/20/2021
Re: Oslo Bay Apartments Tree Inventory/Retention Plan Peer Review

Upon the request of the City of Poulsbo, I have conducted a review of the submitted tree retention materials associated with the proposed 55.2-acre Oslo Bay apartments project at the northwest corner of SR 305 & 307. I was provided the Significant Tree Inventory, Tree Retention Narrative and Tree Retention Plans on 12/6/2020. I visited the site on January 15, 2021.

Findings and Comments

Overall, the submitted inventories appear to be accurate in presenting the total number of significant trees within the property and to be retained. The identified forest cover types correctly describe what is found on the site and the sample plots were comprehensive and detailed. Based on this information, I have concluded that this project exceeds the City's required 25% significant tree retention.

Due to the newly exposed forest edge created along the northern property line (Sheet TP-103) I am requesting that the retained trees be assessed by an ISA Certified and Tree Risk Assessment Qualified Arborist once the adjacent clearing has taken place to determine whether they are windfirm. Any trees deemed hazardous should be removed upon notification to the City.

There is a note on the lower righthand corner of sheets TP 100-104 which states that tree protection fencing cannot be relocated at any time without written approval from the owner. I recommend this be reworded to state by written approval of the City.

Under the Tree Retention Notes on sheets TP 100-104, number 5 references a construction sequencing plan. This was not included in the materials and I would like a chance to review prior to approval.

The tree protection details are acceptable with the exception that the fencing shall be secured in place with a 5' 'T' bar driven into the ground through the concrete block or steel base stand.

If you should have questions, please feel free to contact me at 360-870-2511 or suf1234@comcast.net



TECHNICAL MEMORANDUM

Prepared for: Marla Powers
 Associate Planner
 City of Poulsbo
 200 NE Moe Street
 Poulsbo, WA 98370

January 20, 2021

Prepared by: Grette Associates^{LLC}
 2102 North 30th Street, Ste A
 Tacoma, WA 98403

File No.: 208.001.1100

Re: Oslo Bay Apartments – Critical Areas Report: Third-Party Review

1 INTRODUCTION

The City of Poulsbo contracted with Grette Associates to assist in the review of the revised *Non-Wetland Determination Report* (the “KCPW Report”; revised November 4, 2020), the *Critical Areas Report* (the “Critical Areas Report”; Revised November 4, 2020), and the *Habitat Management Plan* (the “HMP”; revised November 4, 2020) that were prepared by Ecological Land Services (ELS) in support of the proposed Oslo Bay Apartments Project. These documents have been revised to address City comments and previous third-party reviews associated with the proposed project (Grette Associates 2020a, 2020b, and 2020c).

In summary of Grette Associates’ 2020 reviews, it was determined that there are three wetland features and two stream features within the project site (Table 1 and Table 2). The purpose of the revised documents was to update the classifications of the critical area features and to address project elements that are within 300 feet of the features for conformance with Chapter 16.20 of the Poulsbo Municipal Code (PMC).

Table 1. Wetland Summary

Feature	Water Type ¹	Buffer ²	Building Setback ²
Wetland A	Category III	150 ft.	15 ft.
Wetland B	Category IV	50 ft.	15 ft.
Wetland C	Category IV	50 ft.	15 ft.

¹ Please note that Grette Associates July 2020 review contained minor differences in functional scores for Wetlands B and C; however, those differences did not result in a change in categorization.

² Per PMC 16.20.230.

Table 2. Stream Summary

Feature	Water Type ¹	Buffer ¹	Building Setback ¹
Dogfish Creek	F1	200 ft.	25 ft.
Unnamed Stream	F2 and Ns1 ²	F2:150 ft./Ns1:75 ft.	25 ft.

¹ Per PMC 16.20.315

² the unnamed stream within the western portion of the project site contains fish habitat and non-fish habitat conditions.

2 REVIEW METHODS

Grette Associates conducted a thorough review of the documents submitted to the City. The review focused on verifying the accuracy of the descriptions within the reports for compliance with Chapter 16.20 of the PMC as well as consistency with other applicable application materials provided to Grette Associates.

3 REVIEW RESULTS

3.1 KCPW Report

The KCPW Report has been revised to correctly characterize and classify the portion of the unnamed stream within the subject property as a Type Ns1 stream. Per 16.20.315, Type Ns1 streams are subject to a 75-foot buffer and a 25-foot building setback. The KCPW Report correctly assigns the appropriate buffer. With the exception of the access road, the project is not proposing any development within the subject property.

Given that an HMP has been prepared to address the proposed stream crossing and the purpose of the KCPW Report was to document that no wetland conditions are present within the subject property, the KCPW Report is deemed to be complete and compliant with the wetland assessment reporting requirements defined in PMC 16.20.725. Therefore, Grette Associates recommends that this report be approved.

3.2 Critical Areas Report

The Critical Areas Report was prepared to summarize the baseline conditions within the project site for conformance with PMC 16.20.725 and PMC 16.20.750. In summary, the Critical Areas Report has been revised to update Wetland A's rating (Category III). The characterization of Wetland B and Wetland C and their ratings were approved in Grette Associates' July 2020 review. Please note that Table 1 in the Critical Areas Report needs to be revised to be consistent with the rating forms.

Additionally, the Critical Areas Report correctly summarizes the stream conditions within the project site (Tables 1 and 2). Dogfish Creek is classified as a Type F1 stream and subject to a 200-foot buffer and 25-foot building setback. The Critical Areas Report accurately classifies the unnamed stream situated within the western portion of the project site. Based on a site-specific review by WDFW, the lower portion of the unnamed stream is classified as a Type F2 stream while the upper portion of the unnamed stream is classified as a Type Ns1 stream. Per PMC 16.20.315, Type F2 streams are subject to a 150-foot buffer and Type Ns1 streams are subject to a 75-foot buffer. Both stream segments are subject to a 25-foot building setback (PMC 16.20.315). The Critical Areas Report accurately assigns the appropriate buffers.

In summary, with the exception of the minor inconsistency with Table 1 regarding the wetland ratings, the Critical Areas Report is compliant with PMC 16.20.725 and PMC 16.20.750. Therefore, Grette Associates recommends that this report be revised and approved.

3.3 Habitat Management Plan

Based on the information provided, the HMP was prepared to address the proposed stream buffer reduction, stormwater discharge, and stream crossing associated with the Ns1 stream for compliance with PMC 16.20.755.

3.3.1 Stream Buffer Reduction

According to the HMP, a stream buffer reduction from 150 feet to 112.5 feet (25%) along the southern portion of the Type F2 stream is necessary to accommodate the construction of the western stormwater pond. The HMP provides the appropriate discussion to demonstrate that no feasible alternative is available to relocate the stormwater pond to retain the standard 150-foot buffer. Per PMC 16.20.315(B), stream buffers may be reduced up to 25 percent if the resulting conditions are sufficient to protect the affected habitat. The HMP is proposing to remove invasive species and provide supplemental plantings along the outer margin of the reduced buffer; however, the proposed planting plan is limited to small shrub species. Per the HMP, the purpose of the proposed enhancement is to create a dense outer buffer area. Given that the construction of the stormwater pond will include temporary disturbance within the outer reduced buffer area and building setback, Grette Associates' recommends that an assortment of native trees be included in the proposed planting plan to provide a structurally diverse plant community.

In addition to the proposed buffer reduction associated with the western stormwater pond, it appears that the project proposes to reduce a portion of the Type F2 buffer north of the stormwater pond to support the proposed alignment for Vetter Rd. With the exception of some minor intrusion into the 25-foot building setback, Figure 12 within the HMP shows that the project can retain the standard 150-foot stream buffer. Per PMC 16.20.315, minor intrusions may be allowed within the 25-foot building setback. Given this information, the HMP does not demonstrate a purpose and/or need to reduce the standard 150-foot stream buffer and the more appropriate modification would be the allowed intrusion (pending City approval) into the building setback.

3.3.2 Stormwater Discharge

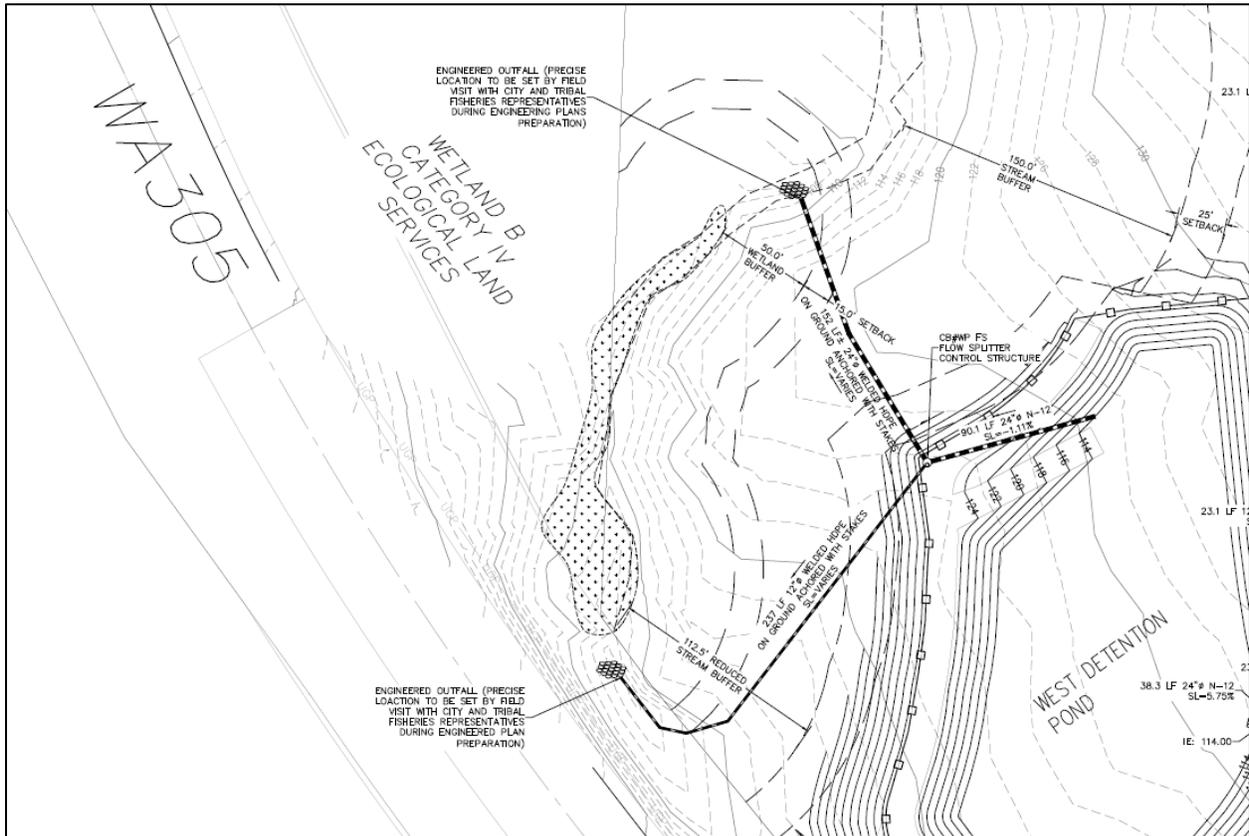
Per PMC 16.20.320(G), utilities may be allowed only when there are no feasible alternatives. According to the HMP, the project proposes to construct two stormwater outfalls associated with the western stormwater pond. The supporting figures within the HMP only show the location of one stormwater outfall which is located near Highway 305 and upslope of the culvert associated with the Type F2 stream. While the HMP briefly describes that post-project conditions will maintain general hydrology conditions within the basin, there is no analysis to demonstrate that the discharge of stormwater will not adversely impact the stream and/or that the outfall will be equipped with any BMP devices to control discharge. Based on the civil plans provided to Grette Associates, an aboveground 24-inch HDPE outfall pipe will extend to the edge of the channel upstream of Wetland B and a second aboveground outfall pipe (12-inch HDPE) will be placed just upslope of the culvert beneath Highway 305 (Figure 1). The civil plans note that a flow control device will be installed at the junction of these two pipes. The outfalls will be armored with small dispersion pads to diffuse flows.

During review of the civil plans Grette Associates identified two additional stormwater outfalls associated with the eastern stormwater pond that are not addressed in the HMP. One would be constructed at the edge of the wetland buffer associated with Wetland A and the other would be constructed near Highway 305, near Wetland A's boundary. Both of these outfall pipes are noted to be 24 inches in size and would be equipped with a flow control device installed where the two pipes connect. Please note that CCS's hydroperiod analysis (August 24, 2020) shows both outfalls being positioned at the edge of Wetland A.

Based on the information provided in the HMP and the inconsistencies identified with the outfalls associated with the eastern stormwater pond, Grette Associates cannot concur with the HMP that

there will be no direct and/or indirect impacts that will occur as a result of the stormwater outfalls. In Grette Associates' professional opinion, the sizing of the stormwater outfall pipes (24-inches¹) suggests that there is potential for large volumes of periodic discharge from the stormwater ponds and the HMP does not provide any supporting information that the dispersion pads will be sufficient to prevent scouring and potential water quality issues. In addition, the civil plans show the larger outfall pipe associated with the western stormwater pond being constructed within the Type F2 stream (Figure 1). This is inconsistent with the description in the HMP.

Figure 1. Proposed stormwater outfall locations.



3.3.3 Stream Crossing

Stream crossings shall adhere to the minimum development standards defined in PMC 16.20.320. The project proposes to extend “Road L” across the Type Ns1 stream to provide access to Vetter Rd. from Viking Ave. NW. PMC 16.20.320 has several design standards that are not applicable for the proposed crossing because the segment of stream is a non-fish habitat feature per WDFW.

The HMP has provided adequate rationale to demonstrate the need of the crossing. In summary, due to the alignment of the stream, there is no alternative alignment for Road L that would prevent crossing the Ns1 stream. Grette Associates concurs with this rationale.

Based on the applicable development standards defined in PMC 16.20.320, the proposed crossing shall not diminish flood-carrying capacity, shall serve multiple properties where possible, and shall

¹ Based on size, the 12-inch HDPE outfall pipe associated with the western stormwater pond is assumed to function as a secondary/overflow pipe.

serve other purposes such as utility crossings, pedestrian or bicycle easements, etc. when feasible. The HMP does not provide any information to demonstrate that the crossing was designed to meet these specific development standards summarized above. However, the HMP does provide detailed information describing that the culvert was sized to span the width of the stream channel and adjacent areas along the margins of the channel which will also permit passage for a range of wildlife species. Based on the information contained in the HMP, the proposed culvert will be 84-inches in size, be placed at the existing grade (approx. 3.4%), will be countersunk 50 percent, and WDFW's streambed sediment mix will be placed inside the culvert to reestablish the streambed. Figure 5 within the HMP shows that Road L will include sidewalks which is one of the applicable design standards defined in PMC 16.20.320.

In summary, based on the information described in the HMP and review of the stream crossing detail provided, the proposed crossing largely meets the minimum requirements defined in PMC 16.20.320. While Grette Associates assumes that the proposed culvert size (84-inches) would not diminish flood-carrying capacity because the size of the upstream culvert (approx. 24-inches) beneath the County's transit station limits stream flows and the bankfull width previously observed in the general location where the culvert will be placed was approximately 36 inches, the HMP should provide the applicable rationale to demonstrate the culvert size will not diminish flood-carrying capacity to comply with PMC 16.20.320.

4 CONCLUSION

Upon thorough review, the KCPW Report and the Critical Areas Report meet the minimum reporting requirements defined in Chapter 16.20 of the PMC. However, prior to acceptance Grette Associates recommends that the HMP and applicable application materials be revised to address the following discrepancies identified in the review.

- Per PMC 16.20.315(B), stream buffers may be reduced up to 25 percent if the resulting conditions are sufficient to protect the affected habitat. The proposed planting plan associated with the buffer reduction to construct the western stormwater pond does not include any tree species. The HMP also describes temporary disturbance during the construction of the stormwater pond which may include the removal of some native trees. To ensure the construction of the pond would not adversely impact existing buffer functions, Grette Associates recommends that the planting plan be revised to include an assortment of native trees;
- Per PMC 16.20.315, minor intrusions may be allowed within the 25-foot building setback. The project proposes to reduce a portion of the 150-foot Type F2 stream to facilitate the construction of Vetter Rd. Figures in the HMP show that the project can retain the standard 150-foot buffer and that the only encroachment would be within the 25-foot building setback. Based on this information, there appears to be no need to reduce the buffer in this area;
- The HMP does not address the two stormwater outfalls that would be constructed in the buffer of Wetland A. Furthermore, the application materials inconsistently show where the outfalls (both western and eastern) will be located. Grette Associates recommends that materials be revised accordingly for consistency and compliance with Chapter 16.20 of the PMC;
- The HMP does not provide any analysis with respect to potential impacts from stormwater discharge. As summarized above, Grette Associates cannot concur with the HMP that there will be no direct and/or indirect impacts that will occur as a result of the stormwater outfalls.

Three of the four outfall pipes are sized to be 24 inches which suggests there would be stormwater discharge at a volume that would have the potential to scour, which would likely cause erosion and water quality issues if not adequately diffused. Per PMC 16.20.305, the purpose of Section 300 of Chapter 16.20 of the PMC is to preserve existing ecological functions of fish and wildlife habitat conservation areas. Grette Associates recommends that the HMP be revised to provide an analysis to clearly demonstrate that the proposed outfalls will adequately diffuse velocities to mitigate any potential erosion and/or water quality issues;

- The civil plans provided to Grette Associates show the 24-inch stormwater outfall associated with the western stormwater pond extending into the Type F2 stream (Figure 1). If the civil plans show the correct location where this outfall will be constructed the HMP will need to be revised to address the direct impacts to the stream for compliance with Chapter 16.20 of the PMC;
- Per PMC 16.20.320, the proposed crossing shall not diminish flood-carrying capacity. The HMP needs to provide a brief discussion to demonstrate that the proposed culvert size will not diminish flood-carrying capacity.

This review was conducted using the best available scientific information and methodologies and the best professional judgement of Grette Associate's staff biologists. Final acceptance and approval of the reports is at the discretion of City staff.

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

Regards,

GRETTE ASSOCIATES^{LLC}



Chad Wallin
Biologist

References:

Grette Associates, LLC. 2020a. Olso Bay Apartments - Wetland Delineation and HMP: Third-party Review. Prepared for the City of Poulsbo. January 31, 2020.

Grette Associates, LLC. 2020b. Olso Bay Apartments - Wetland Delineation and HMP: Third-party Review. Prepared for the City of Poulsbo. July 1, 2020.

Grette Associates, LLC. 2020c. Olso Bay Apartments - Critical Areas Report: Third-party Review. Prepared for the City of Poulsbo. September 3, 2020.

Ecological Land Services. 2020. Non-Wetland Determination: KCPW Recycling Center. Kitsap County parcel 102601-4-028-2003. Prepared for Edward Rose and Sons. Revised November 4, 2020.

Ecological Land Services. 2020. Critical Areas Report: Oslo Bay Apartments. Prepared for Edward Rose and Sons. Revised November 4, 2020.

Ecological Land Services. 2020. Habitat Management Plan: Oslo Bay Apartments. Prepared for Edward Rose and Sons. Revised November 4, 2020.



January 12, 2021

Marla S. Powers, Associate Planner
City of Poulsbo
200 NE Moe Street
Poulsbo, WA 98370

Re: Geotechnical and Stormwater Review

Oslo Bay Apartment Project
Northwest of SR305 and SR307
Poulsbo, Washington
Project No. 180242-05

Dear Ms. Powers:

At your request, Aspect Consulting, LLC (Aspect) has reviewed the geotechnical and stormwater documents for the proposed Oslo Bay Apartment development (Project) to be located northwest of the intersection of State Route 305 (SR305) and State Route 307 (Bond Road, SR307) in Poulsbo, Washington (Site). The Site covers 55.2 acres and encompasses seven Kitsap County Parcel Numbers: 112601-3-040-2008, 112601-3-006-2000, 112601-3-008-2008, 112601-3-021-2001, 102601-4-022-2009, 102601-4-028-2003, and 112601-3-003-2003.

The Project includes the construction of 13 apartment buildings, a clubhouse, a senior care center, and associated infrastructure across the seven parcels, which include two wetlands, a Type F stream, the main stem of Dogfish Creek, steep slopes, critical aquifer recharge areas, and flood hazard areas.

The purpose of our review was to provide comments as to whether the Project complied with the City of Poulsbo's (City) various critical area, grading, and construction provisions as documented in the Poulsbo Municipal Code (PMC). Specifically, the documents we received for our review are:

- "Oslo Bay Apartments Site Plan Review Narrative," dated December 2020, by Edward Rose Millennial Development, LLC and the Project Consultant team.
- "Critical Aquifer Recharge Area Report for the Proposed Oslo Bay Apartment Project Poulsbo, Washington," dated April 24, 2020, by Richard Martin Groundwater, LLC.
- "Oslo Bay Apartments Drainage Report," dated November 23, 2020, by KPFF Consulting Engineers.
- "Oslo Bay Apartments, Poulsbo, Washington, Wetland Hydroperiod Analysis," dated August 24, 2020, by Clear Creek Solutions, Inc.
- "Limited Geotechnical Engineering Report Poulsbo Recycling Center Viking Way Poulsbo, Washington," dated June 21, 2017, by EnviroSound Consulting, Inc.

- “Geotechnical Engineering Report Oslo Bay Apartments,” dated November 23, 2020, by EnviroSound Consulting, Inc.
- “Oslo Bay Apartments Plan Set,” dated November 23, 2020, by Team 4 Engineering.
- “Oslo Bay Wall Exhibits,” dated November 19, 2020 by KPFF Consulting Engineers.

Review Comments and Recommendations

Aspect reviewed the above listed documents on behalf of the City to determine if the proposed Project is in compliance with the various critical area, grading, and construction provisions from the PMC. We offer the following review comments and questions:

Critical Aquifer Recharge Area Report

1. *City of Poulsbo 16.20.765 – Hydrogeologic Report* requires discussion of the effects of the proposed development on the groundwater resource; however, the Critical Aquifer Recharge Area Report (CARA) report does not discuss the hydrology of Dogfish Creek and its potential relationship to Site groundwater, particularly perched groundwater. The report identifies the potential for groundwater perched on top of glacial till (see comment 15 for additional discussion of perched groundwater) and recognizes that there is likely hydraulic connection between perched groundwater and Site wetlands (see first paragraph, top of page 6). However, the report provides no analysis of the potential impacts of reduced recharge from impervious surfaces to the perched zone, nor of the role of perched groundwater in supporting flows within Dogfish Creek and area wetlands. The relationship of Site groundwater to Dogfish Creek and area wetlands should be described, potential impacts identified, and mitigating measures implemented, as appropriate.
2. The CARA report does not address the effects of impermeable surfaces on groundwater recharge to deeper aquifers. The report dismisses the effects of aquifer recharge through the till by categorically stating that the glacial till does not readily transmit water and concludes that the “site currently does not contribute measurable recharge to the underlying aquifers 40 to 250 ft below ground surface.” The CARA report should evaluate the recharge estimates for glacial till presented by the USGS and provide a current condition and post-development water balance to identify impacts in timing and magnitude of Site recharge (Welch, Frans, and Olsen, 2014; Frans and Olsen, 2016). See Figure 17 in Welch and others, 2014.
3. Under the “Stormwater” heading on page 2 of the report, it is implied that stormwater will be retained but not discharged or infiltrated. Please include discussion of what will happen to the stormwater after it is treated. The report as is implies stormwater will not be infiltrated. The report recommends, “Because of the relatively large impervious surface proposed to the Property, stormwater runoff management should identify practices to reduce uncontrolled runoff.” The CARA report should describe or reference the stormwater management practices that will be employed to mitigate any reduction in groundwater discharge (perched or upwelling discharge from deeper aquifers) to Dogfish Creek and wetlands.
4. Depending on stormwater management practices, the results of the recharge analysis described in comment 2 should address potential contaminant pathways and impacts to groundwater quality in both the perched groundwater and deeper aquifers. It is our opinion that with a weathered layer, sand lenses, and vertical cracks that are typical in glacial till deposits, potential

contaminants could be transmitted through the deposit. Discussion of this risk should be added to the report, as appropriate, in conjunction with the analyses described in comments 1 and 2.

5. Under the “Surficial Soil and Geologic Setting” heading on page 5 of the report, it is stated that the thickness of the sea level aquifer is unknown. The Welch 2014 map indicates thickness as 6 to 100 feet on a regional map; this should be mentioned in the report.
6. Under the “Groundwater Conditions” heading on page 5 of the report, please clarify whether the groundwater noted at 40 feet below ground surface at the Site is perched or not.
7. City of Poulsbo 16.20.765 – Hydrogeologic report requires location and identification of wells within 1,000 feet of the Site. It does not appear all wells within 1000 feet were located. Figure 5 shows the locations of water supply wells located from Ecology’s well database that apparently had associated addresses. The report acknowledges “there are likely additional wells associated with other properties” since not all well logs had addresses, implying additional wells with quarter-quarter section locations were identified within 1000 feet; however, these wells are not located on Figure 5 or tabulated. See related detail in comment 8, below.
8. Under the “Wells Within 1,000 Feet of Property” heading on page 6, two wells are noted that are approximately 50 feet deep. These wells are within 1,000 feet of the critical recharge area for the shallow aquifer. In the “Conclusions” section, these wells are not mentioned in the discussion of wells within 1,000 feet. Further discussion of the potential impacts of these wells in the shallow aquifer recharge is required.
9. Under Protection Standards During Construction heading on page 11 of the report, the first bullet references Clallam County Code. This reference should be for Kitsap County and any applicable City of Poulsbo code.
10. Under the “Conclusions” heading, it is stated that the water table is likely greater than 100 feet below ground surface. In previous report sections, the shallow aquifer was described as greater than 50 feet below ground surface. Please clarify and update report so there is consistency in the discussion of this aquifer.

Geotechnical Engineering Report Oslo Bay Apartments

11. The report mentions slopes steeper than 40 percent on the southwest portion of the Site near Dogfish Creek with no further discussion. Please include a discussion and any appropriate analysis and setback recommendations to confirm the Project will not impact these steep slope critical areas.
12. Given the scope of this Project, it is unreasonable to assume it can be constructed entirely in dry seasons. The Site soils will prove challenging during all seasons, with dust control during the dry season and moisture sensitivity during the wet season. The Contractor should be prepared to manage these conditions per the recommendations of the geotechnical engineer, the City guidelines, and the grading, TESC, and SWPPP plans.
13. The report and the accompanying wall exhibits indicate there will be MSE walls as tall as 16 feet. No global or internal analysis is presented in submittals for these walls. An engineering design for these walls needs to be submitted, and the geotechnical engineer should review the design if it is completed by others. In addition, the geotechnical report should include a global

stability analysis of the MSE walls in critical locations to ensure the walls will provide global stability throughout the Site.

14. Structural fill recommendations are not sufficient for this Site. Glacial till will be very difficult for reuse based on the fines content and the standard structural fill specifications for various uses around the Site, particularly as wall backfill. Structural fill meeting standard WSDOT and City requirements should be imported for wall backfill, foundation subgrade, pavement subgrade, and utility trench backfill.
15. Perched groundwater is common on Sites underlain by glacial till and, based on the one piezometer nearby the Project indicating groundwater at 5 feet below ground surface, is likely at this Site. Encountering perched water during excavation for foundations and floor slabs should be expected and discussed in this report, particularly because there may be perched water impacting the moisture-sensitive soils at the subgrade.
16. The slope stability sections do not incorporate groundwater. As previously mentioned, perched groundwater is typical at Sites with this subsurface profile. We recommend the slope stability model include a perched groundwater table to confirm stability.
17. There is a typo in the report. Section 3.9.6 references a Section 2.9.4 which does not exist; we believe the correct reference is to Section 3.9.4.

Basis of Review

The scope of work for this letter was limited to a review of the conclusions and recommendations contained in the documents provided to us and data readily available to Aspect. Our scope of work did not provide for any field verification of explorations or testing, or verification of reported exploration logs, testing results, and analyses presented in the submitted reports.

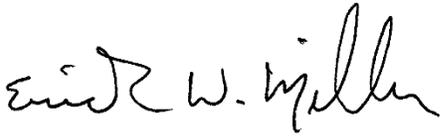
Limitations

Work for this project was performed for the City of Poulsbo (Client), and this letter was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This letter does not represent a legal opinion. No other warranty, expressed or implied, is made.

Please refer to Appendix A titled “Report Limitations and Guidelines for Use” for additional information governing the use of this report.

We trust this letter meets the needs of your permitting processing. If you have any questions, please contact us.

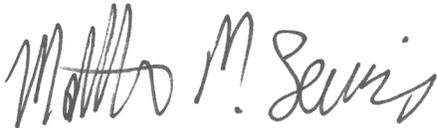
Sincerely,
Aspect Consulting, LLC



Erick Miller, LHG
Principal Hydrogeologist
emiller@aspectconsulting.com



Alison Dennison, LEG
Senior Geologist
adennison@aspectconsulting.com



Matthew Lewis, LHG
Project Hydrogeologist
mlewis@aspectconsulting.com

Attachments: Appendix A – Report Limitations and Guidelines for Use

APPENDIX A

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND GUIDELINES FOR USE

This Report and Project-Specific Factors

Aspect Consulting, LLC (Aspect) considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the subject property, project or governmental regulatory actions

Geoscience Interpretations

The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Aspect.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual limitations. Within the limitations of scope, schedule, and budget, our services have been executed in accordance with our Agreement with the Client and recognized geoscience practices in the same locality and involving similar conditions at the time this report was prepared.

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope instability, or groundwater fluctuations. If any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

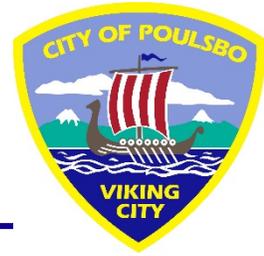
Discipline-Specific Reports Are Not Interchangeable

The equipment, techniques, and personnel used to perform a geotechnical or geologic study differ significantly from those used to perform an environmental study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions, or recommendations (e.g., about the likelihood of encountering underground storage tanks or regulated contaminants). Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

We appreciate the opportunity to perform these services. If you have any questions please contact the Aspect Project Manager for this project.

City of Poulsbo

Engineering Department



February 2, 2021

To: Mark Perkoski, Edward Rose Millennial Development
From: Michael Bateman, PE, Development Review Engineer

RE: Oslo Bay Apartments Site Plan– 4th Submittal

Thank you for the revisions made to the project materials with this submittal. The City of Poulsbo Engineering Department has reviewed the Oslo Bay Apartments Submittal #4 and provides the following comments.

Transportation:

1. Please see the attached TIA Peer Review dated 1/29/2021 by Parametrix and respond to comments.
2. Please see the attached comments dated 12/21/2020 from Kitsap Transit. Provide response to comments. The city is available to facilitate a meeting with Kitsap Transit to resolve any outstanding issues.
3. Please see the attached comments dated 12/8/2020 from Kitsap County.
4. The current TIA submitted indicates that a feasibility determination was made regarding the roundabout but does not include the supporting discussion/documentation for that determination in the TIA. Please include discussion/analysis and supporting documentation regarding roundabout feasibility in the next TIA submittal. The City concurs with the conclusion that a roundabout at this location may not be the preferred intersection control solution at this time.
5. The City is still supportive of the potential for the Ruth Haines roadway improvement to assist with traffic mitigation for this project. We would be happy to continue to assist facilitating discussion(s) on this subject with Kitsap Transit. The City does not see this roadway connection as a requirement for traffic mitigation, but rather as a potentially useful and

desirable option that may benefit Kitsap Transit and the Oslo Bay project.

6. If Ruth Haines is not constructed in the short term - the City would not support making Vetter one-way South as cut-through mitigation. However the city is willing to entertain access restrictions to Vetter road north of the project. Specific improvements need to be coordinated with the local property owners.
7. The current proposal shows two-way access on the unimproved Vetter Road north of Road L. The road is substandard and is currently not sufficient for two-way traffic. In order to support two-way traffic, the roadway must be improved to city standards.
8. The tee intersection at Road L and Vetter is located very close to existing houses and driveways. Please include measures to address noise, light, safety, and construction impacts as part of the SEPA process.
9. Pedestrians will take the shortest path to the transit center which is the alignment along the Vetter right of way. Provide a safe and accessible pedestrian connection to existing improvements. The Kitsap Transit path is located approximately 250 feet north of the project northern property boundary
10. The TIA recommends a 4 way stop at the intersection of Forest Rock and 10th avenue. The City is concerned about queuing space for a 4 way stop at Forest Rock/10th Ave. Field observation shows that the current platoon of Southbound left turning vehicles from SR305 to Forest Rock Lane would exceed the available que storage for a 4 way stop. Please confirm recommendations and modifications necessary to provide a safe intersection. Explain modifications that would improve the queuing storage.
11. Please include an overall drawing/map in the TIA Mitigation section (pg 37) showing the locations of proposed improvements/mitigation for reader clarity.
12. Please revise construction traffic section (starting pg 51) to reflect the materials import/export volume per site plan. Construction truck traffic estimates should be realistic for SEPA determination.

Additional Transportation Comments:

The above comments were directly related to the TIA as submitted with Site Plan Submittal #4. These additional comments below are based on recent discussions and site visits that occurred after the submittal.

- A. The City appreciates the discussion that was held with TSI Solutions on 1/21/2021 and follow-on field visit 1/29/2021 regarding the options for improvements at Road L and Viking Ave and the potential impacts and benefits of all of the various options as well as options for the Forest Rock/10th Ave intersection. With the discussion, context and materials provided in the meeting the City concurs with the conclusion that the aligned intersection is the desired solution for the Road L/Viking intersection alignment. The City also concurs that a roundabout or mini roundabout may not be the appropriate intersection control at this intersection at this time. Sufficient ROW dedication for potential future improvements by the City would be appropriate. Please incorporate the supporting materials (analysis/observations/recommendations) for the intersection configuration as discussed in the next submittal. Please include queuing/safety analysis for this intersection and the second Arco driveway as discussed in the meeting. Please include drawings showing lane configuration, C-curbing location and left turn storage for both Viking/305 and Viking/Road L. Please include discussion regarding providing a safe pedestrian crosswalk improvement as discussed in the meeting.
- B. During the field visit on 1/29/2021 the City and Victor discussed the Viking Ave intersections and observed traffic patterns. The City is concerned about Southbound right turn stacking exceeding the proposed drop lane blocking through traffic. In addition to a dedicated right only, Victor suggested changing the through lane to through and right. Please evaluate and discuss this additional right turn movement and implement if feasible. High bus volume was noted during observations (5 in left turn lane in one cycle). Please confirm bus prioritization is implemented at this signal. Queuing/weaving continues to be a concern. Please show how intersection improvements and signal timing changes proposed will alleviate queuing concerns.
- C. During the field visit on 1/29/2021 observed traffic movements at the intersection of Forest Rock and 10th Avenue. As discussed in comment #11 above, there is concern with queuing impacting SR305. We discussed a closer

evaluation of the signal programming and whether the traffic model was correctly modeling the southbound SR305 left turn movement onto Forest Rock. Additionally, we discussed the potential of a flashing yellow left turn option. We also discussed the possibility of revising the lane configuration of the eastbound leg of the Forest Rock and 10th intersection to a thru/left dedicated lane and a separate dedicated right turn lane. Consider these additional observations and possible combination of improvements in your analysis and discussion.

- D. The City has reached out to Poulsbo Fire regarding the C-curbing proposal for Viking between Road L and SR305 following the 1/21/2021 meeting with TSI. While Poulsbo Fire is not opposed to that solution, they will be very interested in the configuration of the centerline C-curbing. If C-curbing is provided a minimum of 18-feet will be required between the C-curbing and curb and ensuring, there is sufficient width for fire vehicles to bypass vehicles while pulled over. We would prefer to facilitate a discussion with Poulsbo Fire regarding this prior to the next submittal to ensure their concerns (if any) are addressed in the submittal.
- E. Thank you for including the City in the PFA submittal to WSDOT for the Viking Ave/SR305 improvements. Please continue to include the City with PFA submittals to WSDOT. The City understands that Kitsap Transit and WSDOT are currently discussing options for alterations to the right-in right-out configuration to mitigate Kitsap Transit concerns. Please note that Poulsbo Fire will wish to participate and comment on proposed solutions for the Viking/305 PFA as well as the Vetter/305 right-in right-out access.

Stormwater:

13. Please see the attached Stormwater Peer Review dated January 15, 2021 from Parametrix. All comments should be addressed in final storm drainage report. Items involving SEPA potential impacts and associated mitigation may not be deferred, nor items related to project feasibility. The City would like to note however that early resolution of any remaining items will speed construction drawing review.

14. Please also reference the Geotech Peer Review dated January 12, 2021 from Aspect attached with the Planning comments. Address all comments prior to grading permit. Items involving SEPA potential impacts and associated mitigation may not be deferred, nor items related to project feasibility. The City would like to note however that early resolution of any remaining items will speed construction drawing review.
15. Please anticipate a requirement with construction submittal TESC plan to demonstrate a plan for how turbid water contained in temporary storm pond(s) will be treated to remove turbidity prior to release when ponds are full during the winter storm season. Local experience with other projects with similar soil types indicates that this will be particularly difficult to deal with.
16. Thank you for the productive field visit 1/22/2021 with KPFF regarding stormwater pond outfalls. We understand that there will be some outfall modifications as a result of the critical areas discussion and these will be coordinated with Fish and Wildlife, Suquamish Tribe and City peer reviewer is reached.

Site Plan:

17. Please verify site plan cut/fill quantities reflect import needed for structural material meeting WSDOT material standards as required by City standards and noted in Aspect peer review comment #14. A review of all materials testing provided in Geotech report Appendix B indicates that existing site materials will not meet WSDOT standards for any material classification except common borrow (if plasticity index <6 – plasticity index not provided).

TECHNICAL MEMORANDUM

DATE: January 29, 2020
TO: Michael Bateman, City of Poulsbo
FROM: Alex Atchison, PE, PTOE
SUBJECT: Oslo Bay Apartments - November 2020 TIA Review
PROJECT NUMBER: 554-2237-120
PROJECT NAME: Oslo Bay Apartments

We have reviewed the Oslo Bay Apartments Traffic Impact Analysis (TSI, November 30, 2020). Based on our review, we have the following comments.

1. Proposed access to Viking Avenue NW

The November TIA describes three potential site access alternatives at Viking Avenue. One general comment is that we recommend one alternative be confirmed and included in the “final” TIA. See below for specific comments about each alternative.

a) Road L/Viking Ave Offset Stop Controlled Intersection with Full Access at Sonic/Arco Driveway

The first alternative proposes an offset stop-controlled intersection with full access at Sonic/Arco Driveway. The November TIA states this alternative results in an “undesirable conflict” between northbound and southbound left-turns caused by the offset, but as “there is no forecast demand for a southbound left-turn from Viking Avenue” the conflict created would be insignificant. While the forecast demand may show no southbound left-turns, it is unreasonable to assume no vehicles will ever make this turn. At some point there will be a turning/weaving conflict leading to potential safety issues. Unless the southbound left-turn will be restricted, and the intersection operates as right-in-right out, the current proposed design is unacceptable.

b) Road L/Viking Ave Aligned Stop Controlled Intersection with Full Access at Sonic/Arco Driveway

The second site access alternative at Viking Avenue is proposed as a two-way stop-controlled intersection, with Road L fully aligned with the Sonic/Arco driveway. Analysis in the TIA shows that future forecasted level of service meets the City’s LOS requirements.

Under unmitigated conditions, southbound queues from the intersection of SR 305/Viking Avenue will extend past the Sonic/Arco driveway. Improvements proposed at the intersection of SR 305/Viking Avenue is expected to mitigate the southbound queuing issue. However, even with this proposed mitigation, there is still a potential safety issue posed between southbound left-turns at SR 305/Viking Avenue weaving early into two-way-left-turn lane on Viking Avenue and conflicting with northbound left-turns at the Sonic/Arco Driveway. The design of this left lane between SR 305 and the Sonic/Arco driveway needs to include a barrier (such as c-curb) to prevent this weaving movement from happening in the future. The southbound left-turn storage for SR 305 should remain the same as today to accommodate future queuing needs.

Additionally, the site plans do not show the proposed pedestrian crossings across the new intersection of Road L/Viking Avenue to the Sonic/Arco property. The TIA and site plans need to clearly illustrate the layout of the left-turn lanes with c-curb along Viking Way and the proposed pedestrian crossings at Viking Avenue/Road L.

c) Ruth Haines Rd/Viking Ave Stop Controlled Intersection

The TIA needs to show analysis results (LOS and queuing) that support the statement that this alternative would operate similarly to the Road L/Viking Avenue stop sign controlled intersection. The analysis should include the potential for increased cut-through traffic that may result from improvements to Vetter Road north of the project site. Please update tables and text to show this alternative meets City standards or remove this alternative from consideration.

2. Non-motorized Connections

The TIA states on page 15 *“there are currently no continuous sidewalks or bike lanes connecting the site to”* the North Viking Park & Ride and North Viking Transit Center. And page 35 states *“Viking Avenue north of SR 305 does not have continuous non-motorized facilities for the site access at Road L or Ruth Haines to connect to. Improvements to non-motorized connectivity are desirable to accommodate increased non-motorized travel demand created by the project and are identified in the mitigation section.”*

Under the Non-Motorized Mitigation section (page 47 & 48), the TIA states that *“a non-motorized connection from the new Road L intersection to the asphalt path access the North Viking Transit Center”* will be provided. Responses to comments on the August 2020 TIA (page 37 of the comment response matrix) states the *“proposed non-motorized access utilizing Road L and Viking Ave is adequate....”* Given the materials included in the latest submittal, there is no way to confirm if “adequate” non-motorized connections are being proposed. Providing a connection to the paved shoulder on Viking Avenue would not be considered adequate and would not accommodate the increased non-motorized travel demand created by the project. The civil plans included in the latest submittal do not adequately show the proposed non-motorized connections between Road L and the North Viking Transit Center.

The TIA and civil plans need to clearly illustrate improved non-motorized connections between Road L and the North Viking Transit Center. The existing paved shoulder is not considered an adequate connection.

3. Access to Vetter Road north of Road L

The proposed restriction of Vetter Road to one-way southbound north of the project is not supported by the City. Please remove this from the list of possible mitigation options in the TIA. We recommend exploring additional mitigation options with the City than those listed in the TIA, such a restricting northbound vehicle traffic from accessing the existing Vetter Road with a bulb out. This option would maintain the two-way operations on Vetter Road, north of the project, at the same time limit northbound cut-through traffic.

If the Ruth Haines access alternative is chosen, a fully improved Vetter Road will be needed. Analysis is needed to show impacts to traffic operations and changes to expected cut-through traffic resulting from this alternative. Please update tables and text to reflect this or remove this alternative from consideration.

4. Viking Avenue/ Finn Hill Road

The TIA shows decreases in delay in the 2028 AM and PM peak hours at the intersection of Viking Avenue/Finn Hill Road between the with-project and without project condition. Please clearly explain the reason for the decrease in delay with the addition of project traffic. If the signal timing assumptions have changed between the with- and without project condition, this would be considered mitigation and needs to be included in the mitigation section. While this intersection is exempt from the City’s LOS E standards, any increase in delay due to the project would need to be mitigated.

5. Queuing increases at City of Poulsbo intersections

The TIA notes on page 34 that the 95th percentile queues exceed turn bay storage at several City of Poulsbo intersections under the with-project conditions. For the intersection of Viking Avenue/Finn Hill Road/Lindvig Road, the changes in 95th percentile queues are small and within the range of expected daily fluctuations. It is reasonable that no mitigation is proposed to address queuing at this intersection, but the TIA should clearly state this.

Table 1: 95th Percentile Queue Results from Oslo Bay TIA (11/2020)

Intersection	Movement / Storage	2028 Without Project 95 th percentile queue	2028 With Project 95 th percentile queue
Viking Ave/ Finn Hill Road/Lindvig Way	SB LT / 175 feet	138 feet (PM Peak)	183 feet (PM Peak)
	NB LT / 125 feet	248 feet (PM peak)	248 feet (PM peak)
	WB RT / 125 feet	130 feet (PM peak)	133 feet (PM peak)
Bond Road/Front Street	SB RT / 50 feet	225 feet (AM peak) 10 feet (PM peak)	3 feet (AM peak) 463 feet (PM peak)

The TIA does need to discuss impacts to queues at Bond Road/Front Street. Under the 2028 Unmitigated With-Project condition, the 95th percentile queue for the southbound right-turn is reported as 463 feet. This is an increase in over 450 feet of queue compared to the Without Project condition and exceeds the available storage by over 400 feet. There is no mitigation proposed in the TIA to address this change in queue length. The TIA needs to be updated to address this impact and propose necessary mitigation.

6. Crash Analysis

The TIA notes the crash rates for City street segments range from 90.3 percent to 99.7 percent lower than Kitsap County average of 175.4 crashes per 100M VMT. Please add the average City crash rate to Table 12 for clarity.

7. Proposed Mitigation

The mitigation proposed for the SR 305 corridor, specifically the improvements proposed at SR 305/Viking Avenue need to be in place prior to any new project trips from the Oslo Bay Apartment development using the local roadway system. The existing southbound PM peak hour queues at the intersection extend well beyond the Sonic/Arco driveway. Until this queuing issue is mitigated, no new project trips should be allowed on the roadway system, regardless of if the project is built in phases or all at once.

TECHNICAL MEMORANDUM

DATE: January 15, 2021
TO: City of Poulsbo
FROM: Rhiannon Sayles, PE, Paul Fendt, PE
SUBJECT: Oslo Bay Apartments - Stormwater Review
CC:
PROJECT NUMBER: 553-2377-121
PROJECT NAME: Task Order Support Services

Parametrix has reviewed the materials provided by the City for the project known as Oslo Bay Apartments, as per the scope of work and agreement between the City and Parametrix. We have reviewed the plans and calculations for completeness and to evaluate whether the basic elements of the stormwater management and drainage systems will be expected to meet the design guidelines as described by the design engineer. The site was not field reviewed.

While all of the documents provided were read and reviewed to become familiar with the project, the review focused on the stormwater design. Key items in the review included:

- Drainage Report dated November 2020 prepared by kpff
- WWHM Models (received from kpff) titled "eastbasin" and "westbasin"
- Civil Plans dated 11/23/20 prepared by Team 4 Engineering
- Hydroperiod Analysis Report dated 8/24/20 prepared by Clear Creek Solutions

Outstanding Comments from Last Review Cycle (5/13/20)

Downstream Impacts and Conformance to Minimum Requirement #8

1. The predevelopment and post development catchment areas draining to these points must be clarified.
The values for areas draining to the east pond from the drainage report do not match the values draining to the east pond from the hydroperiod analysis.

General Comments

1. All detention ponds must have an emergency overflow spillway designed per the Ecology Manual. Please provide all calculations in the drainage report.
2. All retaining walls to be used as interior side slopes on ponds must be constructed of reinforced concrete and stamped by a structural engineer.
3. Embankments greater than 6' must be designed by a geotechnical engineer and have a key equal to 50 percent of the berm embankment.
4. There are many utility conflicts that cannot be verified by the civil plans. Provide separation between pipes using either plan view or profile call outs.

5. Provide appropriately sized rock inlet protection at the inlet of all detention basins. See Chapter 5. B.10.a of the City of Poulsbo Construction Standards and Specifications for City specific requirements.
6. Provide pipe trench detail that shows conformance with Chapter 5.E of the City of Poulsbo Construction Standards and Specifications.
7. Grading plans must show positive drainage away from the foundations of all buildings. Please provide.
8. The roof drain system and foundation drain system must be shown on the plans. See Chapter 5.B of the City of Poulsbo Construction Standards and Specifications for design guidance.

Drainage Report

1. No calculations found for:
 - a. Emergency overflow weir(s)
 - b. Dispersion Structures/Diffuser Tees
 - c. Cobble for discharge locations
2. For bypass areas the report shows that the flow control BMP compensates for the uncontrolled bypass area such that the net effect at the point of convergence is the same with or without bypass. However, to bypass area that requires flow control you must also show compliance with the following conditions:
 - a. 100-year peak discharge from the bypass area does not exceed 0.4 cfs.
 - b. Runoff Treatment requirements applicable to the bypass areas are met.

New Comments

The applicant has demonstrated that they have a plan to control stormwater in both the temporary and existing conditions. However, there are still many details that need to be provided to show compliance with all state and local standards. The following comments need to be addressed before we can determine that the stormwater design follows all applicable standards.

General Comments

1. Provide WWHM or MGS Flood model for each POC (East and West Basin) to ensure compliance with flow control requirements. Appendix D is illegible and the "eastbasin" WWHM model that was received is empty.
2. Provide a table that shows the drainage area to each wetland in the pre-developed and post-developed condition to verify hydroperiod analysis.
3. Correct the discrepancies between the provided WWHM model "westbasin" and tables 6-3, 6-4, 6-5 and 7-1 of the drainage report as highlighted.
4. The formation of Road L is creating a channel on the North side that leads directly to the unnamed stream. Show velocity calculations and provide temporary and permanent channel lining accordingly.
5. How will the existing drainage channel near the intersection with Road L and Viking Way be maintained? Consider adding a culvert under Road L.
6. If existing stormwater pond is to remain and Road L is decreasing the volume of the existing pond then calculations must be provided that show the pond is sized correctly for the proposed flows. Where does the pond outfall? Is it designed to infiltrate the 100 year storm?
7. Provide pipe capacity and inlet spacing calculations.
8. Show scour protection on plans and provide calculations.
9. Remove demolished pipe callouts from the storm plans.
10. Verify inlet spacing along Road A.
11. How will the parking area in front of Building 9 be collected in the conveyance system?
12. Remove the water and sanitary utilities on the stormwater profiles and just show crossing locations. It is difficult to read the profiles with all three utilities shown.

13. The maximum depth on Type I catch basins is 5'. Structures CB #L4 and CB #L2 do not meet this criterion. Please revise.
14. Show crossing utilities and their clearance from the culvert on the stream crossing profile.
15. While a plan was provided for the infiltration gallery serving a portion of the road improvements at and SR 305, there are key issues if this system does not perform as designed, as there are minimal contingency or adjustments that could be made. Notably, the depth of the facility compared to the surrounding area, the upstream west pond possibly contributing groundwater flow, and the generally poor area soil raises some questions. Key site information to assess the facility were not found, including geotechnical information regarding infiltration results and ground water level; underdrain discharge point and connection; and pretreatment if required by CARA (if the soils treatment is insufficient). Please provide this information.

Detention Ponds

More detail is required to determine whether the proposed detention ponds meet the requirements of the Ecology Manual. Please show the following:

1. Sediment storage area of at least 0.5'.
2. Control structures with orifice sizes and elevations
3. Geotechnical analysis/report for slopes over 15%. The scope of the geotechnical report should include the assessment of impoundment seepage on the stability of the natural slope where the facility will be located. The report should also include embankment compaction method and soil content requirements.
4. Anti-seepage filter-drain diaphragms on outflow pipes in berm embankments impounding water with depths greater than 8 feet at the design water surface.
5. A secondary inlet to the control structure as additional protection against overtopping should the inlet pipe to the control structure become plugged such as a grated opening "jailhouse window".
6. Pond access road surfacing type (permeable pavement, gravel or modular grid pavement).
7. Height of pond fencing and access road gate.
8. All facilities are at least 50' from the top of any slope greater than 15%.

TESC Plan

1. The diversion pump does not appear to be shown in the correct location. Please revise and show full stream bypass plan including fish barriers.
2. If jute netting is only shown on 2:1 slopes within the stream buffer, how will 2:1 slopes be stabilized outside of the buffer?
3. Provide velocity calculations and details on the stabilization of swales.
4. Consider adding filter fabric fence on the high side of the site to prevent clean water from entering project.
5. Provide volume calculations, geometry calculations, and dewatering calculations for the temporary sediment ponds. A dewatering riser must be used instead of a pump.
6. Show silt fence, an overflow spillway and a riser for detention ponds in accordance with BMP C241.

From: [Christine DeGeus](#)
To: [Michael J. Bateman](#)
Cc: [Jeff Shea](#); [Melissa Mohr](#)
Subject: FW: Oslo Bay Apartments TIA Review
Date: Tuesday, December 8, 2020 2:30:42 PM

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Michael,

In addition to Melissa's comments I would add that ADA curb ramps are required for each direction of pedestrian travel at each intersection. The intersections of Vetter/C and Vetter/L should have a total of 6 curb ramps.

Thank you for the opportunity to review the plans.

Christine DeGeus
Traffic Operations Supervisor
Kitsap County Department of Public Works
360-337-7217

From: Melissa Mohr <mmohr@co.kitsap.wa.us>
Sent: Tuesday, December 08, 2020 12:55 PM
To: Michael J. Bateman <mbateman@cityofpoulsbo.com>
Cc: Jeff Shea <JShea@co.kitsap.wa.us>; Christine DeGeus <cdegeus@co.kitsap.wa.us>
Subject: RE: Oslo Bay Apartments TIA Review

Thank you for the opportunity to comment on this. My review duties are normally just for Non-Motorized Facilities, and on that aspect my only comment is that the north ends of the sidewalks on Vetter should have a ramp transition (concrete or asphalt) down to grade, to allow access to any future improvements that might be made to Vetter north of there. This is not the full extent of the County's comments, just regarding the non-motorized aspects. I see that you sent this to Jeff too, and I also forwarded it to Christy DeGeus – they might have other comments.

See you at PRTPO,

Melissa Mohr

Transportation Planning
360-337-4660
mmohr@co.kitsap.wa.us



Kitsap County Public Works
An APWA Accredited Agency



From: Michael J. Bateman <mbateman@cityofpoulsbo.com>
Sent: Monday, December 7, 2020 4:21 PM
To: Jeff Shea <JShea@co.kitsap.wa.us>; Melissa Mohr <mmohr@co.kitsap.wa.us>
Cc: Marla S. Powers <mpowers@cityofpoulsbo.com>; Karla Boughton <kboughton@cityofpoulsbo.com>; Diane K. Lenius <dlenius@cityofpoulsbo.com>; Anthony W. Burgess <aburgess@cityofpoulsbo.com>
Subject: FW: Oslo Bay Apartments TIA Review

Hi Jeff/Melissa –

The city has received a complete revised set of plans and documents for the Oslo Bay Apartment proposal. This is a Site Plan Review and Boundary Line Adjustment application for the construction of 13 apartment buildings, total of 468 units, plus club house and residential amenities. A future site adjacent to this proposal is anticipated to be a Senior Care Center. The site is approximately 55.2 acres in size and includes two wetlands, an unnamed Type F stream and the main stem of Dogfish Creek, steep slopes, critical aquifer recharge area and flood hazard area are associated with this development.

I will send via Wettransfer the following documents:

- Applications (including response matrix)
- Project Narrative
- Traffic Impact Analysis
- Civil Plans
- SR305 WSDOT RI/RO Plans

The remaining application materials are available on our SmartGov public portal here: https://ci-poulsbo-wa.smartgovcommunity.com/PermittingPublic/PermitDetailPublic/Index/c6dd140a-3e22-453d-8f97-ab1a01822daa?_conv=1. I believe I am transferring all materials relevant to review of the stormwater design in the wettransfer link, but I am providing the link to the entire submittal for full context and to ensure that all materials are available to you if you need anything else, and so that other reviewers may be able to go directly to our smartgov portal for the materials.

This is the fourth submittal for this Site plan, and it has not yet been determined to be technically complete.

Please review the materials and let me know if there is anything deficient or missing in this submittal which may prevent us from determining the project to be technically complete. We will need to make a determination as to the technically complete status by December 21 at the latest or let them know when we will be able to do so at that time. Please let me know when you think you will be able to get revision comments back to us by so we can advise the applicant accordingly.

I have not yet reviewed the TIA myself in detail yet and don't yet have a good handle on what they've got planned for options with Ruth Haines. From conversations Karla has had with the applicant's land use attorney I understand they may have removed some of the Road L options from consideration in this submittal. I'm not certain what they currently have as options presented and if any will be acceptable. I do still have concerns about the Road L proximity to the Road L intersection to the SSR305/Viking intersection and that intersection operation in general. In particular the stacking/storage needs for left turns onto SR305 from Viking Southbound and left turns into Sonic/Arco Northbound. Also – depending on intersection location and configuration the potential conflicts with the left turns out of Road L and traffic/stacking on Northbound Viking.

Feel free to contact me if you have any questions or need additional information.

I will work on arranging a meeting with DOT once we've all had a chance to digest these materials and will keep you in the loop on that.

Michael Bateman, PE
City of Poulsbo Engineering Department
200 NE Moe St, Poulsbo, WA 98370
Ph: 360-394-9744 Fax: 360-697-8269

From: [Christine DeGeus](#)
To: [Michael J. Bateman](#)
Cc: [Jeff Shea](#); [Melissa Mohr](#)
Subject: FW: Oslo Bay Apartments TIA Review
Date: Tuesday, December 8, 2020 2:30:42 PM

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Michael,

In addition to Melissa's comments I would add that ADA curb ramps are required for each direction of pedestrian travel at each intersection. The intersections of Vetter/C and Vetter/L should have a total of 6 curb ramps.

Thank you for the opportunity to review the plans.

Christine DeGeus
Traffic Operations Supervisor
Kitsap County Department of Public Works
360-337-7217

From: Melissa Mohr <mmohr@co.kitsap.wa.us>
Sent: Tuesday, December 08, 2020 12:55 PM
To: Michael J. Bateman <mbateman@cityofpoulsbo.com>
Cc: Jeff Shea <JShea@co.kitsap.wa.us>; Christine DeGeus <cdegeus@co.kitsap.wa.us>
Subject: RE: Oslo Bay Apartments TIA Review

Thank you for the opportunity to comment on this. My review duties are normally just for Non-Motorized Facilities, and on that aspect my only comment is that the north ends of the sidewalks on Vetter should have a ramp transition (concrete or asphalt) down to grade, to allow access to any future improvements that might be made to Vetter north of there. This is not the full extent of the County's comments, just regarding the non-motorized aspects. I see that you sent this to Jeff too, and I also forwarded it to Christy DeGeus – they might have other comments.

See you at PRTPO,

Melissa Mohr

Transportation Planning
360-337-4660
mmohr@co.kitsap.wa.us

December 21, 2020

60 Washington Ave. Ste. 200
Bremerton, WA 98337
Phone: 360.479.6962
Fax: 360.377.7086



Marla Powers, Associate Planner
City of Poulsbo
200 Moe Street
Poulsbo, WA 98370

Dear Ms. Powers,

Kitsap Transit was recently notified about an updated Oslo Bay Apartments Traffic Impact Analysis (TIA) submitted to the City of Poulsbo, the project was formally known as the Edward Rose Master Planned Community. Other documents from the updated SEPA application were reviewed including the project civil plans depicting the layout of the site.

We have read the updated TIA and are concerned about the Ruth Haines Rd. option not being fully addressed in the TIA. The project applicant did not appear to explore a partnership with Kitsap Transit in a meaningful fashion. We have not had a chance to fully collaborate recently with the project applicant.

The construction of Ruth Haines Rd. as a viable option to the TIA recommended Road L. The construction of Ruth Haines Rd. will allow for the Vetter Rd. to be improved which will allow for an exit option for transit vehicles to avoid the proximity of the congested Viking and Highway 305 intersection. It will also allow for improvements to be made to Vetter Rd. Kitsap Transit requests that an ADA compliant connection be made to the Transit Center from the project location. More importantly, Kitsap Transit is willing to partner financially with the developer for the construction of Ruth Haines Rd. We see a potential cost savings for the project applicant as there will be less utility work needed as the Transit Center was constructed to accommodate the new roadway. The option for Ruth Haines Road will also remove the off center intersection proposed for Road L across from the gas station entrance. This will remove the concern by the City in regards to the proximity of the Road L intersection to the SR305 intersection.

If the applicant constructs Road L and a roundabout at Viking Ave., we would like to ensure that the roundabout is constructed to accommodate AASHTO Intercity Bus-45 turning radiuses. This same design standard should be applied to the right-in and right-out entrance and exist of the new Vetter Road connection to SR 305.

Kitsap Transit is looking forward to the construction of the housing project as it provides access to transit via a close walk to the many routes found at the Transit Center. We would like to work with the City and the applicant to work through design elements to improve pedestrian connectivity and the safety of transit operations.

Thank you for the opportunity to comment. If you are interested in working with us, please feel free to contact me. I can be reached at edwardc@kitsaptransit.com or 360-824-4919.

Sincerely,

Edward Coviello, AICP
Transportation & Land Use Planner
Kitsap Transit

