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draft memorandum

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to Brett Kelper, AICP (City of Milwaukie)

from John Vlastelicia

subject Natural Resource Review for Coho Point Development
11103 SE Main Street
City of Milwaukie Land Use File #DR-2021-001

Thank you for asking Environmental Science Associates (ESA) to provide peer review assistance to the City of Milwaukie for the Coho Point Development Project located at 11103 SE Main Street. This memorandum summarizes our review of land use application materials related to Water Quality Resource (WQR) area and Habitat Conservation Area (HCA) regulated by Milwaukie Municipal Code (MMC) Section 19.402 (Natural Resources).

This memorandum is formatted to address the review tasks identified by the City in your request for ESA's services (scoping letter from Brett Kelper to Sarah Hartung, August 4, 2021). The City-requested tasks are identified in **bold**, followed by our responses.

Task 1. Review the applicant's initial submittal materials, particularly the natural resource review report prepared by Pacific Habitat Services. Please also review the Natural Resources Assessment Report you prepared about the site for the City in 2016.

Response: ESA reviewed project land use application materials made available through the City's Planning Department web site at <http://www.milwaukieoregon.gov/planning/dr-2021-001>. We reviewed the Natural Resource Assessment Report prepared by Pacific Habitat Services (PHS), dated March 22, 2021. In addition, we reviewed the Natural Resources Assessment Report previously prepared for the site by ESA in February 2016. We note that the study area for ESA's 2016 report was limited to the northern portion of the current overall project area (the primary development site – Tax Lots 1100, 1200, 1300, 1301, and 1302, north of the Adams St. right-of-way), while the PHS report addresses that area plus additional areas south, within the SE Adams St. right-of-way and Dogwood Park, where plaza improvements, grading, a retaining wall, and mitigation are proposed.

Task 2. Site Visit – Visit the site to assess existing conditions and verify that the applicant’s description of existing conditions is accurate and thorough.

Response: ESA visited the Coho Point site on September 1, 2021, after reviewing the PHS report and with the Existing Conditions figure (Figure 4) from the report in hand. ESA generally observed the site to be as described by PHS in Section 3.1 (Site Conditions) of the report, with a building and parking lot on the northern portion of the site, Dogwood Park in the south, and various types and conditions of riparian vegetation along Kellogg Lake throughout the site. There are two large (20+ inch diameter) sweet gum trees in a landscape island in the parking lot on the northern portion of the site that are not noted in the PHS report, but those trees are outside of WQR and HCA. Our observations related to WQR and HCA conditions are addressed more specifically in the Task 3 responses below.

One general observation and key distinction we noted during the site visit is that the condition of the WQR/HCA on the northern, primary development portion of the site is substantially more impacted by existing development than the WQR/HCA on the areas south, in Dogwood Park. Not only is there less tree cover and more invasive Himalayan blackberry cover in the WQR/HCA vegetation on the northern portion of the site, but a significant portion of the overall WQR area (within 50 feet of top of bank of Kellogg Lake) consists of pavement. The PHS report notes the lower quality WQR plant community on the northern portion of the site, but does not highlight the fact that much of the WQR area in the north is not vegetated at all.

Task 3. Comment on the following aspects of the applicant’s natural resource review report:

a. WQR and HCA Boundaries

- **Confirm the applicant’s demarcations of the WQR boundary, particularly with respect to steep slopes and the measurement of the vegetated corridor (see Figure 4 in the report), as well as the report’s classification of the existing condition of the WQR (i.e., Good, Marginal, or Poor).**

Response:

WQR Boundaries: ESA generally concurs with the demarcation of the WQR boundary as mapped on Figure 4 (Existing Conditions) of the PHS report, which shows 1-foot survey contours and shows the WQR boundary as a 50-foot offset from the break in $\geq 25\%$ slope. This is consistent with the methods outlined in MMC Table 19.402.15 for determining WQR location for primary protected water features. We note that it appears the southeastern project area limits extend beyond the topographic survey limits, which may be affecting how the WQR boundary is drawn in that area (sharp jog following the existing railroad bridge over Kellogg Lake), but since the full project area in the south is accounted for as WQR, this detail does not affect the impact analysis.

The description of the WQR boundary in the PHS report (Section 5.1) states: *The slopes adjacent to the north side of Kellogg Lake are less than 25 percent, and therefore, the associated vegetated corridor in this area is 50 feet wide. The slopes along the eastern portion of Kellogg Lake are greater than 25 percent; therefore, in this area, the width of the vegetated corridor varies between 60 and 100 feet from the ordinary high water line.*

To clarify, there is only a very small part of the shoreline at SE McLoughlin Blvd on the northwest corner of the site where surveyed slopes are less than 25% adjacent to Kellogg Lake. However, as mapped on Figure 4, the WQR boundary is effectively greater than 50 feet from ordinary high water

(OHW) for the entire Kellogg Lake shoreline in the project area, because of the steep slopes above OHW immediately adjacent to that point in the NW corner where slopes are <25%.

WQR Condition: The PHS report (page 12) identifies two separate plant communities within the vegetated corridor based on the predominance of woody species: *Along the East bank of Kellogg Lake, the plant community is primarily scrub-shrub with few scattered trees in this area [and] is considered to be Class B (marginal condition) in accordance MMC. Further south, tree canopy cover increases south of the proposed development. Since this area exceeds 50% canopy cover it was determined to be in Class A (good condition).* The report describes two vegetation sample points (one for each community) but does not identify on the figures exactly where those points were located.

ESA concurs with the PHS classification of the WQR along Kellogg Lake south of the primary development site as Class A (Good) condition, based on observations of tree canopy coverage greater than 50%.

It is ESA's opinion that the condition of much of the WQR in the northern portion of the project area, within the primary development site, is more appropriately categorized as Class C (Poor). MMC Table 19.402.11.C describes "Poor" condition WQR as that with a combination of trees, shrubs, and ground cover less than 80% present and/or with less than 25% canopy coverage in the vegetated corridor. Pavement occupies a substantial portion (>20%) of the WQR in the northern portion of the project area, north of the SE Adams St. right-of-way, and tree canopy coverage in that area is less than 25%.

While the 'poor' vs. 'marginal' classification helps inform a sense of the existing WQR that will be impacted, the distinction is not significant for this review because the proposed mitigation addresses the MMC Table 19.402.11.C requirements for both conditions, as described later in this memorandum.

- **Review the applicant's detailed verification of the HCA boundary (starting on page 3 of the report and as shown on Figure 4).**

Response: Page 3 of the PHS report states: "*Because there is discrepancy between the City-mapped HCA, the Applicant proposes to verify HCA on the site using the detailed HCA verification procedures...*"

The PHS report does not identify specifically what is the "discrepancy" in City-mapped HCA, but it goes on to address the HCA verification procedures from MMC 19.402.15.A.2.b and presents both City-Mapped HCA and Field-Verified HCA on Figure 4. The difference between the two HCA boundary lines is relatively small and does not result in substantially more or less HCA on the site. The PHS report does not describe the 'corrections' to the HCA line (i.e., where the City-mapped boundary is in error), but the report describes data sources and methods used to determine the verified HCA boundary presented on Figure 4, and the verified boundary appears to accurately reflect site conditions.

b. Impacts

- **Consider and comment on the proposal to permanently disturb the majority of the WQR and HCA on the primary development site, with off-site mitigation in the adjacent Adams Street**

right-of-way and Dogwood Park. How will the loss of riparian habitat where the primary site is adjacent to Kellogg Lake/Creek affect the water feature's ecological function?

Response: The PHS report documents a total permanent WQR impact area of 0.31 acres, the majority of which is located north of the SE Adams St. right-of-way. An additional 0.05-acre of HCA adjacent and outside of the WQR, mostly within the SE Adams St. right-of-way, would also be permanently impacted. Permanent WQR impacts do not extend all the way to the Kellogg Lake OHW, but they encompass a proposed pervious plaza that approximates the break in slope above Kellogg Lake and extend landward to the outer edge of the WQR, including the proposed building. Much of the WQR within the identified permanent impact area is already impacted by the existing paved parking lot. The Tree Removal Plan presented on Figure 8 of the PHS report shows only one tree proposed for removal within the permanent impact area of the WQR, with eight additional trees proposed for removal in WQR temporary disturbance areas to the south.

In terms of the ecological functions listed in MMC 19.402.1.C.2:

- The permanent impacts to WQR would reduce the width of the existing vegetated riparian corridor along the north/northeastern portion of the lake (mostly shrubs and groundcover in the permanent impact area), thereby reducing the vegetated corridor's effectiveness at separating the water feature from development.
- Microclimate and shade functions provided by existing vegetation in the permanent impact area will be somewhat reduced by the reduction in vegetation width, although the location of the impact area on the north/northeast side of the lake and the lack of large mature trees within the permanent impact area limit the effect.
- Reduced vegetation within the WQR and HCA in the permanent impact area will reduce the natural ability of those areas to provide water filtration, infiltration, and natural purification functions, although the proposed stormwater management plan for the proposed development would adequately treat stormwater, thus limiting the potential for adverse water quality impacts to the lake. Impacts to bank stabilization and sediment/pollutant control functions should also be limited by the proposed stormwater management approach.
- The proposed development would not substantially affect large wood recruitment potential or natural channel dynamics. Natural channel dynamics of Kellogg Creek/Kellogg Lake have already been modified by surrounding development and the impounding effects of McLoughlin Blvd (Kellogg Dam) immediately downstream.
- **Will the proposed off-site mitigation adequately compensate for detrimental impacts to the ecological function of the disturbed resource areas?**

Response: There is an apparent discrepancy between the mitigation planting plan/schedule described in the PHS report narrative (text starting on Page 19, including Tables 3-6) and the planting plan/schedule shown on Figures 9 and 9A of the report: the report text describes four planting areas (A-D) totaling 0.53 acres while the figures shows three planting areas (A-C) totaling 0.37 acres. ESA recommends that this apparent difference be clarified by the applicant.

The presented mitigation is intended to restore temporary impact areas with native vegetation and enhance areas of generally higher-quality WQR than is currently contained in the proposed

permanent impact area, but which could function at a higher level with invasive species removal and additional native plantings. The existing riparian vegetation to be enhanced is mostly off-site but adjacent to the primary development site, along Kellogg Lake within the SE Adams St. right-of-way and Dogwood Park. The proposed enhancement plantings cover an area greater than the combined area of permanent WQR/HCA impact.

Nine trees greater than 2.5-inch caliper will be removed from the WQR and HCA for the project from areas of temporary and permanent disturbance. The restoration/mitigation described in the PHS report text identifies a total of 256 trees and 995 shrubs proposed for planting, along with native seed application.

While ecological functions will be impacted locally in the permanent WQR/HCA impact areas, as described in the response to the previous bullet, it is ESA's opinion that the proposed mitigation can adequately compensate for those impacts.

- **Will the proposed removal of material from within the mitigation area (to compensate for fill placed in the floodplain) result in any detrimental impacts to ecological function that cannot be addressed with the proposed mitigation?**

Response: To meet balanced cut/fill requirements in the 100-year floodplain, the project proposes excavation along Kellogg Lake that would temporarily disturb areas outside of the permanent WQR/HCA impact areas. The excavation would lower areas along Kellogg Lake between the OHW level and a proposed gabion retaining wall marking the edge of new development. As described in the Floodplain Analysis Report prepared by DOWL, dated August 2021, the excavation would increase inundation frequency of the areas immediately adjacent to the lake below the retaining wall, creating a configuration closer to natural conditions than the current floodplain.

The excavation area is proposed for restoration planting. The PHS planting plan has identified "wet" area plantings for areas of excavation, with species that can generally tolerate wet conditions (e.g., black cottonwood, Oregon ash, red alder). All proposed excavation is above the OHW level and should not create conditions of excessive inundation for plant survival. The DOWL Floodplain Analysis Report notes that the excavated areas could see some sediment accumulation on the order of up to 6-12 inches. With the proposed monitoring and maintenance program, ESA expects revegetation could be successful in the areas of cut, and we do not foresee the floodplain excavation creating detrimental impacts to ecological function that cannot be addressed with the proposed mitigation.

c. Alternatives Analysis

- **Is the applicant's analysis of alternative scenarios reasonable with respect to each scenario's impacts to the WQR and HCA?**

Response: The alternatives analysis starting on Page 16 of the PHS report describes why an alternative with no impact to the WQR or HCA is not feasible and why alternatives with less impact than the proposed project are also not feasible. The PHS report supports the alternatives analysis by citing the goals of the City's Housing Needs Analysis (HNA) and the goals of the site's Downtown Mixed Use (DMU) zoning, which encourage development that extends to the property line to maximize use of undeveloped or underdeveloped lots close to public transportation. The conclusion

is that alternative site layouts with less impact to WQR and HCA would not be consistent with the City's goals for housing and the site's zoning.

The use of existing City documents and zoning goals is a reasonable approach for justifying the proposal. The City must still balance housing needs and zoning goals with natural resource protections, but, in ESA's opinion, the baseline justification is reasonable if the adverse impacts to WQR/HCA can be adequately mitigated according to MMC 19.402 standards.

d. Mitigation

- **Review the proposed mitigation plan (Figure 9) and consider the narrative related to the proposed mitigation. Has the applicant accurately described the adverse impacts that will be caused by the proposed development?**

Response: The PHS report describes existing ecological functions and values of the riparian area on the site, quantifies temporary and permanent impacts to WQR and HCA, and acknowledges that the proposal will reduce the amount of WQR and HCA habitat available for wildlife usage. The descriptions of impacts appear to be reasonable and accurate.

The planting information on Figure 9 (Mitigation Plan) and Figure 9A (Mitigation Plant Schedules) show three planting areas: A, B, and C. Those figures do not appear to match the descriptions of planting provided in the PHS report text starting on Page 19 and including Tables 3 through 6, which identify four planting areas: A, B, C, and D. Planting area D is missing from the figures. This should be corrected.

- **Does the mitigation plan sufficiently address the mitigation requirements established in MMC Table 19.402.11.C for WQR areas and MMC Subsection 19.402.11.D for HCA's?**

Response: The PHS report explicitly identifies and addresses all relevant mitigation requirements in the above-referenced MMC sections, starting on Page 18. In summary, the proposed mitigation includes: inventory and removal of man-made debris and noxious materials that might be present within the WQR; implementation of a stormwater plan that will meet City requirements for runoff rates and water quality; removal of non-native invasive plants; and the installation of native tree and shrub plantings and application of native seed to cover all bare ground. The proposed mitigation addresses MMC Table 19.402.11.C requirements for permanent WQR impacts on the northern portion of the site, whether the WQR is classified as 'marginal' or 'poor'.

- **Are the numbers, species, and locations of proposed mitigation plantings sufficient and appropriate for the proposed impacts?**

Response: The species proposed for planting are all native and appear to be appropriate for the planting areas. The mitigation plan includes "wet" planting schedules and "mesic" planting schedules, depending on the area/elevation. The numbers, species, size, diversity, and spacing of the proposed plantings adhere to the requirements of MMC Subsection 19.402.11.D.

As noted previously, ESA recommends that the applicant update the mitigation plan/schedule figures (Figures 9 and 9A) in the PHS report to ensure consistency with the report text and tables (i.e., add Planting Area D to the figures).

- **Is the proposed mitigation sufficient to reestablish and/or improve the ecological functions and values that will be disturbed and negatively impacted by the proposed development? As part of**

your response, select one of the three following descriptions of how the existing ecological function and value of the WQR will be affected by the proposed development and mitigation, elaborating briefly to explain your answer: Improved, Unchanged, or Degraded.

Response: Ecological functions and values on the primary development site have been impacted by previous development, including the existing paved parking area that encroaches into the WQR. The proposed development would further impact functions and values by introducing a new multi-story building that further encroaches into the WQR. The proposed mitigation would maintain some functions and improve some overall site functions by increasing native plant coverage, tree and shrub numbers, and structural/species diversity. The ecological functions and values listed in MMC 19.401.1.C.2 are addressed in the table below.

Function/Value	Overall Project Effect	Rationale
Vegetated corridors to separate protected water features from development	Unchanged	Vegetated corridor width will be reduced along the north/northeastern shoreline of Kellogg Lake. Vegetated corridor quality and buffering effect will be enhanced over time in the mitigation planting areas to the south, through increased vegetation coverage and species/structure diversity.
Microclimate and shade	Improved	Microclimate and shade functions provided by existing vegetation in the permanent impact area will be somewhat reduced by the reduction in vegetation width, although the location of the impact area on the north/northeast side of the lake, existing pavement, and the lack of large mature trees within the permanent impact area limit the effect. The proposed vegetation enhancement will increase tree and shrub numbers in the mitigation areas, and should positively affect microclimate functions as vegetation matures.
Streamflow moderation and water storage	Improved	The project will balance floodplain fill for the proposed development with an equal volume of floodplain excavation from the site. The excavation along Kellogg Lake, from ~OHW to the proposed gabion wall, will increase the frequency that the floodplain is engaged by flows slightly higher than the 2-year event, providing water storage more frequently than current conditions. The

Function/Value	Overall Project Effect	Rationale
		proposed development will not increase impervious surface of the site.
Water filtration, infiltration, and natural purification	Unchanged	These functions will be reduced in the area where vegetated corridor width is reduced for the proposed development. They may also increase somewhat in areas of the proposed floodplain excavation (more accessible to flood flows) and in areas of the proposed mitigation plantings that will increase ground cover and vegetation diversity.
Bank stabilization and sediment and pollution control	Unchanged	A new gabion retaining wall in the WQR is proposed to accommodate new development and floodplain excavation. The increased accessibility of the floodplain to flood flows in excavation areas may increase sediment retention and pollution control functions in those areas.
Large wood recruitment and retention of natural channel dynamics	Unchanged	The project will not substantially affect large wood recruitment potential or natural channel dynamics, which have already been impacted by site and surrounding development. Large wood source trees are limited in the permanent impact areas. Nine trees are proposed for removal in temporary and permanent disturbance areas. The proposed tree mitigation plantings should increase long-term sources of large wood on those portions of the site.
Organic material sources	Unchanged	Organic material sources will be reduced in the area of the site development where vegetated corridor width will be reduced. Organic material sources may be expected to increase in the mitigation areas of the site, where the proposed plantings should increase vegetation coverage and tree/shrub numbers.

Again, thank you for asking ESA to provide natural resources review assistance for the Coho Point Development Project at 11103 SE Main St. Please let me know if you have any questions or would like to discuss any of the information presented in this memorandum.