Ecological Land Services

December 12, 2016

Christy Carr, Planner
City of Bainbridge Island
Department of Planning and Community Development
280 Madison Avenue N
Bainbridge Island, WA 98110

Re: Response to comments regarding Rural American Properties Reasonable Use Exception.

Dear Christy:

I received your email on December 6, 2016 regarding the above referenced project.

1. *It is hard to tell why the delineation takes a hard right (or to the east) turn on Lot 3. I don't see a survey of the flags on Figure 2 in your report or the site plans submitted with the application but I see the flag numbers are referenced in the data sheets. The flags need to be on a site plan.*
   The flag numbers were not on the site map or plan due to an oversight and I've had them added to the site map and plan. The delineation takes the hard corner based on the change in vegetation and elevation. It seems to closely match the mapping of the wetland by the city.

2. *I don't understand the rationale for considering the soil at TP 5 non-hydric while the soil at TP 6 is hydric. The soil at both locations is Cathcart – how can you explain that the soil at TP 5 is not hydric because Cathcart loam is typically very grey in color even when it is not depleted – the same color is considered hydric at TP 6? Is it because of the difference in the color of the surface layer?*
   I understand the confusion. It is often difficult to determine the presence of hydric soil indicators in Cathcart type soils. Initially, we determined the soil at TP 5 is not hydric because of the surface layer but upon re-reading the criteria for F3 Depleted Matrix, it appears that both soil layers meet this indicator despite the color of the surface layer. The area at Test Plot 5 is upland because we did not find hydrology or evidence of hydrology in the area during our field visit. There is also a distinct increase in elevation from the wetland to the upland in that area.

3. *On Lot 2, it appears that the house could be oriented east west (the longer axis running east-west) to minimize impacts to the wetland buffer; that is, it would result in less total area of buffer eliminated. This impact minimization does not seem to have been considered.*
   The building designer oriented the homes along the street as shown on the site plan to meet with the standards of Fort Ward Estates as well as to avoid creating a long driveway to the homesite and to avoid building in the low area at the south end of Lot 2. We have done an assessment of the impact by showing both site plans and determining the extent of buffer intrusion. The assessment indicates that there would be the same level of impact with both orientations and that more native vegetation would be impacted by orienting the home east to west because of the need for a longer driveway and turn around. The home orientation has not been changed on the site plan.

4. *On page 6-7, you state, "There will be a slight functional lift for the wetland buffer provided by the trees so there will be no loss of wetland buffer function." The function of the wetland buffer is not specified, so it is difficult to concur with this statement.*
   The functional lift provided by the shore pines has been addressed in the report on page 7.

5. *On page 7, it states both "Shore pines grow relatively slowly…" and "The specified trees grow relatively quickly…" Also, page 8 states that potted stock will be 1-gallon potted plants while Table 1 specifies 2-gallon. Planted stock should be larger – 4-6 feet tall – probably not potted. Performance standards should be adjusted accordingly.*
   These inconsistencies have revised so that they match. It has been my experience that installing smaller individuals increases the survivability because they will be able to acclimate to the soil and hydrologic conditions as young trees. I have kept the size of the plants as 2-gallon individual so that they will have greater success acclimating to the site.

6. *Why is removal of the "primitive road" on Lot 4 not proposed as mitigation? The drainage plan proposes its removal. If it is removed, would native plants be installed?*
   I was not aware of the primitive road location or the plan to remove it as part of the drainage plan. I have talked with the building designer regarding this question and she has stated that the area in question was historically scooped out and that AJ had proposed to fill it back in. The road or dug out area has been there for a long period of time and hasn't been affecting the function of the wetland. It is now covered primarily with native vegetation that includes hardhack and Nootka rose, which would have to be cleared to accommodate removal of the road. In my opinion, removal will not improve the function of the wetland or buffer and it does not make ecological sense to remove the native vegetation to remove the old road then replant it.

7. *Could the madrone on Lot 4 be retained?*
   The extent of wetland and buffer and the wide right of way along Soundview Boulevard makes it difficult to develop these lots. It appears that the madrone is in the building envelope and cannot be retained.

8. *How was the configuration of the split rail fence/edge of mitigation area determined? Is there any functional/scientific basis to support it?*
   The widest buffer possible was selected for the wetland based on the location and position of the proposed homes. It also provides a clear demarcation for future residents to identify the limits of their yards. There is also a clear line of shrub vegetation along what will be the buffer edge that was used to identify the limits of the buffer. The location of the buffer edge will allow removal of less native vegetation to install the fence and conifer trees.

9. *Your report does not address the multiple storm drains that will be directed toward the wetland and outfalling in the water quality buffer. What is the impact, if any, of the drainage plan?*
   The report has been revised to address the drainage of water into the water quality buffer. In essence, the drainage will likely not impact the wetland because the land on which the homes will be constructed are composed of dense material that functions as impervious surface. The homes will replace the dense impervious surface with roof tops on which clean water will be generated. The clean water will not have a negative impact on the water quality of the wetland. The change from one impervious surface type to another will not result in significant increases to the volume of water entering the wetland.

10. *BIMC 16.20.110 requires a minimum of seven years of monitoring.*
    The report has been changed to reflect the seven years of monitoring.

11. *The contingency plan should include plant replacement if dead/low vigor identified on an annual basis – not wait until the end of the monitoring period.*
    The contingency plan was intended to require plant replacement on a yearly basis as necessary. It has been revised in the report.

If there are any questions regarding the report revisions or the responses to the comments, please contact me at joanne@eco-land.com or 360-674-7186.

Sincerely,

Joanne Bartlett

Joanne Bartlett, PWS
Senior Biologist

Attachment
Revised Wetland Delineation Report

Cc: Amy Duerr-Day