

February 13, 2017

City of Mercer Island  
Attn: Evan Maxim  
9611 SE 36<sup>th</sup> Street  
Mercer Island, WA 98040

**RE: Applicant's Response to 12.7.16 ESA memo for Proposed NFH Single Family Residence (CA016-002)**

Wetland Resources, Inc. staff originally submitted a critical areas report (title: Critical Area Study and Mitigation Plan for NFH - 8000 SE 20<sup>th</sup> Street SFR, date: August 9, 2016) in support of a City of Mercer Island Critical Areas Determination application (CA016-002). City staff contracted ESA to provide third-party review for the project.

Wetland Resources staff obtained a copy of the review comment letter written by ESA (title: Proposed NFH-Single Family Residence (CA016-002) – Environmental Review, date: December 7, 2016). The letter requests additional information from the applicant related to wetland data and the proposed mitigation approach. The following narrative is intended to serve as the applicant's formal response to the request for additional information found in the ESA memorandum. The *Conclusions and Recommendations* section from the memorandum is re-stated (bold, indented), and is immediately followed by the applicant's response (normal font, justified). A revised Critical Area Study and Mitigation Plan will also be submitted for review.

**1. An updated CAS and Mitigation Plan presenting results of additional wetland investigation focused on the lawn areas to the west, northwest, and north of the existing residence; including data plots/ wetland determination data forms and a map depicting data plot locations;**

Wetland Resources staff (Scott Brainard - Principal Ecologist, and Niels Pedersen - Senior Ecologist) conducted a site investigation on 12.15.16 to evaluate conditions within the lawn areas to the west, northwest, and north of the existing residence. Staff sampled soils in the three areas most likely to display wetland conditions (areas with the wettest surface conditions on the day of the investigation). High-accuracy Trimble GPS was used to locate the data plot locations. Staff findings from this investigation are described in the revision 1 Critical Area Study and Mitigation Plan, under the Section 2.0 *Methodology*, subsection 2.4 *Wetland Determination Discussion*. See also Section 3.0 *Wetland and Stream Delineation Report*, subsection 3.2 *Wetland Determination Findings*. In summary, vegetation and soils represent "difficult situations" as described by the WMVC Regional Supplement, and wetland hydrology was absent from all three sampling locations during a period of above-average precipitation. Regulated wetlands were determined to be

absent from the subject property based on hydrology findings.

**2. Updates to the proposed Project Plans, including the Mitigation & Restoration Plan, to reflect additional site analysis focused on wetlands and potential additional mitigation (if wetlands are identified); and**

Wetland conditions were determined to be absent from the subject property. No additional mitigation is required related to wetland impacts. No modifications were made to the Project Plans to account for wetlands, which includes the Mitigation & Restoration Plan. The absence of on-site wetlands is discussed in greater detail within the revised Critical Area Study and Mitigation Plan prepared for this project.

**3. Revision to the proposed mitigation approach to justify piped watercourse buffer reduction. Proposed mitigation should be focused on restoring the specific function of the piped watercourse, such as considering opportunities for off-site restoration of a watercourse within the City or daylighting a section of the stream channel at and immediately upstream of the Lake Washington convergence. See review discussion and detailed recommendations on page 3 of this memo...**

Background

The original mitigation approach was created as a result of personal communication between Wetland Resources staff and the previous City of Mercer Island planning staff (Shana Restall). The directive from city staff was to satisfy all requirements of the Mercer Island City Code (MICC) related to reduction of buffer widths for watercourse buffers in exchange for a reduction of the standard buffer width from 25 feet to zero feet.

Criteria for buffer width reduction is as follows, and is taken directly from MICC 19.07.070(B)(2):

*a. The code official may allow the standard buffer width to be reduced to not less than the above listed minimum width in accordance with an approved critical area study when he/she determines that a smaller area is adequate to protect the watercourse, the impacts will be mitigated by using combinations of the below mitigation options, and the proposal will result in no net loss of watercourse and buffer functions.*

The applicant believes that the original mitigation approach unambiguously meets or exceeds the MICC standards for buffer width reduction, and remains adequate to support the revised proposal for buffer width reduction. See *Code Compliance Discussion* below for a detailed analysis of the validity of the mitigation approach.

Mitigation Opportunities Explored

The ESA review memo asks the applicant to focus on providing mitigation that would restore the functions of the piped watercourse, including daylighting the channel near the confluence with Lake Washington, or providing off-site stream restoration. The applicant spent considerable time and effort determining the feasibility of these mitigation options. In summary, it is not possible to daylight the stream near the confluence because permission from the adjacent property will not be granted, and it is not possible to restore off-site areas within the sub-basin due to lack of opportunity. These findings are presented in greater detail below (see *Stream Daylighting Discussion* and *Off-Site Restoration Discussion*).

Despite the infeasibility of the mitigation options presented in the ESA memo, there may be a creative opportunity that meets the intent of the third-party consultant's request. In advance of that discussion, it shall be noted that the original mitigation proposal meets the buffer width reduction standards set forth in the MICC, and should be allowed on its own merits.

The intent of the ESA request for daylighting/restoration is to improve habitat conditions for salmonids within Lake Washington. To further that goal, the applicant is willing to remove two sections of the existing bulkhead along the lake shoreline, to be replaced with a sandy beach. It is commonly understood that bulkheads remove shallow water habitat, which provide forage, cover, and resting opportunities for juvenile salmon. Providing a low-energy beach along the property is expected to improve ecological functions beyond that which would be achieved by daylighting the piped watercourse (for 40-50 lineal feet as suggested by ESA), and is achieved without encumbering adjacent properties. See Section 1.0 *Proposed Project*, subsection 1.5 *Proposed Ecological Improvements* in the Revision 1 Critical Area Study and Mitigation Plan.

#### Stream Daylighting Discussion

The property owner recently met with the adjacent property owner to discuss the possibility of daylighting the piped watercourse. The outcome was that the neighboring (affected) property owner is both unwilling and unable to support any proposal to daylight the stream.

The owner's unwillingness is based on the understanding that the piped watercourse would become a Type 1 watercourse, which could limit development potential on his property (piped watercourses require 25-foot buffers, Type 1 watercourses require 75-foot buffers).

The owner's inability to support a daylighting proposal is based on a pending lawsuit that includes the property as a contested asset. It is infeasible (from a legal perspective) for the current owner to allow additional encumbrance on the property by supporting a proposal to daylight the stream.

Any daylighting scenario would increase buffer encumbrance on the neighbor's property. MICC 19.07.070(B)(4)(b) requires applicants to obtain written agreement from affected neighboring property owners when a proposal to restore a watercourse would result in increased buffers on adjacent properties. No such written agreement can be obtained. It is therefore not feasible to daylight the piped watercourse.

#### Off-Site Restoration Discussion

The applicant's consultant conducted a thorough analysis of off-site restoration opportunities. Based on communication with city staff Lauren Anderson (email correspondence, date: 12/12/16, subject line: Niels Pedersen- CAO-16-002), off-site restoration must occur within the same sub-basin. The limits of the sub-basin were determined using the City of Mercer Island stormwater system map (considering all areas that ultimately outflow to Lake Washington at the outlet of the piped watercourse), and a pour point model that determines contributing basin based on a 3'x3' pixel Digital Elevation Model.

The applicant researched ownership of all parcels that are located within the sub-basin. Only two parcels are under public ownership; Sound Transit owns two adjacent parcels that are used for

the Mercer Island Park and Ride, adjacent to I-90 (King County parcel ID numbers 531510-1640 and 531510-1635). No open streams are located in the vicinity of the Sound Transit parcels, and the piped channel that is located on the property is beneath a recently poured cement sidewalk. Restoration is not appropriate in this area.

Several open channels exist in upstream portions of the stormwater network, within the city right-of-way. These areas could benefit from restoration planting and invasive species removal. However, permanent protection cannot be guaranteed within the right-of-way, and regular maintenance typically results in total loss of restoration plantings (even if agreements are made to avoid these areas). Off-site restoration does not appear to be appropriate for this project.

#### Buffer Width Reduction Code Compliance Discussion

As previously described, buffer width reduction is contingent upon meeting three clear standards, set forth in MICC 19.07.070(B)(2):

- Standard 1: a smaller area is adequate to protect the watercourse,
- Standard 2: the impacts will be mitigated by using combinations of the below mitigation options, and
- Standard 3: the proposal will result in no net loss of watercourse and buffer functions.

Note: “the below mitigation options” in Standard 2 refers to MICC 19.07.070(B)(2)(b)(i)-(x)

The applicant has demonstrated, with affirmation from ESA (12/7/16 ESA memo, page 3, *Review of Proposed Development and Mitigation Plan*, paragraph 3), that the piped condition of the watercourse isolates the critical area from the surrounding landscape. This reality frames all discussion of buffer impacts and mitigation for this project; buffers exist to provide protection to critical areas, and in the case of piped features they provide no protection.

#### Standard 1

There is no correlation between the width of the buffer and the adequacy of protection it provides, because the buffer provides no protection to the critical area. A smaller area is therefore adequate to protect the watercourse. Standard 1 is met.

#### Standard 2

Mitigation is intended to compensate for impacts to critical areas. Proposed buffer reduction does not alter the condition or functions of the piped watercourse. Development within 25 feet would have no effect on the critical area, because it is isolated. This project does not impact critical areas, so there is no imperative to provide mitigation. The buffer reduction request should be granted simply because it is a reasonable proposal. Standard 2 is met.

As a demonstration of personal commitment to environmental stewardship, the applicant proposes to install a green roof and pervious materials, to remove a portion of an existing bulkhead, and to install a sandy beach. These actions are intended to offset the increase in impervious surface that will result from this project as a whole, and will modestly improve opportunities for juvenile salmon in Lake Washington. This proposal is expected to improve ecological functions beyond what would be achieved by daylighting the storm pipe at the confluence with Lake Washington, or by restoring a portion of an open-channel roadside drainage feature upstream of the site. As an added benefit, green roof and pervious surfaces

represent a “combination of mitigation options” from the list that appears in MICC 19.07.070(B)(2)(b)(i)-(x).

### Standard 3

Any project action occurring within 25 feet of the pipe would not impact watercourse and buffer functions because the pipe isolates the water, and the buffer provides no function to the piped watercourse. The existing condition (legally existing, non-conforming use) and post-development condition (reduced buffer width) are equivalent in terms of their impact to watercourse and buffer functions (no impact). The proposed development, being equivalent to the existing condition, will result in no net loss of watercourse and buffer functions. Standard 3 is met.

### Conclusion

This project meets all MICC standards of review for allowed buffer width reduction. Furthermore, this project does not preclude future daylighting of the stream. The ESA memo’s assertion that buffer width reduction is contingent upon “restoring,” “improving,” “enhancing,” or “significantly increasing functions” of the piped watercourse is not supported by the plain language used in the MICC to define buffer width reduction allowances. The proposed buffer reduction should be allowed based on demonstrated compliance with the MICC.

If you have any questions, please feel free to call the office at (425) 337-3174, or email at [niels@wetlandresources.com](mailto:niels@wetlandresources.com)



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