Architects PLLC

October 27, 2017

**Lauren Anderson, Assistant Planner**City of Mercer Island Development Services Group 9611 SE 36<sup>th</sup> St.
Mercer Island, WA 98040

RE: ADU14-003, CAO17-005, SHL17-007-004, Second Review Letter Land Use Applications for proposed home, ADU driveway and retaining wall construction within a steep slope along the shoreline for the Lady Bug Trust. DEV17-009 Impervious Surface Deviation Application has been withdrawn.

Dear Lauren,

Thank you for your review and your summary of staff comments for the Land Use submittal for the Ogden Point Residence. I am writing this letter to you in response to your first review letter for the land use application. Below and in **bold**, I have responded to the review comments.

#### General

1. To reduce site plan discrepancies, please submit one complete set of plans addressing all eplan comments and the comments listed in this letter.

One complete set of plans addressing all eplan comments and the comments listed in the review comment letter have been submitted.

2. Please provide a response letter that responds to all of our comments.

See below for all responses to the comments.

3. When resubmitting the revised site plan set, please add "clouding" around all the changes from the first to the second submittal.

Changes specifically requested by the reviews and mentioned in this response letter have been clouded. Note that there have been several minor changes to the site plan since the previous submittal.

4. The City will accept the Building Permit (intake meeting) after we receive confirmation from the air excavation results that the location of the proposed ADU will not have a negative impact on tree 156.

Air excavation was performed by the Project Arborist on September 14, 2017 in the presence of the City's Arborist. The ground was heavily compacted and the roots were not exposed. It is our understanding that the excavation was sufficient but will

require a site visit once excavation for the garage/ADU has begun to fully assess the potential impact to tree 156.

# Planning:

5. Please provide a Construction Management Plan (CMP), refer to the CMP Checklist provide.

**Construction Management Plan will be provided prior to permit issuance.** 

6. Please label the setbacks and width on all pages on the plans.

Please see the updated plans for the setbacks.

7. On Sheet A2.4, please verify that the proposed retaining walls within the required side setbacks meet our height requirement set forth in MICC 19.02.050. The maximum height is 144 inches for cut slopes, and the proposed retaining wall 03 is in question at a maximum height of approximately 29 feet 9 inches. In addition, with the proposed code update, the maximum height of the retaining wall outside of the required setbacks is 17 feet. Please consult with your Geotechnical Engineer and Don Cole (Building Official) about the design of the retaining wall, possible options include stepping the retaining wall and/or raising the driveway from the current proposal (still must meet maximum driveway grade of 20%).

Please see the revised shoring wall design on sheet A2.4. The proposed retaining wall complies with the new Residential Development Standards. The maximum height of retaining wall segments are less than 17'-0", except within the side yard setbacks where a maximum height of 12'-0" is maintained.

8. Please provide building elevations drawings that the ADU shall be designed consistent with the existing roof pitch, siding, and windows of the principal dwelling unit.

Please see note 1 on sheet A2 of the ADU elevations. The ADU is designed consistent with the main house.

9. Please provide the lot line revision (LLR) documents within the plan set for SUB17-004. Please provide the same documents that were provided in submittal 2 but illustrating the change in the driveway, retaining wall, and garage location. Those documents (plans) will be the ones that will be signed and recorded following final plat review.

Please see the Lot Line Revision documents included with this submittal.

10. Please remove the garage and Accessory Dwelling Unit (ADU) eaves from the 5-footsetback form the access easement, as they are considered a part of the structure and not structures are allowed within that 5-foot setback.

The garage and ADU eaves have been removed from the 5-foot easement setback.

#### 11. Critical Areas:

a. Please provide a maintenance and monitoring plan for the mitigation areas.

Mitigation planting maintenance and monitoring will be required for 5 years from the date of project completion to ensure mitigation success and critical area protection.

# A maintenance and monitoring plan for 5 years will be furnished prior to permit issuance.

b. Please provide a temporary erosion and sediment control plan. Erosion control measures shall be in place, including along the outer edge of the critical area (steep slope) prior to clearing and grading. Monitoring surface water discharge from the site during construction may be required.

### Refer to Triad's response letter, dated 10/26/17

c. Please provide a storm water and erosion control management plan consistent with MICC 15.09.

#### Refer to Triad's response letter, dated 10/26/17

d. Please provide a conceptual grading plan indicating the location of the grading and what the proposed grade will be.

Refer to Triad's response letter, dated 10/26/17.

e. Please provide a conceptual TESC plan, however official review by Ruji Ding will be performed under the building permit.

Refer to Triad's response letter, dated 10/26/17.

f. Please provide a complete Bond Quantity Worksheet.

Bond Quantity Worksheet will be provided prior to permit issuance.

- 12. Plat Alterations (future site development permit):
  - a. The owner(s) of a project shall deposit with the city a performance bond or funds for a set-aside account in an amount equal to 150 percent of the cost of the required improvements, as established by the city engineer. Such security shall list the exact work that shall be performed by the owner(s) and shall specify that all the deferred improvements shall be completed within the time specified by the city engineer and if no time is so specified, then not later than one year. The city may also required a bond or set-aside account securing the successful operation of improvements or survival of required landscaping for up to two years after final approval.

We understand that a performance bond needs to be in place before the building permit will be issued.

**b.** Please contact the City's Civil Engineer (Ruji Ding) and the Building Official (Don Cole) to discuss construction seasons and possible drainage control.

See Triad response letter, dated 10/26/17.

#### Fire

13. While the fire code does not require additional fire protection for the dock it is felt that it would be a fire safety enhancement. The large size of the boat, its proximity to others around it, and the fuel capacity present fire suppression challenges. We would be willing to consider Fire Code Alternate Request with the addition of one class 1 dry standpipe connection on the dock and one adjacent to the exterior of the house. These shall meet NFPA 14-2013.

The Owner is currently researching costs associated with the sprinkler system and will evaluate Code Alternates more carefully once the City has made a determination on the sprinkler system based on the submitted permit documents.

14. The Fire Main and water service for this project is conceptual in nature and will be evaluated on an associated permit. The type of sprinkler system that is required for this will determine fire service main size or if it can be combined with the domestic service. A Fire Code alt request is required.

Refer to Triad's response letter, dated 10/26/17.

15. At this early stage in approval it looks like a 13R sprinkler system and an NFPA 72 Household Fire Alarm is required for the ADU. As further information is provided requirements may change.

#### Duly noted.

- 16. Please refer to the comments on SUB17-004 plans.
- 17. The City will need full building plans to determine fire protection requirements for the house. Until then the sprinkler type is unknown and water details cannot be completed.

Building plans will be provided at the building permit intake meeting scheduled for November 14.

#### Trees:

18. Tree 156 shall be protected and its limits of disturbance should be detailed by the Project Arborist. The submitted Arborist memo did not describe the requested air excavation or how the limits of disturbance had been determined. This analysis should include full root zone analysis with air tool by certified Arborist. Limits of proposed disturbance should be marked in the field for the TRAQ Qualified Arborist visit. The City Arborist shall be notified at least one week ahead of time of when the excavation will take place so a conversation between the Project Arborist and the City Arborist may take place while the roots or trench

is exposed. The placement of the structure near tree 156 shall be positioned in accordance to the results of these limits of disturbance. If proposed limits of excavation where air excavation takes place and significant roots are discovered, air excavation should keep going until an acceptable distance is found.

Air excavation was performed on September 14, 2017. The ground was heavily compacted and the arborist was not able to expose any roots. The excavation was sufficient but will require a site visit once the excavation has occurred to assess the level of impacts to tree 156.

19. On the Tree 156 Memo, please remove the X from the tree 156 label on the second page.

Tree 156 Memo has been removed from this submittal. Tree 156 will be retained and protected.

- 20. These comments are to be implemented before any building permit will be accepted for intake:
  - a. Show all tree information on Civil sheet.

Tree symbols and tree numbers, both to remain and to be removed has been added to the Civil plan sheets for reference.

b. This northwest property line grove of trees shall be protected as shown on L-1.0 dated 7/26/17.

Please see the revised L-1.0 for the grove of tree protection note.

c. Building plans shall use reasonable best efforts to design the home, driveway, underground utilities and other proposed improvements in a manner that provides for reasonable development while minimizing impact s to Regulated Trees on site and in the right of way. Conduct all work in accordance with best construction practices to retain as many trees as possible per MIC 19.10.080A.3b.

Reasonable best efforts will be considered with the design of the home, driveway, and underground utilities.

d. Due to the proposed site development and building permit application following the new Residential Code Update, this means the project needs to meet the revised tree code requirements. One proposed requirement is to retain a minimum of 30% of the trees on site over a rolling five-year period. Another is that a permit is required to remove any tree unless specifically exempted.

A minimum of 30% trees will be retained.

#### Building

21. To avoid incurring impact fees on this lot, a complete building permit application must be submitted within one year from the date of demolition of the existing single-family residence. Impact fees will apply to the lot if it is vacant for 12 months or more.

Building permit intake meetings have been scheduled for November 14th for both lots.

22. Please contact Don Cole about the feasibility of a Wet Season Deviation.

The need for a Wet Season Deviation will be evaluated based on the expected timeline for permit issuance.

Sincerely,

David A. Jaffe, AIA



Lauren Anderson, Assistant Planner City of Mercer Island Development Services Group 9611 SE 36<sup>th</sup> Street Mercer Island. WA 98040

RE: ADU17-003, CAO17-005, SHL17-007, SUB17-004 Second Review Letter Land Use Applications for proposed home, ADU, driveway and retaining wall construction within a steep slope along the shoreline for the Lady Bug Trust

Dear Lauren Anderson,

Thank you for your review and your summary of staff comments for the Land Use submittal for our project for the Lady Bug Trust. I am writing this letter to you in response to your first review letter for the land use application. Below and in **bold**, I have responded to the review comments related to our engineering design of the project. I have prepared a new plan set (now 7 sheets) which provides additional information and a revised design which should satisfy the review comments. Please let me know if you would like any further information or clarification any points. Once again

Sincerely,

Adam Stricker, PE (425) 415 – 2076

Review comments followed by Triad response (in bold)

#### 11. Critical Areas:

b. Please provide a temporary erosion and sediment control plan. Erosion control measures shall be in place, including along the outer edge of the critical area (steep slope) prior to clearing and grading. Monitoring surface water discharge from the site during construction may be required.

A conceptual erosion control plan has been added to the set as sheets C5 and C6.

c. Please provide a storm water and erosion control management plan consistent with MICC 15.09.

A conceptual erosion control plan has been added to the set as sheets C5 and C6. Stormwater management features were shown on the previously submitted Conceptual Grading and Utility Plan sheets (C3 and C4) and have been updated and included in this resubmittal.

d. Please provide a conceptual grading plan indicating the location of grading and what the proposed grade will be.

Site grading was shown on the previously submitted Conceptual Grading and Utility Plan sheets (C3 and C4) as well as the driveway centerline profile. These sheets have been updated and are included in this resubmittal.

e. Please provide a conceptual TESC plan, however official review by Ruji Ding will be performed under the building permit.

A conceptual erosion control plan has been added to the set as sheets C5 and C6.

12. Plat Alterations (future site development permit):

b. Please contact the City's Civil Engineer (Ruji Ding) and the Building Official (Don Cole) to discuss construction seasons and possible drainage control.

Noted, we will have this discussion during the building permit submittal.

14. The Fire Main and water service for this project is conceptual in nature and will be evaluated on an associated permit. The type of sprinkler system that is required for this will determine fire service main size or if it can be combined with the domestic service. A Fire Code alt request is required.

Noted, we will update the water system sizing when the sprinkler size determination has been made. Domestic water supply sizing will be updated once the City has reviewed our water meter sizing worksheet, which will be submitted with the building permit.

In addition to these responses following has been added to the ePlan set.

14. Show all tree information on Civil sheet.

Tree symbols and tree numbers, both to remain and to be removed have been added to the Civil plan sheets for reference.

There are two sewer mains in this area. Please show the locations of the sewer mains correctly. Also show and call out the pubic sewer easement limits.

The location of a gravity sewer line was surveyed by Terrane and is now shown on the plan set. Asbuilts obtained from the City indicate the second line, a pressure line, was installed at the same time and in the same trench. Asbuilts indicate the pressure sewer line is placed 6-inches away towards the Lake in relation to the surveyed gravity sewer line and at the same elevation.

The sewer easement (#5110633) document was obtained by Terrane. The easement location is not defined by the easement document and is therefore not able to be plotted. The easement language, in respect to new structures and construction states as follows:

"The grantor of said easement shall not prevent said grantors from erecting any type of structure or structures upon the ground over such pipe line as long as reasonable precautions are taken to prevent damage to such pipe line, and reasonable access by grantee to such pipe line is provided for purposes of inspection, repair, or replacement thereof."

This is not a city water main, it is a private fire line.

Noted, this line is now referred to as a "Private Fire Line"

Add note: The design of the the this fire line shown on this plan is not reviewed and approved. The design will be reviewed under the building permit.

Noted, language to this effect has been added to the plans.

Please note, if all private water lines must be located in the recorded private utility easement. All offsite utility work will occur in the access and utility easement (Rec. No. 9304061280) that benefits the project property. A Box note stating this has been added to the plans.

Lot 2 is not a part of the landuse permits. For this permitting package, please only show 1 water meter for planning purposes.

Noted, the Lot 2 water infrastructure is not shown.

#### Add note:

The water system design including the water meter, water service line and water supply line shown on this planning set are not reviewed and approved. The design will be reviewed under the building permit. **This note has been added** 

#### Add note:

The drainage connection to the existing CB is not approved by the City of Mercer Island. This connection may not be accepted and approved upon the reviewing of the future building permit by the City of Mercer island.

This note has been added. Does this comment reject our proposal to connect to the existing catch basin? We would like connect to this catchbasin so that the bulkhead and outfall would not have to be rebuilt. If the catchbasin is in working condition we would like to show this connection on the building permit plans.

Provide detail that shows hydrant installation. Hydrant shall be at similar elevation as access road and clear space provided. Provide detail that shows hydrant installation. Hydrant shall be at similar elevation as access road and clear space provided.

This hydrant location has been revised and is now at the edge of road in the Lake side of the existing private drive. This location places the hydrant at the same grade as the road and is one of the few level areas within our utility easement to place the hydrant. We look forward to revisiting the hydrant requirement/placement with the review of the building permit plans.

Ensure angles of approach and departure meet fire engine requirements.

If fire engine access is a requirement we can perform a AutoTurn analysis for the building permit. Please let us know if this is required and the dimensions of the fire engine we will have to show accessing the lower motor court.

No. 105A

# EASEMENT FOR SEWER LINE

## 1. General

The undersigned, Grantors, for and in consideration of One Dollar (\$1.00) and other valuable consideration, the receipt of which is hereby acknowledged, by these presents bargain, sell, transfer and convey unto MERCER ISLAND SEWER DISTRICT, Mercer Island, Washington, Grantee, an easement over, across, along and under the following described property situated in King County, State of Washington, to-wit:

The Westerly 20 feet of the Northwesterly 217 feet of the Southeasterly 317 feet of Tract "A" Replat of Island Park

EASEMENT LOCATION UNDEFINABLE. LINE SHOWN AS LOCATED BY TERRANE LAND SURVEYING 10-13-17 AND VERIFIED BY MERCER ISLAND SHORT PLAT NO MI-82-08-15

said easement being for the purpose of installing, constructing, maintaining, operating, repairing and replacing the sever line or lines and all necessary connections and appurtenances hereto, together with the right of ingress and egress to, from and across said described property for the foregoing purposes, provided that in the original installation of such pipe line or lines, and appurtenances, the Grantes shall immediately after such installation restore said premises to their original condition as near as may be.

SUBJECT TO THE FOLLOWING RESTRICTIONS: The exact portion of said property across which said pipe is to be laid is subject to determination by grantors, and in conformance to where the line enters and leaves abutting property. The granting of said easement shall not prevent said grantors from erecting any type of structure or structures upon the ground over such pipe line as and reasonable precautions are taken to prevent damage to such pipe line, of inspection, repair, or replacement thereof. Any repair or maintenance inconvenience as possible to grantors, and grantee shall, at the termination possible. Condition of contract specification shall inure to the benefit



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Thymolyday Thurle Ong den

STATE OF WASHINGTON ) SS. COUNTY OF KING )

On this 3 day of Mountain 1959, before me, the understaned, a NOTARY PUBLIC in and for the State of Washington, duly commissioned and sworn, personally appeared Japanese D. Oyden and Selen R. Oyden

to me known to be the individuals described in and who executed the Teragoing instrument, and acknowledged to me that the signed and solled the said instrument as the free and voluntary act and deed for the trees and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

Notary Public in and for the State of Washington, residing at Manysvill

DEC 8-1959

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