



CITY OF MERCER ISLAND

9611 SE 36th Street • Mercer Island, WA 98040-3732

(206) 275-7605 • FAX (206) 275-7726

www.mercergov.org

January 23, 2018

Demetriou Architects

Attn: David Jaffe

3675 West Mercer Way

Mercer Island, WA 98040

Via email

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 David Jaffe,

The City of Mercer Island Development Services Group has performed a review for compliance with the zoning code, Title 19 of the Mercer Island City Code (MICC) for the above land use applications. The following items need to be addressed before continuing the review process of the application. Please refer to each application's electronic plan or "eplan" comments and refer to the additional comments below:

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.
2. Please provide a response letter that responds to all review comments.
3. Please add "cloud" around all of the changes from the first to the second submittal on the revised plan set.

Planning:

4. Please provide a Construction Management Plan (CMP); please refer to the CMP Checklist from August 29, 2017 (Attachment D). The CMP is required prior to the decision of the consolidated Land Use Applications listed above. This would be a high-level plan, we can meet in-person to discuss the level of detail if needed.
5. Please change the application number from SWB17-004 to SUB17-004 for the Lot Consolidation on Sheet 1-3 of 4.
6. On Sheet L-3.0 please add a note next to the proposed dock that it is under review under a separate permit, SHL17-009 Shoreline Substantial Development Application.
7. Critical Areas:

- a. Please provide a maintenance and monitoring plan and planting schedule 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.
- b. Please make sure the Bond Quantity Worksheet reflects any changes due to the new Arborist Report findings. If any tree species or amount changed (or any plantings) please revise the current Bond Quantity Worksheet. Bond Quantity Worksheets can be found here: <http://www.kingcounty.gov/~media/depts/permitting-environmental-review/dper/documents/forms/ls-wks-sensareaBQ-pdf.ashx?la=en>
- c. After verifying that the Bond Quantity Worksheet is up to date, please provide a complete Assignment of Funds or Performance Bond. Prior to approval of the consolidated land use review, the Assignment of Funds or Performance Bond must be complete. Please let me know if you need the forms.

Contact: Lauren.Anderson@mercergov.org or 206-275-7704

Fire:

8. As stated in the last review letter (Attachment C) the below still applies:
 - a. 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 alternate request is required.
 - b. At this early stage in approval it looks like a 13R sprinkler system and an National Fire Protection Association (NFPA) 72 Household Fire Alarm is required for the Accessory Dwelling Unit (ADU). As further information is provided requirements may change.
 - c. 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.
9. Please show edge of pavement and topography on sheet C3 in the area of the turn.
10. Please provide a preliminary code alternate related to the preliminary Fire Plan Review. Refer to the attached Code Alternate Information Sheet (Attachment A) and the Preliminary Fire Review Sheet (Attachment B).

Contact: Herschel.Rostov@mercergov.org or 206-275-7607

Trees:

11. Please provide the updated Arborist Report that reflects the revised tree code (MICC 19.10) which came into effect November 1, 2017.
12. Please provide plans that match up with the new Arborist Report to address exceptional trees within the footprint, driveway, and retaining wall location, including driplines and limits of disturbance.
13. Please update all sheets and documents that reference the old tree removal plan and old tree code, such as the project narrative.

Contact: John.Kenney@mercergov.org or 206-275-7713

Building:

14. Please contact Don Cole about the feasibility of a Wet Season Deviation, Demo, clearing, and grading. Please keep in mind that the demolition, clearing, and grading should not have a negative impact on exceptional trees, please consult with John Kenney.
15. For Your Information: During building permit and site development review the retaining wall design will require peer review, which is charged to the applicant.
16. Further retaining wall design and official Building review will occur during the Building Permit and Site Development Permit review process.

Contact: Don.Cole@mercergov.org or 206-275-7701

The Mercer Island Review Team's processing of the land use applications listed above are on hold until these issues are resolved. Please note, Ruji Ding (civil engineering) will further review the temporary erosion and sediment control plan, and the stormwater and erosion control management plan during Site Development and Building Permit review. Based upon review of the comments, it seems that that it may be possible that if there are substantial changes that occur then all reviewers would need to re-review.

Please do not hesitate to contact me at 206-275-7704 or via e-mail at lauren.anderson@mercergov.org if you have any questions. ***Please let me know if you would like to meet in-person to go over the review comments if needed.*** It may be efficient to meet in person to go over review items #4 and #11, as these items are big review items that could possibly affect the proposal.

Please provide the above items by March 21, 2018 (**60 days**). The City may authorize additional time for submittal of the above information based upon a written request for a deadline extension, accompanied by a schedule for resubmittal.

Sincerely,



Lauren Anderson, Assistant Planner
City of Mercer Island Development Services Group
Lauren.anderson@mercergov.org
(206) 275-7704

- Enc. Attachment A** Code Alternate Information Sheet
- Attachment B** Preliminary Fire Review Sheet
- Attachment C** Second Review Letter

Attachment D Construction Management Plan (CMP) Checklist



Mercer Island Fire Marshal's Office
3030 78th Avenue SE
Mercer Island, WA 98040
(206) 275-7966

FIRE CODE ALTERNATE REQUEST

This document is intended to provide guidance on the approval process for a code alternate request.

The unique and challenging geography, water system, and design desires often make it difficult to meet the Fire Code requirements for a project on Mercer Island. The fire code allows applicants to propose alternate fire protection or design methods to be used to overcome these deficiencies.

2012 IFC - [A] 104.9 Alternative materials and methods.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. The fire code official is authorized to approve an alternative material or method of construction where the fire code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

Draft Submittal and Review Process:

Before you propose an alternative to mitigate a fire service deficiency, you will be provided with a "Fire Plan Review" sheet with the specific deficiencies for your project. You will need to address each fire deficiency noted. Checked items marked on this review sheet are areas where the required code is not met. You will draft your request letter, stating the scope of work for the project, citing the deficiencies that were identified from the review sheet, proposing your specific items that you propose as alternative(s) to meeting the code, and finally a summary statement which states "We believe the proposed is equal to or better than the code requirement." Your proposal or "code alternate" will be reviewed to determine if your proposal meets this final summary statement.

Below is a list of items that will be considered as alternative fire protections.

- An "NFPA 13D - Standard" sprinkler system
- An upgrade to an "NFPA 13D – Plus" sprinkler system
- An upgrade to an "NFPA 13R – Plus" sprinkler system
- Installation of a "Household Fire Alarm System" per NFPA 72 Chapter 29
- Provide fire retardant coating treatment in the attic and crawl space
- Install 1-hr rated gypsum in all areas.
- Provide solid core or fire rated doors
- Any other items that you would like to propose

All fire code alternate proposals are required to be submitted for review to our Mercer Island Development Services Group. Either in person or submitted to our FTP site. Please contact the Mercer Island Fire Marshal's office for additional information.

B



Mercer Island Fire Marshal Office
3030 78th Avenue SE
Mercer Island, WA 98040
(206) 275-7966

Permit No: SUB 17-004

Preliminary

FIRE PLAN REVIEW

Name: _____

Address: 3075 W Mercer Way

1. PROJECT TYPE

NSF + ADU

Alteration or Addition

Valuation Ratio

Proposed Work _____ / Assessed Value _____ =
_____ % (from Fire Area Work Sheet)

Exempt structure - detached garage or similar structure less than 750 sf.

Less than 10% (fire review not required)

10 - 49% (monitored Household Fire Alarm System per NFPA 72 Chapter 29, if fire deficiency)

50% or greater (substantial alteration)

2. FIRE AREA

Fire Area = 11,843 square feet (sf) (from Fire Area Worksheet)

≥ 10000 SF Requires a NFPA 13R or 13 sprinkler system (use 13R sprinkler system as base)

3. FIRE FLOW

Hydrant ID# C2-23 PSI _____

Flow Required 3000 GPM @ 20 psi (from IFC table B105.1)

With Sprinkler Reduction 1500 GPM @ 20 psi (50% reduction)

Available 2480 GPM @ 20 psi (Max of 500gpm for a 2-port hydrant)

Does not meet fire flow even with sprinkler reduction (use 13R sprinkler system as base)

4. HYDRANTS

Number Required: 1 Spacing _____ Max. Frontage _____

Number Available: 1 Spacing _____ Frontage _____ *Added*

Distance from all building points to a hydrant 600' + (300' Max, 600' w/ Sprinklers)

OK w/ Sprinklers

5. FIRE ACCESS ROADS

- Distance from all points to access road (150'). 1015'
- Length provided: 1000' ft.
- Width Required: 26 + (< 500' = 20, ≥ 500' = 26')
- Width provided: ≥ 16' 12' - 16' ≤ 12'
- Radius provided (minimum 28' inside/45' outside): ? ft.
- Turnaround provided: None Sub Standard Standard
- Grade Provided: < 10' < 15' < 20' > 20'

6. CODE ALT/DEFICIENCIES

- Distance _____
Length _____ = Width 20' 26'
- Width Provided: _____
 - 16'
 - 12' - 16'
 - ≤ 12' (Code Alternate Required)
- Radius _____
- Turn Around
 - Substandard
 - None
- Grade _____
 - 10' - 15'
 - 15' - 20'
 - Over 20' (Code Alternate Required)

Attachment C



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August 29, 2017

Demetriou Architects

Attn: David Jaffe

3675 West Mercer Way

Mercer Island, WA 98040

Via email

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. DEV17-009 Impervious Surface Deviation Application has been withdrawn.

Dear David Jaffe,

The City of Mercer Island Development Services Group has performed a review for compliance with the zoning code, Title 19 of the Mercer Island City Code (MICC) for the above land use applications. The following issues need to be addressed before we continue processing of the application. Please refer to each application's electronic plan or "eplan" comments and refer to the additional comments below:

General:

1. To reduce implications of site plan discrepancies, please submit one complete set of plans addressing all eplan comments and the comments listed in this letter.
2. Please provide a response letter that responds to all of our comments.
3. When resubmitting the plan set, please add "clouding" around all of the changes from the first to the second 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.

Planning:

5. Please provide a Construction Management Plan (CMP), refer to the CMP Checklist provided.
6. Please label the setbacks and width on all pages on the plans.
7. On Sheet A2.4, please verify that the proposed retaining walls within the required side setbacks meet our height requirements 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 walls and/or raising the driveway from the current proposal (still must meet maximum driveway grade of 20%).
8. Please provide building elevation drawings that the ADU shall be designed consistent with the existing roof pitch, siding, and windows of the principal dwelling unit.
 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.
 10. Please remove the garage and Accessory Dwelling Unit (ADU) eaves from the 5-foot setback from the access easement, as they are considered a part of the structure and no structures are allowed within that 5-foot 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.
 - 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.
 - c. Please provide a storm water and erosion control management plan consistent with MICC 15.09.
 - d. Please provide a conceptual grading plan indicating the location of grading and what the proposed grade will be.
 - e. Please provide a conceptual TESC plan, however official review by Ruji Ding will be performed under the building permit.
 - f. Please provide a completed Bond Quantity Worksheet, found here: <http://www.kingcounty.gov/~media/depts/permitting-environmental-review/dper/documents/forms/lis-wks-sensareaBQ-pdf.ashx?la=en>
 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 of 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 require 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.
 - b. Please contact the City's Civil Engineer (Ruji Ding) and the Building Official (Don Cole) to discuss construction seasons and possible drainage control.

Contact: Lauren.Anderson@mercergov.org or 206-275-7704

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.
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.
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.
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.

Contact: Herschel.Rostov@mercergov.org or 206-275-7607

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 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.
19. On the Tree 156 Memo, please remove the X from the tree 156 label on the second page.
20. These comments are to be implemented before any building permit will be accepted for intake:
 - a. Show all tree information on Civil sheet.
 - b. This northwest property line grove of trees shall be protected as shown on L-1.0 dated 7/26/17.
 - 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 impacts 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 MI 19.10.080A3b.
 - 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. Please refer to the links below for more information about the tree code update (19.10):

- <http://www.mercergov.org/Page.asp?NavID=3131>
- <https://www.youtube.com/watch?v=VgSySXzsOA8#action=share>
- <http://www.mercergov.org/files/Code%20comparison%20table%20-%208-21-2017.pdf>

Contact: John.Kenney@mercergov.org or 206-275-7713

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. All impact fee regulations can be found in our code (online here: <http://www.codepublishing.com/WA/MercerIsland/#!/MercerIsland19/MercerIsland19.html>) in chapters 19.17, 19.18, and 19.19 respectively.
22. Please contact Don Cole about the feasibility of a Wet Season Deviation.

Contact: Don.Cole@mercergov.org or 206-275-7701

Engineering:

23. Please refer to the eplan comments on SUB17-004, link provided below.

Contact: Ruji.Ding@mercergov.org or 206-275-7703

The eplan comments can be found under the following link:

- a. SUB17-004: https://MlePlan.mercergov.org/adobe/eplan/~CurrentSharedReviews/SUB17-004-SUB4-PLANS-073117_review.pdf.

The Customer Service Team may assist you with any questions regarding accessing the online comments and trouble shooting. They may be reached at 206-275-7728.

The Mercer Island Review Team's processing of the land use applications listed above are on hold until these issues are resolved. Please do not hesitate to contact me at 206-275-7704 or via e-mail at lauren.anderson@mercergov.org if you have any questions.

Please provide the above items by October 30, 2017 (**60 days**). The City may authorize additional time for submittal of the above information based upon a written request for a deadline extension, accompanied by a schedule for resubmittal.

Sincerely,



Lauren Anderson, Assistant Planner
City of Mercer Island Development Services Group

Lauren.anderson@mercergov.org

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Construction Management Plan Checklist:

1. Project overview describing the scope of the project.
2. Construction Schedule describing the timeframe for key phases of work and days/hours of operation (refer to attachments as examples). In addition, please provide a contingency plan.
3. Describe activities, frequencies and durations of work that may potentially impact neighbor's convenient use of the private drive such as hauling (in/out), concrete pours, material deliveries, paving, etc.
4. Contact information and the main point of contact for concerns and questions (provide name, email and/or phone number)
5. Communication Plan: how will you coordinate with the neighbors in advance of activities that may impact them. Will you contact them with email, letter, signs, etc.? If anything changes or is behind schedule, how will you alert the neighbors?
6. Describe how you plan to mitigate impacts to the neighbors regarding noise, use of the private drive, potential blocking of the drive, trucking, dirt/mud tracked onto the drive, sight distance/visibility, large trucks entering/exiting West Mercer Way, construction worker and related parking, etc.
7. Parking plan: describe how construction worker parking will be handled to prevent impacts to the private drive and right of way. Building permit conditions restrict parking in the public right of way except where directly adjacent to the property. Parking must occur on-site or in approved off-site locations.
A step to prevent undesired parking near the entrance/exit of the shared driveway onto West Mercer Way is to provide a Traffic Engineer memo for sight distance and traffic visibility for the possible placement of no parking barricades. Please contact the City Assistant Planner Lauren Anderson if you would like to discuss parking plan possibilities.
8. Construction hours: The City anticipates the following construction hours will be required at the time this project will be in the construction phase:
 - a. Monday through Friday: 7am-7pm
 - b. Saturday: 9am-6pm
 - c. Sundays and Holidays: closed
9. A potentially useful resource:
https://www.seattle.gov/transportation/docs/stuse/Construction%20Management%20Plan%20Guide_062515.pdf