September 13, 2023

City of Mukilteo Community Development Dept.
Attn: Sarah Kress, Associate Planner
11930 Cyrus Way
Mukilteo, WA 98275

RE: File: SD-2021-001/ENG-2021-019/SEPA-2021-010
Harbor Grove Subdivision

Dear Ms. Kress,

Please accept the following comments regarding the Determination of Non-Significance issued on August 30, 2023 for the Harbor Grove preliminary seven-lot subdivision.

I. The DNS is deficient and has been issued in error for the following reasons:

A. The Harbor Grove application is incomplete and contains insufficient information for the City of Mukilteo and the public to complete the analysis of impacts under SEPA and city code. The application is incomplete based on the following:

1. Variances are required under MMC Chapter 17.20.080.A.2.a. for retaining wall height within the 25-foot rear setback and MMC 17.20.020 for future building height potentially exceeding the allowable maximum of 30 feet. The proposed project design conflicts with these requirements for the reasons stated herein. See analysis in Section III here.

2. The application does not include slope and vegetation removal data required under MMC 15.12.050.C. – Table 1 – Clearing Matrix. The information provided by the Applicant in the civil plans and geotechnical study does not allow the City to complete an evaluation of impacts on topography, vegetation, or hydrology under this section or SEPA. See analysis in Section III here.

3. The DNS and project application do not provide a complete description of the project proposal. The following major elements of the proposal are not included in either the DNS or the description on page 3 of the environmental checklist:
   - Over 500 linear feet of retaining walls proposed along the property's west and south property lines. The combined height of the retaining walls would be up to 20 feet and the walls would be located within the 25' rear setback;
   - The elevation of the site would be raised by 20' above the existing ground level along the property's west and south boundaries, immediately adjacent to existing single-family development. This would be accomplished by placement of up to 10,000 cubic yards of fill material; and
   - Placement of a stormwater pump system with 160 lineal feet of force main piping and a drainage swale immediately adjacent to developed residential properties along the project's western boundary.

The omission of these key elements from the project description prevents the public and decision makers from completing an evaluation of the project under SEPA and city code. These are the most controversial components of the project and are the cause of many of the impacts on the adjacent properties. As a result, the public has not been adequately informed as to the true scope of the project and is required to "piece together" these details by interpreting the grading/drainage plans and technical studies. Most members of the public do not have the background or expertise to interpret this information. As a result, they cannot perform their own independent evaluation of how the project impacts their properties or the broader neighborhood.

In addition, the SEPA checklist and other application documents do not describe the applicant's design goals and objectives for the project. Consequently, the application fails to demonstrate that the proposed mass grading and drainage alterations are necessary for reasonable development of the property. These aspects of the design are directly and indirectly responsible for many of the project's impacts and sufficient justification for these design elements has not been provided. This information is also necessary to inform the decision maker and the public as to what alternative designs must be considered.

B. The DNS does not identify or analyze impacts on the abutting property owners on the west side of the project site. This includes impacts identified in public comments submitted previously on the project. These impacts will result in material damage to the abutting properties, including short- and long-term impacts on surface water, earth and topography, groundwater, visual impacts and aesthetics (land and shoreline use) and light/shadow impacts created by excessive grade changes, building height and retaining wall height. The impacts described herein are site-specific impacts based on the detailed plans and specifications in the application; they have not been identified or mitigated through any previous SEPA review or by the City's Comprehensive Plan.

It is worth noting that many of the impacts of the project are directly related to the part of the project proposal (i.e., grading in excess of 1,000 cubic yards) that triggered the requirement for a SEPA review in the first place under MMC 17.84.070.

C. The DNS does not identify mitigation measures or conditions necessary to address the environmental impacts of the proposal. It concludes no mitigation measures are required because the application complies with existing development regulations. It also states the proposal has been clarified and changed by the applicant:

> "…as necessary include necessary mitigation measures to avoid, minimize or compensate for probable significant adverse impacts."

However, the DNS does not describe the impacts in question, nor does it identify mitigation measures. The DNS also fails to consider alternative designs that could have been implemented with fewer impacts.

D. The Harbor Grove application conflicts with the development regulations contained in the Mukilteo Municipal Code (MMC) and other adopted standards including:

- Title 15 (Buildings and Construction);
- Title 17 (Zoning);
- Chapter 17.84 (Implementing the State Environmental Policy Act); and
- City of Mukilteo 2017 Development Standards (amended 2019).

By failing to comply with these code provisions, the proposed project generates impacts on the environment and abutting properties that have not been mitigated—either by SEPA or by existing codes and ordinances. See analysis in Section III here.

Additionally, the DNS provides no information as to how the City's existing development regulations apply to the project, or what must be done to comply with them (i.e., list of conditions/requirements). The lack of such information makes it impossible for the public to know whether or how any of the project's impacts will be addressed.

II. Discussion of Impacts Under SEPA Elements of the Environment.

The following analysis describes likely impacts of the proposed project under the elements of the Environment in WAC 197-11-444, which is adopted by reference in MMC 17.84.110. *Note: the absence of mitigation measures in the DNS presumes that the project has no impacts under SEPA, and that all other impacts will be addressed by existing codes and ordinances. This conclusion is incorrect in both cases.*

A. SEPA Elements: *Earth, Water*

Impacts from mass grading, fill and retaining walls. Placement of a minimum of 10,000 cubic yards of fill material at a depth of up to 20 feet or more will change the character of the site and lead to both short- and long-term impacts.

1. **Short-Term impacts/impacts during construction.** Short term impacts will include the potential for erosion and sedimentation during construction of the preliminary subdivision. This site has a high potential for transport of sediment to the abutting properties due to slopes of greater than 35 percent, removal of native vegetation, excessive grading and fill, and artificial grade changes along the property boundary abutting Rugosa Ridge. The temporary erosion and sedimentation control (TESC) measures will be inadequate to prevent stormwater runoff and sediment from entering adjacent properties to the west and south.

    a. Silt fence. The proposed silt fence along the west property one will be inadequate to protect adjacent properties from potential mass soil movement and silt-laden runoff during a heavy rainfall event. Additional measures must be taken to block movement of soil and water across the west and south property lines.

    b. Phase II Interceptor swale. The TESC plans show a Phase I and Phase II interceptor swale, with the Phase II swale installed at an elevation of about 405'. The existing land elevation at the location of the swale ranges from 392' – 400' which means the swale can *only* be installed after site grading is complete. Because there will be a delay between the time the site is cleared/graded and when this system becomes operational, the adjacent properties will be vulnerable to mass soil movement and erosion impacts prior to the time the swale becomes operational.

    c. Permanent Interceptor swale. This swale is shown on the TESC plan along the west property line and includes a pump system to pump water and sediment away from the western portion of the site, up to the eastern portion of the site. The location of this swale immediately adjacent to the property line abutting Rugosa Ridge leaves little to no space for access in the event of a problem during construction. The swale will be sandwiched between a fence on one side and a large retaining wall on the other. The swale and pump system could be easily overwhelmed with sediment if there is a large storm event during construction, rendering it inoperable and damaging the adjacent properties.

Similarly, a power outage during construction would cause the system to fail and flood the adjacent properties and structures with sediment-laden runoff.

d. Retaining Wall Construction. The TESC plan "Construction Sequence" does not indicate when the large retaining walls along the west property line will be constructed. This is very important since the size and location of the walls will effectively block access to the permanent interceptor swale. How will this swale be accessed for maintenance and repairs during construction?

e. Large storm event during construction. This development will require a substantial amount of sitework that will leave the site exposed to rainfall for many months. Due to the scope and duration of the project, this work likely cannot be completed during one dry season and will likely extend into the wet season, increasing the risk of runoff and damage to the adjacent properties. Contingency provisions must be provided to address a large storm occurring while the site is under construction. This site has a high potential for transport of sediment to the abutting properties due to slopes of greater than 35 percent and the amount of grading and fill. The potential scenario of a 50 or 100-year storm event occurring during construction while earth-moving work is ongoing must be evaluated as part of the SEPA review. A wet weather erosion control plan and/or wet weather suspension plan must be provided under Section 3.5.4.2 or 3.5.4.3 of the City of Mukilteo Development Standards.

f. Property damage during construction. Property owners in Rugosa Ridge have installed fencing and landscaping up to the property boundary adjacent to the project. With the proposed grading, drainage and retaining walls constructed up to the property line, there is a high potential for contractor work to cause damage to our properties. It is noted the developer and contractors do not have permission to remove, damage, or undermine fences, landscaping, or other improvements on our property.

2. Topography and Soils

Risk of Differential Settlement; risk of retaining wall failure; risk of drainage system failure.
With the proposed extensive site alterations, including grading, fill, retaining walls, and drainage revisions, the project creates substantial risk that one or more of the improvements will fail, or that the substantial amount of fill material will experience settlement. The level of risk will increase over time due to lack of maintenance. Because the project site would be elevated, the adjacent properties in Rugosa Ridge would be most at risk, not the subject property.

Potential sedimentation impact on Hargreaves Place. In addition to providing access, Hargreaves Place is also a drainage facility consisting of permeable pavement. Any erosion event occurring during construction of the Harbor Grove property would likely cause sediment to flow downhill to the west and be deposited in the street, reducing its drainage function and damaging both the property owners in Rugosa Ridge and the City of Mukilteo, since both parties own portions of the street. Downstream properties may also be impacted. This scenario must be evaluated in the SEPA analysis and contingencies provided.

3. Long-Term Impacts

a. Surface Water.
   i. Stormwater Facility Design. The proposed project design, with its intensive regrading of the site, will alter the natural drainage pattern, resulting in surface water being redirected to a different drainage sub-basin than it currently flows. Currently, a small amount of surface water exits the eastern portion of the site via a drainage swale along 53rd Ave W that flows north to Smugglers Gulch Creek. The remainder either infiltrates to the groundwater table or is absorbed by the

existing vegetation on the site. According to the studies in the application, subsurface water flows mostly in a westerly direction toward properties in Rugosa Ridge.

The stormwater system includes a drainage collection swale on the western edge of the property, combined with a pump system to send collected surface water upward and east to a stormwater vault. This is a highly unusual design that relies on a mechanical pump system to prevent collected surface and subsurface water from running off to properties in Rugosa Ridge, which sit at a lower elevation. This type of pressurized system is not normally used as a permanent stormwater control. It would more typically be used in a temporary system such as dewatering a construction site, or in a basement or crawl space. This system creates risk. A mechanical failure, pipe obstruction, or even a simple power failure would cause the system to stop functioning. As a result of the topography, failure of the pump system would not impact the properties that actually own it. Instead, a system failure would result in collected water flowing back to the west, into properties in Rugosa Ridge, causing flooding and property damage. The system must be designed, installed and must function perfectly ***forever*** to avoid impacts on the adjacent properties. It is an imperfect design that will eventually fail.

The *Hydrogeologic and Stormwater System Design Assessment (Landau Associates 9/23* – Exhibit 1*)* concluded the applicant's drainage and hydrologic studies have likely underestimated the amount of stormwater flows/infiltration flows entering the stormwater pump system. The underestimation is the result of the applicant's studies not accounting for sufficient infiltration of stormwater within the western portion of the site in the grading and filling of the project. The results of this underestimation are that properties in Rugosa Ridge are at greater risk in the event of stormwater overflows caused by a pump system failure or power outage.

In addition, *Landau* concludes the project design does not appear to include emergency overflow measures to protect adjacent properties in the event of pump system failure or power outage. This type of system would normally include such measures as part of the system design. See additional analysis in Section III here.

The runoff pattern of surface and subsurface water affecting properties to the west of the project will be altered by the proposed grading and drainage measures. Per the applicant's drainage studies, existing runoff "sheetflows" in a westerly direction, which disperses the water at low concentrations across a broad area. However, the modifications to site drainage will result in water moving west, then being collected and conveyed to a single point at the pump location. This means that any failure of the pump system will release higher concentrations of stormwater as compared with existing conditions.

The location and design of the pump system guarantees that future access to the pump and associated piping in the event of a system failure will be either impractical or impossible, and it will be difficult to inspect, repair or replace it. The future lot owners in Harbor Grove will have neither the awareness nor the technical capability to complete repairs of this system in a timely manner. If the system fails and floods properties in Rugosa Ridge, there would be significant time lag between when the problem first occurs and when it is fixed, if it can be fixed at all. This would extend the duration of flooding indefinitely.

The risk of flooding and property damage to the adjacent properties in Rugosa Ridge has not been adequately evaluated or mitigated. This actual risk is greater than what may be inferred from the plans and studies on file. This is due to:

- Proximity of the stormwater pump and collection system to the west property line;
- Elevation differences between properties;
- Stormwater calculations that use incorrect assumptions regarding soil types and infiltration rates;
- Insufficient protection measures in the event of stormwater overflows from the pump system; and
- Inadequate maintenance provisions to meet City of Mukilteo Development Standards (see B.1, below).

B. SEPA Element: *Land and Shoreline Use*

1. **Inadequate Maintenance Provisions for Retaining Wall Area on West Side of Property**. The project design ensures that many of the site improvements will not be maintained because they will not be accessible or visible to the future lot owners in Harbor Grove. This includes drainage facilities, landscaping and retaining walls along the project's western property line. The lack of maintenance will result in nuisance impacts as viewed from properties in Rugosa Ridge, and property damage caused by flooding when the stormwater pump system fails.

   a. Drainage swale and pump system. The project includes a drainage swale and pressurized pump system (i.e., force main) to collect stormwater runoff along the project's western boundary. The applicant proposes this system as part of a private stormwater system to be owned and maintained by the future Homeowners Association (HOA). It will not be owned or maintained by the City of Mukilteo. This is a complex and specialized system that will require skilled personnel to inspect, maintain and repair it. And it will be expensive. This work is beyond the capabilities of a small, 7-lot HOA and will require a specialized consultant to be contracted with the HOA, per the Applicant response letter dated 4-21-23. Further, it is not clear the City will have legal authority or the resources to compel the HOA to take the following actions, which will be necessary steps to ensure the system functions properly over time:

      - Ensure the HOA convenes regular meetings;
      - Ensure the HOA adopts a budget and collects assessments for pump system maintenance and repair;
      - Ensure the HOA enters into a contract with a pump system/drainage specialist;
      - Ensure the HOA drainage specialist completes all inspections, maintenance and repairs such that flooding impacts on Rugosa Ridge are avoided; and
      - Ensure the HOA continues to do all of the above for the life of the project (i.e., 100+ years).

      In summary, the City will have no control over how the future HOA conducts its business, which means it will be unable to prevent a pump system failure. There is a possibility the future Harbor Grove HOA will become inactive, meaning that it stops conducting meetings and collecting assessments from its members. Can the City really prevent this scenario and what would be the outcome if this were to occur?

      The potential impact of a drainage system failure must be evaluated and avoided or mitigated.

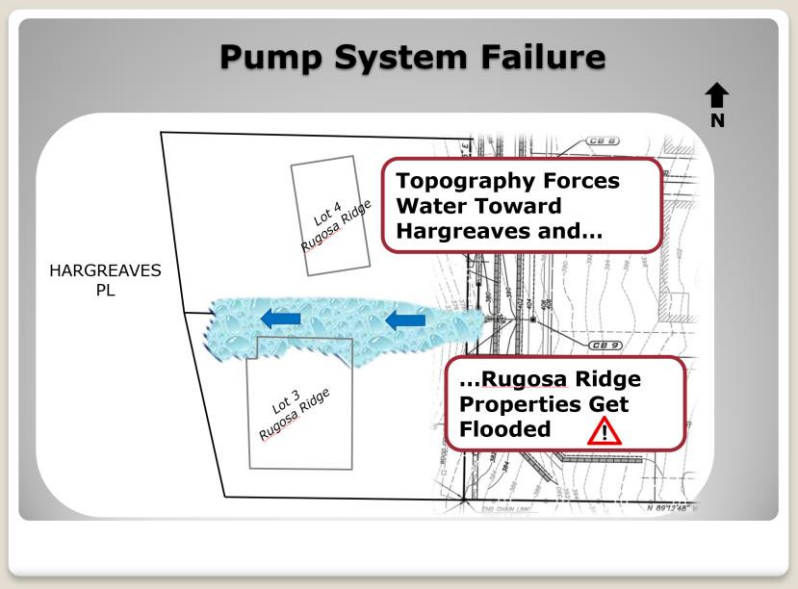

Figure 1 – Impact of Stormwater Pump System Failure on Rugosa Ridge Properties

The use of covenants and easements will not provide sufficient legal authority for the city to enforce on the HOA. This type of detailed policing and enforcement can only be enabled through a binding legal agreement that is signed by all parties, including future lot owners in Harbor Grove. Since all future property owners would be responsible for protecting property in another subdivision (Rugosa Ridge), they should be required to sign such an agreement as a condition of lot purchase. Rugosa Ridge HOA should be a party to the agreement and should be granted right of access to the pump system for inspections. This is reasonable given that: a) the pump would be much easier to access from Rugosa properties than from Harbor Grove properties; and b) Rugosa properties would be the first to experience the effects of a pump system failure.

The design of the project's drainage system places the responsibility of protecting property located within one HOA (Rugosa Ridge) in the hands of another HOA (Harbor Grove). In approving this design, the City would effectively be delegating protection of the public health, safety and welfare to a small group of private property owners over which it has only limited control. And such a role or responsibility is never included in the charter language or bylaws of a typical HOA. This scenario places lot owners in Rugosa Ridge in a vulnerable position (to flooding impacts) and is in nobody's best long-term interest. In the event of a pump system failure that impacts the adjacent properties, the burden of proof would fall on the affected property owners in Rugosa Ridge, putting them in an extremely difficult position.

b. Landscaping along western retaining walls. Regular landscape maintenance includes irrigation, debris removal, weeding, pruning and mulching. The proposed landscaping improvements located at the base of and in between the retaining walls cannot be maintained due to the height, length and location of the walls. No irrigation of the landscape areas is proposed (*see Landscape plans on file*). The continuous wall design will prevent the transport of materials and equipment to and from the landscape areas. The inaccessibility of this area will lead to accumulation of leaves, weeds and debris. Importantly, the landscaping will provide no tangible benefit to the future property owners of Harbor Grove since it will not be visible. It will only exist for the presumed 'benefit' of the residents of Rugosa

Ridge. This will greatly reduce the incentive for future residents of Harbor Grove to perform maintenance work. When the landscaping dies due to lack of maintenance and irrigation, it will become a visual nuisance that gets worse over time as dead plants, weeds and debris accumulate.

The use of covenants and restrictions to require maintenance of the landscaping in this area will be ineffective when the future homeowners cannot see it or gain access to it. The City would be approving a project design that creates a non-maintainable condition and becomes a source of conflict between existing owners in Rugosa Ridge and future owners in Harbor Grove. It is setting the stage for future enforcement action by the City and ultimate failure.

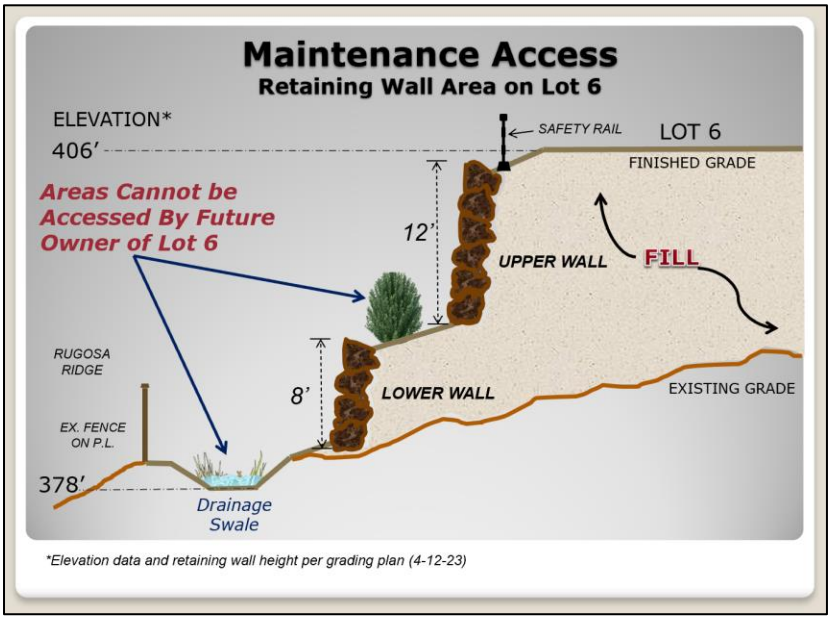

Figure 2 – Illustration Showing Difficulty of Access to Improvements on Lot 6

c. Retaining Walls. The retaining walls along the western boundary of the project will be isolated. Future houses and other improvements will be constructed between the access road and the walls, meaning that any wall failures or damaged areas cannot be accessed for repairs. For example, if a section of the 12' wall on Lot 6 were to fail, it is likely that large equipment would be needed to bring in materials. However, there would be no place for equipment staging. The expectation, therefore, is that the walls will be designed, installed and maintained such that they will last forever. This is a false premise that will lead to erosion and drainage impacts on the adjacent Rugosa properties in the event of a wall failure. Such impacts cannot be addressed because the wall cannot be accessed for repairs. This is a potential unavoidable adverse impact under SEPA.

d. Maintenance Easement/Maintenance Plan. The proposed maintenance provisions in the preliminary plat include an easement between Lots 5 and 6 and along the western boundary of the property, combined with language on the plans authorizing the City to inspect the drainage (storm detention) facility (see *Grading* and *Composite Utility* plans). The layout of the maintenance easement would require workers to hand-carry all tools, materials and equipment because there would be no vehicular access. As an example, access from 53rd Ave to the drainage swale and landscape areas in

the southwest corner of Lot 7 would require walking a distance of at least 650 feet over uneven terrain and around many obstacles. There are no logistical plans stating how often these facilities need to be inspected, how equipment or bulk materials will be brought in or out of the site. The simple conclusion is that maintenance of any improvements along the far western portion of the property will be impractical or impossible.

There needs to be a full maintenance plan, schedule, and budget. This information is needed before the project is approved to understand whether the drainage and landscaping improvements can or will be maintained by the future HOA. Providing a legal mechanism alone (i.e., easement and covenants) is insufficient when there will be real-world difficulties in actually performing the maintenance due to a flawed project design.

2. **Visual/Aesthetic impacts.** The project includes large retaining walls up to 20 feet in height facing developed residential properties to the west. The walls will be located within the rear setback area, in violation of the zoning code, which limits freestanding walls to six feet within the rear setback. The future dwellings will be perched on top of the walls and will tower over the neighboring properties to the west, causing them a loss of use and enjoyment of their property. The walls will be an eyesore when they are first installed and will become a nuisance due to lack of maintenance *(see Item B.1 above)*.

3. **Light/Shadow impacts.** The proposed fill and grade changes on the western portion of the property would result in a finished grade at least 20 feet higher than the existing grade. Since buildings are allowed to be constructed up to 30 feet in height under the zoning code, the effective building height would be up to 50 feet above existing grade if buildings are constructed near the rear setback line on Lots 5, 6 and 7. As a result, future dwellings placed on the artificially elevated ground level would loom over the adjacent properties, peering into back yards, reducing solar exposure and casting longer shadows during morning hours. This would reduce privacy, use and enjoyment of properties in Rugosa Ridge.

   Visual impacts, nuisance impacts, reduced solar access, and other incompatibilities, could have been reduced if the City had required the project to be redesigned earlier in the permit process. With the current design, these impacts have not been addressed under SEPA or zoning.

III. Project Compliance with Mukilteo Municipal Code.

This section describes how the proposed project fails to comply with applicable provisions of the Mukilteo Municipal Code (MMC).

A. Title 17 – Zoning

1. **Setbacks for retaining walls; building height.**

17.08.020 Definitions.

"Building height" means the vertical distance from the mean ground level (prior to any elevation change in native existing grade except as approved through a plat or short plat) to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the height of the highest gable or roofline of a gable or pitched roof."

"Setback" or "yard requirements" means the required open space distance that buildings, uses or structures must be removed from their lot lines.

"Setback line" means a line parallel to the property line and located at the minimum distance required by the code or ordinance between a building wall and a property line or other reference.

"Structure" means a combination of materials constructed or erected on the ground or water, or attached to something having a location on the ground or water.

"Freestanding sign" means a pole, pylon, ground or monument sign supported by the structures or supports that are placed on, or anchored in, the ground and that are independent from any building or structure.

17.20.080 Fences and freestanding walls.

A. Fences and Freestanding Walls. Fences and freestanding walls are allowed under the following conditions.

2. Height.

a. In residential zones, fences and freestanding walls located in side and rear yards may not exceed six feet in height and must be stepped down to not more than four feet or forty-eight inches at the front setback line.

C. Variances. Increases in the height of fences or freestanding walls by more than two feet in height shall be subject to the review procedures and requirements of Section 17.64.040, Variances.

Analysis – Retaining Wall Setbacks and Height:

The proposed retaining walls along the western boundary of the project are located within the 25-foot rear setback required by the zoning code (*Figure 3*). The lower wall would be within 12 feet of the property line, while the upper wall would be within about 20 feet. The total length of the lower wall would be 170 feet, while the upper wall would be 250 feet. The combined height of the walls would be up to 20 feet on Lots 6 and 7, in the southwest corner of the project site. Both walls would exceed six feet in height in places. The purpose of the walls is to enable the grade of the site to be raised and leveled such that it is significantly higher than the surrounding properties.

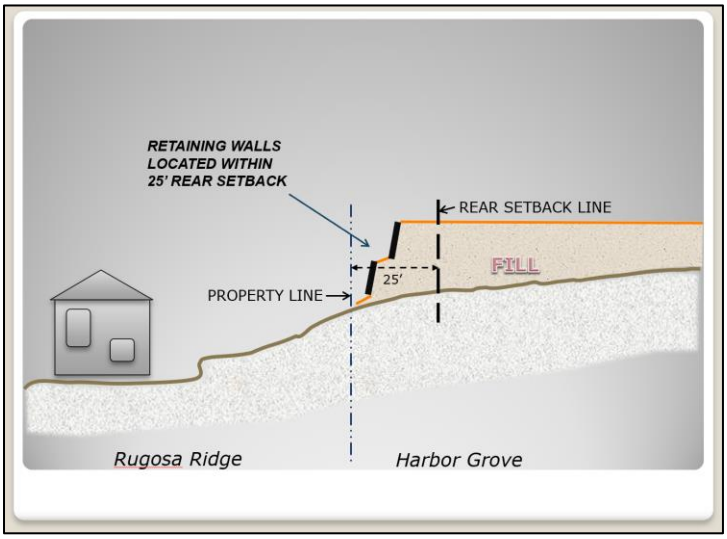

Figure 3 – Diagram showing location of retaining walls within rear setback

The City maintains that retaining walls are not freestanding walls and therefore are not required to meet setback regulations for walls, fences or other structures (*Galuska email 2/3/23*). Under this reasoning, there is no limit to the height of retaining walls within setback areas. In other words, the Planning Department maintains the walls

are *exempt* from regulation under the zoning code. This interpretation of the zoning code is contrary to the requirement that buildings and structures be located outside of the setback area (see "setback" definition above). It allows damaging impacts on adjacent properties including light, shadow impacts, and increased building height caused by abrupt and artificial grade increases. It also causes changes in drainage patterns.

Retaining walls are "structures" as defined in the zoning code (see definition above).

City code does not define freestanding walls or retaining walls specifically. The term "freestanding" is, however, used in identification of ***sign*** types and provides guidance on how the term should be applied here (see definition above). A "freestanding sign" is part of a self-supporting structure that is not attached to a building or other structure. Using this same approach, the retaining walls in the Harbor Grove project are also considered freestanding since they are not connected to any other structures. They are independent structures whose only function is to support fill dirt and allow the site elevation to be raised.

The proposed walls, because of their height, length and continuous nature, are more like large buildings than the type of retaining walls that are commonly used on residential lots. In fact, the proposed walls create a greater impact than if a variance were issued for a residential house within the rear setback. This is due to the continuous length of hundreds of feet, with no gaps to allow light to pass through.

The proposed walls along the western and southern property lines are both retaining walls ***and*** freestanding walls under city code and must meet the height and setback provisions under 17.20.080.A.2.a. They are also required to meet the setback standard because they are structures. A variance application is required for wall height exceeding eight feet within the 25-foot rear setback. The variance application must be processed as part of the Harbor Grove subdivision application and provided to the Hearing Examiner for review and approval. Without a variance request, the application is incomplete and the SEPA threshold determination has been issued in error.

Analysis – Building Height:

Under **MMC Section 17.20.020 - Structure bulk matrix –** maximum building height in the RD 12.5 zone is 30 feet from ***existing grade***, as stated in the City's requirements for building height calculation. The finished grade on Lots 4 through 7 is proposed to be elevated by up to 20 feet above existing grade. Calculation of building height based on the finished grade would result in future residences being allowed to have 30 feet of building height on top of 20 feet of fill for an overall height of up to 50 feet above the existing ground level (*Figure 4*). Applying the building height standard in this manner would be absurd and would create significant impacts on adjacent properties. It would amount to a building height bonus. Buildings located at or near the 25' rear setback line would tower over neighboring houses and yards, resulting in light and shadow impacts and loss of privacy, use and enjoyment. These impacts have not been addressed or mitigated.

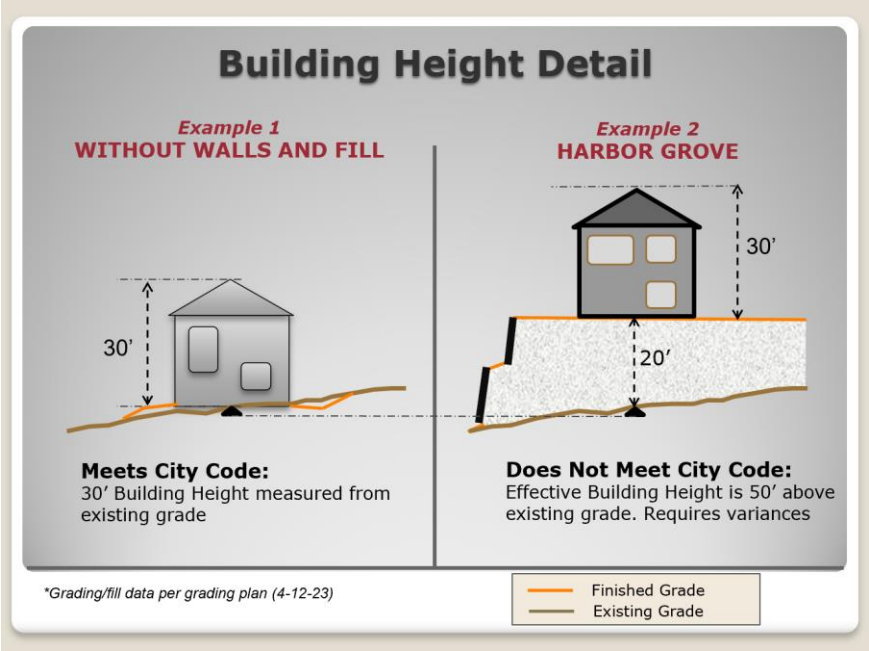

Figure 4 – Building Height examples – with and without project

The definition of building height provides an exception for plats and short plats based on an approved grading plan; however, this is a discretionary review process that must consider the impacts that would result from the large-scale regrading of a site. The purpose and intent of this exception is to allow for minor changes within the interior of the site necessary for reasonable grading for utilities, roads and building sites, while protecting adjacent properties and the natural setting from harmful impacts of artificial increases in site elevation and building height. It recognizes the need to create smooth, rather than abrupt transitions around the exterior margins of a subdivision. It is intended to consider the balancing of cut and fill, rather than a net import of fill material (10,000 cubic yards) as proposed in the project. The building height exception connected to approval of a grading plan must be considered jointly with MMC 15.16 addressing grading and excavation. The City has applied the two sets of code provisions (zoning and grading) in isolation from each other in a manner that fails to consider impacts under SEPA and zoning.

A variance is required to allow future building height on the site to exceed 30 feet from the existing ground elevation. The City has not provided justification for allowing future building height to be calculated from finished grade, nor has it documented the impacts of this interpretation.

2. **MMC 17.13.010 LAND USE AND DEVELOPMENT REVIEW PROCEDURES - Purpose**

   C. The purpose of this chapter is to establish a land use development permit review process, as required by state law, for considering consistency of a proposed project with the applicable development regulations. Consistency shall be established by considering the following four factors:

   4. The character of the development, such as development standards.

Compatibility of Project Design. The ***design*** of the project is inconsistent with the character of the surrounding development. The properties within the vicinity of the project have been developed without the use of large fills

and retaining walls. The project includes over 500 lineal feet of retaining walls, mostly within the rear setback along the west property line abutting existing developed property—and mostly supporting fill. For comparison, grading and retaining work on the Rugosa Ridge subdivision was completed lot-by-lot. There are no continuous walls spanning multiple lots. Most walls that have been built support an excavation, rather than a fill and are located within the interior portion of the site. Excavations typically have much less impact on abutting property since they do not result in light/shadow impacts and increased building height. Because of their height and length, the walls and mass grading scheme for Harbor Grove are more typical of larger commercial or industrial projects. These developments normally require a large, flat graded area for larger building footprints. Single-family development does not require large, flat expanses as proposed in the Harbor Grove application.

a. Impacts caused by City's Inconsistent Application of Standards. The City's review of the project has resulted in the development standards being applied unequally when compared to the surrounding properties and the larger neighborhood. The City's unbalanced application of grading and excavation, drainage and zoning standards categorically ignores concerns of the abutting property owners raised throughout the public comment process. The scale of grading activity, the large walls and increased building height are design elements that have not been used in the surrounding residential developments. The project design results in not just land use impacts but impacts on earth and water as demonstrated herein. It is as though the City has two completely different interpretations of its development standards: one for Harbor Grove and another for the surrounding community.

b. Daffron Short Plat (SP 2017-003). To understand how the City's application of development standards varies from one project to the next, there is an excellent example involving the adjacent property at 9018 – 53rd Ave W. The property was the subject of a four-lot short subdivision that was completed recently, although the houses have yet to be constructed. This project also abuts the Rugosa Ridge subdivision on its west side and has similar topography to the Harbor Grove site. And yet it was developed very differently, with minimal grading and drainage impacts and no retaining walls. It was also developed with minimal vegetation removal. See the comparison chart below:

	Daffron Short Plat 9018 – 53rd Ave W	**Harbor Grove Subdivision 9110 – 53rd Ave W**
No. of Lots/ Acreage	4 lots/1.4 acres	7 lots/2.4 acres
Grading	Minimal for road/utilities. Balanced cut & fill	Mass grading. 10,000 cubic yards fill. 20' fill depth near site boundary
Drainage	Gravity flow	Pump/force main system. Major grade changes to enable re-routing of stormwater runoff.
Vegetation Removal	Minimal for road/utilities	All vegetation removed, except small portion of site.
Retaining Walls	None	2-tiered wall system. Over 500 linear feet of walls. 20' height.

Table 1 – Comparison of Daffron Short Plat and Harbor Grove Subdivision

B. SEPA

WAC 197-11-060 Content of environmental review.

(4) ***Impacts.***

(c) *Agencies shall carefully consider the range of probable impacts, including short-term and long-term effects. Impacts shall include those that are likely to arise or exist over the lifetime of a proposal or, depending on the particular proposal, longer.*

Analysis: The DNS does not identify or evaluate any environmental impacts of the proposal, including long-term impacts of the project on SEPA elements *Earth*, *Water* and *Land Use*. Long-term impacts on adjacent properties would include surface water flooding from drainage system failure including potential structure damage, changes to groundwater, nuisance impacts, light and shadow impacts, and loss of use of enjoyment of the adjacent properties. These impacts will be made worse by a project design that prevents proper maintenance of landscaping and infrastructure improvements. Impacts will occur over the long-term duration of the project (100+ years). Sufficient safeguards and contingency measures have not been provided to prevent or mitigate these impacts. It is noted these impacts have been raised previously during the public comment period and remain unaddressed.

C. Title 15 – Buildings and Construction

MMC 15.16.010 – Grading and Excavation - Purpose

15.16.010.C.3 *Minimize the impact of increased runoff erosion and sedimentation on nonconsenting persons caused by improper land development and maintenance practices;*

Analysis: The proposal places the deepest fill and tallest walls along the west and south property lines, which are the lowest portions of the property and directly abut developed residential properties. The walls will be within the rear setback area and will be hundreds of feet in length, leaving the far western and southern property lines inaccessible. If there is a problem either during or post-construction, such as a large rain event, it will be impossible to take corrective measures since equipment cannot be brought into this area. Similarly, equipment cannot be brought into the area from Rugosa properties due to the slope and location of existing improvements. All remedial work will need to be performed by hand, which will limit the effectiveness of any remedial action.

Both the City's clearing/grading requirements and the 2019 DOE Stormwater Manual recognize the importance of retaining native vegetation in limiting the impacts of increased site runoff, erosion and sedimentation.

This proposal would concentrate the most intensive development activity (grading and fill) where it will have the highest potential to cause erosion and sedimentation impacts on the surrounding properties. The remoteness and inaccessibility of the area below the retaining walls will prevent maintenance from being completed by the future homeowners. The project design creates a high likelihood of damaging impacts on the adjacent properties and should not be approved for this reason alone.

15.16.010.C.4 *Maintain and protect ground water resources; to minimize adverse effects of alteration in ground and surface water quantities, locations, and flow patterns;*

Analysis: As described in Section II, the project proposal would alter the natural drainage pattern by collecting and routing surface and subsurface water to the east side of the site. It would cause potential impacts on the adjacent properties by creating risk through installation of a mechanical pump system. This system will degrade over time and will be prone to failure. Failure of the pump system would lead to a large amount of stormwater flowing directly onto adjacent properties.

15.16.010.C.5 *Promote safety upon city roads and right-of-way; to decrease potential landslide, flood, and erosion damage to public and private property;*

Analysis: The project proposal would increase the risk of potential flood and erosion damage to adjacent private property as documented in this report.

15.16.140 Setbacks

C. Toe of Fill Slope. The toe of fill slope shall be made not nearer to the site boundary line than one-half the height of the slope with a minimum of two feet and a maximum of twenty feet. Where a fill slope is to be located near the site boundary and the adjacent off-site property is developed, special precautions shall be incorporated in the work as the permit authority deems necessary to protect the adjoining property from damage as a result of such grading. These precautions may include but are not limited to:

1. Additional setbacks;

Analysis: The greatest amount of fill (up to 20 feet deep) will be placed immediately adjacent to developed residential properties in Rugosa Ridge *(see Grading plan)*. The western boundary of fill (toe) and associated retaining walls will be within approximately 10 feet of the property line. Grading for the proposed drainage swale will require additional work at the property line. In terms of grading activity, this will be the most intensive area of development on this site. The construction work alone will be disruptive to the adjacent properties and will likely result in property damage to fences and landscaping. It will also cause an extended period of nuisance impacts (noise, dust, smoke, etc.) and increase the potential for erosion and sedimentation.

The City must use its authority under 15.16.140.C and SEPA to require additional retaining wall setbacks and reduced grading/fill in order to protect adjacent developed properties in Rugosa Ridge from grading and construction impacts.

15.16.050. Requirements. (for clearing and grading permit)
It is the intent of this section to promote practices consistent with the city's natural topographic, vegetational, and hydrologic features, and to control substantial land alterations of a speculative nature.

Analysis: The proposed grading and drainage scheme substantially modifies the existing natural site features, including the regrading from a sloping topography to a single flat pad; removal of all the existing site vegetation; and alteration of the natural drainage pattern (i.e., discharging stormwater from a different location than existing conditions). For the reasons stated in this letter, the grading permit for the Harbor Grove subdivision should not be approved.

Conclusion: The proposed development scheme is not consistent with the city's natural topographic, vegetational and hydrologic features and does not meet the intent of Section 15.16.050.

15.16.050.C Clearing.

1. *All clearing of vegetation shall conform to the specifications of this table, except as noted elsewhere in this subsection:*

Table 1: Clearing Matrix		
Grade of Site or Slope (%)	***Maximum Native Vegetation/Groundcover Removal (%)***	***Minimum Required Significant Tree Retention (%)***
> 35% 2b		*See notes.*
> 25%—≤ 35%	*45%*	*55%*
> 15%—≤ 25%	*60%*	*40%*
≤ 15%	*75%*	*25%*

Analysis: The application includes grading and filling of most of the property, including the steepest areas consisting of slopes greater than 35% within the south and western portions of the site. No vegetation would be retained in these portions of the property. Table 1 contains restrictions on how much of the native vegetation must be retained on a development site, based on the steepness of slopes on the property.

To meet the standards in Table 1 – Clearing Matrix, the application on file should have included a map showing a breakdown of on-site slopes according to steepness. Such a map can be prepared easily using Autocad or other common engineering software. See Figure 5 below, which shows the site to be anything but flat…

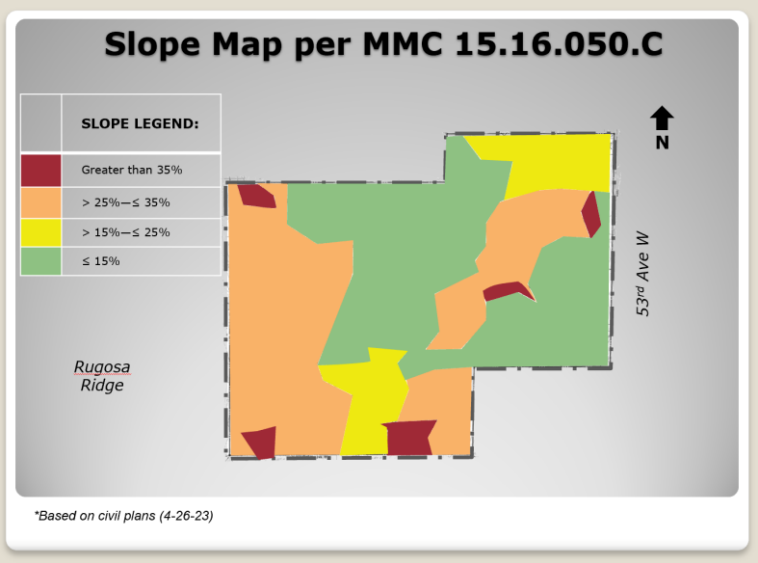

Figure 5 – Slope Map Showing Approximate Breakdown of Slopes by Percentage

The application fails to comply with the requirements of MMC 15.16.050.C – Table 1 because it does not provide slope category and vegetation removal data. It uses the "average slope" of the property, which is incorrect because it does not acknowledge that a significant portion of the site is greater than 15% slope. The

result is that the DNS allows extensive clearing, grading and alteration of the property, causing potential erosion and sedimentation impacts on adjacent properties and leading to long-term flooding and land use impacts. The purpose and intent of this section is to protect steeper sloped areas and abutting properties from exactly the type of intensive development proposed in this application. This intent is stated in 15.16.010.C.6. ***"…to promote practices consistent with the city's natural topographic, vegetational, and hydrologic features…"*** *The clearing and tree retention requirements implement this standard and must be applied correctly by the City. Otherwise, approval of the application as submitted will result in significant alteration of the site's topography, vegetation and hydrology.*

D. City of Mukilteo Development Standards (2019 Amendment)

Chapter 3 - Surface Water

3.4 General Requirements (applies to storm drainage facilities)

3. Emergency overflow provisions shall be installed in such a manner as to direct waters away from all structures without causing failure of those structures. The impact of a system failure should be analyzed both in terms of on-site and off-site effects. The impacts may be to adjacent properties or to elements of the public drainage system or other private systems. Retention/detention and infiltration facility design must take into account overflows which may result from:

a. Higher-intensity or longer-duration storms than the design storm;
b. Plugged orifices;
c. Inadequate storage due to sediment buildup;
d. Debris blockage; and
e. Other reasons causing system failure.

Analysis: Possible causes of failure of the Harbor Grove stormwater pump system on the west side of the property include pump failure; debris blockage of the water intake; sediment buildup; power outage; or failure of the force main outlet piping. The conveyance swale, pump and piping would be located at a higher elevation than the adjacent property. A system failure would result in stormwater overflowing off-site in a westerly direction due to the sloping topography. One of the adjacent residences sits directly in the flow path of any surface water exiting the lowest point of the Harbor Grove property (*see Figure 1*). A drainage system failure on the Harbor Grove property would potentially result in direct surface flows onto the neighboring property, causing damage to the structure, yard and landscaping. The DNS does not acknowledge or describe this impact.

The Landau study (*Exhibit 1*) conducted a review of the proposed stormwater management system and determined the following:

> ***…the concept of a pump system without an emergency overflow or bypass system is inherently risky. In-perpetuity pumping is not standard practice for retaining wall drainage design. It is not clear in the project design documentation what the emergency overflow/bypass plan is in the event of prolonged power outage or other pump system malfunction. If emergency bypass flows will drain westward by gravity, some type of overflow and conveyance system would typically be appropriate to protect the neighboring parcel(s) from impacts.***

The project design does not comply with 3.4.3 because it does not include emergency overflow provisions to protect structures on the adjacent properties. In fact, the proposed location and design of the stormwater pump system would achieve the exact opposite of what is required by Section 3.4.3--it would ensure that stormwater emergency overflows are directed ***toward*** *the adjacent structures, not away from them. The DNS from the City, and the application and analysis provided by the applicant do not evaluate the impact of a drainage system failure as required by the standards. Due to the design and location of the stormwater system, there are no contingency or emergency measures that can be put in place to prevent overflow stormwater from damaging the adjacent residence. Once a failure occurs, stormwater overflows will continue until the failure is corrected. Due to the difficulty in gaining access to this system and the fact it will be privately owned and maintained, there is no guarantee the needed repairs/corrections will be completed in a timely manner.*

6. The frequency and difficulty of future maintenance should be minimized by thorough consideration of possible failures in the system during design and what would be required to correct the problem. Design adjustments to ease maintenance should be a major consideration.

Analysis: The City has acknowledged that stormwater pump systems are the "option of last resort" for handling stormwater runoff in new development. However, it has provided no data or analysis to indicate that other options have even been considered during the project review process. Without a listing and evaluation of such options or alternative designs, the City's SEPA analysis is incomplete.

The stormwater collection and pump system on the west side of the property will need to be inspected and maintained on a regular basis. However, due to its remoteness and lack of visibility, maintenance will be extremely difficult *(see analysis under Section II.B above)*. The City cannot guarantee this system will be maintained because it will not own it. And the developer cannot ensure it will be maintained because it will pass the maintenance obligation to future homeowners. This creates uncertainty and risk for homeowners of the adjacent properties in Rugosa Ridge, who will have perpetual concerns about flooding impacts resulting from system failure.

The project design does not facilitate long-term maintenance of the drainage system. Because of the potential property damage impacts resulting from drainage system failure, the City must use its authority under Section 3.4, General Requirements, to either require a redesign of the project, or to deny the project outright.

7. Offsite improvements may be required if on-site controls are insufficient to mitigate impacts due to flooding, erosion, sedimentation, pollution, or habitat degradation.

Analysis: Per criteria #3 above, the project is required to provide emergency overflow measures to address impacts resulting from pump system failure. Due to the topography and location of the proposed stormwater collection and pump system, the project design may not allow on-site controls to mitigate these impacts. The only remaining option is for the applicant to install emergency overflow provisions on the adjacent properties. No such provisions have been made in the application.

Neither on-site nor off-site controls have been provided to mitigate the impacts of flooding and sedimentation as a result of a failure of the stormwater pump system.

9. The visual impact and other potential problems (mosquito breeding, smell, etc.) should be considered. Concerns will vary with the site environment, but aesthetics should always be of concern to the designer.

Analysis: Placement of the drainage swale and pump system at the base of the large, continuous walls along the western boundary will discourage future maintenance of the drainage system, leading to overgrown conditions, debris accumulation and general neglect of this area. This will cause visual nuisance impacts which will affect the adjacent properties in Rugosa Ridge. This impact has not been addressed under Section 3.4, General Requirements, or SEPA.

Overall Conclusion: The project application does not comply with the City's Development Standards – Section 3.4, General Requirements – criteria #s 3, 6, 7 and 9.

3.4.17 Stormwater Facility Access and Maintenance

1. All stormwater facilities shall be accessible to maintenance vehicles. If the facility is not located in or adjacent to an existing access, an improved roadway surface shall be provided.

Analysis: The stormwater drainage swale, pump and pipe system will be located at the base of a large retaining wall and would be inaccessible from any road or driveway. The nearest road would be approximately 150' as the crow flies, and the actual travel distance on foot would be much further (see *Figure 5* below). At this location, it would be physically impossible to provide vehicular access to this portion of the drainage system. As a result, all maintenance will need to be performed by hand and all materials and equipment will need to be hand-carried. This will greatly limit the type of work that can be performed and the frequency of maintenance.

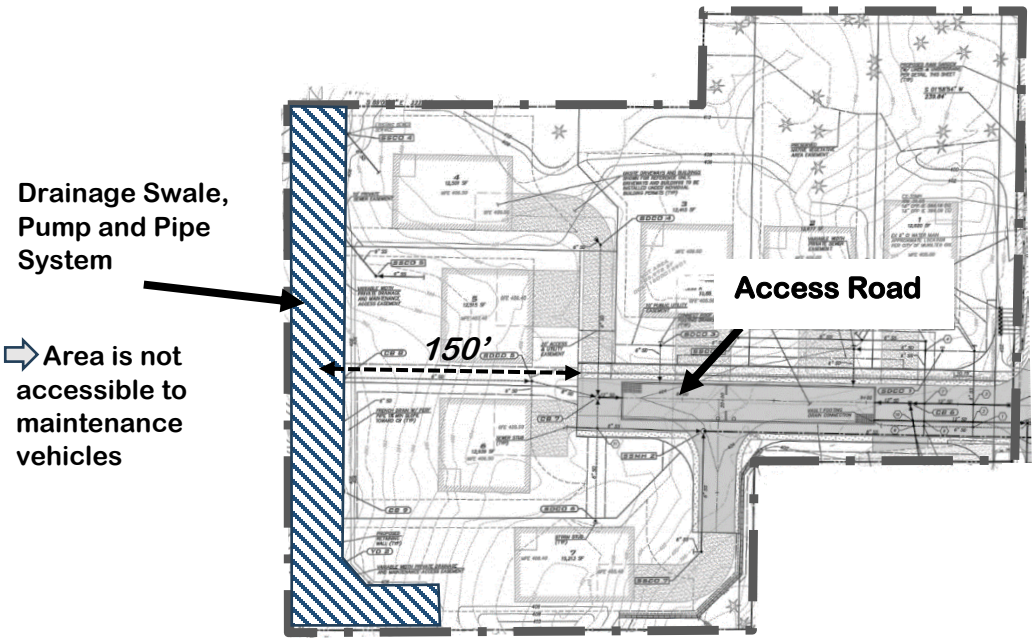

Figure 5 – Map of Project Showing Location of Drainage System and Access Road

The project design does not comply with stormwater facility access and maintenance standards because the stormwater pump system will be inaccessible to maintenance vehicles.

V. Summary, Conclusion and Alternative Design Options.

The Harbor Grove subdivision, if approved and constructed as currently proposed, will cause physical damage to my property, as well as other properties in the Rugosa Ridge subdivision. The design of the project creates risk of flooding impacts, erosion and sedimentation, nuisance impacts and loss of basic property rights including reduced privacy, use and enjoyment. Impacts will be both short- and long-term and will negatively affect property values.

The City of Mukilteo will be negatively impacted by the project. It will be drawn into conflict between Rugosa Ridge and future Harbor Grove property owners as a result of flooding and stormwater concerns, nuisances and failure to maintain Harbor Grove improvements properly. These are long-term concerns that will drain city resources due to the need for monitoring, enforcement and mediation. If approved and constructed, the impacts of the development could result in legal action that would cost additional city resources.

The DNS has been issued in error and must be withdrawn for the following reasons:

A. The application is incomplete based on the requirements of Mukilteo City Code, Titles 15 and 17.
B. The application fails to comply with multiple requirements of the Mukilteo City Code and will cause impacts on the adjacent properties as a result.
C. The Harbor Grove subdivision proposal will cause unavoidable adverse impacts under SEPA that have not been mitigated. This includes damaging impacts on the adjacent properties and the natural environment.
D. The DNS fails to consider alternative project design(s) with fewer impacts on the neighboring properties.
E. The applicant has failed to provide justification for a project design that results in impacts on adjacent properties and the natural environment.

The City must take one of the following actions based on the application failing to meet city code or to address its environmental impacts:

1. Withdraw the DNS, reject and return the application to the applicant; or
2. Withdraw the DNS and issue a written request for a major redesign of the project to address impacts under SEPA and the project's inconsistencies with the Mukilteo Municipal Code. Alternative designs that could be considered include the following:

    - **Alternative A** – Cluster the housing and lots in the eastern portion of the site. This design can be accomplished with significantly less grading and drainage impacts on the abutting property owners in Rugosa Ridge.

    - **Alternative B** – Revised grading and drainage concept that preserves the natural topography, vegetation and hydrology consistent with MMC 15.16.010 and 15.16.050.

Respectfully submitted,

David Tyler
9055 Hargreaves Pl
Mukilteo, WA 98275

Cc: Andy Galuska

Enclosure: Exhibit 1 - *Hydrogeologic and Stormwater System Design Assessment (Landau Associates, 9/11/23)*