

Attachment A – Country Club Road Failure Background

Background and Context

Based on research conducted by the Public Works Department, Country Club Road is the second oldest “County Road” in Kitsap County, dating back to 1882. It is located on the southeast side of Bainbridge Island and serves primarily single-family residence-related traffic between Blakely Avenue on the western end, and the Country Club property on the eastern end, and can be roughly divided into three distinct sections/conditions:

- The western section of the road between Blakely Avenue and the intersection with Toe Jam Hill Road is upland of Blakely Harbor Park and several residential properties and is in relatively good condition. The City performed pavement repair and chip seal on a significant portion of that stretch of the road in the last five years.
- The middle section of the road between Toe Jam and the shoreline frontage is also upland of residential properties, but both the drainage and pavement are in very poor condition. The repairs for this stretch of the road are currently funded in the City’s Capital Improvement Plan (CIP) with \$275K in year 2021 and 2022.
- The eastern section of the road, beginning at the shoreline frontage and continuing for another approximately 600 linear feet (as shown in the aerial photo below) has been an ongoing repair and maintenance issue for Kitsap County and the City due to continuous erosion. Several efforts to stabilize the road, which serves approximately 35 homes, have been executed over the last several decades, with the latest effort occurring in 2005 (see photo below).



The yellow line indicates the stretch of road currently failing along the shoreline. Toe Jam Hill on the left, Upper Farms Road on the lower right.

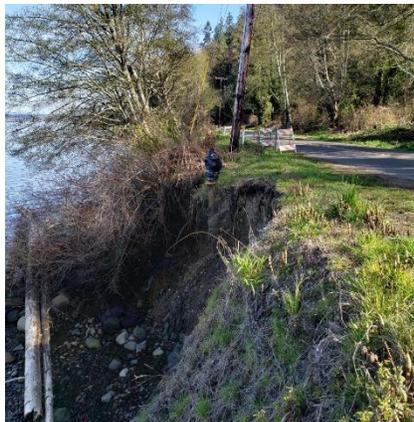


City contractors performing shoreline stabilization repairs in 2005.

Existing Conditions

The failing section of roadway identified above has been rapidly changing over the course of the last several years. A majority of the existing bulkhead that was constructed in 2005, and subsequently repaired, has failed, leaving the underlying soils exposed and subject to erosion. On the western end of this section, there was a massive failure of the bulkhead, which has left a KPUD fire hydrant and a PSE utility pole exposed and in need of relocation (see photo 1 below.) This stretch is located on a

curve, and there still exists between 10' and 15' of gravel shoulder waterward of the roadway. In the middle and eastern end of this section, there have been localized failures of the bulkhead, and there is no shoulder remaining to protect the road. In several areas along this stretch, the slope failure is undermining the pavement at the westbound lane edge or is about to do so (see photos 2 and 3 below).



1. This section of the bulkhead is failing at the curve in the road. Note the fire hydrant and utility pole exposed at the top of the slope.



2. This slope failure is impacting the pavement at the edge of the westbound travel lane.



3. This slope failure is about to impact the pavement at the edge of the westbound travel lane. This is same area as the 2005 photo above – note the lack of uplands where a backhoe was once able to travel.

The following time-lapse photos of the westbound (shoreline side) of the road edge also provide a compelling picture of the rapid changes occurring at the top of the slope:



January 30, 2006



January 10, 2019



February 3, 2020

Recommended Solution / Next Steps

For the last year, Public Works Engineering has been working with a consultant to design and permit a bulkhead repair and reconstruction project that would stabilize the shoreline along the subject stretch of road. The design plans for the bulkhead, which are currently at 90%, also include the repair and relocation of drainage culverts along the stretch of road, as well as minor repairs along the westbound lane edge. The project is estimated to cost approximately \$375K, but there is currently no funding allocated in the 2019-20 biennial budget. Permits for construction of the project have been received by the City's Planning Department, the State Department of Fish and Wildlife. The project also requires a permit from the Corps of Engineers (COE), and City staff are

working with the Corps to determine the type of permit that is most suitable for the work, and the timeframes associated for those permit approvals.

The Council can expect to be briefed on the project scope and budget as part of the discussion on planning the 2021-26 update to the City's Capital Improvement Plan (CIP) on May 26, 2020. Depending on the ultimate permit timeline, the project could potentially proceed in 2020 if funding was made available in Q2, or 2021 if funding was made available through the CIP planning process for future years. To protect public safety in advance of identifying the budget and schedule for this proposed project, City staff is working towards closing the westbound lane and maintaining one-way traffic with signage beginning on June 17, 2020.

Other Considerations

Right-of-Way Access and Adjoining Owners – The subject section of Country Club Road where emergency repair and maintenance of the bulkhead is needed to stabilize the road exists within the documented 60-foot wide public right-of-way, as well as on what appears to be privately-owned property of two adjacent owners. Based on survey work and other research conducted by the Public Works Engineering team, including related to the age, use, and history of public investment in the roadway, the Public Works Department believes that the City has a legal right to perform repair and maintenance within the roadway prism, including an area that extends beyond the documented right-of-way and encompasses the shoreline bulkhead to the limits of its existing condition.

On the eastern side of the subject area of needed repairs, although the City has established legal rights as described above, City staff has procured easements from the adjoining property owner to perform the work. On the western side of the subject area, however, the adjoining property owner has not been amenable to providing easements, and therefore the City will need to assert its legal rights to do this emergency work via other means. The situation with the western adjoining property owner is complicated by the fact that the owner wishes to permit and build a bulkhead fronting their residential home and abutting the City's current/future bulkhead, but is prevented from doing so by City and state shoreline regulations. In contrast, the City can perform the work for its proposed emergency repair in accordance with provisions of the shoreline code that allow for the protection of public facilities. Regarding this owner, the Engineering and Planning staff have worked diligently to provide information and potential paths forward for permitting allowable types of shoreline stabilization on the owner's adjoining private property, but at the current time the owner has not pursued these paths. Given the emergency nature of the situation with the failing roadway, the Public Works Department is prepared to move forward with the bulkhead repair and maintenance work that will preserve the roadway. The City Attorney's Office is currently assessing legal considerations and options related to the proposed project.

Climate Change / Local Improvement District Considerations – It makes sense in the era of climate change adaptation to acknowledge that the subject shoreline portion of Country Club Road will continue to face erosion, flooding, landslides and other weather-related impacts in the coming decades – likely much more frequently and far quicker than what has been experienced in the past – and the proposed bulkhead repair and maintenance is only a temporary solution to the problem.

The fully engineered repair addressed earlier in this report will still only be a temporary fix lasting between 8 and 12 years, as sea-level rise and other site conditions will continue to contribute to erosion of the low-bank shoreline. That said, the City is not prepared at this time to plan for or fund an alternative solution to the problem. Raising the roadbed, or moving the road inland, where there are numerous critical area regulations and physical challenges to deal with, are not options that can be realistically considered at this time.

Complicating the matter is the dichotomy that this segment of Country Club Road is a dead end, single point of entry/exit – which clearly makes it a priority for safety reasons – but that it also only serves approximately 35 private homes. Because of those two factors, the Council may want to consider whether the establishment of a Local Improvement District (LID) is a reasonable mechanism for funding the long-term repair and maintenance or larger capital investments that this facility will require to remain functional in the coming decades.