



Fairbanks Engineering Corporation
Geotechnical & Marine Engineers

April 30, 2026

Coastal Resources Management Council
Attn: Jeff Willis, Executive Director & Council Members
4808 Tower Hill Road, Room 116
Wakefield, RI 02879

(via email – cstaff1@crmc.ri.gov)

Re: A2026-01-003 CRMC Assent Application – Letter of Support
Repair of the Cliff Walk Slope along Ochre Point Mansion Property
Newport, RI
FEC Project No. 18028.00

Executive Director Willis & Council Members:

Fairbanks Engineering Corporation (FEC), on behalf of the Ochre Point owners, prepared this letter supporting the proposed project to construct a stone revetment shoreline protection system (revetment) along the existing coastal slope between Narragansett Avenue and Webster Avenue. The revetment project as proposed would provide long term stability along this historically unstable earth and rock slope supporting the Cliff Walk walkway. The slope along this section failed most recently in March 2022 and again in December 2022 as a result of coastal storm waves. It also failed during superstorm Sandy in 2012 and was repaired but that repair failed in December 2022.

The failed slope areas are directly adjacent to the Ochre Point mansion property located between Narragansett Avenue and Webster Avenue. The Ochre Point owners have agreed to allow the construction to be staged from their property. This eliminates the need to perform the work from the water which would add significant cost and environmental impacts. The City of Newport recently submitted construction plans and an application for Assent to CRMC for this project. The project as currently proposed would stabilize this entire section of slope, which historically has been prone to failure and repair many times. The slope instabilities that exist along this section of the Cliff Walk have resulted in well documented extended periods of walkway closure.

The revetment being proposed would also address the concern that a failure in the overlook area of the slope could result in a failure of the stone arch bridge over the Cliff Walk walkway. The overlook supports a stone arch bridge over the walkway. A failure or movement of the overlook could result in the bridge falling onto the walkway which could injure or kill a pedestrian walking below it.

The failed slope is adjacent to Easton Bay which is a well-known surfing location due to the frequent occurrence of large waves. This bay is tracked by an international surfing website due to the quality and frequency of the large waves. FEMA classifies this as a high energy wave zone with a BFE of elevation +25 ft. The large waves that impact this area regularly are the cause of the ongoing slope erosion and instabilities that have plagued this area since the walkway was created.



CRMC staff (Silva & Lucia) indicated in a letter dated February 2, 2026, and also in phone conversations with the design engineer, a concern about supporting the project if it included a revetment across the Ochre Point overlook bedrock outcrop area. This overlook area must be protected to ensure stability of the overall slope along this area and also to ensure the bridge remains stable that the overlook supports.

Eliminating the overlook bedrock outcrop area from the project is not considered feasible due to constructability and stability concerns/issues. The overlook bedrock outcrop is relatively narrow (about 25 ft) and the need to return the revetment armor stone layer at each end of the overlook makes this approach unfeasible. Leaving this area unprotected (if it was feasible) would also create a potential hazard to public health, safety and welfare because the stone bridge over the walkway is supported on the overlook. A failure of the overlook could result in a bridge collapse that could injure or kill someone passing below it on the walkway.

It is also noted that CRMC previously issued an Assent (75-9-13) to construct a stone revetment, similar to what is being proposed currently, along this entire slope area. It is further noted that many other areas along the Cliff walk adjacent to Easton Bay are currently protected by stone revetments.

CRMC Redbook Regulation Requirements

This project as proposed meets the requirements for Assent outlined in the CRMC Redbook as a Category B Assent with a special exception. The project further meets the special exception requirements of “compelling public purpose” because the Cliff Walk is a historic entity that provides public access to between 700,000 and a 1 million pedestrians each year. The protection of the overlook bedrock outcrop would ensure the protection of anyone walking below the stone bridge the overlook supports.

The proposed stone revetment design also meets the requirements of Section 1.3.1, G (Shoreline Protection) of the CRMC Redbook. Including it being designed for the FEMA 100-year storm, significant wave height as required by the US Army Corps of Engineers (USCOE).

Protecting Public Health, Safety and Welfare

The stabilization of the existing slope using the proposed stone revetment would allow continued access along the shoreline. It would also ensure that the public’s health, safety and welfare are maintained while doing so. This includes stabilizing the overlook area that supports stone arch bridge over the walkway. This bridge weighs more than 10 tons. A failure of the overlook area, or excessive lateral movement (visual observations indicate the overlook is actively moving), could result in the bridge falling onto the Cliff Walk walkway below. This could injure or kill a pedestrian walking below it.



Photo 1: Stone Arch Bridge over the Cliff Walk walkway

Existing Conditions

The existing slope along this section of the Cliff Walk is comprised of various types of stone masonry and concrete retaining walls, bedrock, and vegetated soil areas. It is apparent from the various types of retaining walls, and concrete underpinning of some of these walls, that this slope area has been unstable for a long time.



Photo 2: Slope along Cliff Walk proposed for repair – note failed areas & various wall generations

Based on the historical information provided by the “A History of Hurricanes and the Cliff Walk” by Evan Elichalt/ Salve Regina University this area has been closed for extended periods of time after large coastal storms. These closures were generally the result of sever erosion, slope and structure failures that resulted in the walkway being impossible. The walkway was closed generally from Forty Steps extending south due to damage caused by both the hurricane of 1938 and hurricane Carol in 1954. According to the history of the Cliff Walk the 1938 hurricane damage wasn’t repaired and the walkway reopened until September 1945. Unfortunately hurricane Carol then reclosed many areas in 1954. These areas were not completely repaired until 1971 when the US Army Corps of Engineers repaired the damaged slopes with revetment systems and or seawalls. Other hurricanes or large coastal storms (i.e., Hurricane Bob, superstorm Sandy, the two (2) coastal storms in 2022) have also caused damage to this, and other areas, of the Cliff Walk walkway. As stated in the above reference “As a coastal promenade, the Cliff Walk is particularly susceptible to the destructive natural elements of strong wing, rain, and daily erosion pressure from waves below.”

The bedrock type and condition along this section of the Cliff Walk make it more susceptible to instability. In general, the bedrock is the Rhode Island formation generally comprised of shale type bedrock. This bedrock is generally highly fractured and soft. The bedrock is also jointed and bedded toward the south and east. This condition causes the bedrock to fail toward the water creating the slope instabilities apparent in this area.



Photo 3: Slope along Cliff Walk in 1st area that failed (prior to the failure) – note hole in masonry seawall along its base and also the bedding joints in the bedrock sloping toward the water

The overlook area of the shoreline that supports the stone masonry bridge over the Cliff Walk walkway is an outcrop comprised of variable bedrock types. The lower portion of this formation is comprised of what appears to be a harder/more sound bedrock. However, the bedrock above this is softer, more bedded and fractured. It also has bedding planes that slope fairly steeply toward the water. It’s this upper section of bedrock that supports the stone masonry retaining wall that supports the grass overlook area adjacent to the stone pedestrian bridge over the Cliff Walk walkway. The bedrock at this location is/was obviously more competent than the bedrock immediately adjacent to it. However, there are many such formations along the

Cliff Walk and many remanent outcroppings in the water just offshore that were probably similar at some time in the past. There are several such formations just offshore of this outcrop, refer to Photo 2 above and Photos 4 & 5 below. Although it is not possible to predict the timeframe, this outcrop area will fail in the future due to the normal erosion forces present along this coastline.



Photo 4: Overlook feature: note varying bedrock type along height – softer less competent rock up high



Photo 5: Overlook feature: note large eroded area between lower and middle bedrock section – given the sloping bedding plane the upper section will fail along this plane in the future which would cause failure of the bedrock, retaining wall and bridge supported above.

Constructability Requirements & Challenges

There has been discussion about eliminating the overlook area from the overall project. Given the relatively narrow width (it's only about 25 ft wide) of the overlook and the size of the revetment armor stone, this is not considered feasible from a constructability standpoint. The revetment includes smaller bedding stone layers that cannot be exposed to the large wave forces that frequently exist in Easton Bay. As such, the armor stone would need to be returned at each end of the overlook area to accomplish this. Due to the size of the armor stone, the armor layer is about 8 ft thick, these returns would take up most of the gap area. Also the returns would create a narrow channel that would focus and amplify the wave energy. See Figure 1 below, taken from the permit plans, to better illustrate the constructability issue.

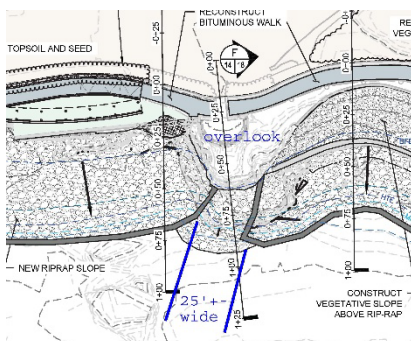


Figure 1: Plan at Overlook area showing relatively narrow width of gap & also that it is aligned in the direction of the storm waves which exacerbates the issue if the revetment in this section were eliminated

Increased Wave Forces at Overlook Caused by a “Gap”

Another concern associated with not extending the revetment across the overlook is the increased wave forces that would result. Leaving a gap (if feasible) at the overlook would create an “alley” and/or “ramp” that would funnel wave forces directly against the overlook bedrock and stone masonry walls. This change to the shoreline profile would greatly increase the force of the wave impacts on the area. This is similar to areas where there are trench type features below water that funnel water to the shoreline to create large waves. Any gap left at the overlook would be expected to result in the accelerated degradation and failure of the overlook which could cause a failure of the arch bridge over the Cliff Walk walkway. It is also noted that the overlook is comprised of different rock types and hardness. The bedrock clearly is softer and less competent as you go higher up the slope. The alleyway created by leaving a gap would focus larger wave forces onto these less stable, and more erosive, bedrock areas – refer to photos 4 and 5.

In addition, the overlook stability will be negatively impacted in ways not fully understood by the construction of the revetment. Construction would require large construction equipment to place large armor stones and underlayer stones along both sides of the overlook. The impacts from these operations and vibrations are anticipated to degrade the stability of the overlook bedrock and the masonry walls. These are areas already showing signs of movement and the proposed construction should be anticipated to make conditions worse.



Summary

We are in support of the slope repair project as currently proposed by the City of Newport and being reviewed for Assent (file #A2026-01-003). The stone revetment system as proposed would stabilize a large section of Cliff Walk slope. A section of slope that has been unstable for a long time. The area has been closed for extended periods twice just since 2012 in addition to the closures related to the hurricanes in 1938 and 1954. We understand the project funding is in place to repair the entire slope section. This creates a unique opportunity to repair and stabilize an historic structure and a national treasure that is, and has been, enjoyed by the general public to access the shoreline for a long time. As noted above there have been several extended closures as a result of storm-related damage and the subsequent funding issues. This is a unique opportunity, and it would be unfortunate and shortsighted, in our opinion, not to address the entire slope, given the existing conditions and concerns about public health safety and welfare.

We trust this is helpful and if you have any questions, please do not hesitate to call me.

Respectfully,

Fairbanks Engineering Corporation

A handwritten signature in blue ink, appearing to read 'Rob F', is positioned below the company name.

Robert W. Fairbanks, P.E.
President/Chief Geotechnical & Marine Engineer

Cc: Turner Scott, esq. (via email)
Stephanie Robat, PE (via email)