## Response to #4 (aesthetics):

Lastly, there are multiple safety hazards outside park edges as shown in the section "Safety Concerns Outside the Project", from which the Park District seeks to protect users. The groin extension guardrail does this.

The Park District shares the concern about aesthetics and learned much from the Lloyd Beach project. For the New Park and Beach project, the Park District board and staff, and the third-party experts hired by the Park District, are applying the lessons learned regarding stone elevation, planting materials and design.

While the Lloyd Beach improvements have been very well received and accomplish the intended objectives, there remains room for aesthetic improvement. Construction of a full stone breakwater, like Lloyd Beach, that slopes up from the water to the toe of the bluff is too harsh and would create a "fortress" like feeling. The breakwater stones at the New Park and Beach will be lower than those at Lloyd and set at a consistent height so lake horizon and shoreline views are preserved. The red dashed line in the following photo indicates the approximate height of the new breakwater in relationship to the one at Lloyd.



Lloyd Beach – existing breakwater (red line indicates approximate height of proposed Breakwater for comparison)



Lloyd Beach – existing breakwater blocks view to lake horizon from beach

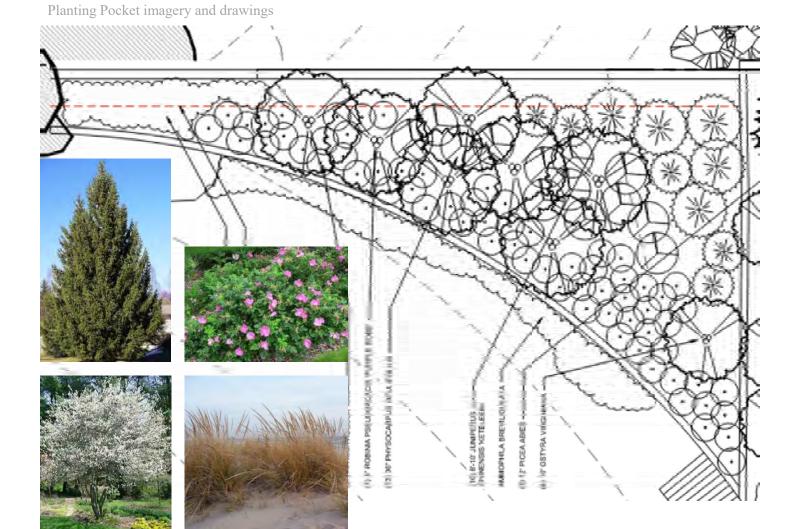


Lloyd Beach – existing breakwater blocks shoreline views

## Response to #4 (aesthetics - continued):

The proposed planting pockets will continue to lessen the "fortress" feeling and will bring vegetation and greenery down the bluff to the beach level to enhance the outdoor environment and beach experience. The pockets narrow as they extend lakeward and give way to the stone groin, thus creating a more aesthetically pleasing transition.



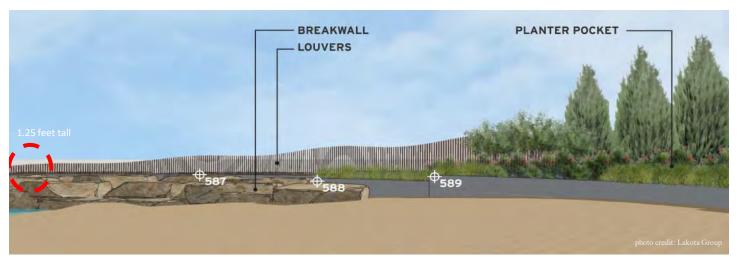


## Response to #4 (aesthetics - continued):

The groin extension guardrail is planned to be an artistic element and public art, as demonstrated through the wave like design, choice of materials, and orientation to preserve views. The taller members nearer the bluff will be screened by the landscaping in the planter pocket.

Vertical steel plates of varying heights and measuring 3/8" thick by 8" wide, spaced at 6" on center, and oriented at a 40-degree angle will be welded to the base steel groin structure. This orientation will allow views through the plates to the lake. The spacing and orientation will make the space between the plates approximately 3 7/8", meeting the code requirements to prevent entrapment. The varying height of the plates is a thoughtful design and form of public art, while also serving a functional purpose. The top of the plates follow a sine wave shape with steadily decreasing height as they go eastward, to resemble the shape of a wave running from the bluff out toward the water.

The tops of the plates will descend in height as they go eastward from the bluff out toward the water. The most eastward member will be the shortest at 1.25 feet tall and discourage beach users from climbing the breakwater. The tallest member is most westward and is 6.5 feet tall.



Preliminary rendering of groin extension guardrail



Preliminary rendering of groin extension guardrail

## Response to #4 (aesthetics - continued):

Other municipalities have not been as thoughtful or considerate in their solutions to protect beach patrons - and the beach experience is negatively impacted as a result.











Safety measures by other municipalities that are not aesthetically considerate