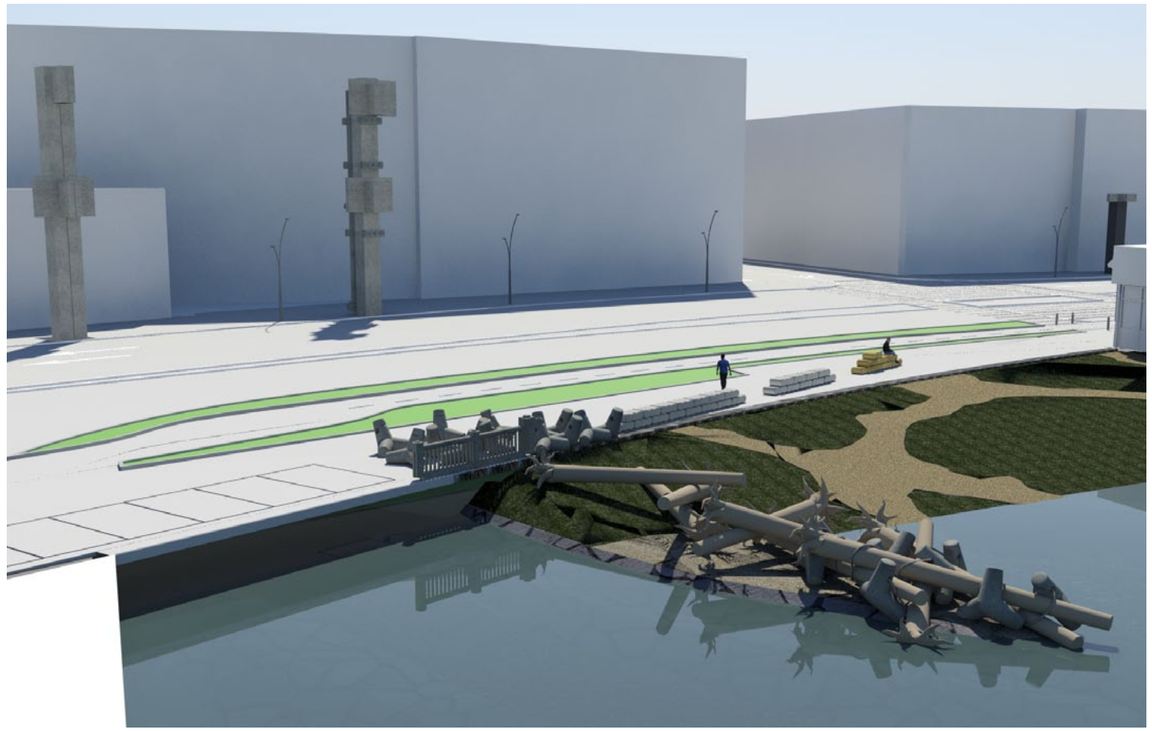
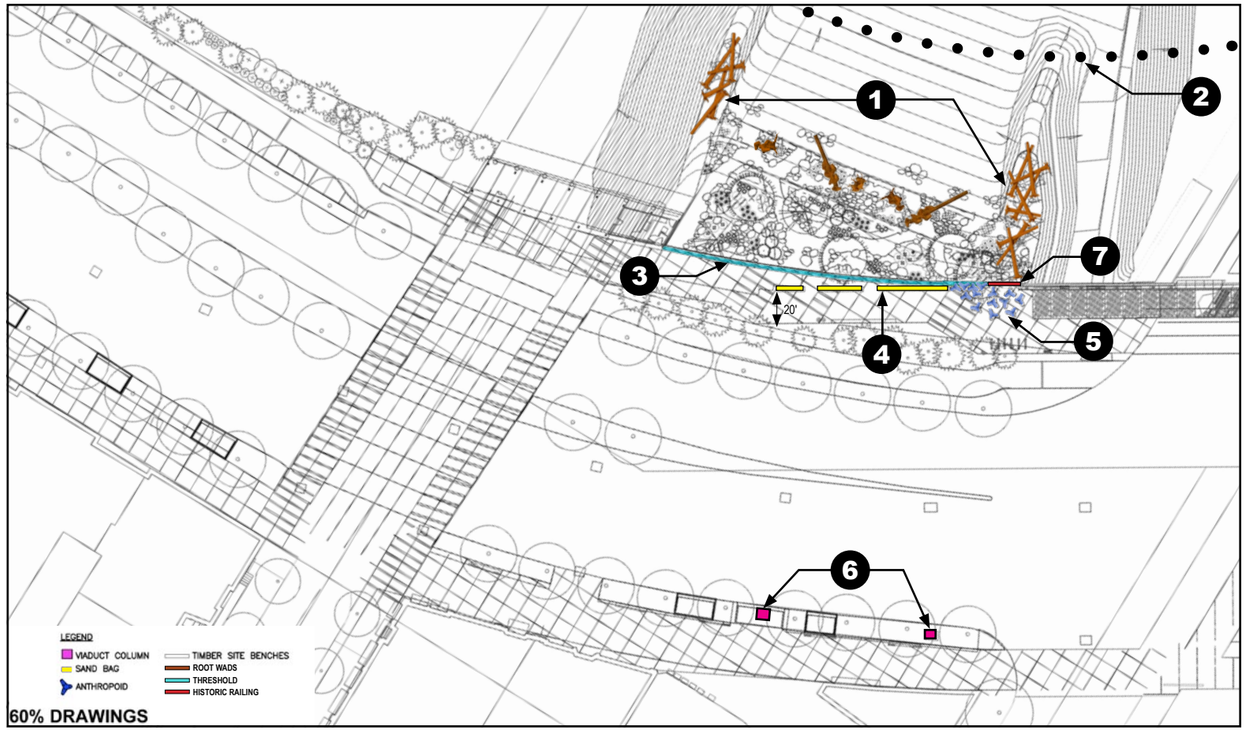
Anthropocene Beach // Zone One
Elliott Bay Seawall Habitat Project
90% Design Development

Buster Simpson
May 2015

The conceptual art work framed here is intended to provide multiple levels of engagement, including habitat enhancement. Both marine and shoreline habitat are addressed, acknowledging the interdependence of the two realms. Additionally, future discussions are anticipated to address the relationship of the beach to the promenade, the roadway and to Pioneer Square.

It is hoped that collaborative efforts can leverage what are considered site-specific and metaphorical actions to create integrated functioning habitat enhancements and provide pedagogical encounters. The environmental restoration of the encroachment at urban water's edge calls for an honest transparent aesthetic, one that has dynamic agility in the face of the influences of climate change as we enter what is now considered the human influenced Anthropocene Epoch.





1 BEACH HABITAT

This plan reinforces the beach habitat ecology by introducing a number of root wad/anchor systems integral to the beach and on top of the jetty arms. The root wads provide protected habitat, introduce biomass, and bring diversity to the water's edge. A robust assemblage of anchored root wads along the top of the jetty arms suggests a psychological human barrier to foster a habitat sanctuary and address security concerns along the north jetty arm.

2 CONTAINMENT BARRIER

In order to protect the habitat investment, a containment barrier should be located in the beach offshore area for rapid deployment. The rolled up barrier has visual appeal, kinetically interacting with wave action. When deployed the containment boom form responds to the tidal movements including an inboard and outboard floating catenary.

3 ANTHROPOCENE THRESHOLD

Consideration should be given to saving in place the existing remnant of the historic seawall railing (including reinstalling the historic plaque) and integrating it into a threshold "rubble edge" which includes balustrades of repurposed historic railing removed elsewhere on the project.

4 SEARISERS (SEATING)

Two approaches to ***SeaRisers*** that serve as seating are being considered. One approach is a formal system with a high level of design, consistent in its manufacture and sharing similarities with the ***Anthropomorphic Dolos***. The other approach is the ***Concrete 'Sandbag' SeaRiser*** approach, which is a product made by casting concrete in a bag and allowing it to set in place. This approach is more natural with a feeling of community engagement and will stand apart from the rest of the waterfront's high level of design refinement. These two approaches need to be mocked up to get an understanding of their suitability, contextually and functionally. As suggested by the Seattle Design Commission, the ***SeaRiser*** concept could repeat at various locations along the entire waterfront project thus providing another lineal design element.

5 ANTHROPOMORPHIC DOLOS

Anthropomorphic Dolos serve as both metaphors of human intervention and as an engineered armor and anchor resource. In the proposed 'temporary' location, the dolos provide a pedestrian-navigable play area as they await deployment as anchors on the beach at some indeterminate future time.

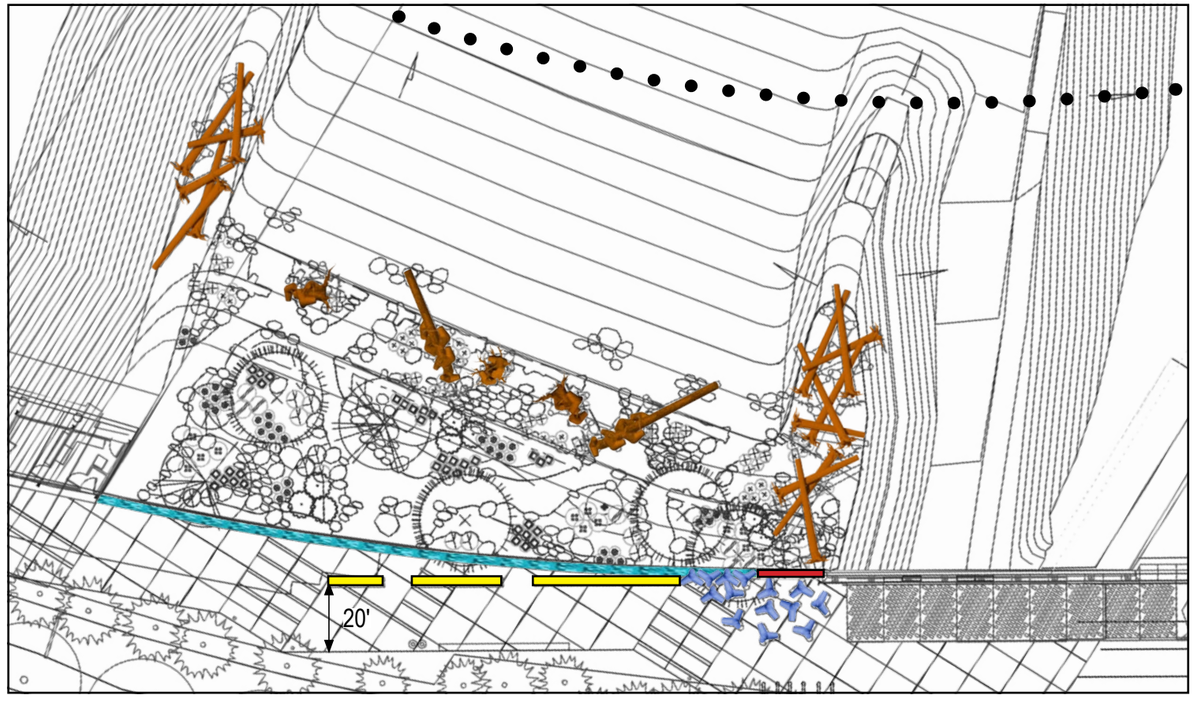
6 ALASKAN WAY VIADUCT TOTEMS

The saving of selected columns of the Alaskan Way Viaduct presents a totemic welcoming figure of scale while providing a historic anomaly. Repurposing the iconic columns for some future function will be studied.

7 HISTORIC CONCRETE SEAWALL BALUSTRADE

Historical concrete seawall balustrade pre-existing in original location with historical plaque reinstalled.

Buster Simpson © 2015
901 Yakima Ave South • Seattle, WA 98144
206.328.6212 Studio • 206.753.7717 Mobile
buster@bustersimpson.net • www.bustersimpson.net



Historic beach with Salish canoes

Salish canoe anchors

Typical Puget Sound biomass infusion

Olympic Sculpture Park Beach

Skagit River Delta biomass

Volunteer Madrona landscape

Containment barrier

BEACH HABITAT

As part of the original intent and scope of my commission for a habitat artwork I have modified the root wad and anchor approach and placement at beach and on rock arms. I am proposing either the use of natural stone anchors to conform to the shoreline-permitting agency or the use of dolos as per existing USACE practices.

The present landscape plan has earmarked credit in the budget for boulders and root wads that were intended to fund this habitat effort. There still needs to be modifications to the landscape plan in order to respond to the permitting agency and final design and it will be advantageous for the artist to be a key member of that design process. One carved stone canoe anchor could serve as a First Nations monument to the Salish Sea.

CONTAINMENT BARRIER

In order to protect the habitat investment, a containment barrier should be located in the beach off-shore area for rapid deployment. The rolled up barrier has visual appeal kinetically interacting with wave action. When deployed the containment boom forms to the tidal movements including an inboard and outboard floating catenary.

Buster Simpson © 2015
901 Yakima Ave South • Seattle, WA 98144
206.328.6212 Studio • 206.753.7717 Mobile
buster@bustersimpson.net • www.bustersimpson.net

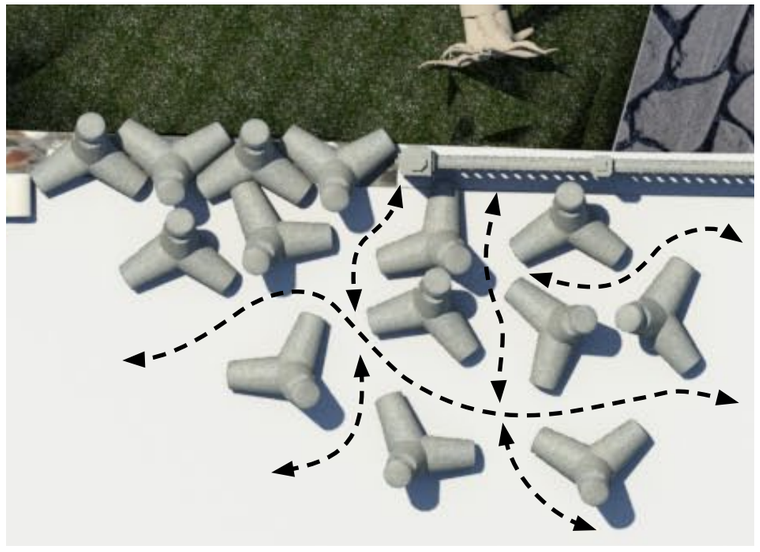
Elliott Bay Seawall Project	ANTHROPOCENE BEACH // ZONE 1	90% DESIGN DEVELOPMENT	DRAWING: T. METTEN	2015-05-07	PA-03

Natural Puget Sound source of root wads

Installation process, Portland, OR

Dolos as pedestrian-navigable play area

Proposed root wads (concrete anchor version)



Plan view showing pedestrian flow spacing of dolos

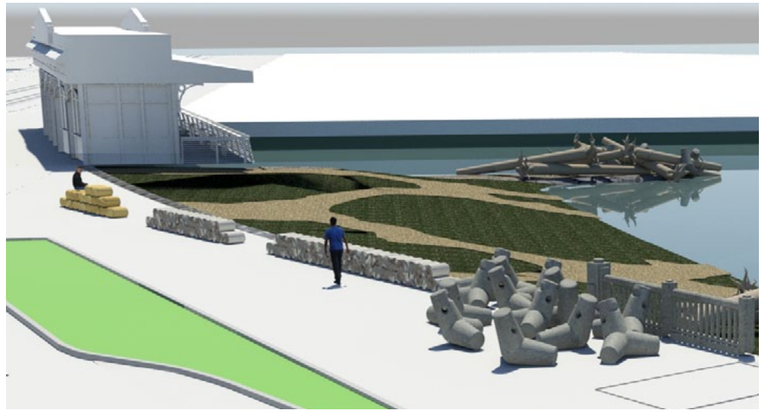
Dolos as shoreline armor

Secured Embrace, Frye Art Museum

Seating appropriate

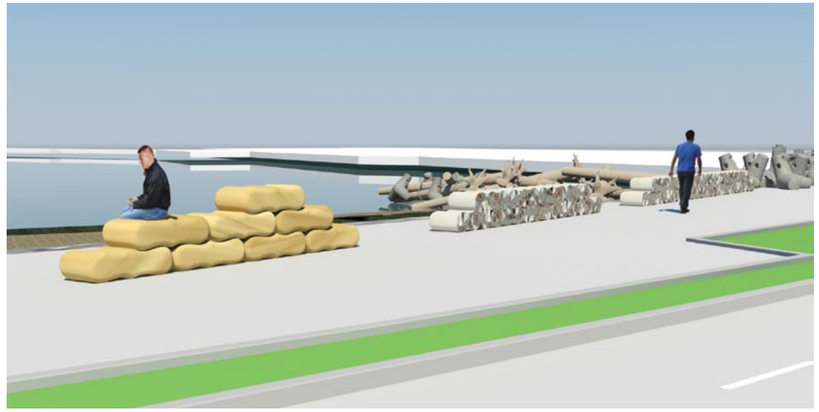
ANTHROPOMORPHIC DOLOS

Anthropomorphic Dolos are intended as both a metaphor of human intervention and, as intended, an engineered solution to shoreline armor and anchor system in order to secure the root wads. The mass of a 3,000-pound dolo and the buoyancy of the root wad biomass “partner” imply a dance awaiting deployment. The concept is of an artwork that intends to be deployed, or repurposed at some future point in time. Meanwhile, the huddling of the dolos creates a conversational seating and play area. The location reinforces the gesture of the rock arm and landscape extension onto that rock arm.



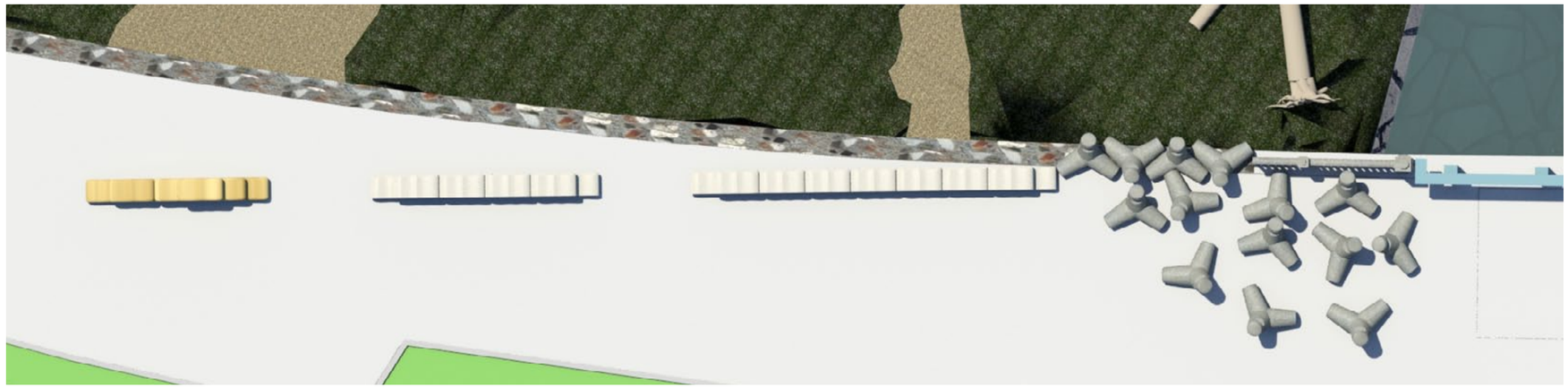
Installation of ***Anthropomorphic Dolos*** and ***SeaRisers*** looking southwest

Installation looking north

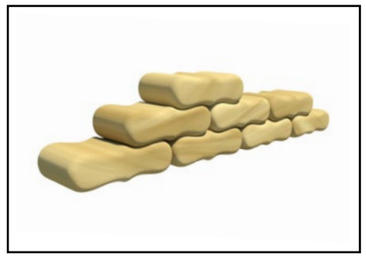


Installation looking northwest

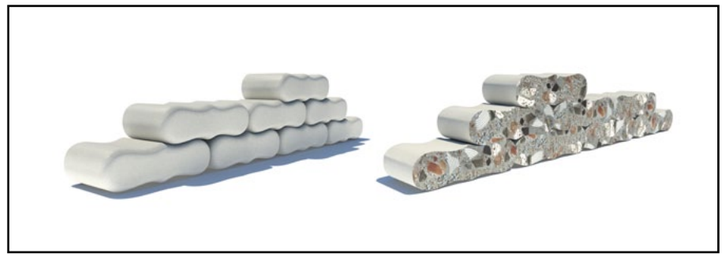
Elevation view of ***Anthropomorphic Dolos***, ***Stone SeaRisers***, and ***Concrete/Rubble SeaRisers***



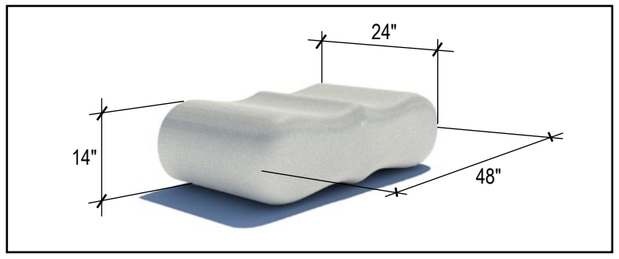
Plan view of ***Anthropomorphic Dolos***, ***Stone SeaRisers***, and ***Concrete/Rubble SeaRisers***



Study of ***Stone SeaRisers***



Study of ***Concrete/Rubble SeaRisers***



Dimensions of both the ***Stone SeaRisers*** and ***Concrete/Rubble SeaRisers***

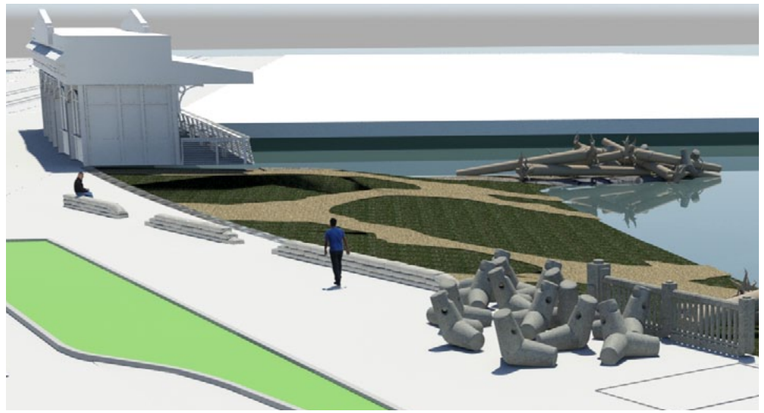
STONE & CONCRETE/RUBBLE SEARISERS

SeaRisers are a design that function as a seating wall, with the ability to accommodate the stacking of additional ***SeaRisers*** to create a variable seating encounter. The benches will be constructed of either (or both) stone and cast concrete in the dimensions shown. The design allows positioning and flexibility with the use of a forklift. All edges would be honed to an acceptable radius and polished or sandblasted. Sealing the material is a consideration.

The ***Stone SeaRisers*** would be cut on a contour wire saw from native sandstone, limestone, or granite, if available. The nesting design enables an efficient extracting of units from quarry blocks. Sandstone and granite would reference the historic building materials of adjacent Pioneer Square. Limestone is another consideration due to its ability to assist in neutralizing the increasing acidity (at least symbolically) of Puget Sound/Salish Sea waters. Geologic conglomerates are another source.

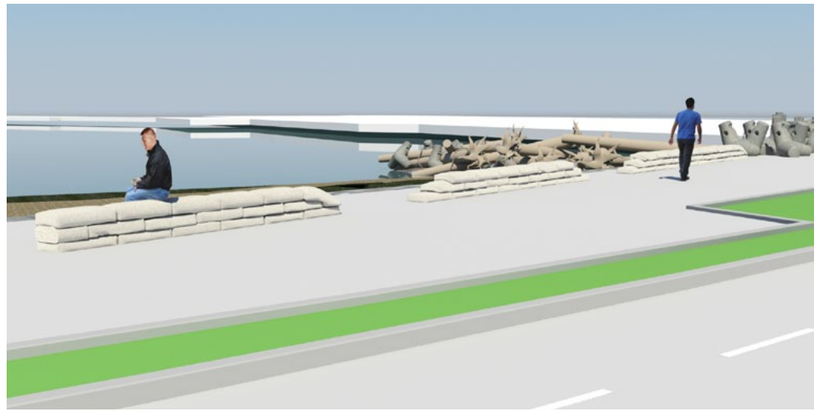
The ***Concrete/Rubble SeaRisers*** are of the same design, but cast but cast in forms much like the ***Anthropocene Dolos***. The double-wide concrete forms would enable direct access during pouring for the placement of special materials, such as historic rubble, in the center of the form that, when cut in half with a concrete saw, would reveal the concrete rubble conglomerate and result in two 24" wide ***SeaRisers***. Polishing the surface of the rubble conglomerate with terrazzo polishers is a possibility. The exterior surface could be sandblasted or honed.

Buster Simpson © 2015
901 Yakima Ave South • Seattle, WA 98144
206.328.6212 Studio • 206.753.7717 Mobile
buster@bustersimpson.net • www.bustersimpson.net



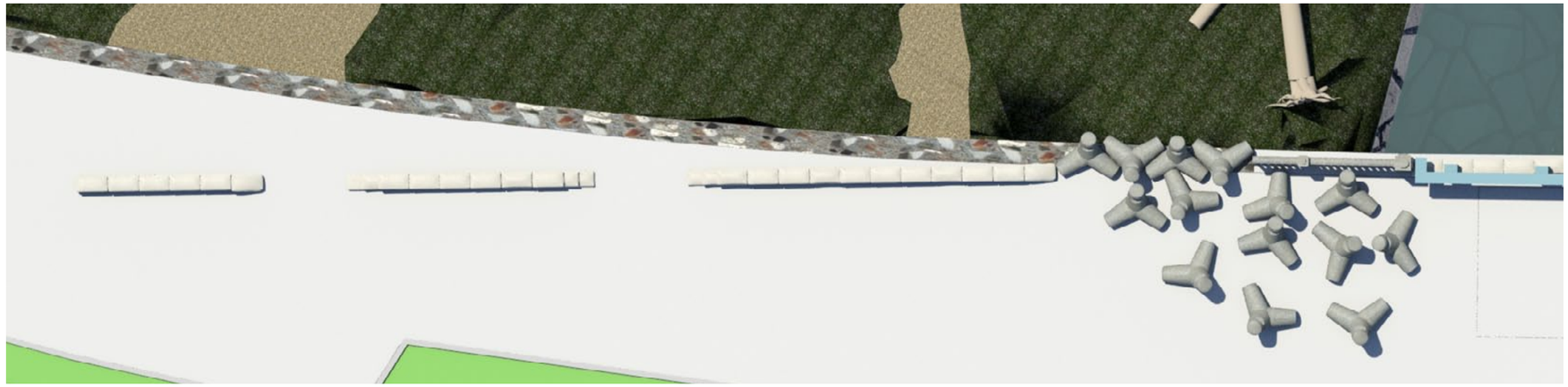
Installation of ***Anthropomorphic Dolos*** and ***SeaRisers*** looking southwest

Installation looking north

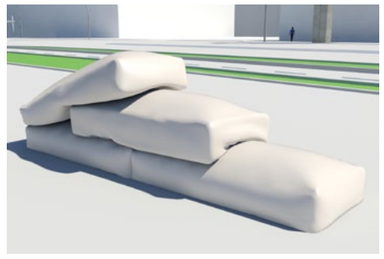


Installation looking northwest

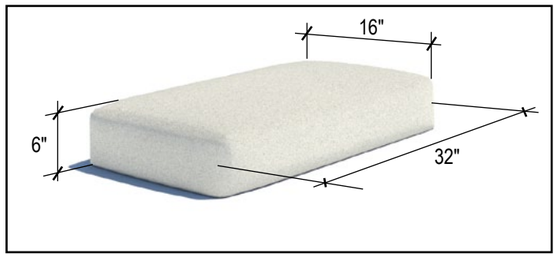
Elevation view of ***Anthropomorphic Dolos*** and ***Concrete 'Sandbag' SeaRisers***



Plan view of ***Anthropomorphic Dolos*** and ***Concrete 'Sandbag' SeaRisers***



Studies of ***Concrete 'Sandbag' SeaRisers***



Dimensions of the ***Concrete 'Sandbag' SeaRisers***

Military defenses using concrete bags

CONCRETE 'SANDBAG' SEARISERS

The less formal, more homegrown approach is the ***Concrete 'Sandbag' SeaRiser***, which is a product made by casting concrete in a bag and allowing it to set in place. This approach is more natural with a feel of 'community intervention' and will stand apart from the rest of the waterfront's high level of refinement. If feasible and aesthetically acceptable through the mock up process, one potential opportunity is that this method could become a community effort, much like community sandbagging during flooding.

Cargo bags along the Seattle Waterfront

Buster Simpson © 2015
901 Yakima Ave South • Seattle, WA 98144
206.328.6212 Studio • 206.753.7717 Mobile
buster@bustersimpson.net • www.bustersimpson.net

HISTORIC CONCRETE SEAWALL BALUSTRADE
Historical concrete seawall balustrade pre-existing in original location with historical plaque reinstalled.

Columns 3 & 4 looking north

Columns 3 & 4 looking northwest

ALASKAN WAY VIADUCT TOTEMS

The saving of selected columns of the Alaskan Way Viaduct presents a scale totemic welcome figure while providing a historic anomaly. The vestige of a combination of footprints and columns along the entire waterfront (where possible) will provide an additional layer of meaning and complexity the streetscape design and create another unifying vector and serve as a gauge to sea change.

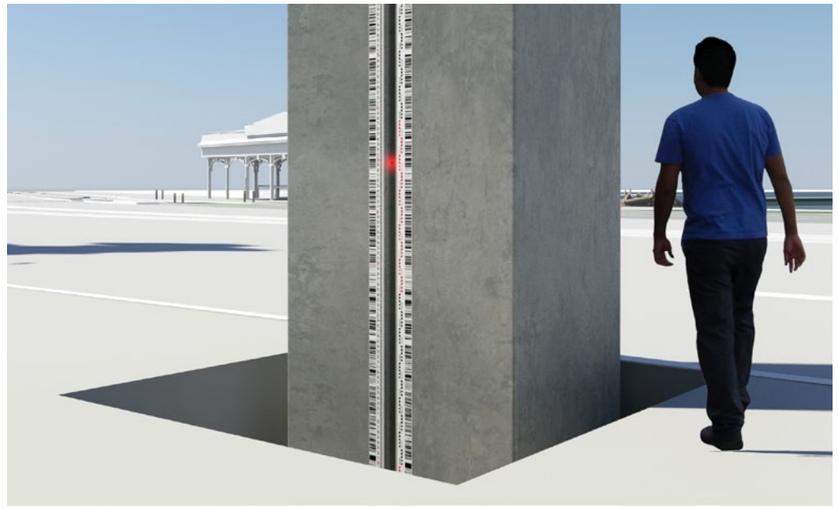
Columns 3 and 4 serve as a totemic column couplet greeting visitors as if a version of a ‘welcome figure’. Column 4 is proposed to be repurposed as a millennium gauge and will serve as a marker of record and a reminder of change. The 2-inch separation between the two columns provides space for an adjustable marker. The existing grade of Column 4 will be excavated to the column footing (approximately five feet) and serve as a reference to an earlier Pioneer Square at grade elevation. This column is considered the “Gauge”.

Column 3 is slightly more massive in scale and complex in its structural detailing. Significant bracing presents meaning to a story of tectonic plates, temporary retrofit engineering, and the reason for the demise of the Viaduct structure due to the Nisqually earthquake. In addition to Columns 1 and 2, all four columns exist on the public walkway of the future street alignment. Column 3 is within inches of the curb and under present street engineering requirements does not comply with the three-foot setback. This situation presents an opportunity to exercise a creative variance to the “norm”, an urban anomaly.

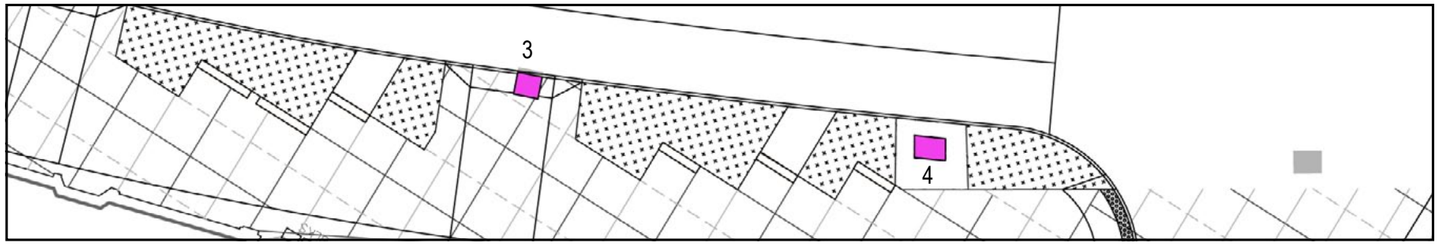
I propose we pursue retaining the concrete column and secure a variance from the three-foot setback from the curb (there are existing examples we can site in the city). The cost effectiveness and honesty of retaining this column provides a rhythm of an earlier order I feel is important if this anomaly is to read properly. Further to this, any additional column footprints along the project, either at grade or at some elevation, will be reinforced by the columns at Yesler and Washington Street and provide a conceptually cohesive vector.

The farmer who plows around the tree or large rock in the field creates an anomaly as enrichment. We are asking the street engineers to respect an “inconvenient truth” known as Column 3 and wave the three-foot setback from the curb.

This course of action will be done in a cost effective manner and provide a totem that will be representative both of the past and future repurposed ethos.

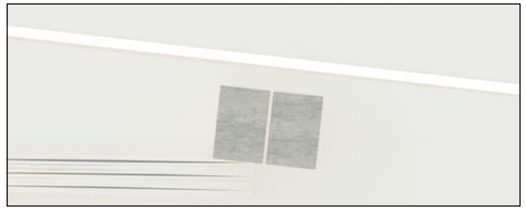


Double seismic column showing sealevel gauge and reveal of underground footing

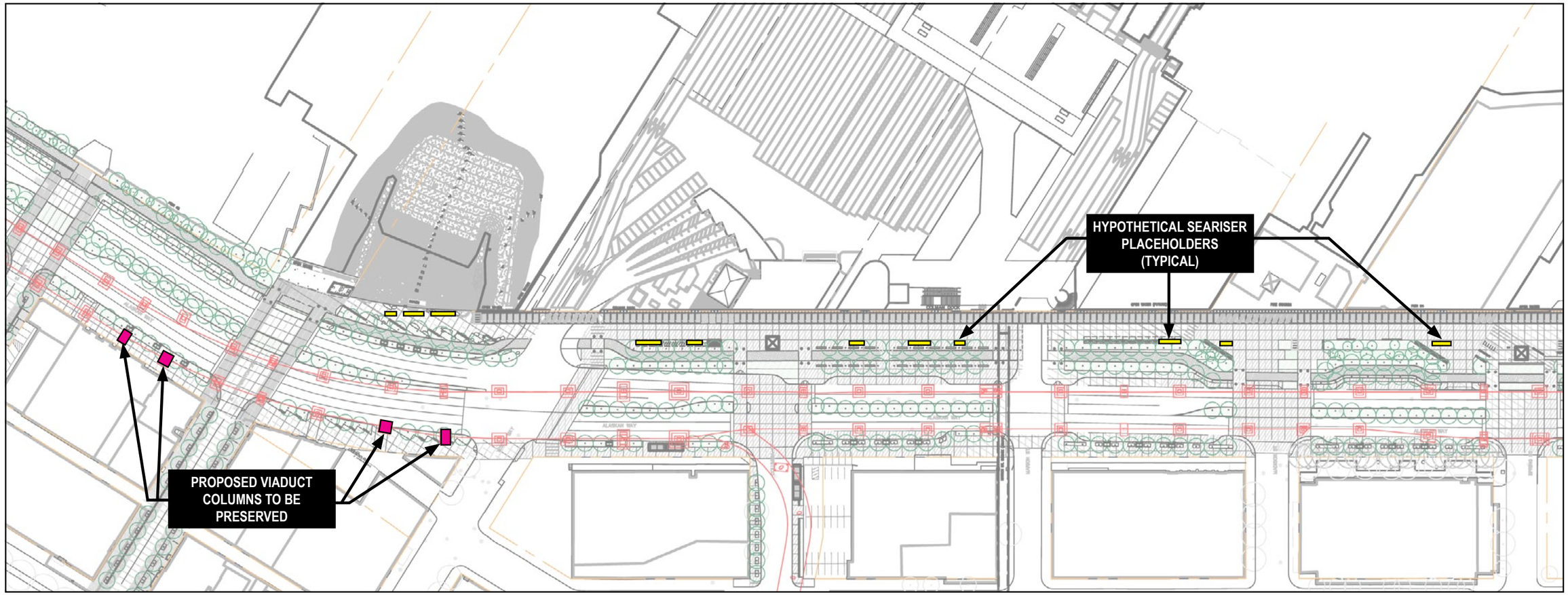


Plan view of site showing columns

Column 3



Column 4



Buster Simpson © 2015
901 Yakima Ave South • Seattle, WA 98144
206.328.6212 Studio • 206.753.7717 Mobile
buster@bustersimpson.net • www.bustersimpson.net

Elliott Bay Seawall Project

ANTHROPOCENE BEACH // ZONE 1

90% DESIGN DEVELOPMENT

DRAWING: T. METTEN

2015-05-07

PA-09