

Caloosahatchee Water Wall and Pond Shelter

A Regenerative Public Art Project

Concept Pack 2.17





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| ① McGregor Blvd | ⑥ Proposed location of Caloosahatchee Water Wall |
| ② New sidewalk and lighting by FDOT | ⑦ Existing retention pond area |
| ③ Proposed connector pathways / paving | ⑧ Proposed extended retention pond with cypress trees |
| ④ Proposed native landscaping (upland) | ⑨ Proposed location of Pond Shelter |
| ⑤ Proposed pond expansion and native littoral and aquatic planting (improved water quality and habit enhancement) | ⑩ Alliance for the Arts gallery location within main building |

Project Overview

The Alliance for the Arts has engaged Michael Singer Studio to lead a collaborative design team to re-imagine the western edge of its 10-acre campus as a part of a multi-phase campus expansion plan. This phase of the project seeks to enhance the urban landscape through a naturalization and expansion of an existing retention pond, regenerating the land and establishing a beautiful thriving pocket of Florida flora and fauna. The two focal points of this project are the Caloosahatchee Water Wall and the Pond Shelter. In addition to these key components a new sidewalk and lighting is being built by the Florida Department of Transportation (FDOT) along the western edge of the site, and new connector sidewalks will welcome guests arriving by foot or bike into the City of Fort Myers and the Alliance campus.

Caloosahatchee Water Wall

The Caloosahatchee Water Wall is proposed as a 25' tall wall of water made from blue anodized aluminum and perforated with a pattern representing the historic and current courses of the Caloosahatchee River. This interpretive sculpture will introduce the public to the reasons behind the environmental conditions of the Caloosahatchee River which is now heavily polluted and often results in the estuary filled with toxic algae. The Water Wall's site on the Alliance Campus is less than a ¼ mile away from the Caloosahatchee River and is therefore an optimal site for the arts to engage in this important local environmental issue. The site is also at the gateway to Ft Myers along historic McGregor Blvd seen by over 600,000 people monthly; the Water Wall is scaled to engage this audience in the arts by encouraging them to visit the piece and participate in this community green space. In addition to being an aesthetic and interpretive piece, the Caloosahatchee Water Wall is designed to be a water filter, using the surface of the wall and aquatic vegetation at the base of the wall to aerate and filter the water in the retention basin. Water is pumped up from the retention basin utilizing energy from solar panels mounted on the wall; the water trickles down the wall surface and through the perforated aluminum shapes that form the course of the River. The concept of the wall is thus both literal and figurative- cleansing water in real time while demonstrating the need for such measures at a regional level in order to restore the Caloosahatchee River. A sign will be placed adjacent to the sculpture interpreting both the project and the environmental issues surrounding the Caloosahatchee River. On the north side an aluminum lattice will support blooming vines emerging from the native vegetation planted around the Water Wall. The solar panels placed on the south side of the piece are tilted at an angle for efficiency but also for the aluminum structure of the Water Wall to form a large "A" echoing the A in the Alliance's logo. Evening LED lighting will highlight the Water Wall and the "A", ensuring a strong visible presence for evening gallery openings and theater performances.

Pond Shelter

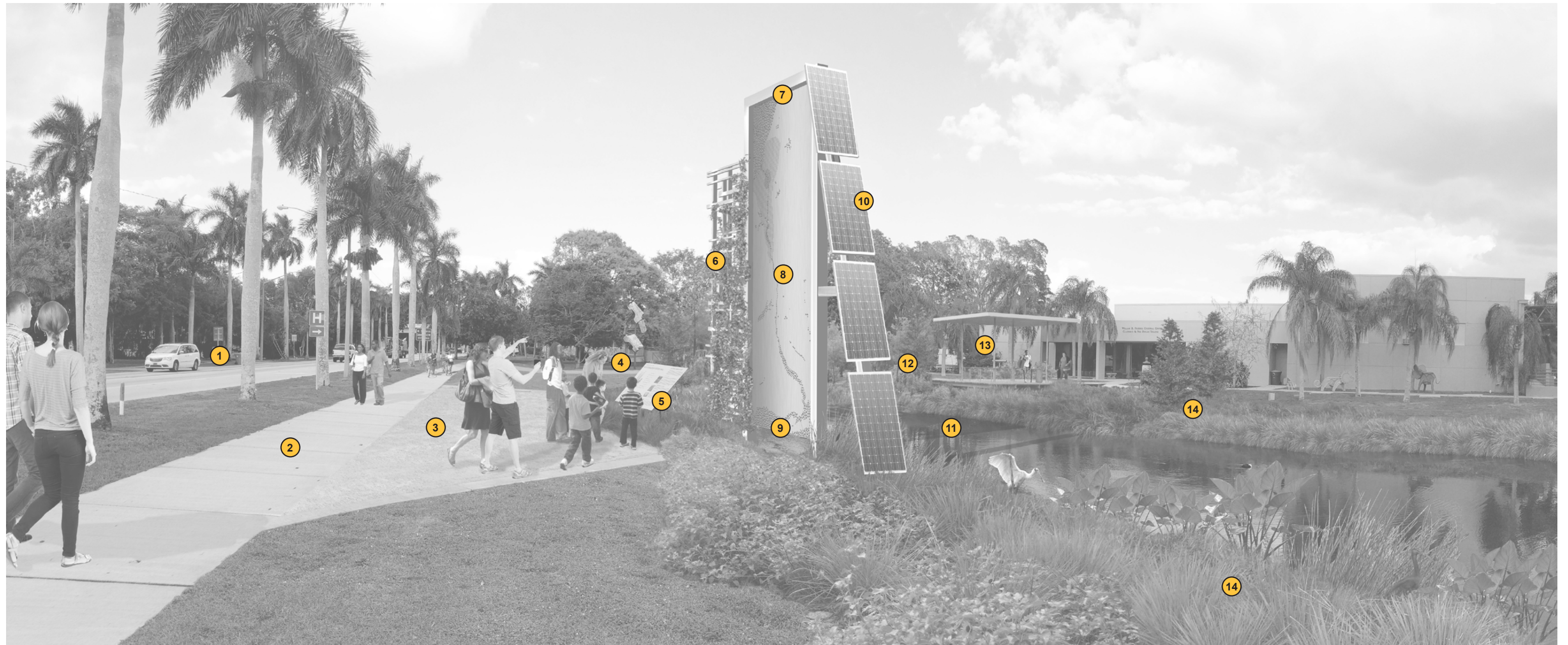
The Pond Shelter is proposed as a 16'x20' outdoor room adjacent to the Alliance's gallery space and intended as a 'front porch' for visitors approaching the campus from the new sidewalks. The Shelter will have an open and minimalist design and will relate in material, detailing and color to the Water Wall across the pond. The Shelter's structure will be made from aluminum with portions of the structure anodized blue to visually relate to the Water Wall and the theater, with the intent to visually unify the campus. Native emergent aquatic vegetation will surround the shelter and extend to the north with cypress trees, low shrubs and palmetto, creating a beautiful, contemplative space that supports wildlife habitat such as wading birds. The Shelter will be utilized as a space for plein air drawing and painting, as well as an outdoor classroom and will be free and open to the public to explore.



Conceptual Rendering Looking North Along the West Side of the Alliance Campus

The Caloosahatchee Water Wall is seen from the south side with the Pond Shelter in the distance across the water. As the sun sets, the pattern of the Caloosahatchee River is cast as a shadow upon the surface of the water and shows the River in its actual orientation running from the east to the west.

Existing Condition



① McGregor Blvd, a major roadway with over 600,000 vehicles per month.

② The new sidewalk to be installed by FDOT will be 8 feet wide and will connect to new crosswalks. The project will include new drainage for the area as well as lighting and signage.

③ A paved space will connect the new sidewalk to the Caloosahatchee Water Wall. As shown in the rendering the paved area could be recycled concrete fines which are permeable, 100% recycled, and compacted to meet ADA requirements.

④ In the background of this rendering is one of the new proposed connector walkways. The intent of these walkways is to connect the new sidewalk with the Alliance for the Arts campus and main building, inviting the public to enter and explore.

⑤ The Caloosahatchee Water Wall will include a sign that will interpret both the project and the environmental issues surrounding the Caloosahatchee River.

⑥ Blooming native vines will climb the aluminum lattice on the north side of the Wall.

⑦ Water is pumped up to the top of the Water Wall from the retention basin utilizing energy from solar panels mounted on the south side of the wall. Water then trickles down the surface of the wall and is aerated in the process.

⑧ The Water Wall surface is proposed as blue anodized aluminum and perforated with a pattern representing the historic and current courses of the Caloosahatchee River. The water sheeting from the top of the wall will trickle through the perforated openings, increasing the aeration of the water.

⑨ At the bottom of the Water Wall the water drips back into the retention pond and is filtered through a series of plants, roots and associated beneficial bacteria.

⑩ Solar panels on the south side of the wall will power the pump and lighting for the Caloosahatchee Water Wall. The size and extent of the solar panels is not known at this conceptual level of design.

⑪ As the sun sets, the pattern of the Caloosahatchee River is cast as a shadow upon the surface of the retention pond and shows the River in its actual orientation running from the east to the west.

⑫ The retention pond is proposed to be extended to the north and naturalized with native emergent aquatic vegetation, cypress trees, low shrubs and palmetto, creating a beautiful, contemplative space that supports wildlife habitat such as wading birds.

⑬ The Pond Shelter is proposed as a 16'x20' outdoor room adjacent to the Alliance's gallery space and intended as a 'front porch' for visitors approaching the campus from the new pathways. The Shelter will relate in material, detailing and color to the Water Wall across the pond.

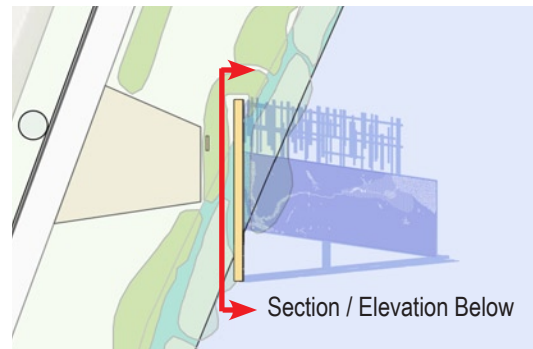
⑭ The retention pond is proposed to be expanded to allow for a littoral edge of native plants including emergent and upland vegetation. As possible, native water lilies may also be utilized. The extent of the expansion and littoral vegetation will largely depend on the overall project budget.



Conceptual Rendering Looking South at the West Side of the Alliance Campus

This view is taken from the west side of McGregor Blvd and gives a sense of the visual impact the project will have on the 600,000 people experiencing it each month. The anodized blue detailing of the Caloosahatchee Water Wall is echoed in the detailing of the Pond Shelter and relates to the blue theater of the Alliance for the Arts main building.

Existing Condition



↑ North
Diagrammatic Plan (see page 2)
Scale: 1"=40'



Conceptual Perspectival Section / Elevation
Approximate Scale: 1/4"=1'



- 1 The male model shown for scale is 7'2" tall from foot to fingertip. The scale is approximate due to the perspectival nature of this sectional elevation drawing.
- 2 Native vegetation will be used throughout the project and along the retention pond, demonstrating best practices in reducing stormwater pollution. This demonstration is directly related to solving the pollution issues in the Caloosahatchee River.
- 3 Blooming native vines will climb the aluminum lattice on the north side of the Wall. The final design will be developed so as to reduce the ability for people to climb the structure (the vines may be temporarily trained up the wall with wire).
- 4 The retention pond is proposed to be expanded to allow for a littoral edge of native plants including emergent and upland vegetation. Ideally the littoral shelf (the slope) will be more gradual than shown; this will largely depend on the amount of site work and grading that can be budgeted.
- 5 Sculpted cast aluminum detailing, a signature of much of Michael Singer Studio's work, may be integrated with parts of the aluminum structure of the Caloosahatchee Water Wall and the Pond Shelter. The locations and extent of the sculpted cast aluminum will be determined in the following stages of design.
- 6 Water is pumped up to the top of the Water Wall from the retention basin utilizing energy from solar panels mounted on the south side of the wall. Water then trickles down the surface of the wall and is aerated in the process. The water source is concealed within the structure of the wall. It may be determined that an intermittent water flow is more desirable than a constant flow; this will be determined in the following stages of design.
- 7 The Water Wall surface is proposed as blue anodized aluminum and perforated with a pattern representing the historic and current courses of the Caloosahatchee River. The water sheeting from the top of the Wall will trickle through the perforated openings, increasing the aeration of the water. The perforated pattern in this location represents Lake Okeechobee.
- 8 The perforated pattern in this location of the wall represents the estimated extent of historic wetlands and lakes (Lakes Bonnet, Flirt and Hicpochee) that existed before the canal was created (now called the C-43) and joined to the Caloosahatchee River.
- 9 Small rectangular perforations in the overall pattern represent the 3 locks along the present day C-43 canal which is connected to, and a part of, the Caloosahatchee River. These 3 locks are an essential part of explaining the present-day environmental conditions of the River.
- 10 The perforated pattern in this location of the wall is where Fort Myers is located along the River. Fort Myers and other areas / features of interest (such as watersheds or major roadways) may be added to the perforated pattern in the following stages of design.
- 11 The perforated pattern at the bottom of the wall is where the Caloosahatchee River empties into Pine Island Sound and ultimately into the Gulf of Mexico. Metaphorically, the Caloosahatchee River flows into the retention pond on site which represents the Gulf of Mexico.
- 12 At the bottom of the Water Wall the water drips back into the retention pond and is filtered through a series of plants, plant roots, soil and associated beneficial bacteria. As possible, native water lilies or other floating aquatic plants may be utilized for additional filtration and habitat creation.
- 13 The solar panels placed on the south side of the piece are tilted at an angle for efficiency but also for the aluminum structure of the Water Wall to form a large "A" echoing the A in the Alliance's logo and also announcing the arts campus.
- 14 Solar panels on the south side of the wall will power the pump and lighting for the Caloosahatchee Water Wall. The size and extent of the solar panels is not known at this conceptual level of design.