

Design Alternatives

RIVERSIDE PARK



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August 18, 2008

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Calcasieu River 1920 McNeese State University Library

PROBLEM STATEMENT

Riverside Park is rich in cultural, historical, and natural values. It stretches alongside Lake Charles’ Calcasieu River and has some of the most beautiful views in the area. The park is nestled within a natural wooded wetlands area that has been designated for future research and conservation. Neighboring the wetlands are established residential communities, home to many who remember fishing in the park as a child. Many associated with this park have continuously viewed it as having potential to become a preferred destination for family gatherings, outdoor learning, natural habitat observation, and quiet, reflective recreational experiences. The City of Lake Charles shares our desire to unveil the obvious potential of Riverside Park by enhancing its current attributes and redefining it as a thriving local retreat for surrounding communities and regional visitors. As well as providing human activity opportunities within the park, Riverside Park can also attract and house its native natural wildlife. Enhancing the existing characteristics of the park, ensuring the conservation of its native wildlife, and creating opportunities for human activity, will offer its users a unique Louisiana experience.

SCOPE & STUDY AREA

Riverside Park is bordered by English Bayou to the north, Calcasieu River to the west, and a natural wooded wetland marsh to the south. The Master Plan addresses programming, land uses, lighting, landscaping, circulation, and the implementation of stormwater best management practices. These elements can be designed with consideration to safety, culture, and history to ensure an enduring, enjoyable local retreat.

CHALLENGES

Riverside Park and other community parks share similar challenges regarding their general decline caused by extended use, vandals, inadequate maintenance regimes, negative user perceptions, and possible instances of crime. Although the park’s linear site limits large communal programming areas, multiple small communal areas can be integrated along its narrow corridor.

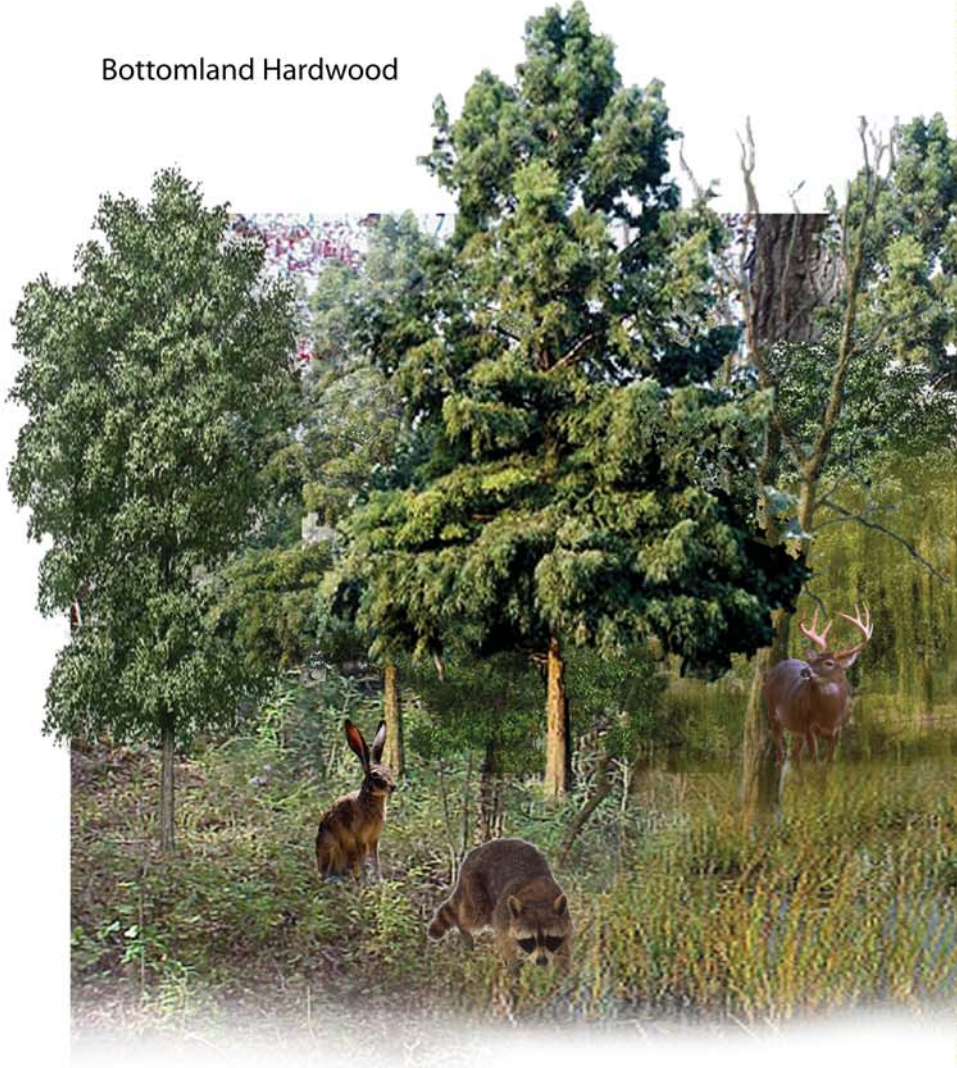
GOALS

- Develop an adaptable program that offers a variety of experiences.
- Create a landscape that reflects the area’s natural amenities and historical uses.
- Use existing materials from the area to express the site’s rich natural environment and cultural history. These materials will be used to create sustainable, artistic objects that are functionally integrated into the design.
- Redesign the existing drainage to mimic the natural waterways of Louisiana, provide improved stormwater management practices, expose and attract visitors to natural environments of Louisiana, and enhance wildlife habitats.
- Develop a design that minimizes maintenance and facilitates future park care.

ECOLOGY

Illustrated below are some of the natural flora and fauna that Riverside Park has to offer.

Bottomland Hardwood



Flora

Taxodium distichum Bald Cypress
Quercus virginiana Southern Live Oak
Liquidambar styraciflua Sweet Gum
Ulmus americana American Elm
Platanus occidentalis Sycamore
Populus deltoides Cottonwood
Celtis laevigata Hackberry
Andropogon gerardii Big Bluestem
Sorghastrum nutans Indiangrass
Tripsacum dactyloides Eastern Gamagrass
Panicum virgatum Switchgrass
Paspalum plicatulum Brownseed Paspulum
Distichlis spicata Spike Grass
Alternanthera philoxeroides Alligator Weed

Fauna

Mustela vison Mink
Ondatra zibethicus Muskrat
Procyon lotor Raccoon
Didelphis virginiana Opossum
Sylvilagus sp. Rabbitt
Sciurus carolinensis Grey Squirrel
Odocoileus virginianus Whitetail Deer
Crotalus horridus Timber Rattlesnake
Agkistrodon contortrix Copperhead
Agelaius phoeniceus Red-winged Blackbird
Scelopax minor American Woodcock

Brackish Marsh



Flora

Taxodium distichum Bald Cypress
Liquidambar styraciflua Sweet gum
Ulmus americana American Elm
Platanus occidentalis Sycamore
Celtis laevigata Hackberry
Salix babylonica Weeping Willow
Andropogon gerardii Big Bluestem
Sorghastrum nutans Indiangrass
Tripsacum dactyloides Eastern Gamagrass
Panicum virgatum Switchgrass
Paspalum plicatulum Brownseed Paspulum
Distichlis spicata Spike Grass
Spartina alterniflora Saltmarsh Cordgrass
Juncus sp. Rush
Scirpus sp. Bullrush Sedge
Eichhornia crassipes Water Hyacinth
Typha latifolia Broadleaf Cattail
Pontederia cordata Pickerel Weed

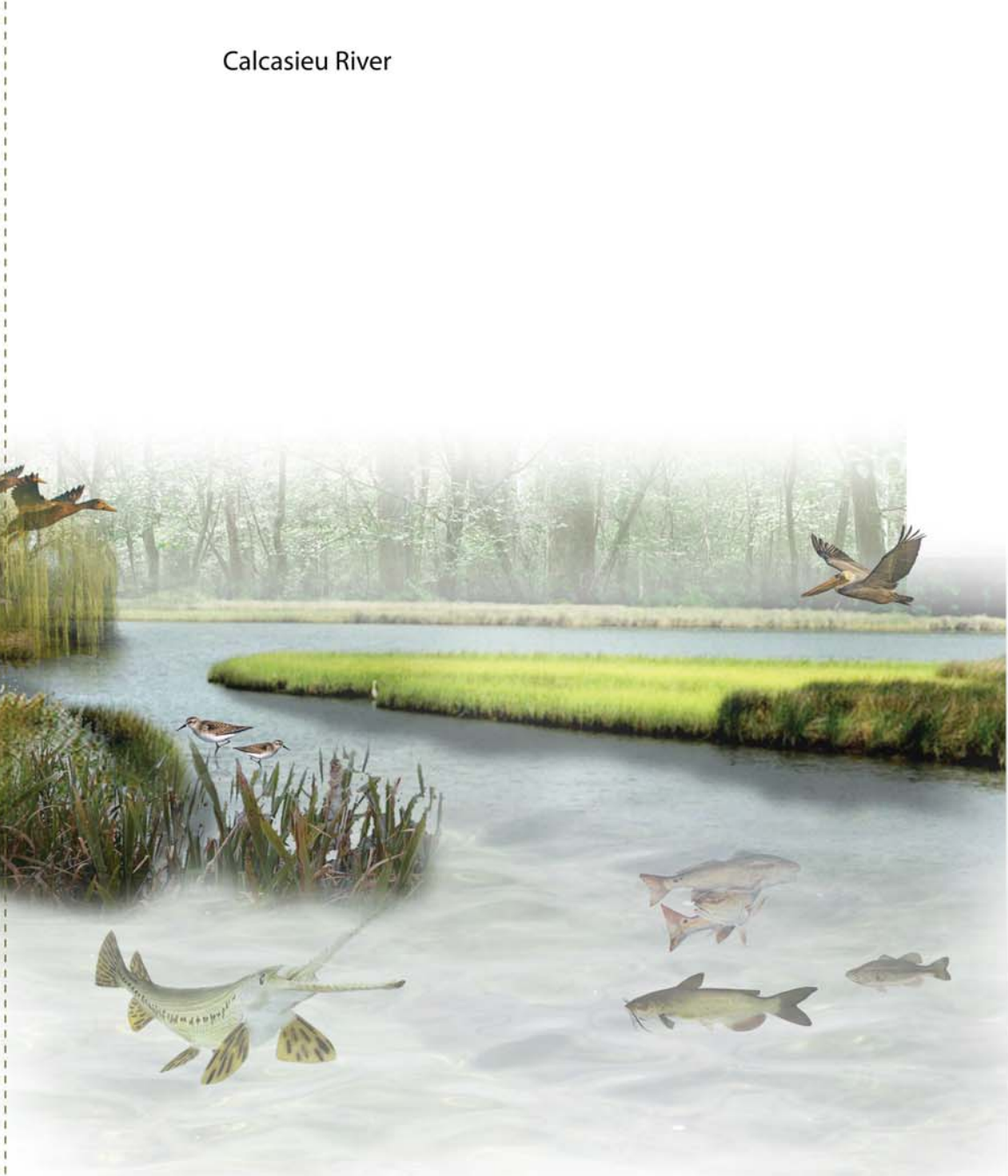
Fauna

Castor canadensis Beaver

Anatinae sp. Duck
Actitis macularius Sandpiper
Sterna hirundo Tern
Cistothorus palustris Marsh Wren

Alligator mississippiensis Alligator
Agkistrodon piscivorus Water Moccasin
Chelydridae sp. Turtle

Calcasieu River



Flora

Taxodium distichum Bald Cypress
Salix babylonica Weeping Willow
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Fauna

Castor canadensis Beaver

Anatinae sp. Duck
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Pelecanus occidentalis Brown Pelican
Emberizidae sp. Seaside Sparrow

Alligator mississippiensis Alligator
Agkistrodon piscivorus Water Moccasin
Chelydridae sp. Turtle

Lutjanus campechanus Red Snapper
Pogonius cromis Black Drum
Paralichthys albigutta Gulf Flounder
Ictalurus punctatus Catfish
Micrpterus sp. Bass
Atractosteus spatula Alligator Gar
Mugel cephalus Mullet
Sciaenops ocellatus Redfish
Apoldinotus grunniens Sheephead
Malacostraca sp. Crabs and Shrimp
Crassotrea virginica Oysters

Riverside Park has a vivid, eclectic history functioning as a host to the Goos Ferry, an orange orchard, and the local destination for children and their parents to fish. Its historical background inspired the design concepts and aided in the program development.



Calcasieu River Ferry 1921



Historical Calcasieu River Aerial



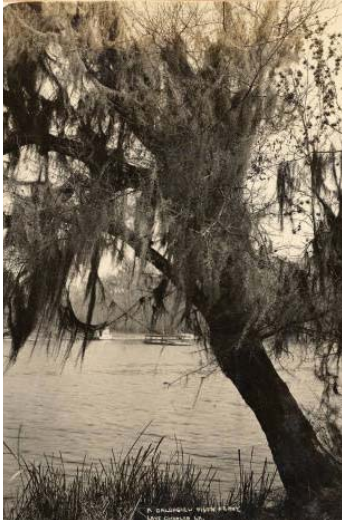
Goos Shipyard 1890 MSU Library



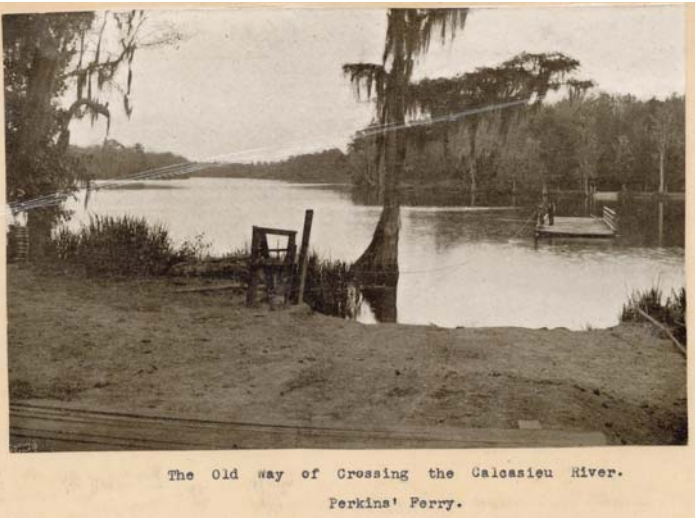
Calcasieu River 1920 MSU Library



Baptism Calcasieu River 1930



Goos Ferry, Calcasieu River



Perkins' Ferry, Calcasieu River

Photos of existing conditions.





Riverside Park is a beautiful, thriving natural refuge for many native Louisiana species of plants and animals. The site has been gently used over the past years, thus major preparation for future development is not necessary.

PROGRAM ELEMENTS

After inventorying, reviewing, and analyzing the gathered site information, the program elements were developed.

Natural Areas

- Nature Trails
- Picnic Areas
- Wildlife Habitat areas
- Wetlands
- Access to waters edge

Landscaping

- Bald Cypress Groves
- Entry gardens

Structures

- Picnic Pavilions
- Erosion Control
- Elevated Observation Deck
- Overhead Entry signage
- Outdoor Classroom
- Playground
- Seating
- Boat Docks
- Fishing Piers

Vehicular Circulation

- Dropoff Area
- Roundabout
- Improved parking
- Overflow Parking
- Improved Boat Launch

Security

- Cleared understory area
- Controlled entrance
- Perimeter buffers



INITIAL DESIGN CONCEPTS

PIERS

Riverside Park is a space that offers many fishing experiences for its users. This is an attribute that should be conserved and enhanced for current and future generations to enjoy. Implementing a system of fishing piers, observation decks, boat docks, and boardwalks, extending along the edge and into the water, provides extended fishing opportunities and provides users an intimate experience with the wetlands and waterscape. Views of natural habitat, fish, and bird activity can also be enjoyed while meandering along the piers and boardwalks.



Examples of native wildlife around Riverside Park



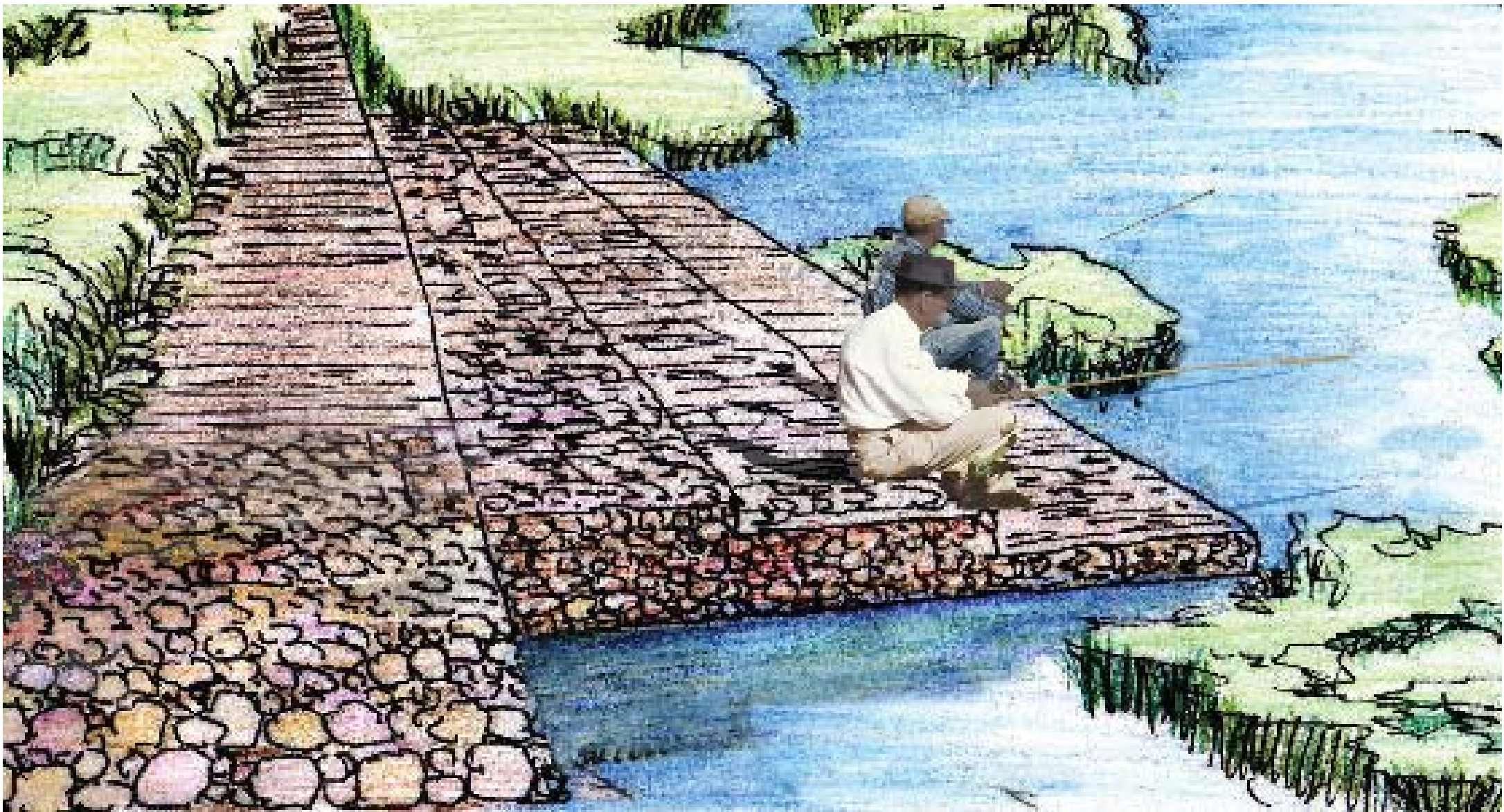
Rendering of proposed pier and decking that offers an observation deck for wildlife viewing



Precedent images for proposed pier and decking

EROSION CONTROL

The majority of the site is bordered by the Calcasieu River, and thus, land erosion issues must be addressed. During the conceptual designing process, gabions were chosen to mitigate erosion because they are functional, natural, and aesthetically pleasing. Gabions, wire cages filled with re-purposed, broken concrete and/or rocks, are used to support buildings and land. They embrace the local ecological system by becoming habitats for smaller fish on the water’s edge and allowing plant root growth. Fluctuating water levels do not disturb the established natural habitat or affect the gabion’s structural integrity. Gabions also support human activities by providing an intriguing place for pier fishing and allowing users an intimate experience along the water’s edge. Gabions also filter park site runoff before it enters English Bayou and Calcasieu River.



Rendering of proposed gabion erosion control as steps into the water.



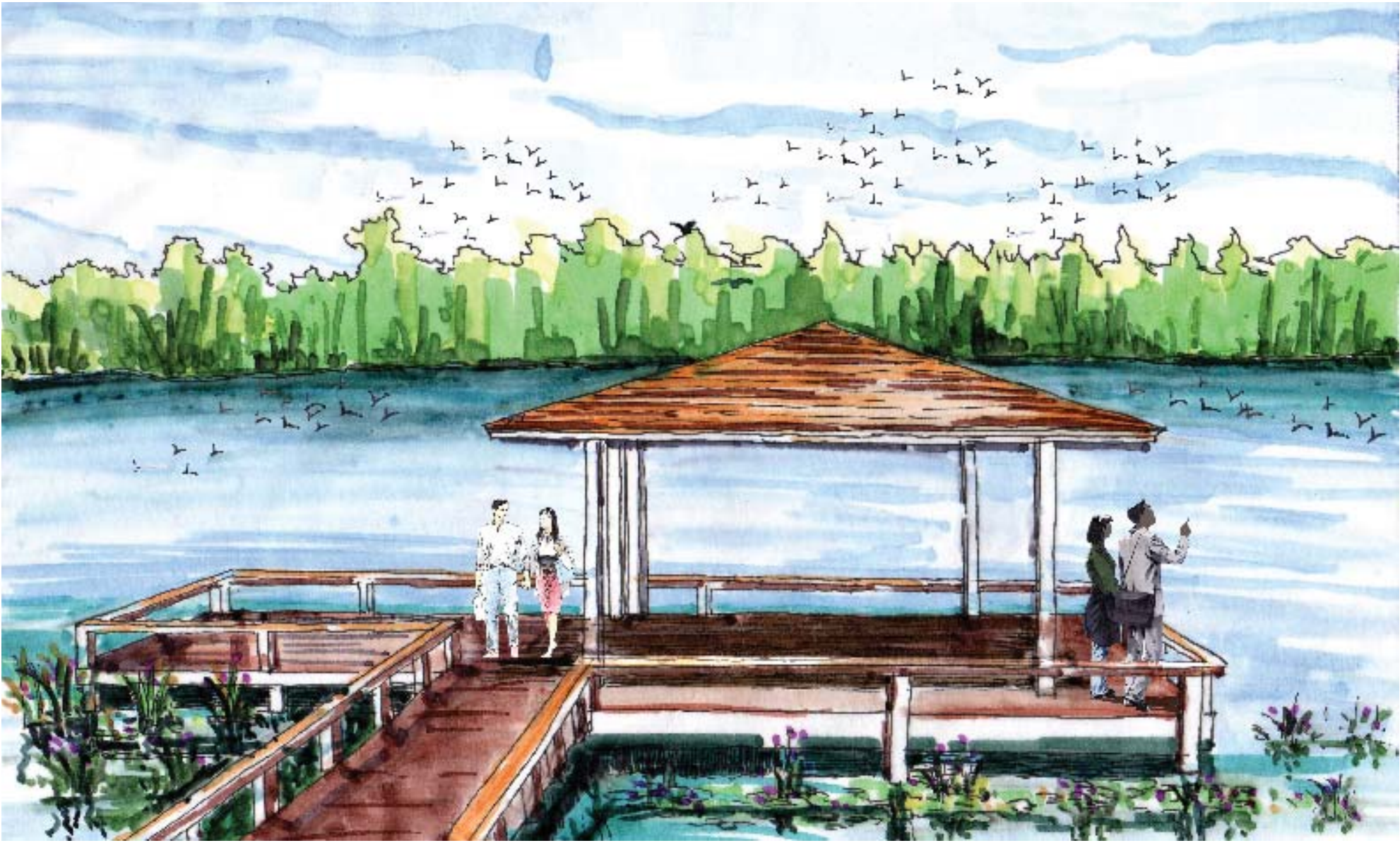
INITIAL DESIGN CONCEPTS

PAVILION

The pavilion, simplistic and floating above the water, is designed to reflect the form of the old Goos Ferry that traveled countless times across the Calcasieu River. This pavilion can be used as an outdoor classroom or provide shelter to those fishing during hot afternoons or rainy days.



Historical images depicting the Goos Ferry crossing Calcasieu River at Fitzenreiter Park



Rendering of proposed pavilion



Precedent images for proposed pavilions

SITE AMENITIES

Riverside Park has many opportune locations for educational, interpretive, and artistic elements that respect the site’s vivid history, natural elements, and wildlife species. Proposed program elements include outdoor classrooms, sculptural features, playground amenities, flora and fauna information markers, fountain, improved boat launch, elevated observation structures, and areas for community artistic involvement. Many of these amenities, particularly the sculptural features, are envisioned as artistic creations that utilize local products and materials. These materials include, but are not limited to, local dead cypress trees that can be rearranged, left in place, and/or carved.



Photo simulation of proposed childrens playground using forms reminiscent of waves of water from the lake



Photo simulation of a possible on site sculpture created with repurposed materials

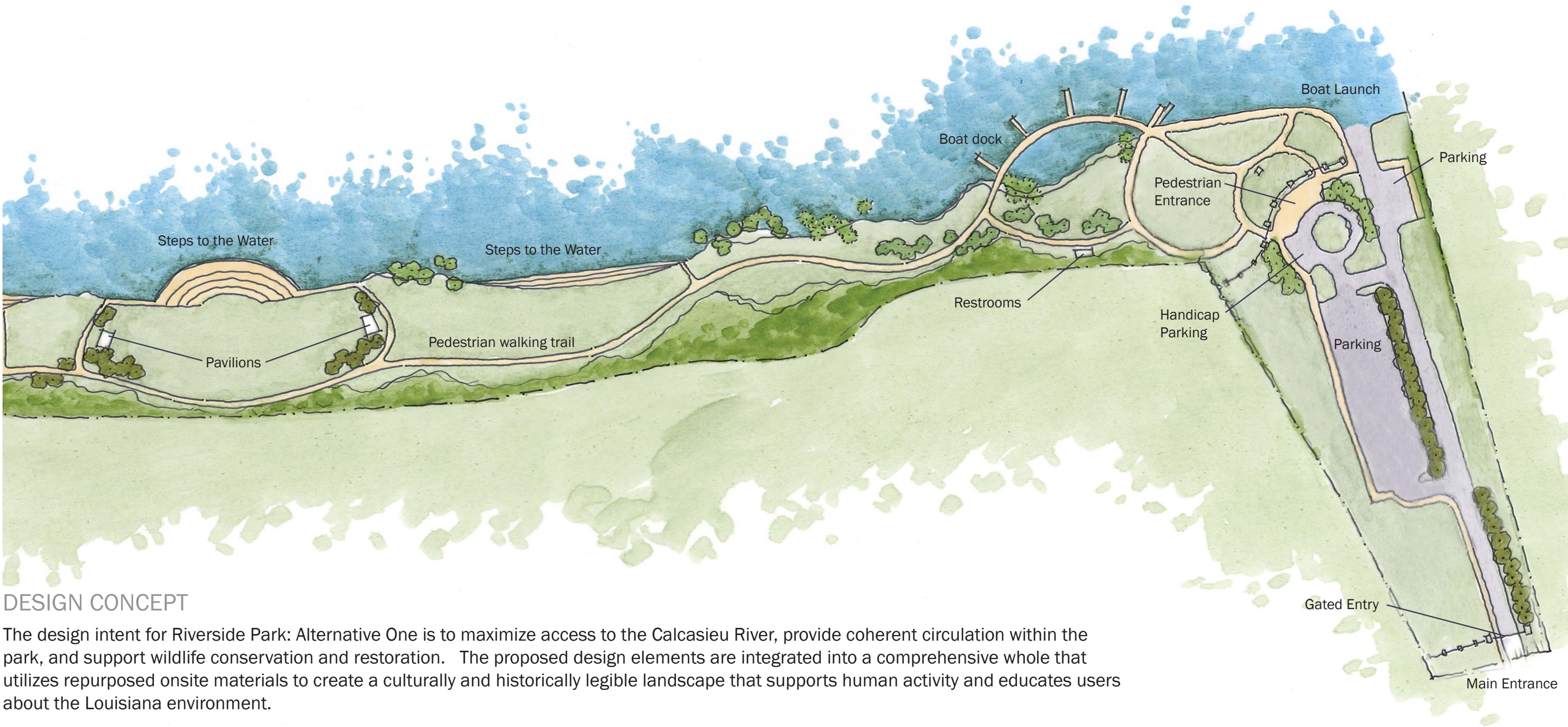


Photo simulation of proposed sculptural pieces to be found throughout the park



ALTERNATIVE 1

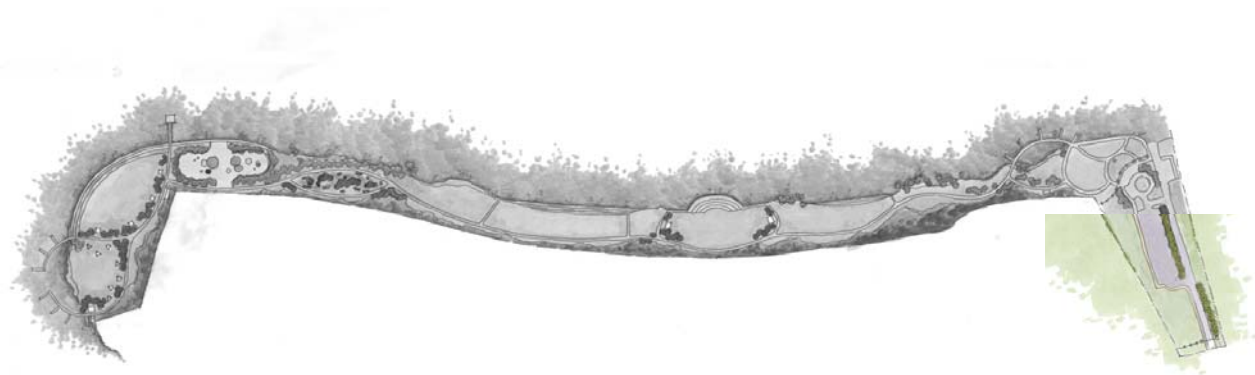




DESIGN CONCEPT

The design intent for Riverside Park: Alternative One is to maximize access to the Calcasieu River, provide coherent circulation within the park, and support wildlife conservation and restoration. The proposed design elements are integrated into a comprehensive whole that utilizes repurposed onsite materials to create a culturally and historically legible landscape that supports human activity and educates users about the Louisiana environment.

ALTERNATIVE 1



MAIN PARK ENTRANCE

The entry gate at the main park entrance area allows controlled access of Riverside Park to maximize safety. The obelisk columns are reminiscent of lighthouses seen in many fishing communities and their materials reflect the natural integrity of the park and the material palette used for designed elements. Linear rows of trees line the entry path to frame the visitors' view of the Calcasieu River and screen views of parking.

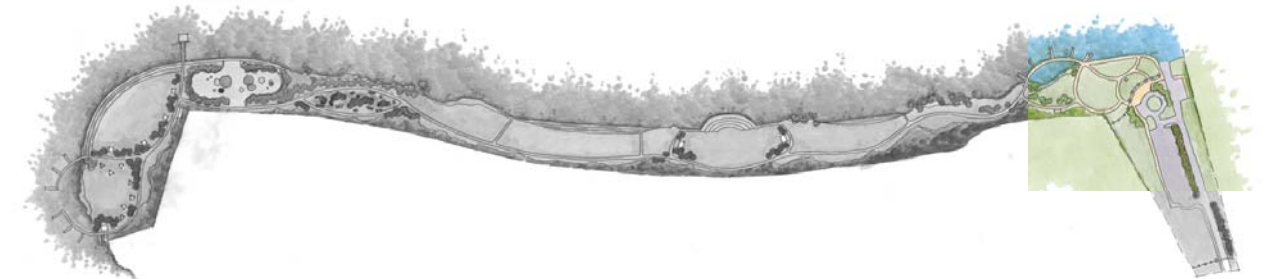


Precedent images for park signage

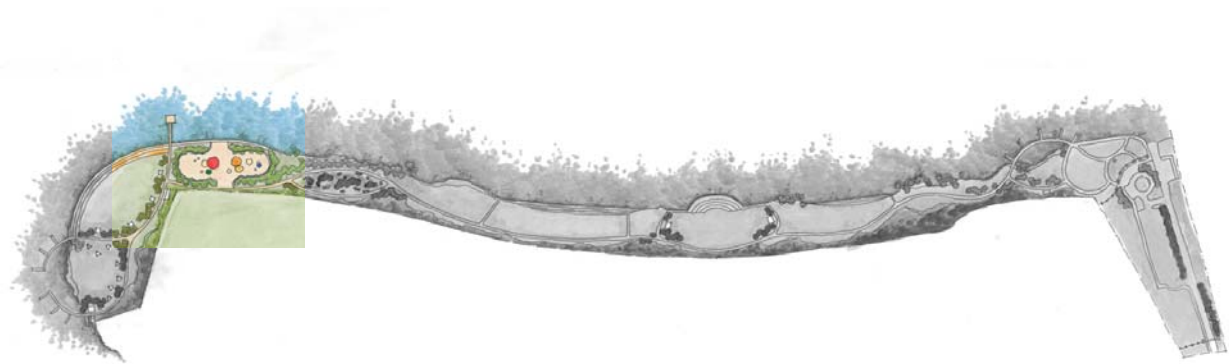


INTERPRETIVE SIGNAGE

Centrally located signage, comprised of a series of stone wedges, reveals the park's history and ecology, and provides an ideal, recognizable space for visitors to gather.



ALTERNATIVE 1

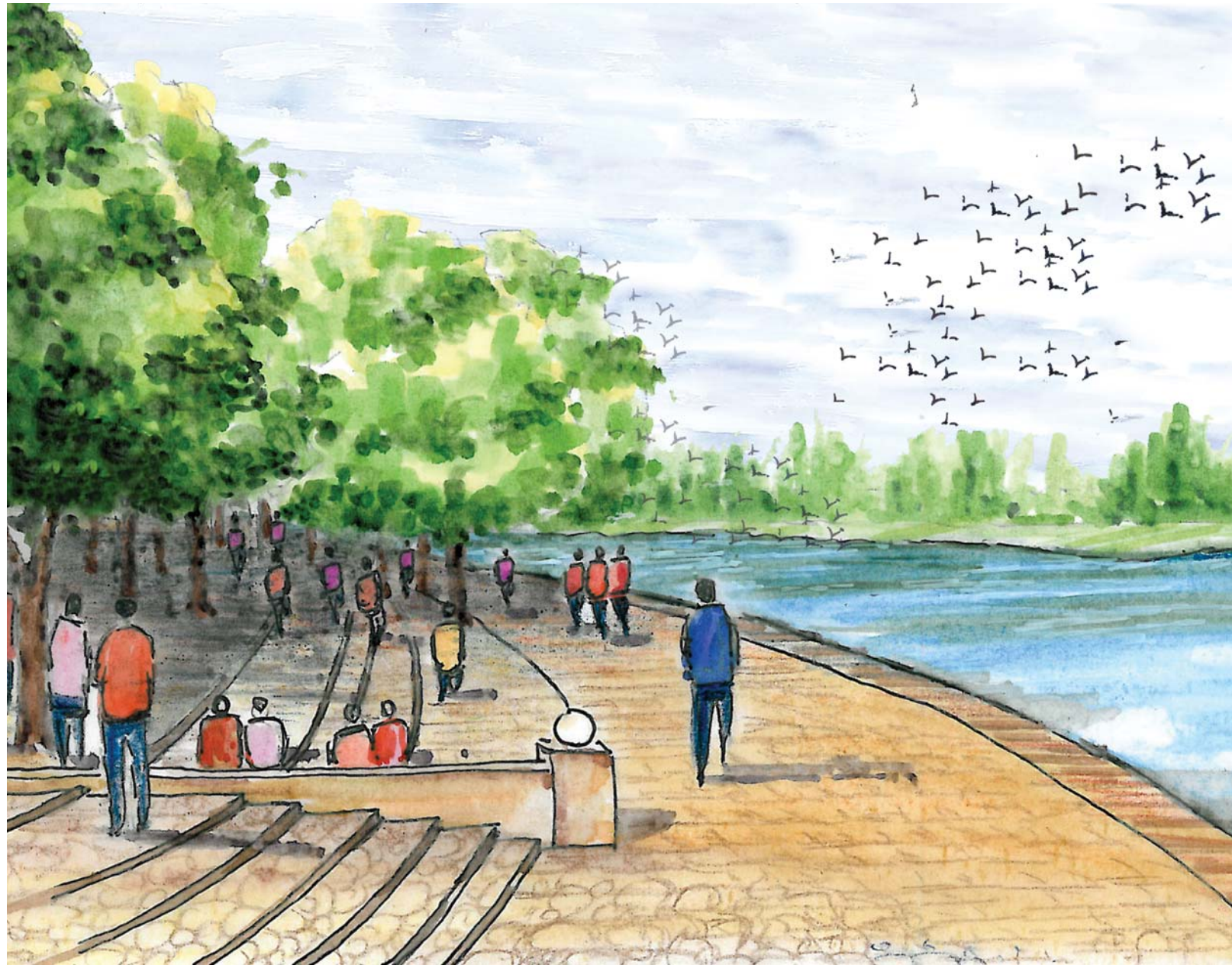


CHILDRENS PLAYGROUND/WATER PLAY AREA

The children’s play area encourages children of all ages to play while safely enjoying the views of the Calcasieu River. The poles extruding from the ground gently spray water, relieving users of the intense heat known to Louisiana. The play area utilizes sustainable building techniques by using onsite, repurposed materials and cleanses and recirculates the fountain water.

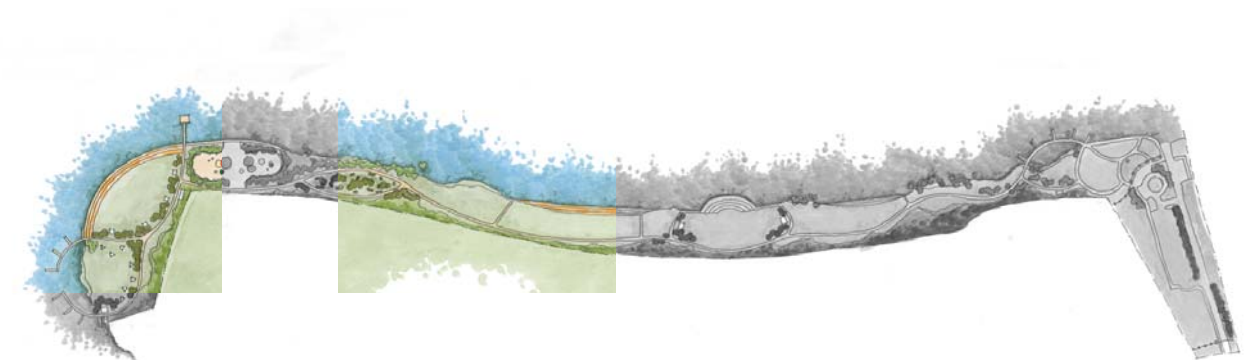


Precedent images for water edge use

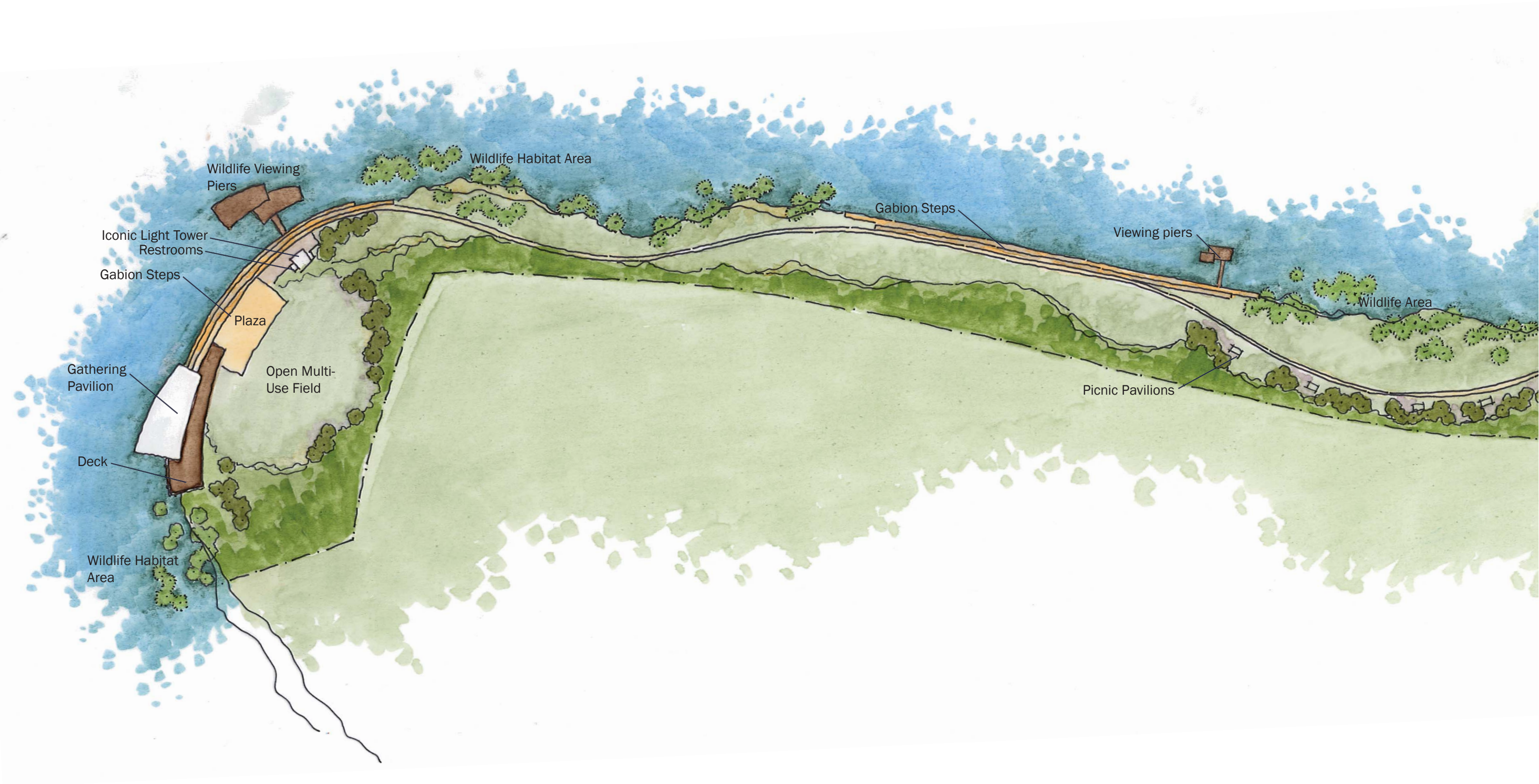


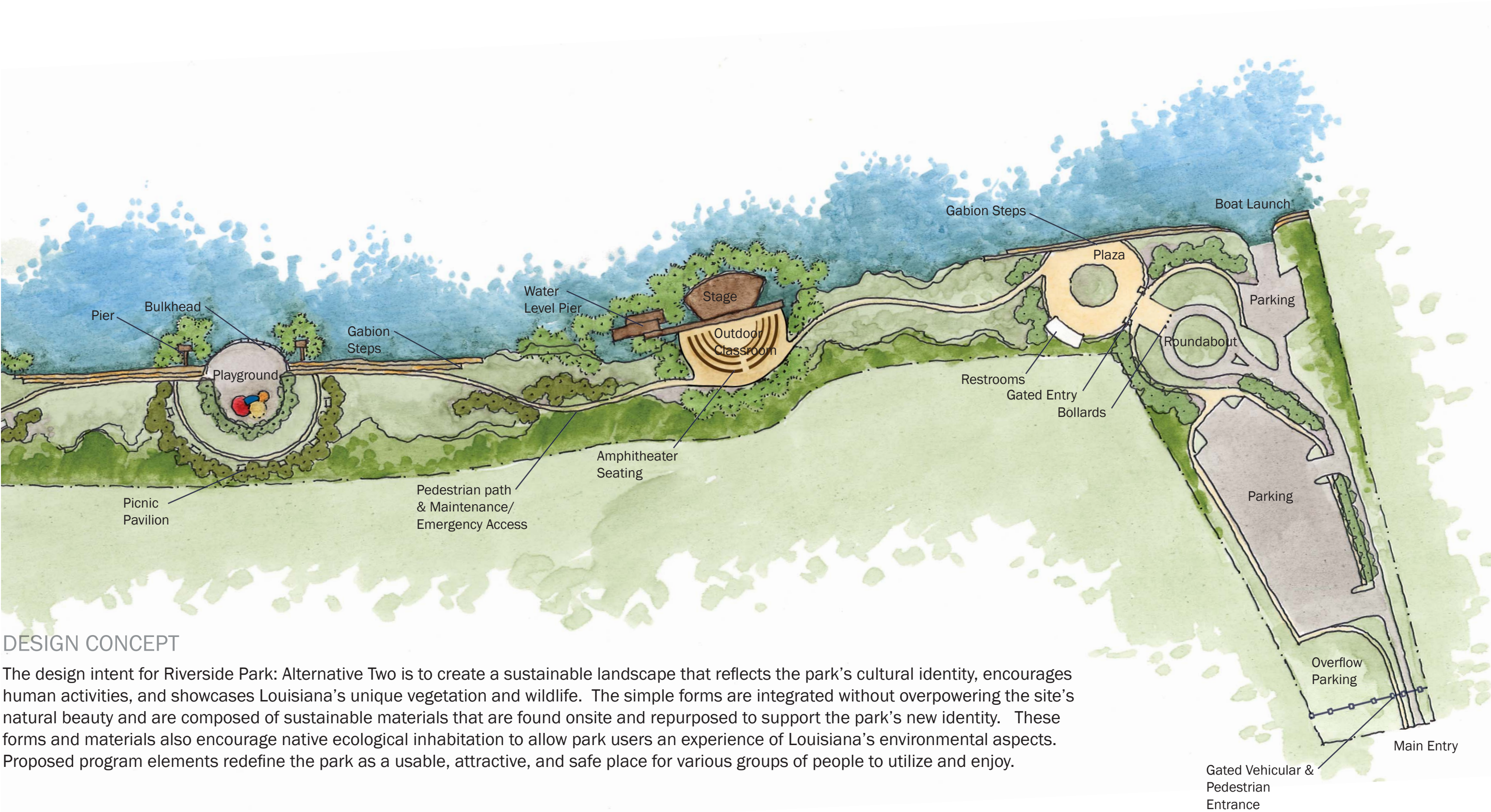
PEDESTRIAN PATHS

Gabion terraces stabilize the edges of the Calcasieu River and embrace the local ecological system by becoming habitats for smaller fish and allowing plant root growth. Visitors can also utilize the gabion terraces for viewing native plantings and wildlife, pier fishing, quiet seating, large group events, and experiencing the water edge. The meandering pedestrian paths border the Calcasieu River to allow users a continued connection to the water while progressing through the park.



ALTERNATIVE 2





DESIGN CONCEPT

The design intent for Riverside Park: Alternative Two is to create a sustainable landscape that reflects the park’s cultural identity, encourages human activities, and showcases Louisiana’s unique vegetation and wildlife. The simple forms are integrated without overpowering the site’s natural beauty and are composed of sustainable materials that are found onsite and repurposed to support the park’s new identity. These forms and materials also encourage native ecological inhabitation to allow park users an experience of Louisiana’s environmental aspects. Proposed program elements redefine the park as a usable, attractive, and safe place for various groups of people to utilize and enjoy.

ALTERNATIVE 2



ENTRY PLAZA

The entrance to Riverside Park is marked by a graceful form that reflects the design palette used throughout the park. The materials used in the creation of the entry feature are sustainable and durable. The columns are gabions filled with repurposed broken concrete and the arching form above supports metal letters identifying the name of the park. The gate is to be kept open during park operating hours and locked for monitored access when the park is closed. Entering through this gate, visitors are immediately surrounded by the bountiful, natural landscape that is particular to the park.



Rendering of proposed pedestrian entry signage into Riverside



Precedent images for proposed signage



BOAT LAUNCH

The path progression from the entry plaza leads to a boat launch that facilitates the use of large boats and kayaks in the Calcasieu River. Its close proximity to the entrance allows visitors to easily disperse and convene with their traveling groups. Restrooms are located at the entry plaza to easily serve all park patrons. The edges of the launch are stabilized with gabion steps to allow river access as the water level fluctuates. Parking is located near the boat launch area to accommodate large trucks and boats.



ALTERNATIVE 2



SIGNAGE

The signage within Riverside Park is intended to guide, educate, and be used as group meeting points. The gabion base of the signage repeats the use of gabions in the park and the etched stainless steel creates a simple, sleek appearance. The bent form protruding from the base and supporting the plaque is COR-TEN steel, a weathering steel that is an enduring material with an industrial appearance. All materials are resistant to weather, vandalism, and typical wear.



Precedent images for proposed signage

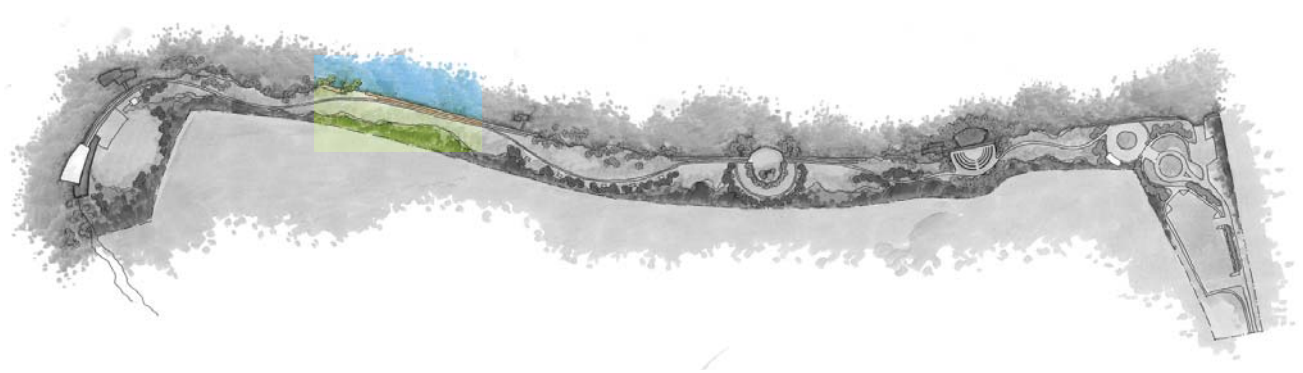


PLAYGROUND/BULKHEAD

The playground is centrally located to encourage multiple family use and its space is maximized by utilizing a bulkhead that extends into the Calcasieu River. Cypress trees frame the views from the bulkhead and water level piers are nestled within the trees for visitors to fish and view wildlife. The pavilions surrounding the perimeter of the playground provide a comfortable, functional space for adults to supervise children playing. The grass lawn located between the playground and the pavilions accommodates passive sports and picnics.



ALTERNATIVE 2



GABION STEPS

Edges along the Calcasieu River are stabilized with gabion terraces that provide many benefits to Riverside Park. Gabions embrace the local ecological system by becoming habitats for smaller fish on the water’s edge and allowing plant root growth. Visitors can also utilize the gabion terraces for viewing native plantings and wildlife, pier fishing, quiet seating, and experiencing the water edge.





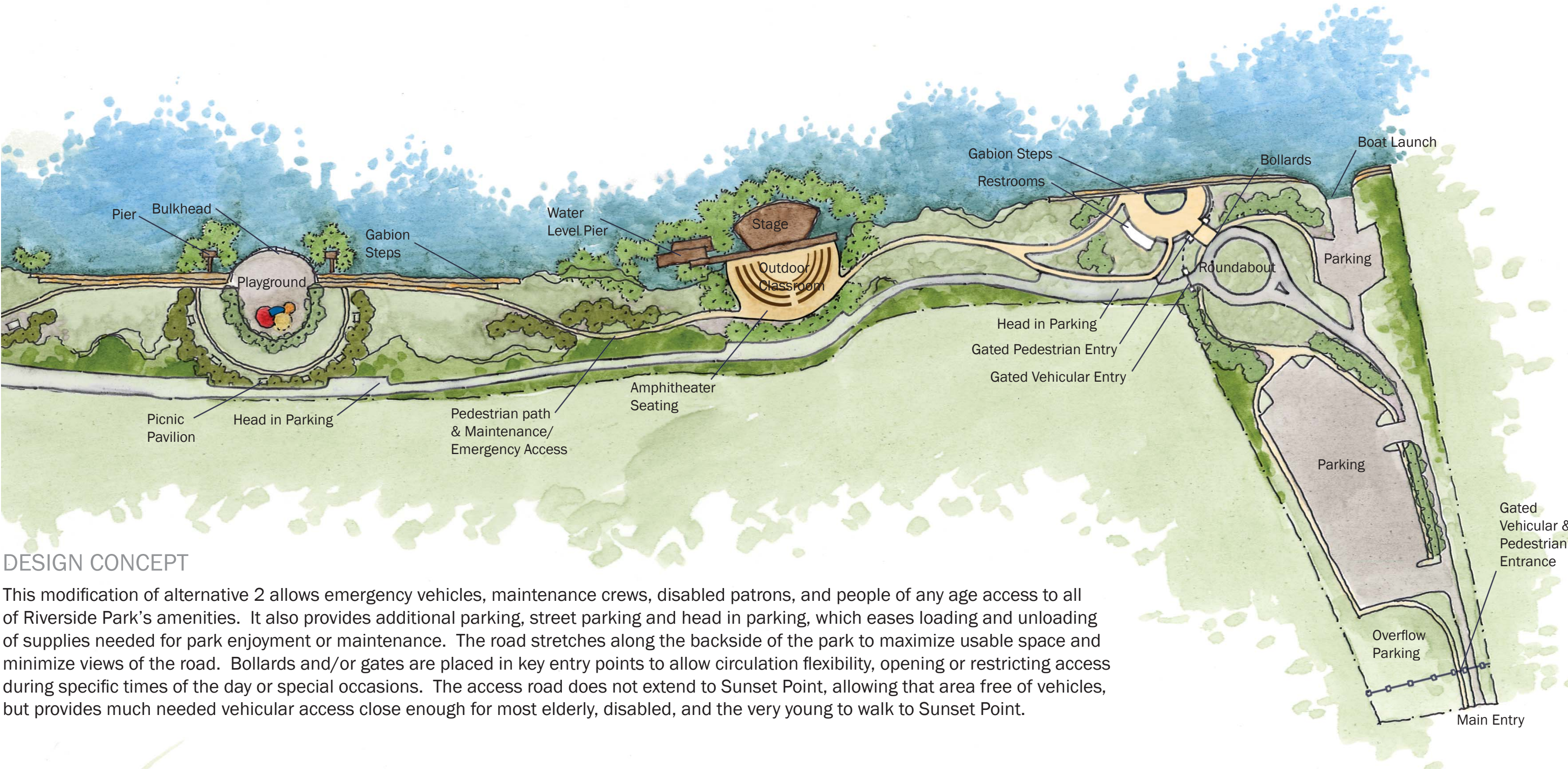
SUNSET POINT

Sunset Point anchors Riverside Park and provides a unique visual experience to its users. The iconic tower is a beacon that visually heightens the space by vertically extending itself to prominently state the space's importance as the park anchor. A large gathering pavilion accommodates various group events. Cypress trees are planted to encourage wildlife inhabitation and further support the natural quality of the park. Piers, gabion terraces, and a boat dock lace the land to the river to provide users various opportunities to experience the water.



ALTERNATIVE 2b





DESIGN CONCEPT

This modification of alternative 2 allows emergency vehicles, maintenance crews, disabled patrons, and people of any age access to all of Riverside Park's amenities. It also provides additional parking, street parking and head in parking, which eases loading and unloading of supplies needed for park enjoyment or maintenance. The road stretches along the backside of the park to maximize usable space and minimize views of the road. Bollards and/or gates are placed in key entry points to allow circulation flexibility, opening or restricting access during specific times of the day or special occasions. The access road does not extend to Sunset Point, allowing that area free of vehicles, but provides much needed vehicular access close enough for most elderly, disabled, and the very young to walk to Sunset Point.

CONCLUSION

The design alternatives for Riverside Park address the outlined goals to create a sustainable landscape that provides an adaptable program, addresses safety concerns, reflects the site’s natural and historical uses, uses sustainable materials, utilizes stormwater management best practices, encourages wildlife conservation and restoration, and minimizes required maintenance. The alternatives considered these goals and used them to guide the creation of distinctively different design possibilities.