

An architectural site plan of the New Orleans Riverfront, showing building footprints, streets, and waterfront areas. The plan is oriented vertically, with the river on the right side. The drawing uses blue lines and shading to highlight specific areas and features.

*October 2017*

NEW ORLEANS  
**RIVERFRONT**  
**MASTER PLAN**  
URBAN DESIGN RECOMMENDATIONS

Submitted to:  
The New Orleans Building Corporation

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# 1

## INTRODUCTION



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Historical image of the City of New Orleans and riverfront

## INTRODUCTION

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### Evolution of the New Orleans riverfront

New Orleans was established in 1718 on the banks of the Mississippi River, a crucial transportation corridor for overseas trade and continental commerce. The Louisiana territory was purchased from France in 1803 under the leadership of President Thomas Jefferson, who recognized the value of the port city to the United States.

Initially, Citizens enjoyed open views to the river and access to the wharves along the river's edge. Steamboats and other vessels traveled up and down the Mississippi River. In 1896, following neglect after the Civil War, the Board of Commissioners of the Port of New Orleans was formed to rebuild public wharves, manage river traffic, and regulate trade. This began a period of growth and prosperity,

elevating New Orleans to a premier world trade city. New wharves were constructed with adjacent enclosed storage warehouses, blocking access and visibility to the river from the city. Modernized port facilities followed, including container cargo terminals and gantry cranes, all of which separated the city from its river.

In the twentieth century, the shipping industry became more advanced and efficient leading to the removal of large warehouses along the riverfront in New Orleans. This gradual transition created opportunities for the city and the river to reconnect. In 1975, Mayor Moon Landrieu envisioned the removal of abandoned port warehouses in front of Jackson Square and the construction of a wooden pedestrian boardwalk with

trees and seating along the river. Visual and physical access to the river was restored, and wooden steps extended from the boardwalk down into the river. This transformational project was named the Moonwalk in the mayor's honor and it became a destination for the city's many visitors. It remains so to this day.

With the success of the Moonwalk, additional sites along the river including the Julia Street Wharf and the Governor Nicholls Street Wharf were redeveloped over time to incorporate pedestrian access paths and views of the waterfront. However, these individual developments occurred sporadically and failed to create a cohesive riverfront experience or reconnect the river to the city.

## Purpose

The City of New Orleans developed this Riverfront Master Plan to guide a coordinated, vision for the city's riverfront amenities. By providing design recommendations, the plan seeks to create a continuous experience along the riverfront for residents and visitors alike.

This cohesive experience is not only envisioned within the site itself, but also extends out to the immediate context of the riverfront. In order to ensure that this is achieved, a set of primary goals were established by the client, consultant team, and stakeholders to guide the planning process.

## Goals for the Master Plan

**Enhance the New Orleans riverfront as a destination**

**Create a seamless experience along the riverfront**

**Strengthen the physical connections between the riverfront and the city**

**Enhance views between the riverfront and the city**

**Increase the amount of usable space along the riverfront**



## Master Planning Process



The Riverfront Master Plan process consisted of on-site inventory and investigations; analysis of existing conditions; stakeholder input meetings; planning team charrettes; regulatory reviews; the development of alternatives; and refinement of the preferred alternative.

A detailed, scaled base map of the study area was prepared by the team using aerial imagery obtained from the New Orleans Regional Planning Commission and publicly available satellite elevation imagery. The team supplemented satellite elevation data by conducting on-site reconnaissance and surveying elevations at wharves, specifically in Woldenberg Park. This information was compiled with other data resulting in a final base map that located and identified existing site buildings, streets, walkways, art features, site furniture, and vegetation.

After generating a thorough base map, comprehensive analysis was conducted that highlighted numerous areas of improvement for the study area: disjointed pedestrian circulation patterns; underwhelming and unclear wayfinding; numerous access constraints; grading issues; a lack of sufficient shade across the entire site;

and viewsheds that were undesirable in their current conditions. These analytical observations were documented in the form of maps, narratives, and photographs.

Stakeholder input was ongoing throughout the design process and stakeholders' requests were addressed accordingly. This iterative process maximized stakeholder involvement and support. The project team also consulted a number of regulatory agencies that have jurisdiction over the riverfront and other facilities in the nearby proximity. Concepts for improving pedestrian safety and arrival sequencing at railroad crossings were vetted with the New Orleans Public Belt Railroad while the Orleans Levee District and the U.S. Army Corps of Engineers were consulted with concepts for improving the appearance of the floodwalls. Continuing the coordination between these stakeholders and regulatory agencies and any design consultant selected for the implementation of the Riverfront Master Plan was critical (see Section 3).

This process was utilized by the consultant team in the development of two alternative riverfront plans. The two alternatives were presented to

the City of New Orleans for comments, which were incorporated into two final alternatives. The city then selected the preferred of the two final alternatives, and provided feedback for refining it. This preferred alternative was further refined to a greater level of detail resulting in the final Riverfront Master Plan (see Section 5).

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# 2

## STAKEHOLDER ENGAGEMENT



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Aerials of key stakeholder segments along the riverfront. From left to right: Spanish Plaza, Canal Street Ferry Terminal, Aquarium of the Americas, Woldenberg Park, and the Moonwalk.

## STAKEHOLDER ENGAGEMENT

The Riverfront Master Plan Stakeholders are: the French Market Corporation (FMC); Audubon Nature Institute (ANI); Regional Transit Authority (RTA); Four Seasons Hotels Ltd. (FS); and the Howard Hughes Corporation (HH). Stakeholder input was gathered at the project's inception and initial design concepts were developed and shown to stakeholders for input. Stakeholder concerns and recommendations were evaluated and incorporated changes into the Riverfront Master Plan as appropriate.

### Project Stakeholders

#### Howard Hughes Corporation

The Howard Hughes Corporation, developer of the Riverwalk Outlet Collection, holds a lease from the City of New Orleans to utilize Spanish Plaza for restaurants, movable kiosks, signage, festivals, and special events

in exchange for the maintenance and upkeep of the plaza. Meetings with HH indicated their needs and desires as follows:

- *more shade;*
- *sufficient light levels for safety and visibility;*
- *clear views of the Riverwalk entrance sign;*
- *views of the outlet store signs above the arcade;*
- *replacement of aged and broken plaza pavement;*
- *space for mobile kiosks;*
- *maintain maintenance access to the fountain;*
- *areas for special events;*
- *adequate drainage;*
- *electrical outlets; and*
- *low maintenance fixtures, plantings, and finishes.*

As a result of meetings with HH, the initial plaza designs were modified to replace the existing palm trees with shade trees that allow for views across the plaza.

#### Regional Transit Authority

The Regional Transit Authority operates the Riverfront Streetcar Line, city bus system, and Canal Street Ferry. A new terminal for the ferry is in the final design stage and construction is scheduled to be completed by 2018. Collaboration with the Regional Transit Authority advanced the following opportunities for consideration in the Master Plan:

- *create a connection between the adjacent Canal Street Wharf and Ferry Terminal;*
- *coordinate paving and grading;*
- *coordinate style of light fixtures across all riverfront projects; and*
- *design the foot of Canal Street*

as the main entrance plaza to the riverfront. The Intersection on Canal Street and Convention Center Boulevard would become Canal Street Plaza, a gateway to Spanish Plaza, the Ferry Terminal, the Audubon Aquarium of the Americas, and the Four Seasons Hotel and Residences.

### *Four Seasons Hotels*

The historic World Trade Center building, also located at the foot of Canal Street, is being redeveloped as the Four Seasons Hotel and Residences. Numerous design coordination meetings between Four Seasons Hotels, Regional Transit Authority, and Howard Hughes were held to achieve:

- *seamless integration of Canal Street Plaza with the Four Seasons development and the RTA Ferry terminal; and*
- *compatible designs of Four Seasons and Spanish Plaza.*

### *Audubon Nature Institute*

The Audubon Nature Institute operates the Audubon Aquarium of the Americas and Woldenberg Park. ANI's primary concerns include:

- *preserve the Aquarium donor brick area in its existing location;*
- *retain the existing palm trees in the Aquarium Plaza;*
- *retain the existing fountain and pump house;*
- *maintain Audubon's current use of the area in front of the Aquarium for festivals and other events;*
- *preserve the art installations and memorials in their existing locations; and*

- *enhance the vitality of Woldenberg Park.*

### *French Market Corporation*

The French Market Corporation operates the French Market and manages and maintains the Moonwalk. FMC commissioned a design team to renovate the Moonwalk in preparation for the city's Tri-centennial celebration. Key elements to be considered in the Master Plan include:

- *provide more shade;*
- *improve access points and visibility between the riverfront and French Market;*
- *utilize low-maintenance enhancements, whenever possible; and*
- *maintain the existing number of parking spaces in the corridor between the French Market and the Moonwalk.*

# 3

## REGULATORY REVIEWS



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Diagram of one of the regulatory agencies' prominent feature along the riverfront. The New Orleans Public Belt's rail system shown in red.

## REGULATORY REVIEWS

As part of the planning process, design concepts and implementation strategies were reviewed with agencies that have jurisdiction over the Riverfront. This aspect of the process allowed for immediate feedback that also guided the Master Plan. The surveyed regulatory agencies provided critical information regarding wind and weight restrictions, navigable waterway considerations, construction material and planting selections, and site access. The following fifteen agencies have jurisdiction over the development of the New Orleans riverfront:

### Federal Agencies

- *United States Army Corp of Engineers;*
- *United States Coast Guard;*

### State Agencies

- *Coastal Protection and Restoration Authority;*
- *Louisiana Office of State Fire Marshal;*
- *State of Louisiana, Department*

*of Natural Resources - Office of Coastal Management;*

- *Southeast Louisiana Flood Protection Authority - East;*

### Local Agencies

- *City of New Orleans, Department of Parks and Parkways;*
- *City of New Orleans, Department of Public Works;*
- *City of New Orleans, Department of Safety and Permits;*
- *City of New Orleans, Office of Resilience and Sustainability;*
- *New Orleans City Planning Commission;*
- *New Orleans Public Belt;*
- *Orleans Levee District;*
- *Sewerage & Water Board of New Orleans; and*
- *The Port of New Orleans.*

The following descriptions identify the delegation of authority for review and approval by each agency:

### *United States Army Corp of Engineers (USACE)*

The New Orleans District of the USACE manages levee and floodwall assets in South Louisiana. The project area includes a floodwall and levee along its length. USACE must review and approve any projects being implemented near these assets.

### *United States Coast Guard (USCG)*

The USCG is responsible for the protection of ports and inland waterways along the coast as well as international waters. For riverfront projects, the USCG reviews proposed lighting and construction that involves reflective surfaces for potential navigational interference.

### *Coastal Protection and Restoration Authority (CPRA)*

CPRA is a State entity overseeing comprehensive coastal protection for Louisiana, tasked to focus development and implementation efforts towards a sustainable Coastal Protection Master Plan. The project area is within the CPRA's jurisdiction,

which must review all plans for riverfront construction.

#### *Louisiana Office of State Fire Marshal (SFM)*

The SFM must review and approve all proposed projects for compliance with the State Fire Code and the Americans with Disabilities Act (ADA).

#### *State of Louisiana, Department of Natural Resources - Office of Coastal Management (DNR-OCM)*

The DNR-OCM is responsible for protection and maintenance of Louisiana's coastal wetlands through regulation of the uses of coastal zones. The project area is within the jurisdiction of DNR-OCM, which must review all plans for riverfront construction.

#### *Southeast Louisiana Flood Protection Authority - East (SLFPAE)*

SLFPAE works with local, regional, state, and federal partners to operate and maintain infrastructure that protect the city from floods and storm surges. The project area is within the SLFPAE's jurisdiction.

#### *City of New Orleans, Department of Parks and Parkways (PKW)*

All public developments and projects adjacent to the public right-of-way must be reviewed and approved by PKW. Planting design and tree protection within the study area must be reviewed and approved by PKW.

#### *City of New Orleans, Department of Public Works (DPW)*

For projects affecting public streets or drainage systems, DPW must review and approve the construction documentation prior to implementation.

#### *City of New Orleans, Office of Resilience and Sustainability (ORS)*

The ORS requires review by the Resilience Design Review Committee for all city projects to ensure compliance with the New Orleans Master Plan, New Orleans Hazard Mitigation Plan, and Resilient New Orleans, the city's resiliency strategy plan.

#### *City of New Orleans, Department of Safety and Permits (DSP)*

Projects are reviewed for building code compliance for all developments within the City of New Orleans. They require approval from all federal, state, and local regulatory agencies before granting permits for construction and certificates of occupancy.

#### *New Orleans City Planning Commission (CPC)*

The CPC reviews projects for zoning and code compliance. As part of that review, the CPC requires all public projects come before the Design Advisory Committee (DAC) which provides recommendations regarding site design and architectural context issues. Riverfront Master Plan project sites are located within either the CBD-4 (Exposition) or VCP (Vieux Carre Park) zoning districts and must also be reviewed and approved for compliance with the Comprehensive Zoning Ordinance (CZO).

#### *New Orleans Public Belt (NOPB)*

The NOPB Railroad is a switching railroad with the primary mission of serving the Port of New Orleans and local industries. The project area includes NOPB rail lines. NOPB reviews projects associated with NOPB rail and rail crossings.

#### *Orleans Levee District (OLD)*

OLD operates, constructs, and maintains the Mississippi River and Hurricane Protection Flood Control Systems, including levees, floodwalls, floodgates, and other flood protection infrastructure. The project area includes a floodwall along its length.

#### *Sewerage & Water Board of New Orleans (SWBNO)*

For projects affecting the municipal water service, wastewater sewerage, or drainage system, SWBNO must review and approve the construction documents prior to implementation. Developments along the riverfront, which are outside the levee protection system, do not require stormwater drainage to connect with the municipal system.

#### *The Port of New Orleans (PORT NOLA)*

PORT NOLA manages and monitors waterborne trade and commerce on the Mississippi River. The project area includes wharves and docking space owned and managed by the port. Projects must be reviewed and approved by PORT NOLA and obtain permits for land and water access that may be required during construction.

# 4

## EXISTING CONDITIONS & ANALYSIS



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Aerial of the New Orleans riverfront

## EXISTING CONDITIONS & ANALYSIS

### Riverfront Corridor

The Riverfront Master Plan site lies along the Mississippi River between the Outlet Collection at Riverwalk and the Governor Nicholls Street Wharf. The site is comprised of access corridors connecting the Central Business District and French Quarter to the riverfront and five distinctly programmed areas:

- *Spanish Plaza;*
- *Canal Street Ferry Terminal;*
- *Aquarium of the Americas;*
- *Woldenberg Park; and*
- *Moonwalk.*

Following local cultural tradition, this report does not refer to directions and locations by cardinal orientation, such as north and south, but rather by directional flow of the Mississippi River. The use of the river to describe locations and directions for navigating New Orleans has practical benefits due to the meandering form it takes through the city, thus making the use of cardinal directions confusing at times. The elements and conditions along the riverfront are described in the following pages from upriver to downriver.

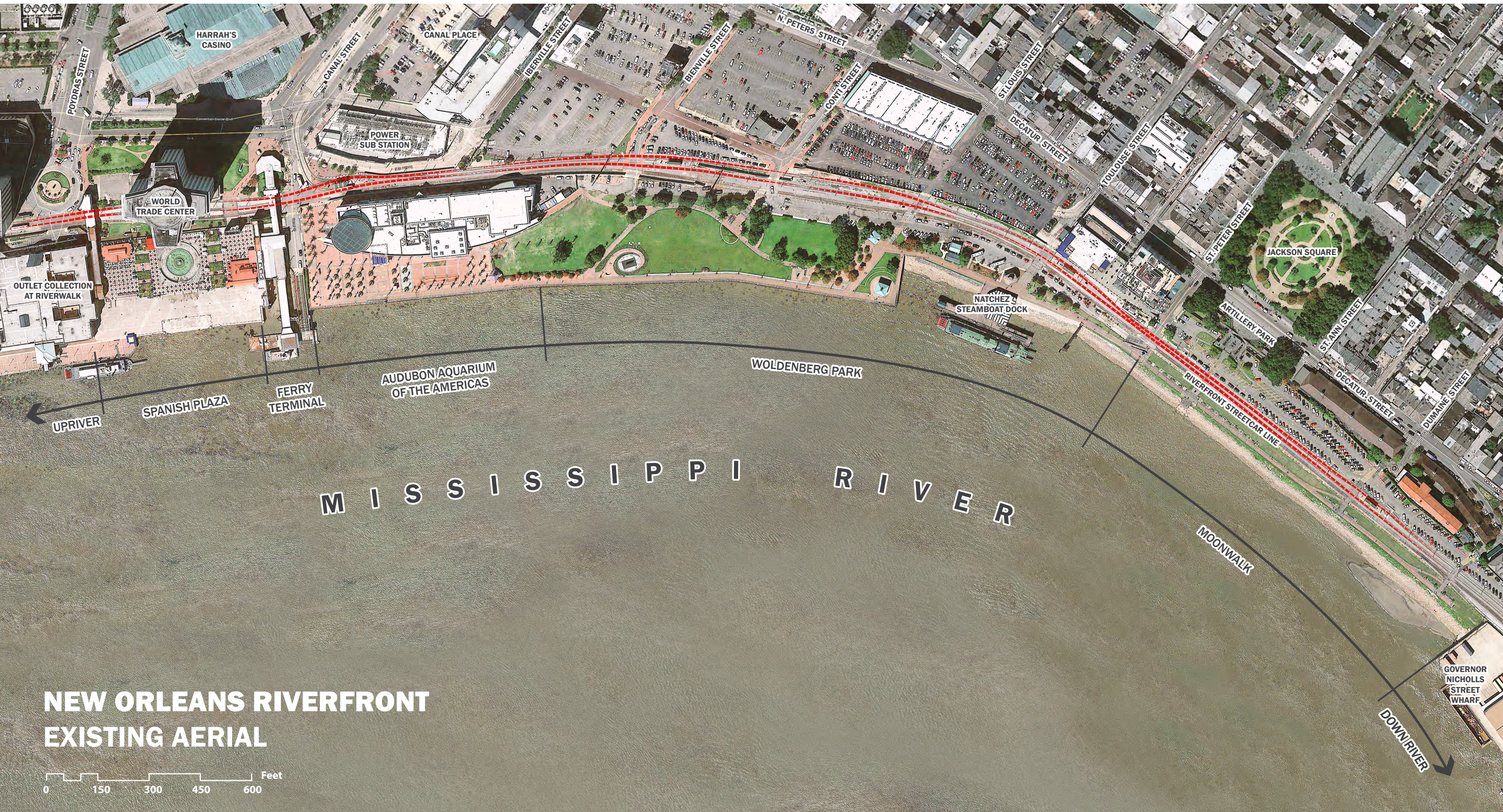
With the exception of those who arrive by ferry, the five distinct zones of the riverfront are accessed exclusively via public right-of-way corridors which are separated from the site by a floodwall and a railroad corridor, which serves the Riverfront Streetcar Line and the New Orleans Public Belt. The transition through the floodwall and across these various vehicular and transit areas defines the entry to the site for the visitor.

Pedestrian spaces were evaluated for usability, amount of shade and seating, and for views to the river and to the city. Vehicular circulation, service access, and parking areas were studied to ascertain system efficiency and evaluate the existing physical, visual, and safety conditions for pedestrians visiting the riverfront. Transit access is provided by four streetcar stations located along the rail corridor. Given the restrictions presented by the floodwall, the vehicular circulation is considerably efficient allowing cars, service trucks, and tourism buses to navigate with ease. However, due to the narrow, linear nature of the site, parking spaces are irregularly shaped and

do not comply with municipal code. Observation and analysis revealed that the main issue along the riverfront is that pedestrian circulation is disjointed. Due to the curving river, the existing pathway system zigzags and bends along the river's edge causing visual confusion for the pedestrians. As a result, site visitors were observed leaving the site and utilizing French Quarter streets to make their way up and down the riverfront. Furthermore, safety appears compromised as pedestrian spaces haphazardly overlap vehicular areas.

Numerous design details were also considered during the analysis process. Hardscape materials used throughout the study area were assessed for their suitability across a range of programmatic uses. It was determined that utilizing distinct pavement types and colors to delineate pedestrian versus vehicular zones would address current circulation issues and improve safety and wayfinding.

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HARRAH'S CASINO

CANAL PLACE

POWER SUB STATION

WORLD TRADE CENTER

OUTLET COLLECTION AT RIVERWALK

AUDUBON AQUARIUM OF THE AMERICAS

FERRY TERMINAL

SPANISH PLAZA

UPRIVER

WOLDENBERG PARK

NATCHEZ STEAMBOAT DOCK

JACKSON SQUARE

ARTILLERY PARK

RIVERFRONT STREETCAR LINE

MOONWALK

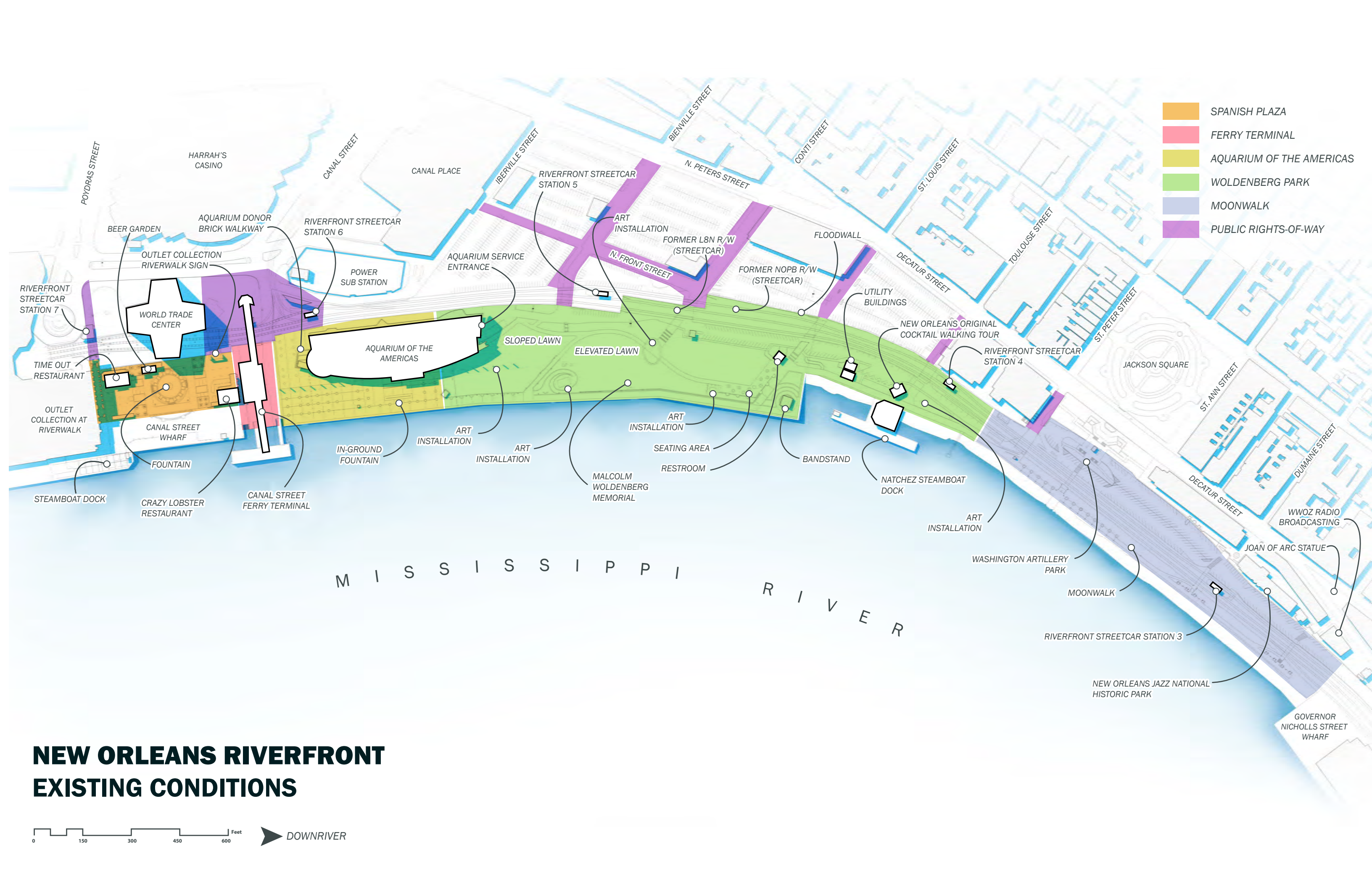
GOVERNOR NICHOLLS STREET WHARF

DOWNRIVER

MISSISSIPPI RIVER

# NEW ORLEANS RIVERFRONT EXISTING AERIAL

0 150 300 450 600 Feet

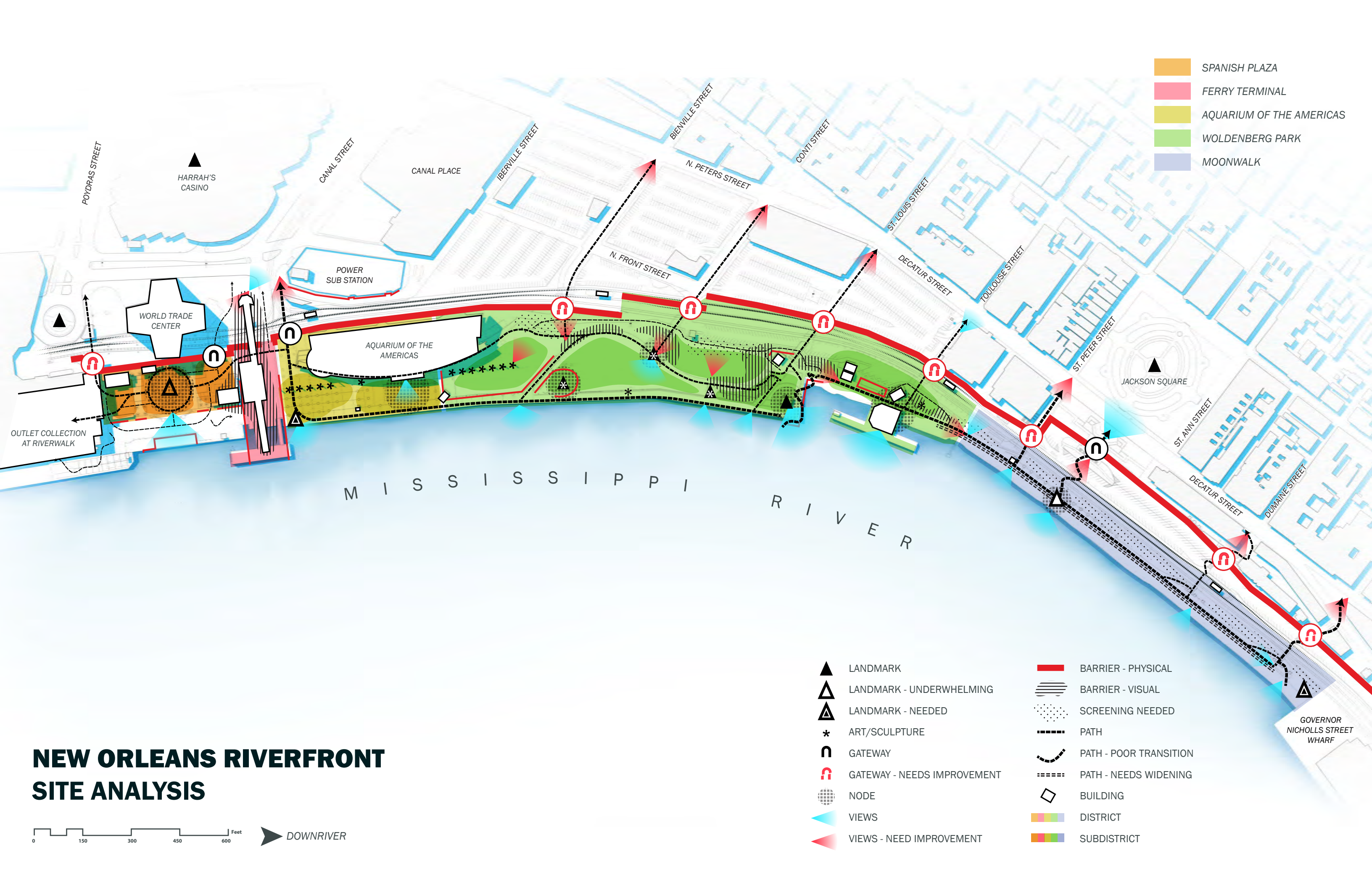


- SPANISH PLAZA
- FERRY TERMINAL
- AQUARIUM OF THE AMERICAS
- WOLDENBERG PARK
- MOONWALK
- PUBLIC RIGHTS-OF-WAY

# NEW ORLEANS RIVERFRONT EXISTING CONDITIONS

























- SPANISH PLAZA
- FERRY TERMINAL
- AQUARIUM OF THE AMERICAS
- WOLDENBERG PARK
- MOONWALK

# NEW ORLEANS RIVERFRONT SITE ANALYSIS



- |   |  |
|---|--|
|  LANDMARK                    |  BARRIER - PHYSICAL     |
|  LANDMARK - UNDERWHELMING    |  BARRIER - VISUAL       |
|  LANDMARK - NEEDED           |  SCREENING NEEDED       |
|  ART/SCULPTURE               |  PATH                   |
|  GATEWAY                     |  PATH - POOR TRANSITION |
|  GATEWAY - NEEDS IMPROVEMENT |  PATH - NEEDS WIDENING  |
|  NODE                        |  BUILDING               |
|  VIEWS                       |  DISTRICT               |
|  VIEWS - NEED IMPROVEMENT    |  SUBDISTRICT            |



## Upriver of site

Just beyond the upriver terminus of the riverfront project site lies the Outlet Collection at Riverwalk. This 250,000 square-foot retail center, which is primarily accessed via Spanish Plaza, extends from the boundary of the site upriver to the Ernest N. Morial Convention Center. After being closed for a number of years for substantial renovations, it re-opened in 2014 as a major retail attraction that supplements other attractions nearby such as the Port of New Orleans cruise ship terminal, the Convention Center, Hilton Hotel, and Harrah's Casino. Additionally, the Riverwalk serves as an anchor at the foot of Poydras Street, the central thoroughfare of the central business district of New Orleans.

The entrance to the Riverwalk from Spanish Plaza is clearly articulated by a tall archway that can be seen from any point in the plaza. The archway echoes the existing arcade structure that connects the Riverwalk entrance to Poydras Street, yet the materials and colors do not relate in context. When exiting the Riverwalk at this location, pedestrians enjoy wide views of Spanish Plaza and the Mississippi River.

Aerial of the existing conditions - Upriver



## Spanish Plaza

Spanish Plaza is located at the upriver terminus of the project site between the World Trade Center, located on Convention Center Boulevard, and the Mississippi River. This area is comprised both of Spanish Plaza itself, which totals 1.56 acres, as well as the adjacent Canal Street Wharf, which fronts approximately 440 linear feet of the Mississippi River. Spanish Plaza, similar to the Canal Street Wharf, is supported on an elevated structural deck that is suspended over, and embedded into, the banks of the river.

The Creole Queen Steamboat docks on the upriver side of the Canal Street Wharf, utilizing a portion of the wharf for passengers to board and disembark the ship.

The plaza is home to a number of festivals and special events, most notably the Lundi Gras celebration and carnival, featuring the King Of Zulu, Rex, the Mayor of New Orleans, and other dignitaries.

The new design for Spanish Plaza will begin construction in fall 2017, and it is scheduled to be completed by May of 2018 in time for the City of New Orleans Tri-centennial Celebration.

### History

The site was originally constructed in the 1960s in conjunction with the World Trade Center. At this time it was known as Eads Plaza, named for James Buchanan Eads, the engineer who, in 1875, improved navigation along this area of the Mississippi River by constructing jetties that increased the rate of water flow

Aerial of the existing conditions - Spanish Plaza



Historical image of Eads Plaza at the foot of Canal Street

essentially dredging excess silt from the riverfront.

Spain controlled the Louisiana Territory, and thus New Orleans, from 1763 to 1803. As a tribute to the city's Spanish heritage and cultural influence, the government of Spain constructed Spanish Plaza as a gift to the city in 1976. The focal point of the plaza is a circular fountain surrounded by fifty-six hand-painted Spanish tile insets depicting the crests that represent the provinces of Spain.

Over time, neglect and lack of maintenance left Spanish Plaza in a state of disrepair. However, it has recently been refurbished in 2001 by the Louisiana Trade Delegation and a partial renovation in 2013 by the Howard Hughes Corporation, owner and operator of the Outlet Collection at Riverwalk. Howard Hughes Corporation is allowed to use the plaza for gatherings, events, and retail in exchange for ongoing maintenance. Due to the deteriorated condition of Spanish Plaza, the city called for its full redesign and renovation in 2016.

#### Access

Pedestrians access Spanish Plaza from various locations including Poydras Street, Canal Street, the Canal Street Wharf, the Ferry Terminal, and the Riverwalk Outlet Collection. Pedestrians making their way down either Poydras Street or Canal Street, cross the railroad tracks, climb stairs, and arrive at a large metal structure that support Riverwalk signs. Beyond the metal structure at Poydras Street pedestrians continue on through the south arcade which serves as the primary connection between Poydras Street and the plaza. Similarly, when approaching from Canal Street, users must again cross railroad tracks and climb stairs before being greeted to the plaza by another metal structure housing Riverwalk signage. However, unlike its counterpart the Canal Street entrance allows for direct access through openings in the floodwall adjacent to the north arcade.

#### Characteristics

A series of railroad lines, utilized by the New Orleans Public Belt and the

Regional Transit Authority, and the concrete floodwall, built by the U.S. Army Corp of Engineers and governed by Orleans Levee District, separate the World Trade Center from Spanish Plaza. The Canal Street Wharf, owned by the Port of New Orleans, sits between the plaza and the river.

The World Trade Center is an iconic 33-story structure designed by Edward Durell Stone that was added to the National Register of Historic Places in 2014. The building, which was formerly occupied by the World Trade Center organization and the Port of New Orleans, is currently being re-purposed as the Four Seasons Hotel and Residences.

The plaza is also bordered by the Outlet Collection at Riverwalk upriver and the Canal Street Ferry Terminal downriver. Nearby are the Hilton Hotel, Harrah's Casino, the Aquarium of the Americas, and the active Canal Street and Poydras Street corridors, all of which are both origins and destinations for Spanish Plaza and riverfront visitors.



*Poydras Street access into Spanish Plaza*



*Canal Street access into Spanish Plaza and Ferry Terminal arcade entrances side by side*



*Spanish Plaza fountain in the foreground and the Outlet Collection at Riverwalk access behind*



*World Trade Center overlooking Spanish Plaza*



*New Orleans Public Belt railroad lines and floodwall looking upriver on the pedestrian crossing*

The design of the plaza is visually and physically divided into three sections, two lower wings that flank a raised central area and are connected to the elevated level with a series of pedestrian ramps and raised planter walls. Lighting in these zones is provided by contemporary light poles. The raised area is organized around a centrally located, circular fountain that is sunken and surrounded by the ring of stone walls housing the aforementioned Spanish tiles. The 114' diameter recessed fountain area is accessible from four sets of stairs. Currently, the plaza is not up to code, as there are no ADA accessible routes to the fountain. Four large, traditionally-styled light poles, a dedication plaque, and an open-air canopy structure are located within the elevated area surrounding the fountain. This structure, located near the floodwall, is used as supplemental outdoor seating for the Time Out Sports Bar located adjacent to the South Arcade. Other structures exist onsite, such as the Crazy Lobster seafood restaurant located adjacent to the ferry terminal and Canal Street Wharf. Both restaurants have fenced-in outdoor seating that partitions use for their patrons from others visiting the plaza.

### *Analysis*

Despite its numerous points of entry, access to Spanish Plaza from the upriver side is unclear and needs improvement. Numerous gateway structures, such as the one reached via Poydras Street, signify entrance locations to the Riverwalk but do not identify Spanish Plaza. Along the South Arcade, many of the arched openings are blocked by the restaurant, vending machines,

and other features further impeding access. However, openings closer to the Riverwalk entrance are clear for pedestrians to enter the plaza.

Conversely, access to Spanish Plaza from the downriver side is more clearly articulated than its counterpart. From Canal Street, access to the plaza requires crossing both freight rail and streetcar tracks, ascending stairs, and walking through the floodgate. Here visitors find, and ultimately enter the site by walking through, another large structure that supports a Riverwalk identification sign. The plaza can also be accessed by traversing through the ferry terminal area between the riverside of the floodwall and the terminal.

Beyond providing identification signage for entry points to the plaza, access to, and wayfinding within, the plaza could be improved for all user groups. For example, clearly marked ADA paths and access points to reach Spanish Plaza are not provided anywhere along the riverfront. Furthermore, provisions for bicyclists, such as paths and parking, do not exist. This is typical along the entire riverfront site.

Within the space, existing components do not relate in a logical manner. For instance, the open-air canopy previously mentioned is incompatible with the surrounding buildings and plaza architecture, and is the lone structure located on the elevated plaza level near the fountain. Furthermore, the structure impedes pedestrian flow around the fountain.

The onsite restaurants cause unique disruptions in the function of the site

as well. The fenced-in dining areas impedes plaza circulation, while occupying substantial plaza space. Additionally, the buildings themselves are architecturally incompatible with the plaza due in large part to their red, standing-seam metal roofs. A number of other structures exist that hinder the site's ability to operate as an urban plaza. Movable vendor kiosks, owned and managed by the Howard Hughes Corporation, are located all around both the upper and lower levels of the plaza.

While an over-arching issue on the entire riverfront, the need for additional shade is quite apparent within Spanish Plaza, which only receives shade from surrounding buildings.

Additionally, pavement across the plaza (including the original red, black, and white stone paving) is in disrepair, and the transition between the plaza structure (concrete piers) and the Canal Street Wharf (timber piers) show signs of separation. Inconsistent settling of these structures indicate that the wharf may require structural renovations.



Large light poles



Contemporary lights and ramps in the spaces flanking the fountain



The Crazy Lobster Restaurant



Planters, vending machines, and the Time Out Restaurant impede circulation



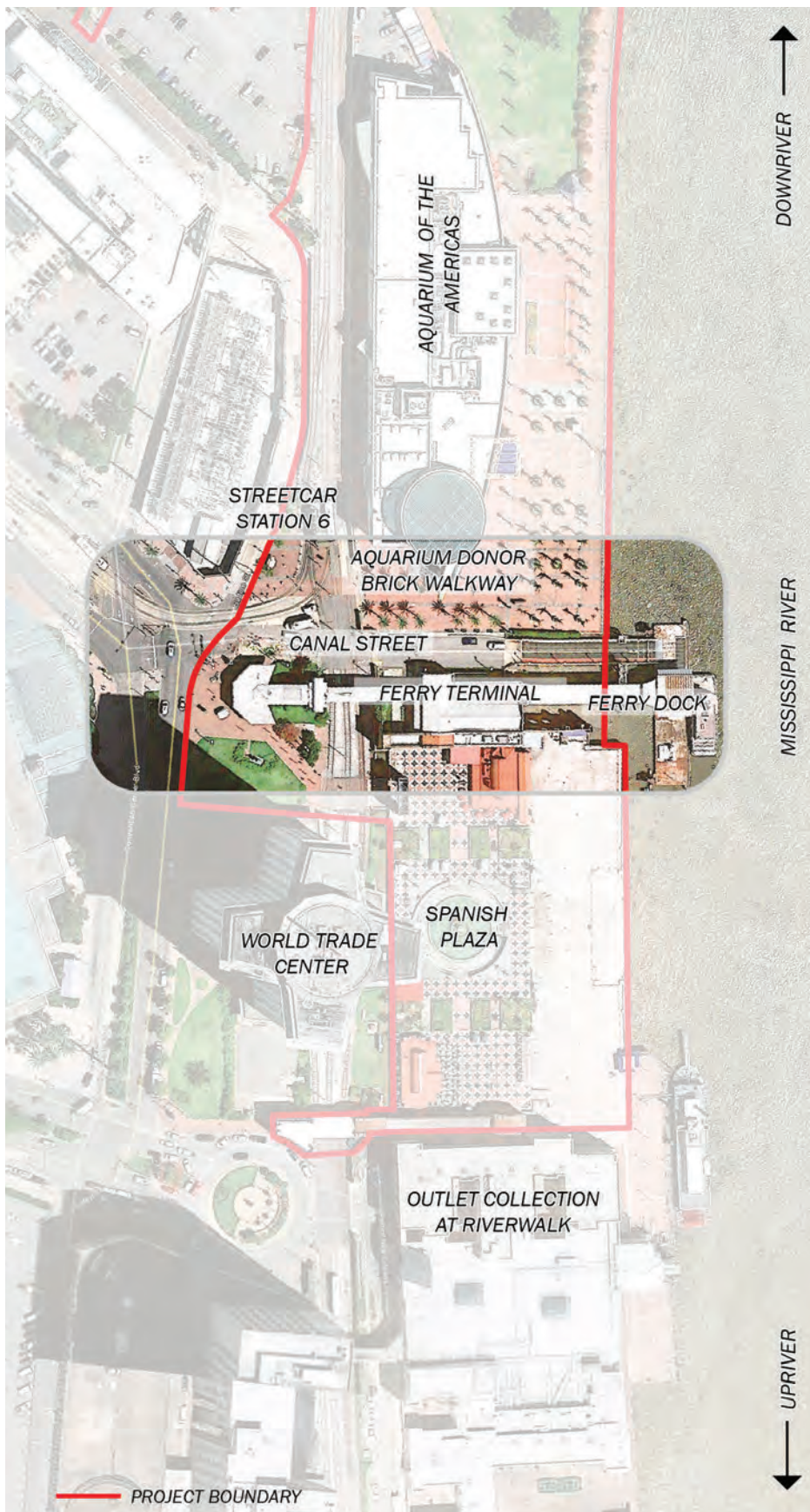
Narrow space between restaurant and fountain



Existing pavement in disrepair



Lack of shade throughout Spanish Plaza and the Canal Street Wharf



## Canal Street Ferry Terminal

The Canal Street Ferry Terminal located at the foot of Canal Street is owned and operated by the Regional Transit Authority, and provides ferry service across the Mississippi River to and from Algiers Point. The ferry terminal building, dating from the 1930s, sits on a 0.91 acre site that covers 104 linear feet of river frontage. As currently sited, it restricts circulation and views between Spanish Plaza and the rest of the riverfront downriver.

### History

Ferry transportation in New Orleans has historically been a critical mode for traversing the Mississippi River and ferry service has operated since 1827. The first bridge to cross the river, the Greater New Orleans Bridge, was built in 1958. Thirty years later, a second span was built adjacent to the first, and the twin spans became known as the Crescent City Connection. For the next forty-five years, ferry service maintained its role as an important part of commuting, providing both vehicular and pedestrian service between the Canal Street Ferry Terminal and the Algiers Ferry Terminal. However vehicular passage was discontinued in the early 2000s. Currently, the ferry only services pedestrians and bicyclists to cross the river.

### Access

Ferry users include daily commuters, shoppers, and tourists. The Canal Street Ferry Terminal can be reached from Canal Street and Convention Center Boulevard, the Aquarium of the Americas, or Spanish Plaza. From the Aquarium of the Americas and

Aerial of the existing conditions - Canal Street Ferry Terminal





View of ferry terminal from Canal Street with pedestrians, vehicles, and rail lines



Ferry Terminal access into Spanish Plaza

Spanish Plaza, pedestrian access to the terminal entrance is circuitous and unclear. With the exception of a singular sign at Convention Center Blvd, wayfinding elements are not present to guide pedestrians. Additionally, clearly marked ADA paths and access points are not provided, nor are provisions made for bicycle parking.

#### Characteristics

The existing terminal structure serving as an entrance to the ferry includes concrete steps at the foot of Canal Street, an elevated walkway that crosses over the rail and streetcar tracks, the actual terminal which incorporates the North Arcade, and a gangway that extends to the floating barge used for boarding the ferry.

As of August 2017, the existing structure is planned to be demolished; therefore the Regional Transit Authority has hired a design team to create a new terminal. This new terminal is being designed to have a smaller building footprint and will provide a continuous pedestrian connection along the river's edge. In addition to the terminal building itself, an arrival plaza at the foot of Canal Street will be incorporated into the site. The design of this space will be geared towards its function as the nexus of numerous destinations: the new ferry terminal, the Aquarium of the Americas, Spanish Plaza, the Riverwalk, and the Four Seasons. The existing building is scheduled to be replaced in 2018. New ferries are scheduled to be in operation when the new terminal opens.

#### Analysis

In its current state the Canal Street Ferry Terminal does little to engage the two iconic spaces that border it. The building blocks views, impedes circulation between the aquarium, and the World Trade Center, and it is incompatible with surrounding architectural context. Furthermore, the approach to the existing terminal building at the intersection of Convention Center Boulevard and Canal Street is underwhelming and isolates its users from the riverfront experience.

However, the proposed designs for the new terminal building and Canal Street plaza will greatly improve pedestrian access between Spanish Plaza and the Aquarium Plaza and provide expansive views.



## Aquarium of the Americas

The 1.88 acre Aquarium of the Americas site is located between the Canal Street Ferry Terminal and Woldenberg Park and features a large, public gathering plaza bounded by the aquarium building and the river's edge. This portion of the riverfront site occupies a total of 510 feet along the river.

### History

The Aquarium of the Americas, operated by Audubon Nature Institute, opened in 1990. It is the first and only public aquarium in New Orleans. The aquarium building and the adjacent plaza were constructed simultaneously. The location of the building, atop the Bienville Street Wharf, fostered controversy as local residents did not want the facility sited adjacent to the French Quarter. There were also concerns about making such a significant investment in a vulnerable structure located so close to the river's edge. The acquisition of the wharf as a location for the aquarium was facilitated by the Port of New Orleans Board of Commissioners. In 2014, under the direction of Audubon Nature Institute, improvements were made to the aquarium's site by incorporating additional palm trees and a new interactive fountain into the plaza.

### Access

Access to the Aquarium Plaza is from Canal Street and the ferry terminal upriver or Woldenberg Park downriver. Beyond the extents of the plaza, the amount of the pavement decreases to a twenty foot wide promenade, which serves as the primary path along the waterfront, and several

Aerial of the existing conditions - Aquarium of the Americas

secondary paths separated by large open lawn space. Public transit to the aquarium is provided by the Riverfront Streetcar, buses, and ferry. The streetcar drops off passengers at Station 6, located directly behind the aquarium near Canal Street. The site also sits adjacent to several large asphalt parking lots. The parking lots are located along Bienville Street, downriver of the aquarium, within the floodwall. Although the plaza is ADA accessible, ADA paths are not clearly marked. There are no provisions for bicycle parking.

### Characteristics

Terra cotta colored brick pavers form the Aquarium Plaza surface and tall palm trees in large round planters are organized in a grid pattern along the length of the plaza. Fifteen foot tall columns topped with abstract sculptures of marine life by local artist Ida Kohlmeyer are organized in a line parallel to the river. The interactive fountain feature, which was introduced in the 2014 renovation, is located slightly upriver from the center of the plaza.

Views downriver from the plaza are expansive; however, the ferry terminal blocks views upriver. Service to the aquarium building is located at the downriver end of the building, and is accessed via Bienville Street through a floodgate.

The aforementioned path ties directly into a ground-level colonnade that wraps the riverside façade of the aquarium building. This route follows the perimeter of the building leading visitors to the entrance.



Large parking lot and downriver aquarium access point through floodgate into Woldenberg Park.



Aquarium access through floodgate from Canal Street adjacent to ferry terminal



Interactive fountain near the aquarium's main entrance



Art sculptures



View looking downriver featuring grid of palm trees and planters set back from the river to form the Promenade



*Aquarium colonnade*



*Exterior facade of the aquarium*



*Lack of shade in Aquarium Plaza*

The aquarium is a three story, white glazed ceramic brick structure characterized by a blue glass curtain wall across the front, overhanging a colonnade. The aquarium also features a tall, cylindrical blue glass tower with a dramatically sloped blue glass roof at the end of the building closest to Canal Street. This structure has become an icon in the city, strongly identifying the aquarium in the landscape and drawing visitors towards it.

A new transit station is being planned for the foot of Canal Street near the existing Riverfront Streetcar Station 6, which will incorporate bus and streetcar drop-offs and provide a more convenient and direct means for commuting passengers to visit the nearby aquarium, ferry terminal, malls, plazas, hotels, and casino.

### *Analysis*

The Canal Street access route was observed as being more heavily used despite requiring visitors to enter the site through a floodgate (after crossing rail lines). The transition between the Aquarium Plaza and the downriver Woldenberg Park, however, is seamless.

The sculptures and palm trees in the Aquarium plaza provide strong verticality in the space but do not provide adequate shade to mitigate heat and glare. The colonnade, the only shaded area of the site, located adjacent to the building is covered by the second floor of the aquarium which overhangs the walkway. Seating is also a concern within the space. Benches surround the palm planters, yet many of them are in need of refurbishment.

The path to the Aquarium Plaza and main building entrance from the Bienville Street access point is unclear and orients users toward the service entrance and trash dumpsters. Wayfinding is needed to guide pedestrians down Bienville Street, through the entry thresholds of the site (railroad tracks, floodwall, and parking lot), and into the interior space of the plaza.



*The downriver path to the aquarium from the parking lot is unclear and uninviting for pedestrians*

### Woldenberg Park

Woldenberg Park is a 7.08-acre open green space developed on top of decommissioned wharves running 1,978 linear feet along the river's edge.

#### History

Prior to the park's conception, the wharves that separated the French Quarter from the river housed warehouses and industrial docks. The park was developed as part of the 1984 Louisiana World Exhibition. The park is currently managed by the Audubon Nature Institute.

#### Access

Woldenberg Park can be accessed from four streets that run perpendicular to the river:

- Bienville Street;
- Conti Street;
- St. Louis Street; and
- Toulouse Street.

These access points require pedestrians to traverse parking lots and then floodgates to reach Woldenberg Park. Beyond this visitors must also cross rail lines located past the floodwall before reaching the edge of the park.

Access to the park is also possible from the adjacent Moonwalk (downriver) and Aquarium of the Americas (upriver). Clearly marked ADA paths and access points are not provided, nor are provisions for bicycle parking.



Aerial of the existing conditions - Woldenberg Park

### Characteristics

The park was constructed by importing soil as fill on top of the relatively flat, elevated existing wharf. This design created sloping lawn areas as well as allowed for deeper root zones for mature trees, which provide substantial shade today. Aside from the lawn areas, the park also features a twenty foot wide promenade along the river's edge connecting the Aquarium Plaza to the Moonwalk.

Woldenberg Park is the largest continuous open space along the riverfront, allowing it to serve both as a passive area as well as highly programmed festival space. Most notable of the events held in the park are the French Quarter Festival and Zulu Lundi Gras Fest. Several sculptural pieces exist in Woldenberg Park, some as part of the original design others added later. The New Orleans Holocaust Memorial, located directly off the promenade, is accessed by a spiral path to see the monument in the round. Other sculptures of note are:

- *Ocean Song* (stainless steel; original);
- *Monument to the Immigrant* (white marble; added);
- *Old Man River* (white marble; original); and
- *Malcolm Woldenberg Memorial* (bronze; added).

Downriver of the Monument to the Immigrant, the riverfront promenade elbows, turning toward the city due to the wharf's abrupt ending. As the path's new direction intersects with river bank, the promenade turns



Large, raised lawn looking downriver just past the New Orleans Holocaust Memorial



Art pieces: N.O. Holocaust Memorial, Monument to the Immigrant, Malcolm Woldenberg Memorial



Art pieces: Old Man River, Ocean Song, Goldring Family Foundation



The Promenade zigzags around the Bandstand and continues around the bend to the ticket building, steamboat dock, and large tent.

downriver again realigning itself with the river's edge. After this transition, the park is significantly narrower. Adjacent to the promenade's change in direction at the downriver end of the wharf, a bandstand area provides a venue for small concerts. Farther downriver, where the park is narrow, is the Natchez Steamboat dock, a tourism bus loading and drop-off area, ticketing building, and a restroom facility.

### Analysis

The arrival sequence to Woldenberg Park needs improvements. None of the access points, whether from along the city streets or riverfront, provide a clear sense of arrival either at the

park or the riverfront as a whole. Linear parking lots between the park and the floodwall add to confusion and detract from the overall park experience. Additionally, pedestrian safety at the park's access points is a concern, as there is little, if any, designation for pedestrian crossings.

Once visitors reach the site, wayfinding is further hampered by the existing topography. Currently, a ridge runs down the middle of the open lawn resulting in two topographic orientations, one which faces the floodwall and the other the river. Not only does the ridge impede the visual relationship between the two sides, but the slopes restrict the

layout of event spaces reducing its functionality. At the downriver end of the wharf, the existing promenade abruptly zigzags making it unclear to users whether or not the walkway continues.

Additional circulation problems arise downriver of the wharf where the park is most narrow. A steamboat ticketing building and restroom facility obstruct circulation at a key intersection between a major access point at Toulouse Street and where the park connects to the Moonwalk.





Bienville Street entrance into Woldenberg Park offering no visual cues for pedestrians



Conti Street entrance into Woldenberg Park lacking safe pedestrian crossings and wayfinding



St. Louis Street entrance into Woldenberg Park



Aerial of the existing conditions - Moonwalk

## Moonwalk

The Moonwalk stretches along the river from St. Peter Street to Governor Nicholls Street Wharf. The Moonwalk area covers 1.27 acres and runs a total of 1,170 feet along the river's edge.

### History

Direct access to the river's edge has been unavailable since the twentieth century when port facilities, industries, and floodwalls separated the city from the river. In 1976, access to the riverfront was given back to the citizens by removing the wharves and constructing a promenade. The promenade was built along the riverfront in front of the French Market and Jackson Square, named for Mayor Moon Landrieu, under whose administration it was conceived and constructed. The original Moonwalk included a series of wooden steps that descended into the river on axis with the center of both Washington Artillery Park and Jackson Square. This feature directly connected New Orleans, and its citizens, to the river. The existing Moonwalk has been extended and refurbished over the years.

### Access

The Moonwalk is accessible from Woldenberg Park (upriver) and the French Quarter. Access points from the French Quarter include floodwall gates and overpasses located at:

- St. Peter Street;
- Washington Artillery Park;
- Dumaine Street; and
- St. Philip Street.



Moonwalk promenade lined with benches and treeless planters



Existing connection from Washington Artillery Park to the Moonwalk



Wooden steps provide safe access to the river

Access to the riverfront through the adjacent French Market lacks clarity and wayfinding, making it difficult for pedestrians to find their way. Historically, views down these streets were open, providing French Quarter patrons with glimpses of ships traveling in the river. However, buildings, planters, and other architectural elements have been constructed along the street, blocking views and disorienting pedestrians seeking access points to the riverfront. Furthermore, once through the floodwall visitors must traverse public parking and rail lines to access the Moonwalk.

#### Characteristics

The twelve foot wide walkway that defines the circulation of the Moonwalk is lined with benches and does not offer any shade. The wooden steps on the riverside near Artillery

Park provide the only area in the city where the public can safely reach and touch the water of the Mississippi River; however, these steps are in disrepair.

#### Analysis

Access to the Moonwalk from St. Peter, Dumaine, and St. Philip Streets can be difficult. At St. Peter Street, the street is straight and direct, but the adjacent sidewalk is narrow and hindered by a large restaurant canopy at Jax Brewery. From Washington Artillery Park, the path is indirect, involving walking down steps that run parallel to the river rather than toward it. At Dumaine and St. Philip Streets, line of sight to the riverfront is blocked by the French Market buildings. Pedestrians must make their way between buildings and through narrow pathways along the floodwall to reach access points. From within the French

Quarter, it is not evident that access to the riverfront is possible. Despite these conditions the Moonwalk is extensively used all year long.

Plans are underway to improve the Moonwalk promenade by reintroducing shade trees, additional lighting, and repairing the existing paving. The path connecting Washington Artillery Park to the riverfront is being enhanced under this project. The Master Plan has informed the current Moonwalk renovation with the recommendation that a retaining wall be built along the back slope of the levee at Washington Artillery Park. This allows for the widening of the Moonwalk at that location, greatly increasing usable space. Renovations are expected to be completed by spring of 2018.



*St. Peter Street showing vehicular access prominent and pedestrian entrance to the right*



*Dumaine Street with the floodgate and courtyard skewing the access route*



*St. Philip Street with the floodgate and courtyard off axis and no pedestrian visual cues*



Aerial of the existing conditions - Downriver

**Downriver of site**

At the downriver terminus of the riverfront study area lies the Governor Nicholls Street Wharf, which separates the Moonwalk from Crescent Park, a 1.4 mile park along the river's edge. Located in the Faubourg Marigny and Bywater neighborhoods of New Orleans, Crescent Park features lawn, plantings, pavilion, and picnic areas. The Piety Street Wharf has been repurposed as a plaza space with a small stage and seating areas throughout. Access to the Crescent Park is limited due to its location on the river side of the floodwall. Two pedestrian bridges, one at Marigny Street and another at Piety Street, and the at grade entrance at the foot of Bartholomew Street are the only points of access to Crescent Park. Furthermore, access to the park from the Moonwalk is separated, by the Governor Nicholls Street Wharf. The Marigny Street entrance is equipped with an ADA compliant elevator the Bartholomew Street entrance is also ADA compliant.

Decommissioning the Governor Nicholls Street Wharf to extend the public space from the Moonwalk all the way to Crescent Park would create a two mile long public accessible riverfront destination from downtown through much of Bywater. Furthermore, this connection would strengthen the presence of Crescent Park, which is somewhat isolated due to its location near the most downriver portions of the city, as an integral part of the riverfront.

## Contextual land use & zoning

The context in which the Riverfront Master Plan site sits is a transitional one. The site essentially serves as one of the primary links between the commerce centric Central Business District (CBD) of New Orleans and one of its most historic neighborhood districts, the French Quarter. Furthermore, as previously mentioned, just downriver of the site are two additional historic neighborhoods: Faubourg Marigny and Bywater. The existing zoning and future land uses adopted for these portions of the city reflect their function in the larger framework of the city. Much of the CBD is designated for uses such as mixed-use and high-density commercial with few park spaces dispersed throughout. Conversely, within the French Quarter and its immediate proximity, all zoning districts and land uses are tailored towards preserving the historic character of the area without overly restricting development or growth. The riverfront provides much needed recreational open space for both of these important hubs of the city, while serving as a necessary threshold between them.

The New Orleans CBD and the adjacent Warehouse District are comprised primarily of a range of zoning districts that are unique to those areas of the city. For example, per the New Orleans CZO CBD-1 (Core CBD) is “intended for high-density, mixed-use development that accommodates a wide range of uses”. This and similar districts make up the majority of the interior of the CBD. However, where it engages the riverfront via the Spanish Plaza, the

CBD’s use shifts almost entirely to more event and tourism based uses. Zoned as district CBD-4 (Exposition), many of the major landmarks that connect directly to the upriver terminus of the riverfront such as Harrah’s Casino, Outlet Collection at Riverwalk, and Canal Place serve to draw large numbers of users benefiting from the overflow of foot traffic from the nearby French Quarter.

The character of the French Quarter itself, however, is much different from that of the CBD. The existing zoning districts within the historic area have special designations that preserve its character by placing regulations on numerous features such as: encouraging rehabilitation versus demolition of aging structures, establishing a maximum building height of fifty feet, and setting a minimum dwelling size of 800 square feet. These regulations as outlined within the CZO aim to “preserve and reflect the historic development pattern....creating a dense residential environment”. Similar to the French Quarter, the Faubourg Marigny and Bywater also have unique zoning restrictions in place to ensure the preservation of their respective historical character.

The zoning of the actual riverfront site is largely undesignated at this time. The exceptions are Spanish Plaza and Woldenberg Park, which are zoned as CBD-4 (Exposition) and VCP (Vieux Carre Park) respectively. The Moonwalk does not currently have a zoning district assigned. This lack of zoning could serve detrimental to future of the riverfront site, as the city

does not currently have any ability to enforce standards for development of the space.

The future land use of both the riverfront site and its contextual surroundings closely reflects the state of the existing zoning. The majority of the CBD is designated as downtown exposition or downtown mixed-use, while the French Quarter is primarily allocated as mixed-use historic core. Of note is the designation of Washington Artillery Park and Jackson Square as Parkland Open Space, which is congruent with their present day functions. Additionally, the Canal Street Ferry Terminal is appropriately set as transportation. However, it may be important in future land use maps to acknowledge the existence of the railroad transportation corridor that separates the riverfront site from the city and contains the Riverfront Streetcar Line, which is a primary mode of transportation for visitors to the riverfront site, the CBD, and the French Quarter.



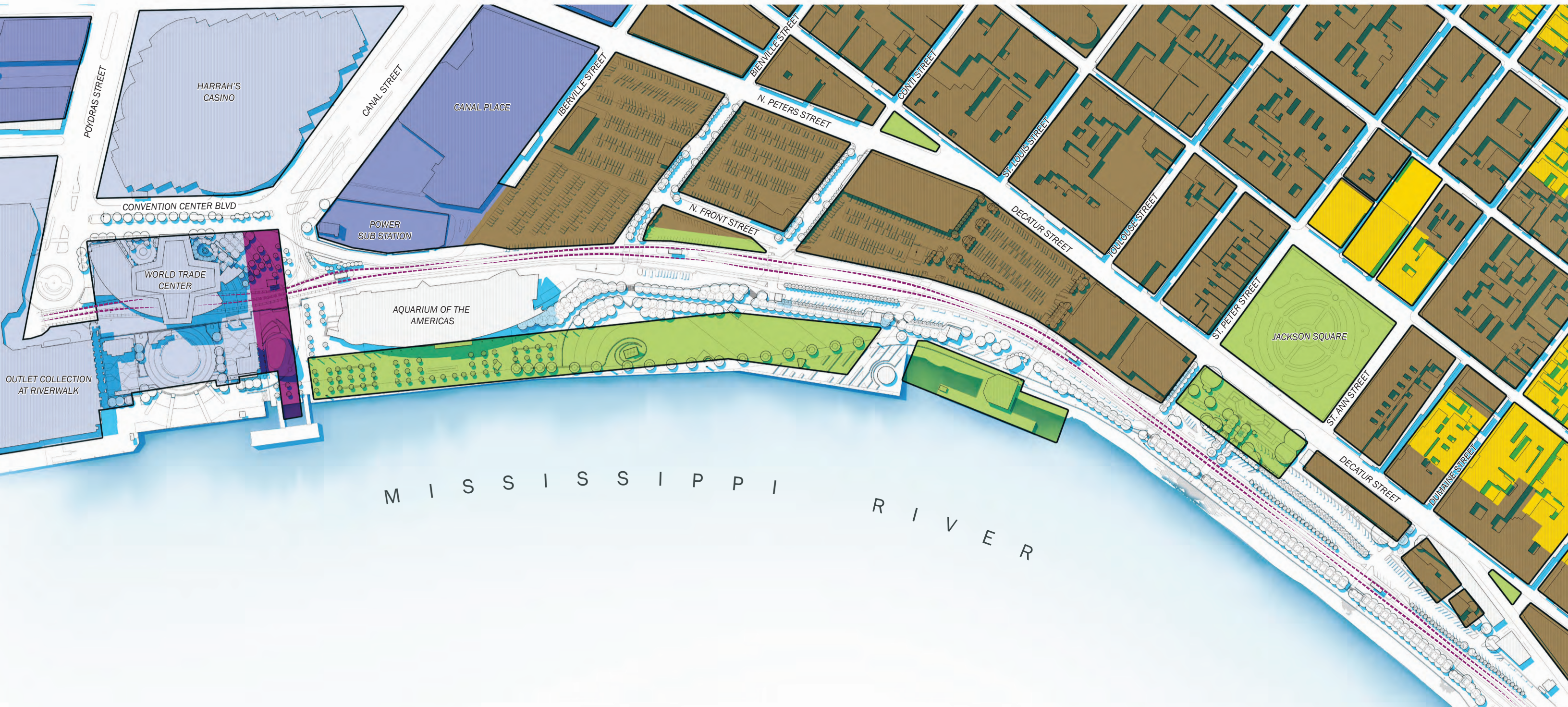
M I S S I S S I P P I  
R I V E R

# NEW ORLEANS RIVERFRONT EXISTING ZONING



- CBD-1 (CORE CBD)
- CBD-2 (HISTORIC MIXED USE)
- CBD-4 (EXPOSITION)
- VCC-1/VCC-2 (VIEUX CARRÉ COMMERCIAL)
- VCE/VCE-1 (VIEUX CARRÉ ENTERTAINMENT)
- VCP (VIEUX CARRÉ PARK)
- VCR-1/VCR-2 (VIEUX CARRÉ RESIDENTIAL)
- VCS/VCS-1 (VIEUX CARRÉ SERVICE)

GOVERNOR  
NICHOLLS STREET  
WHARF



# NEW ORLEANS RIVERFRONT FUTURE LAND USE



- TRANSPORTATION
- MIXED USE HISTORIC CORE
- DOWNTOWN EXPOSITION
- PARKLAND AND OPEN SPACE
- DOWNTOWN MIXED USE
- RESIDENTIAL HISTORIC CORE

GOVERNOR  
NICHOLLS STREET  
WHARF



# 5

## RIVERFRONT MASTER PLAN



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Spaces along the riverfront being utilized for festivals events ensuring the need for proper programming

## RIVERFRONT MASTER PLAN

### Program

As a major destination in the City of New Orleans, the riverfront draws residents, workers, and tourists to its many attractions. Visitors come to enjoy views of the Mississippi River, experience the aquarium, shop, dine, and ride ferries and steamboats. They also walk, jog, exercise, picnic, and congregate for numerous festivals and seasonal events. These experiences will be enhanced by projects currently underway, including improvements to the Moonwalk, implementation of the new ferry terminal, re-design of Spanish Plaza, and by implementing projects set forth in the Riverfront Master Plan.

Spaces are proposed that will be more usable and accessible, accommodating groups of varying sizes and people of all abilities. The riverfront is intended to be used year round as a series of public spaces.

Based on input from stakeholders, as well as direct observations of pedestrians using the riverfront, program elements and spaces should be designed to accommodate individuals visiting the attractions and groups gathering for large festivals and other events.

The New Orleans riverfront contains numerous unique spaces, each with a variety of distinct uses. The Riverfront Master Plan program strengthens continuity along the riverfront by clarifying transitions between disparate areas. This is achieved by creating a seamless visual experience using paving materials, light fixtures, plant materials, and other design elements. The enhanced design of pedestrian railroad crossings and floodgate entrances to the riverfront improves wayfinding between the city and the riverfront. Enhanced views up

and down the riverfront and of the city from the riverfront further strengthen pedestrian orientation, wayfinding, and sightseeing experiences.

The riverfront pedestrian experience is further enhanced with the addition of seating, shade trees, small gathering spaces, lighting, and improvement of lawn areas for recreation, picnicking, and passive activities.

## Riverfront Master Plan Alternatives

Two Riverfront Master Plan alternatives were developed for consideration by the City of New Orleans and stakeholders. Three component riverfront areas, Spanish Plaza, the Moonwalk and Washington Artillery Park entrance, and the Canal Street Ferry Terminal were re-designed or renovated concurrently with development of the master plan alternatives. The final Master Plan reflects the renovation of these areas.

The Master Plan alternatives described in the following pages incorporate an early footprint for the new ferry terminal and accounts for specific Moonwalk renovation proposals. The final design of both the Moonwalk and Canal Street Ferry Terminal improvements are incorporated into the preferred master plan.

Neither alternative is intended to be interpreted as schematic designs for areas of the riverfront. Rather, each offers possible approaches to meeting the overall goals described herein.

### *Alternative One*

The defining feature of Alternative One is the continuous pedestrian promenade along the river's edge that stretches the entirety of the study area from the Riverwalk Outlet Collection to the Governor Nicholls Street Wharf. This feature is constructed of one consistent blend of concrete pavers serving as the spine that runs through the design, linking each of the different sections of the site together. Continuous paving along the entirety of the river's edge will reinforce the riverfront as a continuous experience for pedestrians. Beyond the promenade, the design is tied together through the unification of various site elements such as paving, lighting, and planting across all five distinct sections of the site. Consideration was made, however, to ensure that the unique characteristics of individual areas will not be compromised through the introduction of these unifying design elements. For example, the existing pavers within the Aquarium Plaza are to remain, while the pavers at the entrance to the building were augmented with the introduction of an accent colored paver. This assists in the delineation of the aquarium's entry zone versus the rest of the plaza.

At entry points to the site, Alternative One proposes consistent paving in the form of stamped concrete where pedestrian and vehicular circulation intersects with railroad tracks. Concrete pavers matching the style of the stamped concrete are integrated into streets that provide access to the site between North Peter and Decatur streets and the tracks. This design element more effectively articulates

connections from the French Quarter to the riverfront and aid in wayfinding through clear urban design. Wayfinding at entrance thresholds to the site are further enhanced via the inclusion of street names and elements visible at the top of ramps and stairs from the street. All of this aims to relate one's location along the riverfront with the location within the French Quarter.

Alternative One extends the proposed Spanish Plaza paving and lighting design onto to a refurbished Canal Street Wharf, which visually unifies the currently disjointed pair of public spaces. Spanish Plaza and the proposed Canal Street Wharf are organized around circular forms that ripple out from the center of a new, larger, interactive fountain feature. Pedestrian bridges from the outer edge of the fountain basin connect to the center platform. Direct access to the fountain's center provides the opportunity to be amidst the fountain displays and allows for a cooling space in the plaza. The center platform is intended as a location for a future commissioned public art work in honor of the city's Tri-centennial festivities in 2018. The circular fountain, lighting, and seating are flanked by elevated planters of trees that would provide seasonal shade.

The Canal Street Ferry Terminal project is being designed to incorporate an extension of the wharf providing pedestrian circulation between the Canal Street Wharf and the Aquarium of the Americas on the riverside of the terminal building. This offers the opportunity to connect all three places at the river's edge. With the riverfront promenade continuing

from the Canal Street Wharf through the ferry terminal site and into the Aquarium of the Americas, connections and transitions between these two attractions would be improved. The ferry terminal site also includes the aforementioned plaza at the foot of Canal Street acting as a riverfront gateway.

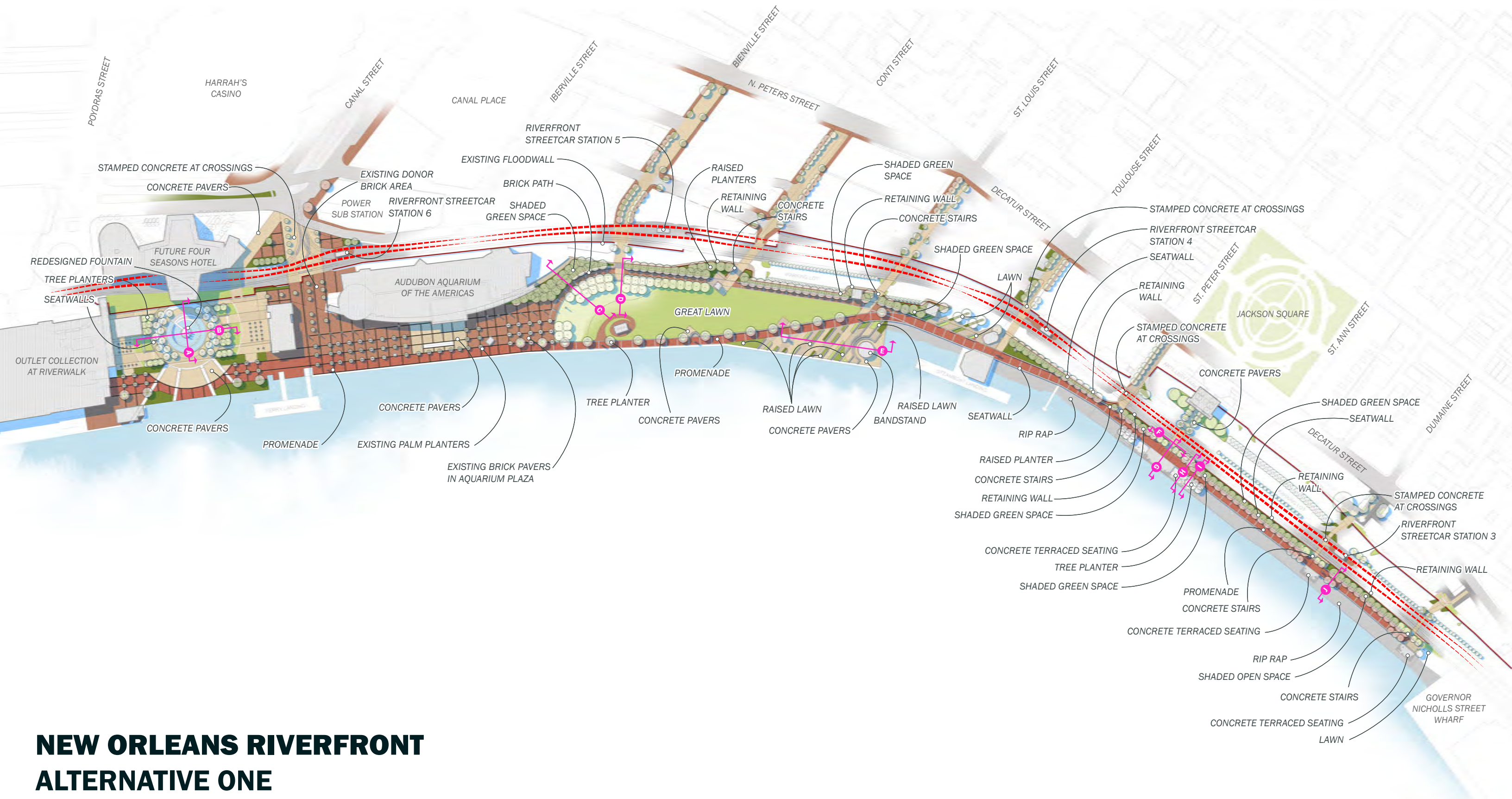
In the Aquarium Plaza, Alternative One proposes repairs to the existing terracotta colored pavers and specialty pavers in front of the aquarium entrance, while preserving the existing donor pavers. This alternative proposes a new geometry between the Aquarium of the Americas and Woldenberg Park, one in which the park curves back towards the riverfront.

Re-grading the Woldenberg Park lawn creates a higher lawn area sloping toward the river with substantial tree plantings that are supported by retaining walls along the edge of the site adjacent to the floodwall. This maximizes the amount of usable open space, which the riverfront currently lacks. Steps and ramps are provided at breaks in the retaining wall at key points to allow access to the park. Located at the top of these access points are arrival areas, which would be aligned with the terminus of each French Quarter streets (Bienville, Conti, St. Louis, and Toulouse), and a walkway shaded by trees provides connections between various access points. These elevated arrival areas would provide a panoramic view along the riverfront and back across the city.

Along the Moonwalk, several improvements are proposed to enhance access points, provide

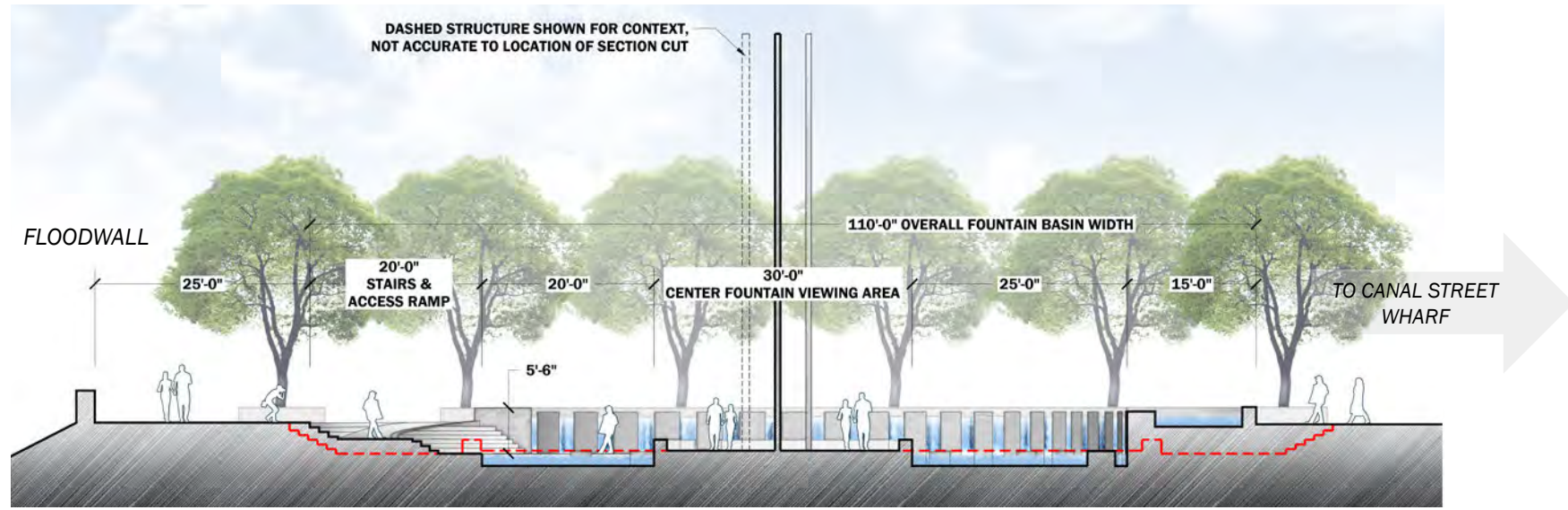
greater access to the river's edge, improve the spaces' usability, and provide additional shade and seating for visitors. Along the Moonwalk between Washington Artillery Park and the Governor Nicholls Street Wharf, Alternative One proposes widening the elevated space along the river by creating a retaining wall along the edge adjacent to the railroad tracks. This would provide appropriate soil depth for additional shade trees, creating stronger definition for the edge of the Moonwalk's primary pedestrian zone and a widened promenade for pedestrians. Additionally, within this portion of the riverfront, terraced seating is proposed at the river's edge allowing visitors to come in close contact with the water. The location of this terraced seating aligns with Washington Artillery Park at the Moonwalk, as well as the foot of both Dumaine and St. Philip streets.

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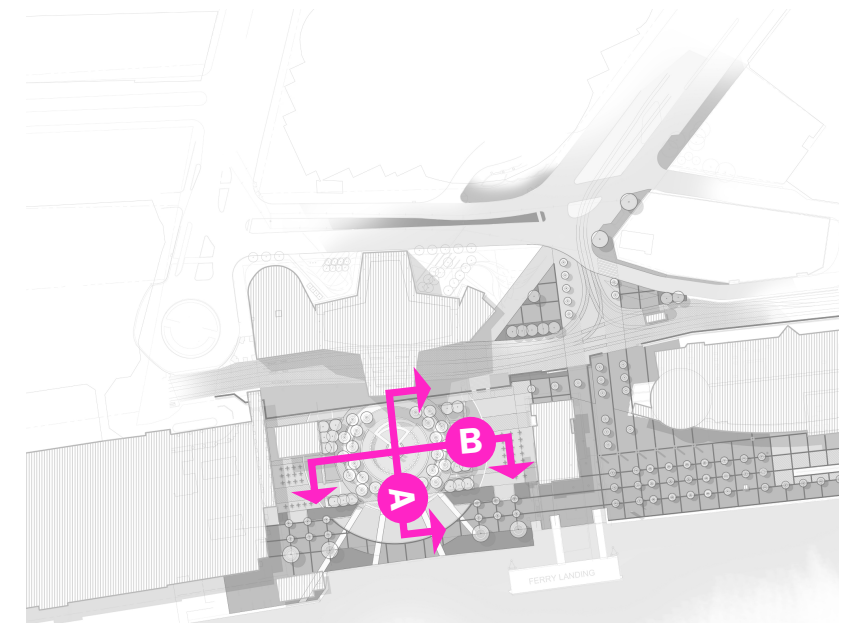


# NEW ORLEANS RIVERFRONT ALTERNATIVE ONE

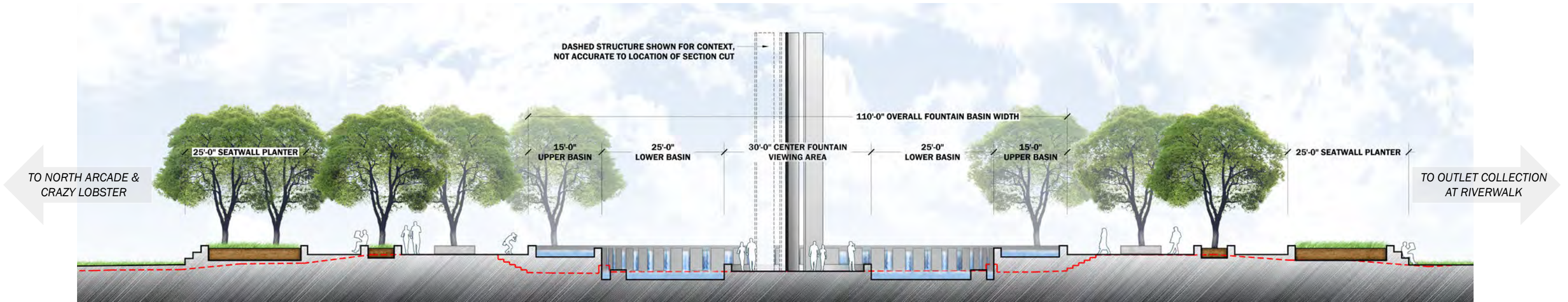




**A** SECTION-ELEVATION: SPANISH PLAZA FOUNTAIN LOOKING DOWNRIVER



SECTION LOCATION KEY MAP

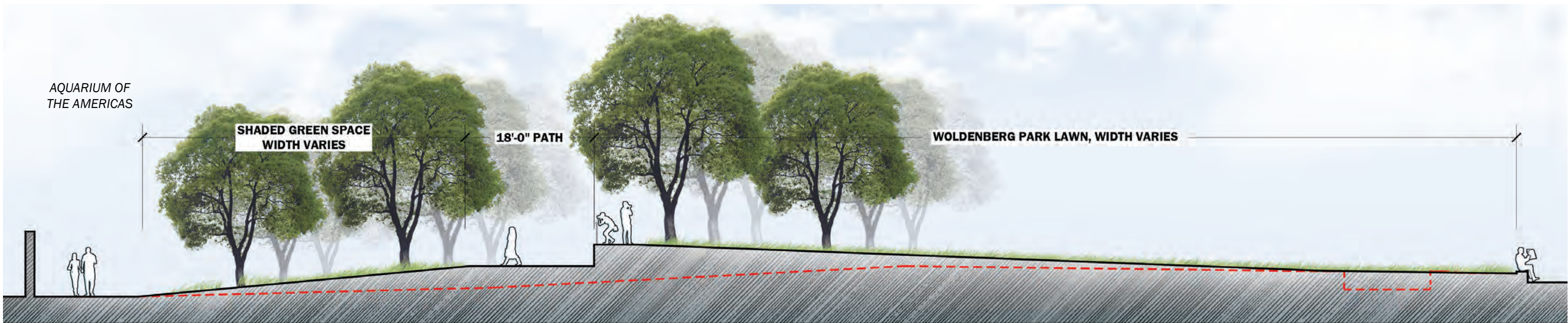


**B** SECTION-ELEVATION: SPANISH PLAZA FOUNTAIN LOOKING TOWARDS THE MISSISSIPPI RIVER

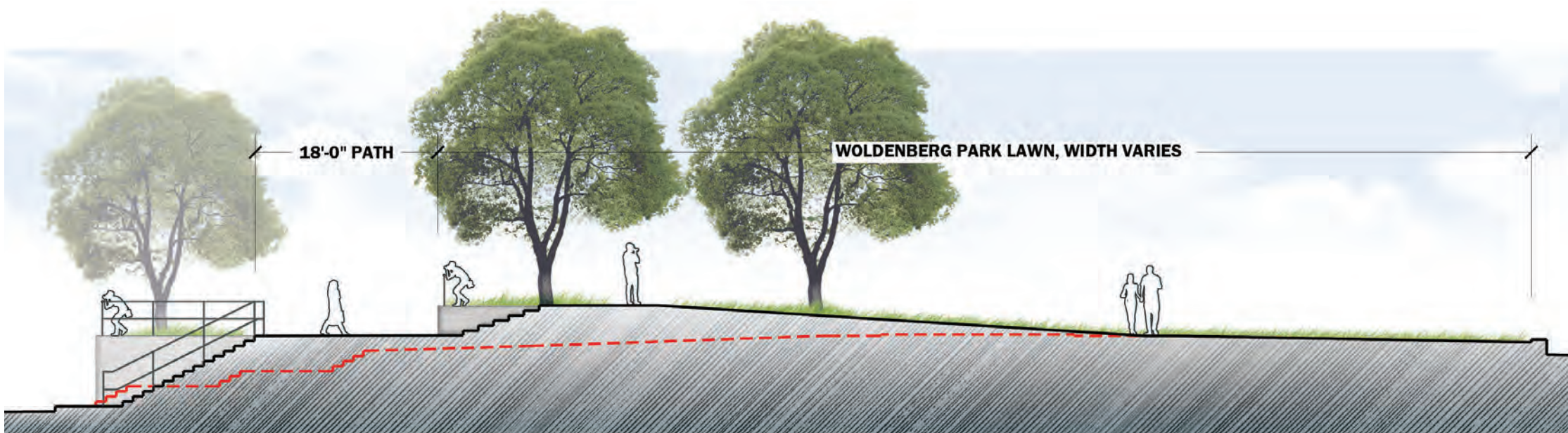
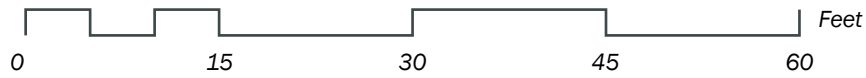


# NEW ORLEANS RIVERFRONT ALTERNATIVE ONE

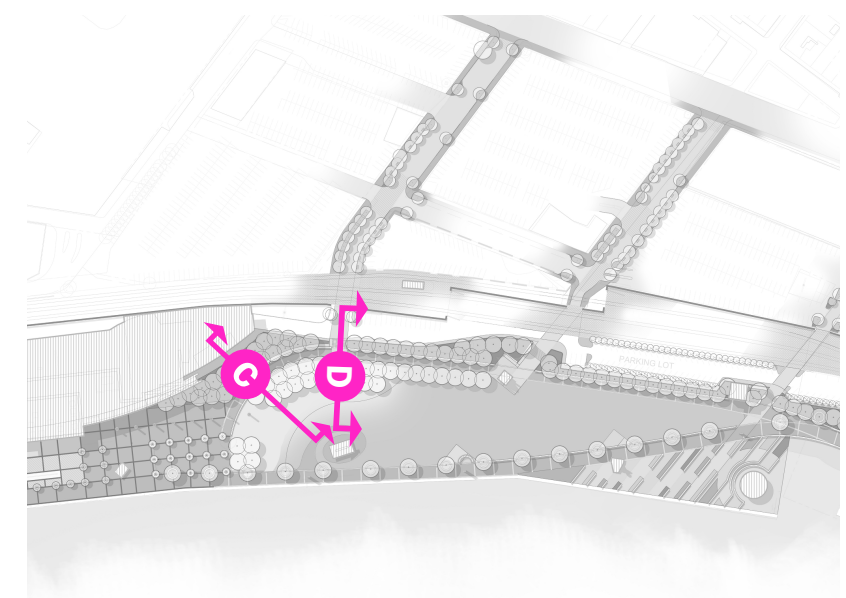
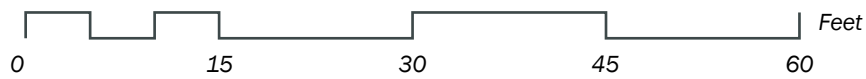




**C** SECTION: EDGE OF WOLDENBERG PARK NEAR AQUARIUM PLAZA LOOKING DOWNRIVER

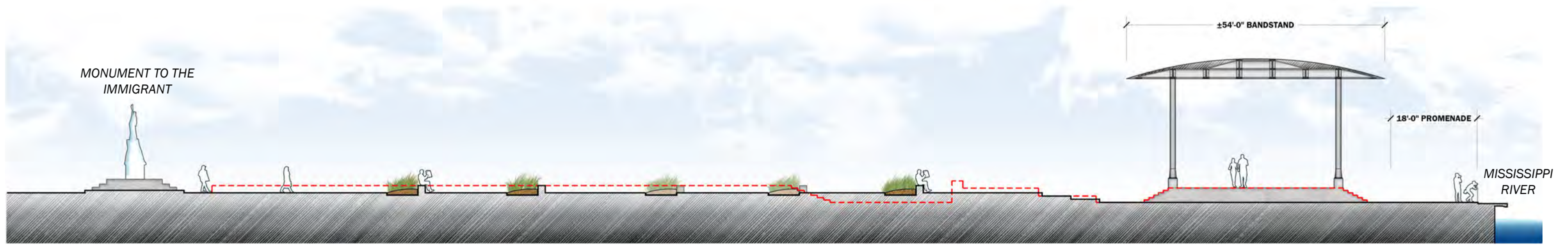


**D** SECTION-ELEVATION: ACCESS POINT TO WOLDENBERG PARK AT BIENVILLE STREET LOOKING DOWNRIVER

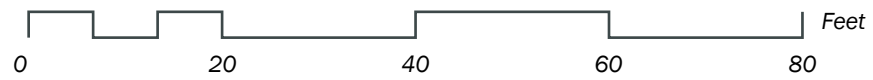


SECTION LOCATION KEY MAP

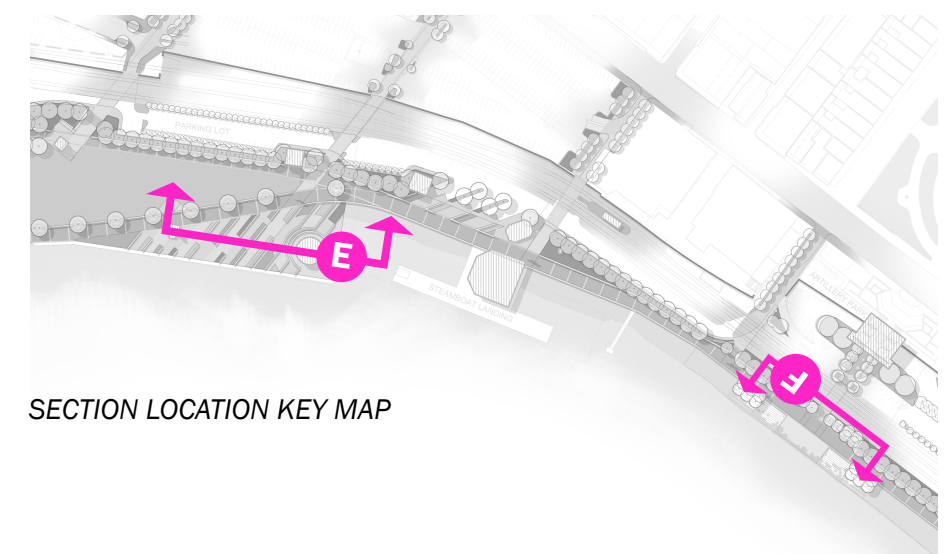
# NEW ORLEANS RIVERFRONT ALTERNATIVE ONE



**E** SECTION: TERRACED SEATING AND PERFORMANCE STAGE IN WOLDENBERG PARK LOOKING TOWARDS THE CITY

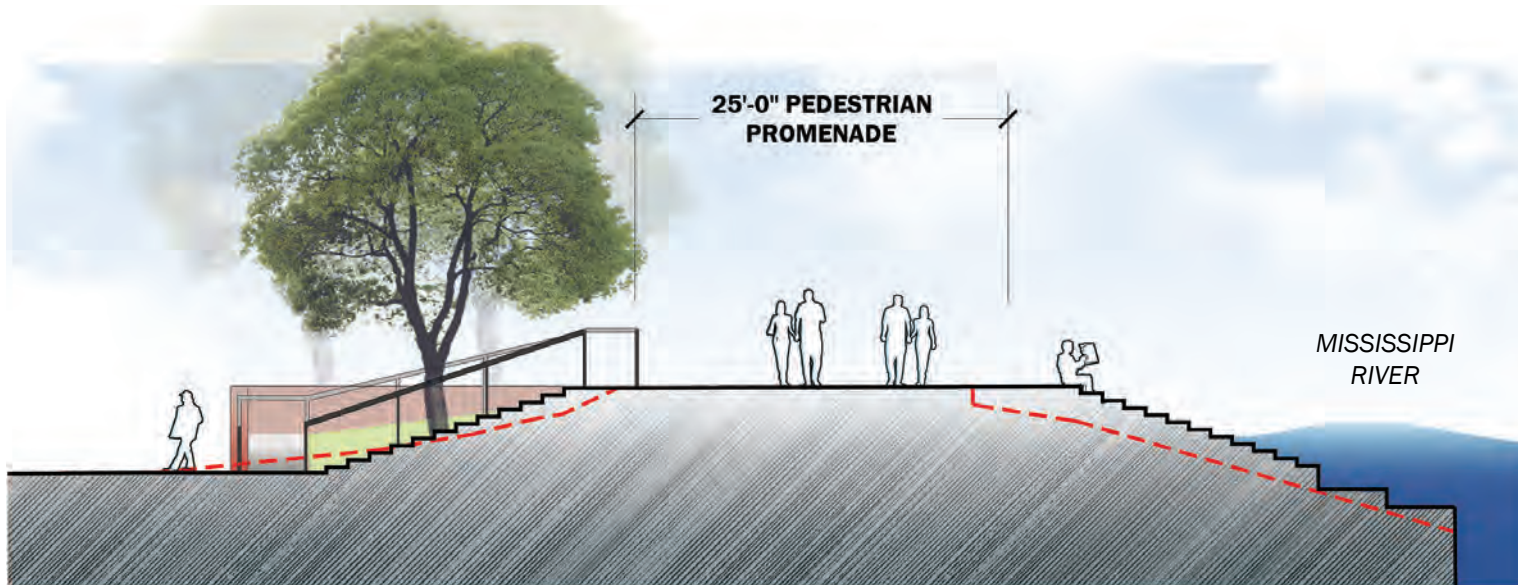


**F** ELEVATION: RIVERFRONT ACCESS AT ARTILLERY PARK LOOKING TOWARDS THE MISSISSIPPI RIVER

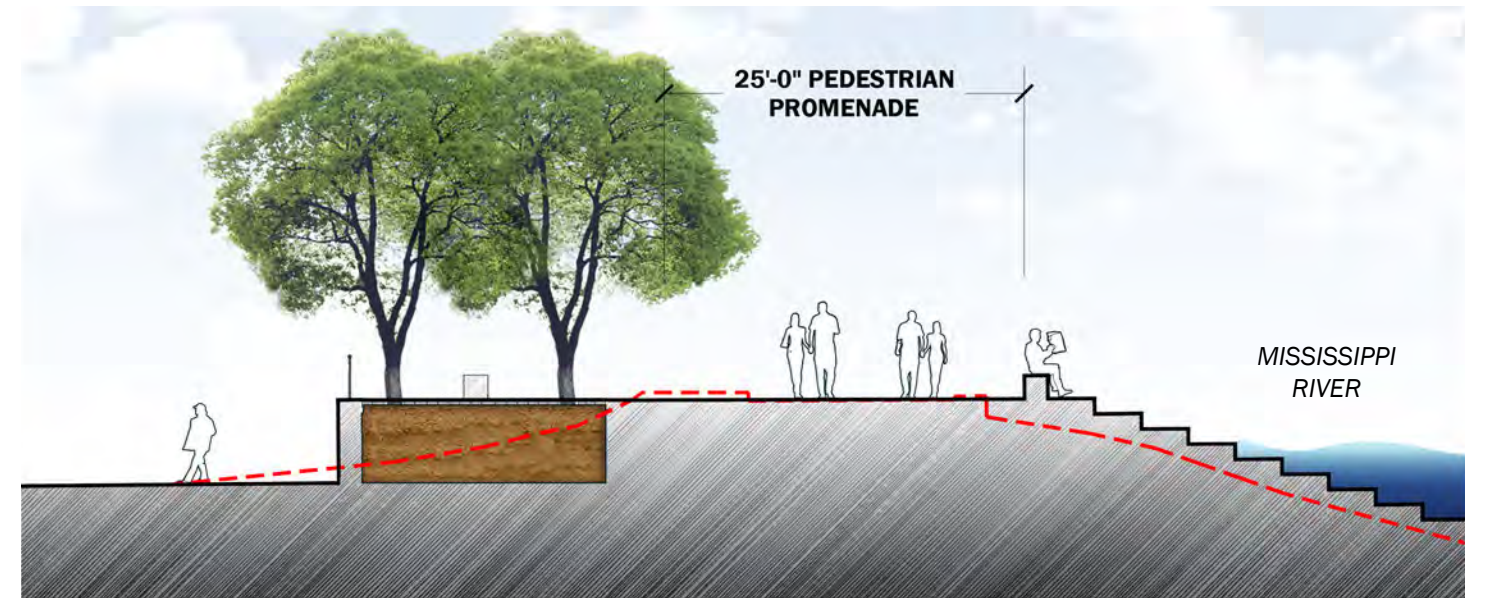
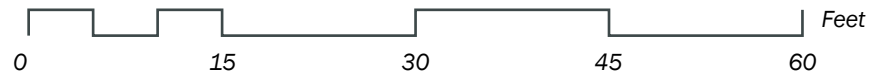


SECTION LOCATION KEY MAP

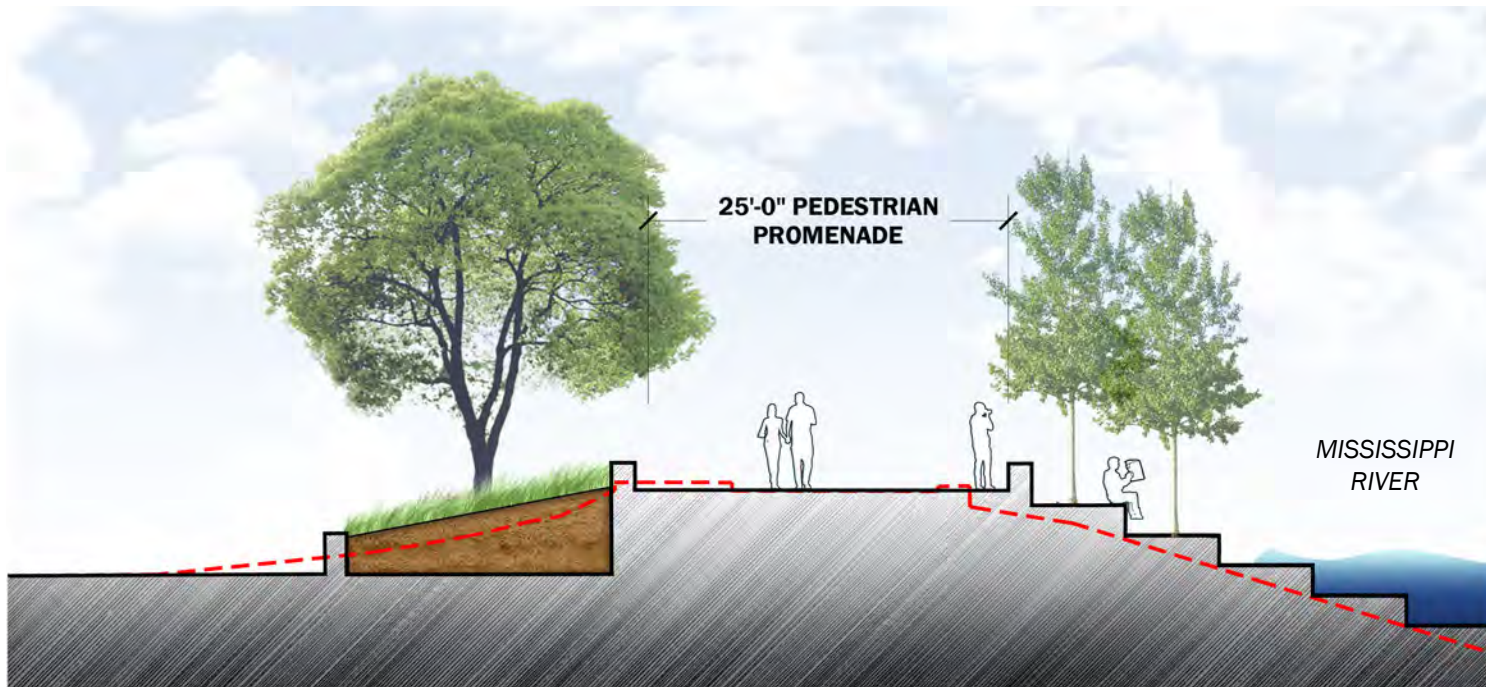
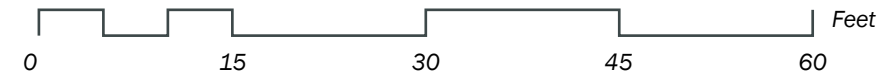
# NEW ORLEANS RIVERFRONT ALTERNATIVE ONE



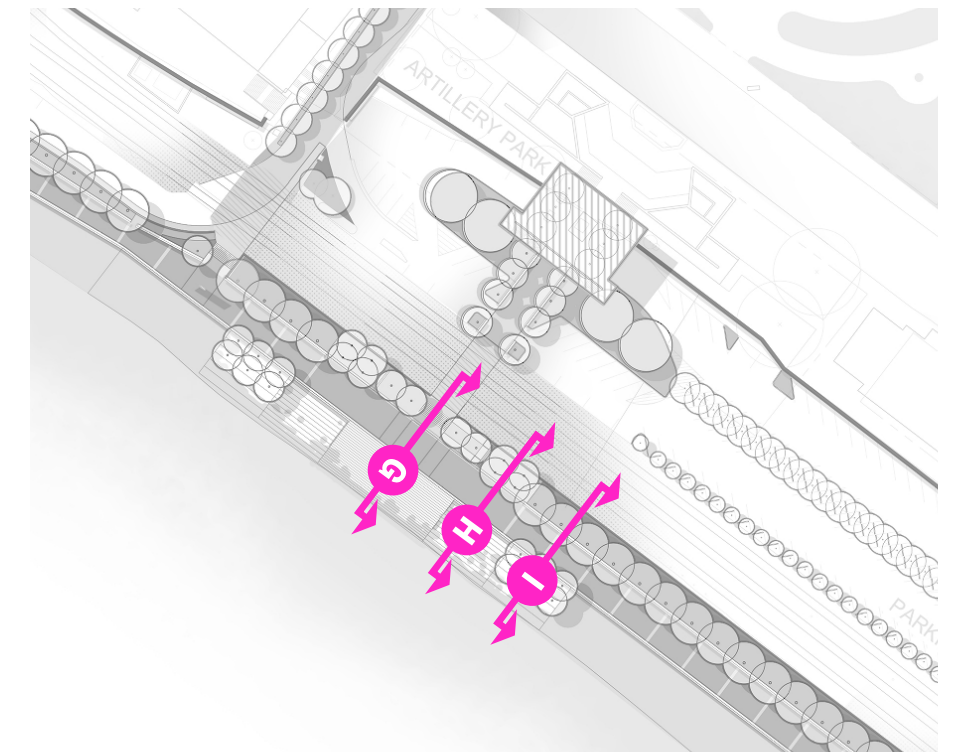
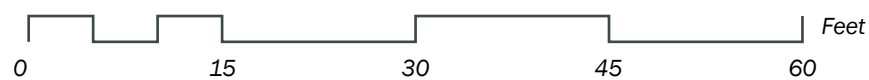
**G** SECTION: RIVERFRONT ACCESS AT ARTILLERY PARK LOOKING DOWNRIVER



**H** SECTION: MOONWALK AT ARTILLERY PARK THROUGH WALL LOOKING DOWNRIVER

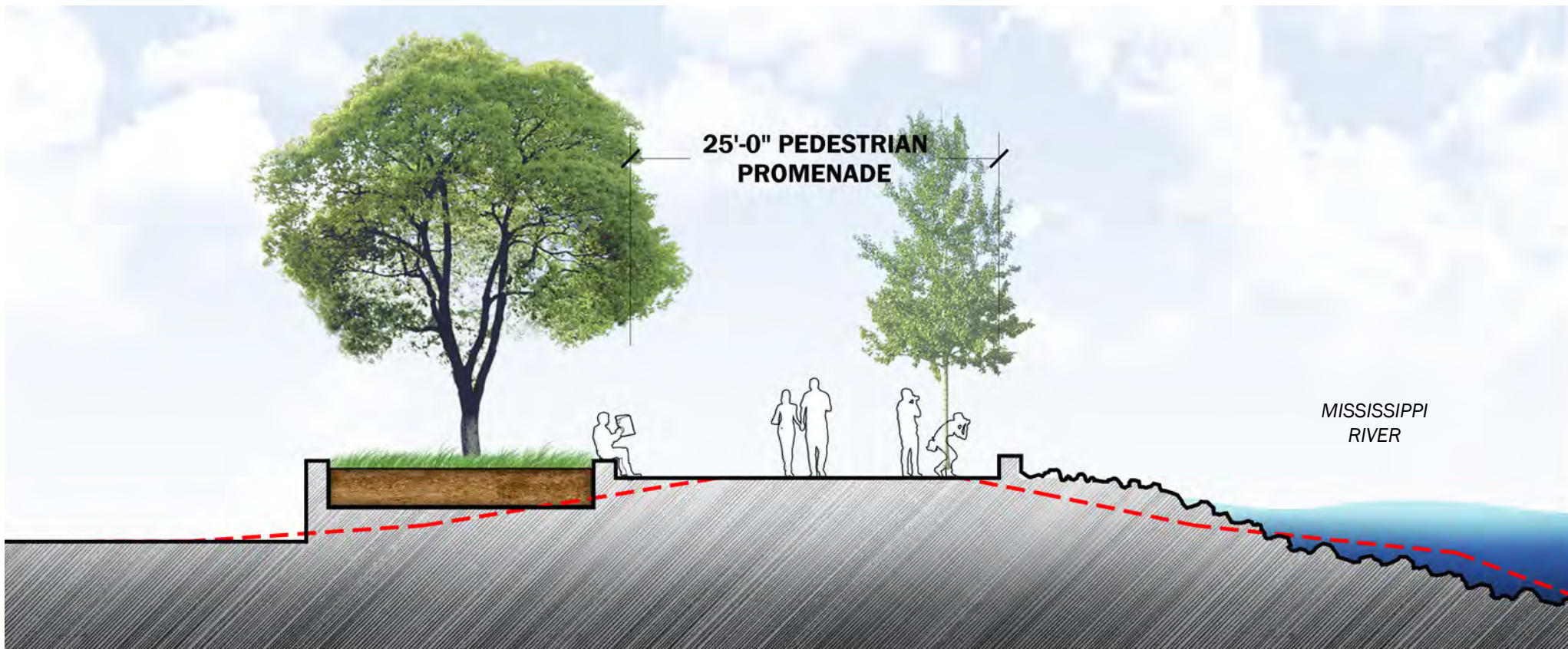


**I** SECTION: MOONWALK AT ARTILLERY PARK THROUGH PLANTING BUFFER LOOKING DOWNRIVER

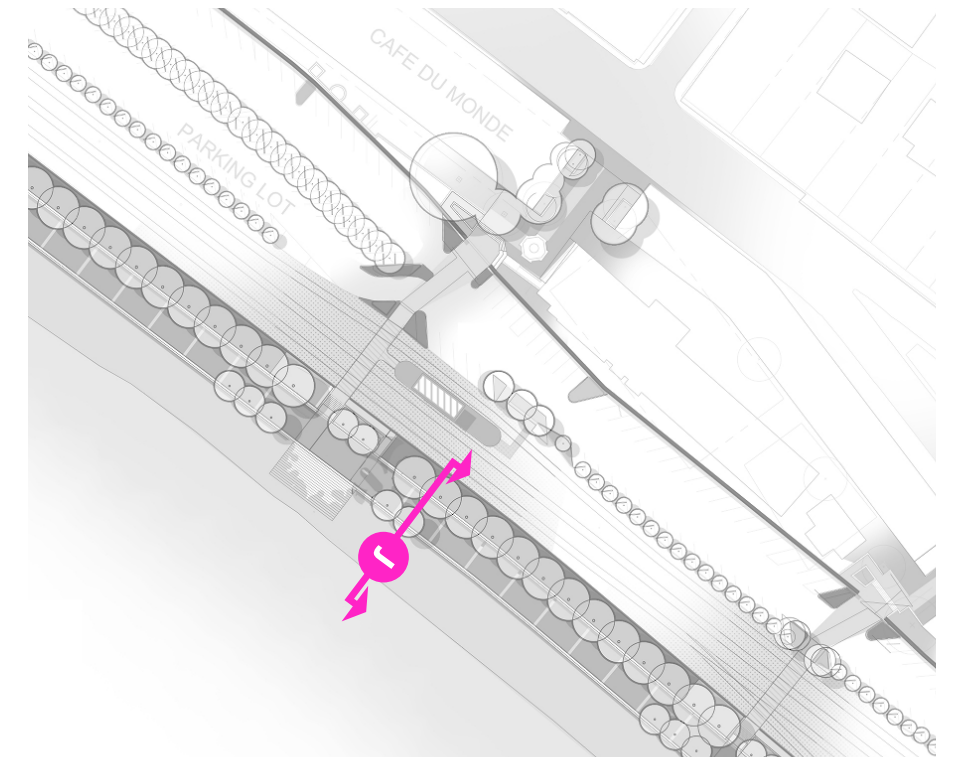
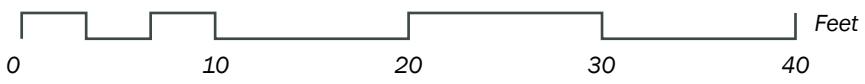


SECTION LOCATION KEY MAP

# NEW ORLEANS RIVERFRONT ALTERNATIVE ONE



**J** SECTION: MOONWALK NEAR DUMAINE STREET LOOKING DOWNRIVER



SECTION LOCATION KEY MAP

# NEW ORLEANS RIVERFRONT ALTERNATIVE ONE

### *Alternative Two*

Similar to Alternative One, Alternative Two aims to generate a continuity across the riverfront through the introduction of consistent design details, such as lighting standards and tree plantings. However, the form these improvements take and how they define the spaces within each section of the riverfront differs significantly from the previous design alternative. The geometric form of an arc, relating to the bends in the river for which the Crescent City is named, is employed for continuity throughout the riverfront in this iteration. At the new Canal Street Plaza, paving and tree plantings form an arc at the foot of Canal Street, receiving pedestrians before they proceed to Spanish Plaza or the ferry terminal.

In Spanish Plaza, seating, planters, and small fountain features take the form of arcs. These features create smaller, more intimate seating areas. The main water feature is a large, curved waterwall that opens toward the river and creates substantial water sounds, light displays, and cooling of the areas surrounding the fountain.

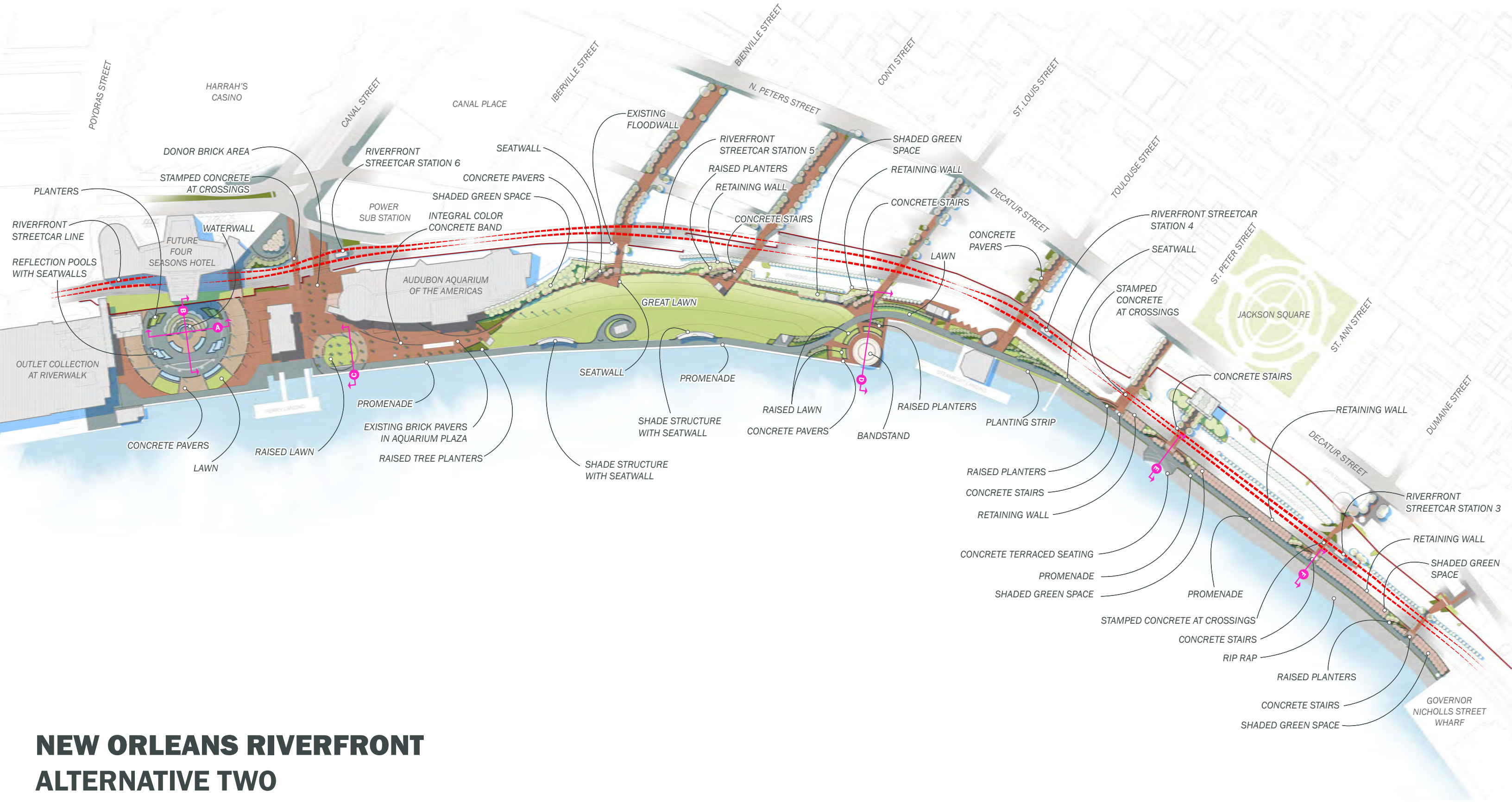
Within Aquarium Plaza, the existing brick pavers will be refurbished and remain in place, however, sweeping arcs of integral colored concrete bands are introduced responding to the over-arching concept of the design, the bend of the river.

At the junction of the Canal Street Ferry Terminal and the Aquarium Plaza, a circular-shaped, raised lawn area provides a new feature for people to use. Visitors can sit on the grass and enjoy the riverfront and ferry

operations. The geometric inspiration for this alternative continues as Woldenberg Park's lawn area curves and extends into the plaza, thus reducing the amount of paved area. Reducing the amount of pavement and increasing the amount of lawn space strengthens the waterfront park concept and provides an escape from the adjacent urban hardscape. Seating along the promenade through the park takes the shape of eighteen inch curved walls that form benches and planted areas oriented toward the river. The promenade curves away from the river toward St. Louis Street to accommodate a circular stage that provides additional shade for visitors when not in use for performances. The park concept is further enhanced by curved planters along the promenade that house shade trees, and the removal of the existing pathways through the lawn to create a larger, uninterrupted green space. The newly defined great lawn will gradually slope towards the river through the use of retaining walls, creating more usable space facing the river and enhancing site views.

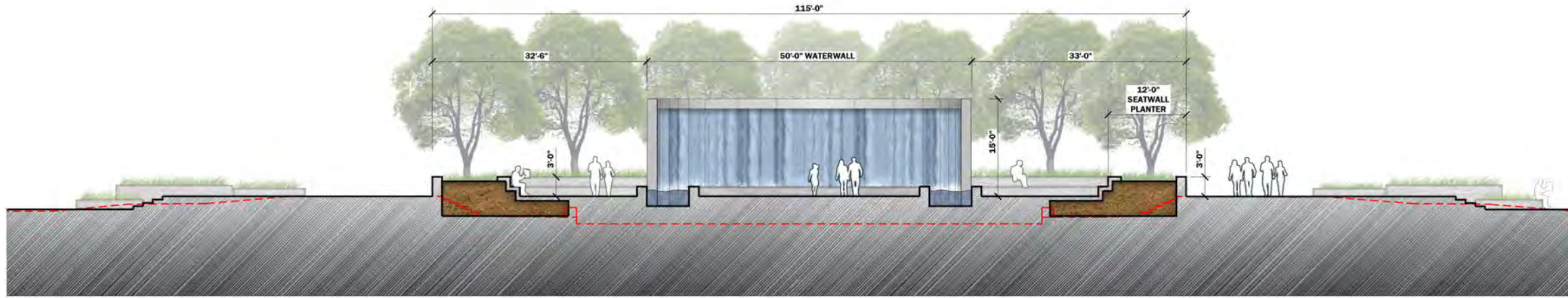
At the Moonwalk, terraced seating leading down to the river in front of Washington Artillery Park allows visitors to step down to the river's edge. Retaining walls along the railroad tracks increases the width of the elevated portion of the Moonwalk, providing more space for pedestrians and soil depth for shade trees.

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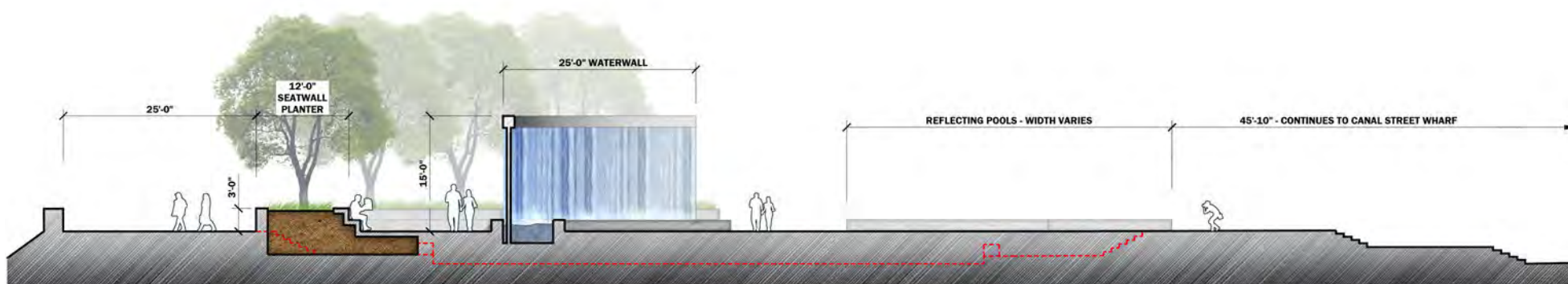
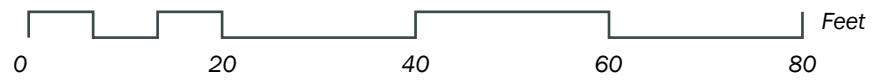


# NEW ORLEANS RIVERFRONT ALTERNATIVE TWO

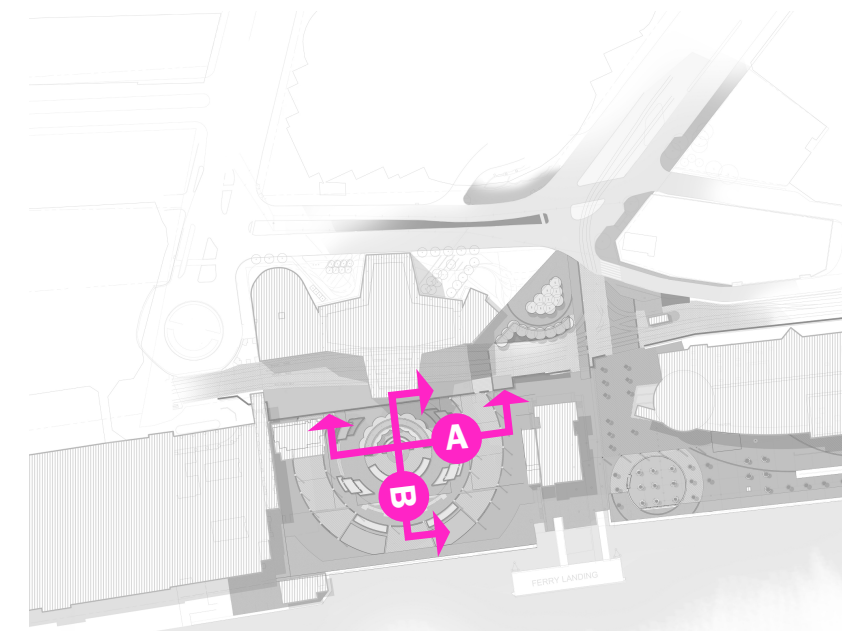




**A** SECTION-ELEVATION: SPANISH PLAZA FOUNTAIN LOOKING TOWARDS THE CITY



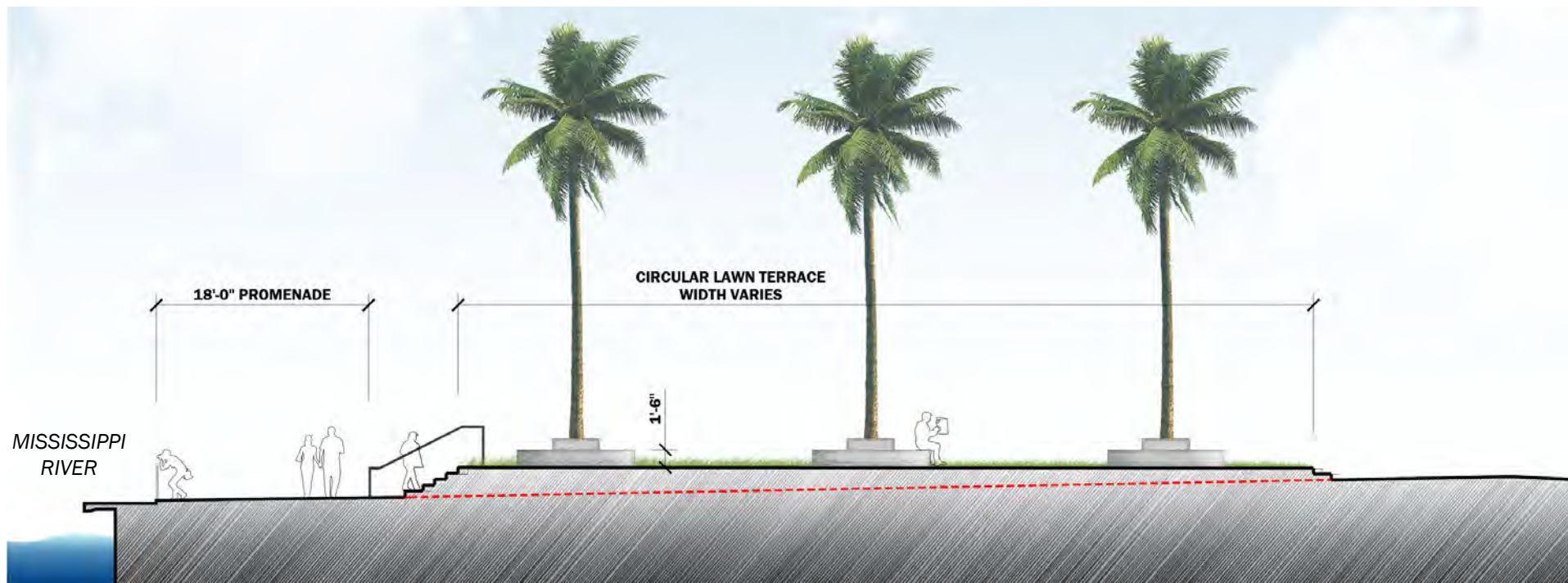
**B** SECTION-ELEVATION: SPANISH PLAZA FOUNTAIN LOOKING DOWNRIVER



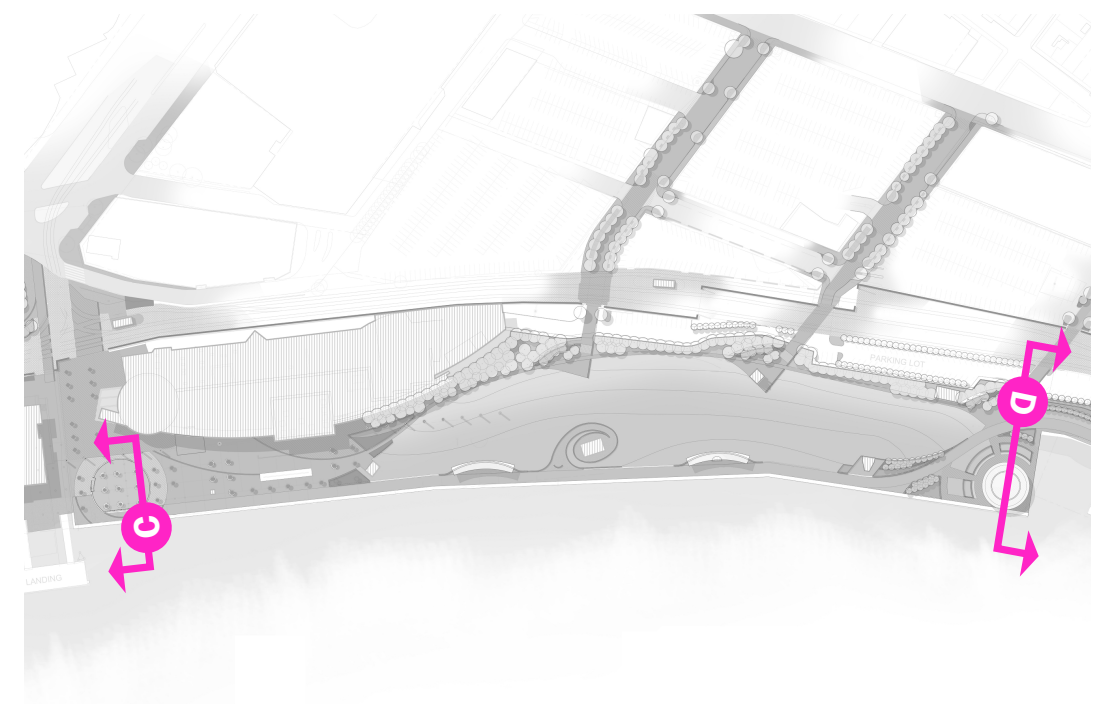
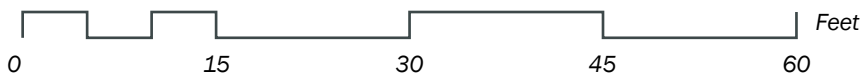
SECTION LOCATION KEY MAP

# NEW ORLEANS RIVERFRONT ALTERNATIVE TWO

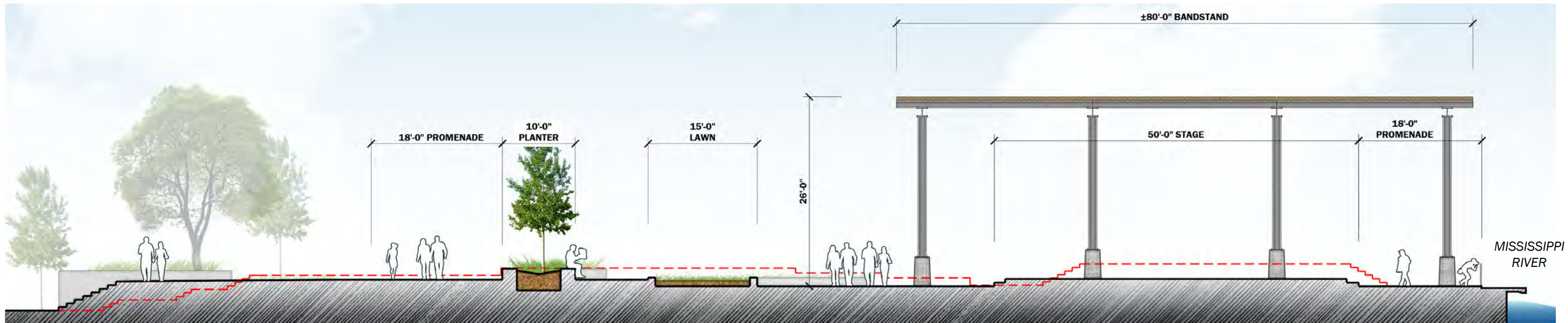




**C** SECTION: AQUARIUM PLAZA RAISED SEATING TERRACE LOOKING UPRIVER



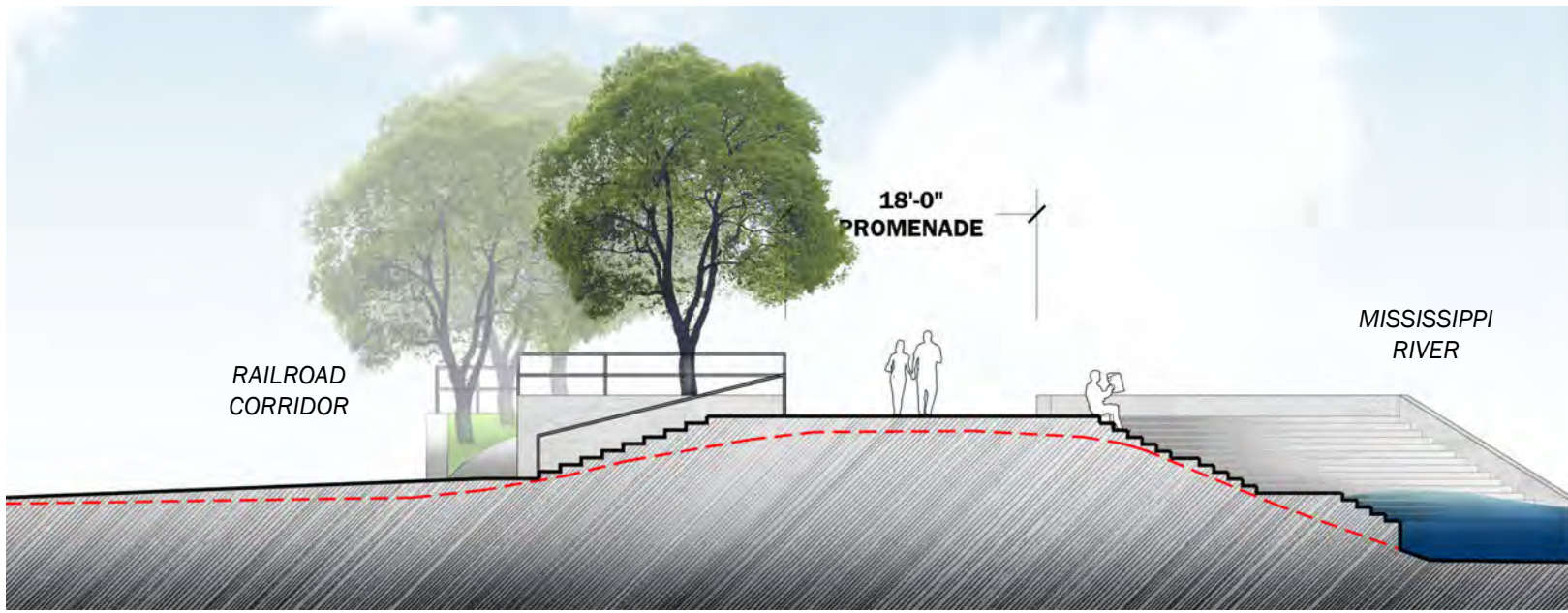
SECTION LOCATION KEY MAP



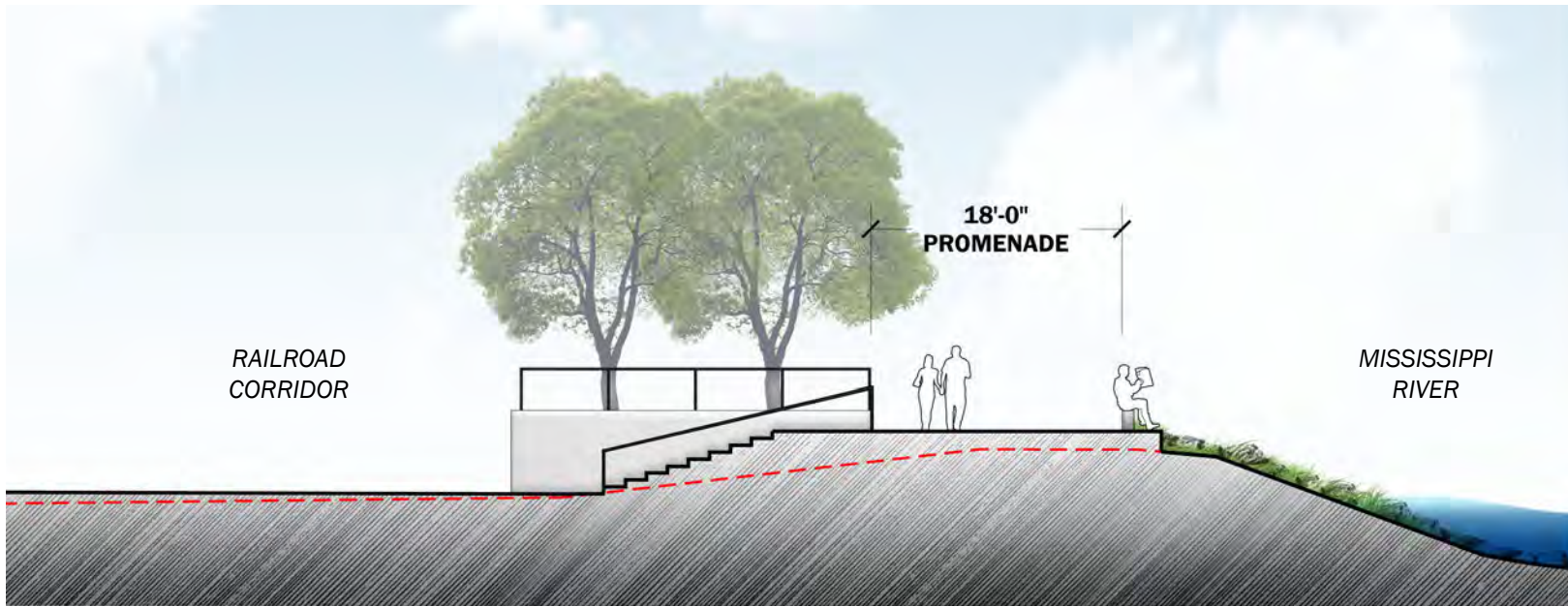
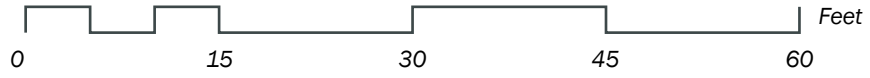
**D** SECTION-ELEVATION: WOLDENBERG PARK STAGE AREA LOOKING TOWARDS THE CITY



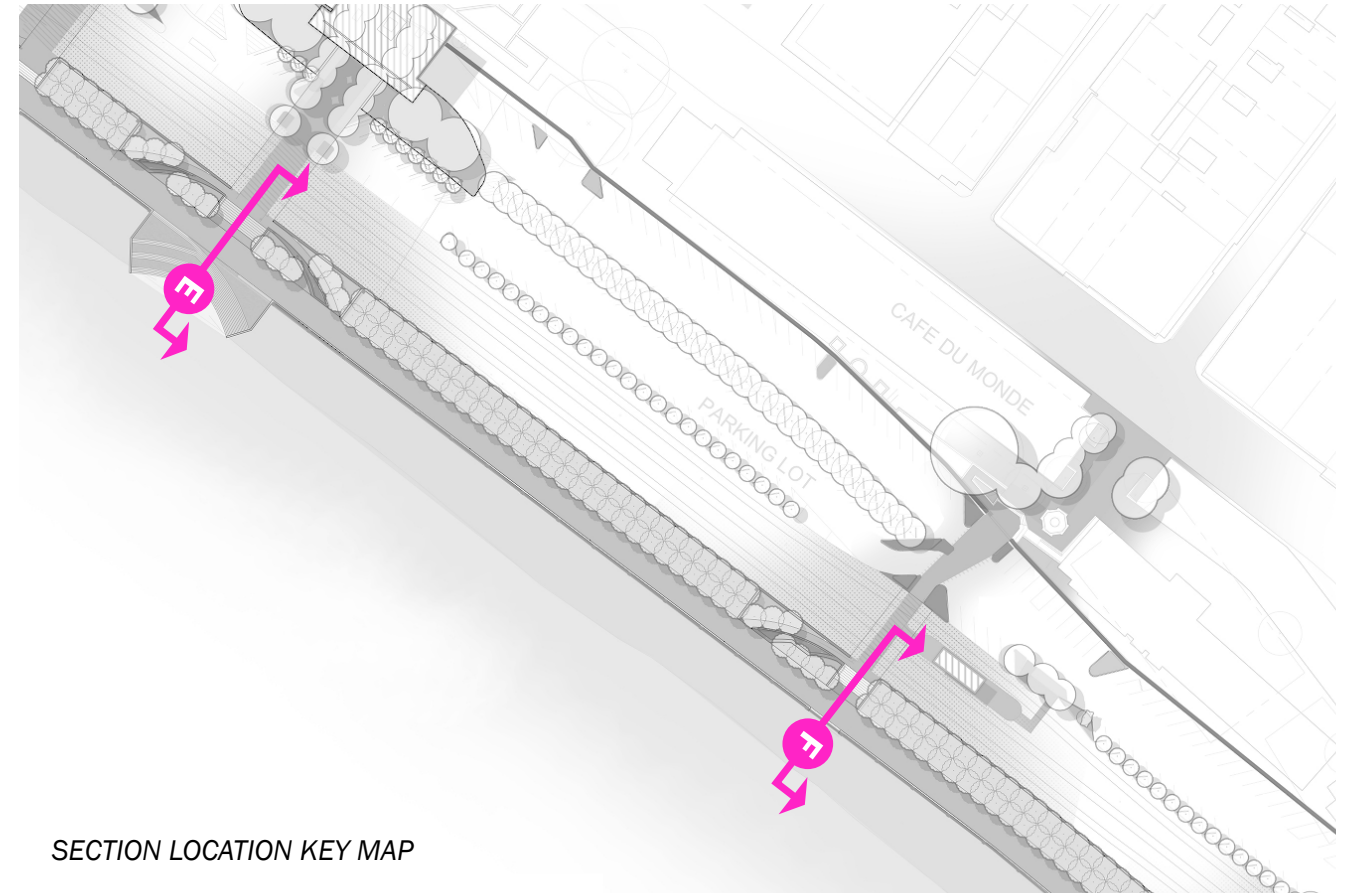
# NEW ORLEANS RIVERFRONT ALTERNATIVE TWO



**E** SECTION-ELEVATION: RIVERFRONT ACCESS AT ARTILLERY PARK LOOKING DOWNRIVER



**F** SECTION-ELEVATION: MOONWALK NEAR DUMAINE STREET LOOKING DOWNRIVER



SECTION LOCATION KEY MAP

# NEW ORLEANS RIVERFRONT ALTERNATIVE TWO

## Master Plan

Following a series of workshops, meetings, and presentations with stakeholders and public officials, the Alternative One concept was selected by city officials as the preferred plan to further develop and refine. Specific changes to the plan were indicated as part of the preferred selection process. During development of the Master Plan, designs for the Moonwalk and the new Canal Street Ferry Terminal advanced and were incorporated into the Riverfront Master Plan.

The Riverfront Master Plan's primary purpose is to enhance the riverfront as a primary destination and means of conveyance through the city for locals and visitors alike. While the riverfront is already used by many, additional features, a broader array of spaces, and opportunities for a wider diversity of experiences will attract more visitors year-round. The Riverfront Master Plan and its features are described as follows, organized by areas:

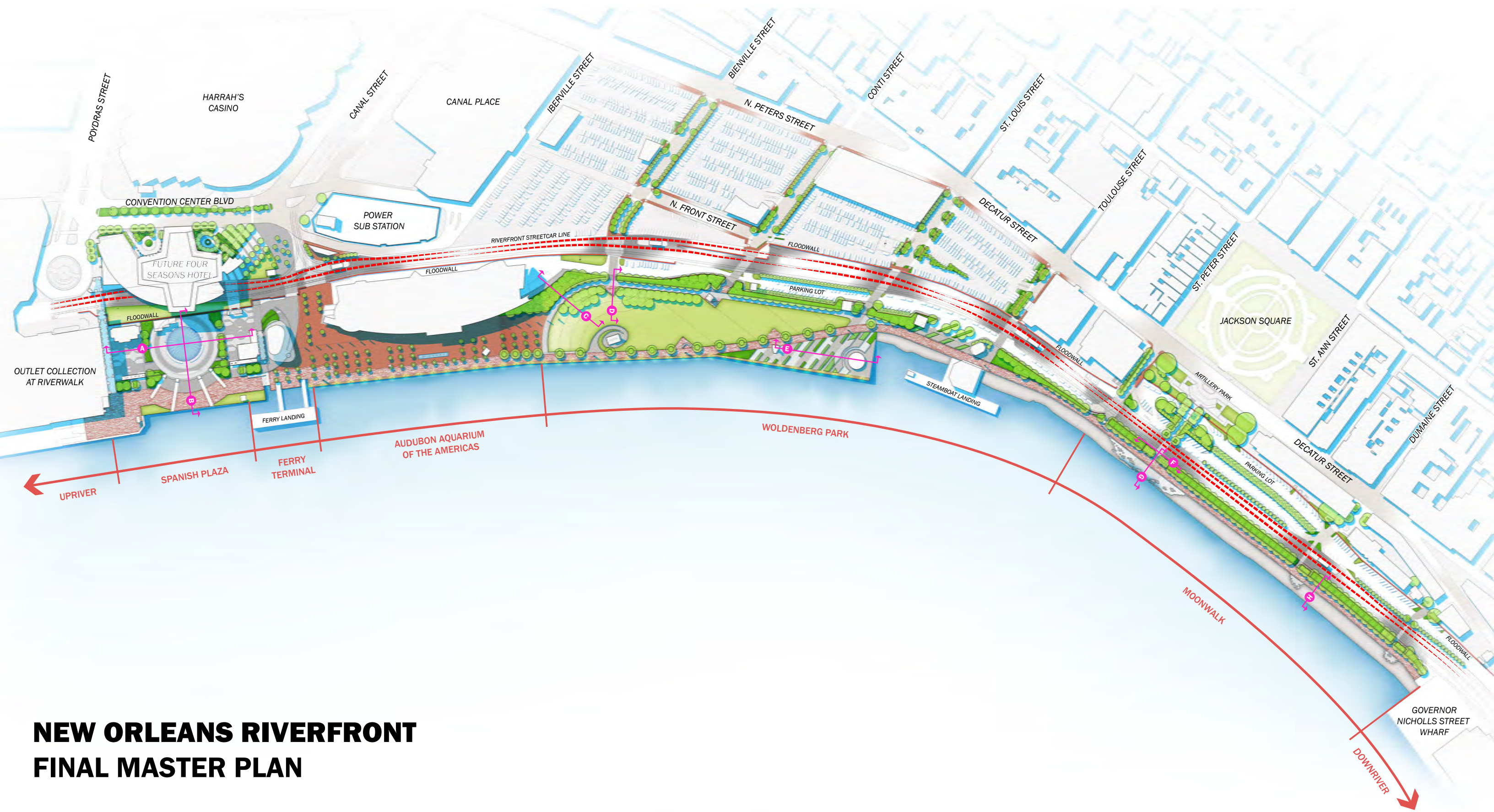
- *Spanish Plaza;*
- *Canal Street Ferry Terminal;*
- *Aquarium Plaza;*
- *Woldenberg Park; and*
- *Moonwalk.*

Along the riverfront, two primary features, the promenade and gateways, serve as defining features that tie together the transitions between each of the five distinct sections of the site. These components are critical in the transformation of the riverfront into a continuous network of public space.



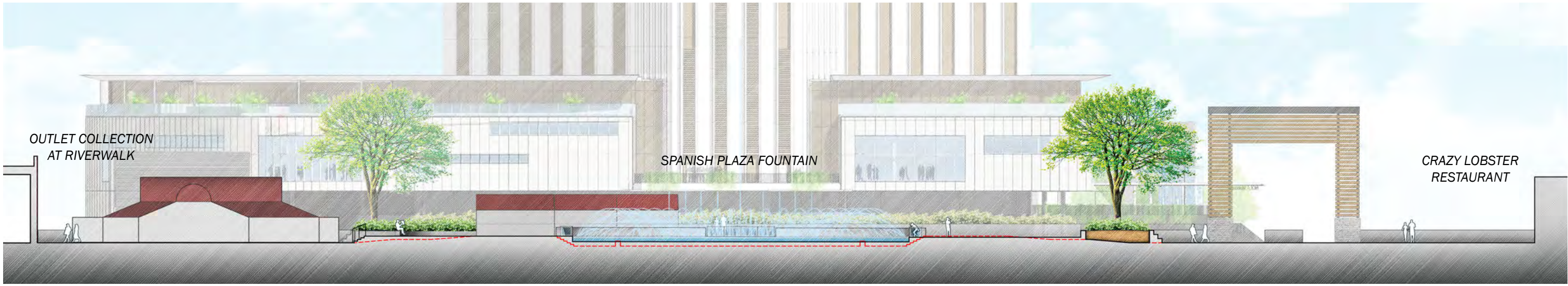
Map of the Riverfront Master Plan's main spaces

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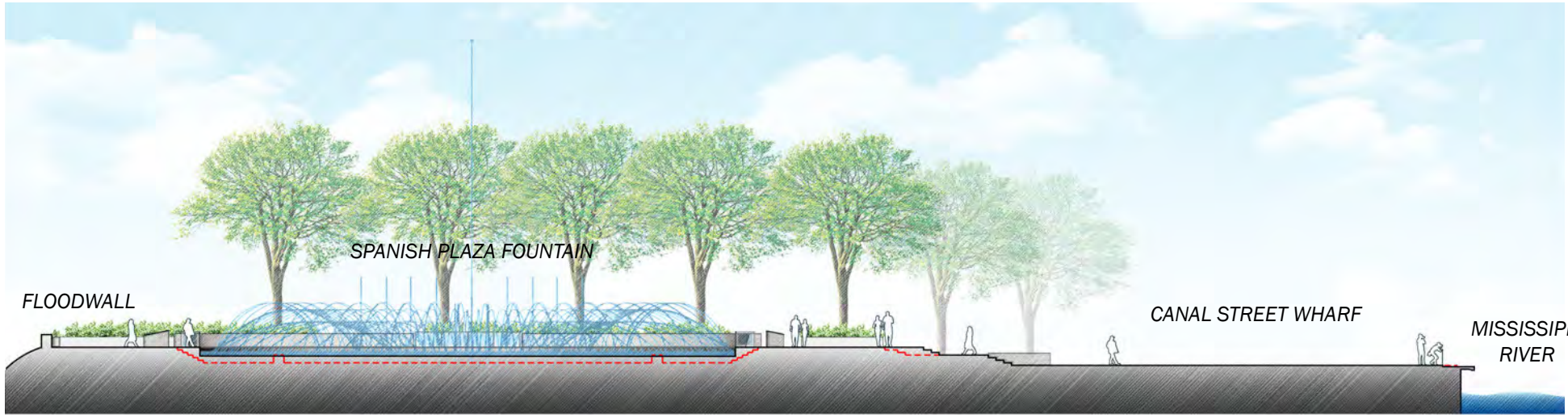
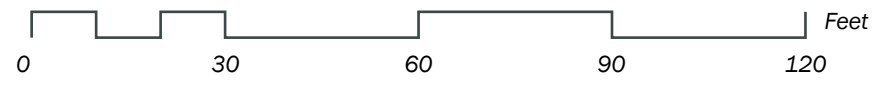


# NEW ORLEANS RIVERFRONT FINAL MASTER PLAN

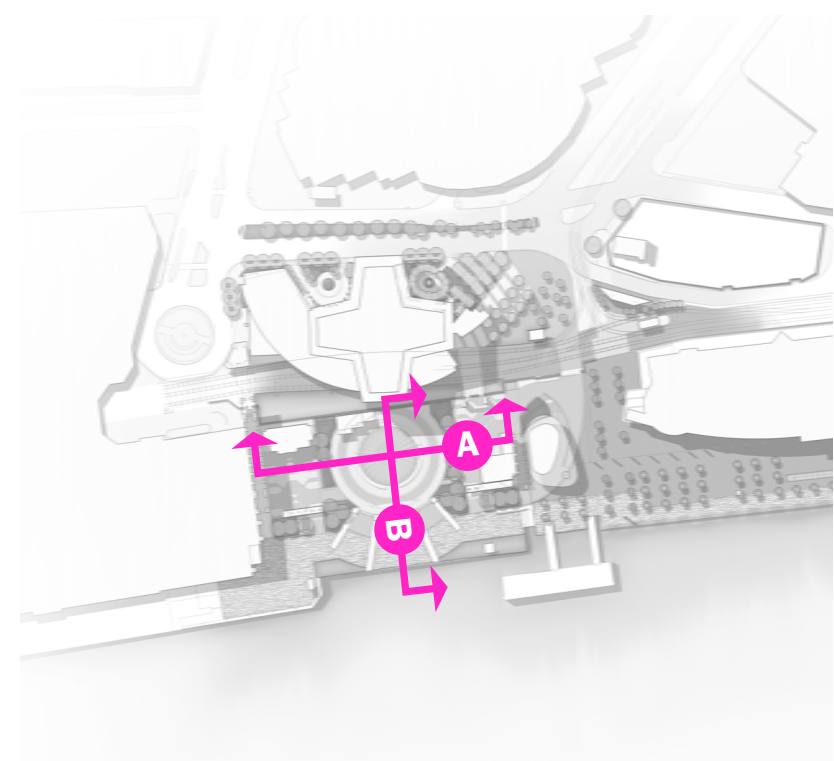
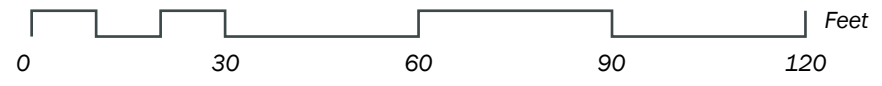




**A** SECTION-ELEVATION: SPANISH PLAZA FOUNTAIN LOOKING TOWARDS THE CITY

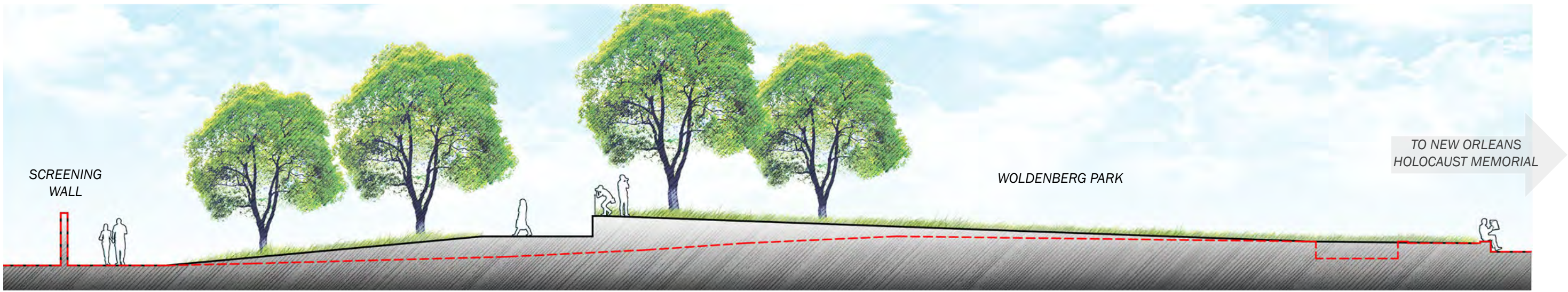


**B** SECTION-ELEVATION: SPANISH PLAZA FOUNTAIN LOOKING DOWNRIVER

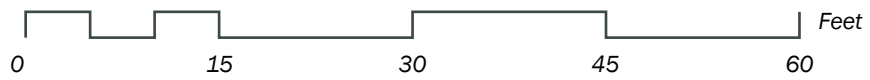


SECTION LOCATION KEY MAP

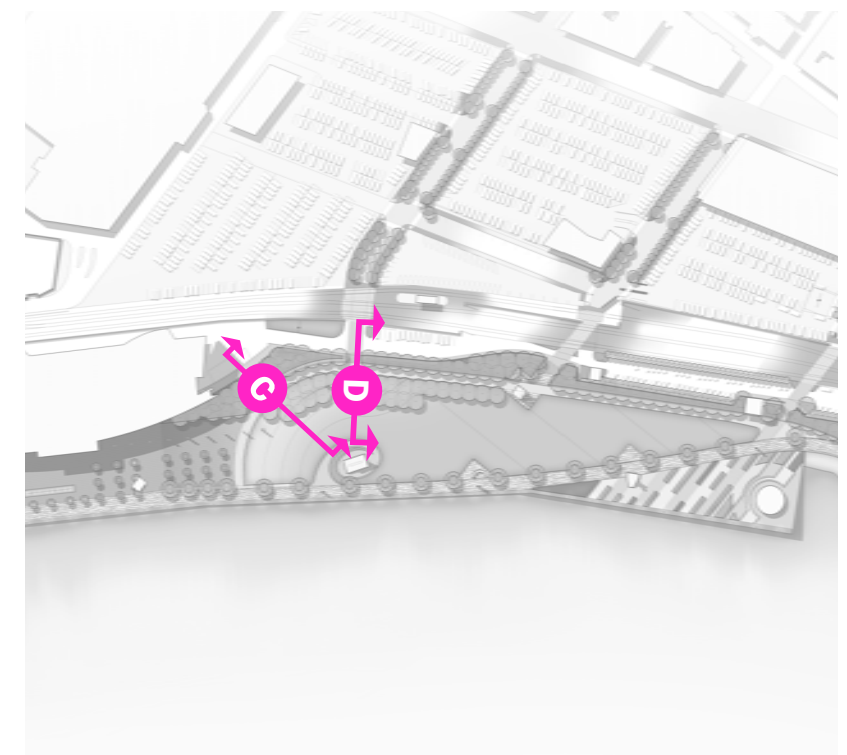
# NEW ORLEANS RIVERFRONT FINAL MASTER PLAN



**C** SECTION: EDGE OF WOLDENBERG PARK LOOKING DOWNRIVER

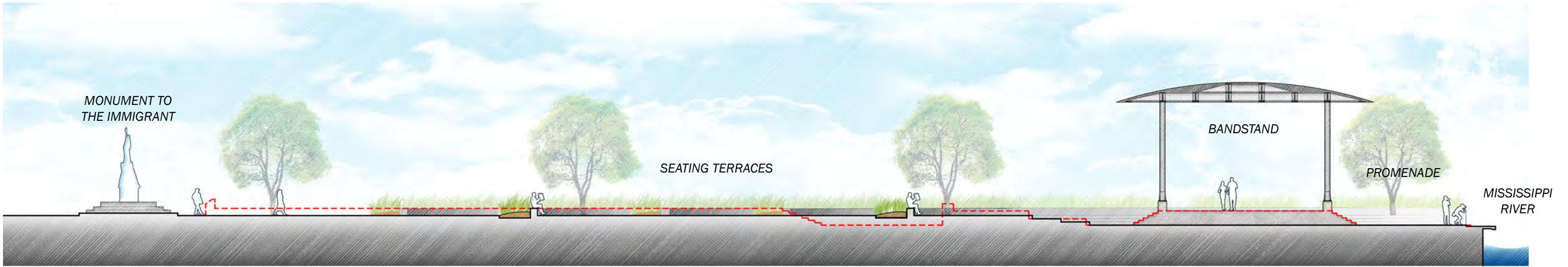


**D** SECTION-ELEVATION: WOLDENBERG PARK ACCESS POINT AT BIENVILLE STREET LOOKING DOWNRIVER

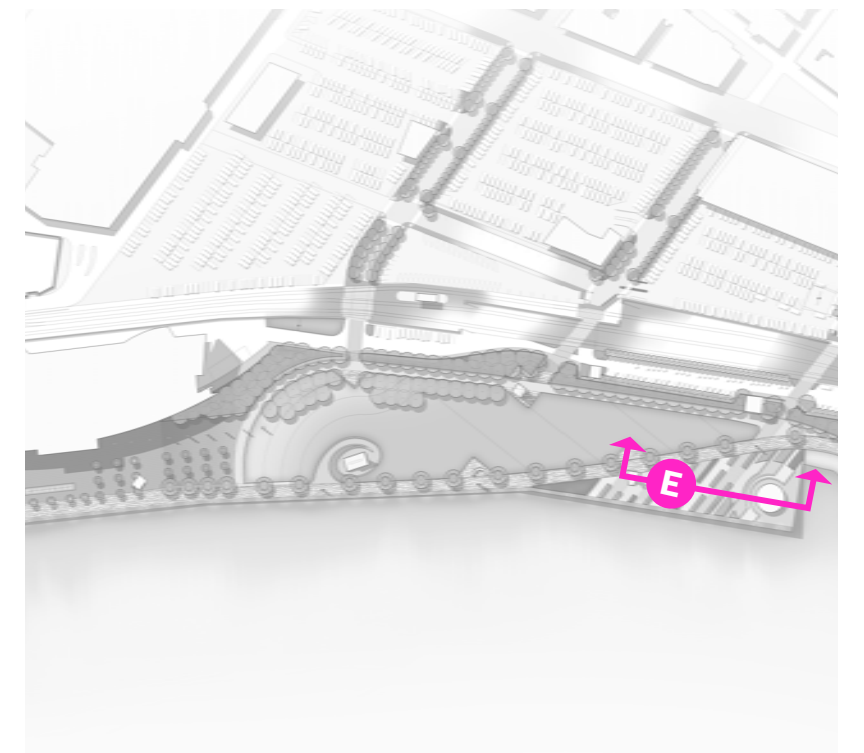
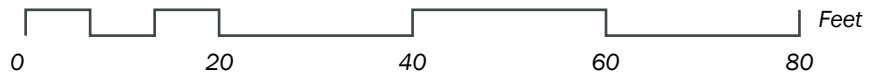


SECTION LOCATION KEY MAP

# NEW ORLEANS RIVERFRONT FINAL MASTER PLAN



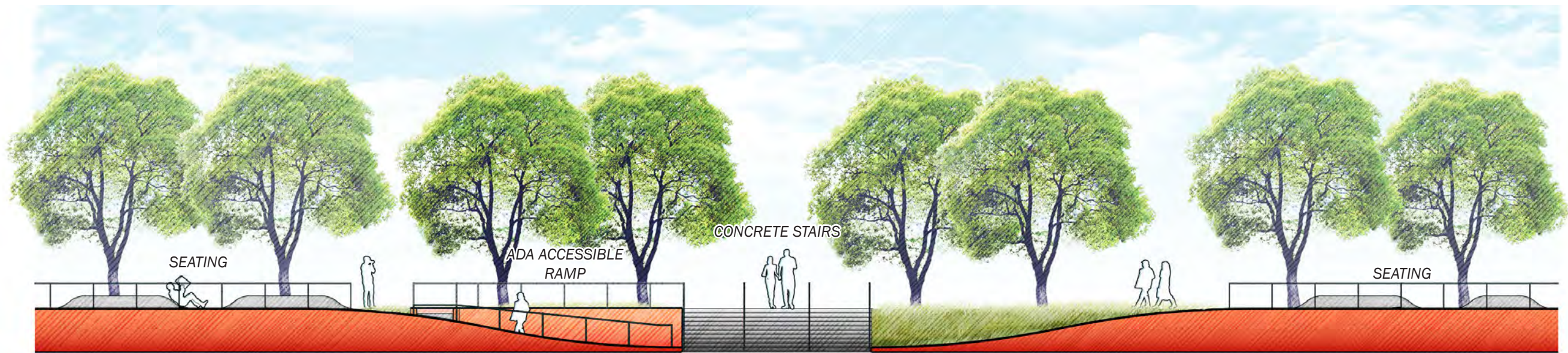
**E** SECTION-ELEVATION: WOLDENBERG PARK TERRACED SEATING AND BANDSTAND LOOKING TOWARDS THE CITY



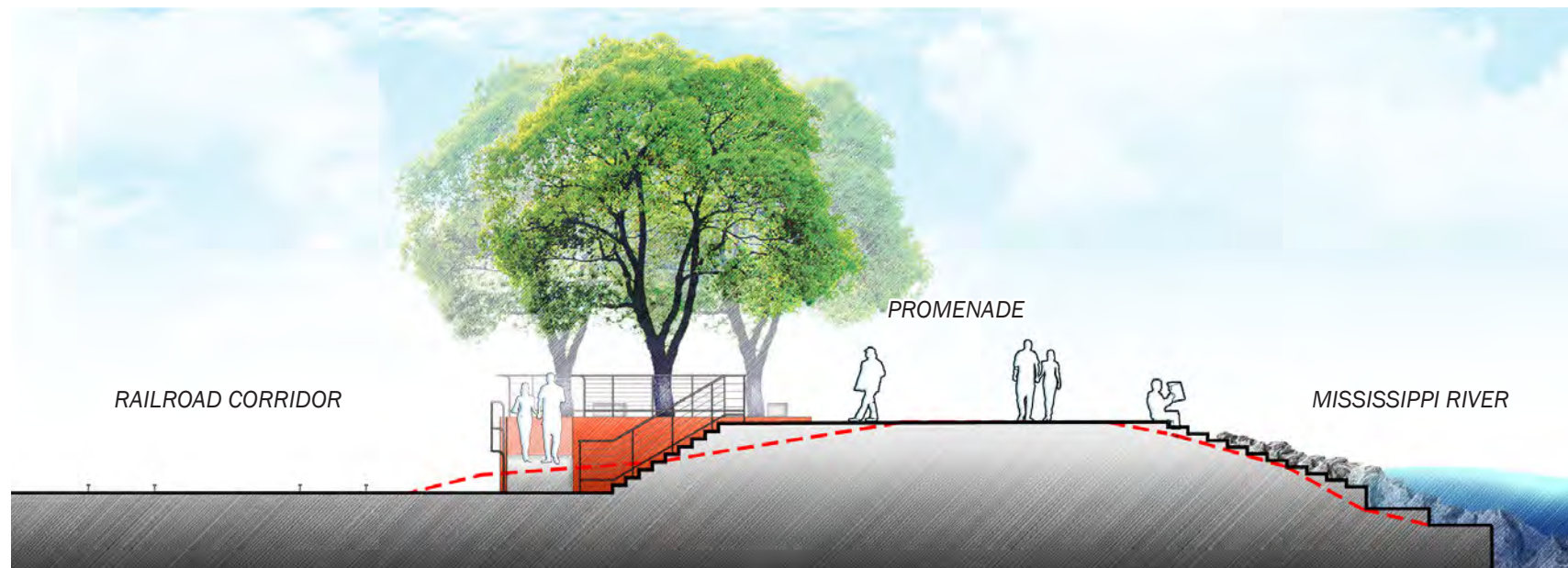
SECTION LOCATION KEY MAP

**NEW ORLEANS RIVERFRONT  
FINAL MASTER PLAN**

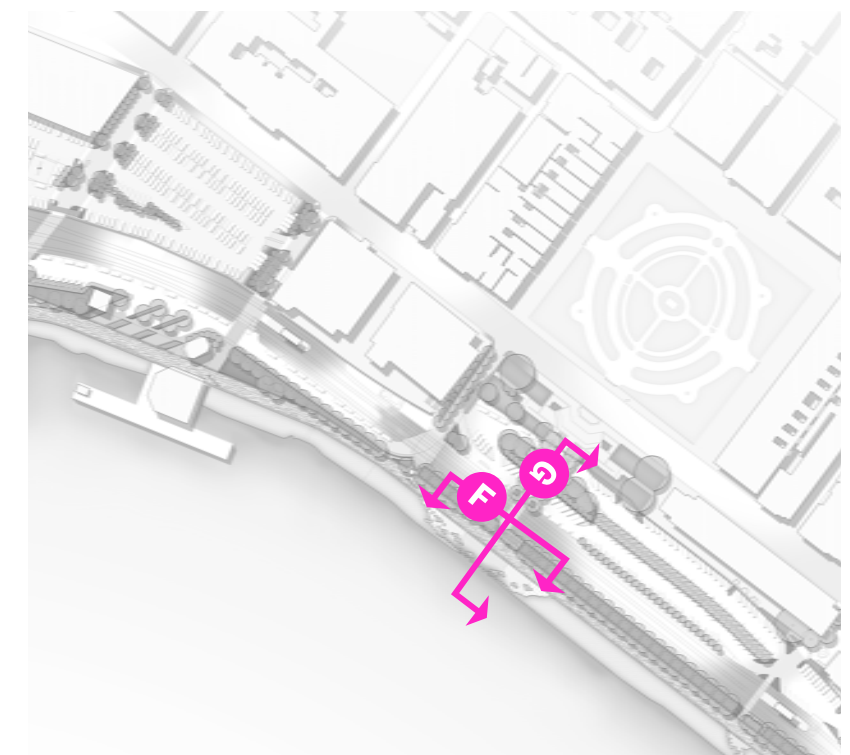
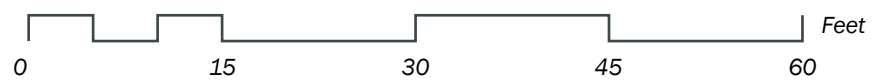




**F** ELEVATION: RIVERFRONT ACCESS POINT AT ARTILLERY PARK LOOKING TOWARDS THE MISSISSIPPI RIVER

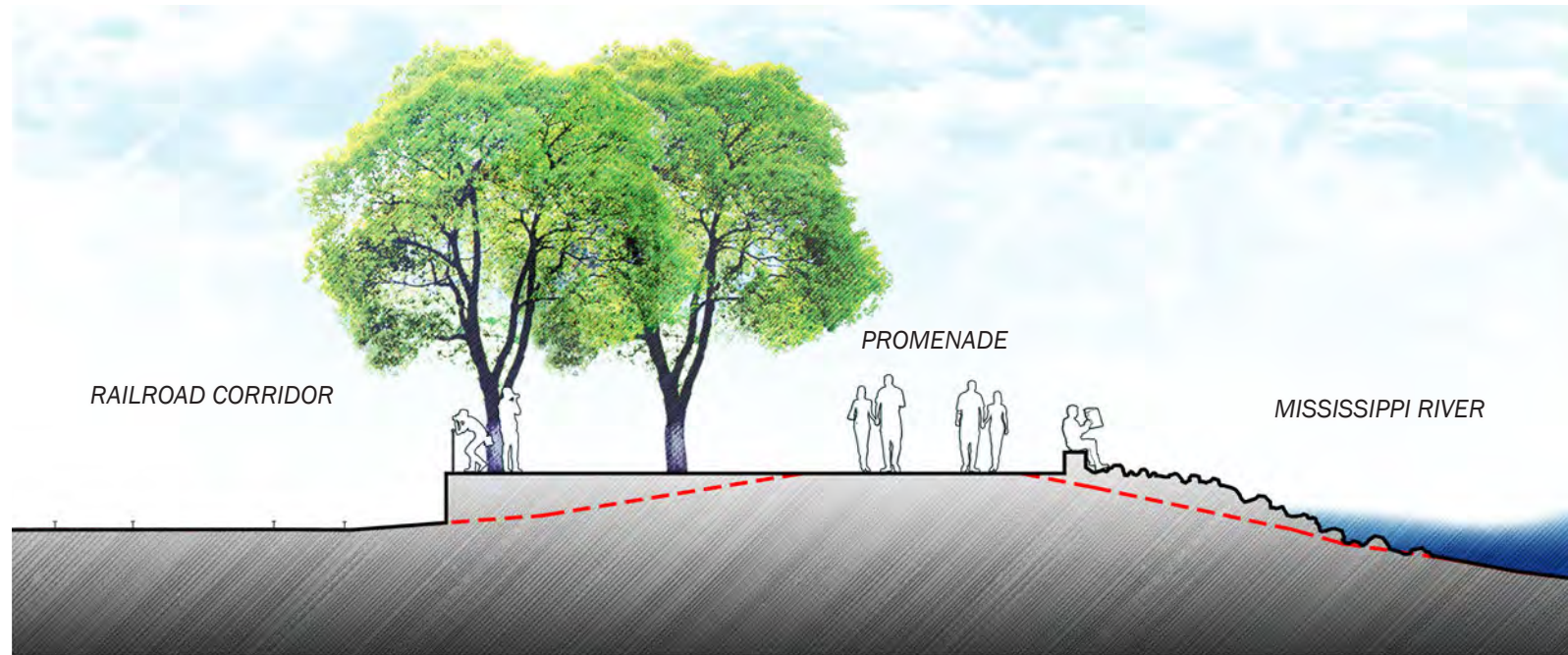


**G** SECTION-ELEVATION: RIVERFRONT ACCESS POINT AT ARTILLERY PARK LOOKING DOWNRIVER

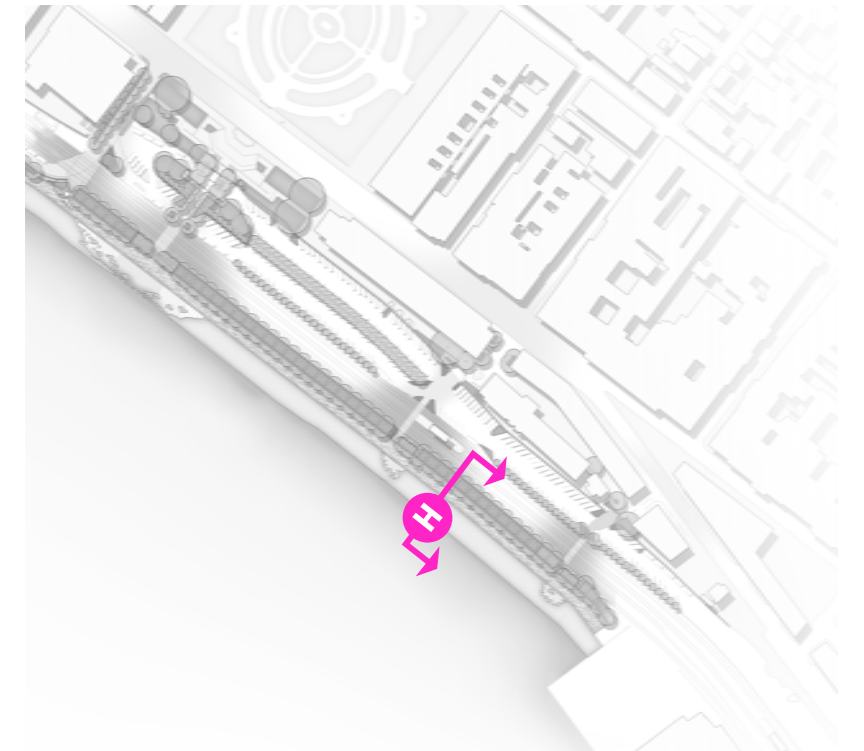
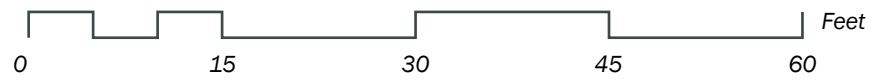


SECTION LOCATION KEY MAP

# NEW ORLEANS RIVERFRONT FINAL MASTER PLAN



**H** SECTION: MOONWALK NEAR DUMAINE STREET LOOKING DOWNRIVER



SECTION LOCATION KEY MAP

# NEW ORLEANS RIVERFRONT FINAL MASTER PLAN

## Gateways

Design consistency and wayfinding at gateways and within streets serving as access corridors to the riverfront are required to meet the project goals to *strengthen the physical connections between the riverfront and the city and increase the amount of usable space along the riverfront*. As a primary means for signaling their locations to visitors, gateways are transformed in the Riverfront Master Plan by increasing the amount of street trees and implementing new paving.

These gateways are located at multiple points along the site including, at the foot of Canal Street, at the foot of streets in the French Quarter, and where public rights-of-way engage the floodwall. Additionally, the floodwall will be painted terra cotta or another bright color that will be visible from the site's context and guide visitors into gateway streets. This added color will further establish the floodgates as riverfront entrance points.

The re-design of the streets and spaces leading to the gateways serves to *enhance the New Orleans riverfront as a destination*. The gateway at Canal Street, the most prominent access point, leads to numerous landmarks such as Canal Street Ferry Terminal, Spanish Plaza, and the Aquarium of the Americas. The space serves as a connection point between these various attractions, and is re-designed into a more functional public space as Canal Street Plaza.



Map of the Riverfront Master Plan's gateways



### Canal Street Plaza

Located at the foot of Canal Street and adjacent to its intersection with Convention Center Boulevard, a new public space will be created by the demolition and replacement of the existing ferry terminal complex. This includes both the terminal building itself, as well as the entrance plaza and access street. The new Canal Street Plaza will *strengthen the physical connections between the riverfront and the city* by functioning as an outdoor vestibule to the riverfront and its surrounding landmarks such as Spanish Plaza, the new Four Seasons Hotel and Residences, the new Canal Street Ferry Terminal, the Aquarium of the Americas, the Riverfront Streetcar Line, and the proposed new transit multi-modal terminal located at the adjacent intersection of Badine Street East and Canal Street.

### French Quarter Streets

The areas located adjacent to the site, but within the floodwall, at Bienville, Conti, St. Louis, Toulouse, and St. Peter streets between South Peters and Decatur streets and the railroad tracks, will be paved with granite pavers, a historic

construction material still found in streets across the city. This material's history as ballast in ships arriving in New Orleans makes it ideal for emphasizing the streets providing access to the riverfront. Furthermore, the sidewalks along these streets will be lined with street trees for shade and paved with terra cotta colored bricks or pavers, also common in New Orleans. These urban design elements will enhance wayfinding and provide a more comfortable walking experience between the French Quarter and riverfront. All locations along the site where pedestrian access crosses the railroad tracks are proposed as concrete stamped with a pattern to produce a boardwalk effect, which relates to wooden railroad ties and historic waterfront boardwalks, such as the Moonwalk. This serves as an additional wayfinding cue to pedestrians, consistently indicating the locations intended for crossing the tracks, often the final threshold before reaching the riverfront.

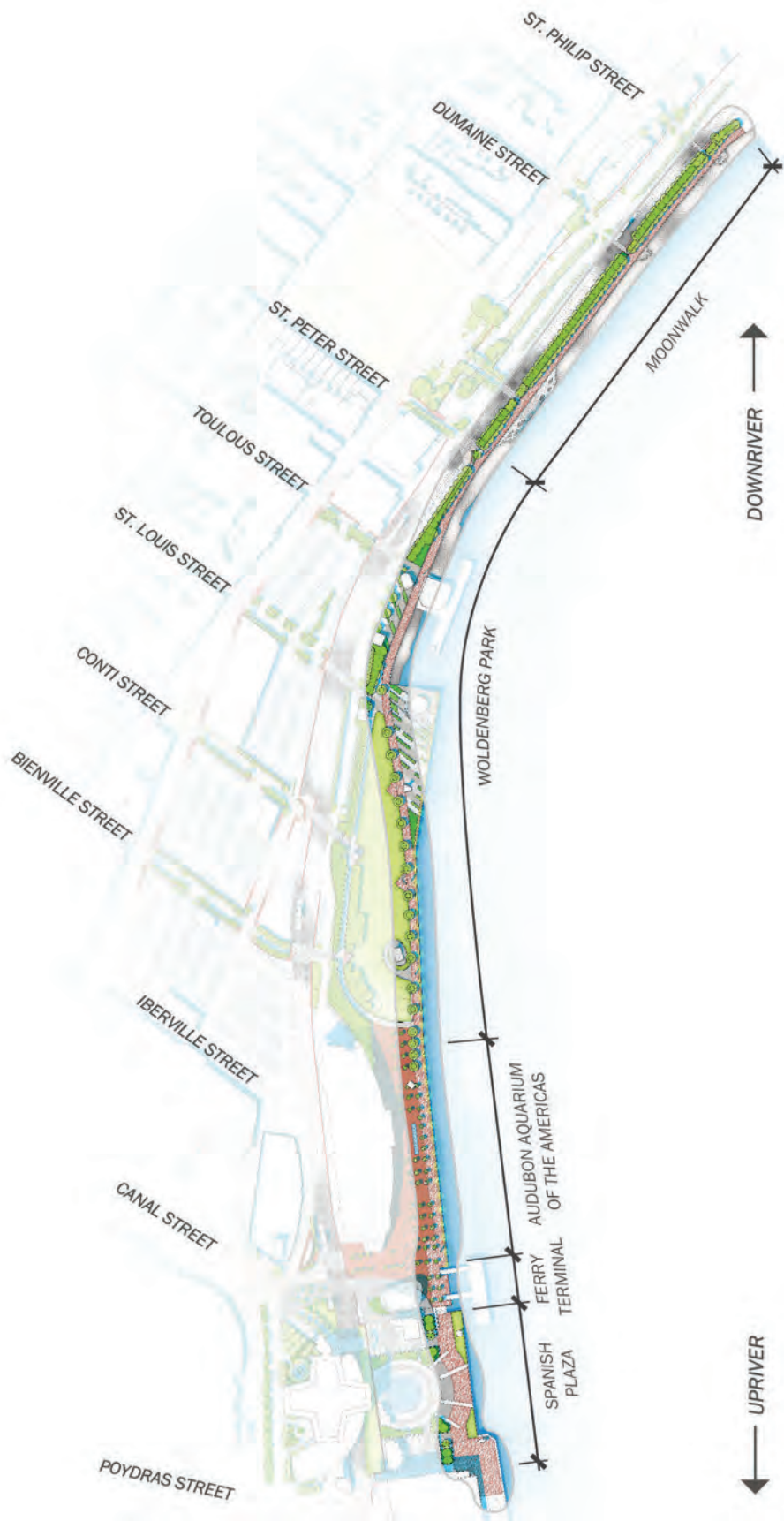
### French Market Floodgates

Floodgates are located at the foot of Bienville, Conti, St. Louis, Toulouse, St. Peter, Dumaine, and St. Philip streets. Beyond these floodgates, and across

railroad tracks, ramps and steps that lead pedestrians to the riverfront are re-designed to comply with ADA requirements. The street names are integrated into the design of the ramps and steps to clearly indicate the users' location in relation to the French Quarter. This could potentially be executed using characteristic blue and white Belgian tiles found in paving at intersections throughout the city. In the French Market, this effect is particularly important in guiding pedestrians to riverfront access points. Bike racks and at least one bike repair station would be located along the riverfront on the city side of the floodwall. At the narrow area of Woldenberg Park, where the steamboat landing is located, parking areas are reconfigured to accommodate tour bus parking and seating for waiting passengers, creating more clarity and definition of spaces. At Washington Artillery Park, the connection to the Moonwalk is signified as a prominent connection to the city by widening the path, installing new pavers, and framing the path with plantings and trees.

## Riverfront Promenade

The master plan is designed to *create a seamless experience along the riverfront* through unified urban design elements including paving, lighting, and trees. Along the river's edge, a continuous riverfront promenade from the Outlet Collection at Riverwalk to Governor Nicholls Street Wharf is created with distinctive paving, repetition of light poles, and trees visible up and down the river, thereby strengthening continuity and enticing visitors to walk along the entire promenade. The riverfront promenade's distinctive paving is a blend of white, grey, and terra cotta colored concrete pavers. This terra cotta color is found throughout the French Quarter and other parts of the city. The promenade will utilize vehicular rated concrete pavers laid in a running bond pattern with the stretchers running parallel with the river. The proposed riverfront light fixture standard is the sixteen-foot Ashbery pedestrian light pole and single luminaire manufactured by Landscape Forms. The fixture is contemporary in function and form while also reminiscent of historic gaslights. Trees are proposed to be two cultivars of elm, Creole Queen and Bosque, characterized by their vase shape that provides a wide canopy and creates ample shade. The trees would be limbed up above pedestrian height to allow for circulation and visibility underneath the limbs. Smaller elms, such as the Bosque Elm, would be utilized where planters with limited root space are required, such as on wharves. Larger Creole Queen American Elms would be planted where they can be in the ground, such as the back of Woldenberg and along the Moonwalk.



Map of the Riverfront Master Plan's promenade



*Proposed riverfront promenade paving*



*Proposed speciality paving*



*Terra cotta influence in the French Quarter*



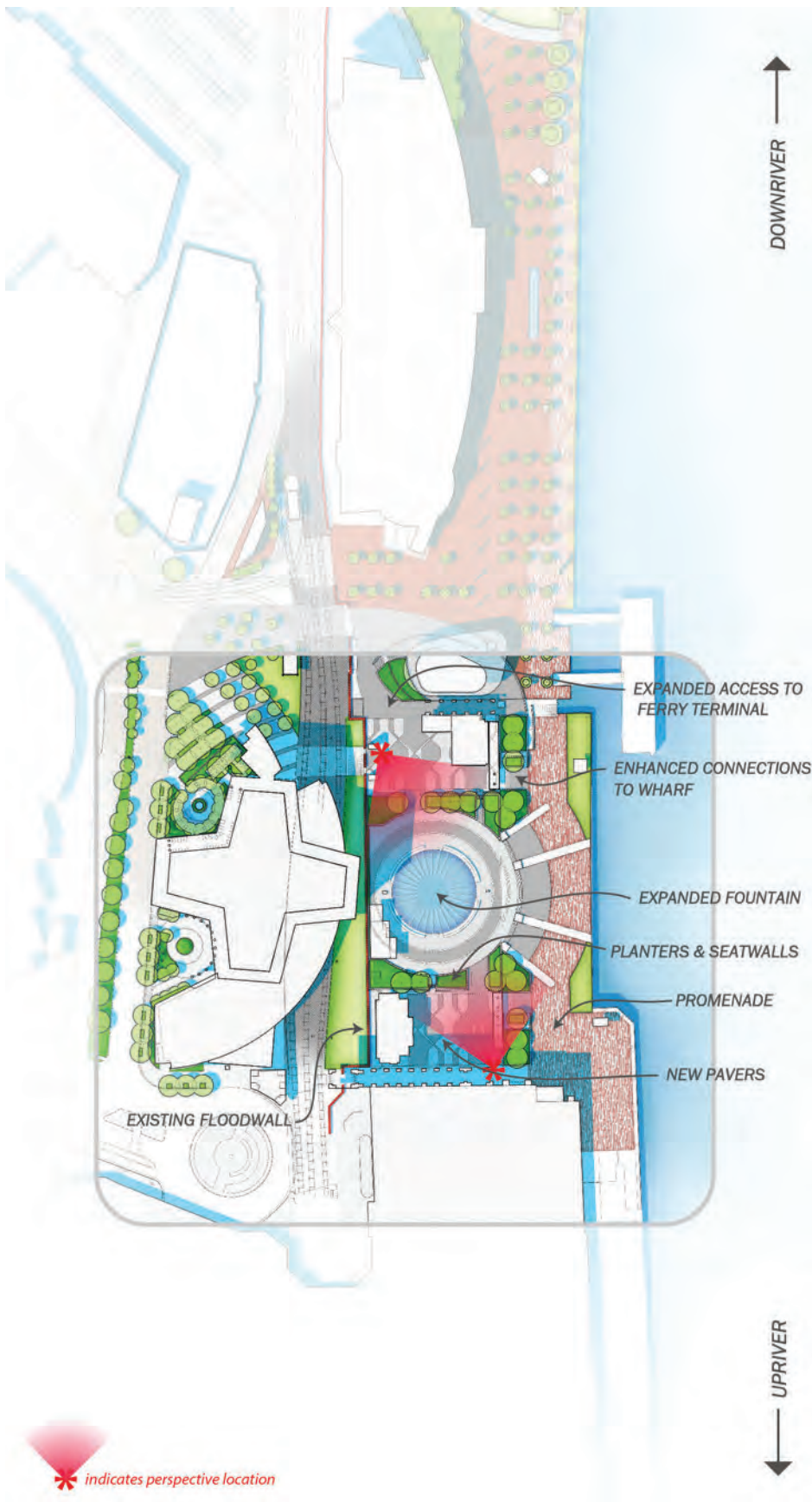
*Bosque Elms trimmed up allowing pedestrians to walk underneath in shade*



*Creole Queen American Elms*



*Ashbery light fixture*



## Spanish Plaza

The Spanish Plaza component of the master plan is under construction as of the time of this writing and will be completed by April 2018. Its re-design will strengthen Spanish Plaza as an attraction along the riverfront and will, thereby, *enhance the New Orleans riverfront as a destination*. In the design, the fountain feature and basin are enlarged to highlight and protect the existing Spanish tiles. Differing heights of water spray around the perimeter of the fountain will be generated by three arching spray rings. A nine-by-nine-foot grid of 15-foot high jets and lights will cover the space within the rings, with each row's height capable of being controlled separately. The result is a dynamic array of water and light patterns of a three-dimensional cube of water jets framing a water cannon that will propel water up to 60 feet in the air. Four platforms extend into the fountain area from the perimeter, allowing visitors to closely engage the fountain.

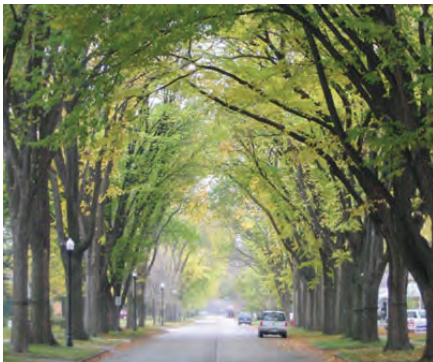
The circular paving pattern around the Spanish Plaza fountain is created by varied mixes of paver colors. Two paver color mixes, one lighter in value the other darker, alternate to create a contrasting pattern. Varying proportions of blue, white, grey, and charcoal color pavers formulate the two color mixes. The blue paver, present in equal proportion in both the lighter and darker mixes, will be unique to Spanish Plaza, highlighting and celebrating the plaza and the blue framed Spanish tiles. Existing narrow planter boxes along the floodwall will be repainted and planted with native grasses to establish a stronger backdrop for the plaza and fountain.



Spanish Plaza Close Up



Rendering of the improved Spanish Plaza exiting the Outlet Collection at Riverwalk looking downriver



Creole Queen Elms' vase shaped canopy



Barcelona chamfered grid pattern



White Muhly grass

Elevated planters of Bosque Elm Trees and native Muhly grasses flank the top of Spanish Plaza and transition to the lower plaza levels on each side, which will *increase the amount of usable space along the riverfront* by providing more seating and shade. The upper level and ramps between the upper and lower levels are also widened by reducing the size of planters as compared to existing conditions.

A geometric paving pattern derived

from overlaying the urban street pattern in historic cities of Spain is used for paving on the lower-levels of the plaza. In historic areas of Barcelona, buildings are built up to the street and chamfered at corners for visibility, creating a modified octagon shape.

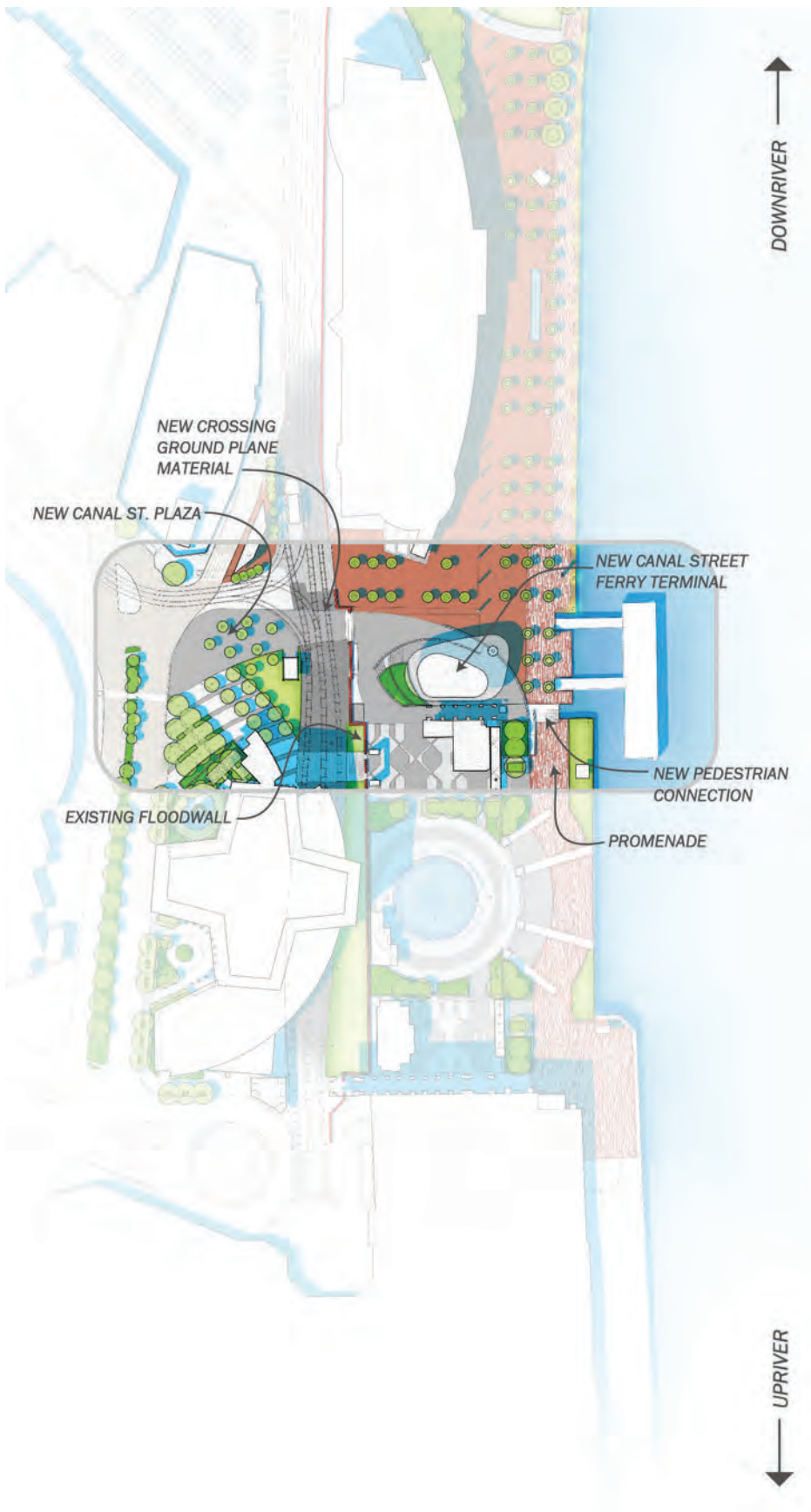
To further *increase the amount of usable space along the riverfront*, a future phase proposes the Spanish Plaza paving pattern design extending

onto Canal Street Wharf. This can be accomplished once the wharf is structurally repaired. This will improve circulation between the Outlet Collection at Riverwalk, Spanish Plaza, and the Creole Queen Steamboat landing. These improvement to the wharf will also allow for the space to host larger concerts and festivals.





*Rendering of the improved Spanish Plaza entering the arch from Canal Street looking upriver*



## Canal Street Ferry Terminal

Removal of the existing ferry terminal steps and walkway entrance will open up the area between Canal Street and the river *to strengthen the physical connections between the riverfront and the city and enhance the views between the riverfront and the city.* The new ferry terminal building has a smaller footprint, which allows for the creation of additional pedestrian areas and green spaces. Additionally, as part of the Canal Street Ferry Terminal project, the Bienville Street Wharf will be extended and connected to the Canal Street Wharf, allowing pedestrians access along the river's edge between Aquarium Plaza and Spanish Plaza. These improvements will also improve circulation between the Aquarium Plaza and Spanish Plaza and *increase the amount of usable space along the riverfront.* The pavement surrounding the terminal is coordinated with pavements of the riverfront promenade, Spanish Plaza, Canal Street Plaza, and Aquarium Plaza.

Canal Street Ferry Terminal Close Up

### Aquarium Plaza

The existing Aquarium Plaza required minimal enhancements to meet the goals of the Riverfront Master Plan. The existing donor bricks and terra cotta colored pavers within Aquarium Plaza, both of which are currently in good condition, are to remain. However, new paving along the river's edge to articulate the riverfront promenade will be a blend of white, greys, terra cotta colors. Installation of Ashbery lighting fixtures along the promenade will further *create a seamless experience along the riverfront*. The concrete planters containing palm trees will be modified to provide more efficient seating.

At the juncture of the Aquarium Plaza and Woldenberg Park, the pathway along the perimeter of the city side of the park curves back from the promenade creating a larger plaza space with a distinct edge that defines the boundary between plaza and the park. This re-design also expands the plaza to wrap around the aquarium building, which will *increase the amount of usable space along the riverfront* that can be used for events.



*indicates perspective location*  
Aquarium of the Americas Close Up



*Aquarium of the Americas Perspective looking downriver*

### Woldenberg Park

Woldenberg Park, built upon a wharf, is a large green space currently utilized as the host site for major events and by visitors on a daily basis. Yet, a substantial portion of the lawn area and the adjacent shaded green space currently faces away from the river. To re-orient this part of the park toward the river, retaining walls will be constructed adjacent to the parking lots on the city-side of the park, which will increase the elevation of the lawn in this area and allow it to be re-graded to slope down towards the river. The result reinforces the lawn as a riverfront amenity and *increases the amount of usable space along the riverfront*. Small arrival plazas are located at the top of ramps and steps that align with the terminus of each French Quarter street. These resting areas will be connected by a shaded walkway that runs parallel to the floodwall. Both the walkway and the arrival plazas will offer panoramic views of the river and the city, *strengthening the physical connections between the riverfront and the city, and increase the amount of usable space along the riverfront*.

Existing walkways winding through the park are removed and the walkway along the river's edge will be reconfigured into the larger riverfront promenade. The introduction of additional seating and shade along the promenade will provide comfortable resting areas for users. The bandstand area near the end of the wharf is re-designed to include seating located within linear planting areas to *enhance the view of the river*.



\* indicates perspective location

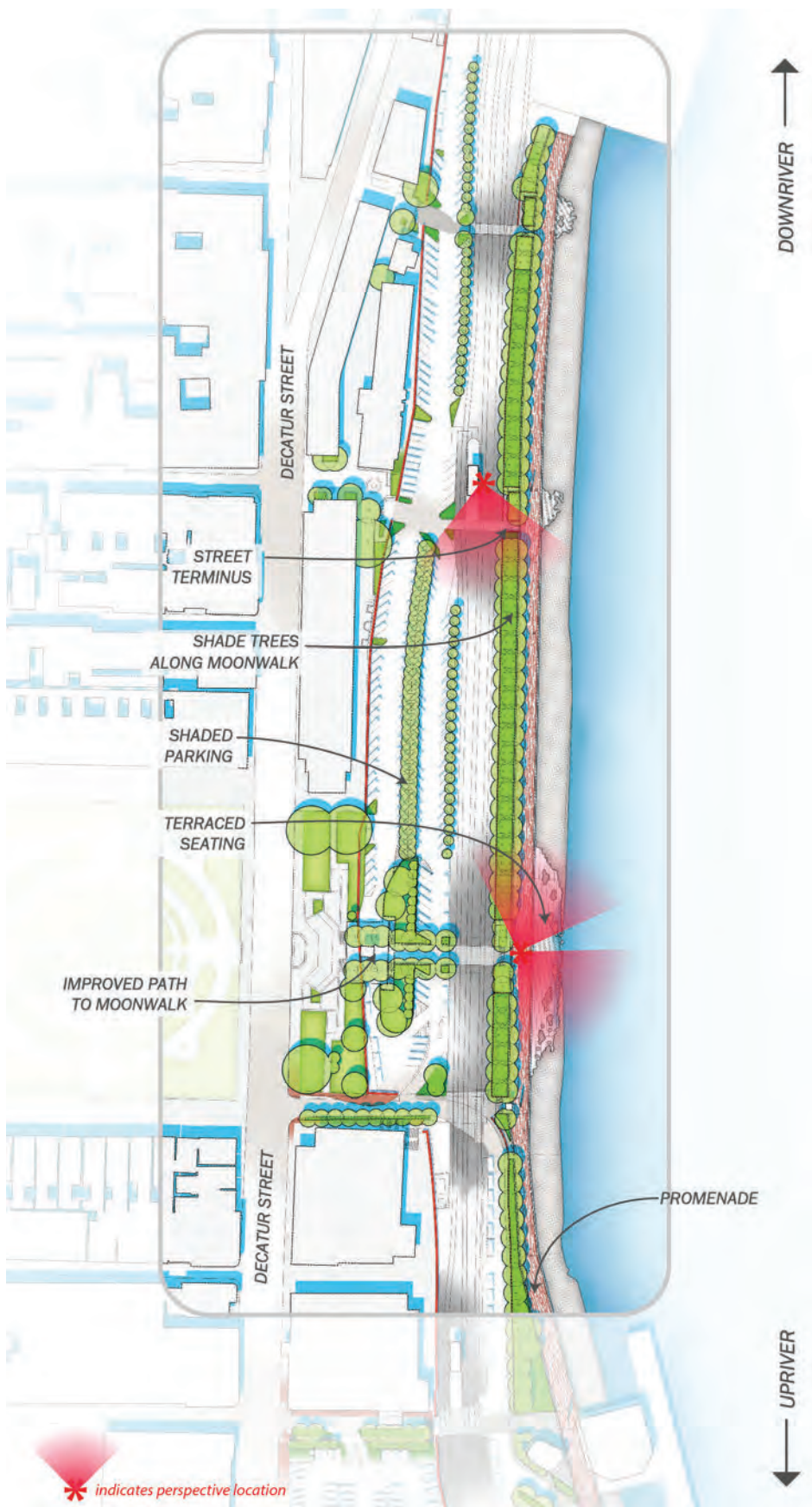
Woldenberg Park Close Up



Woldenberg Park perspective looking downriver



Perspective showing the Conti Street gateway into Woldenberg Park



## Moonwalk

The Moonwalk design establishes an urban destination where visitors can directly access to the river's edge. The Riverfront Master Plan incorporates seat walls and steps into the existing rip-rap banks of the river allowing the public to sit adjacent to the water, both *enhancing views of the river, and increasing the amount of usable space*. The narrow area of the Moonwalk is a constraint to implementing a wide riverfront promenade while maintaining seating areas. To address this issue, retaining walls constructed along the railroad side of the Moonwalk will increase its width, allowing for an additional row of trees, more seating, and a wider riverfront promenade. The widening of this linear space will *enhance the New Orleans riverfront as a destination, create a seamless experience along the riverfront, and increase the amount of usable space along the riverfront*.

Moonwalk Close Up



*Perspective of the riverfront promenade looking upriver*



*Perspective of the riverfront promenade looking downriver*





*Perspective of the Dumaine Street gateway into the Moonwalk*

## Summary

The Riverfront Master Plan will transform the New Orleans riverfront from its current state as a collection of disjointed spaces to a premiere and continuous waterfront destination composed of a mosaic of varied attractions and spaces seamlessly linked together along the edge of the Mississippi River. Clear and intuitive wayfinding features and universal access designed for people of all abilities will open the riverfront and its attractions to a wider user base. By enhancing transitions between spaces, increasing usable space, providing a comfortable environment, and strengthening connections between the city and the river, the riverfront will be a compelling place for residents and visitors to experience.

## Opinion of Probable Cost

The Opinion of Probable Cost prepared in July, 2017 represents the overall Riverfront Master Plan, projecting estimated cost of implementation and construction for each area of the plan. The Opinion of Probable Cost is organized by the five sections of the Riverfront, which include Spanish Plaza, the Canal Street Ferry Terminal, the Aquarium of the Americas, Woldenberg Park, and the Moonwalk, as well as the rights-of-way leading to the Riverfront from the French Quarter and Downtown. The Ferry Terminal cost includes construction of the plazas around the new terminal building, including a majority of the Canal Street Plaza, the remainder of which will be constructed under the Four Seasons project.

The specific cost of each project will be dependent on the final design of each area. Therefore, this Opinion of Probable Cost is intended to be used for budgetary purposes only, not as an estimate of construction costs for the specific improvements proposed. The Opinion of Probable Cost is comprised of:

- *Probable Construction Costs*
- *Survey Services*
- *10% Design Fee*
- *15% Contractor Fee*
- *30% Project Contingency*

The Riverfront Master Plan Opinion of Probable Cost is shown below.

Spanish Plaza <sup>3</sup>	\$ 7,571,000
Canal Street Ferry Terminal <sup>4</sup>	\$ 675,000
Aquarium of the Americas	\$ 3,131,000
Woldenberg Park	\$ 13,388,000
Moonwalk <sup>5</sup>	\$ 7,011,000
Public Rights-of-Way	\$ 7,614,000
<sup>1</sup> Rounded to the nearest \$1,000	
<sup>2</sup> Prepared July 2017	
<sup>3</sup> Costs include \$4.5M of construction that will be completed by April 2018. Remaining cost is for Canal Street Wharf and a higher contingency percentage built into the costs across all areas of the Riverfront Master Plan.	
<sup>4</sup> Costs include site construction being completed by the Regional Transit Authority in 2018. Does not include new terminal building.	
<sup>5</sup> Costs include \$3M of construction that will be completed by April 2018. Remaining cost is for retaining walls and widening of the Moonwalk and a higher contingency percentage built into the costs across all areas of the Riverfront Master Plan.	

# NEW ORLEANS RIVERFRONT

## OPINION OF PROBABLE COST

	UNIT COST	UNITS	SPANISH PLAZA		FERRY TERMINAL		AQUARIUM OF THE AMERICAS		WOLDENBERG PARK		MOONWALK		RIGHT-OF-WAYS		TOTAL (demo + haul) or (purchase + ship + install)
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
<b>Division 01 - General Requirements</b>															
DUMPSTER, CLEAN UP, STORAGE (MEP)	\$ 0.25	SF	122,100	30,525	20,796	5,199	110,000	27,500	260,000	65,000	260,000	65,000	129,378	32,345	\$ 225,569
CONSTRUCTION FENCE	\$ 12.00	SF	1,200	14,400	500	6,000	1,500	18,000	4,000	48,000	1,500	18,000	4,000	48,000	\$ 152,400
TRUCK MATS	\$ 800.00	SF	120	96,000		-		-		-		-		-	\$ 96,000
<b>Division 02 - Existing Conditions</b>															
DEMO (pavement)	\$ 4.50	SF	109,800	494,100	8,000	36,000	76,100	342,450	92,400	415,800	22,900	103,050	129,400	582,300	\$ 1,973,700
DEMO (planter walls)	\$ 6.00	LF	880	5,280		-	900	5,400	2,800	16,800		-		-	\$ 27,480
DEMO (stone walls)	\$ 23.00	LF		-		-		-		-	300	6,900		-	\$ 6,900
DEMO (stone stairs)	\$ 8.00	LF	740	5,920		-		-	6,000	48,000	700	5,600		-	\$ 59,520
DEMO (structural deck)	\$ 1.15	SF	9,000	10,350		-		-		-		-		-	\$ 10,350
DEMO (steel frame)	\$ 0.35	SF	9,000	3,150		-		-		-		-		-	\$ 3,150
DEMO (MEP)	\$ 1.00	SF	122,100	122,100		-		-		-		-		-	\$ 122,100
DEMO (fountain)	\$ 7.00	SF	4,500	31,500		-		-		-		-		-	\$ 31,500
DEMO (canopy)	\$ 4.00	LF	750	3,000		-		-		-		-		-	\$ 3,000
DEMO (light pole)	\$ 1,000.00	EA	20	20,000		-		-	18	18,000	30	30,000		-	\$ 68,000
DEMO (tree removal)	\$ 500.00	EA		-		-		-	100	50,000		-		-	\$ 50,000
TREE PROTECTION FENCE	\$ 18.00	LF		-		-	1,600	28,800	2,000	36,000		-		-	\$ 64,800
<b>Division 03 - Concrete</b>															
CONCRETE STRUCTURAL DECK	\$ 500.00	CY	170	85,000		-		-		-		-		-	\$ 85,000
CLADDED SEAT WALL	\$ 30.00	SF	2,890	86,700		-		-	3,500	105,000	6,800	204,000		-	\$ 395,700
CLADDED PLANTER WALL	\$ 30.00	SF	3,450	103,500		-		-		-	38,300	1,149,000		-	\$ 1,252,500
CLADDED STAIRS	\$ 30.00	SF	630	18,900		-		-	500	15,000		-		-	\$ 33,900
CONCRETE STAIRS	\$ 40.00	LF		-		-		-	1,500	60,000	7,600	304,000		-	\$ 364,000
<b>Division 04 - Masonry</b>															
CMU RETAINING WALL	\$ 100.00	LF		-		-		-	2,100	210,000		-		-	\$ 210,000
<b>Division 05 - Metals</b>															
STRUCTURAL FRAME	\$ 2.50	SF	9,000	22,500		-		-		-		-		-	\$ 22,500
HANDRAIL	\$ 50.00	LF	130	6,500		-		-	300	15,000	400	20,000		-	\$ 41,500
GUARDRAIL	\$ 75.00	LF	430	32,250		-		-	2,100	157,500	1,200	90,000		-	\$ 279,750
GLASS GUARDRAIL	\$ 150.00	LF	140	21,000		-		-		-		-		-	\$ 21,000
<b>Division 13 - Special Construction</b>															
FOUNTAIN BASIN	\$ 400,000.00	EA	1	400,000		-		-		-		-		-	\$ 400,000
<b>Division 22 - Plumbing</b>															
FOUNTAIN	\$ 1,000,000.00	EA	1	1,000,000		-		-		-		-		-	\$ 1,000,000
<b>Division 23 - Heating, Ventilating, and Air Conditioning (HVAC)</b>															
MECHANICAL	\$ 1.00	SF	122,100	122,100		-		-		-		-		-	\$ 122,100
<b>Division 26 - Electrical</b>															
ELECTRICAL	\$ 0.25	SF	122,100	30,525	20,796	5,199	110,000	27,500	260,000	65,000	260,000	65,000	129,378	32,345	\$ 225,569
<b>Division 31 - Earth Work</b>															
GRADING & SITE WORK	\$ 5.00	SF		-		-		-	102,000	510,000	27,300	136,500		-	\$ 646,500
<b>Division 32 - Exterior Improvements</b>															
CURBS	\$ 35.00	LF		-		-		-		-	300	10,500	3,100	108,500	\$ 119,000
STAMPED CONCRETE	\$ 20.00	SF		-		-		-		-	3,900	78,000	20,100	402,000	\$ 480,000
CONCRETE PAVERS	\$ 11.50	SF	65,420	752,330	19,500	224,250	61,100	702,650	51,900	596,850	24,200	278,300	37,400	430,100	\$ 2,984,480
CONCRETE PAVERS (PROMENADE)	\$ 11.50	SF	34,500	396,750		-	18,600	213,900	39,100	449,650		-		-	\$ 1,060,300
GRANITE PAVERS	\$ 25.00	SF		-		-		-		-		-	58,600	1,465,000	\$ 1,465,000
LIGHT WEIGHT SOIL	\$ 150.00	CY	620	93,000		-		-		-		-		-	\$ 93,000
SOIL (BACKFILL)	\$ 55.00	CY		-		-		-	15,600	858,000	2,000	110,000	300	16,500	\$ 984,500
DECIDUOUS TREE	\$ 1,200.00	EA	8	9,600		-	4	4,800	133	159,600	155	186,000	90	108,000	\$ 468,000
EVERGREEN TREE	\$ 600.00	EA		-		-		-	70	42,000	70	42,000	140	84,000	\$ 168,000
PALMS	\$ 7,000.00	EA		-		-	20	140,000		-		-		-	\$ 140,000
PLANTS	\$ 22.00	SF	6,150	135,300	2,000	44,000		-	30,800	677,600	27,000	594,000	15,500	341,000	\$ 1,791,900
TURF	\$ 25.00	SF		-		-		-	102,000	2,550,000		-		-	\$ 2,550,000
MULCH	\$ 0.35	SF	6,150	2,153		-		-	30,800	10,780	27,000	9,450	15,500	5,425	\$ 27,808
IRRIGATION	\$ 1.50	SF	6,150	9,225	2,000	3,000		-	30,800	46,200	27,000	40,500	15,500	23,250	\$ 122,175
PEDESTRIAN LIGHTING FIXTURE	\$ 3,300.00	EA	28	92,400	12	39,600	20	66,000	45	148,500	40	132,000	200	660,000	\$ 1,138,500
PEDESTRIAN LIGHTING FIXTURE (PROMENADE)	\$ 3,300.00	EA	22	72,600		-	24	79,200	55	181,500		-		-	\$ 333,300
SITE/LANDSCAPE LIGHTING FIXTURE	\$ 0.50	SF	122,100	61,050	20,796	10,398	110,000	55,000	260,000	130,000	260,000	130,000	129,378	64,689	\$ 451,137
SITE FURNITURE	\$ 0.75	SF	122,100	91,575	20,796	15,597	110,000	82,500	260,000	195,000	260,000	195,000	129,378	97,034	\$ 676,706
<b>Division 33 - Utilities</b>															
DRAINAGE	\$ 1.00	SF	122,100	122,100	20,796	20,796	110,000	110,000	260,000	260,000	260,000	260,000	129,378	129,378	\$ 902,274
<b>Totals</b>															
SUM				\$ 4,603,383		\$ 410,040		\$ 1,903,700		\$ 8,140,780		\$ 4,262,800		\$ 4,629,865	\$ 23,951,000
CONTINGENCY	30%			\$ 1,381,015		\$ 123,012		\$ 571,110		\$ 2,442,234		\$ 1,278,840		\$ 1,388,959	\$ 7,185,300
CONTRACTOR FEE	15%			\$ 897,660		\$ 79,958		\$ 371,222		\$ 1,587,452		\$ 831,246		\$ 902,824	\$ 4,670,445
DESIGNER & SURVEYOR FEES	10%			\$ 688,206		\$ 61,301		\$ 284,603		\$ 1,217,047		\$ 637,289		\$ 692,165	\$ 3,580,675
TOTALS				\$ 7,570,263		\$ 613,010		\$ 2,846,032		\$ 12,170,466		\$ 6,372,886		\$ 6,921,647	\$ 39,387,420
<b>*TOTALS</b>				<b>\$ 7,571,000</b>		<b>\$ 675,000</b>		<b>\$ 3,131,000</b>		<b>\$ 13,388,000</b>		<b>\$ 7,011,000</b>		<b>\$ 7,614,000</b>	<b>\$ 39,390,000</b>

\*Rounded to the nearest \$1,000

# 6

## PHASING



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## PHASING

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As of late 2017, several projects included in the Riverfront Master Plan are already underway and have estimated completion dates in 2018, while others are in the planning stages and will be completed within the next two to five years. Additionally, there are a number of major projects located just beyond the extents of the riverfront site that are planned for completion within the next two to ten years. If implemented, the projects associated with this master plan may have a profound impact on the usage and connectivity between the riverfront and its context.

Projects to be completed by April 2018:

- *Spanish Plaza renovations*
- *Moonwalk revitalization*

Projects to be completed within the next two to five years:

- *Canal Street Ferry Terminal*
- *Canal Street Plaza*

Projects within immediate proximity of the riverfront to be completed within the next two to ten years:

- *Four Seasons Hotel and Residences*
- *Governor Nicholls Street Wharf redevelopment*

The remaining components of the Riverfront Master Plan can be

implemented over time as funding opportunities arise. While some of the following components correspond to the projects discussed above, many of these are not tied to a specific development effort and involve overall improvements to the riverfront:

- *Improvements to riverfront arrival streets*
- *Continuous new paving and lighting on the riverfront promenade*
- *Improvements to Woldenberg Park*
- *Improvements to Aquarium Plaza*
- *Strengthening riverfront access points*
- *Additional improvements to the Moonwalk*
- *Improvements to the Canal Street Wharf*

Due to the fact that the Riverfront Master Plan cannot be implemented as one project, the project team recommends a tiered priority ranking. Priority One, for example, focuses on and identifies the most crucial improvements for a successful, incremental transformation of the riverfront. Priority Two – Seven represent items with descending levels of pertinence to the core functionality of the final master plan.

### *Priority One*

The first priority includes the introduction of improvements

to public rights-of-way that run perpendicular to, and terminate at the floodwall. These streets and sidewalks are repaved with colored concrete pavers. Also, street trees are provided along both sides of the street and wayfinding elements are introduced. This establishes clear access to the riverfront from the city and exhibits a special vocabulary of materials and colors that cue visitors and locals to the riverfront experience that is beyond. This would result in strengthened physical connections between the riverfront and the city.

### *Priority Two*

The second priority for phased implementation is to establish the riverfront promenade from the Canal Street Ferry Terminal to Governor Nicholls Street Wharf with distinctive paving and new light fixtures. While portions of the promenade will be implemented in the ferry terminal and Moonwalk projects, the promenade will not be complete until the Canal Street Wharf is repaired and repaved. Installing the specified light fixture and paver color mixes as a standard for the promenade will help to meet the Riverfront Master Plan goal of creating a seamless experience.

### *Priority Three*

The third priority is to make substantial improvements to Woldenberg Park, which would help to fulfill the goals to increase the amount of usable space and

enhance views along the riverfront. Constructing retaining walls along the edge of the site and re-grading the terrain from this edge to the promenade along the river to create a larger sloped lawn facing the river results in a magnificent urban green space with dynamic views of the park, river, and city. Other improvements that will transform the park described in greater detail herein, include reconfiguration of pathways and planting trees along the promenade and around the seating areas. Additionally, the lawn should be comprised of hardy, drought-tolerant grass species and feature a high-performance grass system with subsurface drainage in order to improve the turf's vitality and resilience to every day and special event use in the form of large, frequent crowds as well as heavy rainfall.

#### *Priority Four*

The fourth priority is repaving the Aquarium Plaza, while leaving the donor bricks intact, and refurbishing the round concrete planters allowing the area to meet the goals of a seamless experience and enhance the New Orleans riverfront as a destination. Improved plaza seating around the existing palm trees would also be implemented within the third priority phase.

Upon the completion of the projects currently underway and those listed as priorities one, two, three, and four, the riverfront will be greatly transformed, substantially meeting the goals to enhance the riverfront as a destination, create a seamless experience, and increase the amount of usable space.

#### *Priority Five*

The fifth priority for phasing, improving access points to and from the riverfront, is critical to increasing use of the riverfront and meeting two project goals: enhance physical connections between the riverfront and the city and enhance views between the riverfront and the city. This phasing element serves as a compliment to the first priority by introducing improvements to riverfront's numerous access points. These include re-designing the paths and gateways that lead into the riverfront so that they incorporate new ramps, steps, and retaining walls. Colorful walls visible from a block away in the French Quarter, specialty paving over the railroad tracks, and wayfinding signage will further enhance physical connections.

#### *Priority Six*

The Moonwalk improvements will refurbish this pedestrian corridor in time for the city's Tri-centennial festivities. However, the master plan proposes additional improvements that can be implemented at a later time to further strengthen the identity of the Moonwalk and enhance the riverfront as a destination without discarding any of the current renovation work. The future improvements to the Moonwalk include expanding the Moonwalk's pedestrian area by introducing retaining walls along the railroad corridor to form a wider elevated area, providing space for a double row of large trees and additional seating on the city side of the promenade. These improvements contribute to addressing the goals to increase the amount of usable space and enhance the riverfront as a destination.

#### *Priority Seven*

In its current state, the Canal Street Wharf is structurally limited and cannot be heavily used by the public for large events. Priority seven proposes first to strengthen and stabilize the wharf structure. This would allow for the extension of Spanish Plaza's paving design onto the wharf and implementation of the riverfront promenade in that area, meeting the goal to increase the amount of usable space.



# NEW ORLEANS RIVERFRONT PHASING

- PRIORITY ONE
- PRIORITY TWO
- PRIORITY THREE
- PRIORITY FOUR
- PRIORITY FIVE
- PRIORITY SIX
- PRIORITY SEVEN





# 7

## SUMMARY RECOMMENDATIONS



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## SUMMARY RECOMMENDATIONS

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The Riverfront Master Plan is a vision for the New Orleans Riverfront. The plan is intended to be a guide to fully realize the riverfront as a world-class public waterfront space. It is a guide for creating a more continuous and compelling experience along the riverfront for residents and visitors to enjoy.

To ensure this plan is followed, the creation of a riverfront steering committee (or similar entity) within the city is proposed to serve as the steward of the plan and advocate for its goals. A member of the committee would represent the plan and its intent for the required Design Advisory Committee meetings (hosted by the City Planning Commission) when riverfront projects (or riverfront adjacent projects) are under consideration. The steering committee would be consulted to review both public and private development proposals and advise the City of New Orleans on compliance with the Riverfront Master Plan. All nearby development should complement and support the Riverfront Master Plan physically and programmatically. When comprehensive land use planning or zoning changes are proposed, the committee would serve as the resource for advising whether changes compromise the plan. Such a committee would be established and vested with authority, whether determinant or advisory, by the City Council.

The Seattle Waterfront Steering Committee, promulgated by City Council Resolution 31543 in 2014, is a good model to reference when establishing the New Orleans Riverfront Steering Committee. Also, the Waterfront Commission of the City of Alexandria, Virginia is a 21-member group that has advisory authority over developments along parts of the Potomac River. The commission receives regular staff reports on the Potomac waterfront from city departments, including Parks and Recreation, Project Implementation, Planning and Zoning, Transportation, Environmental, and Police. The inter-departmental collaboration in Alexandria also serves as a good precedent.

Currently, uses along the New Orleans riverfront adjacent to the French Quarter are defined by the Vieux Carre Park District (VCP) as set forth in Article 10 of the New Orleans Comprehensive Zoning Ordinance:

A. All land and water areas shall be maintained as open space in the area of the VCP District bounded by the floodwall, the Mississippi River, St. Peter Street (extended), and Ursulines Street (extended). Enclosed structures, with the exception of accessory buildings, and off-street parking areas are prohibited.

B. Seventy-five percent (75%) of the land area shall be maintained as open space in the area of the VCP

Park District bounded by the floodwall, Esplanade Avenue (extended), the Mississippi River, and Ursulines Street (extended). The open space area may not be encumbered by enclosed structures or off-street parking areas, except for building service areas, including loading docks and staging areas, etc. Street rights-of-way are not calculated in the open space requirement.

C. Seventy-five percent (75%) of the land area shall be maintained as open space in the area of the VCP District bounded by the floodwall, Canal Street, the Mississippi River, and St. Peter Street (extended). The open space area may not be encumbered by enclosed structures or off-street parking areas, except building service areas, including loading docks and staging areas, etc.

To ensure the Riverfront Master Plan is adhered to, the VCP should be amended to include the following design controls as described and illustrated in the plan:

- *A continuous promenade, at least 15 feet wide, maintained along the river's edge and paved with a singular, distinctive paving pattern, such as 4" x 8" concrete pavers in a mix of white, grey, charcoal, and terra cotta colors;*
- *Ashbery series single luminaire pedestrian pole lighting fixtures, 16-foot tall, manufactured by Landscape Forms, line the promenade*

*and are used throughout the riverfront for area lighting;*

- *Creole Queen American Elms and Bosque Elms are the riverfront standard trees;*
- *Litter receptacles are the Poe series manufactured by Landscape Forms; and*
- *Crossings at railroad lines are uniform with a distinctive stamped concrete pattern that mimics a boardwalk.*

When implemented in full over the next five to ten years, the riverfront will become a global destination for decades to come, connecting people to the river, linking unique attractions, and providing a distinctive linear walking experience along the Mississippi River.

END OF RIVERFRONT MASTER PLAN FINAL REPORT