

**JEFFERSON PARISH DRAINAGE CANAL DESIGN COMPETITION
CONCEPT STATEMENT**

TEAM B

CONCEPT: TRANSFORMATION

Our concept interprets the transformation that took place over the last 200 years between Lake Avenue and Causeway Boulevard. The design is divided into five districts representing changes that occurred, starting with a fishing village on the East and a commercial hub and bridge on the West. Plantings and sculptural elements are grand gestures and repeated geometries that will be enjoyed by those driving, walking, or biking.

The Sustaining District celebrates early use of the land and lakefront in Metairie, one that has repeatedly recovered from storms and remains today. The piers and pilings of some of the fishing camps and restaurants left after storms, are represented by the Sculptural Piers organized on a grid through the Sustaining District. Swaths of native and naturalized plants flow through the area along the canal, reflecting tides, while movement of Muhly Grass, Rosemary, and Dianella recall the white caps created by winds.

In the Adapting District, sculptures, called Casting Arches, reflect the form of fishing poles repeated in a line along the lakeshore. Wetland thriving plants, including Cypress and Red Swamp Maple trees, are planted along the canal, recalling the swamp ecosystem that once existed here.

The Dwelling District reflects the development of land through Gabion Structures. The cages recall crab traps and the recycled concrete filling represents development. Gabions are placed in relation to the streets that meet West Esplanade Avenue. A pedestrian and bicycle trail through brings people closer to the canal and links with the informal bike path along Bonnabel Boulevard to the Lake Pontchartrain levee path. Swaths of native and naturalized plantings flow through the area, reflecting the continued influence of water on the area. Sculptural piers continue through this district, unifying the districts.

The Growing District represents the shockwave of growth that expanded westward following construction of lakefront levees. Atop the covered intersection of the Bonnabel Canal and Canal No. 2, our design reflects this in a large gathering space that exhibits a sculpture with concentric rings of plantings. A sporadic, gridded pattern of trees represents the developments, highlighting their rapid growth with clusters along the canal. The pedestrian and bike trail continues through the space. Bands of lower plantings organically weave in and out as natural systems were secondary in this time of expansion.

Within the median in the Connecting District, commercial businesses and paving signify the thriving Central Business District of Metairie. The impervious surfaces create stormwater runoff and pollutants that flow directly into the canal. To mitigate water quality, interstitial spaces are designed to capture and filter the runoff through vegetation before entering the canal. A Sculptural Transit Shelter is designed as an icon and demarcates the beginning of the Concept: Transformation. Metal panels describing the history of the area are designed along the curve of the median by the Sculptural Transit

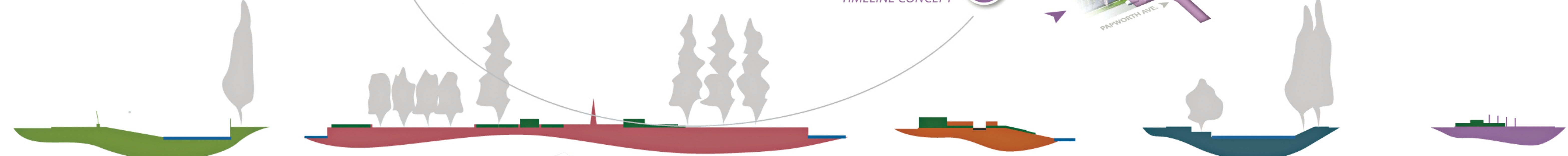
Shelter. In our design, Sculptural Piping weaves vertically through the Connecting District, reflecting the undulating roadbed and bascule of the bridge, which is so vital to connecting the area.

JEFFERSON PARISH DRAINAGE CANAL DESIGN COMPETITION

CONCEPT: TRANSFORMATION



- | | | | |
|--------------------|---------------|-----------------|----------------|
| PURPLE MUHLY GRASS | SOFT RUSH | GIANT LIRIOPE | SABAL PALMETTO |
| TRAILING ROSEMARY | HAMLLEN GRASS | CARDINAL FLOWER | FETTERBUSH |
| DIANELLA | DWARF NANDINA | VIBURNUM | IRIS |
| | | RUDBECKIA | SPIDER LILY |
-
- | | | |
|--------------|--------------|------------------------|
| BLACK LOCUST | POND CYPRESS | SEE BOOKLET FOR DETAIL |
| RED MAPLE | IRONWOOD | SCULPTURAL PIERS |
| REDBUD | SILVER MAPLE | GABION STRUCTURES |
| | FRINGE TREE | CASTING ARCHES |



Concept: Transformation

The northern part of Metairie was originally marsh and swampland influenced by the brackish estuary that is Lake Pontchartrain. Nevertheless, it has been inhabited for hundreds of years, initially by Native American Indians. French settlers lived off of the land by fishing, crabbing, trapping, and hunting, much like the Native Americans. Use of the area continued to transform when small leased farms were developed, followed by draining and subdividing the land between the Mississippi River and Lake Pontchartrain. Many of the streets north of West Esplanade Avenue are named after Native American Indian tribes, as part of the Indian Ocean subdivision. Construction of lakefront levees in the late 1940s and early 1950s signaled the start of the phenomenal rate of development of Metairie. Bonnabel Place and Homestead subdivisions were developed on the south side of West Esplanade Avenue. The second major project to greatly transform the area was the construction of the Causeway Bridge, linking the Northshore and Southshore of Lake Pontchartrain. This catalyzed commercial development at what has become a major commercial hub in not only Jefferson Parish, but the larger region.

JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION



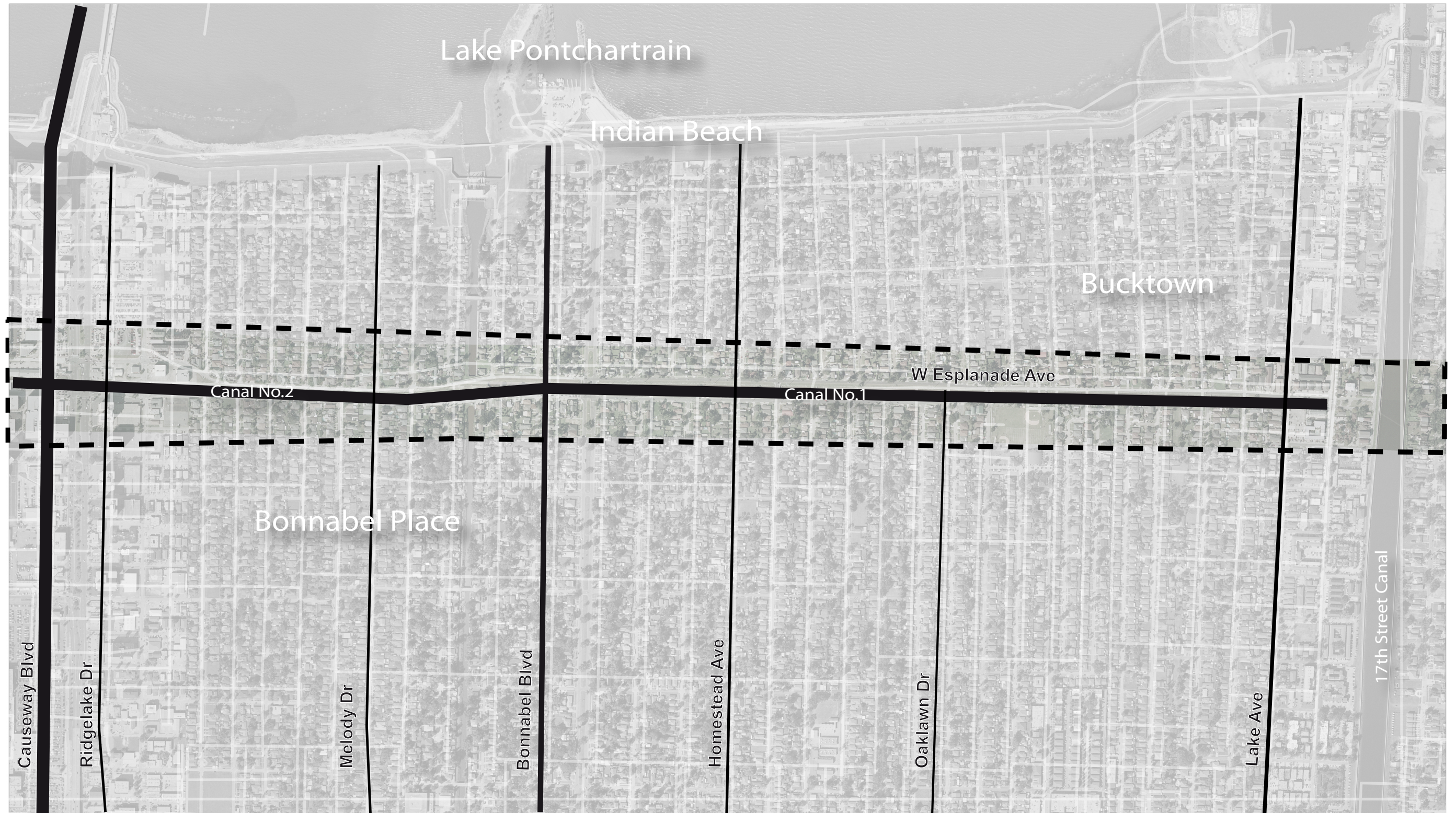
BUCKTOWN
SCULPTURE

HISTORIC PHOTOS USED FOR CONCEPT INSPIRATION

Image of ONE HOUSE IN WATER, B&W — Metairie, Images of America, Catherine Campanella, Arcadia Publishing, 2008
PICTURE of COASTAL FISHING CAMPS along LAKE — Historic Jefferson Parish, Betsy Swanson, Pelican Publishing Company, Gretna 1975
PIC OF CSWAY BRIDGE — <http://www.bridgemeister.com/pic.php?pid=1415>
AERIAL — Metairie, Images of America, Catherine Campanella, Arcadia Publishing, 2008
ALL PICS — Historic Jefferson Parish, Betsy Swanson, Pelican Publishing Company, Gretna 1975

JEFFERSON PARISH DRAINAGE CANAL DESIGN COMPETITION

*Bucktown
Sculpture*

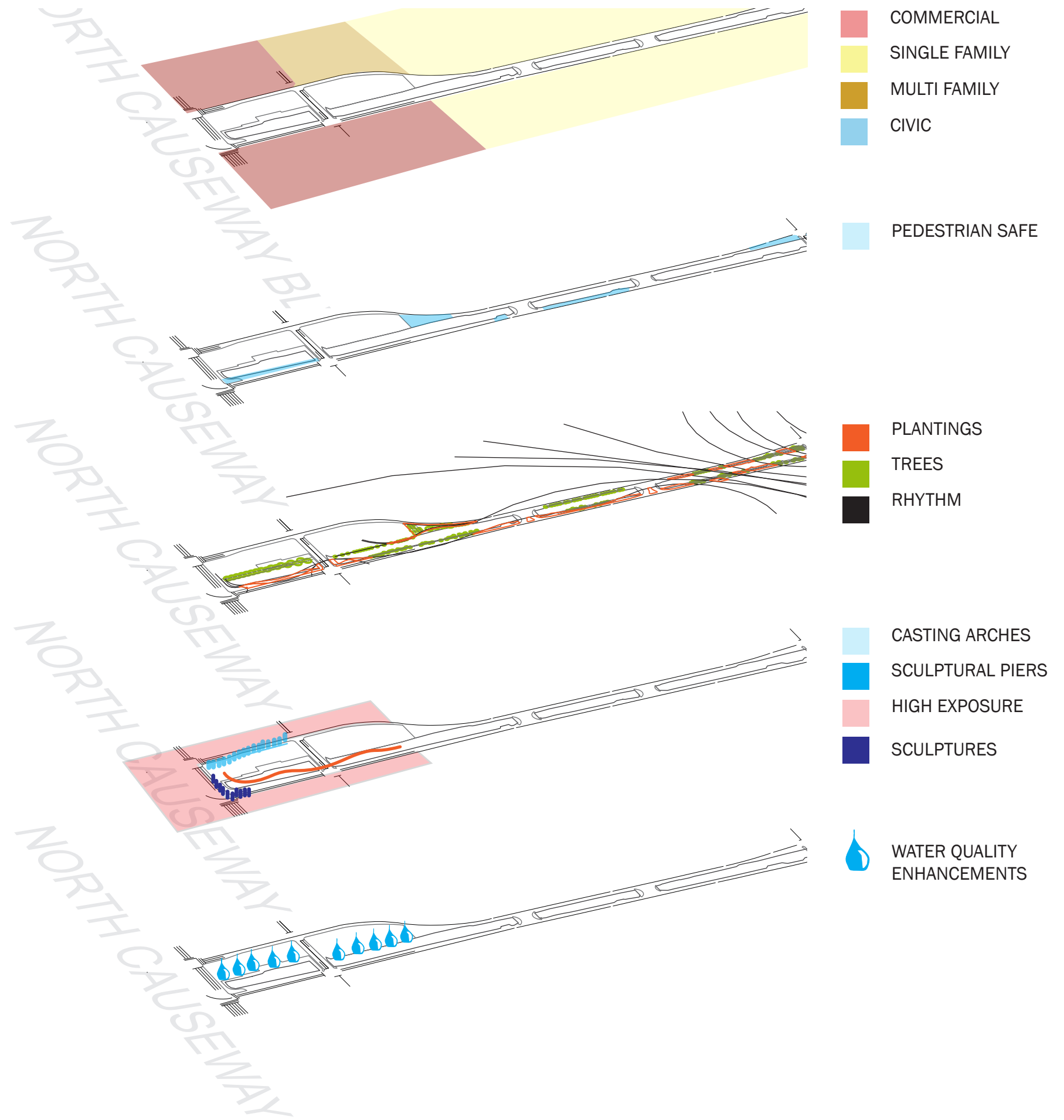


SITE CONTEXT MAP

Connecting District

The intersection of Causeway Boulevard and West Esplanade Avenue serves as a hub connecting north Metairie's residents on the East, West, and South, and to the highly successful commercial businesses between Veterans Boulevard and the lake. The Causeway Bridge provides a daily regional connection for thousands of people between downtown New Orleans and the Northshore. Bernard Xavier de Marigny de Mandeville, who founded the City of Mandeville in 1834, provided a short-lived ferry service across the lake. Construction of the longest bridge over water in the world began construction in 1955, providing a permanent, efficient link between the southern and northern shores of Lake Pontchartrain.

Within the median alongside the canal in the Connecting District, dense commercial businesses and parking lots signify the thriving Central Business District of Metairie. The large impervious surfaces create stormwater runoff and accompanying pollutants that flow directly into the canal. To mitigate runoff water quality, interstitial spaces are designed to capture and filter the runoff through vegetation before it enters the canal. A Sculptural Transit Shelter is designed as an architectural icon for the hub and demarcates the beginning (or end) of the Concept: Transformation. Metal panels describing the history of this part of Jefferson Parish are designed along the curve of the median by the Sculptural Transit Shelter. In our design, Sculptural Piping weaves vertically through the Connecting District, reflecting the undulating roadbed and bascule of the bridge.





FRINGE TREE



BLACK LOCUST



DIANELLA



TRAILING ROSEMARY

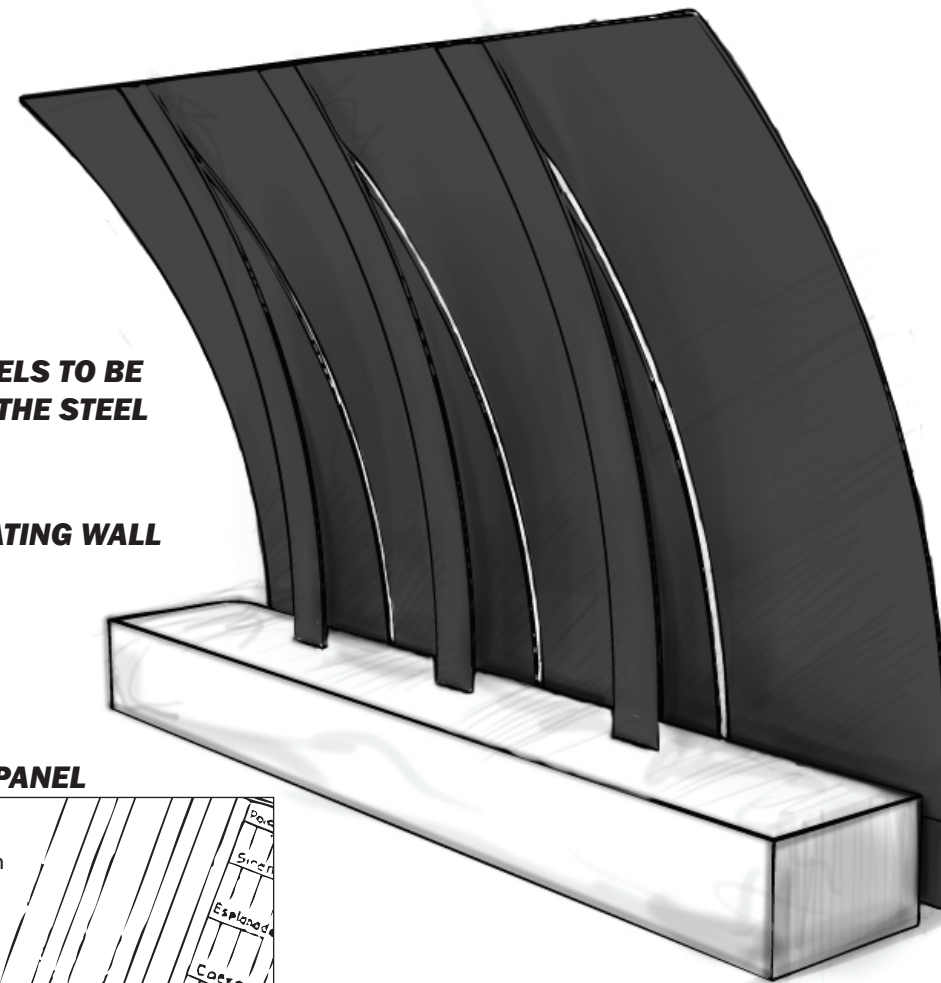


MUHLY GRASS

<http://www.bonnabel.org/about.htm> –Bonnabel Panel
<http://www.southeastroads.com/lpc.html> – Causeway Bridge
 Historic Jefferson Parish, Betsy Swanson, Pelican Publishing Company, Gretna 1975 – Bucktown_metairieville
<http://pontchartrain.net/templates/System/details.asp?id=40334&PID=491307>
 Historic Jefferson Parish, Betsy Swanson, Pelican Publishing Company, Gretna 1975
 ———Railroads

HISTORY PANELS TO BE ETCHED INTO THE STEEL

CONCRETE SEATING WALL

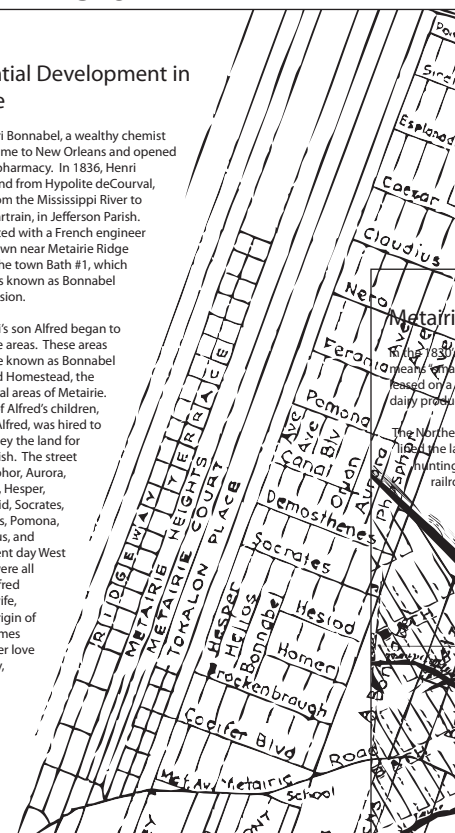


HISTORY PANEL

Residential Development in Metairie

In 1825, Henri Bonnabel, a wealthy chemist from Paris, came to New Orleans and opened a successful pharmacy. In 1836, Henri purchased land from Hypolite deCourval, stretching from the Mississippi River to Lake Pontchartrain, in Jefferson Parish. He collaborated with a French engineer to layout a town near Metairie Ridge and named the town Bath #1, which present day is known as Bonnabel Place subdivision.

In 1914 Henri's son Alfred began to subdivide the areas. These areas became to be known as Bonnabel Place and Old Homestead, the first residential areas of Metairie. One of four of Alfred's children, also named Alfred, was hired to officially survey the land for Jefferson Parish. The street names Phosphor, Aurora, Orion, Helios, Hesper, Demosthenes, Pomona, Nero, Claudius, and Caesar (present day West Esplanade) were all named by Alfred Bonnabel's wife, Luella. The origin of the street names came from her love of mythology, history and literature.



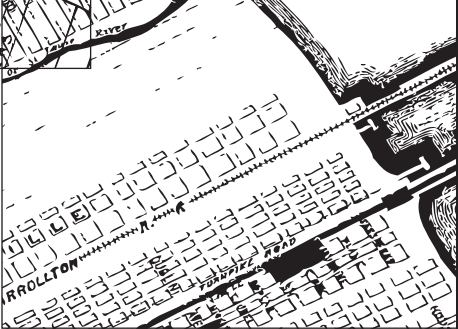
HISTORY PANEL

Metairieville and Bucktown

In the 1830s the eastern portion of Jefferson Parish was known as Metairieville. Metairie means "small farm" in French and refers to the small portions of farmland that owners leased on a share alike basis. The farmers grew vegetables and fruits and also produced dairy products which they transported to the New Orleans Market via Metairie Road.

The Northeastern portion became known as Bucktown. Fishing camps built on pilings along the lakeshore and 17th street canal. People made their living from fishing, crabbing, hunting, trapping, and boat rentals. Resorts and restaurants took advantage of the railroad and shipping along the east end as well.

Supposedly, Bucktown was named after a gentleman by the name of Wooley. He operated a boat rental business and was known as a storyteller. People began to call the area "Buck's Town". Buck was an early home to New Orleans Jazz, with such performers as the Bucktown Five Band and Jelly Roll Morton. The patron of the area was the Bruning family. Bucktown was mainly done by the Bruning family. They owned a local restaurant. The family took it upon their own behalf to quickly stop fights and troublemakers. Because of the efforts, particularly Capitan John Bruning, Bucktown became a place to be. Johnny C. Bruning's name officially changed to Esplanade away from the rough area of Bucktown, but the area is still known as the latter.



HISTORY PANEL

Causeway Bridge

One of the earliest thoughts of crossing Lake Pontchartrain was by Bernard Xavier de Marigny de Mandeville. He founded the City of Mandeville in 1834 and began a ferry service across the lake, which lasted until 1936.

The immigration growth and demand for a shorter route from Mandeville to New Orleans led to the building of the Causeway Bridge. The first pilings were laid on May 23rd, 1955. At a cost of 29 million dollars the 23.83 mile long bridge opened August 30, 1956 and was the longest bridge in the world over water. By the 1960s the bridge was weathering 3,000 vehicles per day. The bridge was getting overwhelmed and needed another span.

In September of 1967 construction of a parallel span started. On May 10, 1969 the second bridge opened and totaled 23.87 miles longer than the original. Present day the bridges are handling 30,000 vehicles per day and by 2018 the bridge will be stretched. The design of a third span is underway to meet the needs of the daily traffic.

HISTORY PANEL

Railroads Spur Development

Jefferson Parish can claim to have two of the earliest railroads in the nation:

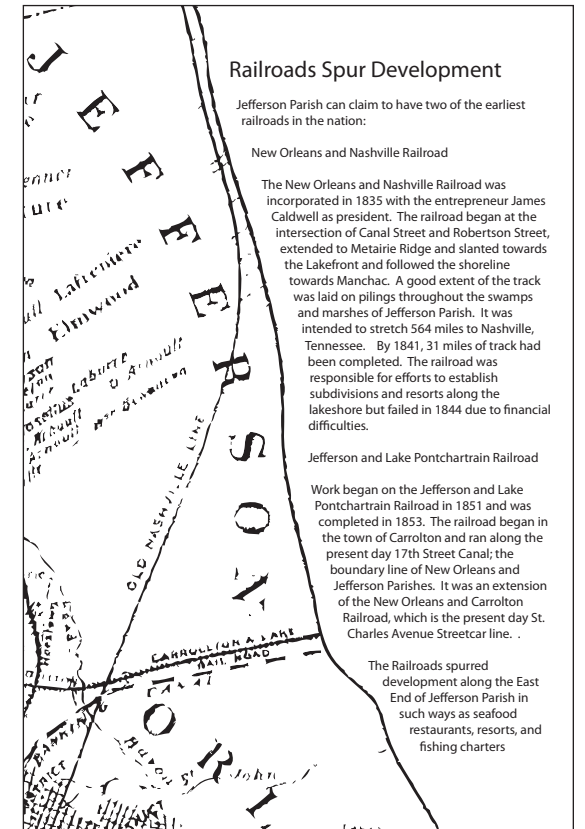
New Orleans and Nashville Railroad

The New Orleans and Nashville Railroad was incorporated in 1835 with the entrepreneur James Caldwell as president. The railroad began at the intersection of Canal Street and Robertson Street, extended to Metairie Ridge and slanted towards the Lakefront and followed the shoreline towards Manchac. A good extent of the track was laid on pilings throughout the swamps and marshes of Jefferson Parish. It was intended to stretch 564 miles to Nashville, Tennessee. By 1841, 31 miles of track had been completed. The railroad was responsible for efforts to establish subdivisions and resorts along the lakeshore but failed in 1844 due to financial difficulties.

Jefferson and Lake Pontchartrain Railroad

Work began on the Jefferson and Lake Pontchartrain Railroad in 1851 and was completed in 1853. The railroad began in the town of Carrollton and ran along the present day 17th Street Canal; the boundary line of New Orleans and Jefferson Parishes. It was an extension of the New Orleans and Carrollton Railroad, which is the present day St. Charles Avenue Streetcar line.

The Railroads spurred development along the East End of Jefferson Parish in such ways as seafood restaurants, resorts, and fishing charters



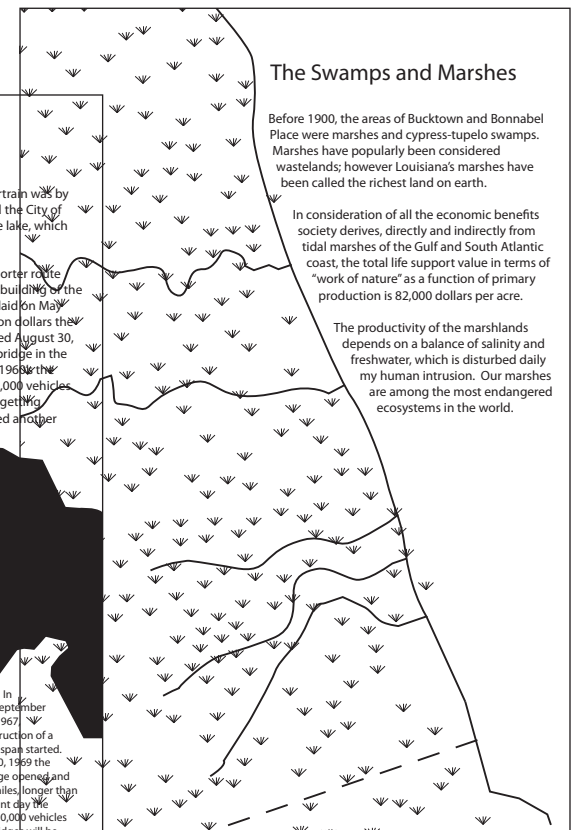
HISTORY PANEL

The Swamps and Marshes

Before 1900, the areas of Bucktown and Bonnabel Place were marshes and cypress-tupelo swamps. Marshes have popularly been considered wastelands; however Louisiana's marshes have been called the richest land on earth.

In consideration of all the economic benefits society derives, directly and indirectly from tidal marshes of the Gulf and South Atlantic coast, the total life support value in terms of "work of nature" as a function of primary production is 82,000 dollars per acre.

The productivity of the marshlands depends on a balance of salinity and freshwater, which is disturbed daily by human intrusion. Our marshes are among the most endangered ecosystems in the world.

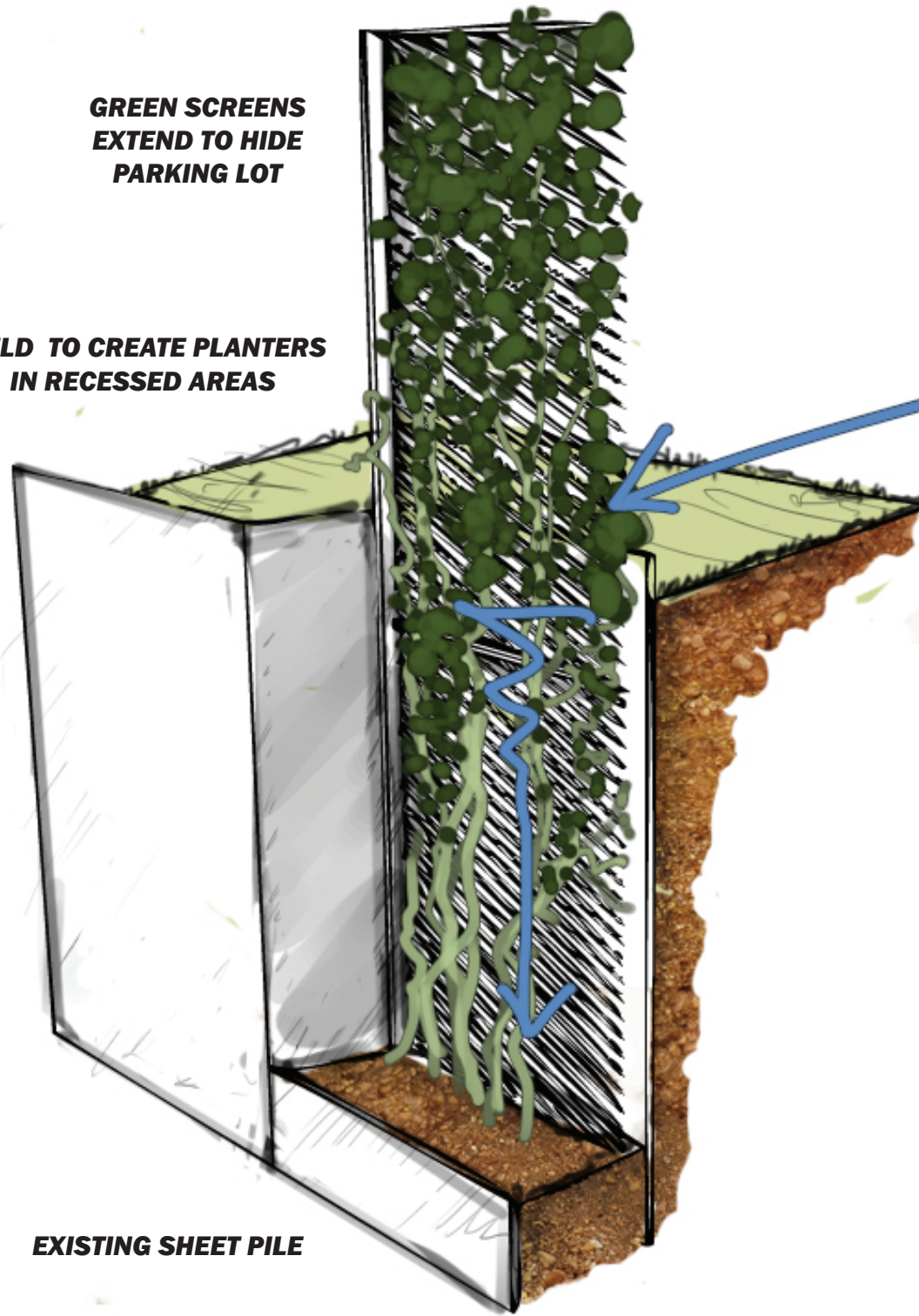


Bucktown Sulpture

**JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION**

**GREEN SCREENS
EXTEND TO HIDE
PARKING LOT**

**WELD TO CREATE PLANTERS
IN RECESSED AREAS**

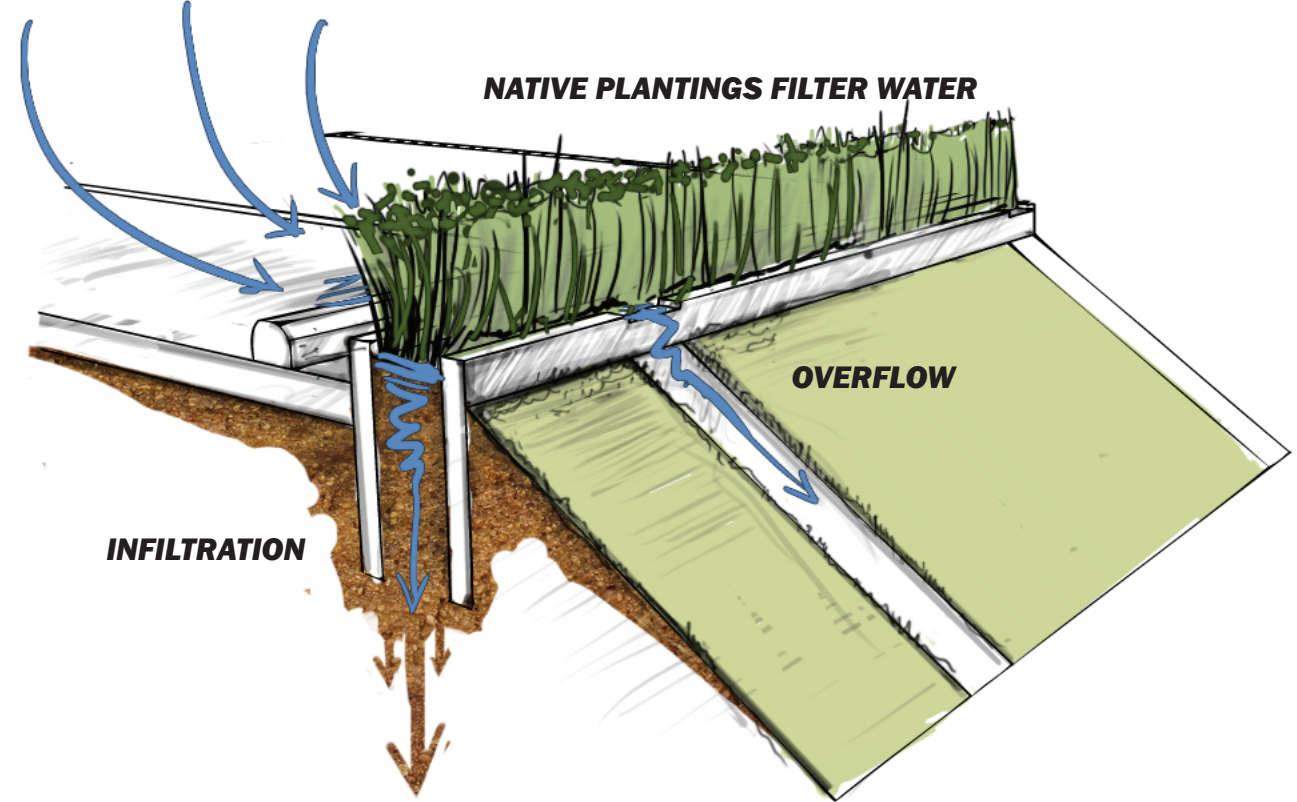


EXISTING SHEET PILE

*BUCKTOWN
SCULPTOR*

**PARKING LOT RUNOFF
COLLECTION**

NATIVE PLANTINGS FILTER WATER



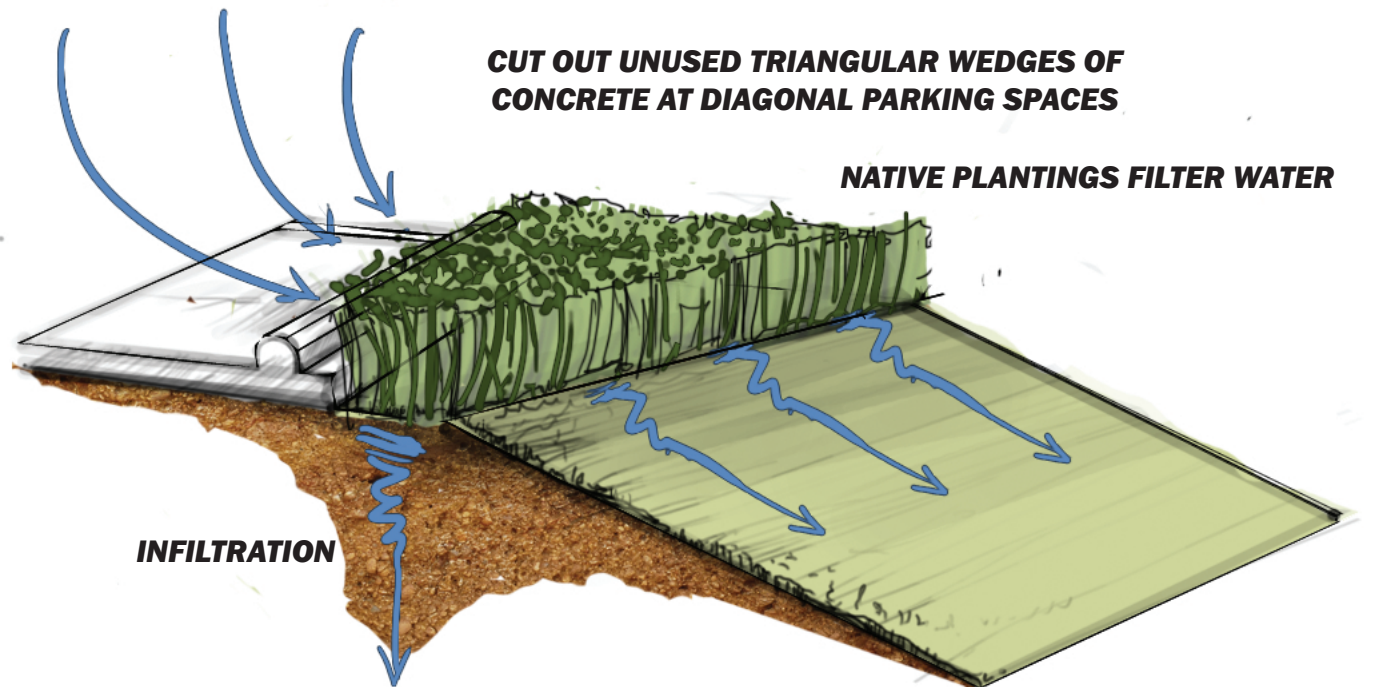
INFILTRATION

OVERFLOW

**PARKING LOT RUNOFF
COLLECTION**

**CUT OUT UNUSED TRIANGULAR WEDGES OF
CONCRETE AT DIAGONAL PARKING SPACES**

NATIVE PLANTINGS FILTER WATER



INFILTRATION

JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION

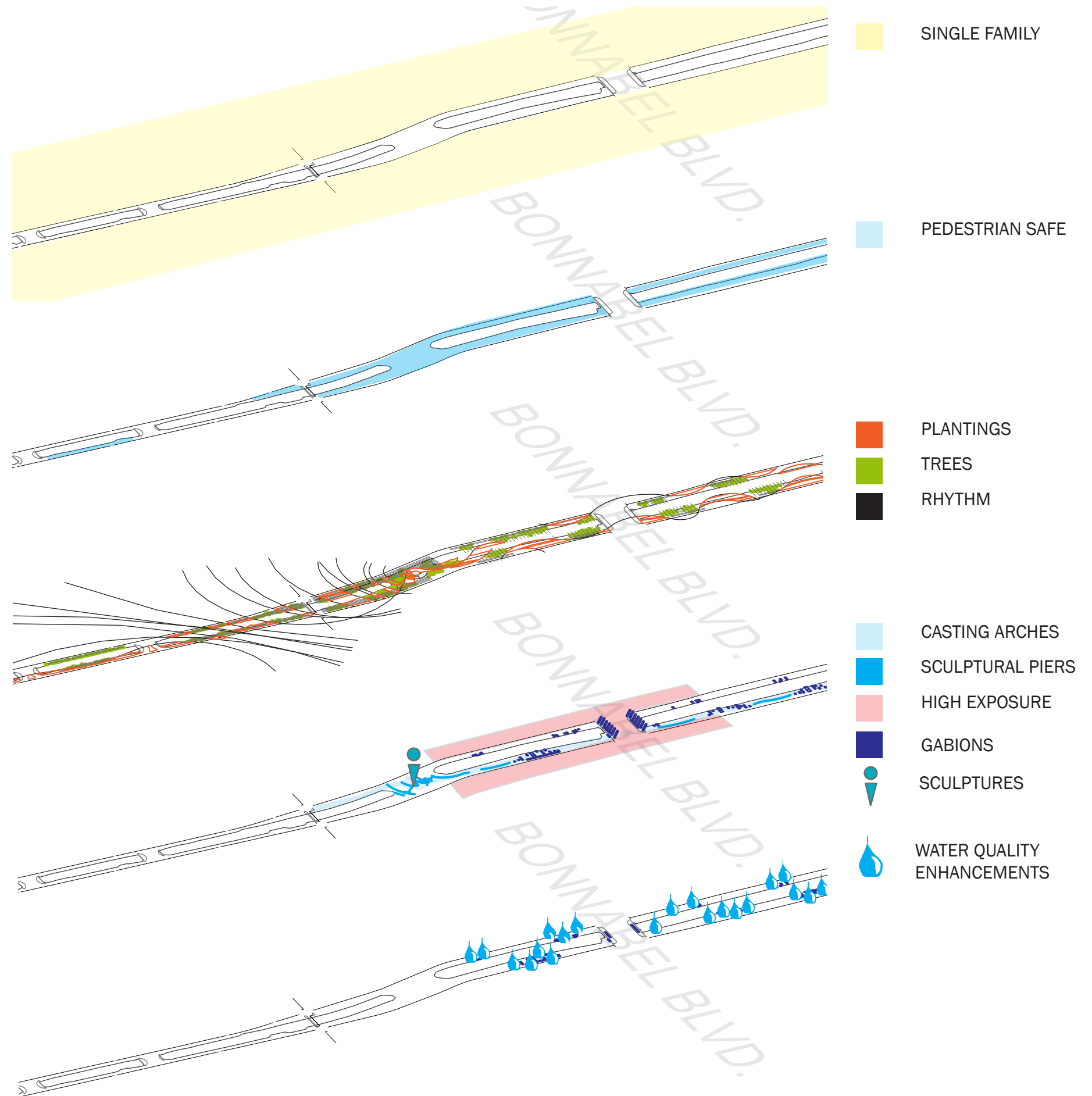
*BUCKTOWN
SCULPTURE*



TRANSIT SHELTER WITH INFORMATIVE HISTORY PANELS & SCULPTURAL PIPING

Growing District

Following the 1947 hurricane that flooded most of Metairie, hurricane protection levees were constructed along the Lake Pontchartrain shoreline. The resulting perceived safety proved to be a catalyst for rapid growth and development. The Growing District represents the shockwave of growth that expanded westward along the lakefront. Atop the covered intersection of the Bonnabel Canal and Canal No. 2, our design reflects this phenomenon in a large gathering space that exhibits a sculpture with concentric rings of plantings. A sporadic, gridded pattern of trees represents the subdivision developments, highlighting their rapid growth with clusters along the canal. The pedestrian and bike trail continues through the space. Bands of lower plantings organically weave in and out as natural systems were secondary in this time of expansion.



WINDUP PLANTINGS, CLUSTERS
TALL TREES



**JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION**



RED MAPLE



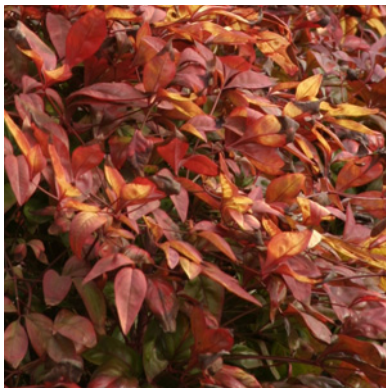
BLACK LOCUST



SOFT RUSH



TRAILING ROSEMARY



DWARF NANDINA



SPIDER LILY



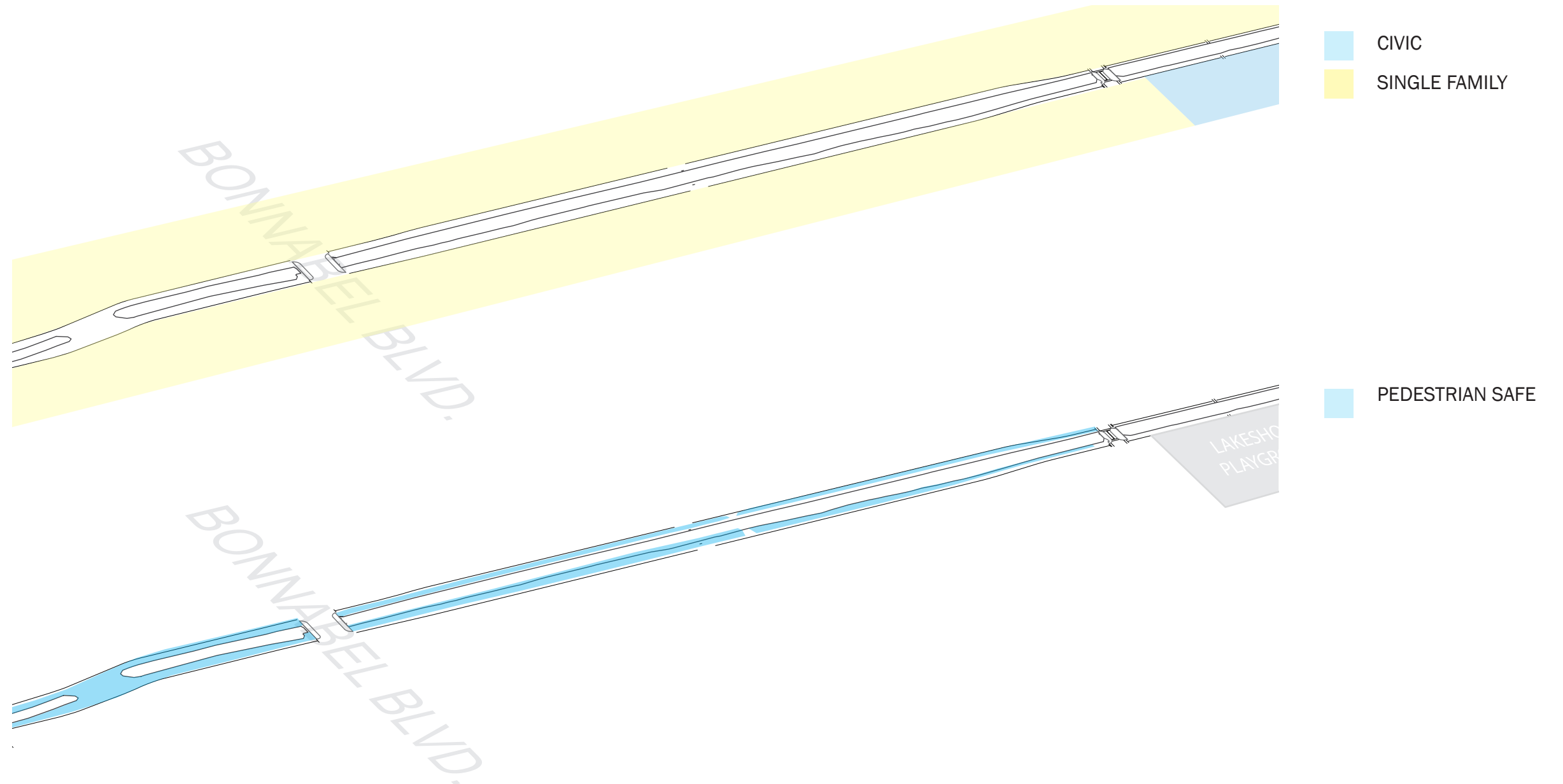
PEDESTRIAN NODE & SCULPTURE

WIMPY PLANTINGS, CUTE
TALL TREES



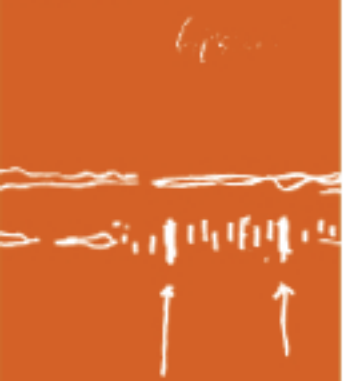
Dwelling District

Henri Bonnabel, a wealthy chemist from Paris, opened a pharmacy in New Orleans. In 1836, he purchased land from Hypolite deCourval stretching from the Mississippi River to Lake Pontchartrain in Jefferson Parish and laid out a town called Bath #1. In 1914, his son, Alfred, began to subdivide the land into what is now known as Bonnabel Place and Old Homestead, the first residential areas of Metairie. The Dwelling District reflects these events through Gabion Structures. The cages of the Gabion Structures recall crab traps and the recycled concrete filling represents development. Gabions are placed in relation to the streets that cross or meet West Esplanade Avenue and the drainage canal. A pedestrian and bicycle trail through the Dwelling District brings people closer to the canal and links with the informal bike path that many take along Bonnabel Boulevard to Lake Pontchartrain to enjoy the levee path there. Swaths of native and naturalized plantings flow through the area, reflecting the continued influence of the lake and water on the area. Sculptural piers continue through this district, providing a unifying element throughout the districts.



JEFFERSON PARISH DRAINAGE CANAL DESIGN COMPETITION

SPOND-STREETS OF SIGN
TRIM: SAMPLE



- PLANTINGS
- TREES
- RHYTHM

- CASTING ARCHES
- SEATING WALLS
- HIGH EXPOSURE
- SCULPTURAL PIERS
- GABIONS
- SCULPTURES

- PROPOSED PEDESTRIAN AND BIKE PATH

- WATER QUALITY ENHANCEMENTS

BONNABEL BLVD.

BONNABEL BLVD.

BONNABEL BLVD.

BONNABEL BLVD.

LAKESHORE PLAYGROUND

LAKESHORE PLAYGROUND

LAKESHORE PLAYGROUND

LAKESHORE PLAYGROUND

CONNECTION TO THE LEVEE PATHS

CONNECTION TO LEVEE PATHS

**JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION**



RED MAPLE



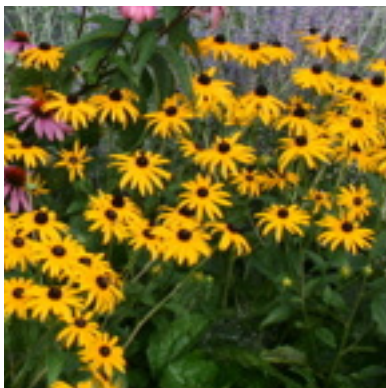
BLACK LOCUST



GIANT LIRIOPE



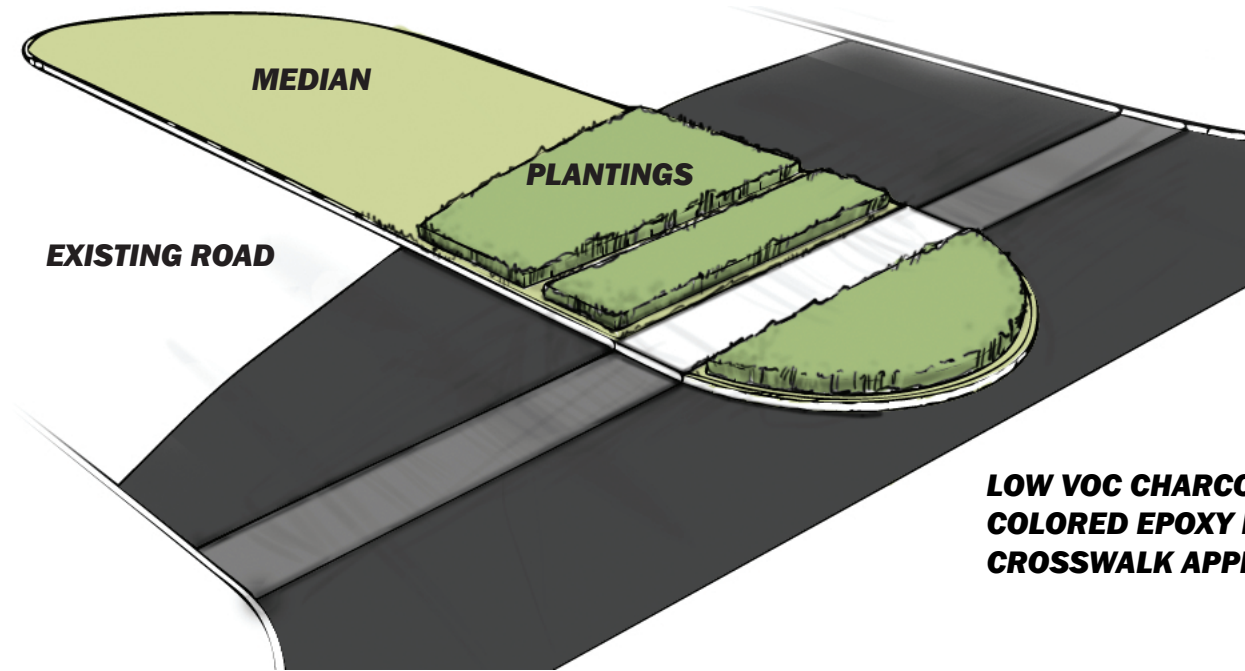
CARDINAL FLOWER



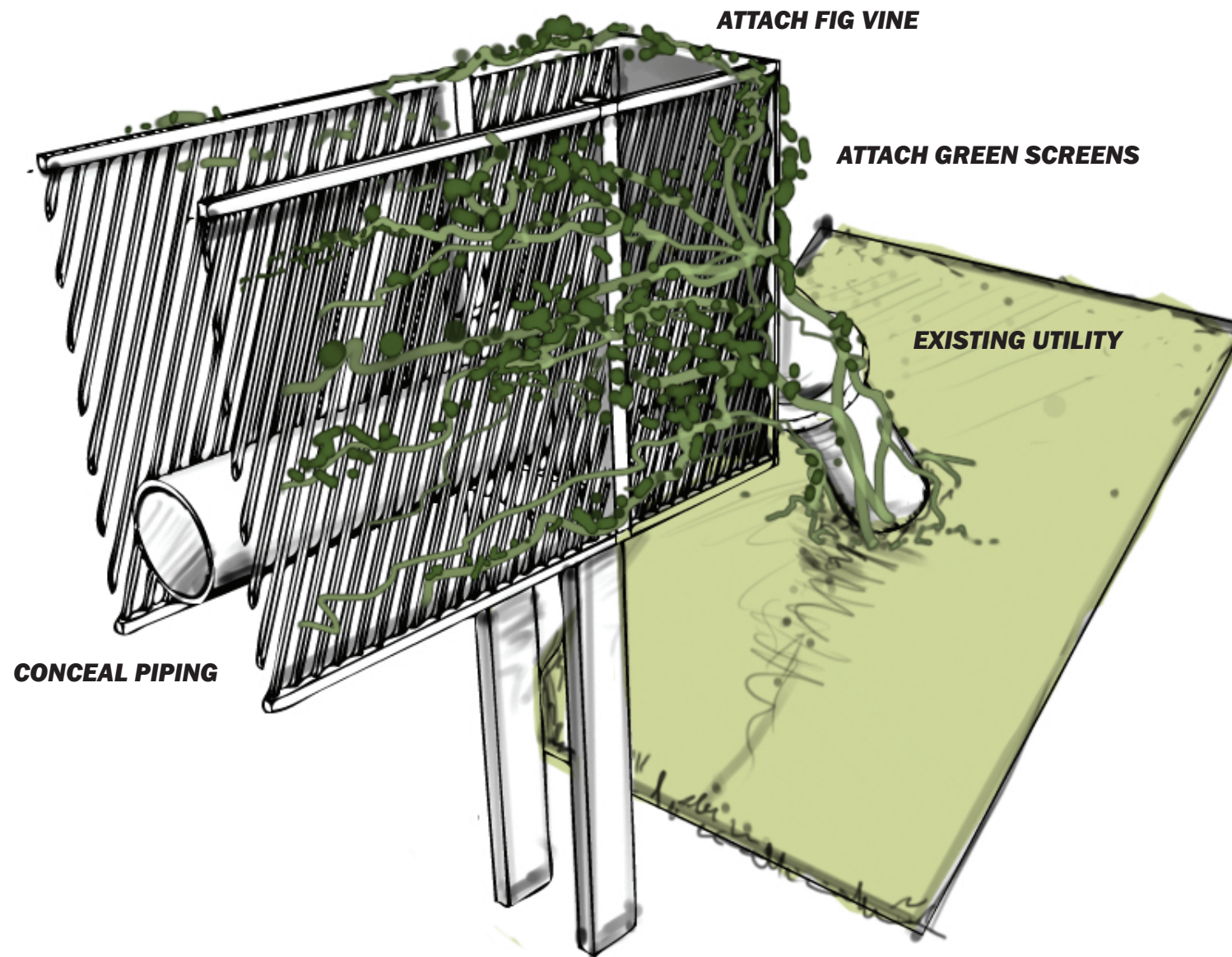
RUDBECKIA



VIBURNUM



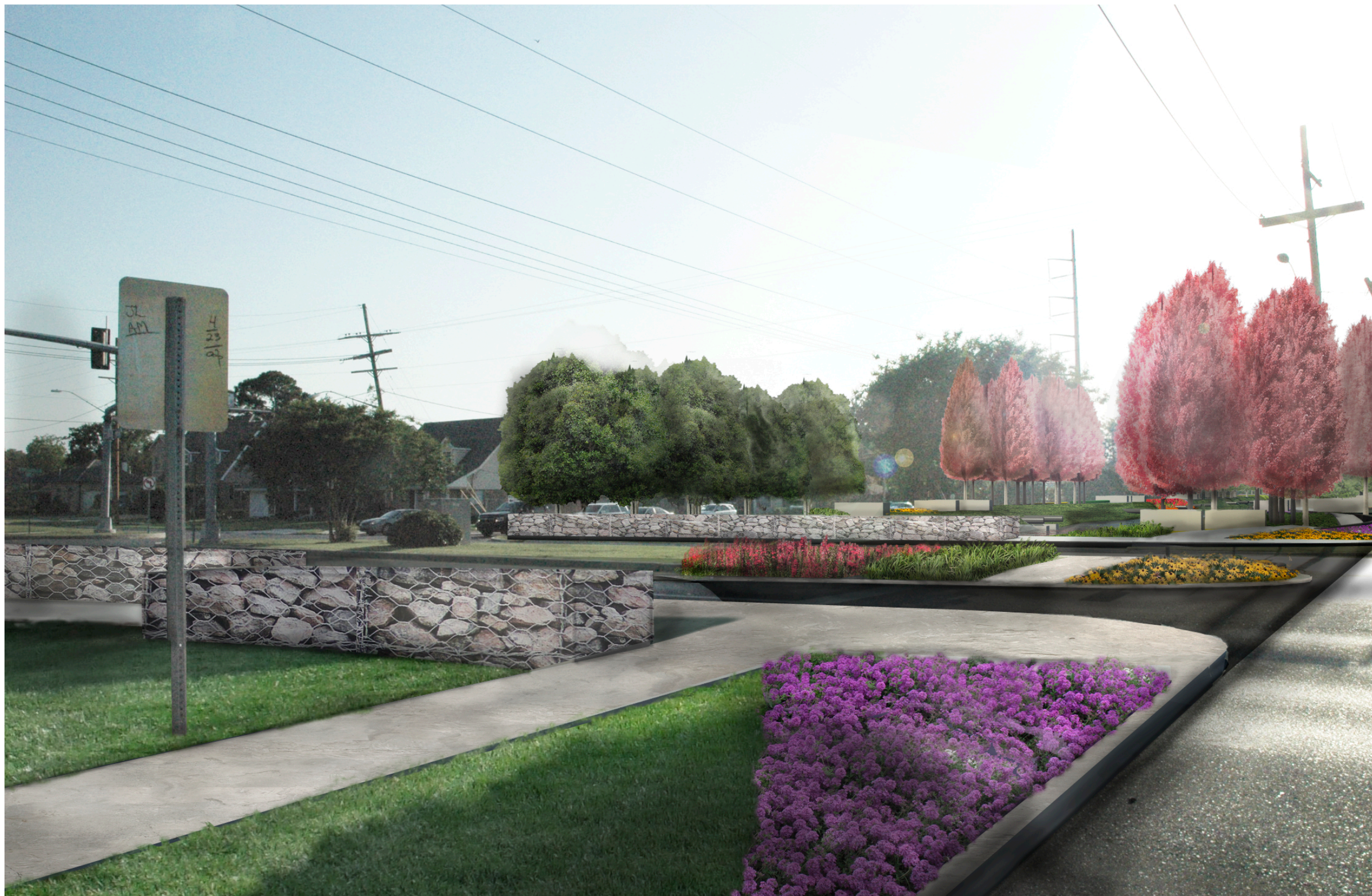
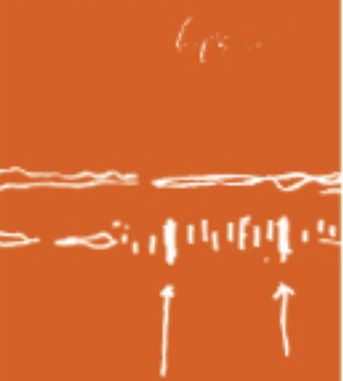
**LOW VOC CHARCOAL
COLORED EPOXY PAINT FOR
CROSSWALK APPLICATIONS**



SPOND-STREETS OF SIGN
TRAIN SAMPLE
life
↑ ↑

**JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION**

SPOND-STREETS OF SIGN
TRIM SAMPLE



PEDESTRIAN ENHANCEMENTS AT BONNABEL BLVD.

**JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION**

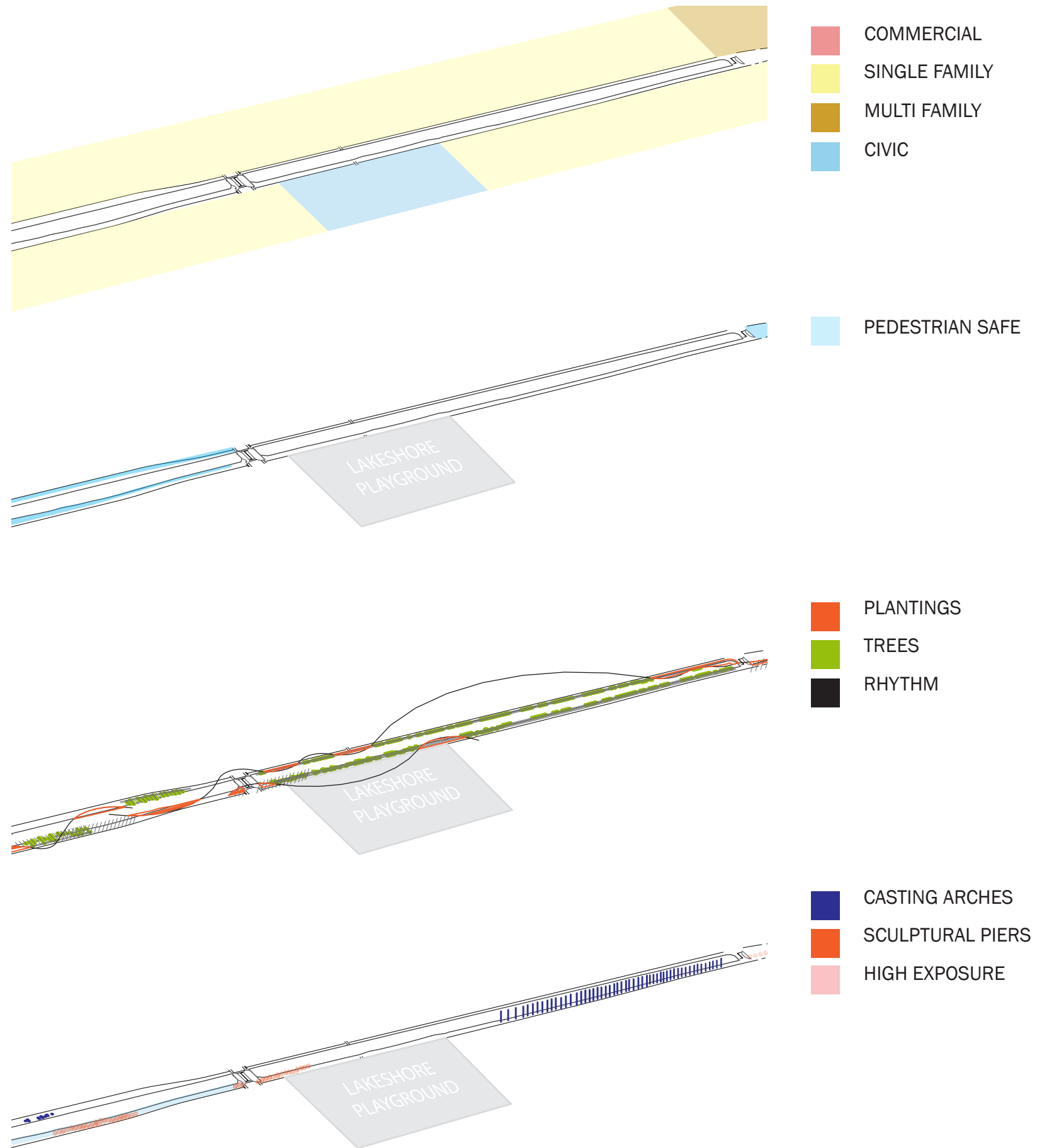
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PEDESTRIAN TRAIL WITH GABIONS & GREEN SCREENS

Adapting District

Before 1900, the areas of Bucktown and Bonnabel Place were marshes and Cypress-Tupelo swamps, the most ecologically productive land on Earth. Settlers fished, trapped, and hunted in the marshes and swamps, adapting their lifestyle to the landscape. Later, the swamp was drained and developed into small leased farms, known in French as "Metairie." The area was later subdivided, thus adapting to meet the needs of the people. In our design, sculptures, called Casting Arches, reflect the form of fishing poles repeated in a line along the lakeshore. Wetland thriving plants, including Cypress and Red Swamp Maple trees, are planted along the canal, recalling the swamp ecosystem that once existed here.



MEDIUM HEIGHT (9') VEG
GREEN SCREEN / MESH?
HEIGHT OF FLOODS - PRE
FUTURE?

JEFFERSON PARISH DRAINAGE CANAL DESIGN COMPETITION



POND CYPRESS



REDBUD



SILVER MAPLE



SABAL PALMETTO



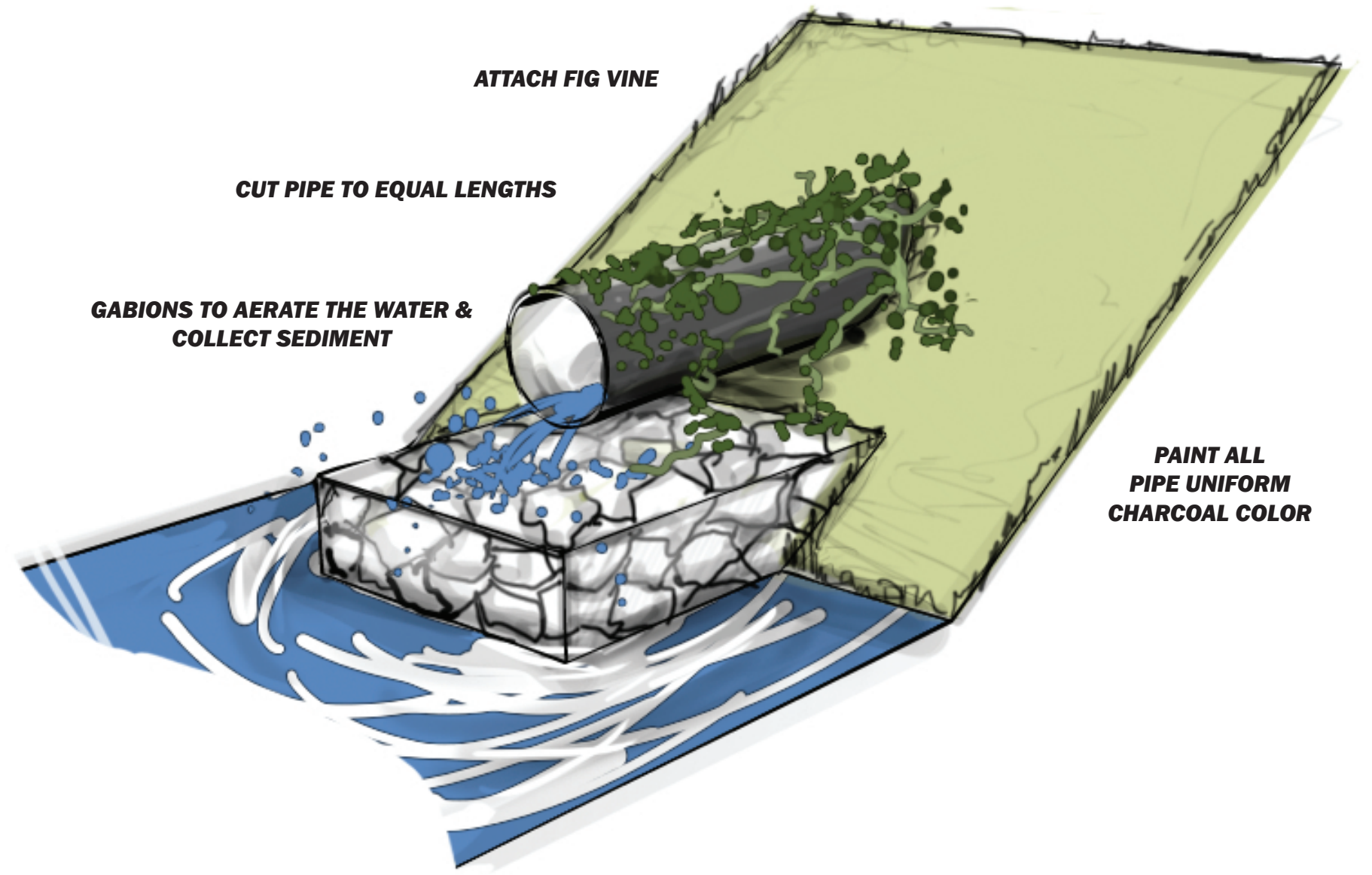
FETTERBUSH



IRIS



SPIDER LILY



ATTACH FIG VINE

CUT PIPE TO EQUAL LENGTHS

GABIONS TO AERATE THE WATER & COLLECT SEDIMENT

PAINT ALL PIPE UNIFORM CHARCOAL COLOR

MEDIUM HEIGHT (4') VEG
GREEN SCREEN / MESH?
HEIGHT OF FLOOD - PREP
FUTURE?



**JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION**



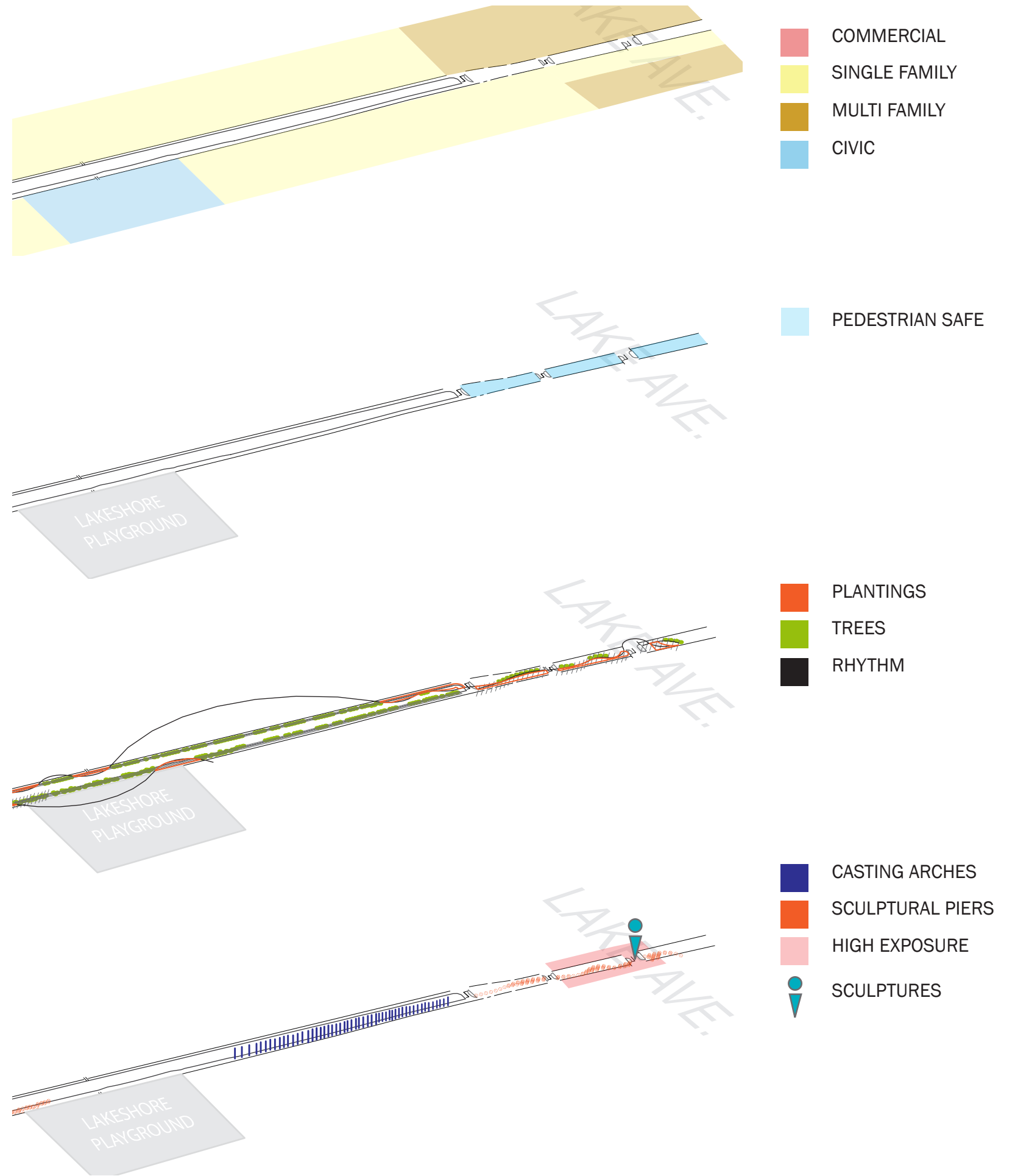
NATIVE PLANTING ENHANCEMENTS & CASTING ARCHES

MEDIUM HEIGHT (9') VEGETATION
GREEN SCREEN / NOISE?
HEIGHT OF FLOOD - PREVENT
FUTURE?



Sustaining District

The northeastern part of Metairie became known as Bucktown, and later as East End, or West End to New Orleanans. Fishing camps built on piers lined the lakeshore and 17th Street canal. People sustained themselves by fishing, crabbing, hunting, trapping, and renting boats. The Sustaining District of our design concept celebrates this very early use of the land and lakefront in Metairie, one that has recovered from storms and flooding repeatedly and remains today. Only the piers and pilings of some of the fishing camps and restaurants, such as Bruning's, have been left after major storms, and are represented by the Sculptural Piers organized on a grid through the Sustaining District. Swaths of native and naturalized plants appear to flow through the area along the canal, reflecting tidal movement of the lake water, while movement of Muhly Grass, Rosemary, and Dianella recall the white caps on the lake created by winds.



(ANCHOR)
FOUND SCULPTURAL
ELEMENTS MADE

JEFFERSON PARISH
DRAINAGE CANAL DESIGN COMPETITION



FRINGE TREE



BLACK LOCUST



DIANELLA



TRAILING ROSEMARY



MUHLY GRASS

(ANCHOR)
ONNOTS 7
FOUND SCULPTURAL
ELEMENTS



RHYTHMICAL PLANTINGS & SCULPTURAL PIERS

Jefferson Davis Drainage Plant List

Sabal Palmetto-3-6' ht x 6' spread, full sun, evergreen, native, slow growing

Muhly Grass-3' ht x 3' spread, full sun, deciduous,

Trailing Rosemary-20" ht x 2' spread, full sun, drought tolerant, non-native

Pond Cypress- 50-60' ht x 25-30' spread, full sun, drought tolerant, native, deciduous

Crinum Lily- 2-5' ht x 2-5' spread, full sun, native, hardy perennial

Iris- 16-36"ht x 14-24" spread, full sun, native, blooming

Dianella- 18" ht x 18" spread, full sun, non-native

Fetterbush- 3-5' ht, evergreen, full sun, native

Verbena- 8" ht x 10-12" spread, perennial, native, full sun

Giant Liriope-18"ht x 18" spread, dark green, full sun, fast growing, evergreen, non-native

Rudbeckia- 1 ½ to 3' x 18" spread, full sun, perennial, native, blooming

Black Locust- 30-80' ht x 30' spread, full sun, deciduous, native

Swamp Red Maple- 40-50' ht x 30-35' spread, full sun, deciduous, blooming,

Fringe Tree-20-25' ht x 12-15' spread, full sun, blooming, native

Ironwood- 40' ht x 25' spread, full sun, native

Silver Maple- 20-30' ht x 20' spread, full sun, deciduous, native

Redbud- 25-30' ht x 15-20' spread, full sun, native, deciduous, blooming

(ANCHOR)
ONNOTS 7
MADE,
FOUND SCULPTURAL
ELEMENTS.

Jefferson Parish Drainage Canal Opinion of Probable Costs for Budgetary Purposes

Trees and Beds

<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Item Budget</i>
Black Locust	160	EA	\$ 300.00	\$ 48,000.00
Fringe Tree	50	EA	\$ 250.00	\$ 12,500.00
Ironwood	80	EA	\$ 300.00	\$ 24,000.00
Pond Cypress	120	EA	\$ 300.00	\$ 36,000.00
Red Maple	140	EA	\$ 300.00	\$ 42,000.00
Silver Maple	30	EA	\$ 300.00	\$ 9,000.00
Redbud	35	EA	\$ 250.00	\$ 8,750.00
Planting Beds	100,000	SF	\$ 6.00	\$ 600,000.00
Total				\$ 780,250.00

Concrete Work

<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Item Budget</i>
Seating Walls Along Path	1,200	LF	\$ 50.00	\$ 60,000.00
Off-Path Seating Walls	700	LF	\$ 50.00	\$ 35,000.00
Trail	4,000	LF	\$ 32.00	\$ 128,000.00
Planter Curbs	13,000	LF	\$ 7.50	\$ 97,500.00
Total				\$ 320,500.00

Miscellaneous

<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Cost</i>	<i>Item Budget</i>
Gabions	1,200	LF	\$ 200.00	\$ 240,000.00
Sculptural Piers	250	EA	\$ 1,000.00	\$ 250,000.00
Sculptural Piping	1,200	LF	\$ 25.00	\$ 30,000.00
Sheet Piling	320	LF	\$ 38.00	\$ 12,160.00
Green Screens	80	EA	\$ 1,300.00	\$ 104,000.00
Casting Arches	200	LF	\$ 50.00	\$ 10,000.00
Total				\$ 646,160.00
Grand Total				\$ 1,746,910.00

Potential Funding Sources

Louisiana DOTD Transportation Enhancement Funds

Louisiana Recreational Trails Program

Louisiana Land & Water Conservation Fund

Greater New Orleans Foundation

Environmental Protection Agency 319 Grants

National Endowment for the Arts

Arts Council of New Orleans

Sydney And Walda Besthoff Foundation

Jefferson the Beautiful