

WEST ESPLANADE CANAL Design Competition

CONCEPT STATEMENT

As we transition our mindset in the urbanized deltaic plain that we inhabit, as we brace ourselves for the challenges of the twenty-first century, it is essential that whenever possible we convert our liabilities into assets. Nowhere is this need and the concomitant opportunity more evident than in the open drainage system of Jefferson Parish. Rather than seeing water as an asset and source of life, we treat it as waste to be expelled.

The Jefferson Drainage Canal Design competition is a call for beautification. However it is also about storing and purifying the water, stabilizing the banks and adding both ecological and recreational value. By widening the canal where the cross section allows, the freeboard or water storage capacity can also be increased.

We aim to turn the canal into a **green linear park** and strengthen the economic and ecological value in this area. This will be a park that is useful for the people who live in Jefferson Parish, where people can walk, bike, fish, catch a cool breeze, find some shade, canoe and watch birds, a park that connects places and people, where people can directly sense and enjoy the water. Transforming this essential element of the stormwater system is inherently an urban development strategy. **Public spaces are created and connected by the water**, including the retail center, churches, playgrounds, school areas and the library.

The West Esplanade drainage canal can connect the retail center near Causeway Boulevard with a park at the 17th Street Canal. The retail center can be renovated into a more attractive and valuable area, where **shops face both the canal and the street**. At the north side there is a pedestrian area, at the south side the road goes along the canal.

The **water belvedere** at the end of this linear park provides the opportunity to look over the 17th Street Canal to the pump station and back over West Esplanade Canal at the life and activities happening below.

Space is limited, but **the canal is fully within the public realm** and improvements made here can be shared by all. We can win space by using well-detailed hard edges, set off against soft water edges which add ecological value. Reeds can grow near the water's edge on shallow banks to purify the water and provide habitat for many species of birds. On the grassy slopes of the canal we propose to plant cypresses to stabilize the banks, offer shade, and increase water storage and evapotranspiration.

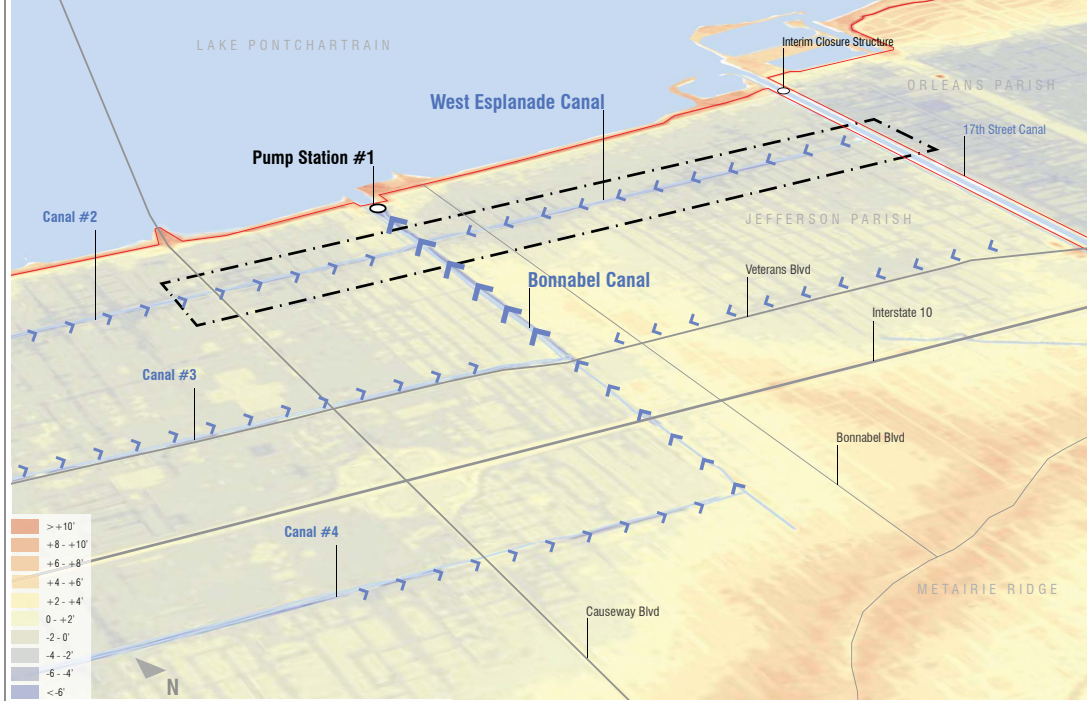
The many different types of bridges over the canal can be re-envisioned as a **family of bridges** with pre-cast facades that arch over the water. Given the expense of burying unsightly utility crossings under the canal, we propose to relocate and bundle them with larger vehicular crossings.

This incremental plan will not only improve the quality of life for local residents, but also spur growth and increase the economic value of the area for residents and the Parish.

TEAM A

WEST ESPLANADE CANAL

AN ATTRACTIVE, HEALTHY WATER SYSTEM IN JEFFERSON PARISH



New water environments can be community amenities along the canal



Existing condition along the canal

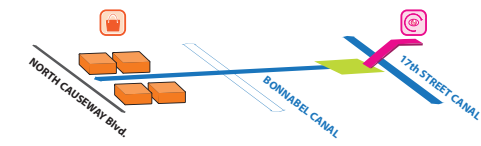


Westersingel, Rotterdam



Sarphatipark, Amsterdam

ANCHORS



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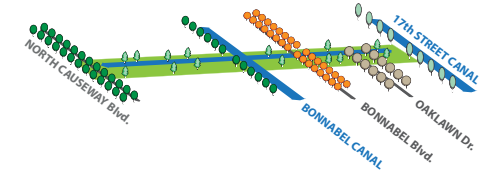
CONNECTIONS



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CROSSINGS



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SYSTEM



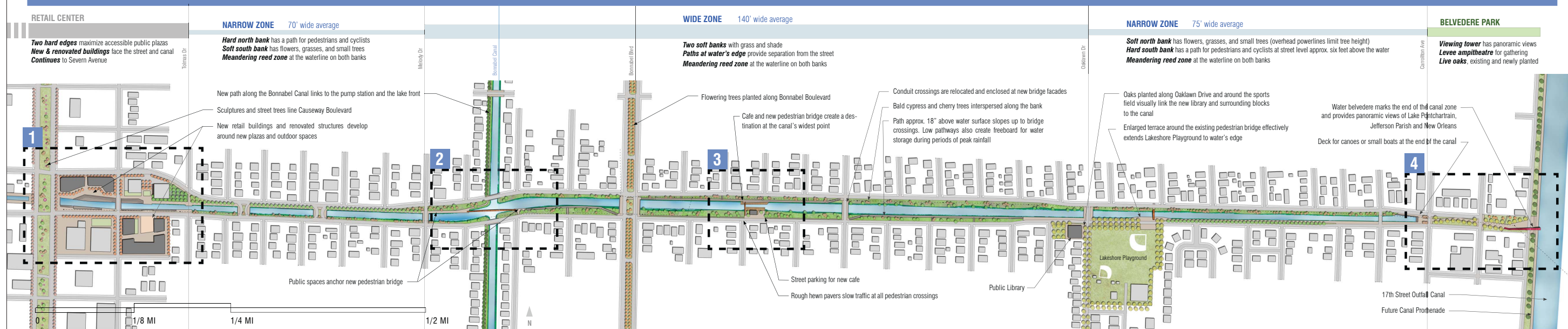
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BEAUTIFICATION TOOL KIT PROTOTYPES FOR IMMEDIATE IMPLEMENTATION

<h3>PATHS & EDGES</h3>	<h3>SOFT EDGE</h3> <p>\$55/lin. ft.</p> <p>Green embankment with reeds, trees, grass and stabilization mats where necessary to anchor vegetation</p>	<h3>HIGH PATH</h3> <p>\$84/lin. ft.</p> <p>Path with a sloped embankment where canal width permits and program requires direct street access</p>	<h3>LOW PATH</h3> <p>\$736/lin. ft.</p> <p>Path with a sloped embankment where canal width permits</p>	<h3>HARD EDGE</h3> <p>\$975/lin. ft.</p> <p>Path at street level where canal right of way narrows</p>	<h3>TIERED HARD EDGES</h3> <p>\$1,799/lin. ft.</p> <p>Paths at street and water levels extend urban fabric to the water's edge</p>		
<h3>BRIDGES & CONDUITS</h3>	<h3>CONCRETE BRIDGE FACADES</h3> <p>\$57,000 per bridge</p> <p>Cast in place concrete facades contribute to a family of similar bridges along the canal</p>	<h3>RELOCATED CONDUIT</h3> <p>\$66,187</p> <p>Unsightly utility conduits moved and concealed at vehicular crossings</p>	<h3>OUTFLOW PIPES</h3>	<h3>PRE-CAST SPOUT</h3> <p>\$2,790 ea.</p> <p>Pipe terminates in decorative concrete element at retaining wall</p>	<h3>BELOW WATERLINE</h3> <p>\$2,240 ea.</p> <p>Pipe opening lowered to accommodate paths at the shoreline</p>	<h3>DECK ENCLOSURE</h3> <p>approx. \$7,800 ea.</p> <p>Pipe opening trimmed near the bank and enclosed in viewing platform</p>	<h3>CANTILEVERED DECK</h3> <p>approx. \$7,800 ea.</p> <p>Pipe attached to cantilevered viewing platform</p>
<h3>VEGETATION & SURFACES</h3>	<h4>TREES</h4> <ul style="list-style-type: none"> Swamp Red Maple (<i>Acer rubrum</i>) Bald Cypress (<i>Taxodium distichum</i>) River Birch (<i>Betula nigra</i>) Live Oak (<i>Quercus virginiana</i>) 	<h4>GRASSES & RUSHES</h4> <ul style="list-style-type: none"> Muhly Grass (<i>Muhlenbergia capillaris</i>) Sand Cordgrass (<i>Spartina patens</i>) Soft Rush (<i>Juncus effusus</i>) 	<h4>PERENNIALS</h4> <ul style="list-style-type: none"> Louisiana Iris (<i>Iris Louisiana hybrids</i>) Swamp Sunflower (<i>Helianthus angustifolius</i>) Common Lady Fern (<i>Athyrium filix-femina</i>) 	<h4>PAVING</h4> <ul style="list-style-type: none"> Concrete Brick Rough hewn stone Composite wood 			

URBAN DESIGN OPPORTUNITIES LONG TERM URBAN WATERWAY DEVELOPMENT



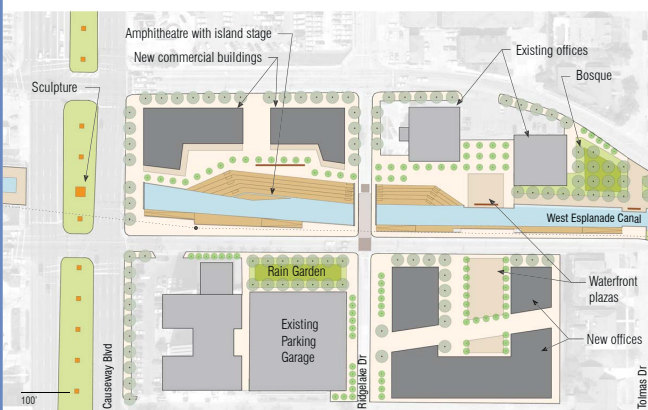
1 RETAIL & COMMERCIAL ZONE



- Shops and cafes activate new public spaces along the water
- All buildings face the street and the canal
- New investment in buildings & renovations results from canal improvements
- Amphitheatre features an island stage and doubles as water storage
- Sculptures on Causeway
- Retail corridor continues along canal to Severn Ave

ESTIMATED COST:
\$742,998*

* Excludes cost of new buildings and renovations

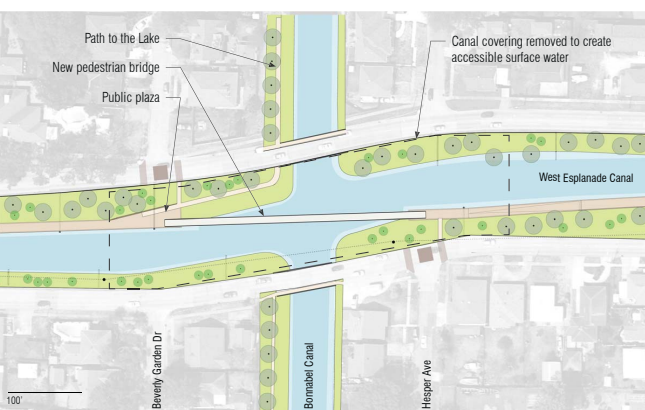


2 CANAL CROSSING

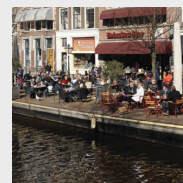


- Expose water to create value -- open the buried waterway
- The intersection of the canals should be highlighted
- Three bridges, two vehicular and one pedestrian, provide connections and access
- Inexpensive vehicular bridges utilize concrete facades
- Pedestrian bridge is anchored by public spaces on both ends
- Pathway to pump station turns north toward the Lake

ESTIMATED COST:
\$840,217



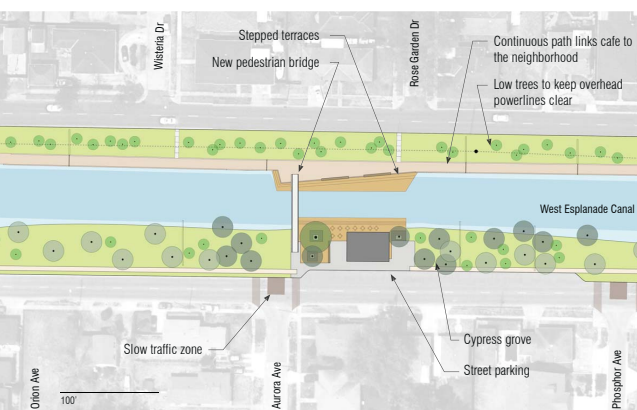
3 WATERFRONT CAFE



- Cafe is a new community destination
- Terraced seating steps down to water level
- New pedestrian bridge links public spaces across the canal
- New street parking utilizes permeable paving
- Cafe located within a cypress grove to provide shaded outdoor areas
- New slow traffic pedestrian areas make crossing West Esplanade safer

ESTIMATED COST:
\$141,250*

* Excludes cost of new building



4 BELVEDERE PARK



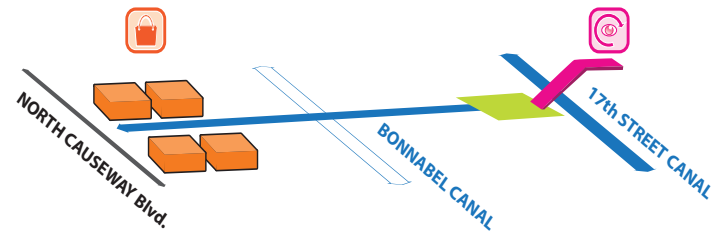
- Water belvedere peers over floodwall
- Low-traffic stretch of West Esplanade converted to park between Lake and Orpheum Aves
- Slow traffic pedestrian zones bound park
- Amphitheatre built into levee below belvedere
- Grassy open space shaded by live oaks
- Gateway to the West Esplanade Canal
- 17th Street Canal promenade is possible in a future without floodwalls

ESTIMATED COST:
\$690,292*

* Includes minimum costs for structure



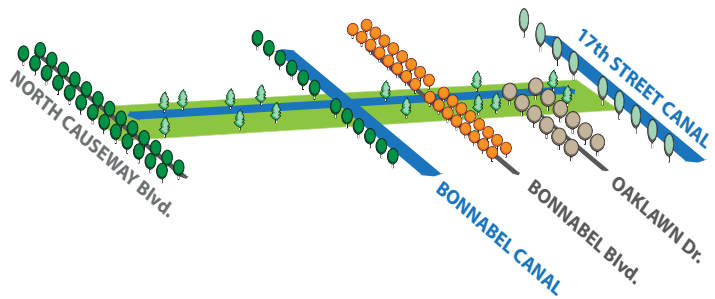
ANCHORS



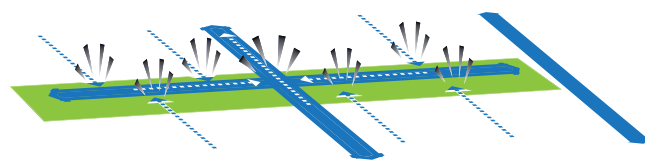
CONNECTIONS



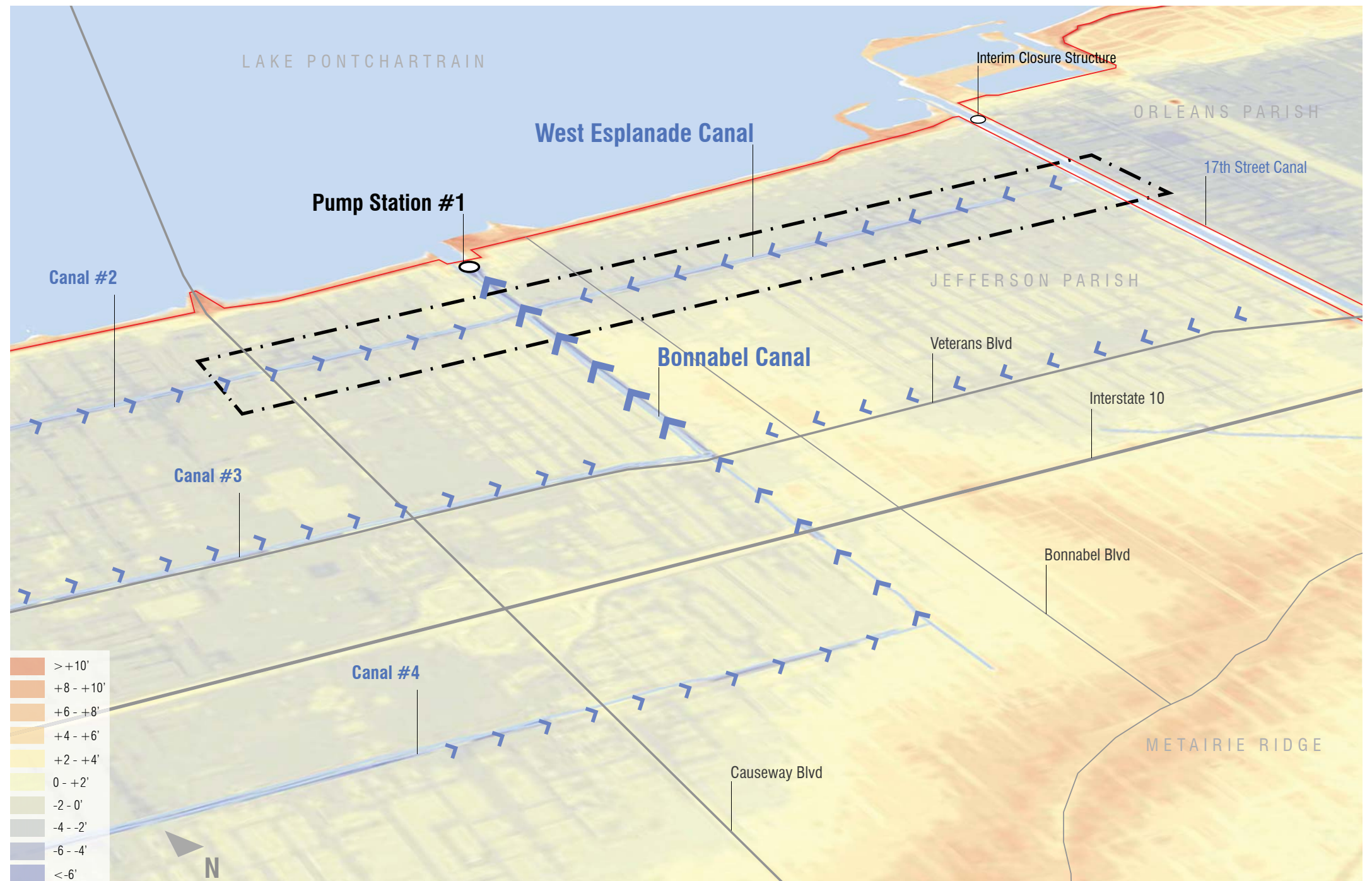
CROSSINGS



SYSTEM



CONTEXT & SYSTEM





New water environments can be community amenities along the canal



Existing condition along the canal

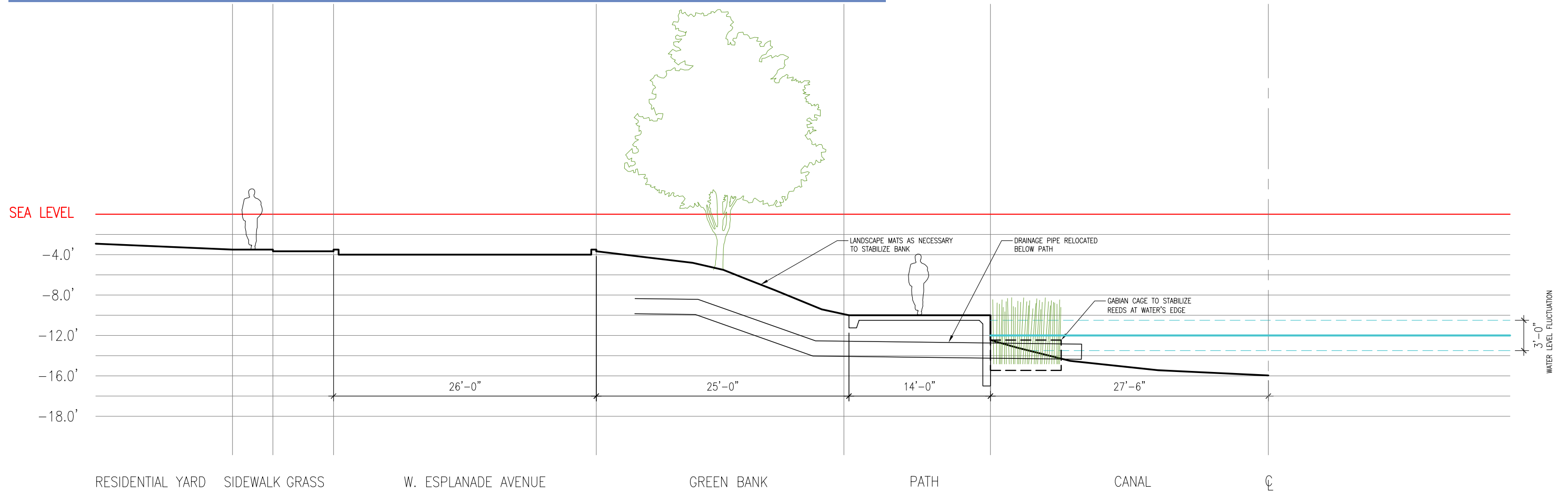


Westersingel, Rotterdam



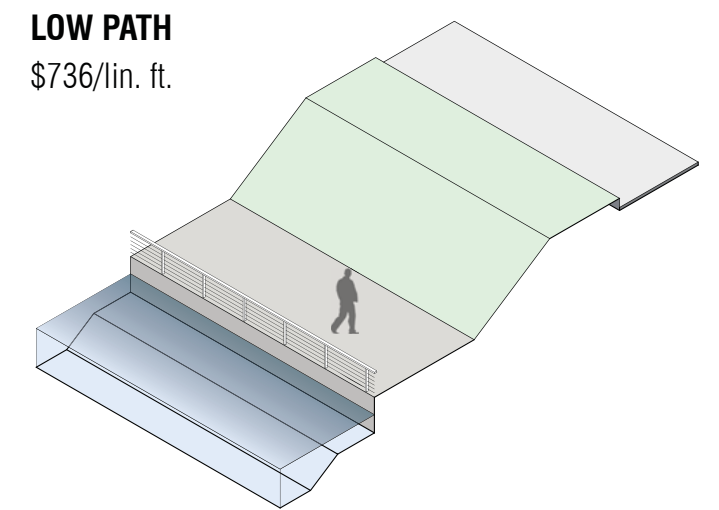
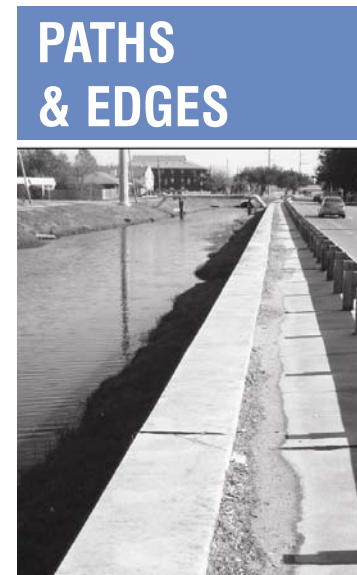
Sarphatipark, Amsterdam

BEAUTIFICATION TOOL KIT PROTOTYPES FOR IMMEDIATE IMPLEMENTATION



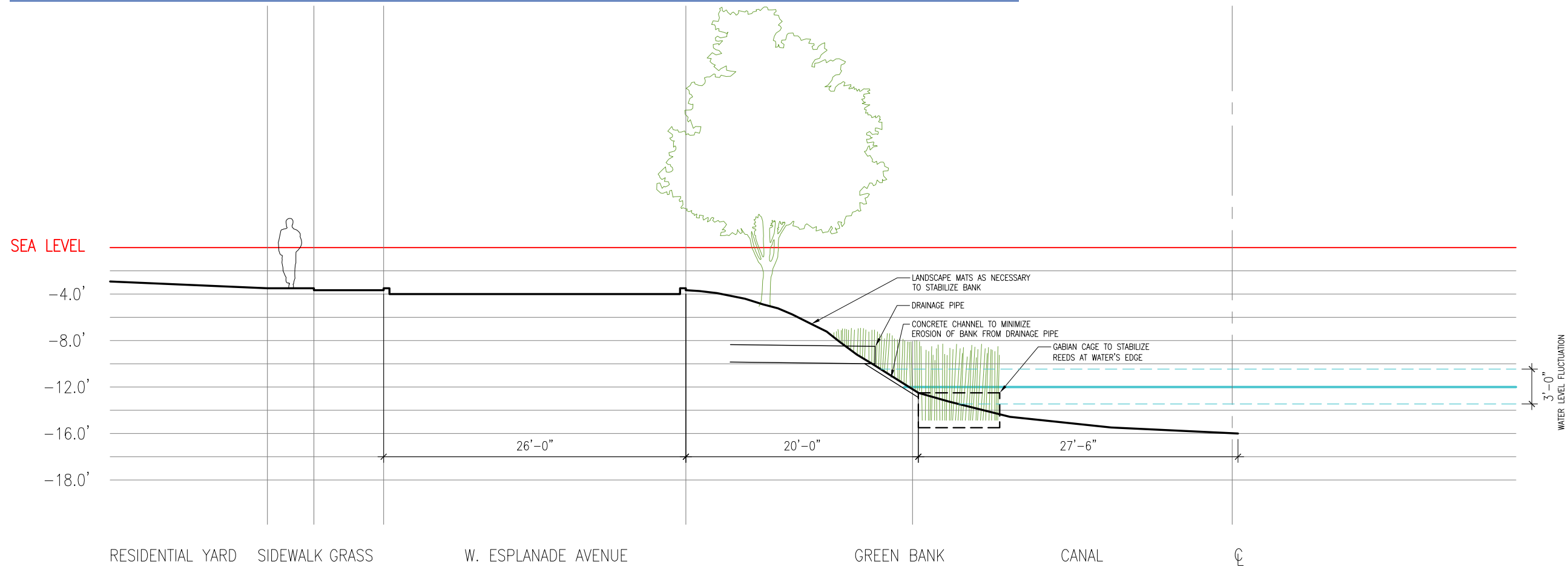
CONDITION A 1" = 10'-0"
3,460 LINEAR FEET

CONCRETE PATH AT WATERS EDGE
CATCH BASIN OUTFLOW RELOCATED BELOW WATERLINE
GABIAN AND LANDSCAPE MAT STABILIZATION



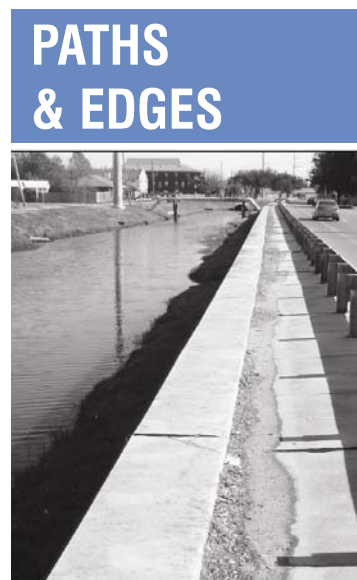
Path with a sloped embankment where canal width permits

BEAUTIFICATION TOOL KIT PROTOTYPES FOR IMMEDIATE IMPLEMENTATION

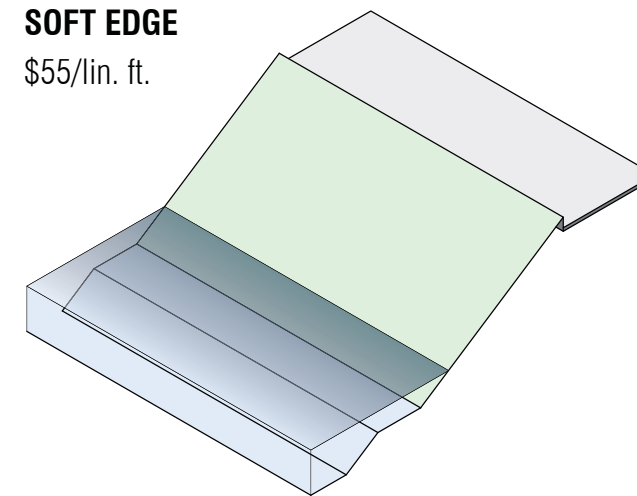


CONDITION B 1" = 10'-0"
8,780 LINEAR FEET

CATCH BASIN OUTFLOW CROPPED NEAR BANK
PRECAST CONCRETE SPOUT AND SPLASH PAD TO LIMIT EROSION
GABION AND LANDSCAPE MAT STABILIZATION

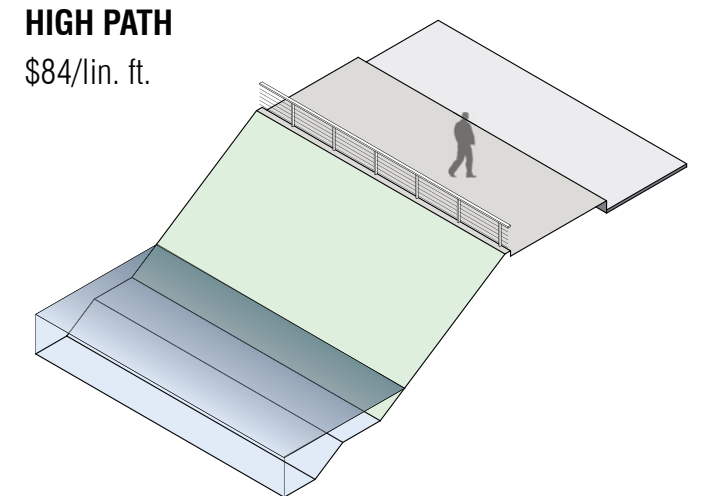


SOFT EDGE
\$55/lin. ft.



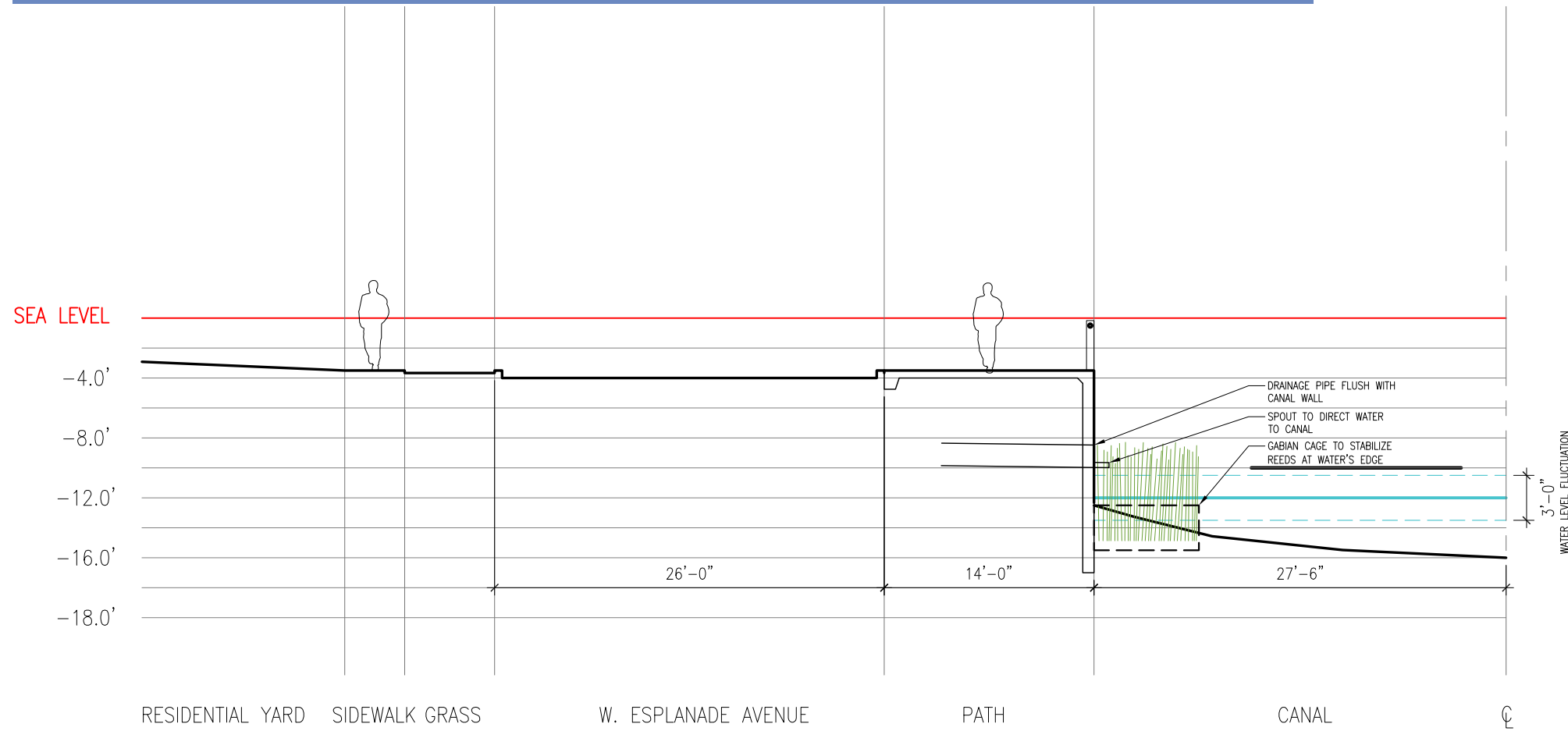
Green embankment with reeds, trees, grass and stabilization mats where necessary to anchor vegetation

HIGH PATH
\$84/lin. ft.



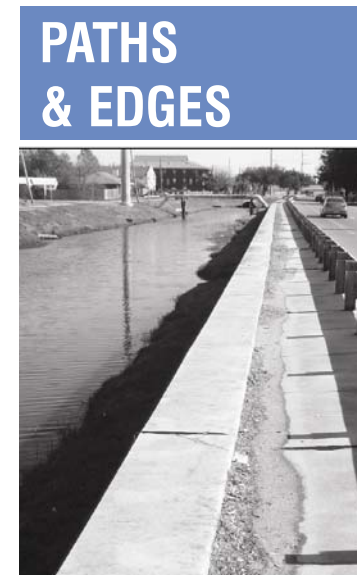
Path with a sloped embankment where canal width permits and program requires direct street access

BEAUTIFICATION TOOL KIT PROTOTYPES FOR IMMEDIATE IMPLEMENTATION

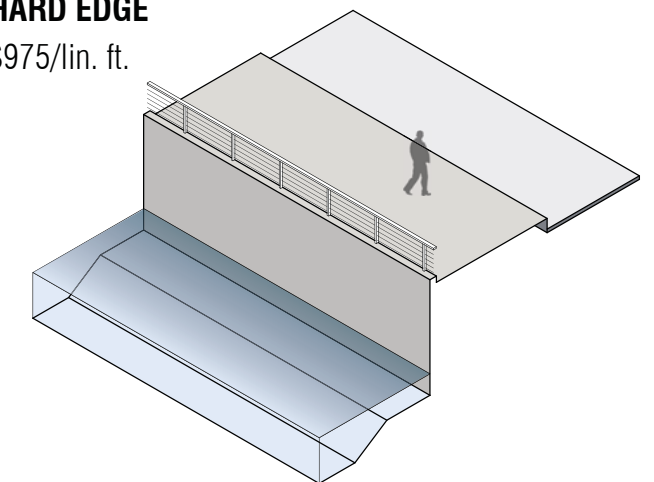


CONDITION C 1" = 10'-0"
5,300 LINEAR FEET

CONCRETE PATH WITH VERTICAL RETAINING WALL (AND SHEET PILE IF NECESSARY)
CATCH BASIN OUTFLOW CROPPED AT RETAINING WALL WITH PRECAST SPOUT ADDED
GABION BANK STABILIZATION

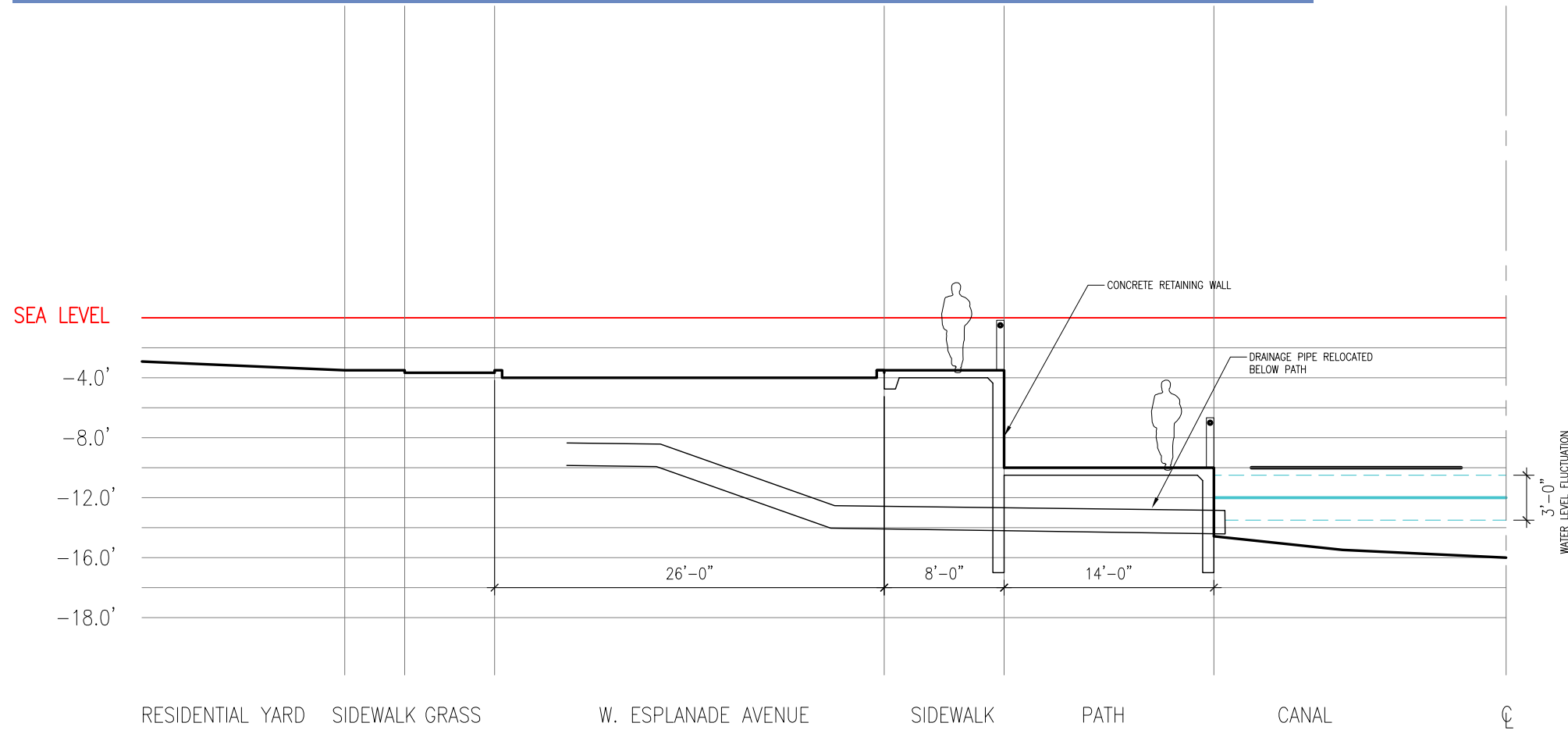


HARD EDGE
\$975/lin. ft.



Path at street level where canal right of way narrows

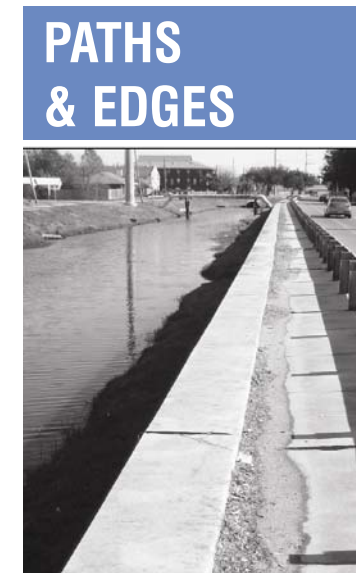
BEAUTIFICATION TOOL KIT PROTOTYPES FOR IMMEDIATE IMPLEMENTATION



CONDITION D 1" = 10'-0"

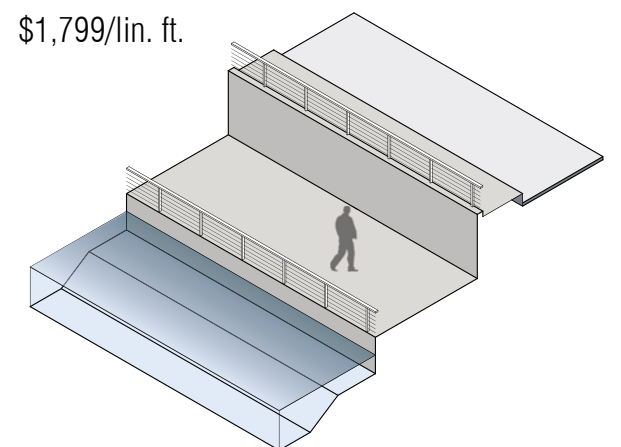
900 LINEAR FEET

- CONCRETE PATH ALONG CANAL WITH VERTICAL RETAINING WALL (AND SHEET PILE IF NECESSARY)
- SIDEWALK AT STREET LEVEL
- OUTFLOW PIPE RELOCATED BELOW WATERLINE



TIERED HARD EDGES

\$1,799/lin. ft.



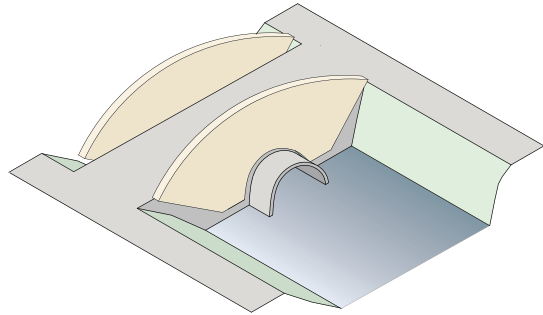
Paths at street and water levels extend urban fabric to the water's edge

BEAUTIFICATION TOOL KIT PROTOTYPES FOR IMMEDIATE IMPLEMENTATION

BRIDGES & CONDUITS

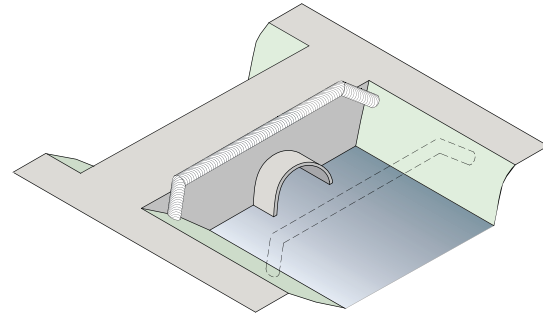


CONCRETE BRIDGE FACADES
\$57,000 per bridge



Cast in place concrete facades contribute to a family of similar bridges along the canal

RELOCATED CONDUIT
\$66,187

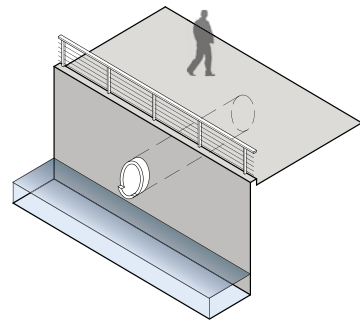


Unsightly utility conduits moved and concealed at vehicular crossings

OUTFLOW PIPES

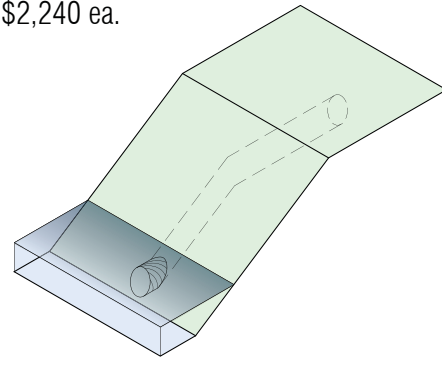


PRE-CAST SPOUT
\$2,790 ea.



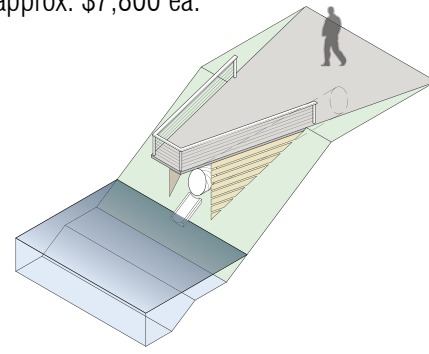
Pipe terminates in decorative concrete element at retaining wall

BELOW WATERLINE
\$2,240 ea.



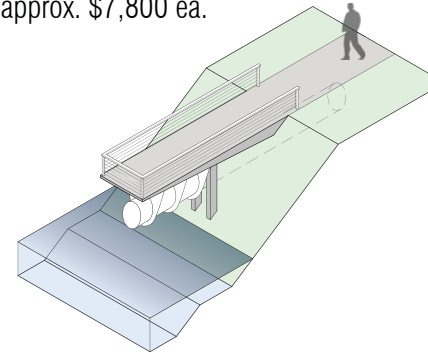
Pipe opening lowered to accommodate paths at the shoreline

DECK ENCLOSURE
approx. \$7,800 ea.



Pipe opening trimmed near the bank and enclosed in viewing platform

CANTILEVERED DECK
approx. \$7,800 ea.



Pipe attached to cantilevered viewing platform

VEGETATION & SURFACES



TREES



Swamp Red Maple
Acer rubrum



Bald Cypress
Taxodium distichum



River Birch
Betula nigra



Live Oak
Quercus virginiana

GRASSES & RUSHES



Muhly Grass
Muhlenbergia capillaris



Sand Cordgrass
Spartina bakeri



Soft Rush
Juncus effuscus

PERENNIALS



Louisiana Iris
Iris Louisiana hybrids



Swamp Sunflower
Helianthus angustifolius



Common Lady Fern
Athyrium filix-femina

PAVING



Concrete



Brick

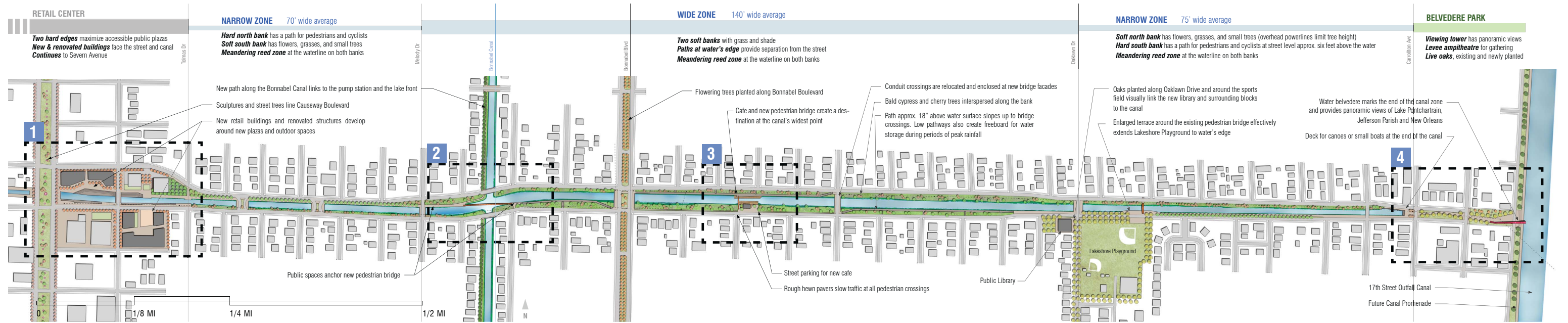


Rough hewn stone



Composite wood

URBAN DESIGN OPPORTUNITIES LONG TERM URBAN WATERWAY DEVELOPMENT



1 RETAIL & COMMERCIAL ZONE

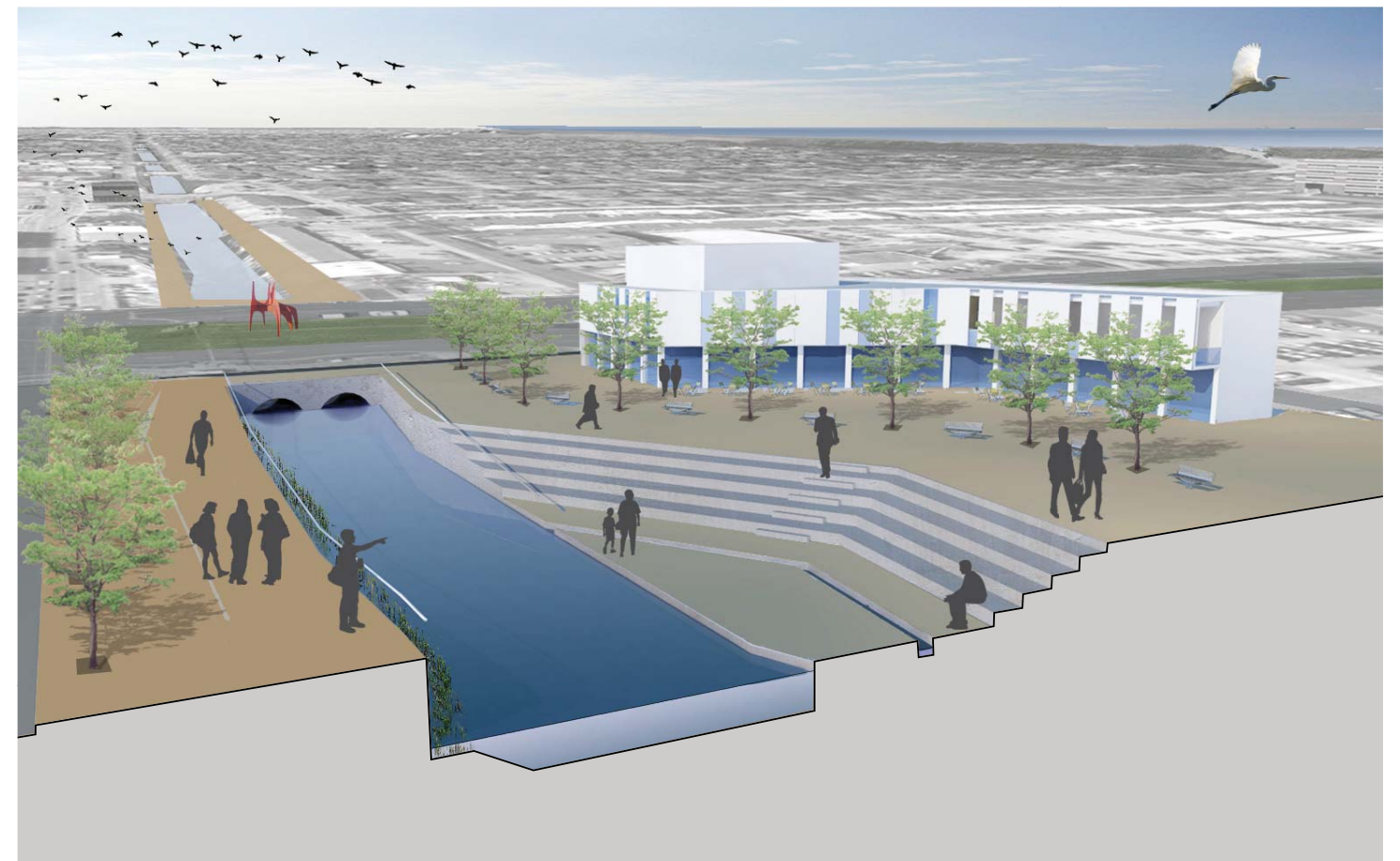
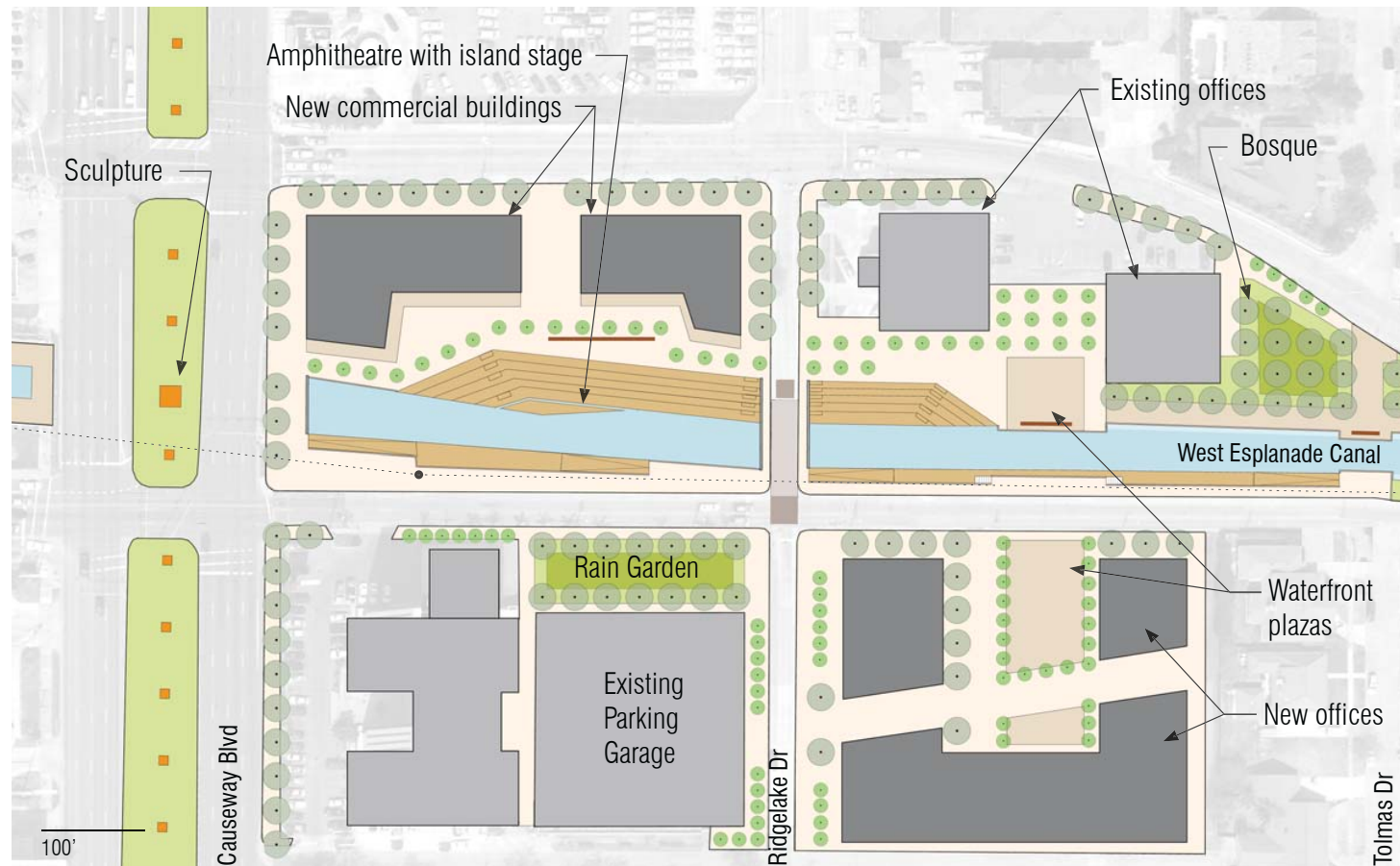


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- Sculptures on Causeway
- Retail corridor continues along canal to Severn Ave

ESTIMATED COST:

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* Excludes cost of new buildings and renovations



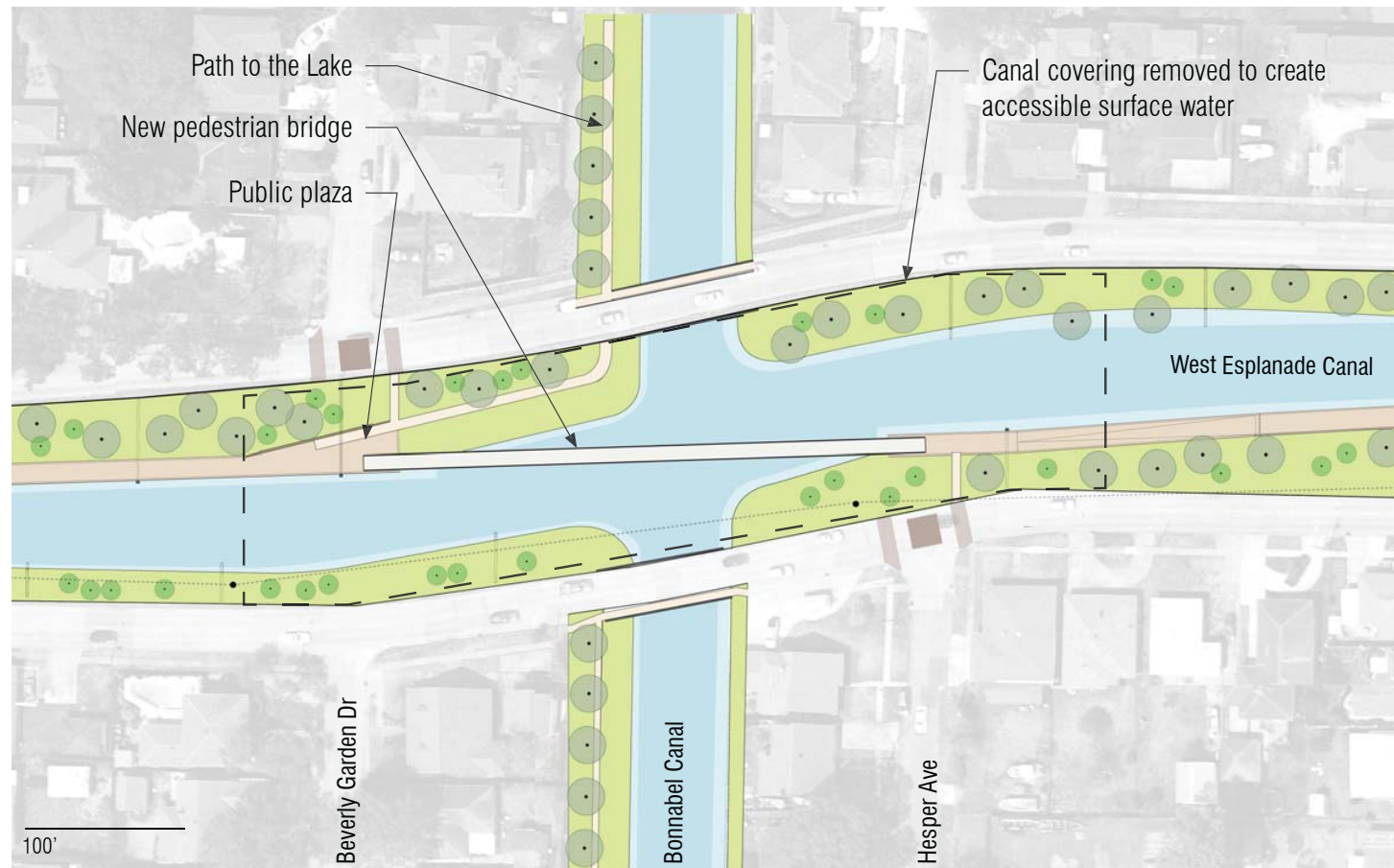
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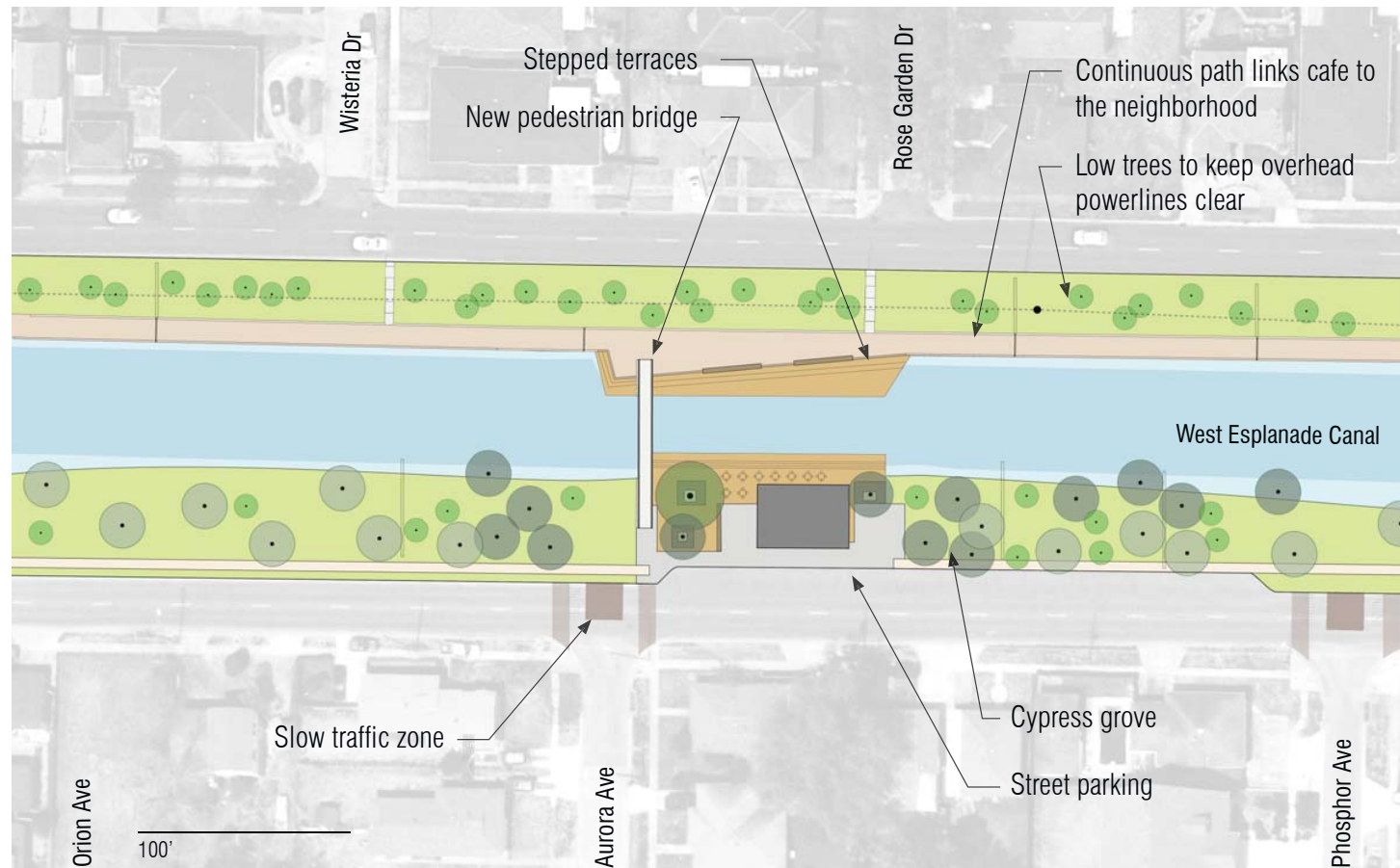
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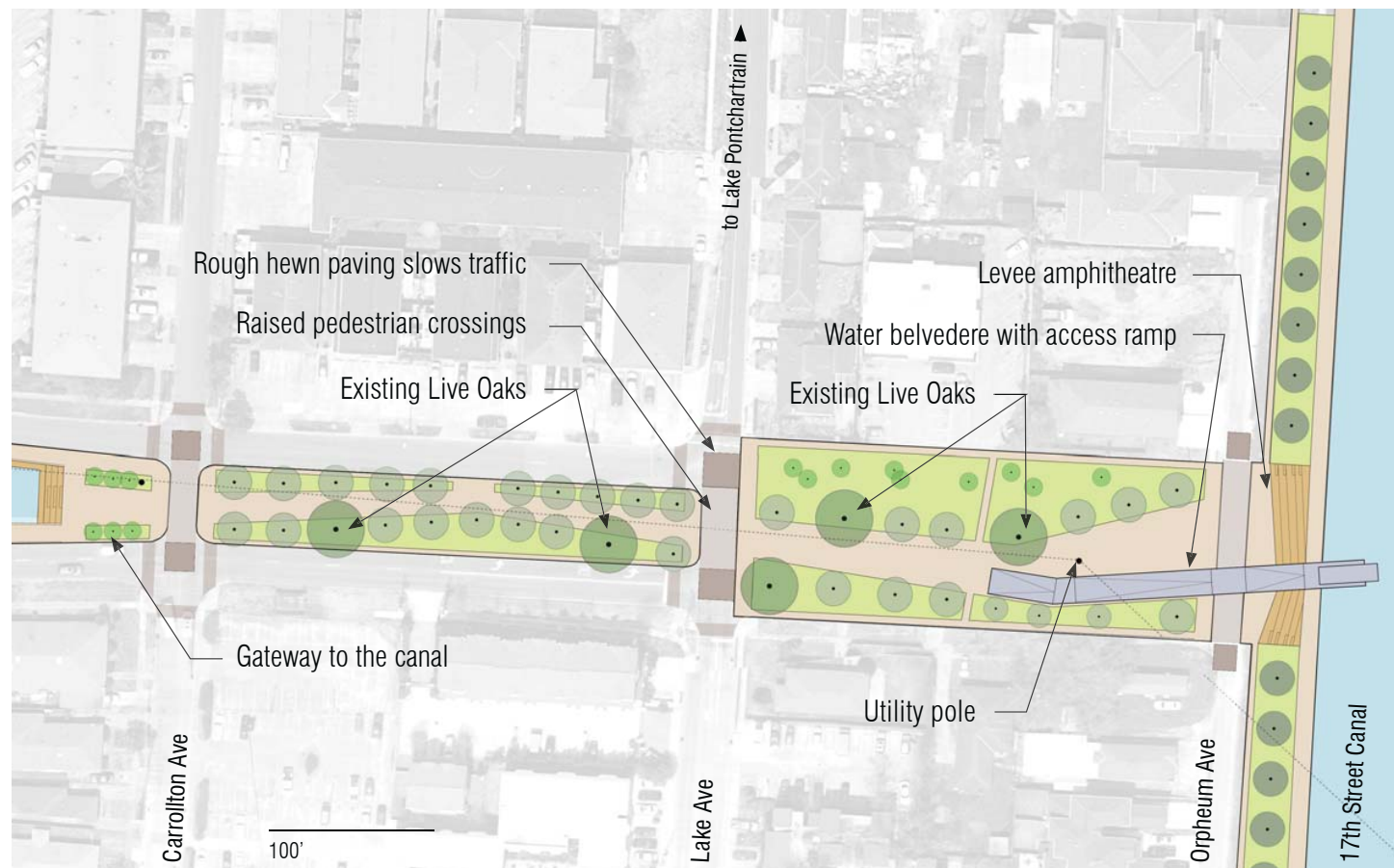
4 BELVEDERE PARK



ESTIMATED COST:
\$690,292*

- Water belvedere peers over floodwall
- Low-traffic stretch of West Esplanade converted to park between Lake and Orpheum Aves
- Slow traffic pedestrian zones bound park
- Amphitheatre built into levee below belvedere
- Grassy open space shaded by live oaks
- Gateway to the West Esplanade Canal
- 17th Street Canal promenade is possible in a future without floodwalls

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WEST ESPLANADE CANAL Design Competition

COST ESTIMATE

Item	Description	Qty	Units	Unit Material Cost (\$)	Total Cost (\$)	Remarks
Walkway - A						
1	Mobilization/Demobilization					
	Mobilization	1	lump	\$3,000	\$3,000	
	Demobilization	1	lump	\$3,000	\$3,000	
	Total Mob/Demob				\$6,000	
2	Earthwork					
	Anchor Mat (bank stabilization)	10765	sqyd	\$20	\$215,300	material and installation
	Sheet Piling	3460	lf	\$500	\$1,730,000	25' deep (excavation, material, installation)
	Total Earthwork				\$1,945,300	
3	Paving					
	14" Concrete Pathway (6" Thick)	4228.9	sqyd	\$55	\$232,589	Price in place
	Brick Pavers @ Edges of Pathway	10380	sqft	\$10	\$103,800	Range of \$7-\$20
	Base Course Material (6" Thick)	5382.2	sqyd	\$6	\$32,293	
	Geotextile	5382.2	sqyd	\$2	\$10,764	
	Total Paving				\$379,447	
4	Pre-Cast Concrete					
	Pre-Cast Concrete Facade (concealing sheet piling)	433	lump	\$500	\$216,500	6' X 8' X 6" Thick
	Total Pre-Cast				\$216,500	
	Total Walkway - A Costs				\$2,547,247	
Walkway - B						
1	Mobilization/Demobilization					
	Mobilization	1	lump	\$500	\$500	
	Demobilization	1	lump	\$500	\$500	
	Total Mob/Demob				\$1,000	
2	Earthwork					
	Anchor Mat (bank stabilization)	24389	sqyd	\$20	\$487,778	material and installation
	Total Earthwork				\$487,778	
	Total Walkway - B Costs				\$488,778	
Walkway - C						
1	Mobilization/Demobilization					
	Mobilization	1	lump	\$5,000	\$5,000	
	Demobilization	1	lump	\$5,000	\$5,000	
	Total Mob/Demob				\$10,000	
2	Earthwork					
	Sheet Piling	4400	lf	\$1,000	\$4,400,000	50' deep (excavation, material, installation)
	Total Earthwork				\$4,400,000	
3	Paving					
	14" Concrete Pathway (6" Thick)	5377.8	sqyd	\$55	\$295,778	Price in place
	Brick Pavers @ Edges of Pathway	13200	sqft	\$10	\$132,000	Range of \$7-\$20
	Base Course Material (6" Thick)	6844.4	sqyd	\$6	\$41,067	
	Geotextile	6844.4	sqyd	\$2	\$13,689	
	Total Paving				\$482,533	
4	Pre-Cast Concrete					
	Pre-Cast Concrete Facade (concealing sheet piling)	550	lump	\$500	\$275,000	6' X 8' X 6" Thick
	Total Pre-Cast				\$275,000	
	Total Walkway - C Costs				\$5,167,533	
Walkway - D						
1	Mobilization/Demobilization					
	Mobilization	1	lump	\$5,000	\$5,000	
	Demobilization	1	lump	\$5,000	\$5,000	
	Total Mob/Demob				\$10,000	
2	Earthwork					
	Sheet Piling (@ sidewalk and pathway edge)	900	lf	\$1,500	\$1,350,000	25' and 50' deep (exc, material, instal)
	Total Earthwork				\$1,350,000	
3	Paving					
	14" Concrete Pathway (6" Thick)	1100	sqyd	\$55	\$60,500	Price in place
	8" Concrete Sidewalk (6" Thick)	800	sqyd	\$55	\$44,000	Price in place
	Brick Pavers @ Edges of Pathway	2700	sqft	\$10	\$27,000	Range of \$7-\$20
	Base Course Material (6" Thick)	1900	sqyd	\$6	\$11,400	
	Geotextile	1900	sqyd	\$2	\$3,800	
	Total Paving				\$146,700	
4	Pre-Cast Concrete					
	Pre-Cast Concrete Facade (concealing sheet piling)	226	lump	\$500	\$113,000	6' X 8' X 6" Thick
	Total Pre-Cast				\$113,000	
	Total Walkway - D Costs				\$1,619,700	
Canal Crossing						
1	Mobilization/Demobilization					
	Mobilization	1	lump	\$5,000	\$5,000	
	Demobilization	1	lump	\$5,000	\$5,000	
	Total Mob/Demob				\$10,000	
2	Earthwork					
	Excavation/Haul	4333.3	cuyd	\$5	\$21,667	
	50' deep Sheetpile wall	700	lf	\$1,000	\$700,000	
	Demo conc culverts	510	cuyd	\$20	\$10,200	
	Temp levees in canal for dewatering + dewatering labor	1	lump	\$30,000	\$30,000	Equipment & operator on hand in case of rain
	Total Earthwork				\$761,867	
3	Concrete work					
	Concrete for new wingwalls	180	cuyd	\$250	\$45,000	
	Total Concrete				\$45,000	
4	300 ft x 6 ft Pedestrian Bridge					
	Composite decking	1800	sqft	\$3.75	\$6,750	Material Only
	40 ft timber piles	20	ea	\$800	\$16,000	\$20 per lf installed
	2 x 10 Composite framing	800	lf	\$0.75	\$600	Material Only
	Total Pedestrian Bridge				\$23,350	
	Total Canal Crossing Costs				\$840,217	
Waterfront Café						
1	Mobilization/Demobilization					
	Mobilization	1	lump	\$1,500	\$1,500	
	Demobilization	1	lump	\$1,500	\$1,500	
	Total Mob/Demob				\$3,000	
2	Earthwork					
	Clearing & grubbing	13500	sqft	\$0.10	\$1,350	
	Total Earthwork				\$1,350	
3	Paving					
	Permeable paving	670	sqyd	\$100	\$67,000	
	Total Paving				\$67,000	
4	75 ft x 6 ft Pedestrian Bridge					
	Composite decking	450	sqft	\$7.00	\$3,150	\$3.75 material
	40 ft timber piles	10	ea	\$800	\$8,000	\$20 per lf installed
	2 x 10 Composite framing	250	lf	\$1.00	\$250	Material Only
	Total Piping Installation (new/reroute)				\$11,400	
5	N&S side Timber Decking (pile supported near & over water)					
	40 ft timber piles	45	ea	\$800	\$36,000	\$20 per lf installed
	Composite decking	3000	sqft	\$7.00	\$21,000	\$3.75 material
	2 x 10 Composite framing	1500	lf	\$1.00	\$1,500	Material Only
	Total Timber Decking				\$58,500	
	Total Waterfront Café Costs				\$141,250	

← SEE DRAWINGS "A-1" & "A-2" FOR DETAILS

← SEE DRAWING "B" FOR DETAILS

← SEE DRAWING "C" FOR DETAILS

WEST ESPLANADE CANAL Design Competition

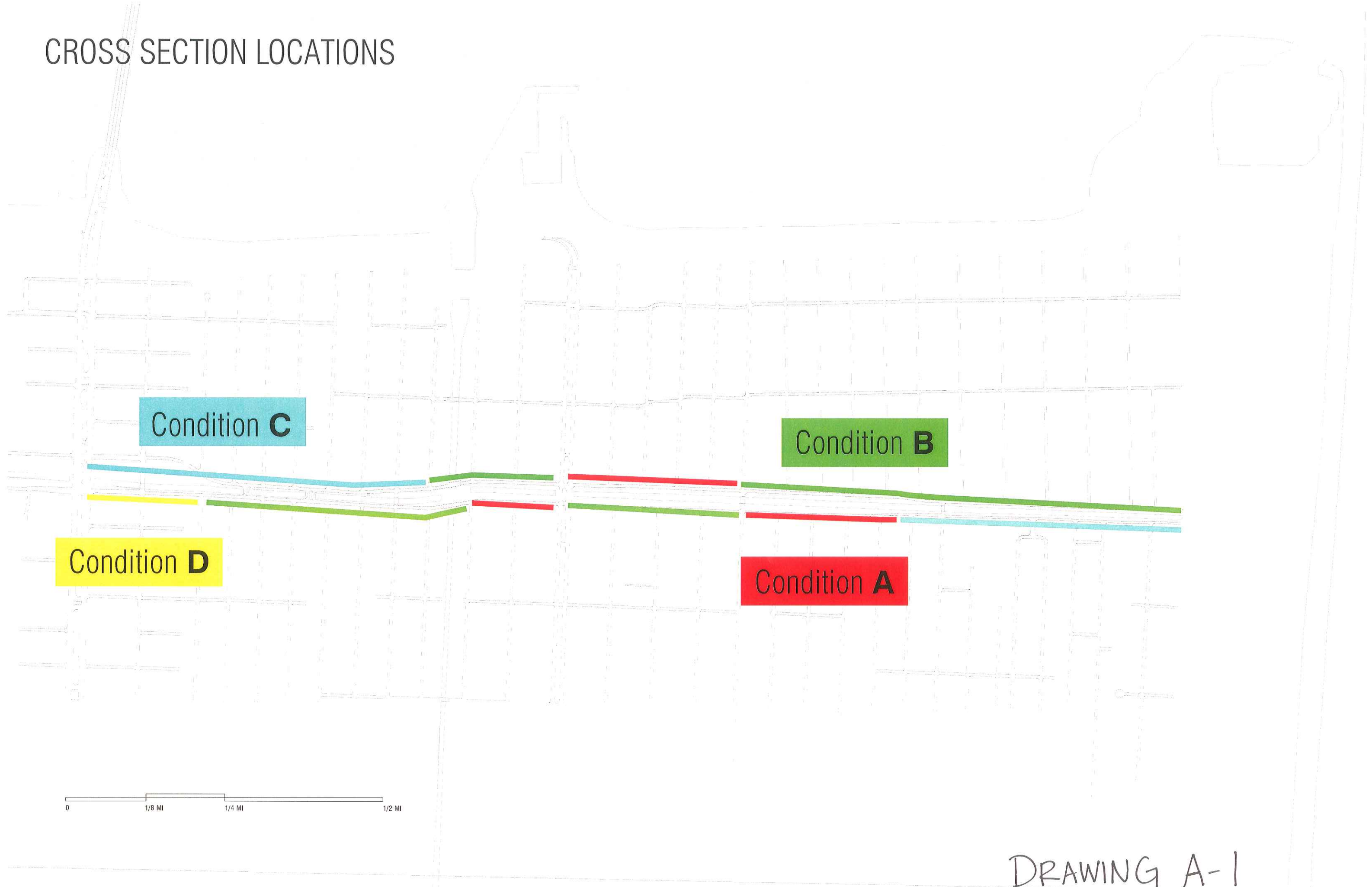
COST ESTIMATE

Belvedere Park						← SEE DRAWINGS "D" & "E" FOR DETAILS
1	<i>Mobilization/Demobilization</i>					
	Mobilization	1	lump	\$3,000	\$3,000	
	Demobilization	1	lump	\$3,000	\$3,000	
	Total Mob/Demob				\$6,000	
2	<i>Earthwork</i>					
	Remove W Esplanade Ave	15000	sqft	\$1	\$15,000	
	Add sod	1.5	msf	\$600	\$900	1500 sqft; msf = 1000 sf
	Landscaping	18750	sqft	\$0.50	\$9,375	
	Total Earthwork				\$25,275	
3	<i>Paving</i>					
	Brick Pavers	25000	sqft	\$10	\$250,000	
	Composite decking ramp	1350	sqft	\$7.00	\$9,450	\$3.75 for material
	cast in place concrete amphitheatre steps	7500	sqft	\$15	\$112,500	
	Base Course Material (6" Thick)	833	sqyd	\$6	\$5,000	
	Geotextile	833	sqyd	\$2	\$1,667	
	Total Paving				\$378,617	
4	<i>Structural Steel Tower with foundation</i>					
	W8x31 main truss chords	14	tons	\$5,000	\$70,000	
	W6x20 diagonals	13	tons	\$3,000	\$65,000	
	Steel fencing material	9	tons	\$3,000	\$27,000	
	C12x20.7 steel stair stringers	5	tons	\$5,000	\$25,000	
	Steel stair treads	6	tons	\$3,000	\$18,000	
	Misc steel connections, etc	5	tons	\$5,000	\$25,000	
	Concrete foundation	44	cuyd	\$600	\$26,400	
	60 ft timber piles	20	ea	\$1,200	\$24,000	\$20 per lf installed.
	Total Tower and Foundation				\$280,400	
	Total Belvedere Park Costs				\$690,292	
Retail and Commercial Zone						← SEE DRAWING "F" FOR DETAILS
1	<i>Mobilization/Demobilization</i>					
	Mobilization	1	lump	\$3,000	\$3,000	
	Demobilization	1	lump	\$3,000	\$3,000	
	Total Mob/Demob				\$6,000	
2	<i>Earthwork</i>					
	Grub and Clear	80000	sqft	\$0.100	\$8,000	
	Landscaping	95000	sqft	\$0.500	\$47,500	
	Rain garden/bioswale	9000	sqft	\$1	\$9,000	
	Total Earthwork				\$64,500	
3	<i>Paving</i>					
	North Bank plaza - Brick Pavers	17000	sqft	\$10	\$170,000	
	South Bank plaza - Brick Pavers	13000	sqft	\$10	\$130,000	
	cast in place concrete amphitheatre steps	22500	sqft	\$15	\$337,500	
	Base Course Material (6" Thick)(crushed limestone)	5833	sqyd	\$6	\$34,998	
	Total Paving				\$672,498	
	Total Retail and Commercial Zone Costs				\$742,998	
Utility Pipe Bridge						
1	<i>Mobilization/Demobilization</i>					
	Mobilization	1	lump	\$2,000	\$2,000	
	Demobilization	1	lump	\$2,000	\$2,000	
	Total Mob/Demob				\$4,000	
3	<i>Bridge Facade</i>					
	Cast-In-Place Bridge Facade	80	cuyd	\$550	\$44,000	
	Pre-Cast Concrete Facade Panels	26	lump	\$500	\$13,000	6' X 8' X 6" Thick
	Total Paving				\$57,000	
4	<i>Piping</i>					
	12" C-900 PVC	2320	lf	\$20	\$46,400	530 lf = avg distance for one conduit to be relocated.
	Trenching (and backfilling)	2120	lf	\$6	\$12,720	
	Bedding Material	706.67	sqyd	\$10	\$7,067	Trench width = Pipe Dia + 12" each side
	Total Piping Installation (new/reroute)				\$66,187	
	Total Utility Pipe Bridge Costs				\$127,187	
Outflow Pipe Modifications						← SEE DRAWING "G" FOR DETAILS
1	<i>Outfall Concealed Underwater</i>					
	Trenching and Backfilling	40	lf	\$6	\$240	
	Removing/Demolishing Existing Pipe	40	lf	\$10	\$400	
	Installation new 24" CMP	40	lf	\$40	\$1,600	
	Total Outfall Concealed Underwater				\$2,240	
2	<i>Pipe Termination in Concrete Feature</i>					
	Trenching and Backfilling	30	lf	\$6	\$180	
	Removing/Demolishing Existing Pipe	31	lf	\$10	\$310	
	24" RCP Extension	32	lf	\$50	\$1,600	
	Precast Concrete Panel (façade) (8'x6'x6")	1	ea	\$500	\$500	
	Installation crew; 4 person w/heavy equipment	1	hr	\$200	\$200	
	Total Pipe Termination in Concrete Feature				\$2,790	
3	<i>Viewing Deck over Outfall</i>					
	Timber Deck with Handrails	1	lump	\$3,000	\$3,000	
	40' Timber Piles (15" dia.)	6	ea	\$800	\$4,800	\$20 per lf installed
	Total Viewing Deck over Outfall				\$7,800	
4	<i>High Grass/Reeds Outfall Concealment</i>					
	Turf Reinforcement Mat	50	sqyd	\$22	\$1,100	Used 50 sqyd for single section
	Seeding	0.0073	acre	\$4,000	\$29	Used 320 sqft for single section
	Total High Grass/Reeds Outfall Concealment				\$1,129	
	Total Outflow Pipe Modification Costs				\$13,959	
Total Project Cost					\$12,365,201	

Notes:

1. Total Project Cost for all alternates does not include Outflow Pipe Modifications costs.
2. Estimated costs for Outflow Pipe Modifications are for a single location (pipe outfall) only.

CROSS SECTION LOCATIONS

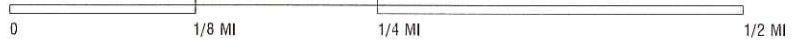


Condition **D**

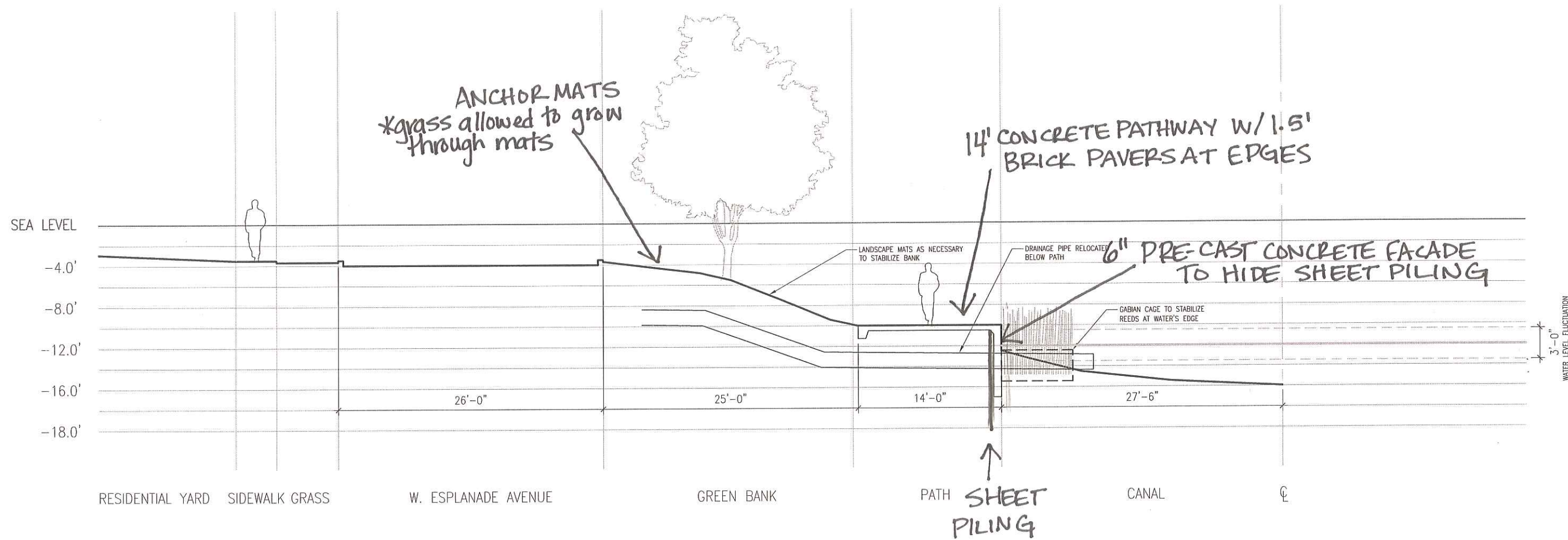
Condition **C**

Condition **A**

Condition **B**

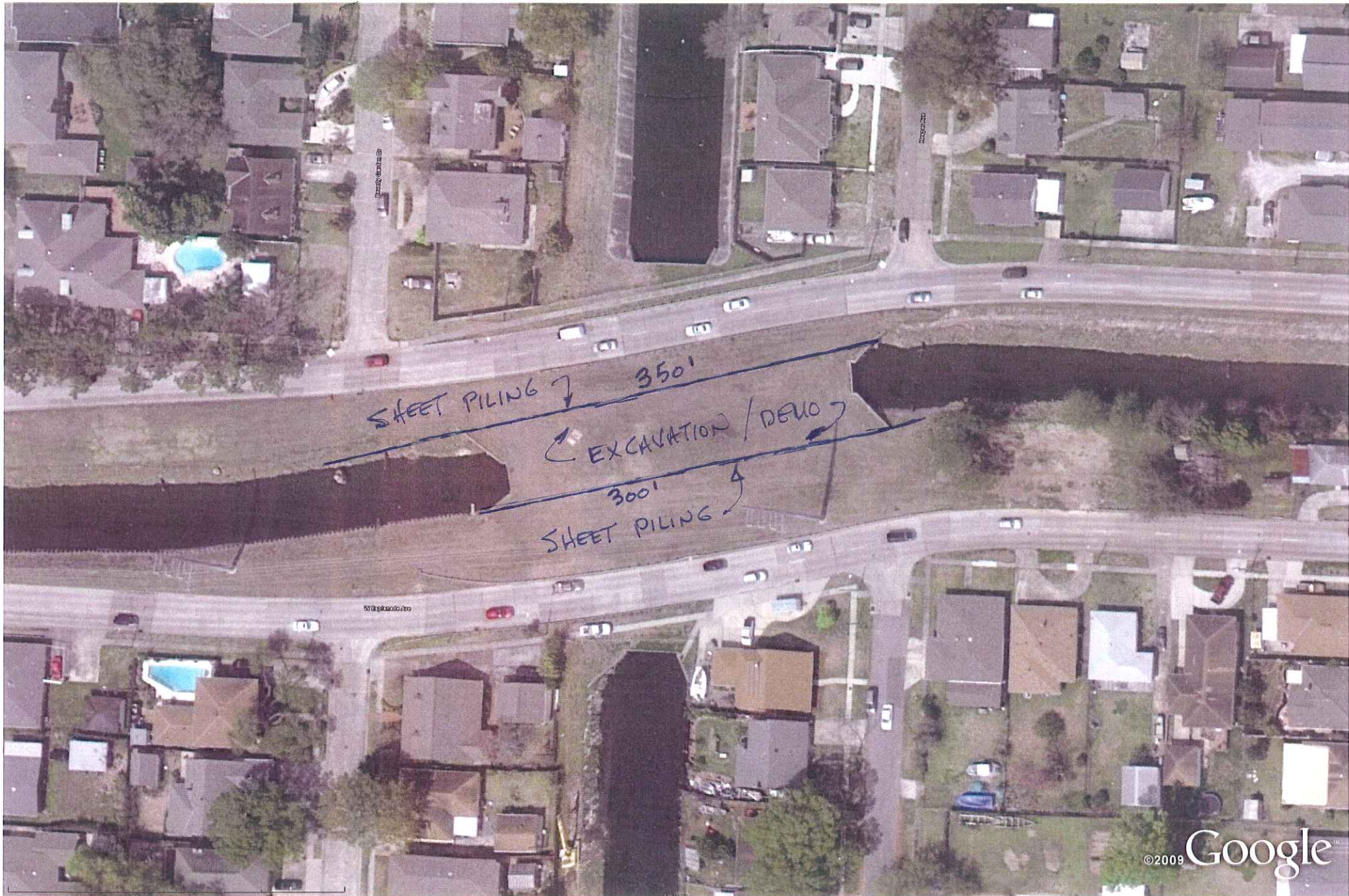


DRAWING A-1

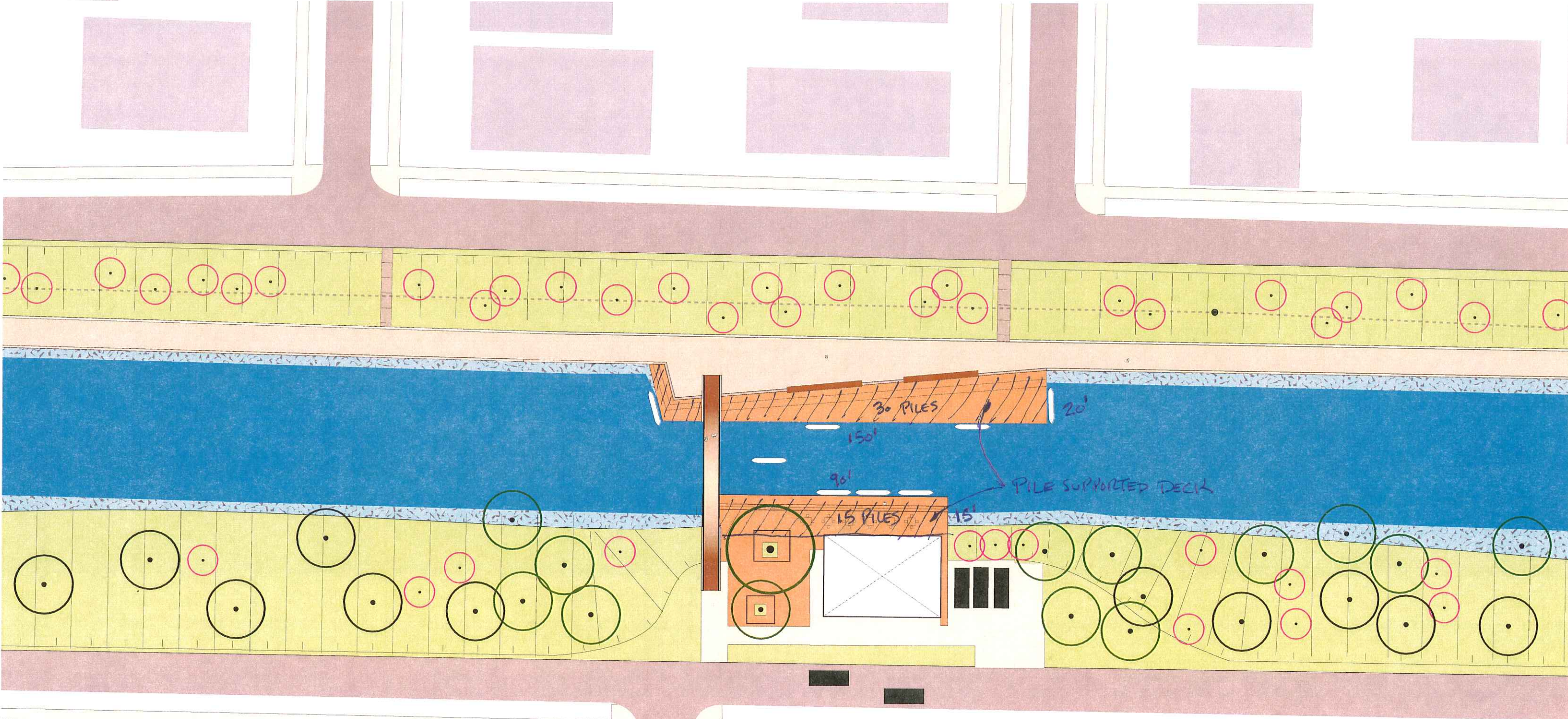


CONDITION A 1" = 10'-0"
 3,460 LINEAR FEET

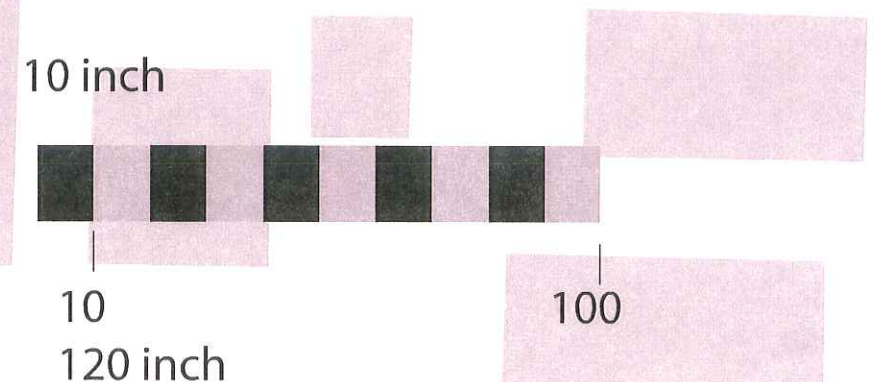
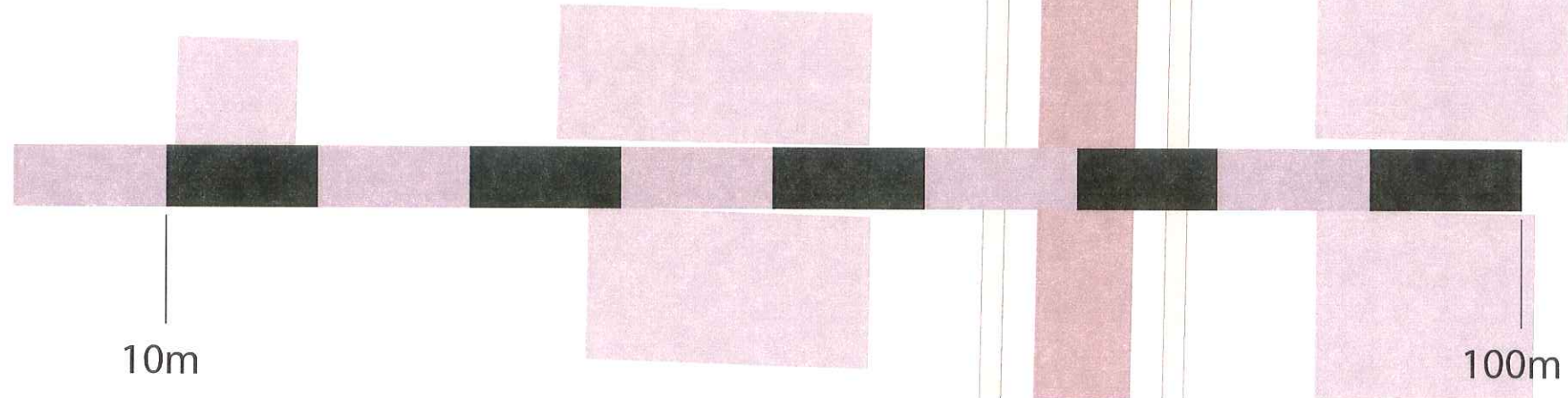
CONCRETE PATH AT WATERS EDGE
 CATCH BASIN OUTFLOW RELOCATED BELOW WATERLINE
 GABION AND LANDSCAPE MAT STABILIZATION



DRAWING B



BEER GARDEN

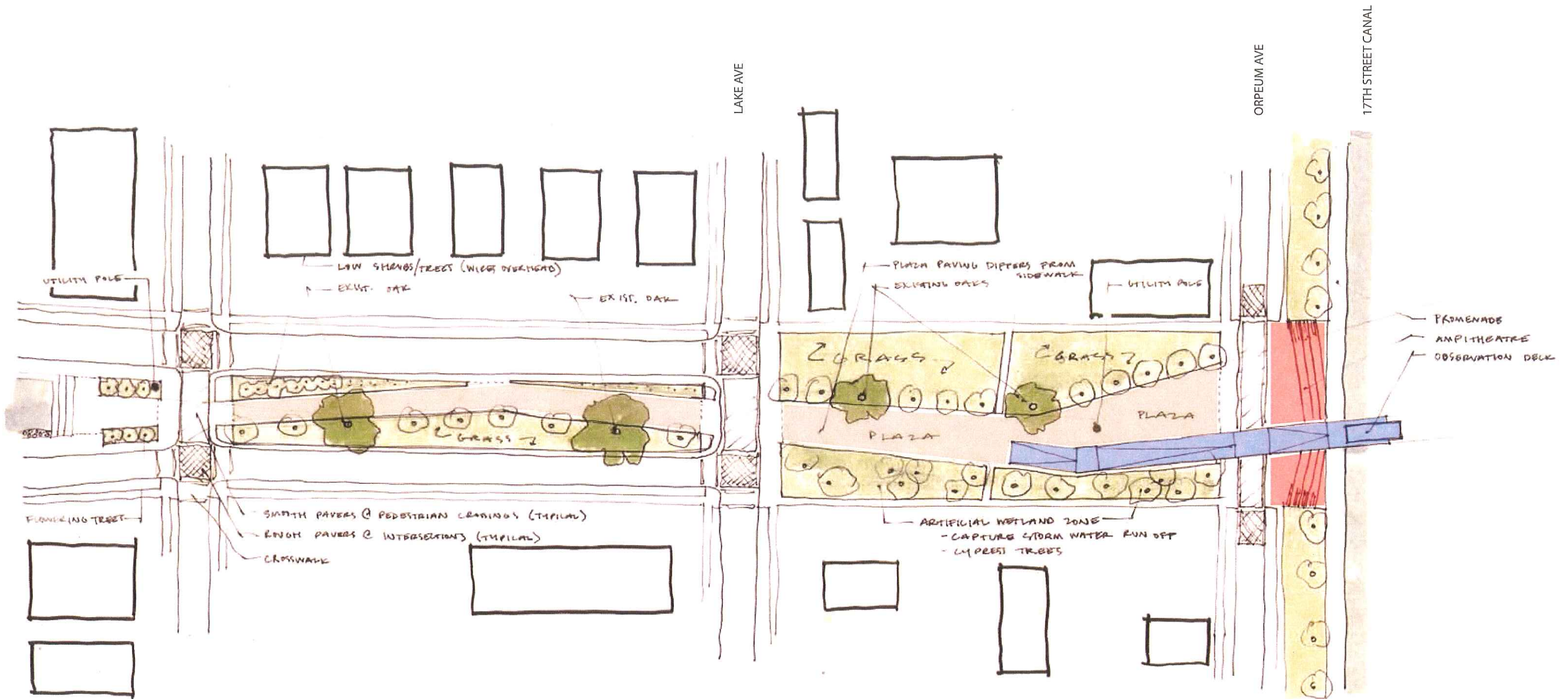


BEER GARDEN

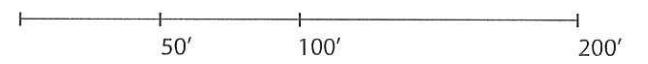
DRAWING C



DRAWING D

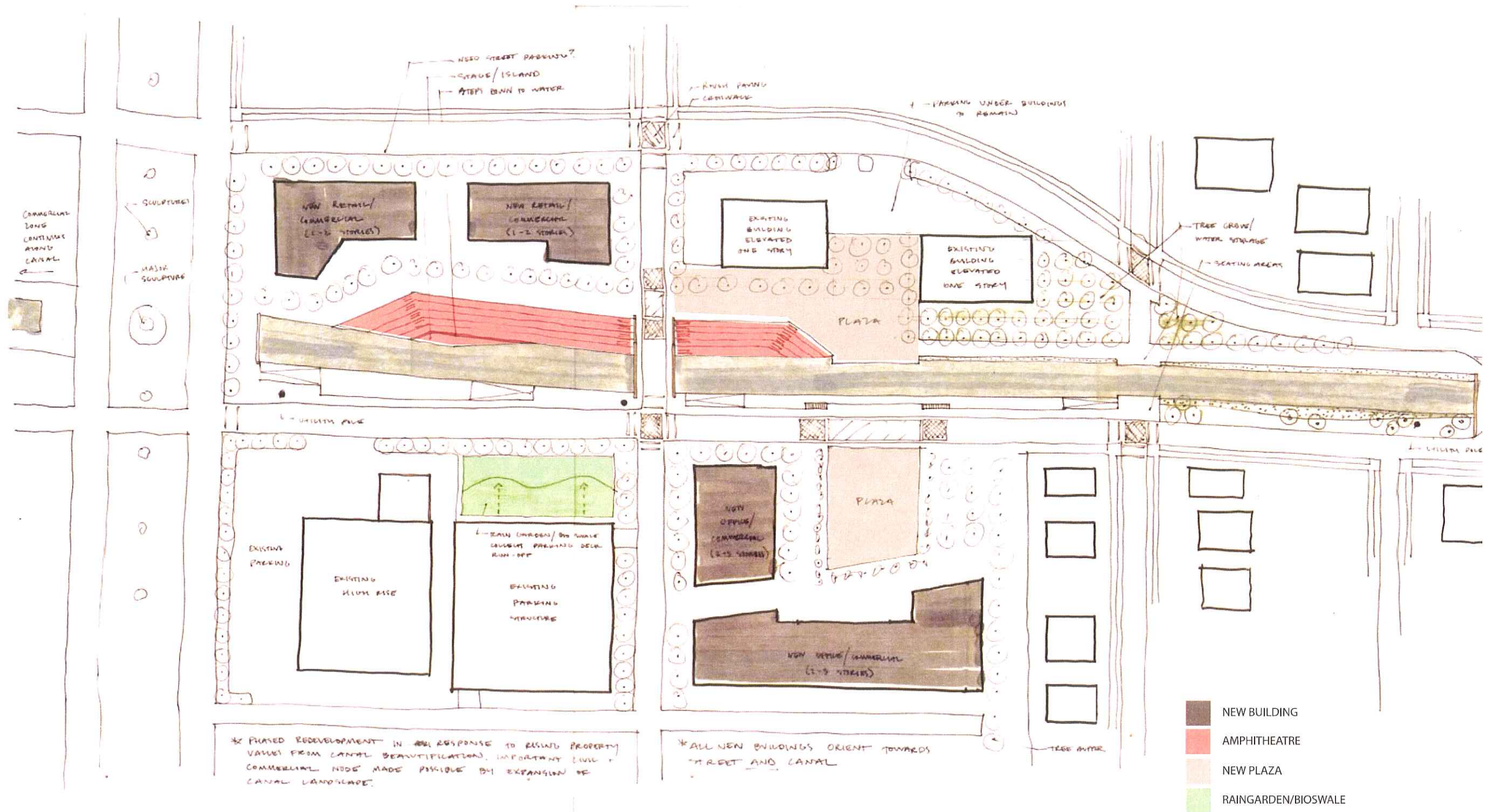


- AMPHITHEATRE
- NEW PLAZA
- RAMP & TOWER



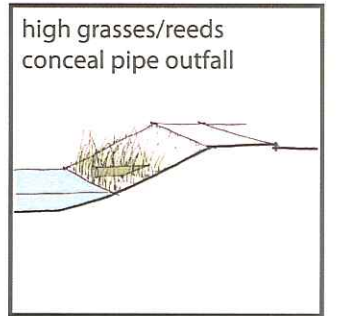
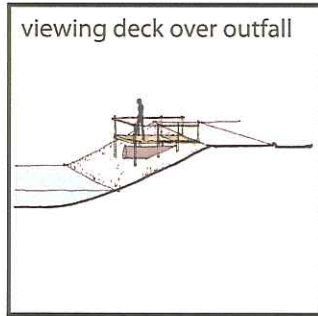
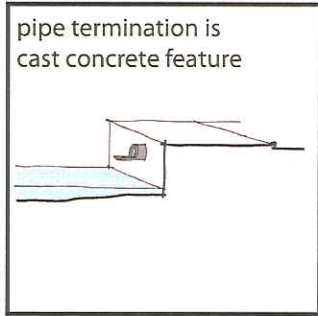
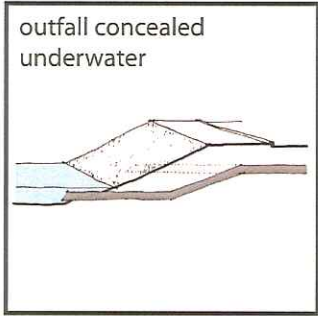
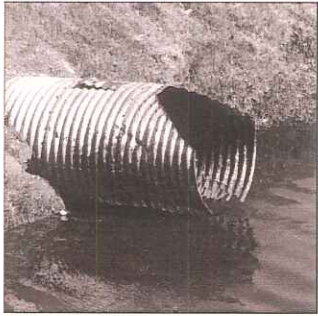
4 TOWER PARK plan

DRAWING E



1 COMMERCIAL ZONE plan

OUTFLOW PIPES



Drawing G

WEST ESPLANADE CANAL Design Competition

POTENTIAL FUNDING SOURCES

The development and implementation of a strategy to improve the West Esplanade Canal synergizes with many planned and ongoing efforts related to water management and community development in the New Orleans area. These include:

Greater New Orleans Foundation Coastal 5+1 Initiative

<http://www.gnof.org/coastal-51-initiative/>

The Coastal 5+1 Initiative will empower diverse communities to confront pressing coastal issues, as defined by local residents working in conjunction with regional and national experts. For the first time in recent history, Louisiana's coastal communities are beginning to recognize that they are bound by common challenges in the environment, economy, and community leadership. This initiative will empower new leaders to deal with new opportunities and realities in the face of failing ecosystems and global climate change. The Coastal 5+1 Initiative seeks to connect emerging leaders with immediate, concrete solutions to long-term problems created by marginalized economies, poor planning, and environmental degradation.

This initiative has already awarded grants to support local organizations in the field of water management and ecological restoration, and development along the West Esplanade Canal may be targeted for philanthropic or public/private partnership funding.

Greater New Orleans, Inc. Water Management Strategy

<http://gnoinc.org/>

Announced in March, GNO, Inc.'s Water Management Strategy will be developed across the east bank of Jefferson, Orleans and St. Bernard Parishes. An effective Water Management Strategy will accrue public benefits, increase quality of life, incorporate sustainability and environmental concerns, and provide a platform for economic growth. The strategy has the following goals:

- * Reduce flood hazards to people and property
- * Use storm water as a resource
- * Increase flexibility and adaptive water management capacity
- * Enable better ground water management and minimize soil subsidence
- * Reduce costs, energy use, and emissions of water management infrastructure
- * Protect and improve environmental quality and sustainability, and well being of open water and habitats

Pilot projects will be developed as part of the Water Management Strategy, and the West Esplanade Canal is a prime candidate.

Additional funding may be supported by federal initiatives, many of which have already been successfully applied in the New Orleans region. These include:

HUD/DOT/EPA Sustainable Communities Initiative

This initiative has funded the Claiborne Corridor Plan: Leveraging Infrastructure to Build Inter-parish Access and Equity. From a community building perspective, the West Esplanade Canal is well positioned to apply for these funds.

Community Development Block Grants

Finally, a revitalized West Esplanade Canal may partially pay for itself. Increased economic activity, elevated property values and a strengthened tax base resulting from strategic development may spur additional municipal investment in the canal beautification project.