



# **The 7th Ward I-10 Corridor Stormwater Runoff Management**

## **Flood Investigation and Schematic Design Package**



Funding for the 7th Ward Flood Investigation Study and Design was made possible by support provided by the National Academy of Science and Engineering Gulf Research Program. Grant Number 2000013787 “Community Ownership Model for the Design of Nature-Based Along the N. Claiborne Corridor” was awarded to Healthy Community Resources & Advocacy, DBA Healthy Community Services, Dr. Angela M. Chalk, Executive Director.

This project was a resident driven project led by Dr. Chalk, Principal Investigator; Kimberly Doley, Co-Investigator, Water Wise Gulf South; Jeffrey Supak, Co-Investigator, Water Wise Gulf South; and Visioning Session Committee Members: Arsene DeLay, Beverly Swinney, Cynthia Walters, Jasmine Pettie, Kirk Anthony Bernard and Joel Holton

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# Narrative

Water Wise Gulf South (WWGS) and Healthy Community Services (HCS) selected Batture to provide landscape architectural design services for a community-driven green infrastructure project located in the 7th Ward neighborhood of New Orleans. The project area includes a series of Louisiana Department of Transportation and Development (DOTD)–owned sites along and beneath Interstate 10, extending from Hunter’s Field at the intersection of St. Bernard Avenue and North Claiborne Avenue to lots located to the east of Elysian Fields Avenue.

This project builds upon the ASLA Legacy Project and continues its mission to prioritize green infrastructure as a means of managing stormwater runoff from Interstate 10 while addressing long-standing environmental and community concerns. Batture analyzed feedback from surrounding residents and stakeholders to better understand local needs, preferences, and challenges collected from a robust engagement process led by WWGS and HCS. Insights gathered through community input, ASLA mapping, DOTD and City of New Orleans’ Parks and Parkways representatives, and Batture’s own site analysis directly inform the design approach. Upon completion of this outreach, Batture created a holistic schematic design package focused on equitable, effective, and maintainable stormwater management solutions.

Analysis revealed significant stormwater accumulation beneath and between the elevated I-10 overpass lanes, as well as persistent ponding at key intersections, including the former Allen Street right-of-way, Elysian Fields, and intermediate crossings along the corridor. These areas have

been prioritized for green infrastructure interventions. The proposed design framework features a continuous dry creek system functioning as a French drain to capture and convey runoff between street underpasses. Rain gardens are strategically located at each intersection to intercept and treat stormwater, while depressed open green spaces provide detention capacity and enhance neighborhood connectivity.

Maintenance and long-term performance are central to the design strategy. A multi-use path winds along the corridor, supporting both maintenance access and recreational use protected from the elements for community members. This path not only activates the space but also promotes visibility and stewardship, helping to ensure the long-term success of the green infrastructure system.

Collectively, the dry creek beds, rain gardens, detention areas, trees, and permeable paving are designed to manage approximately **8740 cubic yards (1.7 million gallons) of stormwater. See page 18 of this booklet for a detailed breakdown.** This is four times the amount required by the city zoning ordinance which mandates development to manage the first 1.25” of runoff in a 10 year storm. Through an integrated, community-informed approach, the project transforms underutilized infrastructure spaces into resilient, multifunctional landscapes that address flooding, improves environmental health, and provide meaningful benefits to the 7th Ward community.









**Analysis & Programming**



# HUNTER'S FIELD SITES

## EXISTING CONDITION ANALYSIS

MAP LEGEND

---

LADOTD RIGHT OF WAY / CITY PROPERTY

---

POTENTIAL PROJECT SITES (LADOTD OWNED)

●

EXISTING VEGETATION

→

SLOPE DIRECTION

■

PONDING

→

PEDESTRIAN PATH

→

VEHICULAR PATH

---

BLOCKED INTERSTATE RUNOFF

▲

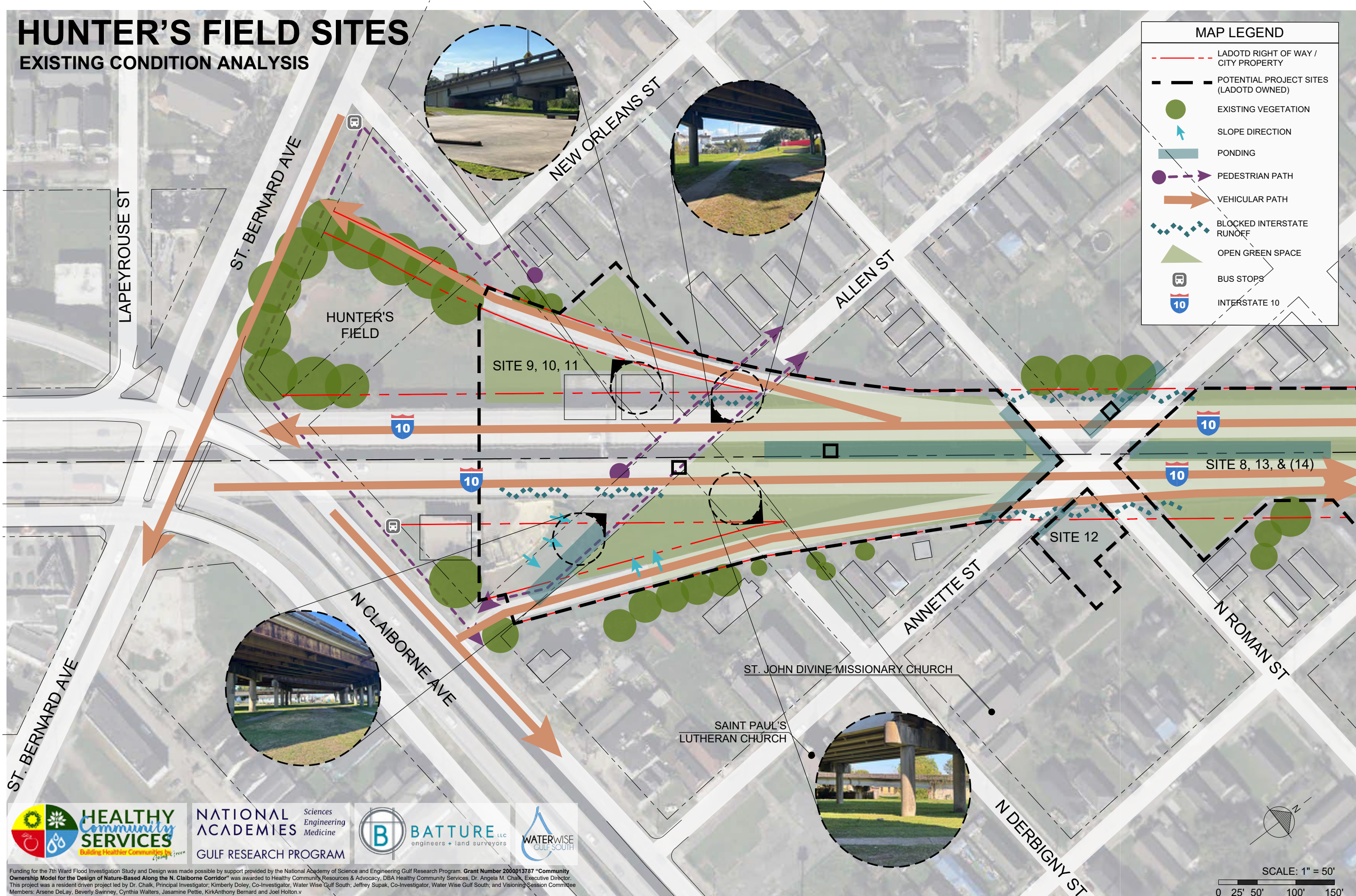
OPEN GREEN SPACE

Ⓡ

BUS STOPS

10

INTERSTATE 10



HEALTHY

Community

SERVICES

NATIONAL ACADEMIES

Sciences Engineering Medicine

GULF RESEARCH PROGRAM

BATTURE

LLC

engineers + land surveyors

WATERWISE

GULF SOUTH

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0

25'

50'

100'

150'

SCALE: 1" = 50'




# HUNTER'S FIELD SITES

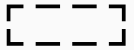
## GREEN INFRASTRUCTURE PROGRAMMING

- 01 Allen Street "Abandoned" Right of Way
- 02 I-10 "Neutral Ground" Understory
- 03 Claiborne Ave - I-10 On-Ramp Green Space
- 04 Annette Street - Roman Street Intersection


MAP LEGEND




PROGRAM NODE




I-10 CONCRETE STRUCTURES




SUITABLE AREAS FOR GREEN INFRASTRUCTURE



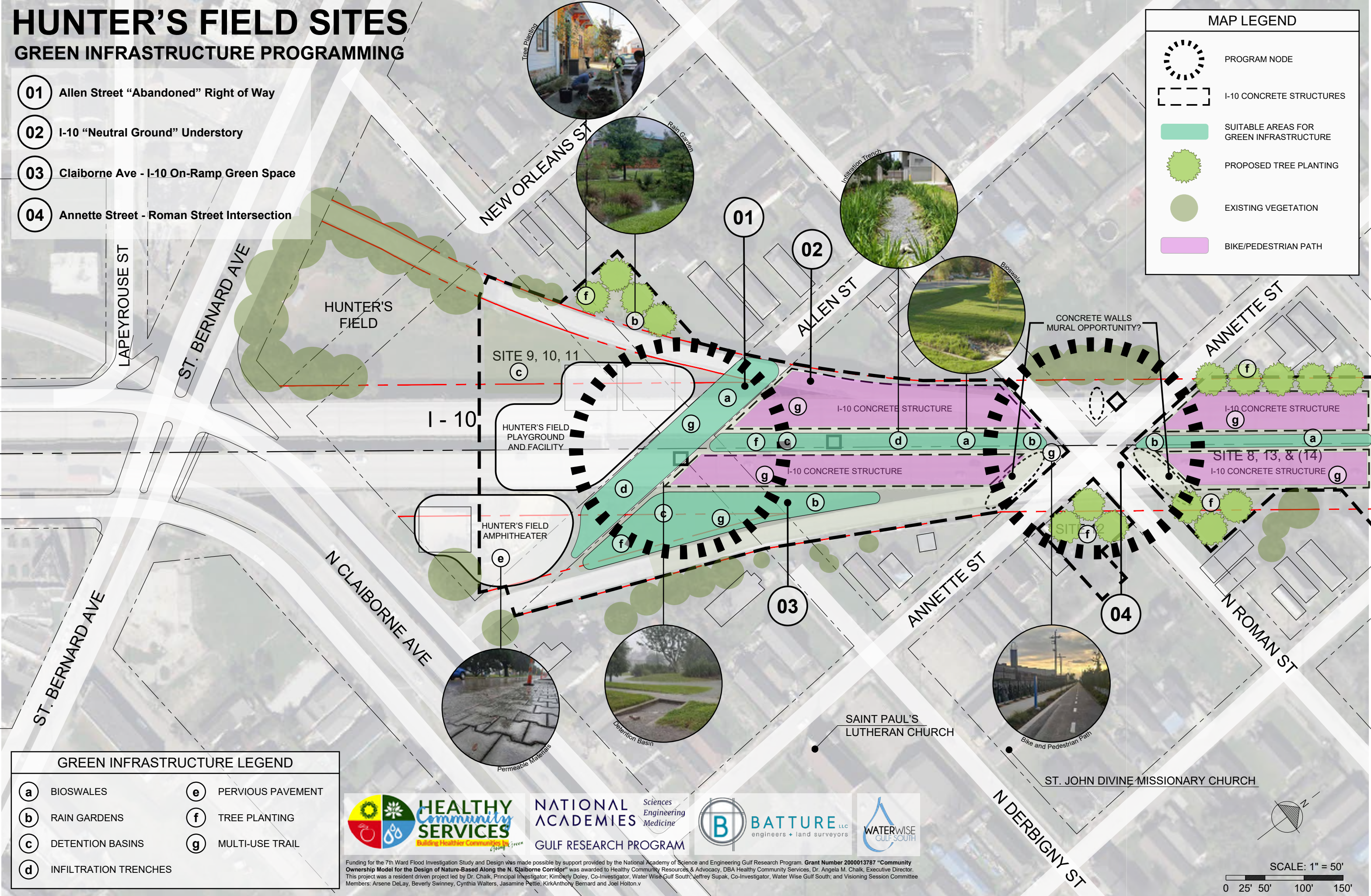
PROPOSED TREE PLANTING




EXISTING VEGETATION




BIKE/PEDESTRIAN PATH




GREEN INFRASTRUCTURE LEGEND




BIOSWALES




RAIN GARDENS




DETENTION BASINS




INFILTRATION TRENCHES



PERVIOUS PAVEMENT



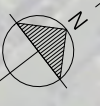
TREE PLANTING



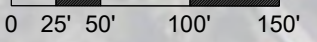
MULTI-USE TRAIL



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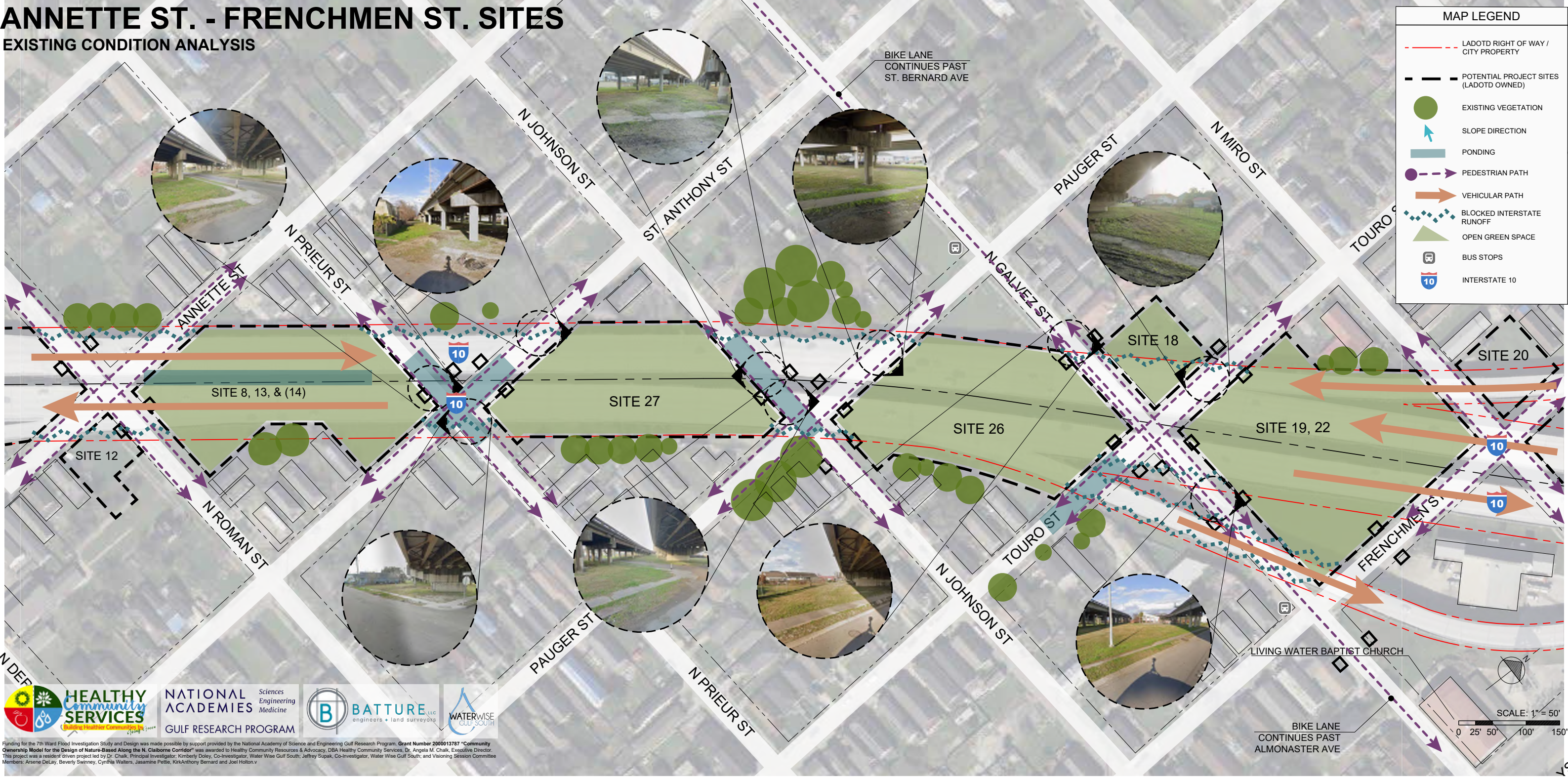
SCALE: 1" = 50'





# ANNETTE ST. - FRENCHMEN ST. SITES

## EXISTING CONDITION ANALYSIS





# ANNETTE ST. to FRENCHMEN ST. SITES

## GREEN INFRASTRUCTURE PROGRAMMING

- 01 Annette Street - Roman Street Intersection
- 02 St. Anthony Street - Prier Street Intersection
- 03 Pauger Street - Johnson Street Intersection
- 04 N Galvez Street - Touro Street Intersection

MAP LEGEND

PROGRAM NODE

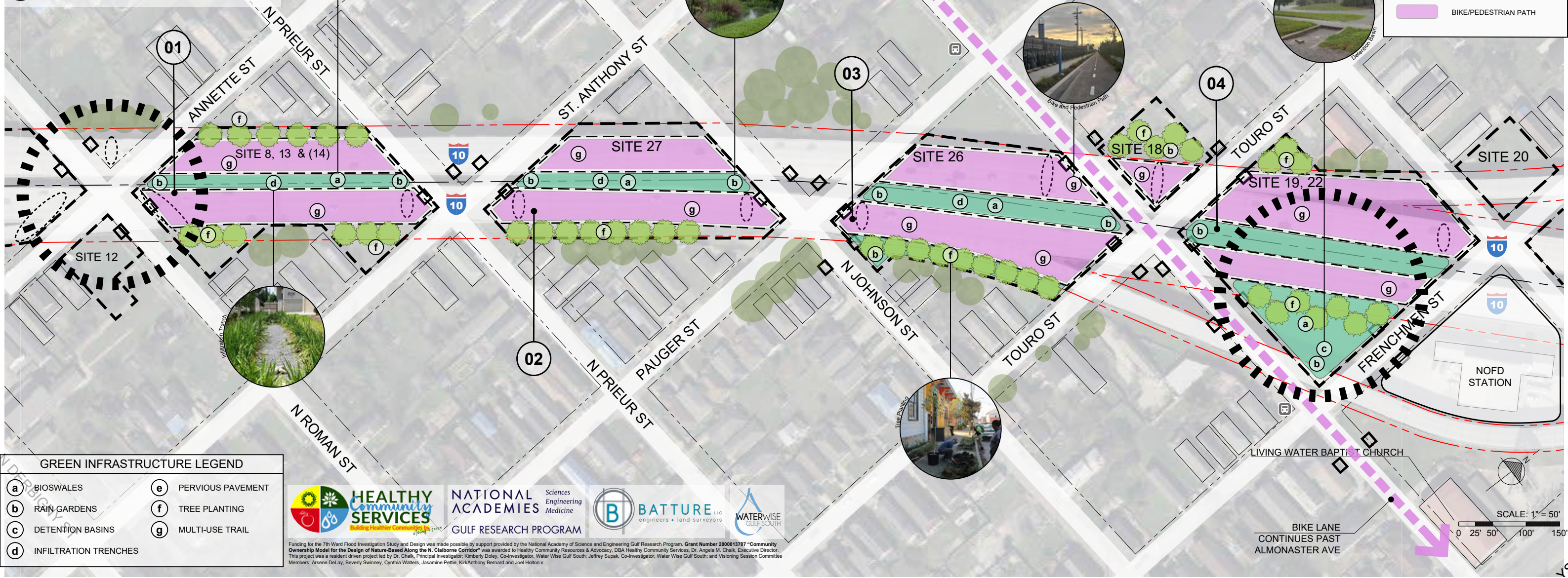
I-10 CONCRETE STRUCTURES

SUITABLE AREAS FOR GREEN INFRASTRUCTURE

PROPOSED TREE PLANTING

EXISTING VEGETATION

BIKE/PEDESTRIAN PATH



GREEN INFRASTRUCTURE LEGEND

BIOSWALES

RAIN GARDENS

DETENTION BASINS

INFILTRATION TRENCHES

PERVIOUS PAVEMENT

TREE PLANTING

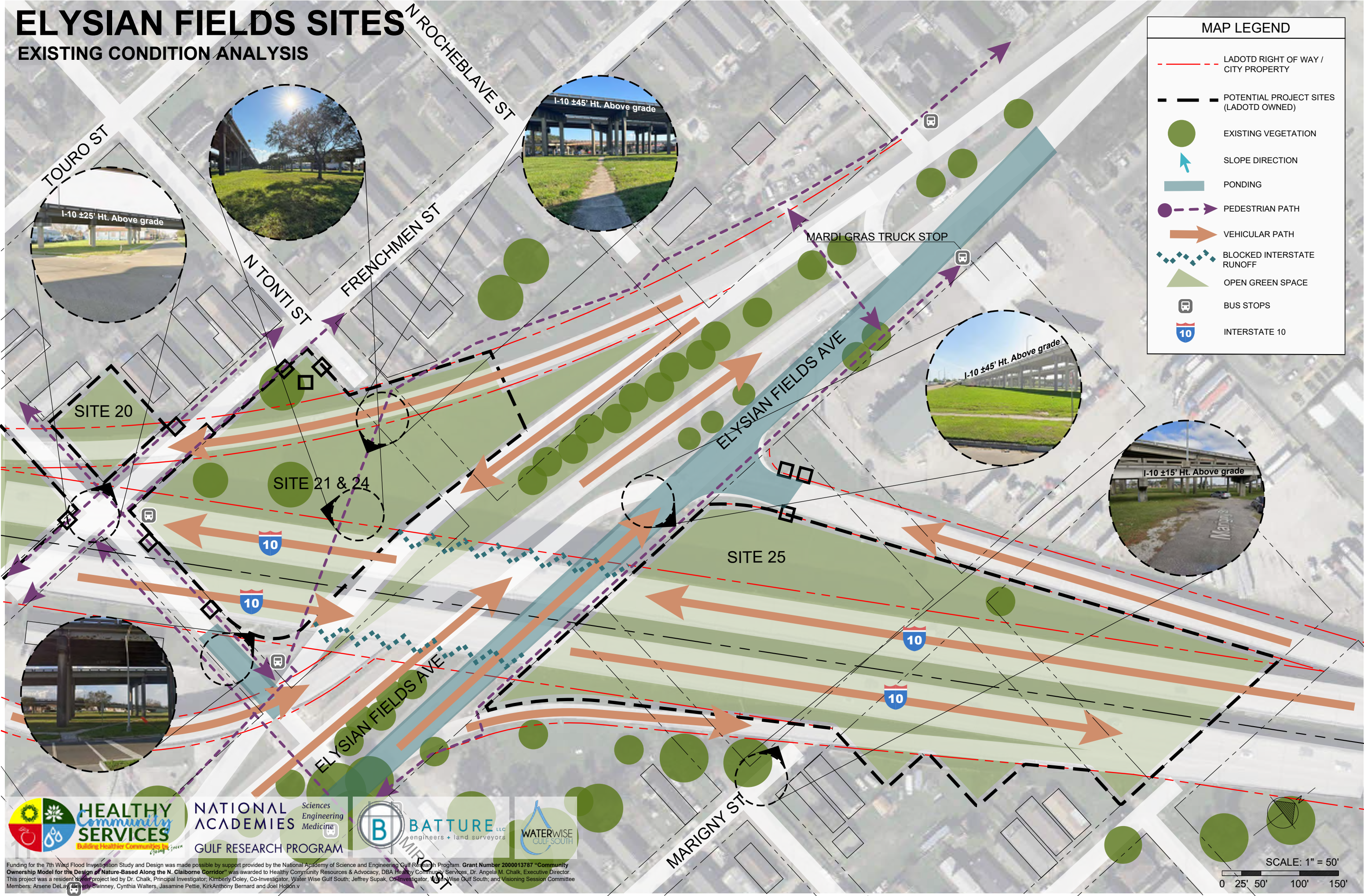
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# ELYSIAN FIELDS SITES

## EXISTING CONDITION ANALYSIS



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# EYLSIAN FIELDS SITES

## GREEN INFRASTRUCTURE PROGRAMS

- 01 Frenchmen St - Miro St Intersection
- 02 NOFD Station Site
- 03 Elysian Fields/I-10 On/Off Ramps

MAP LEGEND

PROGRAM NODE

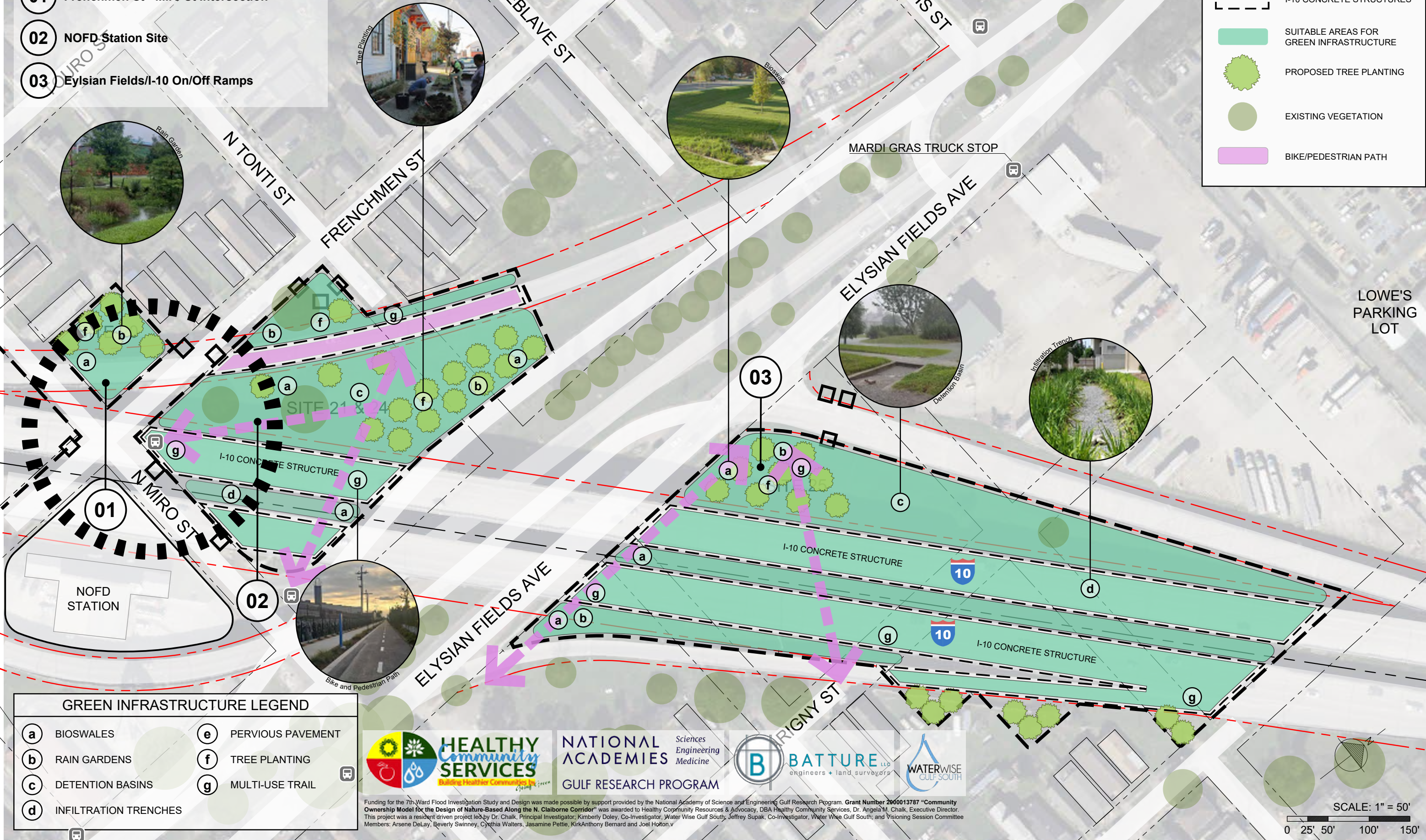
I-10 CONCRETE STRUCTURES

SUITABLE AREAS FOR GREEN INFRASTRUCTURE

PROPOSED TREE PLANTING

EXISTING VEGETATION

BIKE/PEDESTRIAN PATH



GREEN INFRASTRUCTURE LEGEND

BIOSWALES

RAIN GARDENS

DETENTION BASINS

INFILTRATION TRENCHES

PERVIOUS PAVEMENT

TREE PLANTING

MULTI-USE TRAIL

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SCALE: 1" = 50'

0 25' 50' 100' 150'





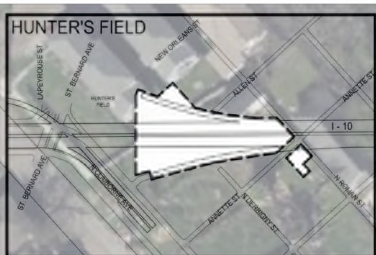


# ALLEN STREET CIRCLE MEADOWS

2025 7th Ward Stormwater Visioning Plan for the N. Claiborne I-10 Corridor



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**LEGEND**

PROJECT SITES (LADOTD OWNED)

GRADING LINES

LANDSCAPE AREA

PROPOSED TREE PLANTING

REFER TO PERSPECTIVE

15'-4" WIDE MULTI-USE PATH (12' BIKE & 8' WALKING PATH)

PLAZA AREA, HONOR OLD TRAFFIC CIRCLE BEFORE CONSTRUCTION OF I-10, REF. BASE E1

DRY CREEK, INFILTRATION TRENCH

8'-0" WIDE PEDESTRIAN PATH

RAIN GARDEN

LANDSCAPE AREA

DETENTION BASIN

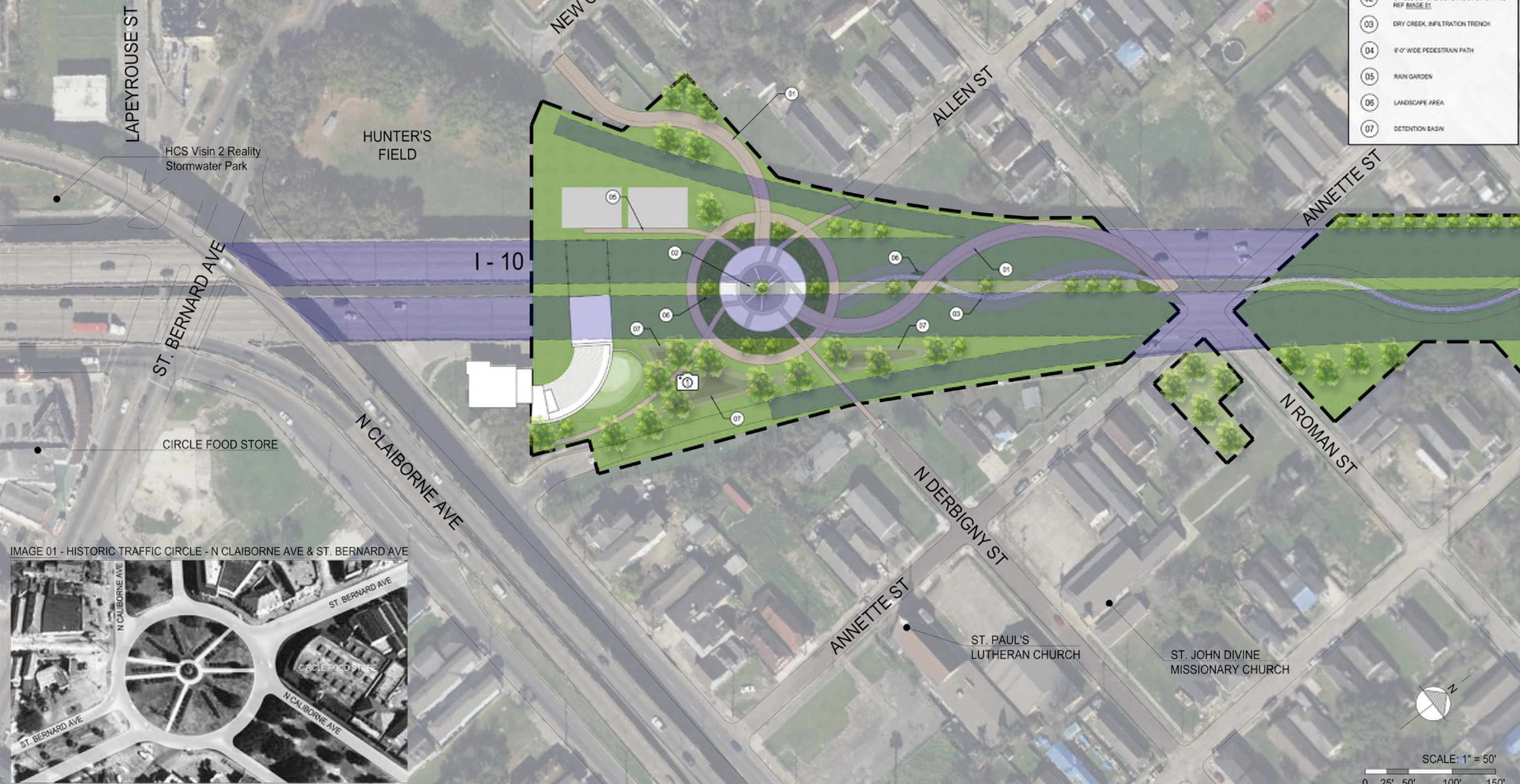
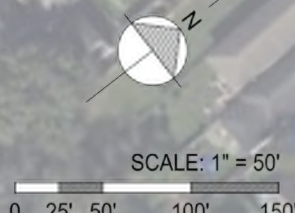
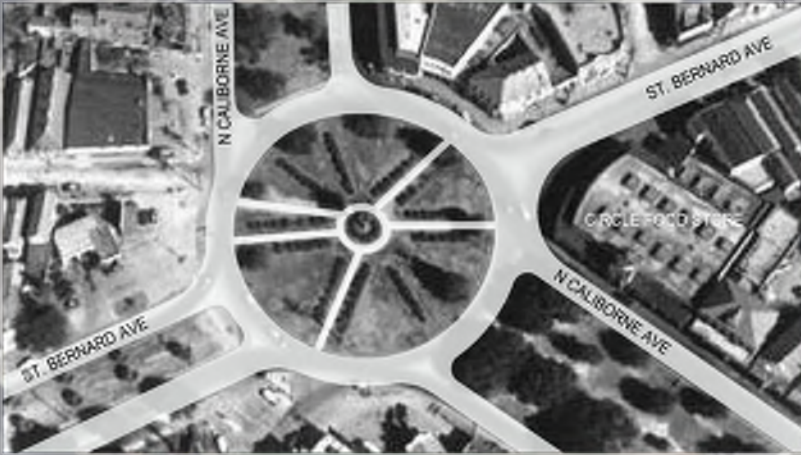


IMAGE 01 - HISTORIC TRAFFIC CIRCLE - N CLAIBORNE AVE & ST. BERNARD AVE







PERVIOUS PAVING





RAIN GARDEN

MULTI-USE PATH

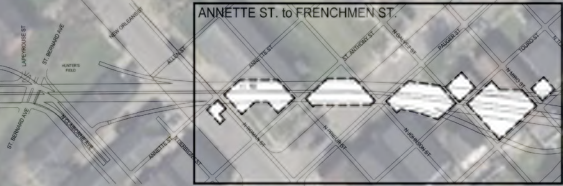


# ANNETTE - FRENCHMEN RAINWATER CORRIDOR

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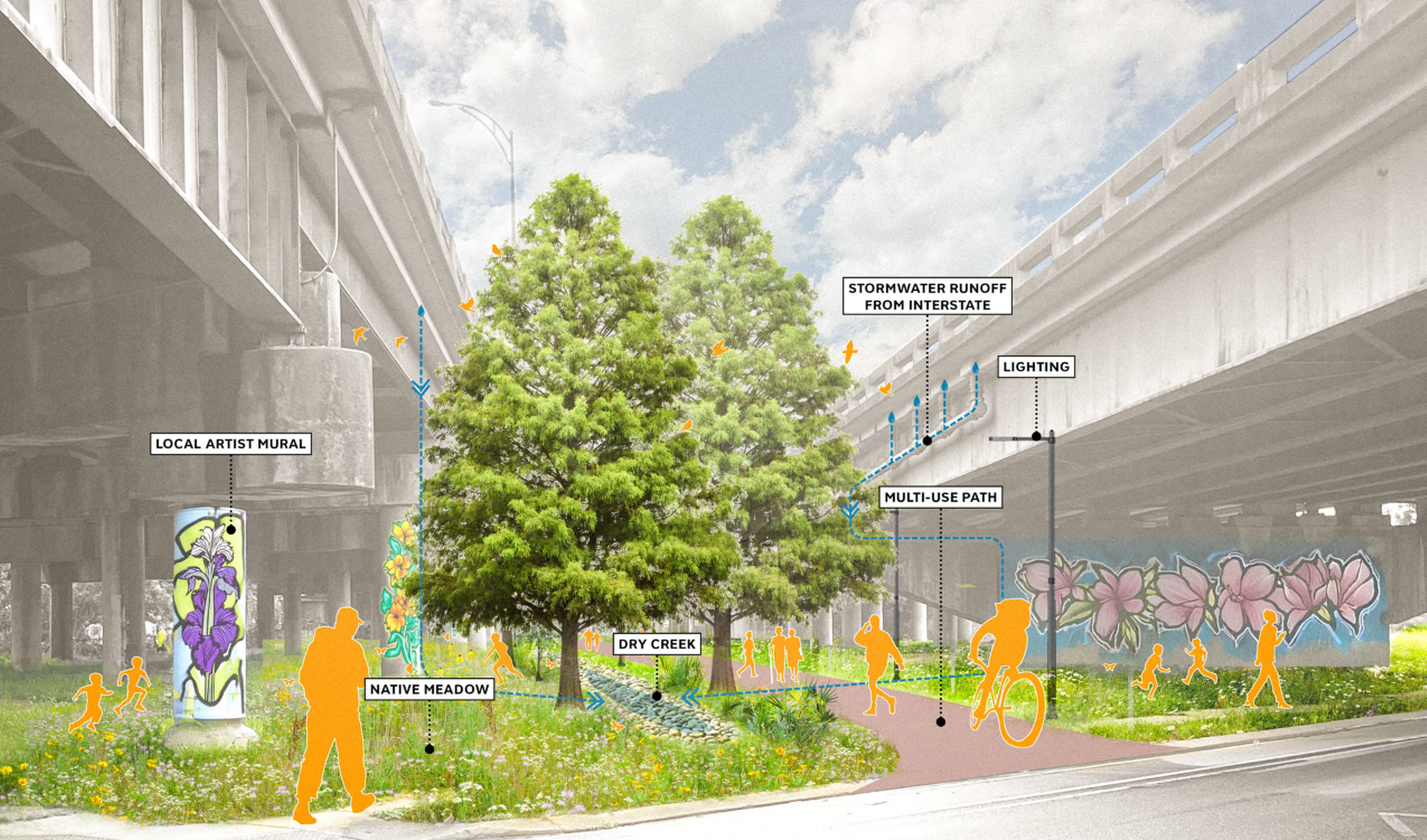


**LEGEND**

- PROJECT SITES (DASHED LINES)
- GRADING LINES
- LANDSCAPE AREA
- PROPOSED TREE PLANTING
- REFER TO PERSPECTIVE
- 01 18" WIDE MULTI-USE PATH (1/2" SLOPE & 8" WALKING PATH)
- 02 DRY CREEK INFILTRATION TRENCH
- 03 4'-0" WIDE PEDESTRIAN PATH
- 04 RAIN GARDEN
- 05 LANDSCAPE AREA
- 06 DEFENTION BASIN







LOCAL ARTIST MURAL

STORMWATER RUNOFF FROM INTERSTATE

LIGHTING

MULTI-USE PATH

DRY CREEK

NATIVE MEADOW



# ELYSIAN FIELDS GREENWAY

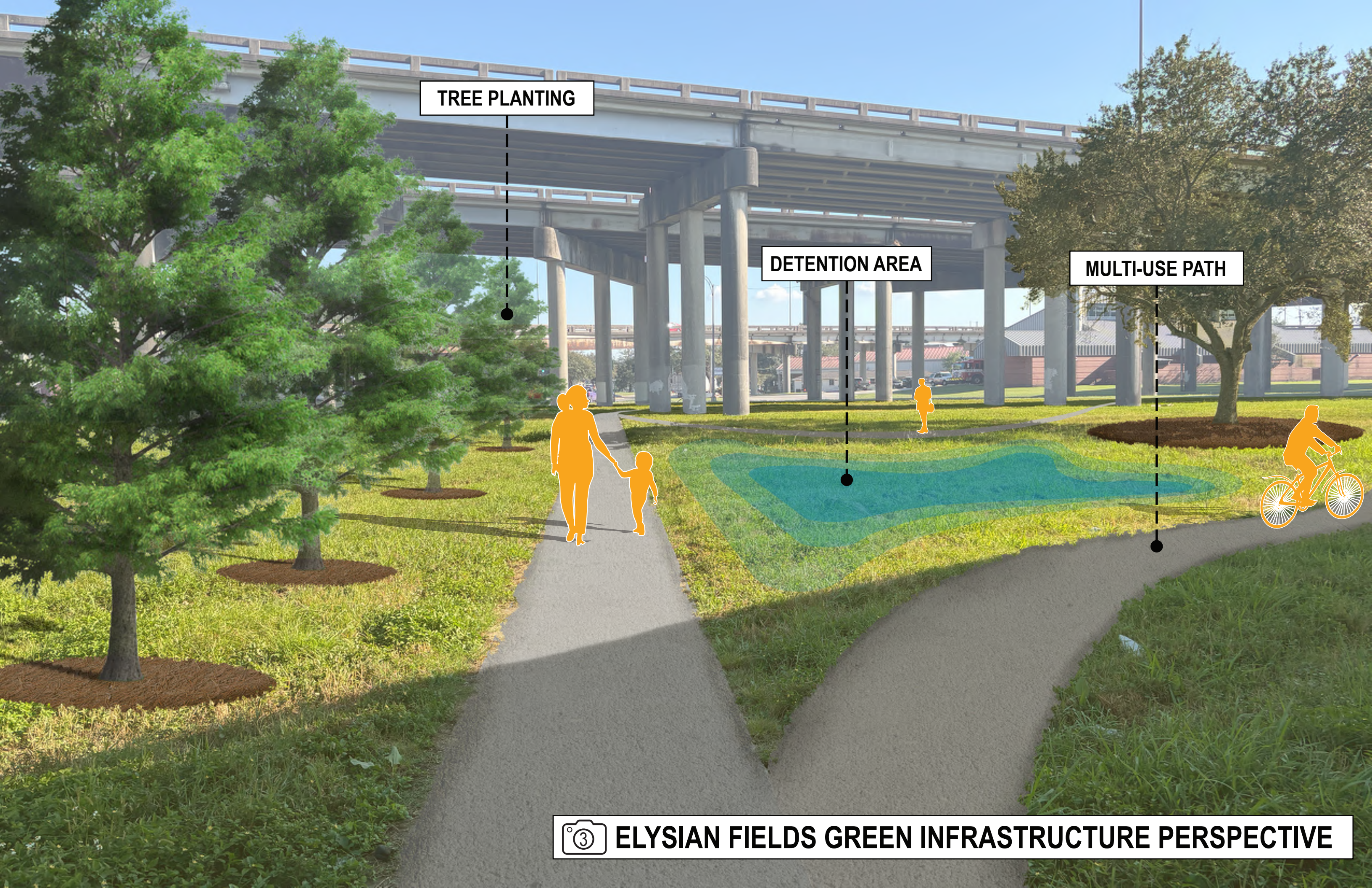
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TREE PLANTING

DETENTION AREA

MULTI-USE PATH



ELYSIAN FIELDS GREEN INFRASTRUCTURE PERSPECTIVE



Project:	HCS 7th Ward GI
Consultant:	Batture LLC

Infiltration Trench	Intervention (SF)	SW Capacity (CY)	SW Capacity (GAL)
Allen Street Circle	2143	767.48	155,011
Annette-Frenchmen	9967	2657.85	536,817
Elysian Fields Greenway	10980	2928.00	591,380
TOTAL	23,090	6353.33	1,283,208

Rain Gardens	SF	CY	GAL
Allen Street Circle	9228	15.89	3,209
Annette-Frenchmen	9767	364.52	73,623
Elysian Fields Greenway	3460	401.59	81,111
TOTAL	22,455	782.00	157,944

Detention Basins	SF	CY	GAL
Allen Street Circle	8449	178.37	36,026
Annette-Frenchmen	15216	321.23	64,879
Elysian Fields Greenway	44058	930.11	187,859
TOTAL	67,723	1429.71	288,764

Permeable Paving	SF	CY	GAL
Allen Street Circle	2045	175.00	35,345
Annette-Frenchmen			
Elysian Fields Greenway			
TOTAL	2,045	175.00	35,345

Tree Planting	EA	CY	GAL
Allen Street Circle	40	14.00	2,828
Annette-Frenchmen	85	29.74	6,007
Elysian Fields Greenway	49	17.15	3,463
TOTAL	174	60.89	12,298

Green Infrastructure Capacity	SF	CY	GAL
TOTAL	115,313	8740.04	1,765,261

# Stormwater Calculations



<b>Project:</b>	HCS 7th Ward GI - Annette Frenchman Rainwater Corridor
<b>Consultant:</b>	Batture LLC

Item No.	Item	Quantity	Unit	Cost Per Unit	Total Cost
C706(51)(A)	CONCRETE SIDEWALK (4" THICK)	4938.22	SY	\$79.50	\$392,589
GI-0200-01-A	OPEN SPACE EXCAVATION FOR GREEN INFRASTRUCTURE FACILITIES	1865.32	CY	\$41.00	\$76,478
GI-1005-01	BIORETENTION MEDIA (INCLUDES MULCHING GROUND COVER)	361.74	CY	\$162.50	\$58,783
GI-1003-03-A	RIP RAP, SPLASH PAD (CLASS A)	184.57	CY	\$75.00	\$13,843
GI-0720-02	TREE (CALIPER 2.5" - 3")	85.00	EA	\$1,533.00	\$130,305
GI-0703-01-B	DRAIN INLETS FOR GI - (DOMED DRAIN INLET) (12" PVC or HDPE)	11.00	EA	\$2,750.00	\$30,250
CS-1	DRY CREEK, INFILTRATION TRENCH	1107.40	SY	\$150.00	\$166,111
GI-0720-03(B)	BIORETENTION PLANTINGS (1 GAL.)	9667.00	SF	\$20.00	\$193,340
GI-1003(B)	STORAGE AGGREGATE (NO. 57 STONE) (PAVERS & RAIN GARDENS)	361.74	CY	\$150.00	\$54,261
GI-0704-02-B	UNDERDRAIN PIPE - PERFORATED - PVC (6")	0.00	LF	\$125.00	\$0
GI-0704-03-B	UNDERDRAIN PIPE - SOLID - PVC (6")	494.00	LF	\$125.00	\$61,750
				<b>TOTAL:</b>	<b>\$1,177,709</b>
	Contingency	0.15			\$176,656

\$1,354,365

<b>Project:</b>	HCS 7th Ward GI - Elysian Fields Greenway
<b>Consultant:</b>	Batture LLC

Item No.	Item	Quantity	Unit	Cost Per Unit	Total Cost
C706(51)(A)	CONCRETE SIDEWALK (4" THICK)	2809.37	SY	\$79.50	\$223,345
GI-0200-01-A	OPEN SPACE EXCAVATION FOR GREEN INFRASTRUCTURE FACILITIES	4078.00	CY	\$41.00	\$167,198
GI-1005-01	BIORETENTION MEDIA (INCLUDES MULCHING GROUND COVER)	128.15	CY	\$162.50	\$20,824
GI-1003-03-A	RIP RAP, SPLASH PAD (CLASS A)	203.31	CY	\$75.00	\$15,249
GI-0720-02	TREE (CALIPER 2.5" - 3")	49.00	EA	\$1,533.00	\$75,117
GI-0703-01-B	DRAIN INLETS FOR GI - (DOMED DRAIN INLET) (12" PVC or HDPE)	13.00	EA	\$2,750.00	\$35,750
CS-1	DRY CREEK, INFILTRATION TRENCH	813.28	SY	\$150.00	\$121,993
GI-0720-03(B)	BIORETENTION PLANTINGS (1 GAL.)	3460.00	SF	\$20.00	\$69,200
GI-1003(B)	STORAGE AGGREGATE (NO. 57 STONE) (PAVERS & RAIN GARDENS)	128.15	CY	\$150.00	\$19,222
GI-0704-02-B	UNDERDRAIN PIPE - PERFORATED - PVC (6")	0.00	LF	\$125.00	\$0
GI-0704-03-B	UNDERDRAIN PIPE - SOLID - PVC (6")	846.00	LF	\$125.00	\$105,750
				<b>TOTAL:</b>	<b>\$853,647</b>
	Contingency	0.15			\$128,047

\$981,695



Project:	HCS 7th Ward GI - Allen St Meadows
Consultant:	Batture LLC

Item No.	Item	Quantity	Unit	Cost Per Unit	Total Cost
C706(51)(A)	CONCRETE SIDEWALK (4" THICK)	3485.00	SY	\$79.50	\$277,058
GI-0200-01-A	OPEN SPACE EXCAVATION FOR GREEN INFRASTRUCTURE FACILITIES	784.51	CY	\$41.00	\$32,165
GI-1005-01	BIORETENTION MEDIA (INCLUDES MULCHING GROUND COVER)	341.79	CY	\$162.50	\$55,541
GI-1003-03-A	RIP RAP, SPLASH PAD (CLASS A)	39.68	CY	\$75.00	\$2,976
GI-0720-02	TREE (CALIPER 2.5" - 3")	40.00	EA	\$1,533.00	\$61,320
GI-0703-01-B	DRAIN INLETS FOR GI - (DOMED DRAIN INLET) (12" PVC or HDPE)	12.00	EA	\$2,750.00	\$33,000
CS-1	DRY CREEK, INFILTRATION TRENCH	784.44	CY	\$150.00	\$117,667
GI-0720-03(B)	BIORETENTION PLANTINGS (1 GAL.)	9229.00	SF	\$20.00	\$184,580
GI-1003(B)	STORAGE AGGREGATE (NO. 57 STONE) (PAVERS & RAIN GARDENS)	417.56	CY	\$150.00	\$62,633
GI-0704-02-B	UNDERDRAIN PIPE - PERFORATED - PVC (6")	470.00	LF	\$125.00	\$58,750
GI-0704-03-B	UNDERDRAIN PIPE - SOLID - PVC (6")	350.00	LF	\$125.00	\$43,750
GI-0605-01-C	PERVIOUS INTERLOCKING CONCRETE PAVERS - VEHICULAR PARKING	228.00	SY	\$150.00	\$34,200
				TOTAL:	\$963,639
	Contingency	0.15			\$144,546

\$1,108,185

Opinion of Probable Cost