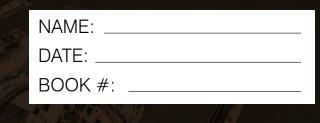
## Port Covington

**EAST WATERFRONT PARK** 

PRESENTATION TO THE URBAN DESIGN & ARCHITECTURE REVIEW PANEL

December 1, 2016







## Port<br/>CoungtonEAST WATERFRONT PARK<br/>Introduction

CAROLINE PAFF Sagamore Development Vice President

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January 28, 2016	East Waterfront Park Schematic: Approval with co
March 3, 2016	East Waterfront Park Final Design: Continued

January 7, 2016	Master Plan Framework and Systems
February 18, 2016	Hanover Street and West End Districts
March 3, 2016	Ecology and Streetscape
March 24, 2016	Hanover and West End Districts
April 14, 2016	Cromwell Street and East Waterfront Districts
May 5, 2016	East End and Founders Park Districts
May 26, 2016	Comprehensive Master Plan

#### **PRIOR ACTIONS**

comments

#### **RELATED PROJECTS**

Create a sense of arrival and make it a destination.

Make strong connections between uses, ecology and people.

Induce multi-modal behaviors through great design and investment in the public realm.

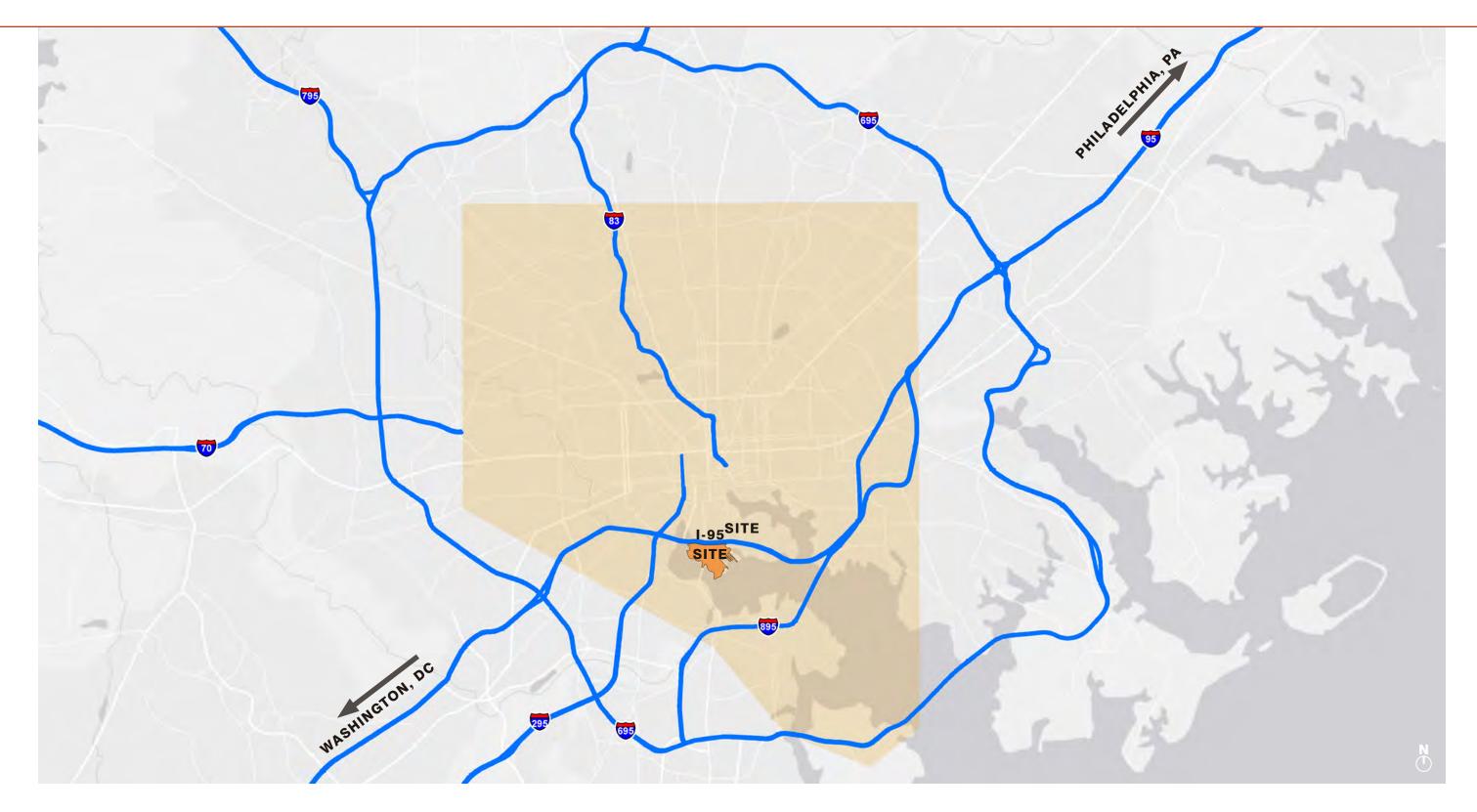
Make it walkable.

Include multiple points of view to ensure diversity and plan resiliency.

Innovate.

#### **URBAN DESIGN GOALS**

#### **REGIONAL CONTEXT MAP**







#### **EXISTING CONDITIONS**

#### **ENVIRONMENTAL CONSTRAINTS**



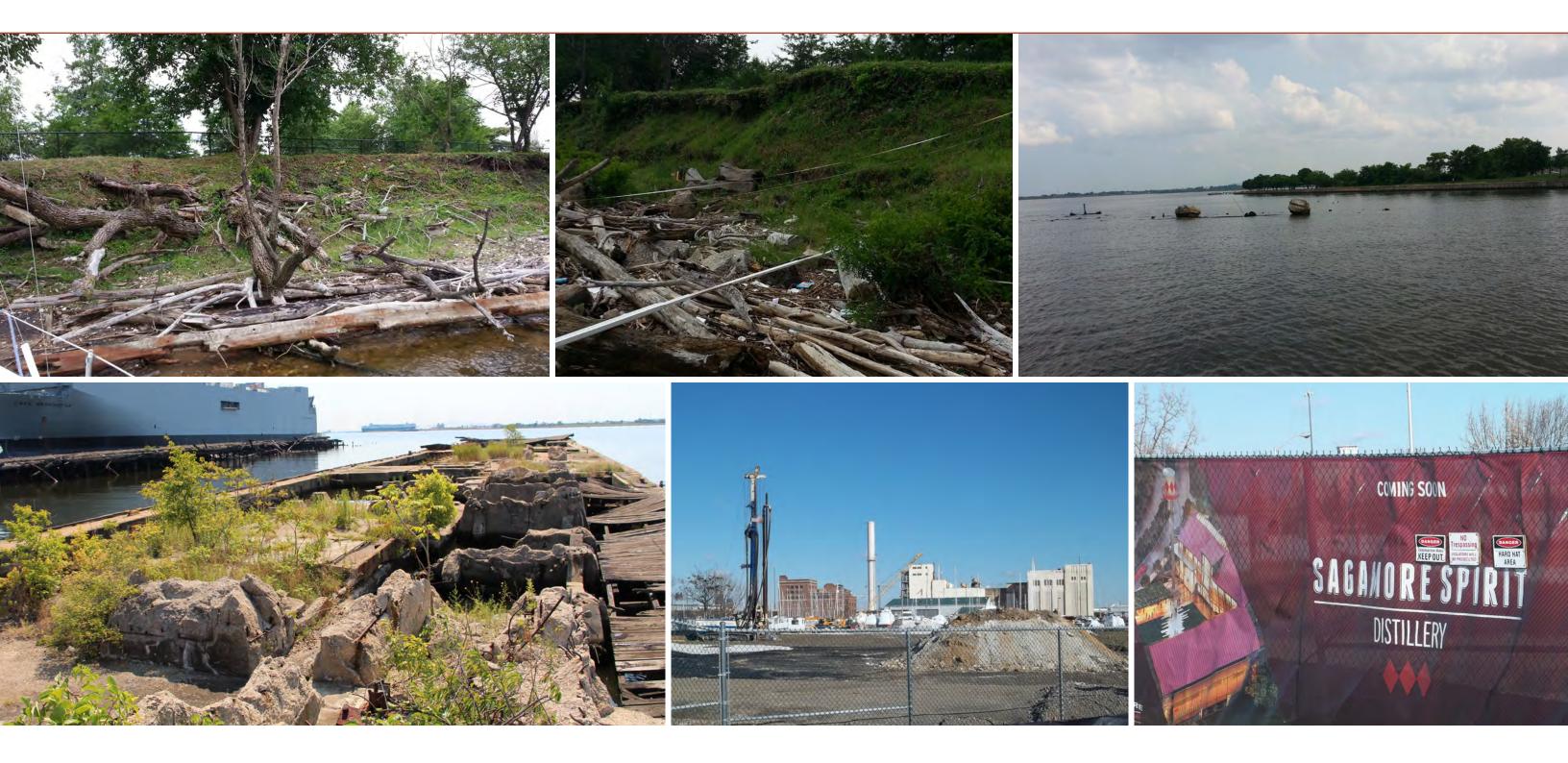
## MAY 26, 2016 FRAMEWORK PLAN



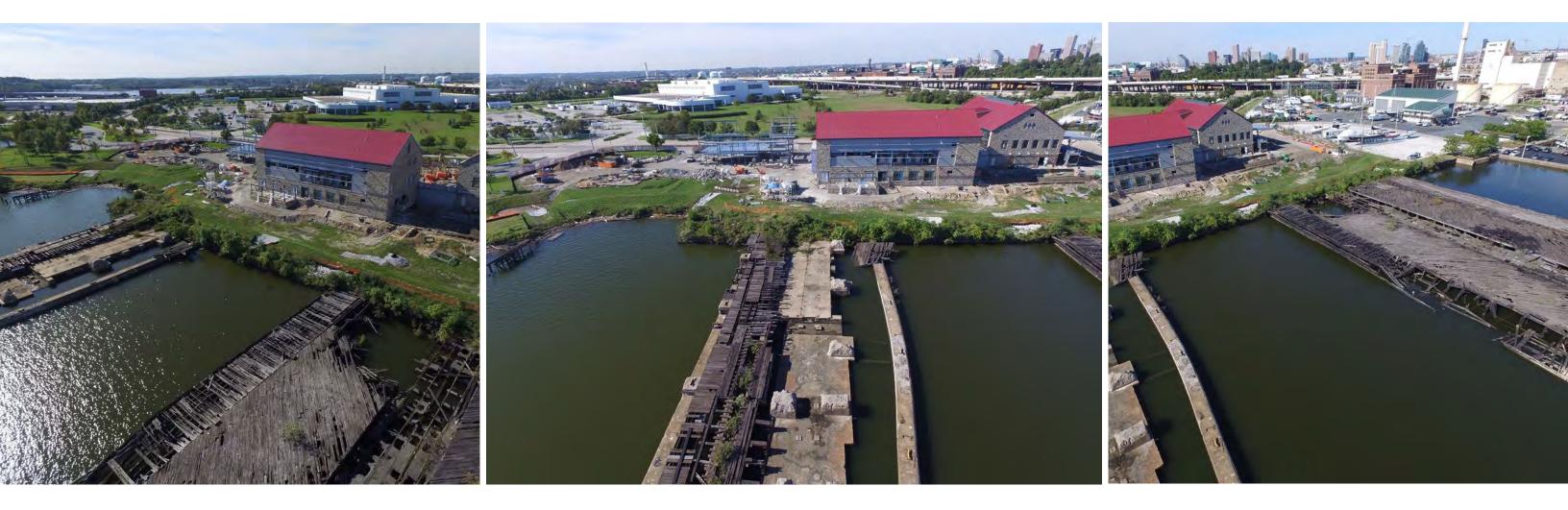
#### MAY 26, 2016 PARKS PLAN



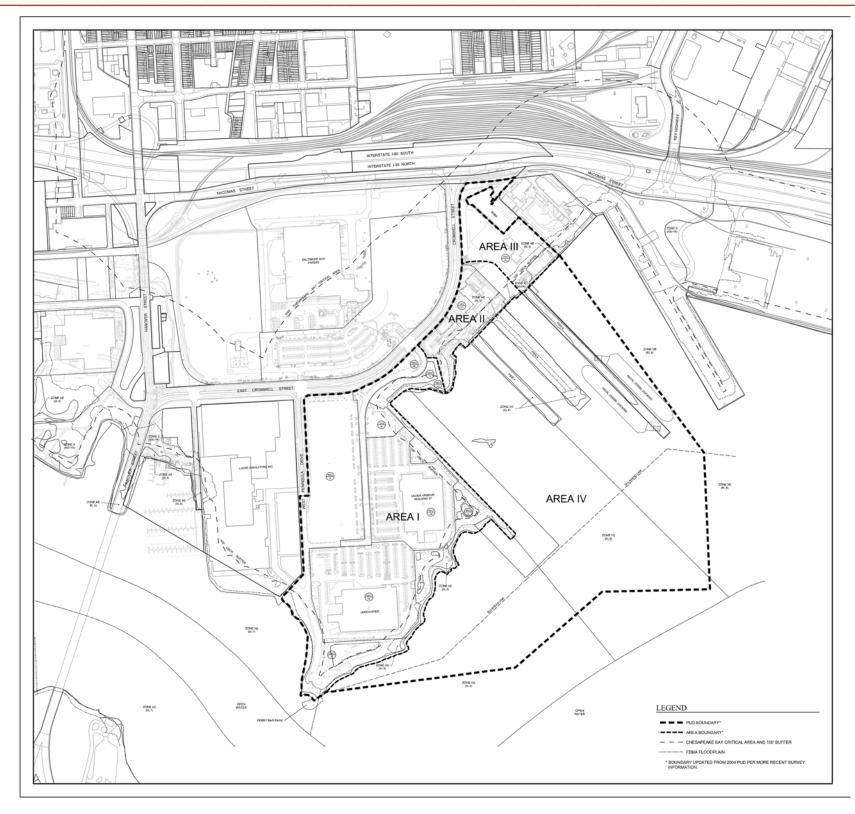
### **EAST WATERFRONT PARK LOCATION**



#### **EXISTING CONDITIONS** AERIAL VIEWS



#### **PORT COVINGTON PUD**



#### **EXISTING SITE CONDITIONS**



## MARCH 3, 2016 SITE PLAN



Consider the park's east-most terminus and how the multiuse path relates to the park spaces and other paths.

Provide lighting, signage and furniture strategies.

Search for a clear, authentic visual language for the peninsula landscape.

#### **MARCH 3, 2016 PANEL COMMENTS**

#### **PRESENTATION OVERVIEW**

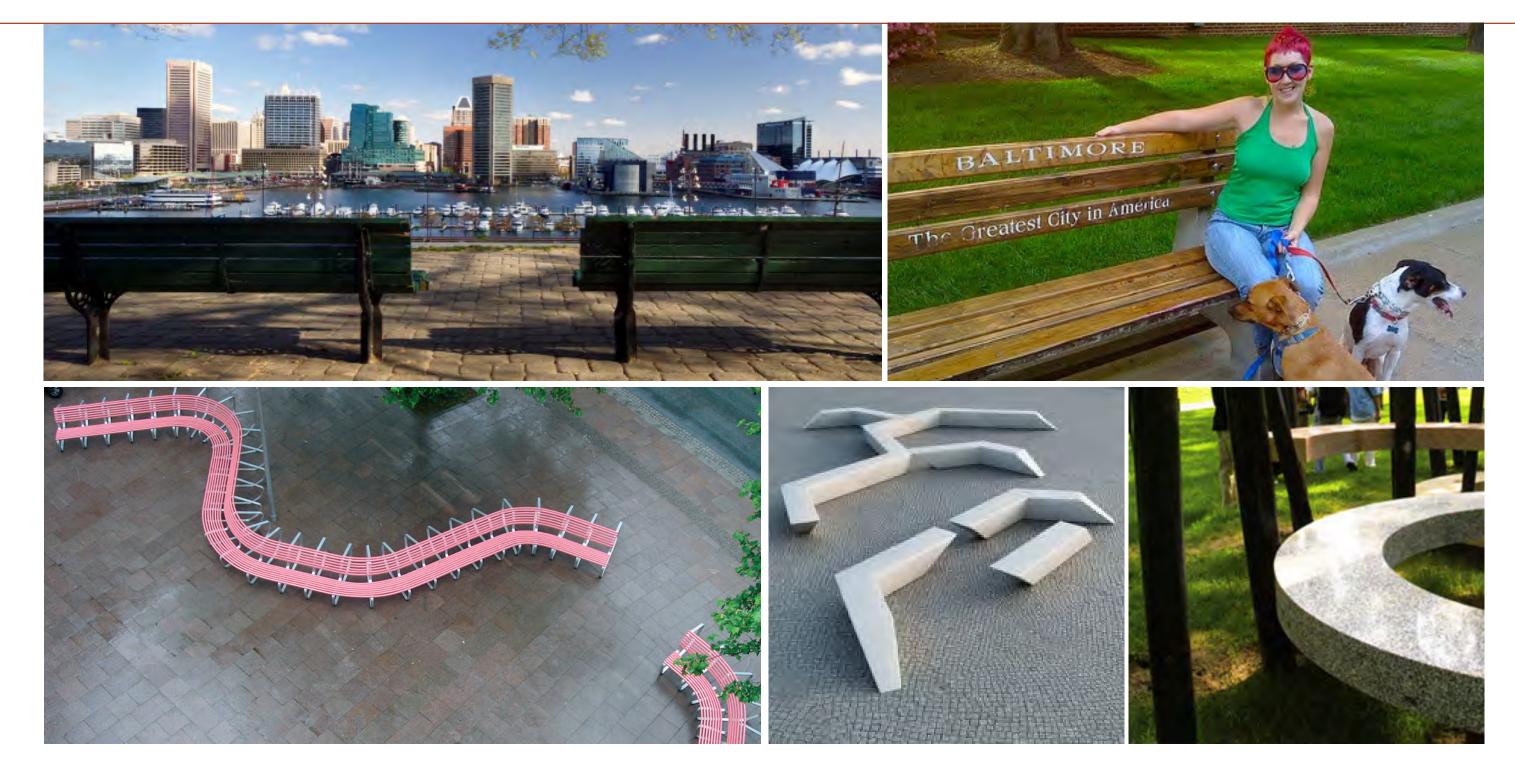
LANDSCAPE AND PARK DESIGN	Betsy Boykin, Core Studio Design
ECOLOGICAL CONTEXT	Chris Streb, Biohabitats
SIGNAGE	Ronnie Younts, Younts Design Inc
LIGHTING	Claude Engle, Claude R. Engle, Li

ŋn

IC.

#### Lighting Consultant

#### THE NEXT GREAT BALTIMORE BENCH





#### **DESIGNER DEAN BROWN**



# Port<br/>CoungtonEAST WATERFRONT PARK<br/>Landscape and Park Design

**BETSY BOYKIN** Core Studio Design President

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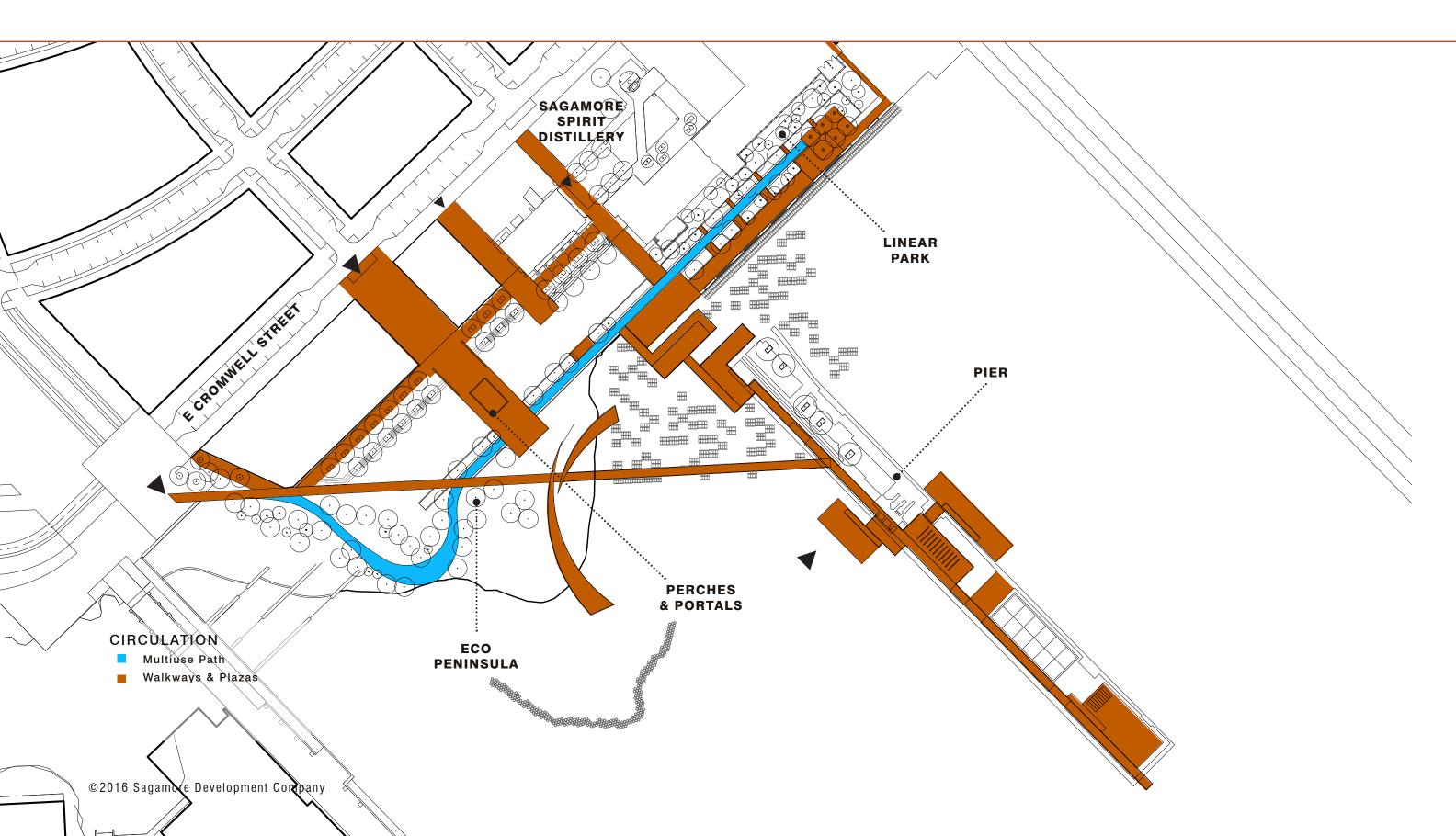


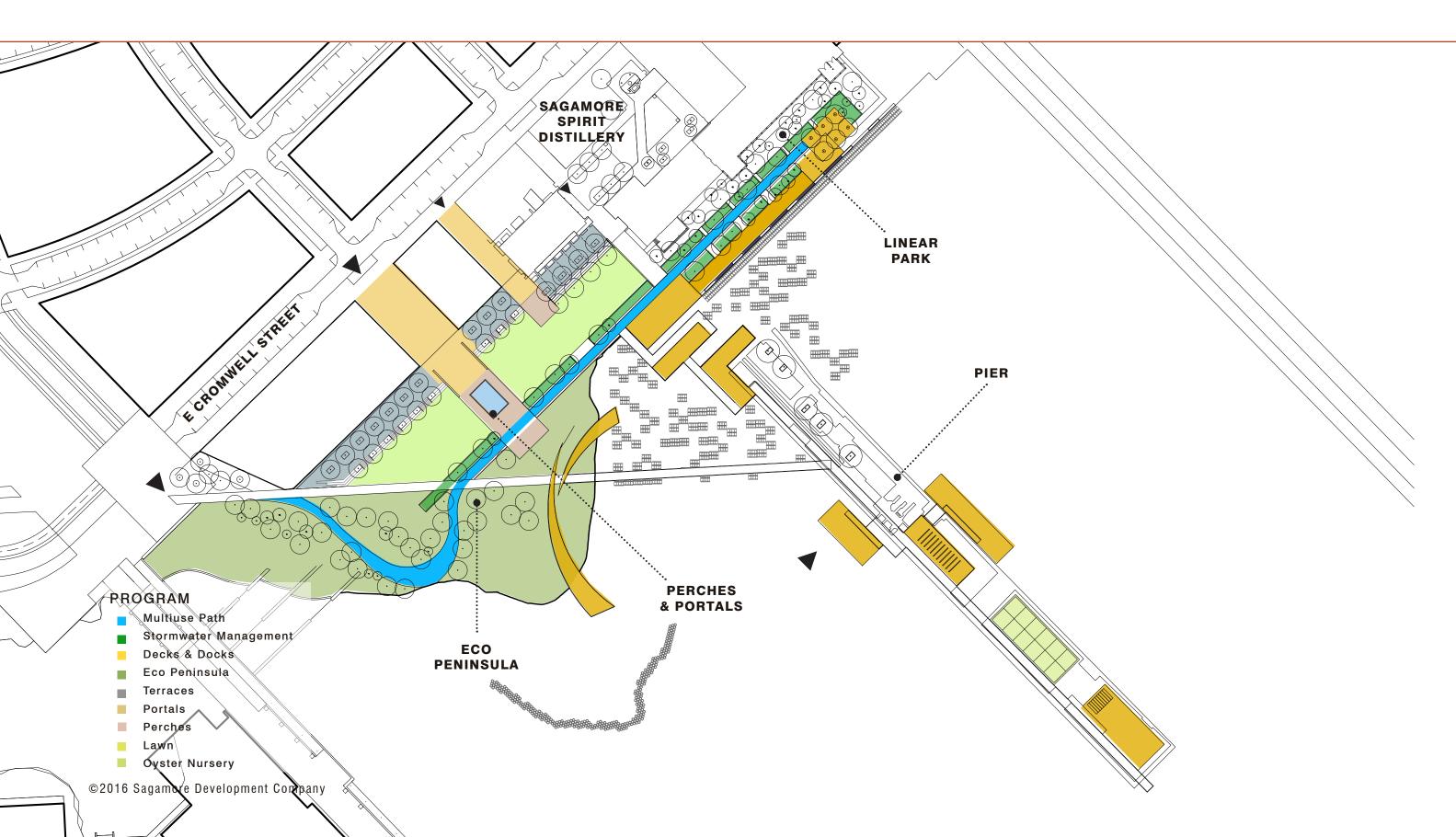
#### **SITE PHASING PLAN**

## SITE PLAN WITHOUT TREES

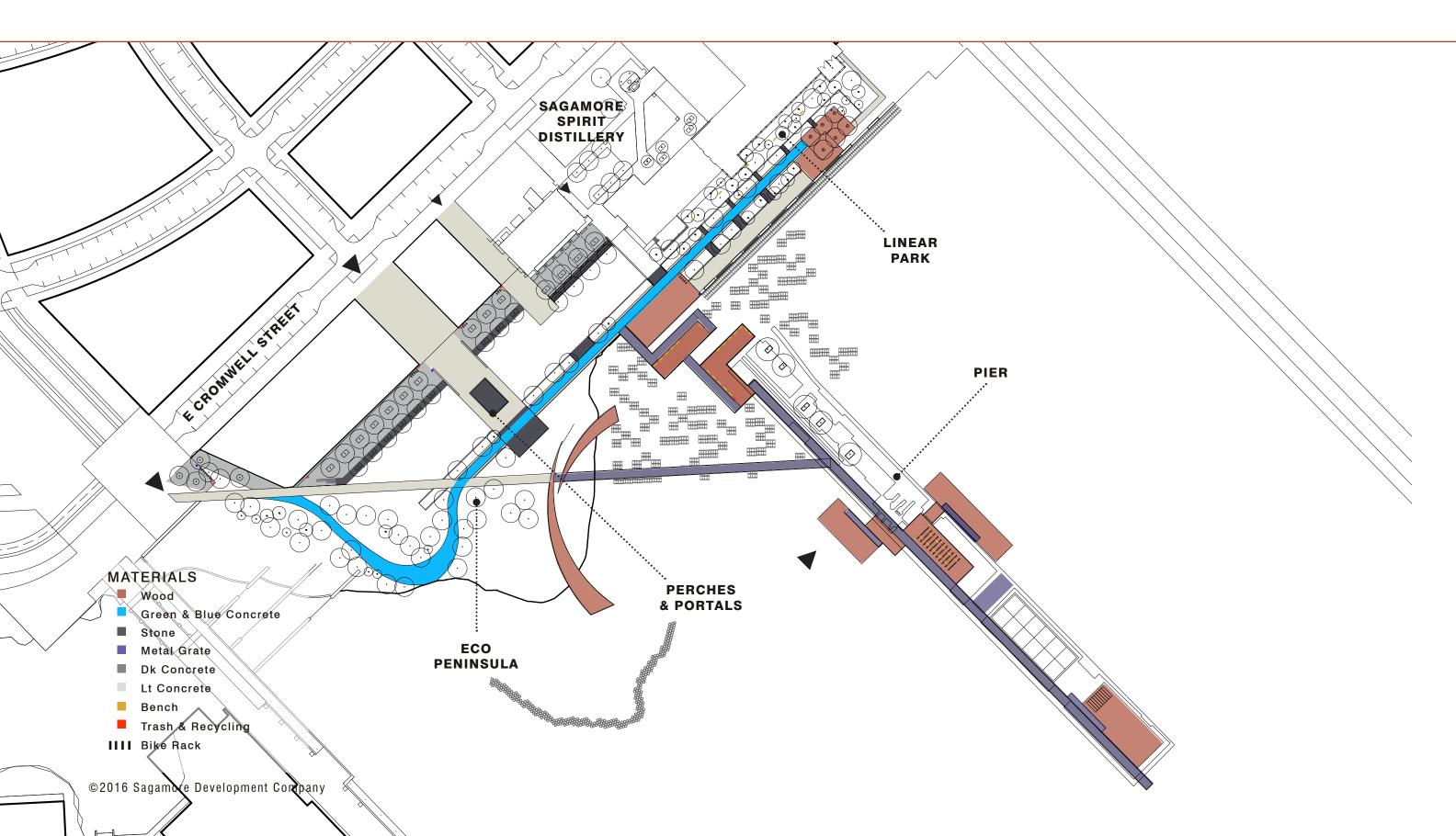


### **CIRCULATION DIAGRAM**



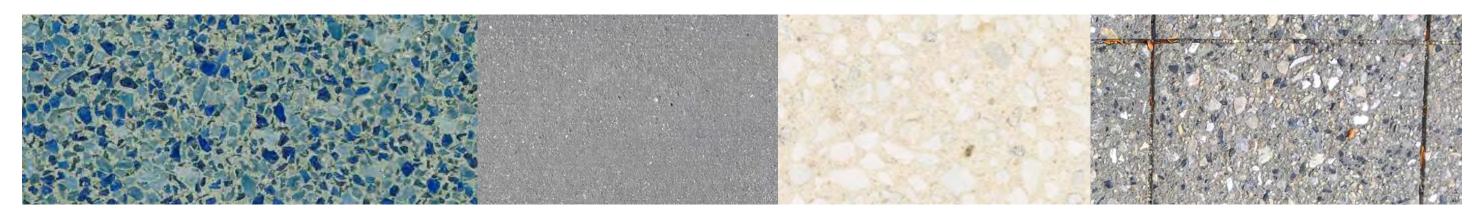


#### **PROGRAM DIAGRAM**



#### **MATERIALS DIAGRAM**

#### CONCRETE



#### STONE



#### METAL

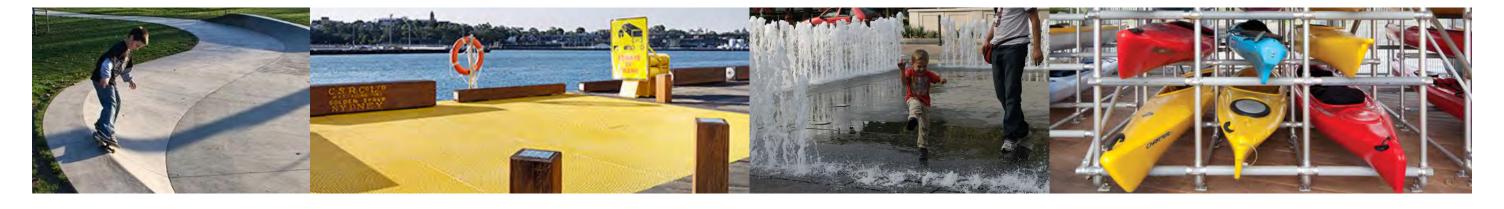


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#### ECOLOGY

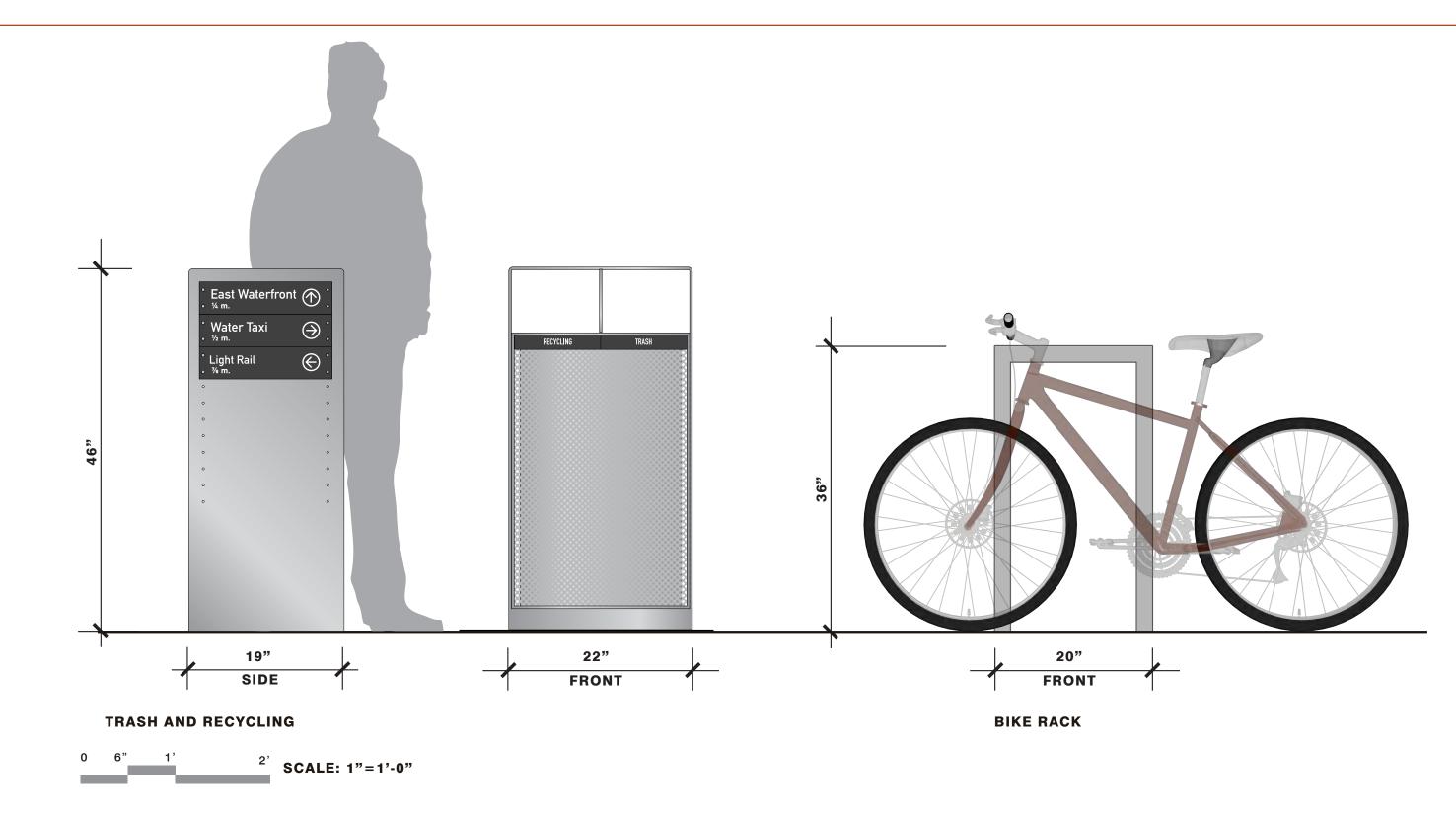


#### SPECIAL MATERIALS



WOOD





#### SITE FURNITURE

### THE NEXT GREAT BALTIMORE BENCH



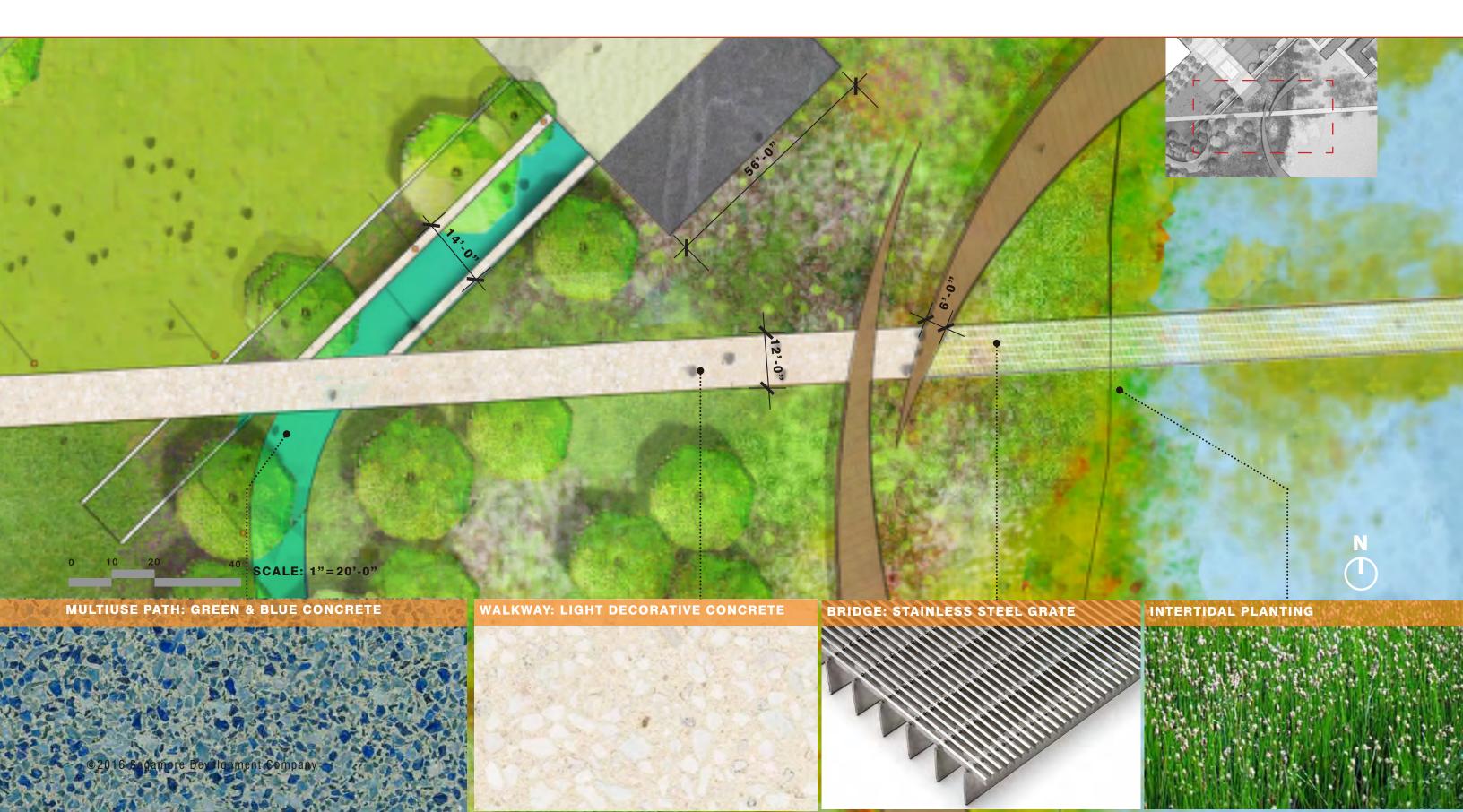




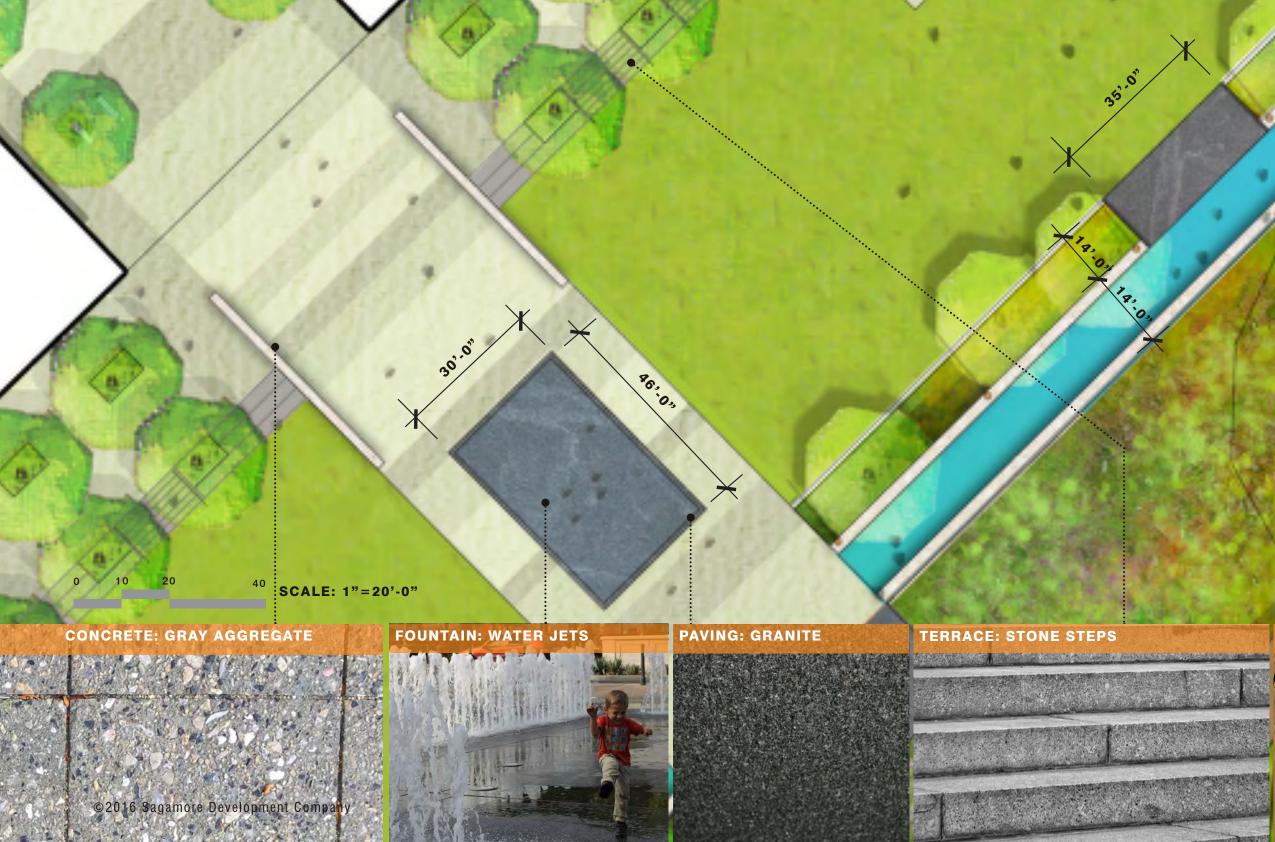
#### **ECO PENINSULA SITE PLAN**



#### **PATHS ENLARGEMENT PLAN**



#### **PERCH ENLARGEMENT PLAN**





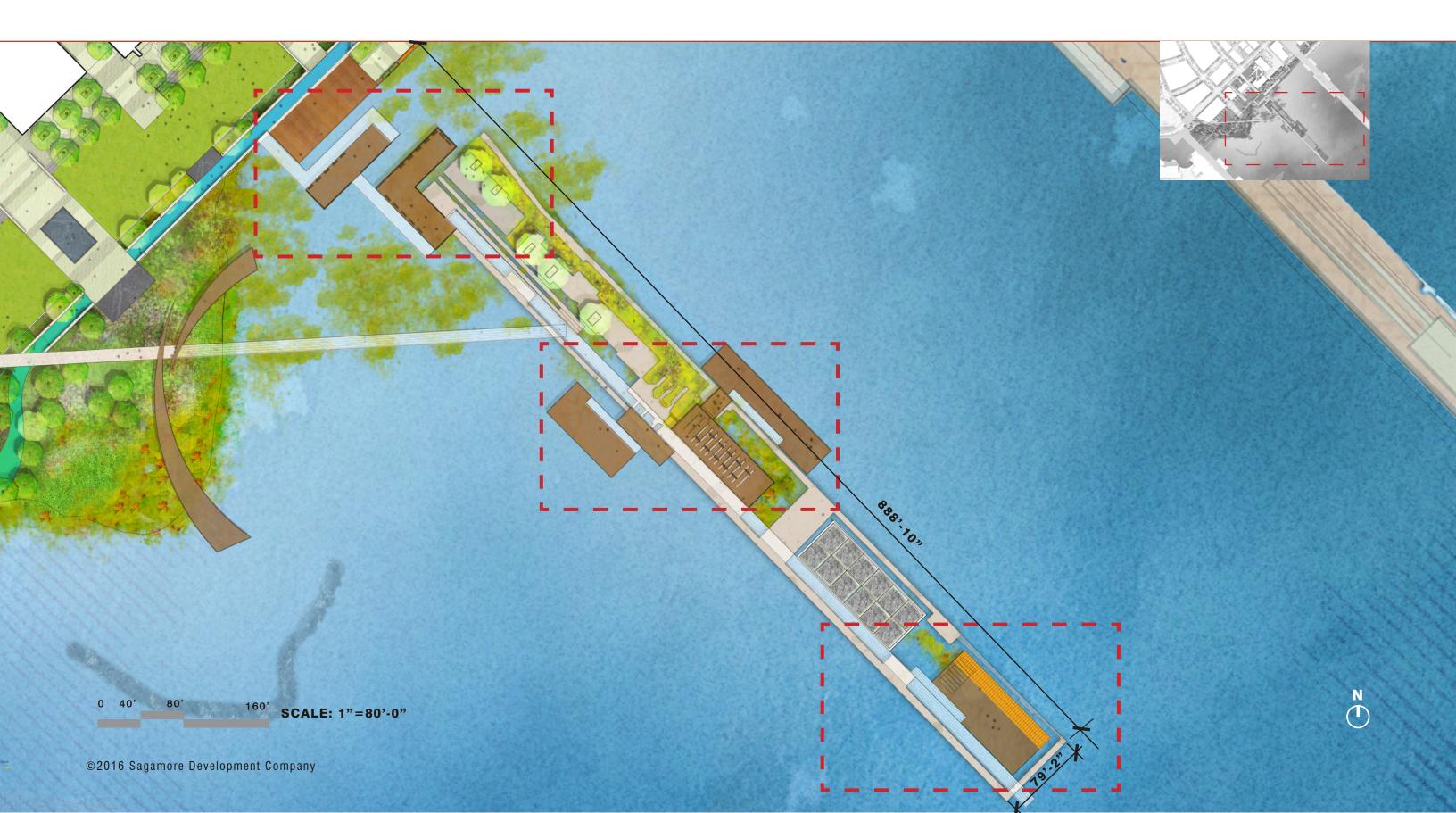
N T

#### LINEAR PARK SITE PLAN



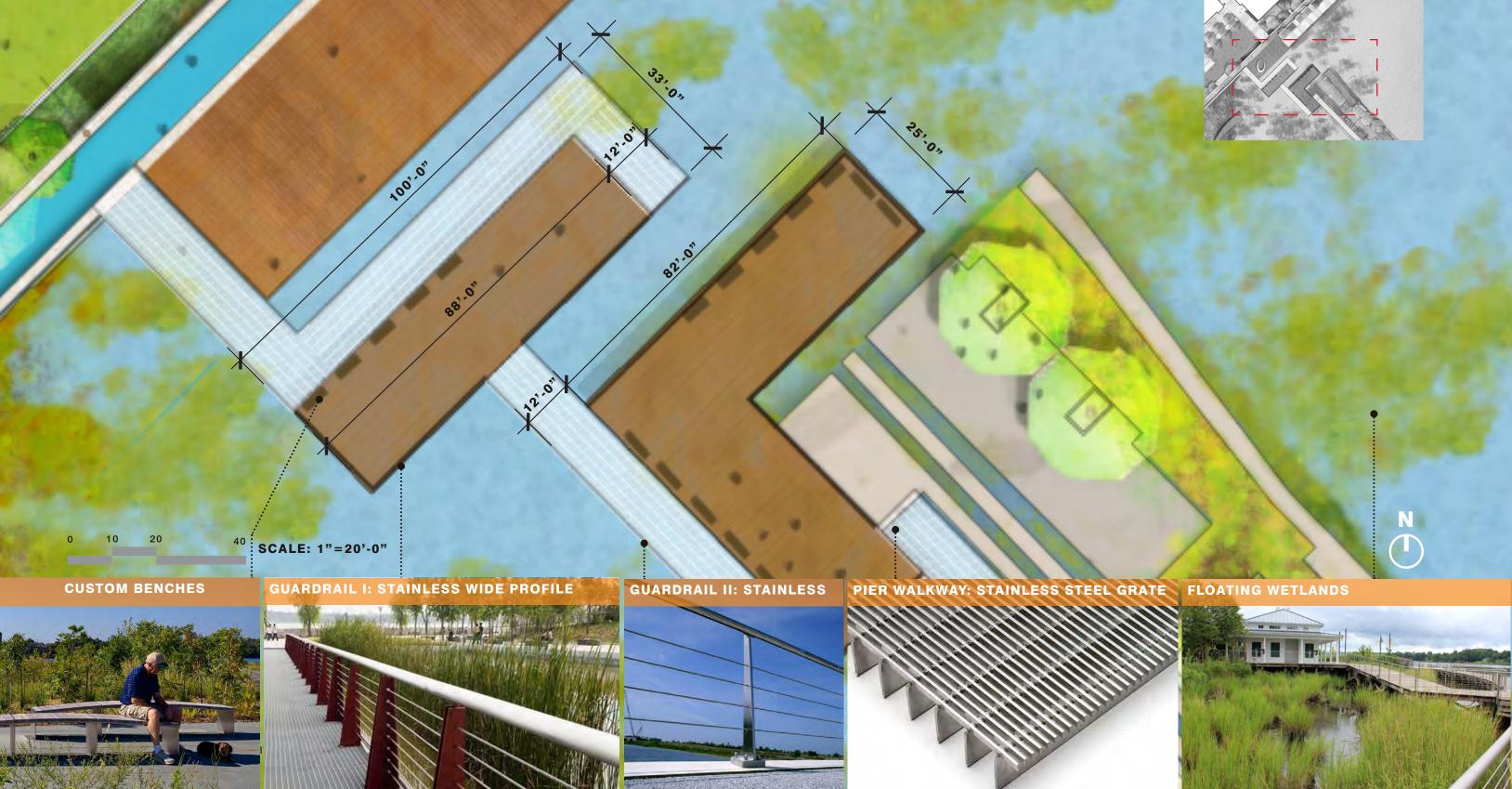
#### LINEAR PARK ENLARGEMENT PLAN





#### **PIER SITE PLAN**

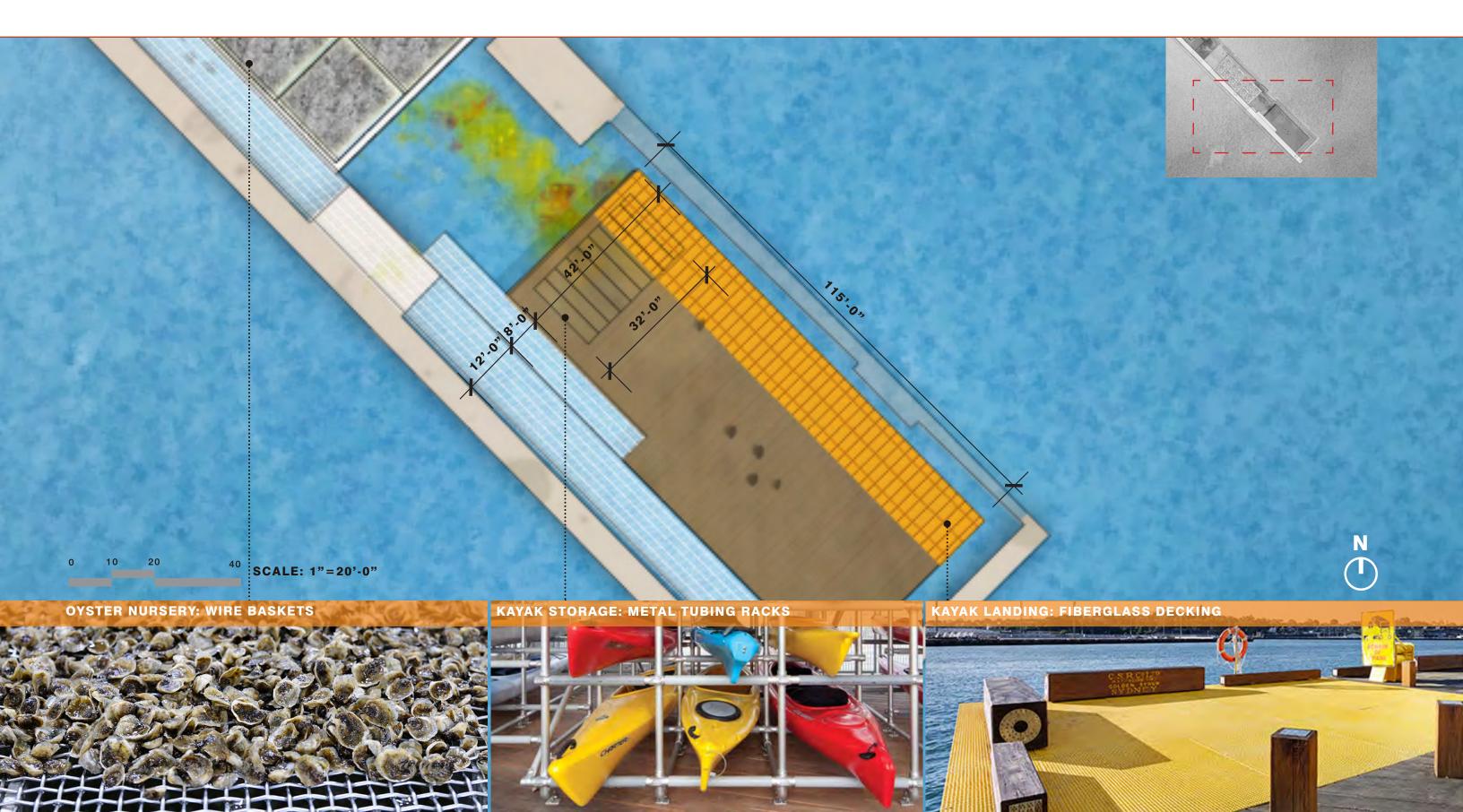
#### **PIER ENLARGEMENT PLAN**

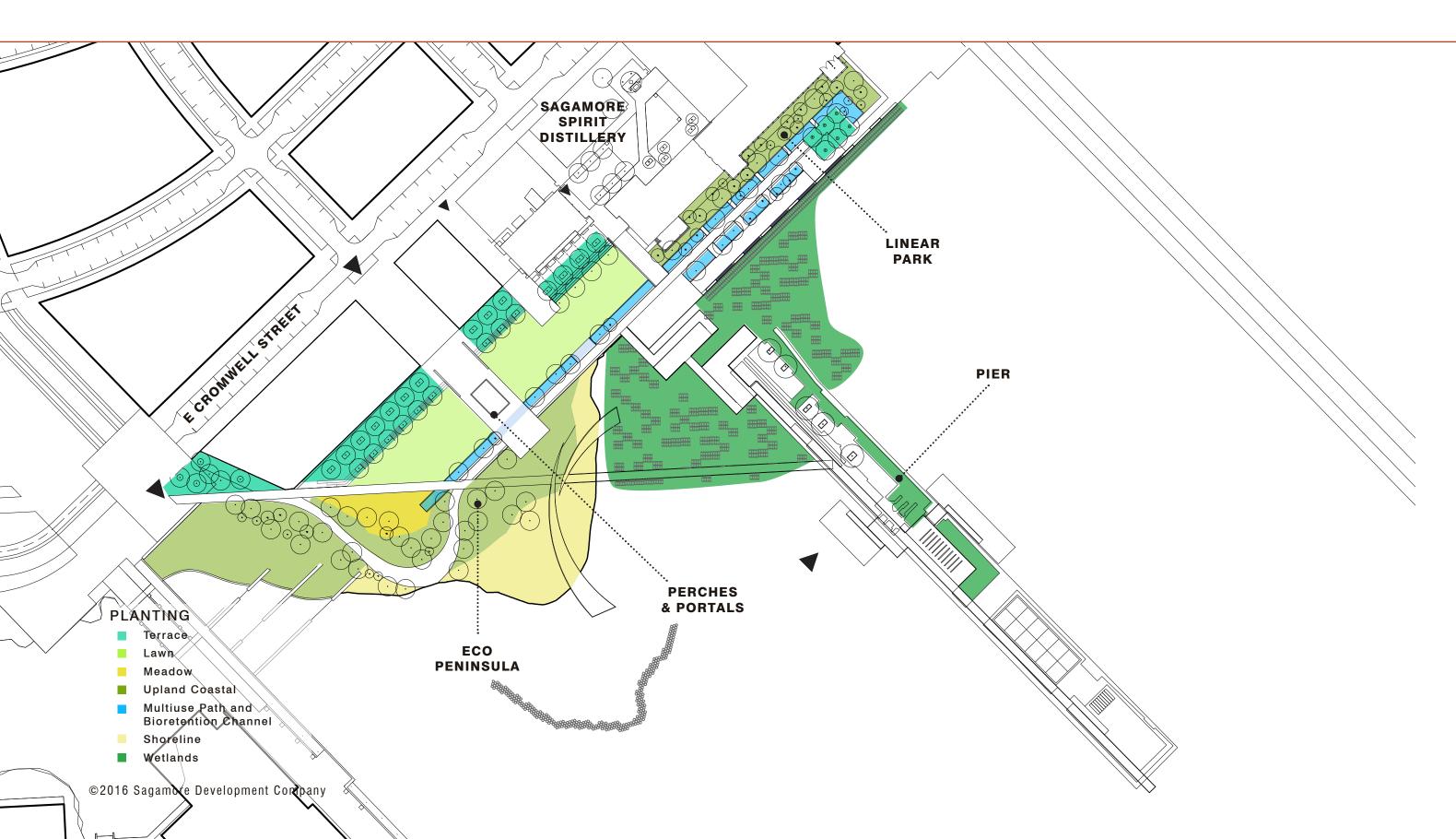


## **PIER ENLARGEMENT PLAN**



### **PIER ENLARGEMENT PLAN**





## **PLANTING DIAGRAM**

### TREES



Red Maple 40-80' Height Spread 30-60' Green lower April Bloom Time Sun Full sun to part shade







Acer rubrum 'Red Sunset' Red Maple 40-50' Height 30-40' Spread White Flower July-August Bloom Time Sun Full sun to part shade



Amelanchier arborea Serviceberry 15-25' Height 15-25' Spread White March-April Time Sun Full sun





Sur



Gymnocladis dioica Kentucky Coffeetree 60-80' Height 40-55' Spread Flowe Green May Bloom Time Full sun Sun



Nyssa sylvatica 30-50' 20-30' oread Green May Full sun to part shade



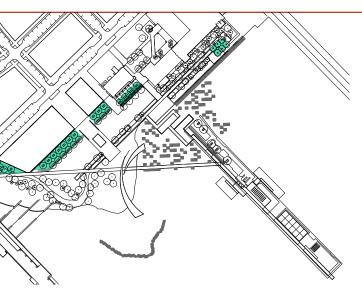
Quercus phellos Willow Oak 50-70' 40-60' Spread Flower Green Bloom Time April

Full sun



 $\mathbf{i}$ 





### Ulmus americana **'Valley Forge'** American Elm

Height	60-70'
Spread	50-60'
Flower	Green
Bloom Time	March
Sun	Full sun to part shade

### HERBACEOUS



nise Hyss 2-4 I-3' bread Purple June-August Time Sun Full sun to part shade











Aster novae angliae

New England Aster	
Height Spread	18"-2' 2-3'
Flower	Purple
Bloom Time	August - September
Sun	Full sun







Echinacea purpurea Purple Co Height 2-5' 18"-2' Spread Flower Purple Bloom Time June-August Sun Full sun to part shade



	Eupator fistulos Joe Pye W	um
t	Height	4-7'
	Spread	2-4'
2	Flower	Rose
/	Bloom Time	July-September
	Sun	Full sun to par shade







Solidago speciosa 2-3' 2-3' Spread

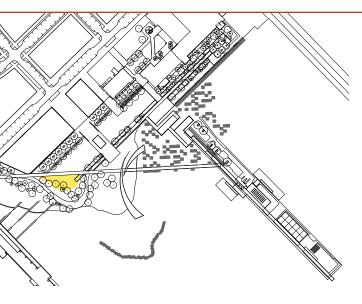
Yellow uly-Septemb Time

Full sun

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#### Schizachyrium scoparium

Little	Bluestem
Little	Diuestein

Height Spread	2-4 1-2'
Flower	Purple
Bloom Time	August-February
Sun	Full sun



### Solidago canadensis

Wild	Goldenrod
DIIAA	Goldenrod

Height	4-5'
Spread	4-5'
Flower	Yellow
Bloom Time	August-October
Sun	Full sun

### TREES



hagbark Hickory 70-90' Height 50-70' Spread Green Flower April-May Bloom Time Sun Full sun to part shade

Carya ovata



Chionanthus virginicus Fringe Tree 12-20' leight pread 12-20' White May-June Full sun to part shade





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Juniperus virginiana Eastern Red Cedar Height 30-65' Spread 8-25' Flower N/A

Bloom

Time

Sun

N/A

Full sun





### Pinus taeda blolly Pine 40-90' Height 20-40' Spread N/A N/A Bloom Time Full sun



Sun











### HERBACEOUS



Carex appalachia ppalachian Sedge 6" Heigh Spread Green April Bloom Time Sun Partial shade

Sun

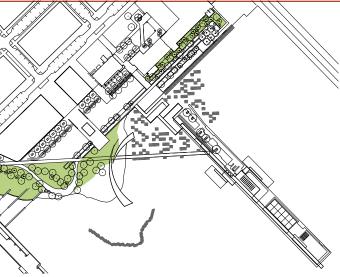
### SHRUBS

Quercus imbri-

40-60' 40-60' Green April Full sun

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### **PLANT PALETTE UPLAND COASTAL**



### Comptonia peregrina <sup>Sweetfern</sup>

Height Spread	2-5' 4-8'
Flower	Yellow
Bloom Time	April-May
Sun	Full sun to part shade



### Rhus copallinum

### Winged Sumac

Height	7-15
Spread	10-20'
Flower	Green
Bloom Time	July-August
Sun	Full sun to partial shade

### **PLANT PALETTE MULTIUSE PATH AND BIORETENTION CHANNEL**





n Redbu 20-30' leigh 25-35' Spread Pink April Full sun to part shade



Chionanthus virginicus Fringe Tree 12-20 Height 12-20' Spread White Bloom May-June Time Sun Full sun to part shade



Halesia caroliniana ilverbel Height 30-40' 25-35' Spread White lower April-May Bloom Time Sun Full sun to part shade



Magnolia grandiflora uthern Magnolia 60-80' Height Spread 30-50' White May-June Time Sun Full sun to part shade





Magnolia virginiana 30-40' 20-30'

White June Full sun to part shade





SHRUBS

Amorpha fruiticosa lse Indigo 4-12 leight 6-15 Spread Form Woody Shrub Native Yes Habitat Intermediate Value









Rosa virginiana /irginia Ros 4-5' 2-4' Spread Pink lowe June Гime Full sun



### **HERBACEOUS**





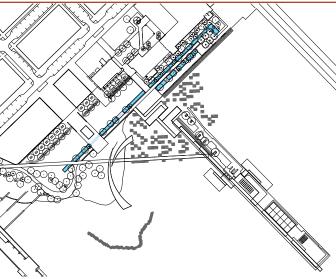
Aster novae angliae New England Aste 18"-2' Height 2-3' Spread Flowe Purple August -September Bloon Time Sun Full sun







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### Lindera benzoin

#### Spicebush

Height	6-12'
Spread	6-12'
Flower	Yellow
Bloom Time	March
Sun	Full sun to part shade



#### Myrica pensylvanica

#### Bayberry

Height	5-10'
Spread	5-10'
Flower	Green
Bloom Time	May
Sun	Full sun to part shade

#### Carex stricta

#### Tussock Sedge

	•
Height	2-3'
Spread	2-3'
Flower	Brown
Bloom Time	August-October
Sun	Full sun



#### Iris versicolor

#### lue Flag Iris

Height	2-3'
Spread	2-3'
Flower	Brown
Bloom Time	August-October
Sun	Full sun

### SHRUBS













HERBACEOUS

N/A	Distichlis	spicata
$W_{\rm M}$	Spike Grass	
	Height	6-8"
$\times \lambda$	Spread	4-6"
	Flower	Yellow
	Bloom Time	April-Octob
Ň	Sun	Full sun
N 186		







Juncus effusus 2-4 pread 2-4' ime



Kostele	tzkya virginica	
Seashore	Mallow	
Height	3-4'	Marsh (
Spread	2-3'	
Flower	Pink	1 AVAN AN
Bloom Time	June-September	
Sun	Full sun	













		Kostelet
ne the		Seashore M
S. HAN		Height
	- 25-	Spread
e e se	Call Control	Flower
	(A)	Bloom Time
	- A	Sun
- Bin Pill	25-	

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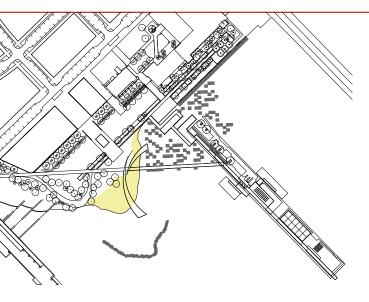




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### **PLANT PALETTE** SHORELINE



#### Scirpus robustus

#### tmarsh Bullrush

Height	5-15'
Spread	2-3'
Flower	Brown
Bloom Time	July-October
Sun	Full sun



#### Solidago sempervirens

#### Seaside Goldenrod

Height	3-6'
Spread	2-3'
Flower	Yellow
Bloom Time	August-October
Sun	Full sun

### TREES



Taxodium distichum		
Bald Cypress	5	
Height	50-100'	
Spread	20-45'	
Flower	N/A	
Bloom Time	N/A	
Sun	Full sun	

### HERBACEOUS





















6-10' I-2' Greenish July-October

Full sun

### **PLANT PALETTE** WETLANDS



### Spartina alternifolia

Smooth Core	dgrass
Height	4-5
Spread	1-2'

Spread	I-2'
Flower	Greenish
Bloom Time	July-October
Sun	Full sun





#### Spartina cynosuroides

#### Big Cordgrass

Height	4-10'
Spread	I-2'
Flower	Greenish
Bloom Time	July-October
Sun	Full sun

# **ECO PENINSULA SITE PLAN**



# **SOUTHWEST ENTRANCE**





# **ECO PENINSULA PERSPECTIVE**



# **MULTIUSE PATH PERSPECTIVE**



## **MULTIUSE PATH AT INTERTIDAL MARSH**





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### INTERTIDAL MARSH

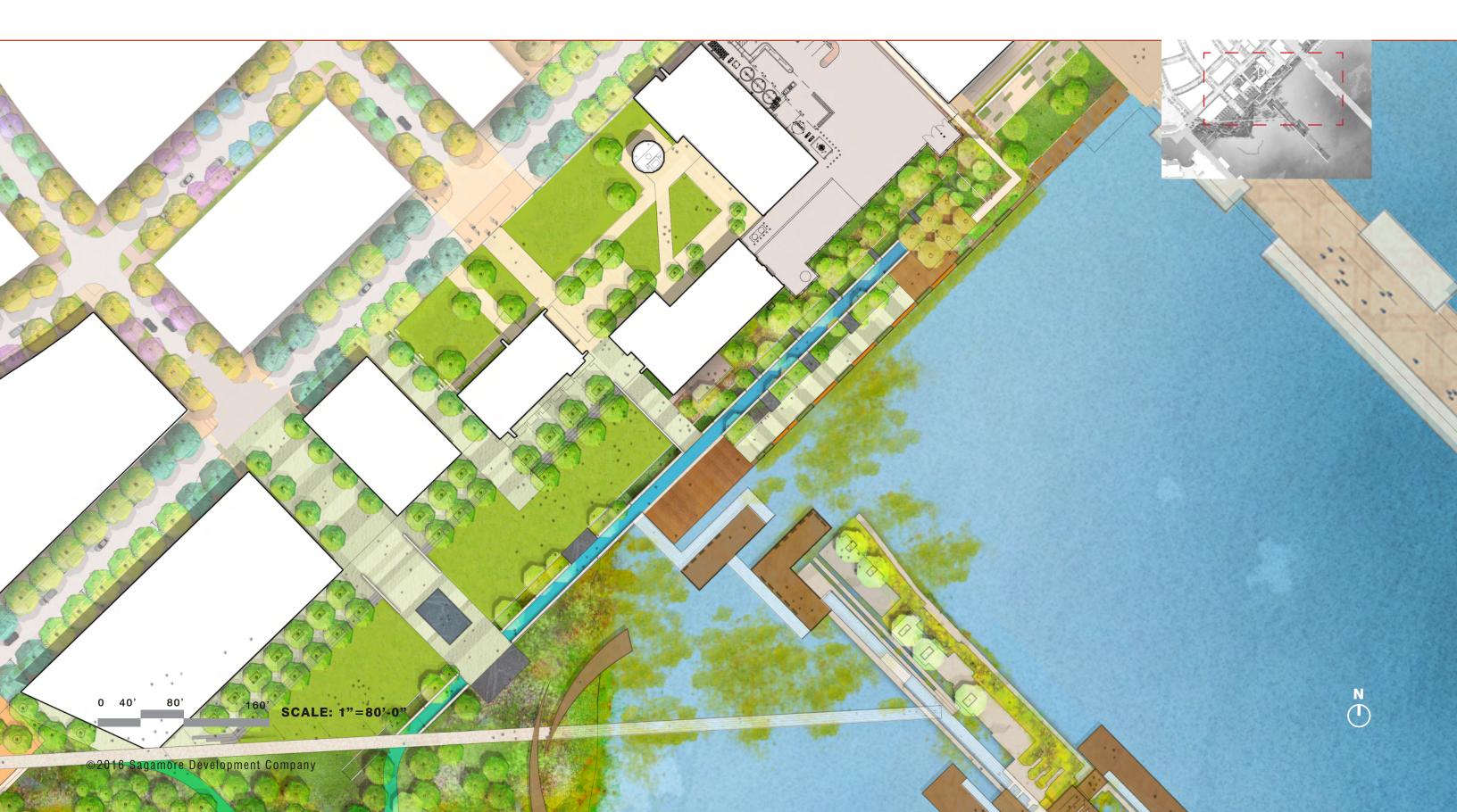


# **MULTIUSE PATH AT OVERLOOK**



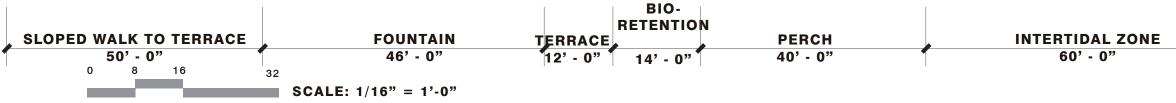
# **PERCH PERSPECTIVE**

# LINEAR PARK SITE PLAN

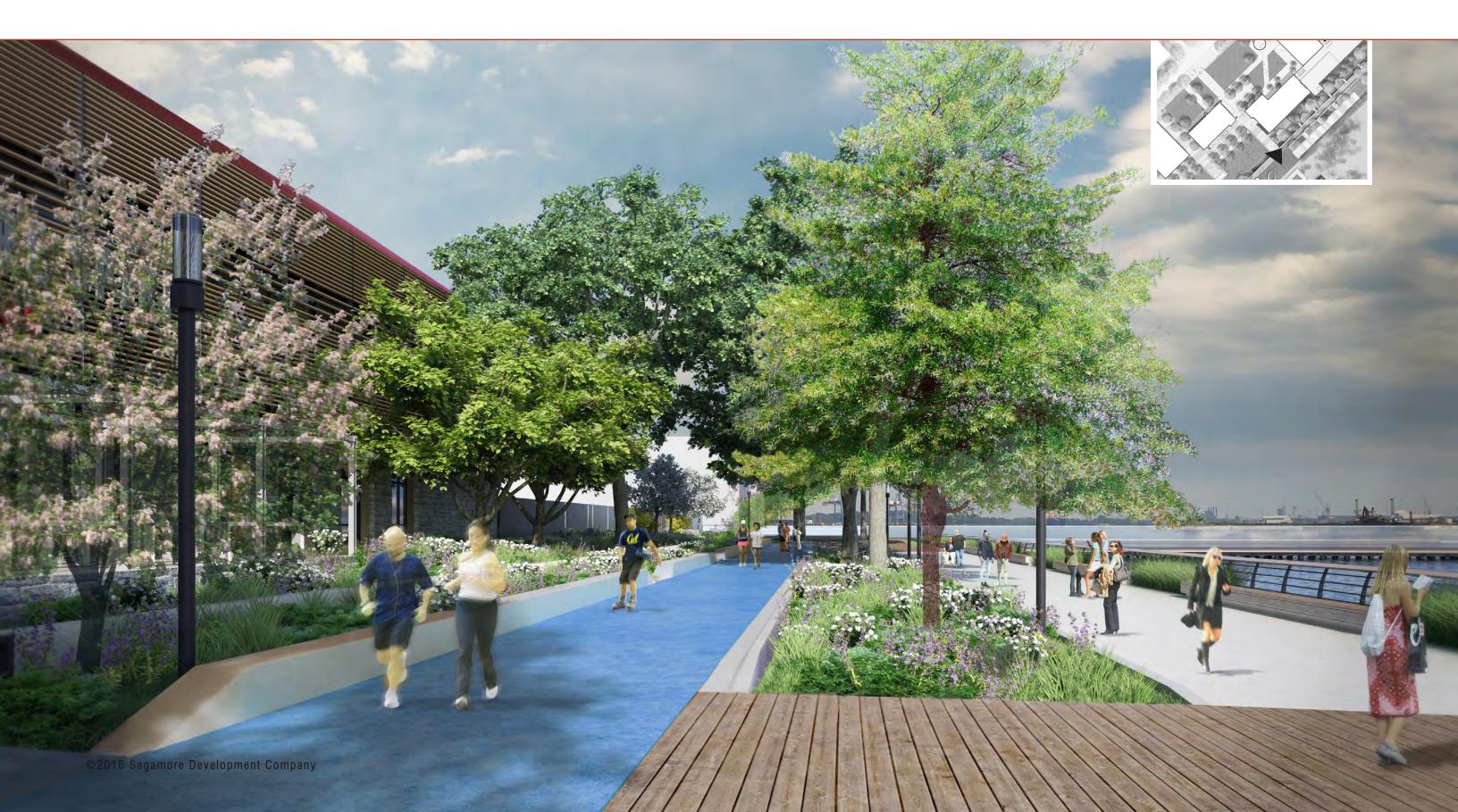


# **FOUNTAIN AND PERCH**









# LINEAR PARK PERSPECTIVE



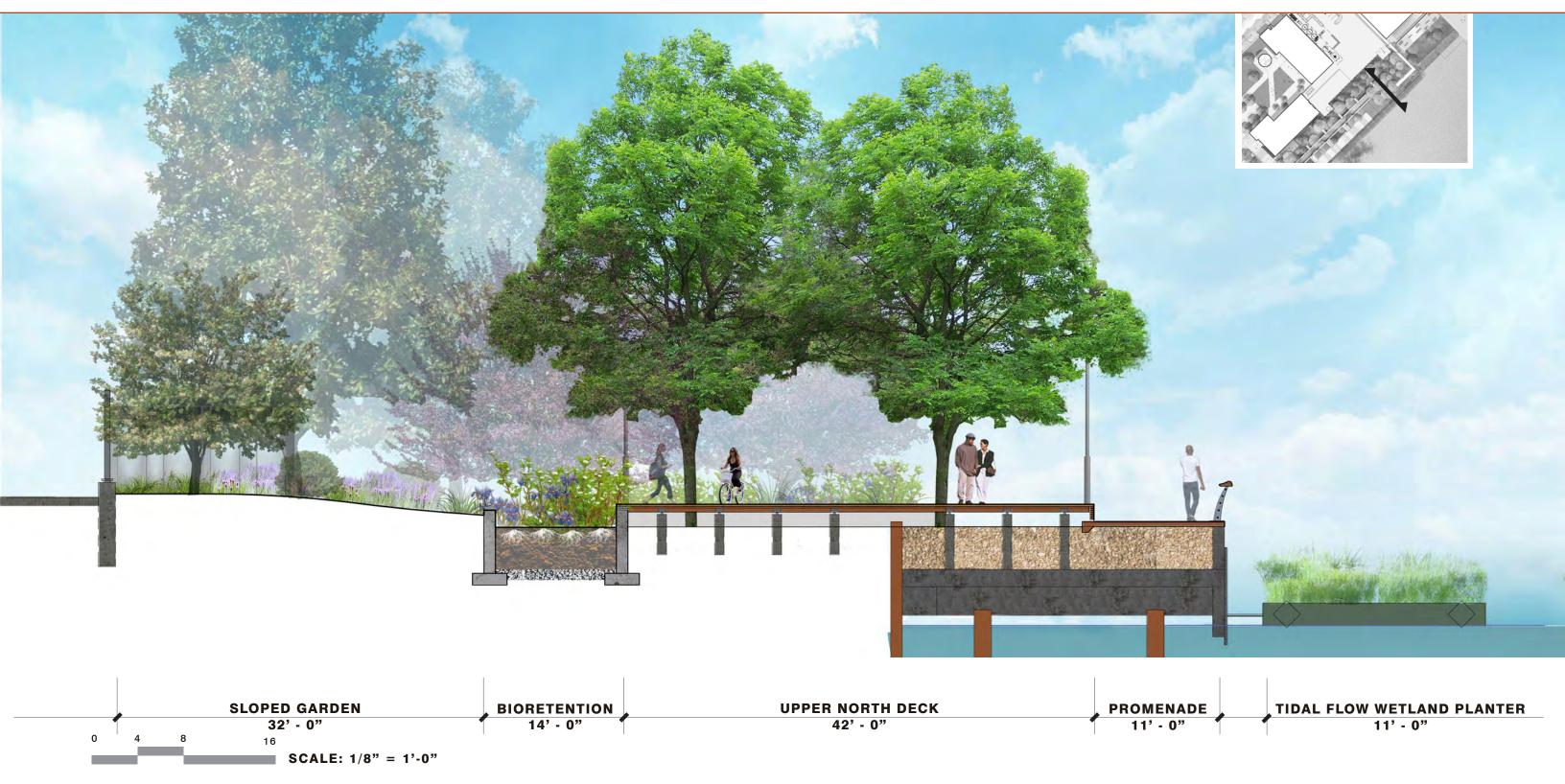
## LINEAR PARK WALKWAY





# LINEAR PARK PERSPECTIVE

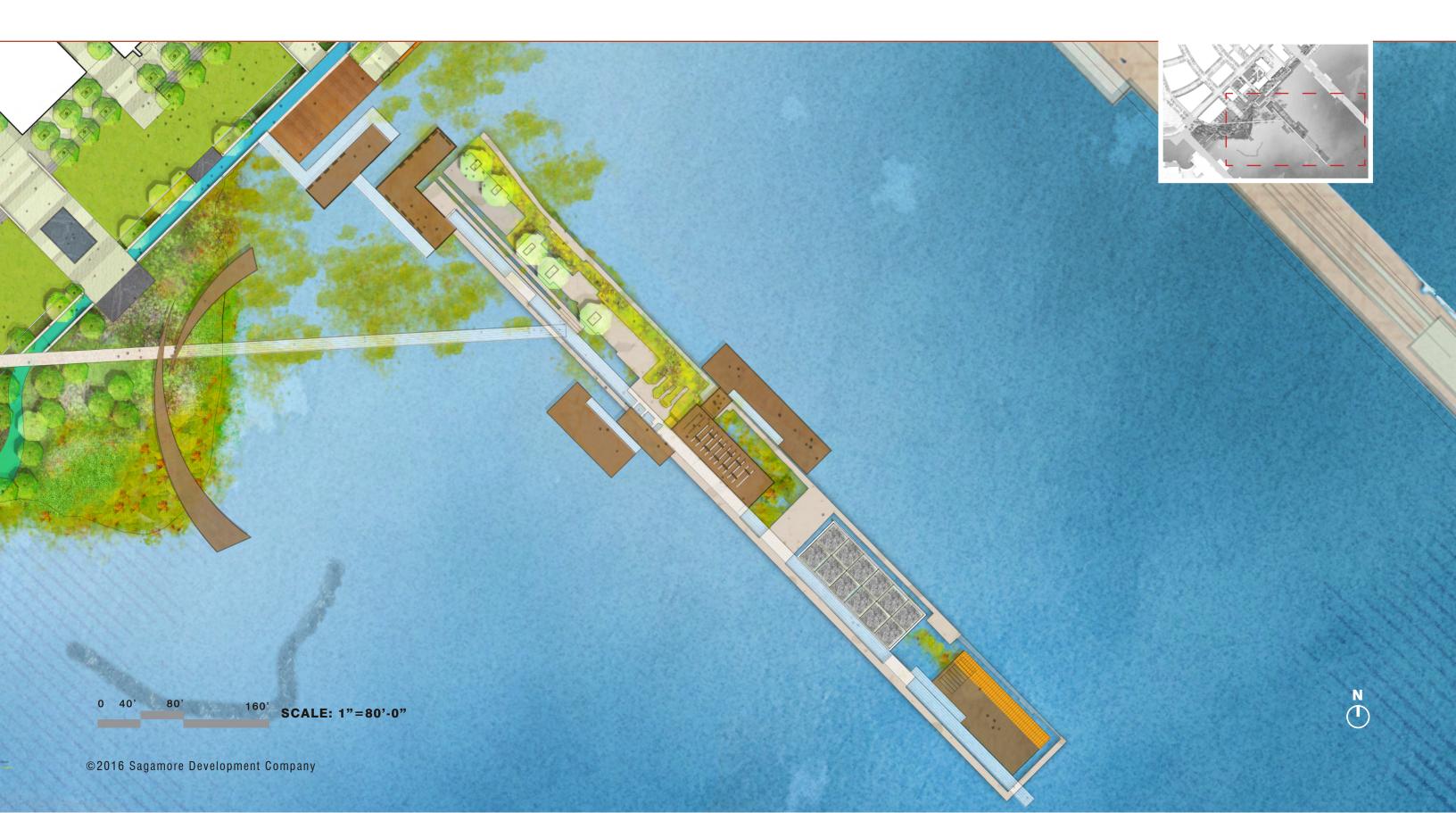
### LINEAR PARK AT NORTH DECK



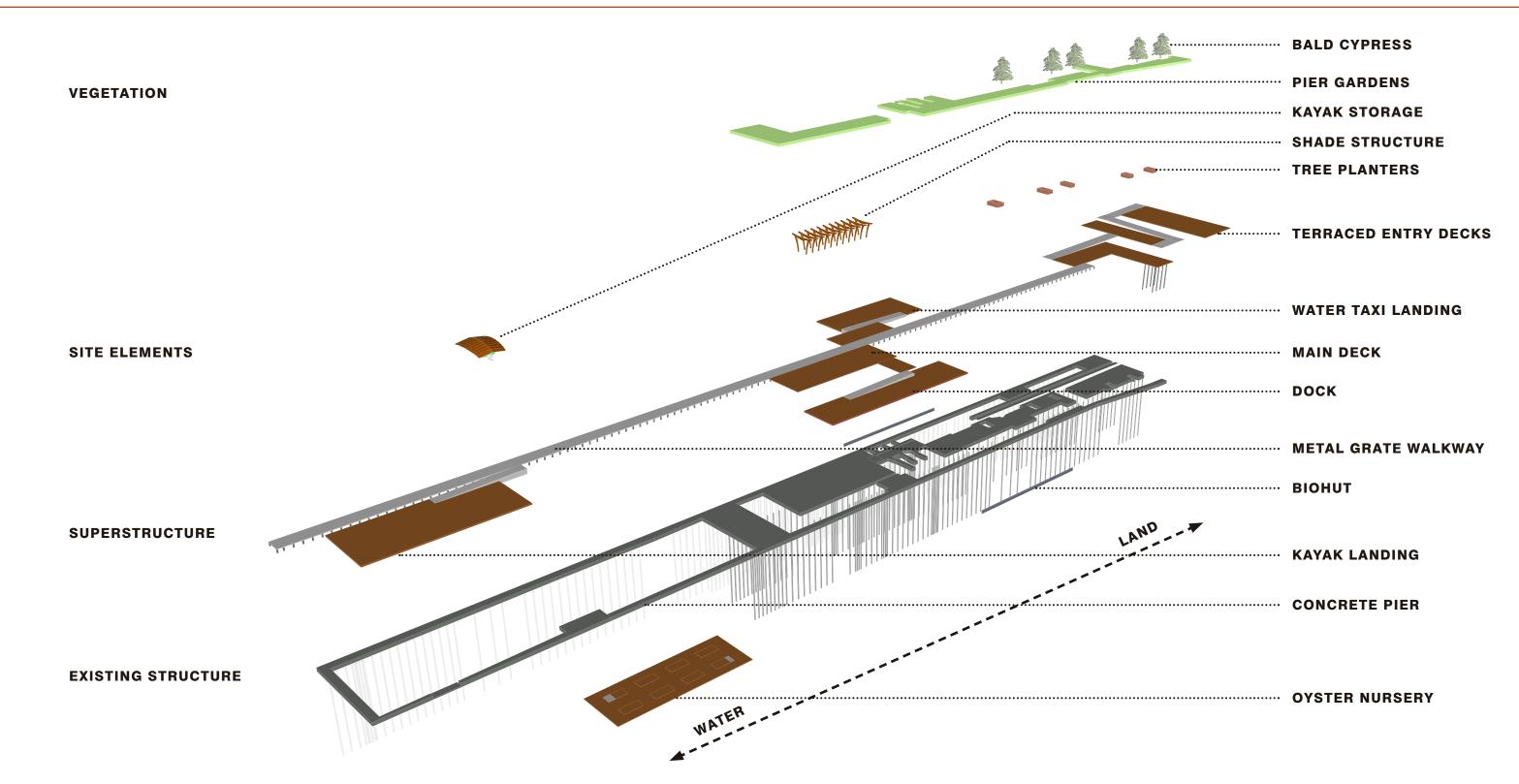
### LINEAR PARK AT NORTH DECK









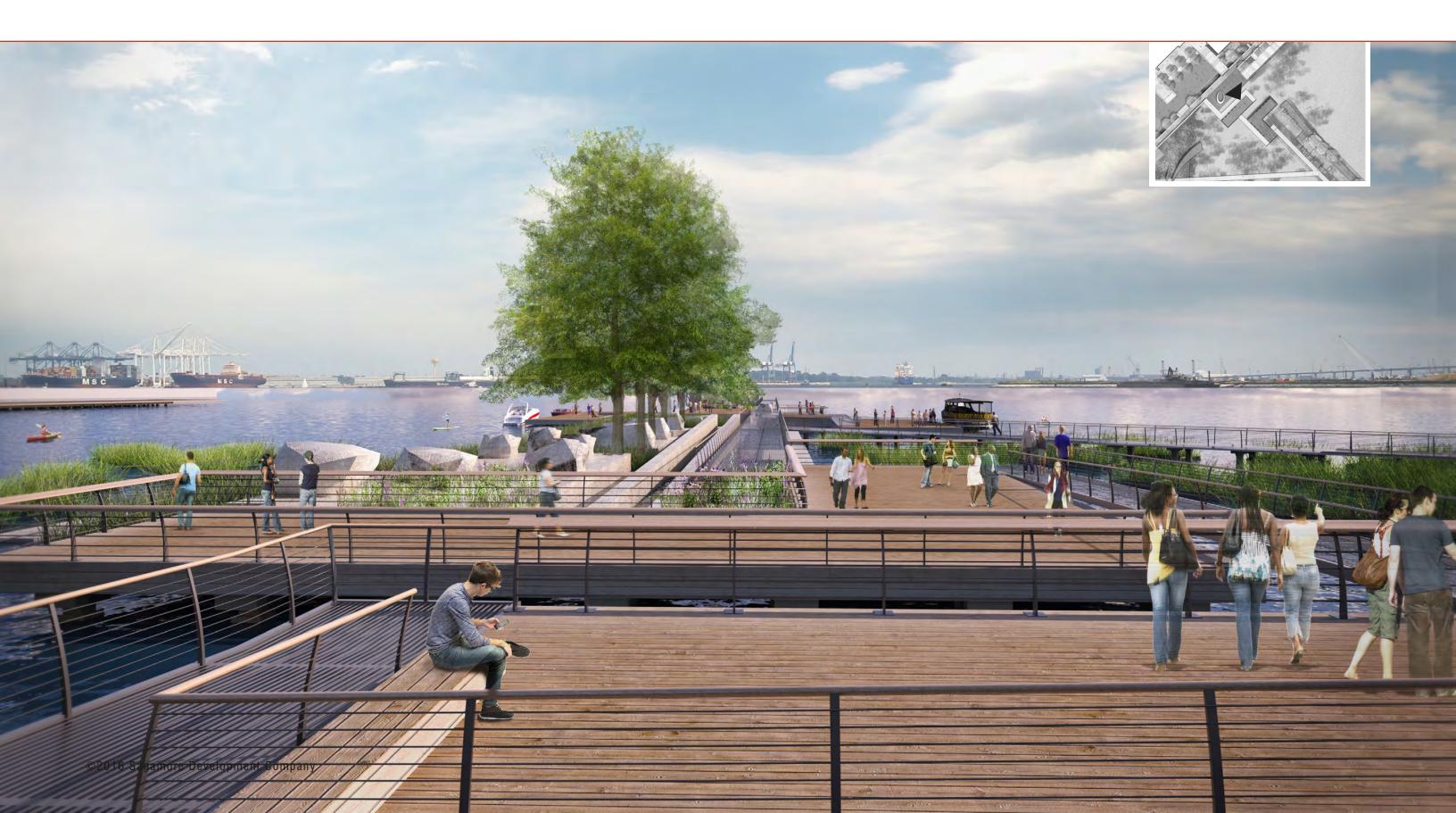


### **PIER AXONOMETRIC**





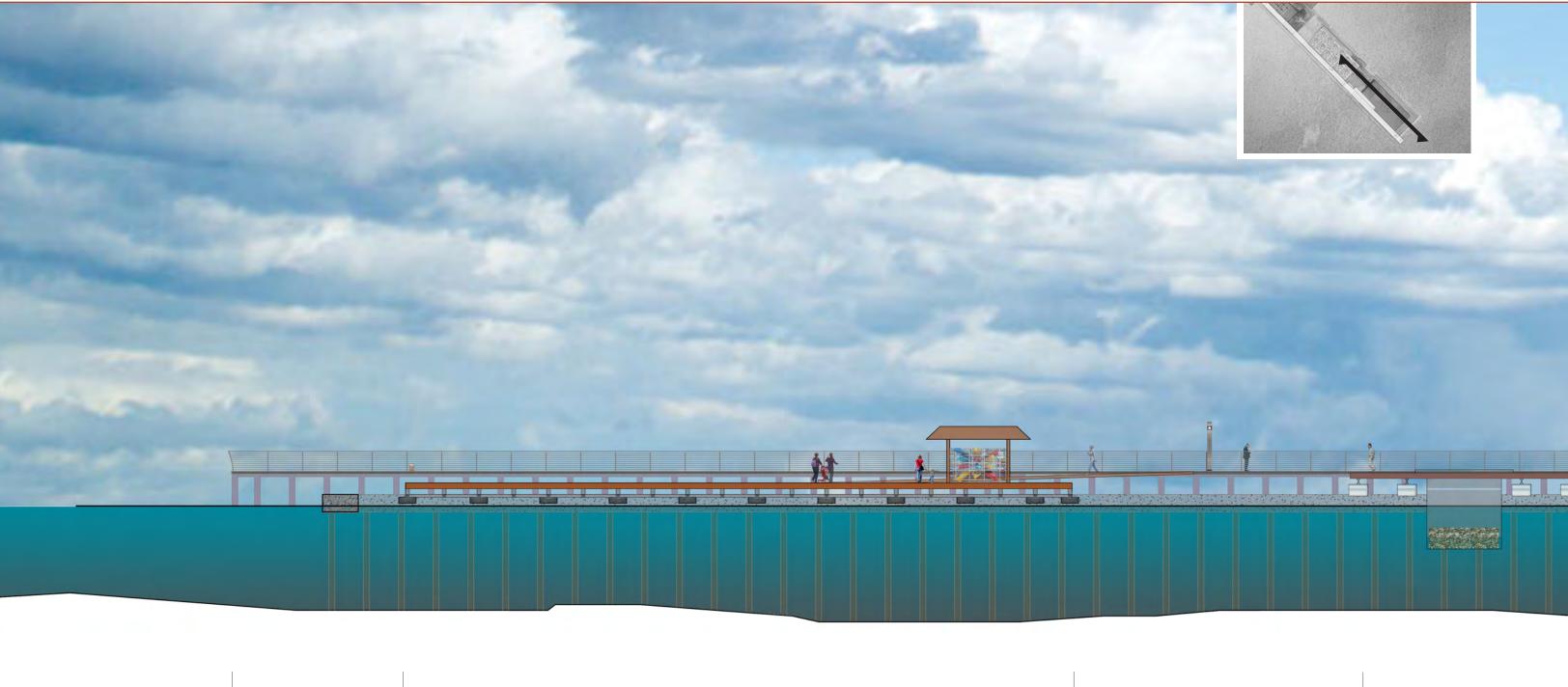
# **VIEW FROM PENINSULA**





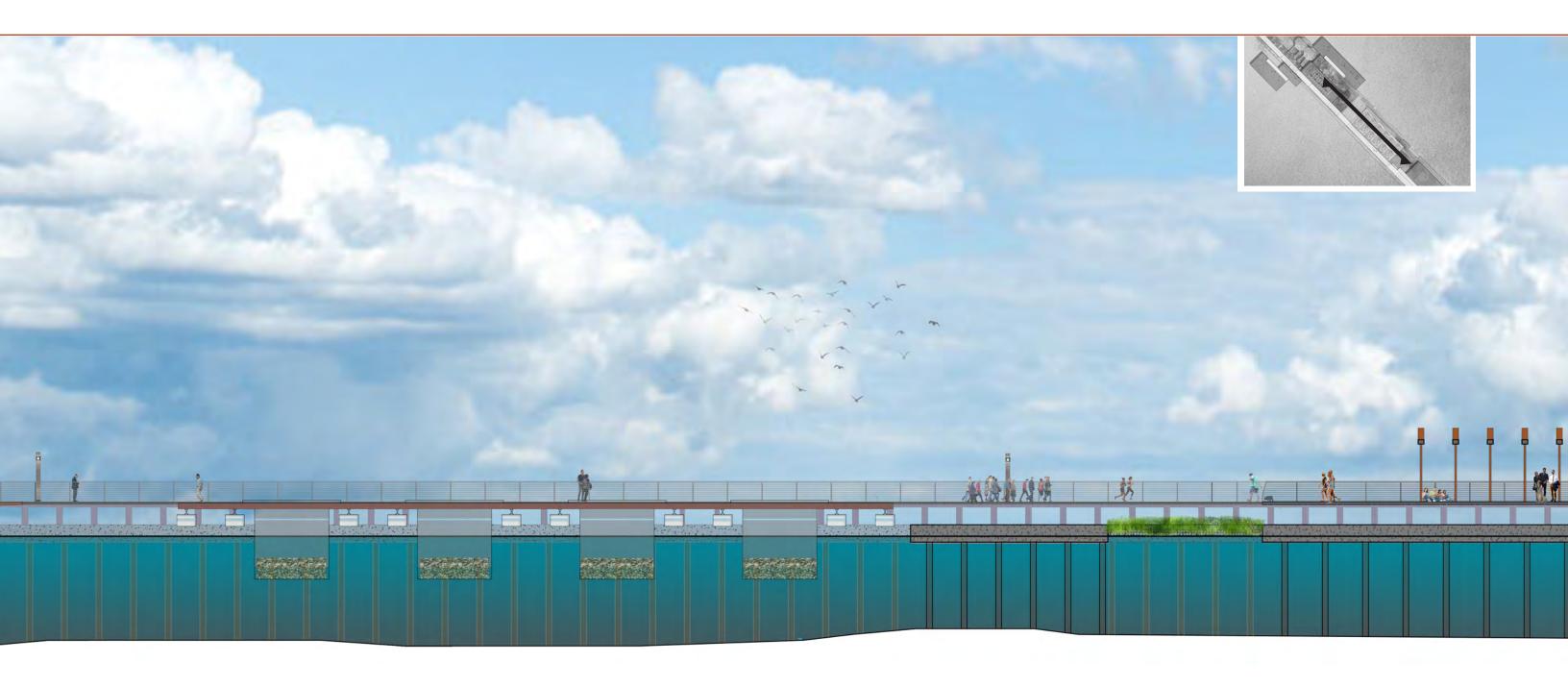
# **SHORELINE PERSPECTIVE**





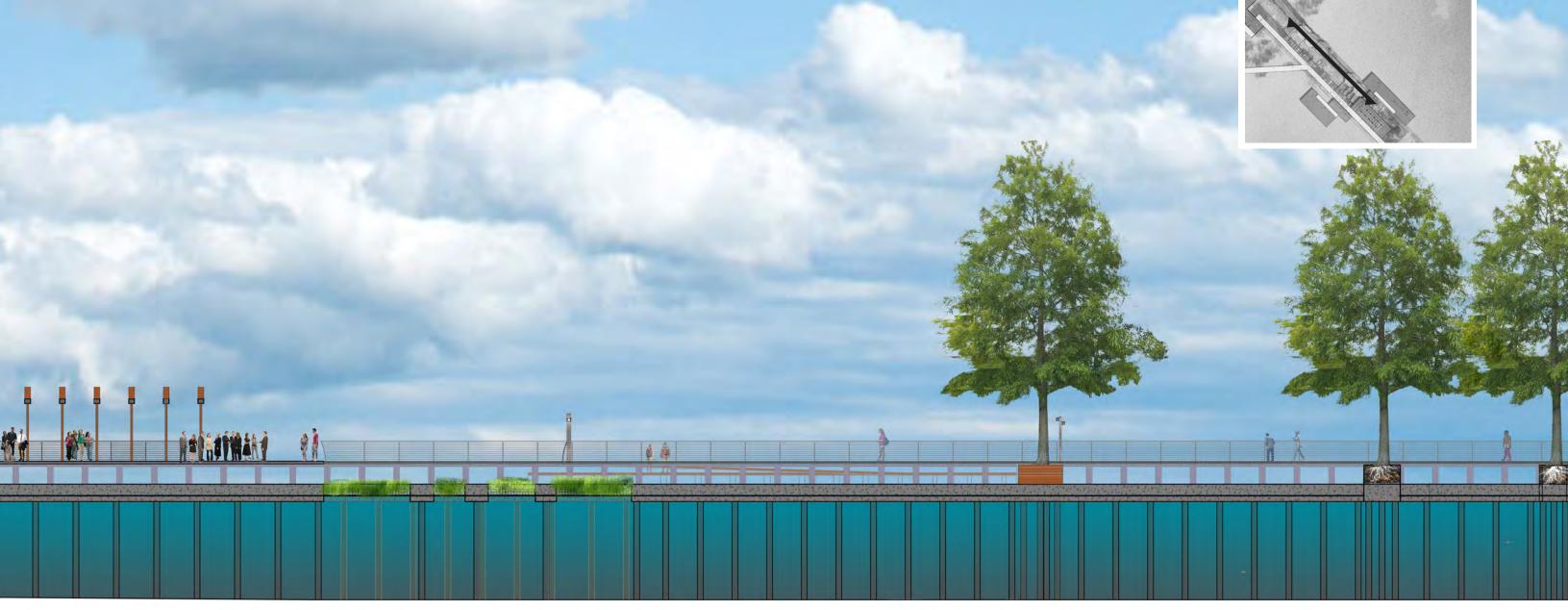








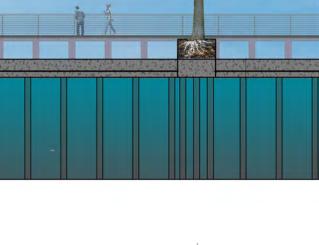




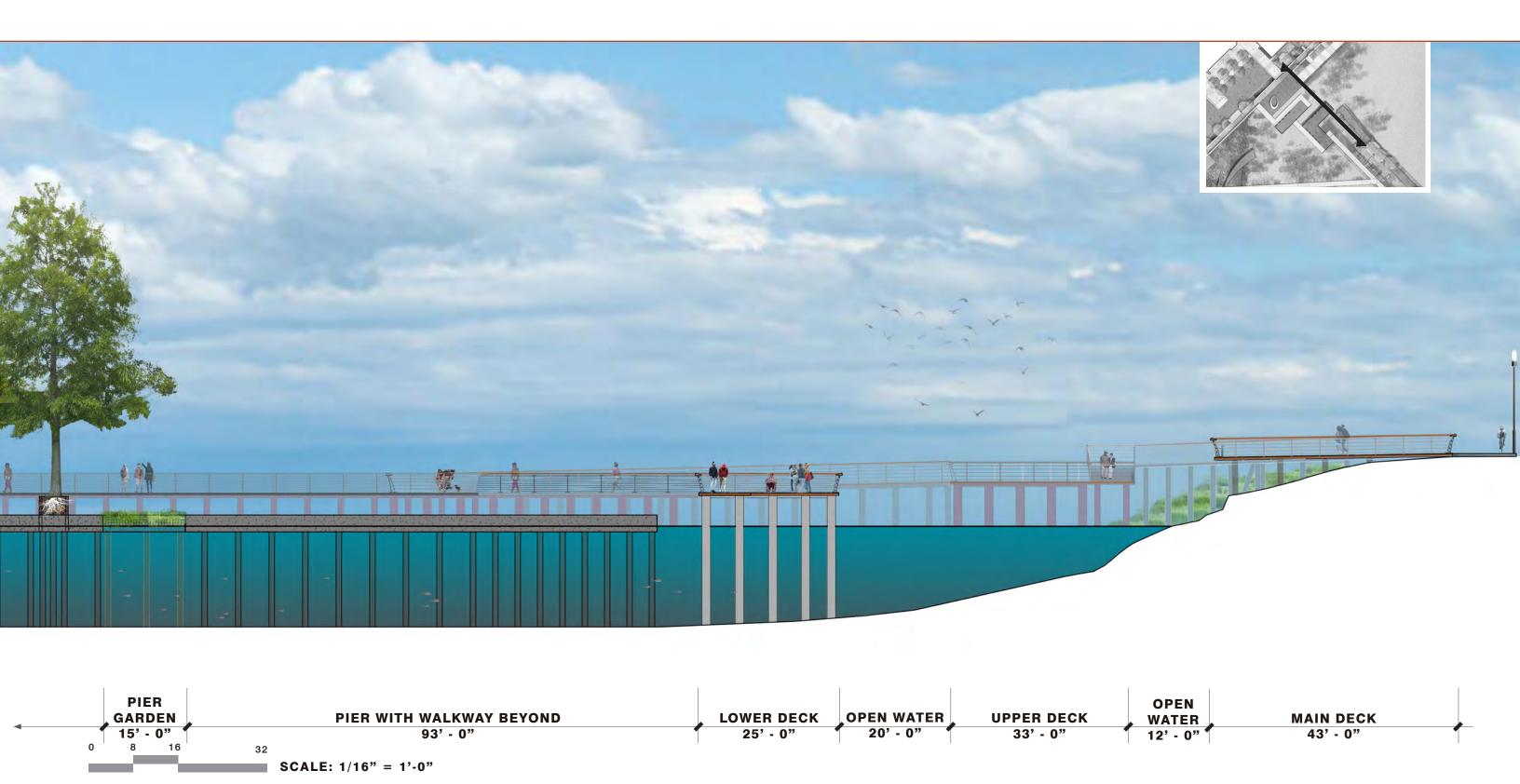


### **BETWEEN TREE PLANTERS** 60' - 0"

### **BETWEEN TREE** PLANTERS 30' - 0"

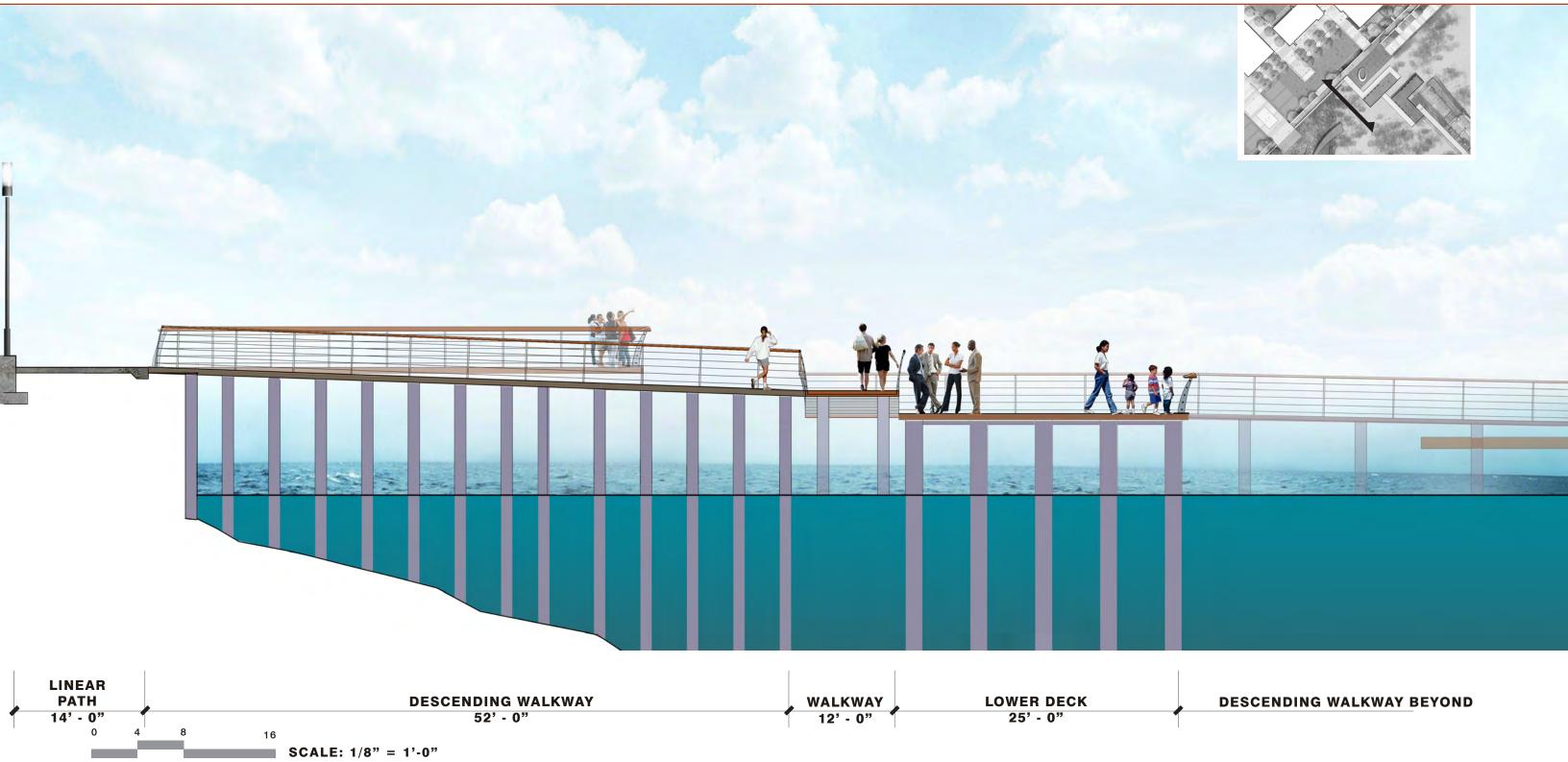


## **PIER SECTION 3**





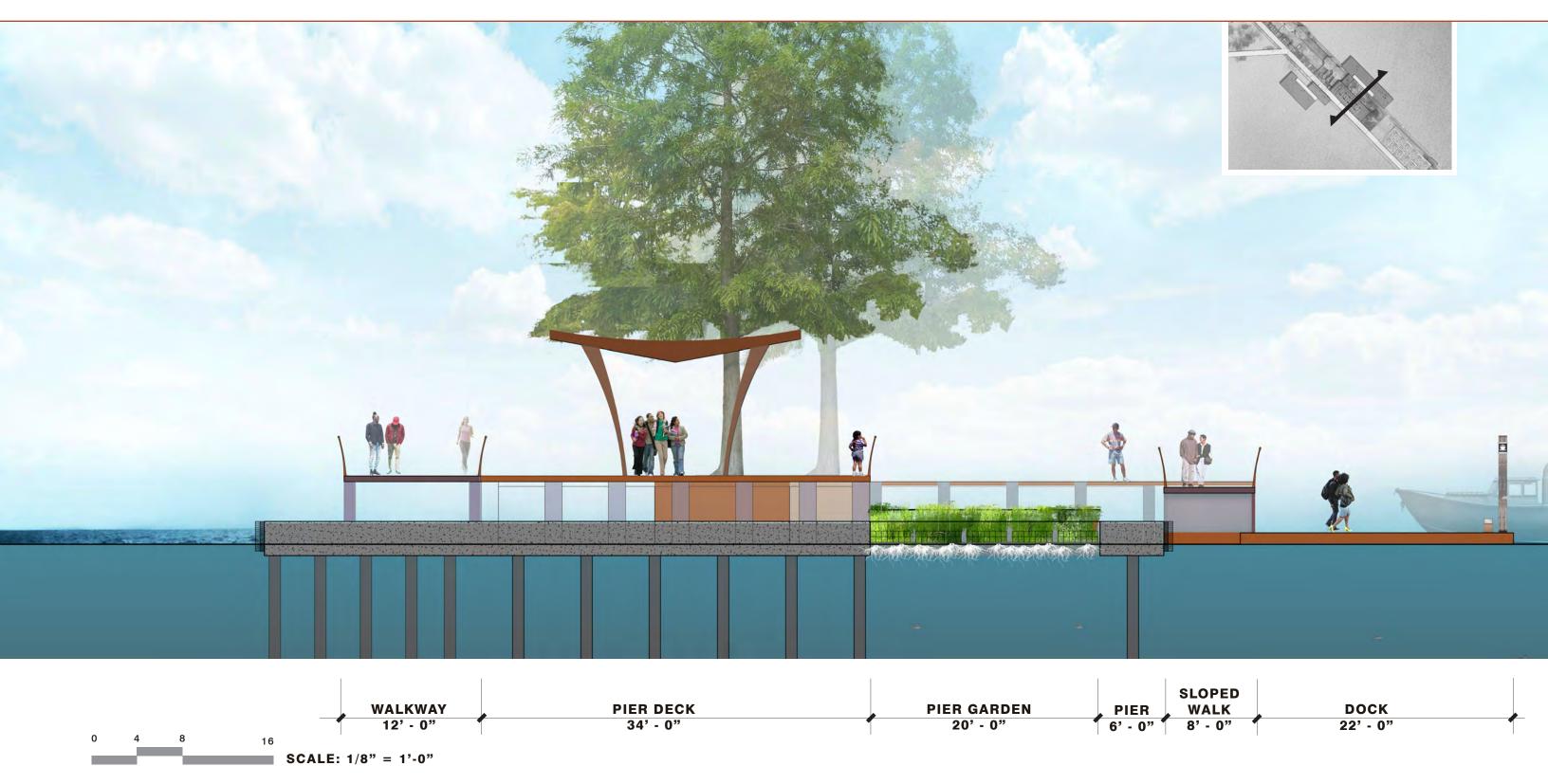
# **DECK CONNECTION TO PIER**





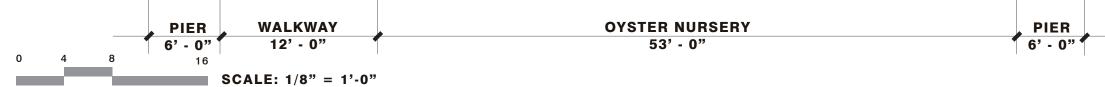


# WATER TAXI LANDING



## **SHADE STRUCTURE AT PIER**





# **OYSTER NURSERY**

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## **KAYAK DECK AND STORAGE**



# Port<br/>CoungtonEAST WATERFRONT PARK<br/>Ecological Context

CHRIS STREB PE, LEED AP Biohabitats Inc. Ecological Engineer

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#### **PORT COVINGTON ECOLOGICAL PRINCIPLES**

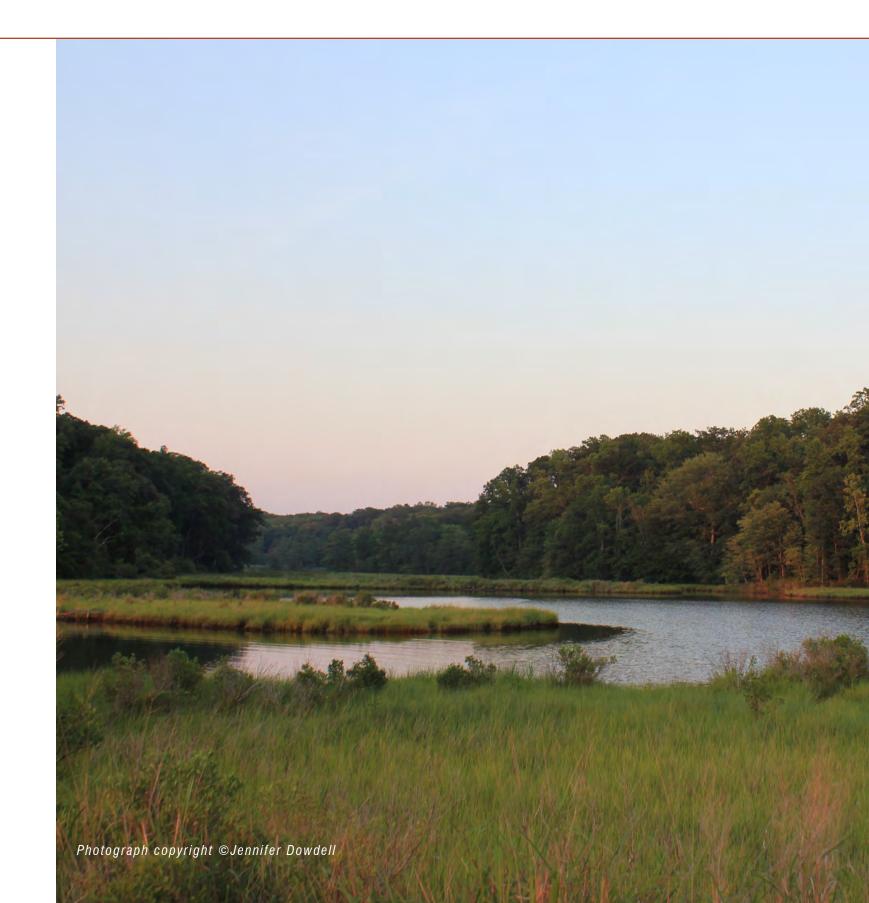
Locally attuned.

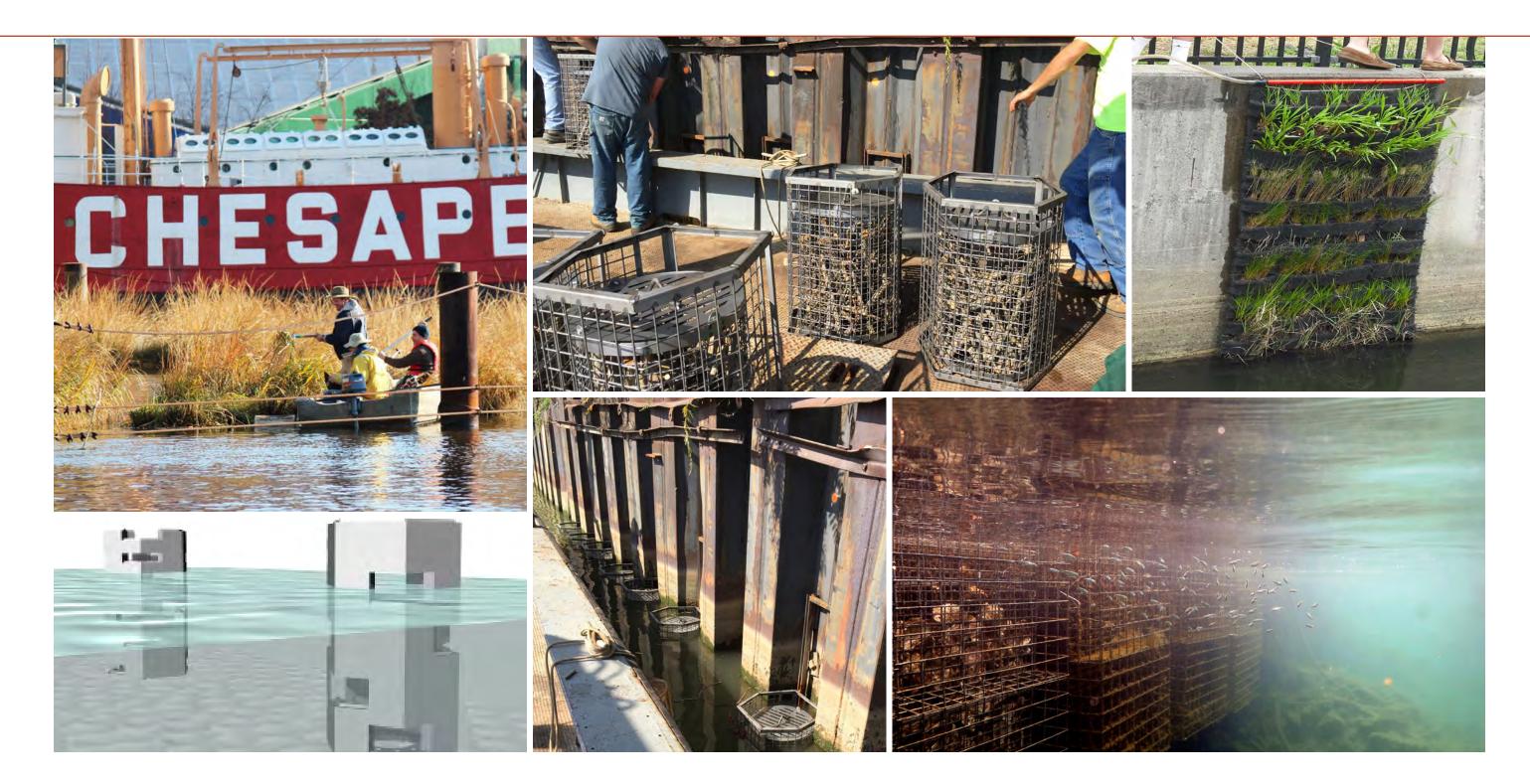
High performance landscape.

Celebrating water.

Community catalyst.

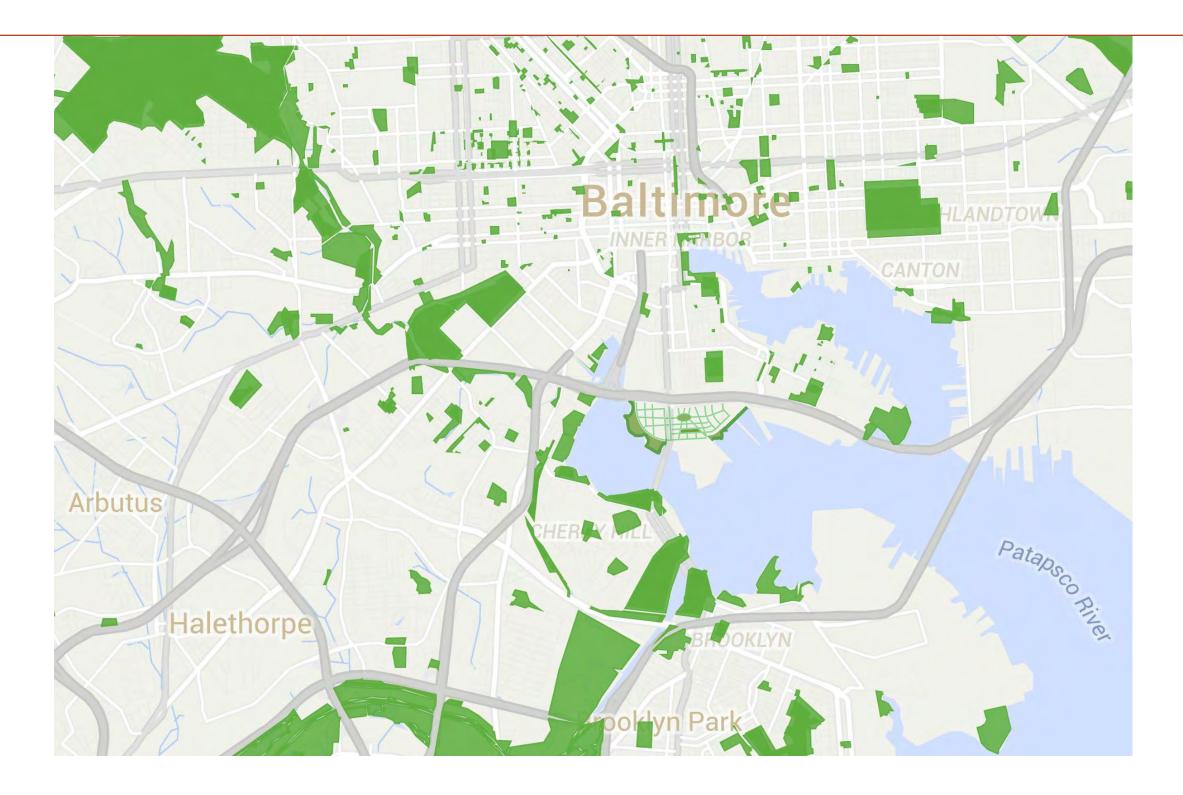
Authenticity.





#### **INNOVATION PLATFORM**

#### **GREATER BALTIMORE WILDERNESS COALITION**





#### **EAST WATERFRONT PARK ECOZONES**



#### **RIPARIAN ZONE**

Intertidal Corridor

Living Bulkhead or Piers ..... 

- 100' Riparian Buffer
- Riparian Shoreline Corridor

N ()

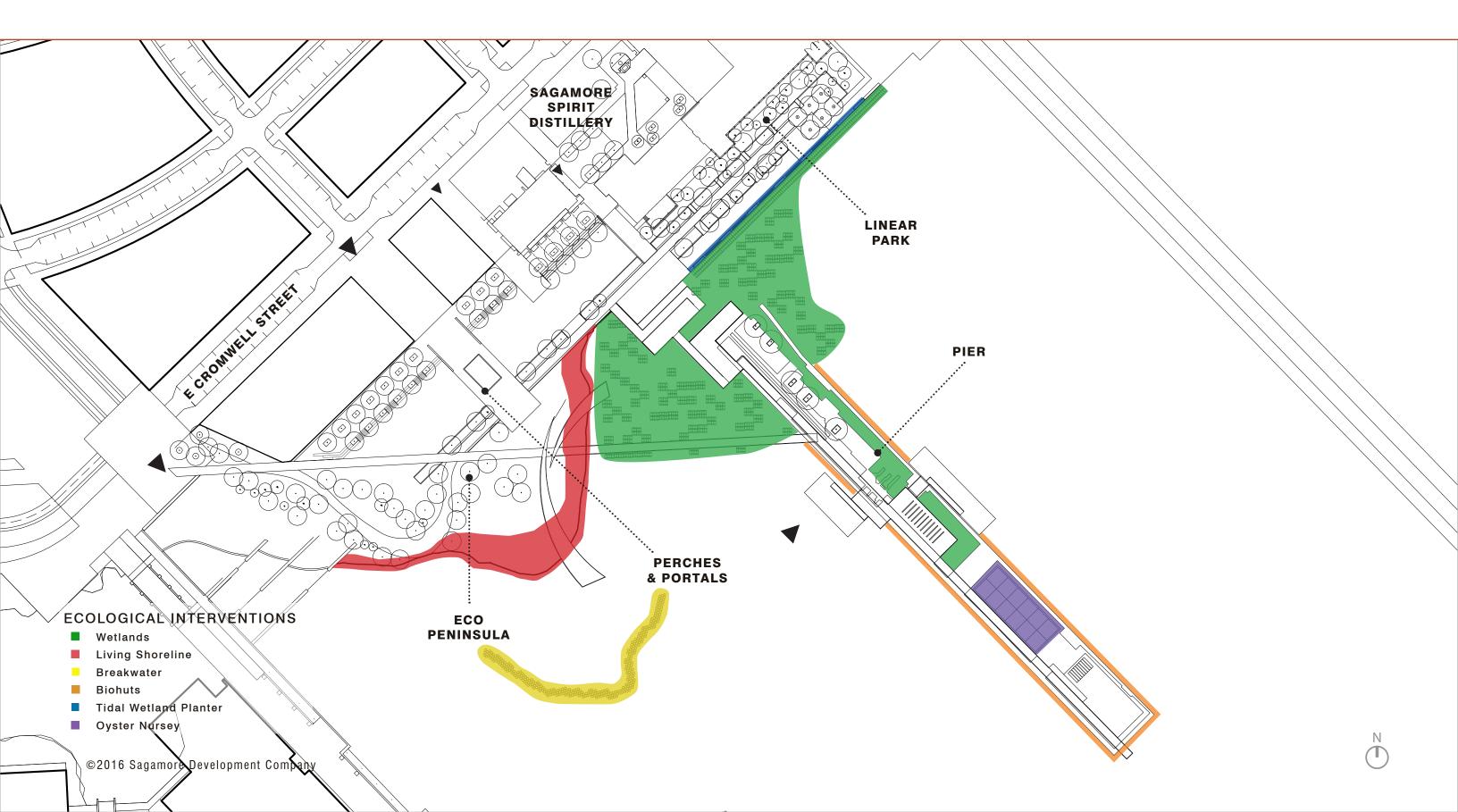
-		LANDSCAPE POSITION	METRICS
PROVISIONING	COLLECT, STORE & MANAGE WATER	UPLAND / SHORELINE (Native plantings and BMPs)	Volume of water captured vs volume used v
SIVOF	FOOD/ URBAN AG	UPLAND (Planter boxes, green roofs)	Calories or Ibs. grown on or near site vs im
PP	POLLINATION	UPLAND / SHORELINE (Living Shoreline and native plantings)	Pollinator surveys, pre and post; square fee
g	CYCLE NUTRIENTS/ WASTE	UPLAND (Compost)	Lbs. of nutrients imported/generated/expor food waste directed to compost; lbs of mat
ORTII	НАВІТАТ	UPLAND / SHORELINE (Living shoreline/gardens)	QHEI, # of types of habitat, species counts
SUPPORTING	BUILD SOILS	UPLAND (Native planting zones/BMPs)	Cubic feet of amended soils, annual soil tean native plant roots
	INCREASE BIODIVERSITY	UPLAND / SHORELINE (Living shoreline /gardens)	Species counts by habitat (plant and wildlif
	CONTROL FLOODING	SHORELINE (Living shoreline)	NOAA/ FEMA models - expected vs adapte
	EVAPOTRANSPIRATION	UPLAND / SHORELINE (Native plantings and BMPs)	itree analysis and output; volume of water of
	PROTECT SHORELINE (CRITICAL AREA BUFFER)	SHORELINE / UPLAND (Ntiave plantings)	Buffer width managed for habitat; QHEI; er
	DARK SKY COMPLIANCE	UPLAND / SHORELINE / BUILDINGS (Low intensity and timed lighting)	Pre and post measures, reduction versus t
ING	URBAN HEAT ISLAND	UPLAND (increased tree canopy and native plantings)	Annual/seasonal avg temps; albedo (pre al analysis; micro-climate temp measurement
REGULATING	CARBON SEQUESTRATION	UPLAND / SHORELINE (increased tree canopy	Annual metric tons carbon generated vs se survey, pre and post; monitoring of trees fo
	FILTER AIR AND WATER (SWM)	and native plantings) UPLAND / SHORELINE (BMPs)	itree analysis and output monitor water qua
a fr	CONTROL PESTS/ INVASIVE SPECIES	UPLAND / SHORELINE (through habitat creation)	IPM; survey of pests and nonnative invasiv
	EDUCATION	UPLAND / SHORELINE (Signage, research, & outdoor classrooms)	Long term monitoring, number of educational pr
4	RESPITE	UPLAND / SHORELINE (Seating and trails)	Site user surveys; perception of opportunities, o
TURA	AESTHETICS	UPLAND / SHORELINE (Native plantings, tree canopy)	Monumented photo sites, change over time; sur
G	RECREATION	UPLAND / SHORELINE (trails connections)	Survey of pre-/post-constrction user numbers, e
	JOBS	UPLAND / SHORLINE / BUILDINGS (open space maintenance)	Jobs created: landscape maintenance, monitori

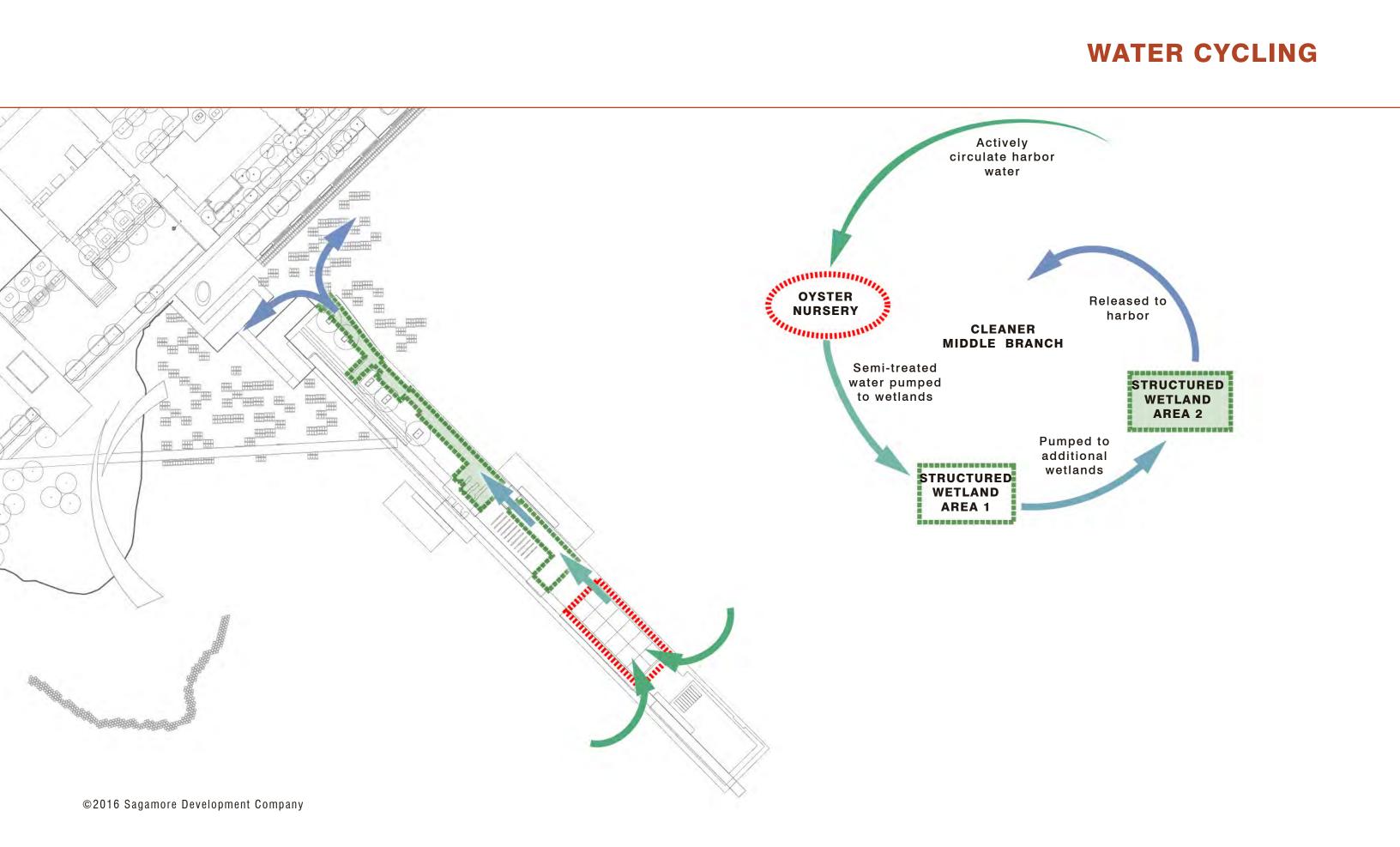
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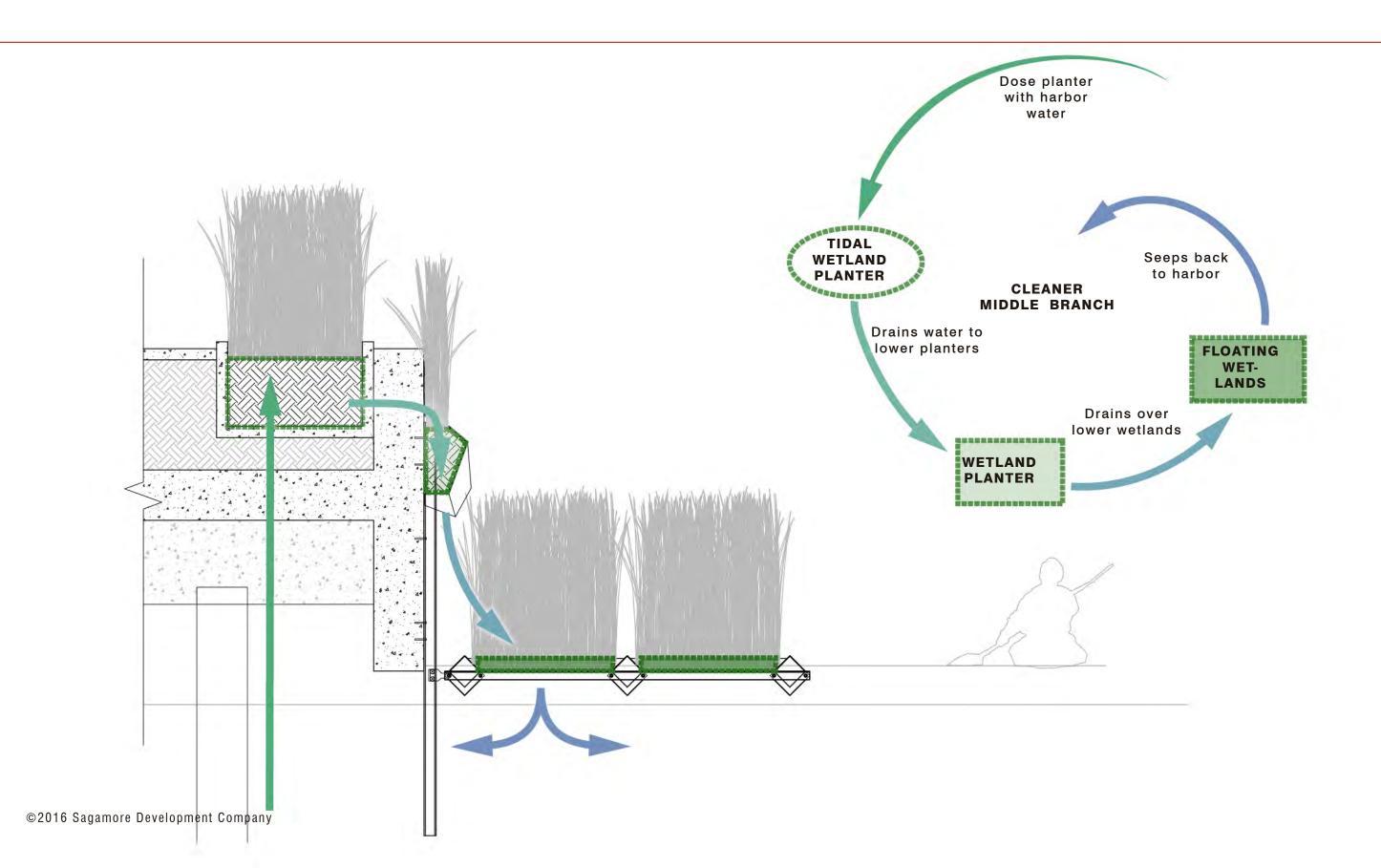
#### **ECOSYSTEM SERVICES** EAST WATERFRONT PARK

- d vs volume conveyed to storm drain
- mported, pre and post
- feet of flowering plantings, pre and post
- orted; Ibs sequestered on site; offsets; tons aterials reused on site
- ts by habitat type, pre and post
- tests; cubc feet of soil organic matter from
- life) , pre and post
- ted; living shoreline sq ft
- r captured on roofs versus released
- erosion measures pre and post
- typical comparable; wildlife surveys
- and post); %IC vs %PC; NASA cities infrared nts across the site
- sequestered offsets from trees; vegetation for health and survival
- uality in stormwater practices
- ive species, pre and post; adaptive mgt
- programs (bio-blitzs) or annual student visits
- daily use
- urvey of user's perceptions of landscapes
- events held; monitoring of sensitive species
- oring; annual & seasonal

#### **ECOLOGICAL INTERVENTIONS**







#### **TIDAL WETLAND CYCLING**



# **Covington EAST WATERFRONT PARK** Signage

**RONNIE YOUNTS** Younts Design Inc. Principal

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#### **INSPIRATION**



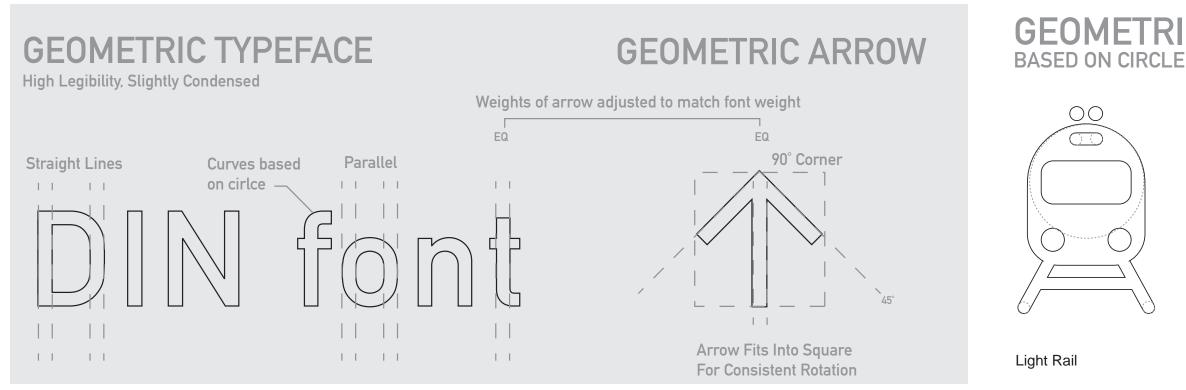
#### SIGNAGE MATERIALS





#### **UNIVERSAL BRACKETS**

#### **TYPEFACES, ARROWS, PICTOGRAMS**



## **DIN ENGESHRIFT**

ABCDEFGHIKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

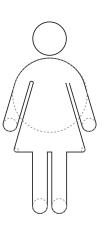
$$\wedge \leftarrow \checkmark \rightarrow$$

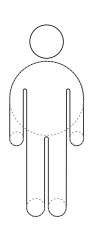
## **DIN STENCIL**

ABCDEFGHIJKLMNOPORSTUVWXYZ 1234567890 ¼ ¾ ⅔ ⅓ ⅓ ⅛ ⅛ ⅛ ⅛ ▲

$$\land \leftarrow \rightarrow \checkmark$$

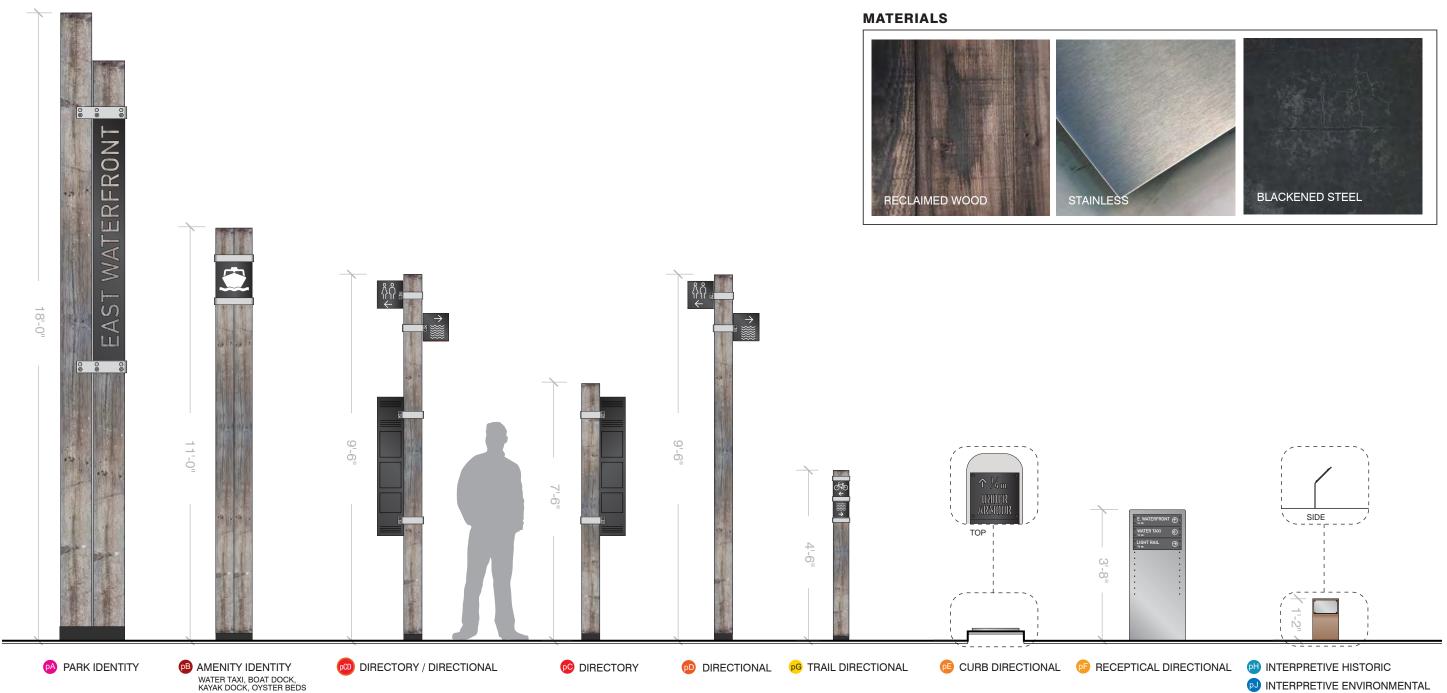
#### GEOMETRIC PICTOGRAMS BASED ON CIRCLE





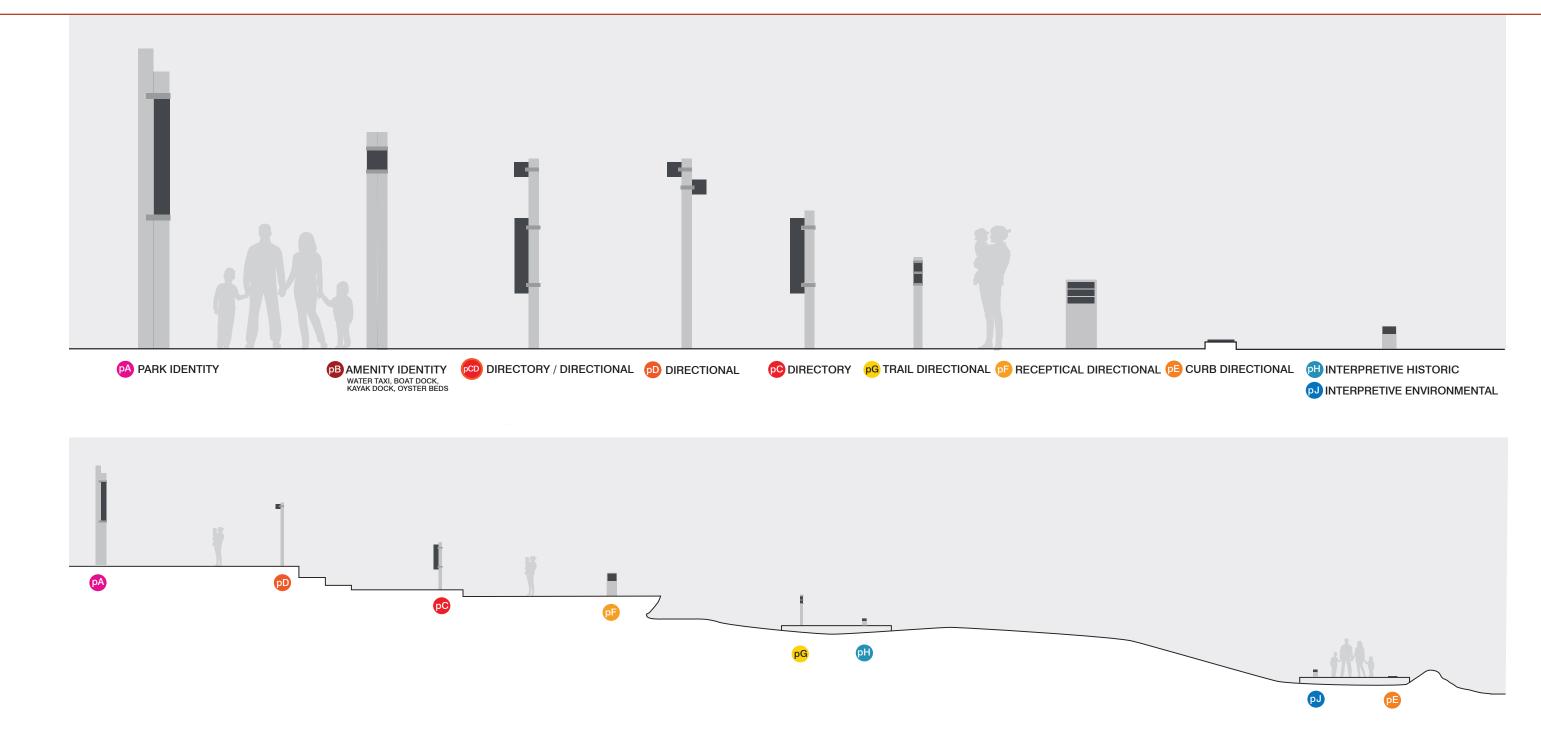
Unisex





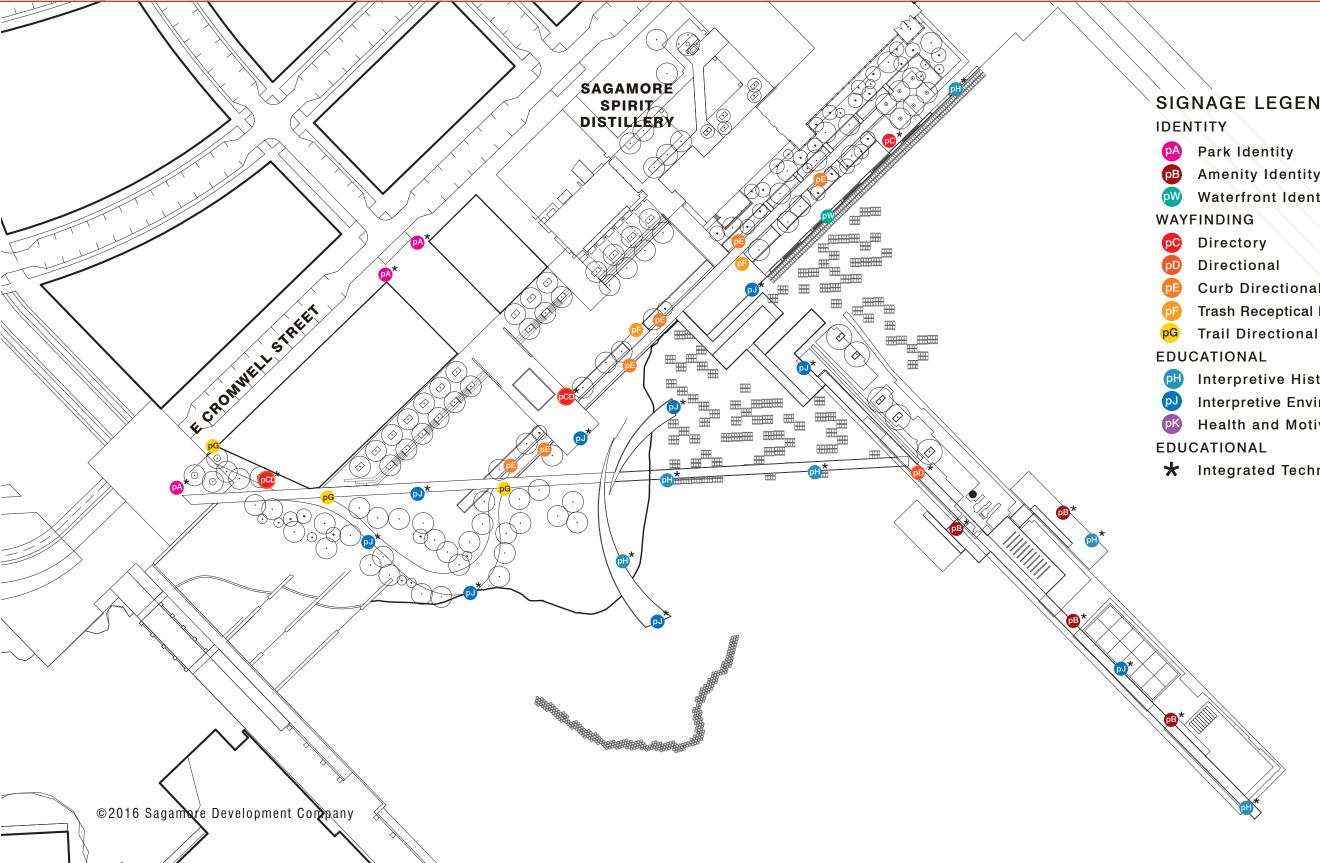
#### **SIGNAGE DETAILS**

▶ INTERPRETIVE ENVIRONMENTAL





### **SIGNAGE LOCATIONS**



- SIGNAGE LEGEND Amenity Identity Waterfront Identity 👝 Curb Directional Trash Receptical Directional
  - Interpretive Historic
  - Interpretive Environmental
- Health and Motivational
- ★ Integrated Technology

#### WATERFRONT IDENTITY SIGNAGE



# PORT COVINENTON













# Port<br/>CoungtonEAST WATERFRONT PARK<br/>Lighting

CLAUDE R. ENGLE, LIGHTING CONSULTANT Claude Engle Lighting Design Principal

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Front porch to Baltimore.



Preserve sight lines through park.

Along paths, a kaleidoscope of activity and users.

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#### **LIGHTING CONCEPT**



Lighting delineates and illuminates.

Hierarchy of vertical lighting.

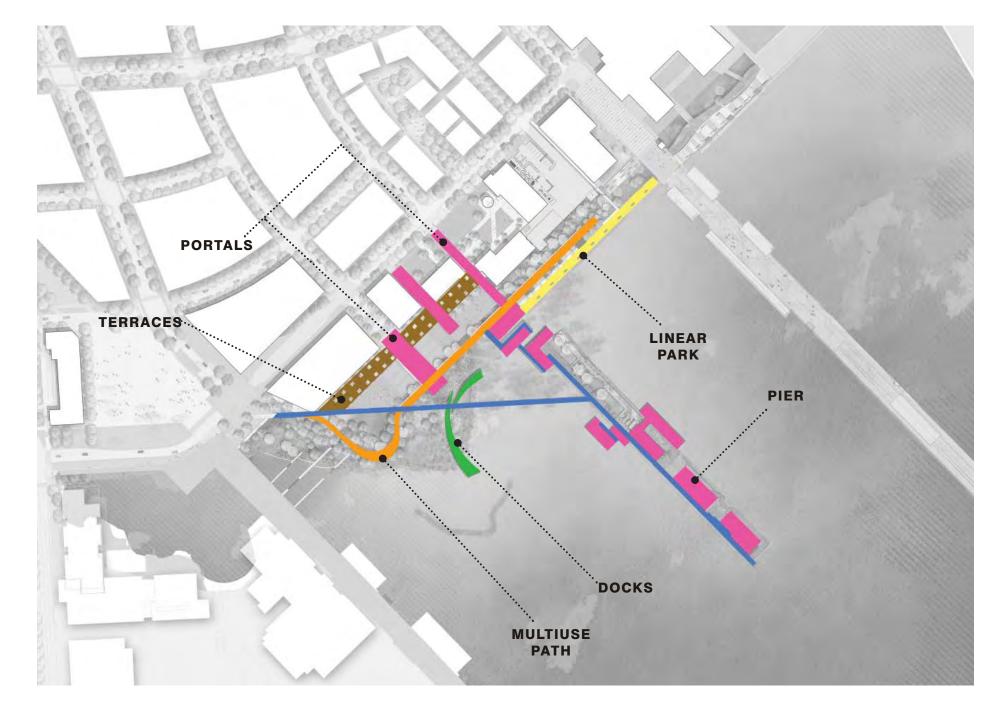
Varying light levels by activity.

Supports composition of park elements.

Eco-friendly light.

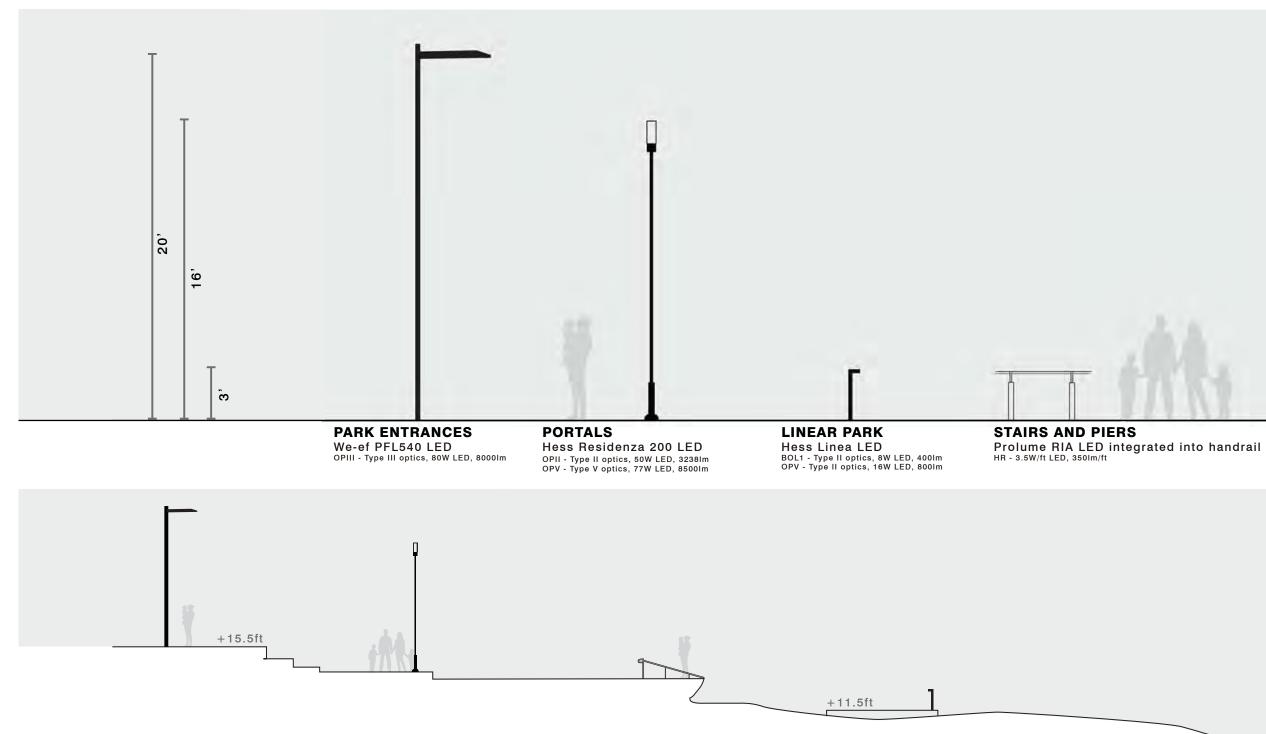
Security by surrounding with light.

Lights that can have elements integrated into them.



#### **LIGHTING CONCEPT**

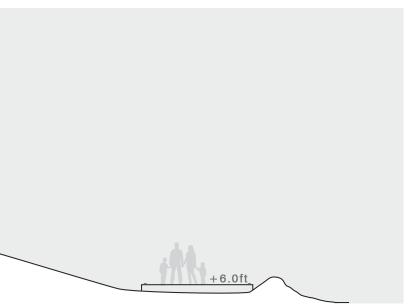


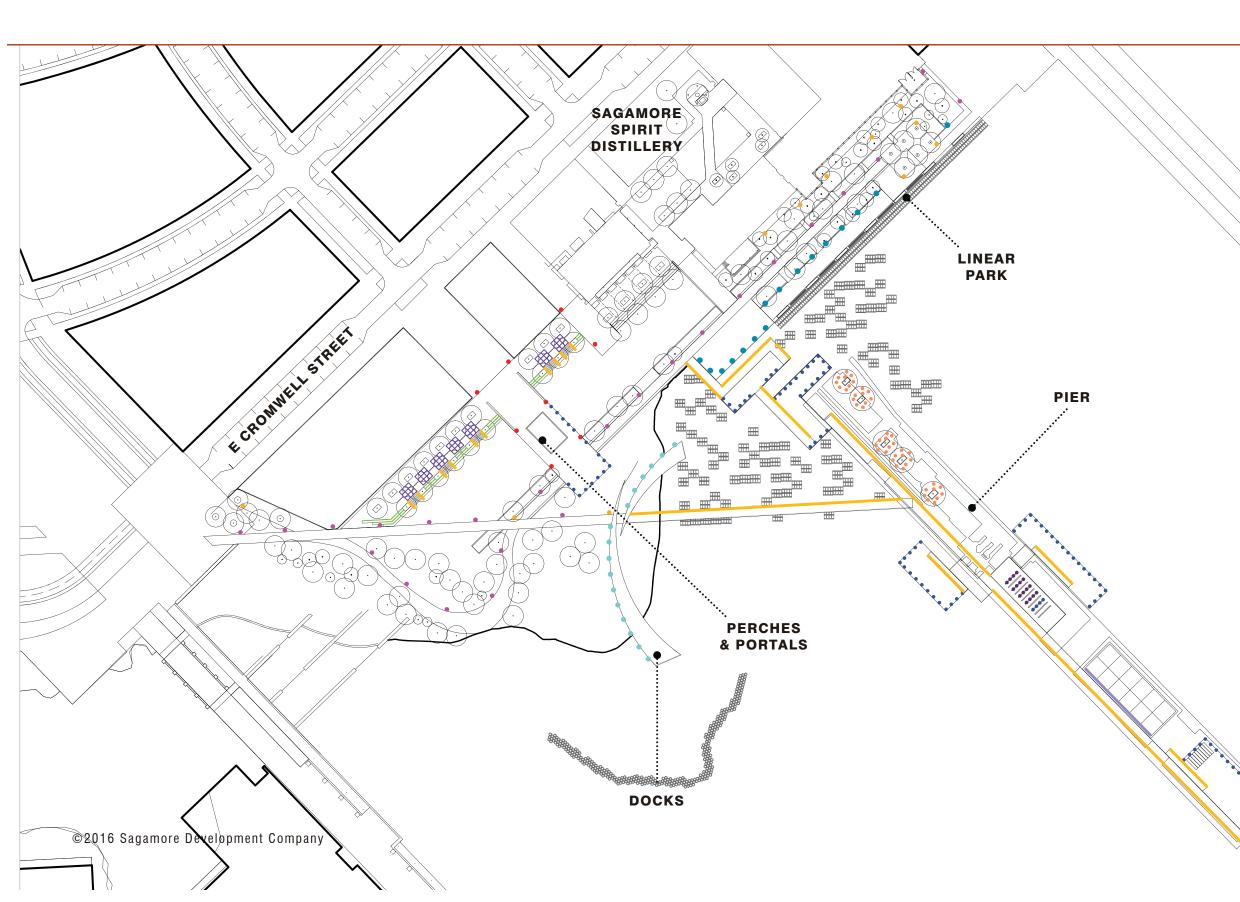


#### **LIGHTING ELEMENTS**



PIER EDGES Lumascape LES553LED





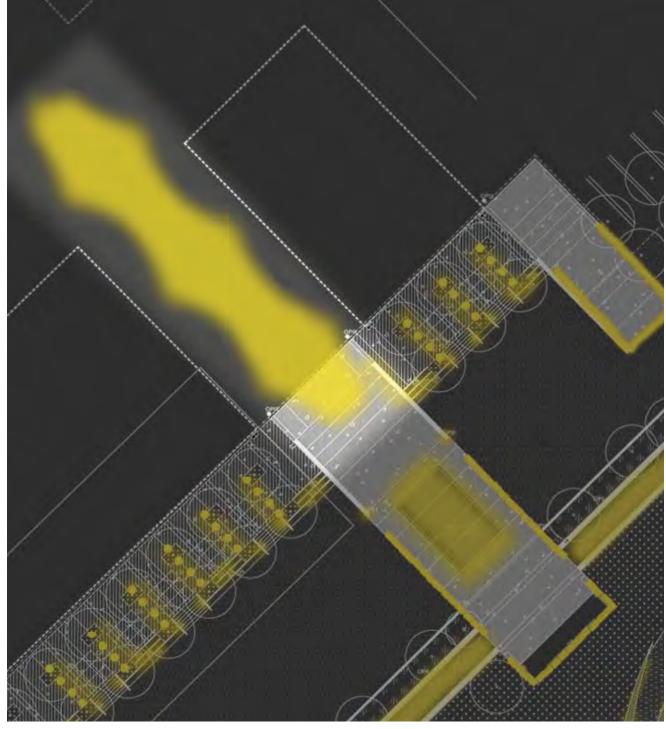
#### **LIGHTING SYSTEMS DIAGRAM**

#### LIGHTING PLAN

- BOL1 : BOLLARD
- BOL2 : BOLLARD
- JL : DOWN LIGHT (RECESSED)
- OB : EDGE LIGHT (IN-GROUND)
- HR : HANDRAIL
- LNT : LANTERN
- **OPII : POLE LIGHT**
- OPIII : POLE LIGHT
- OPV : POLE LIGHT
- CA : CATENARY LIGHT
- SN : STAIR LIGHT
- UHL : UNDERWATER LIGHT







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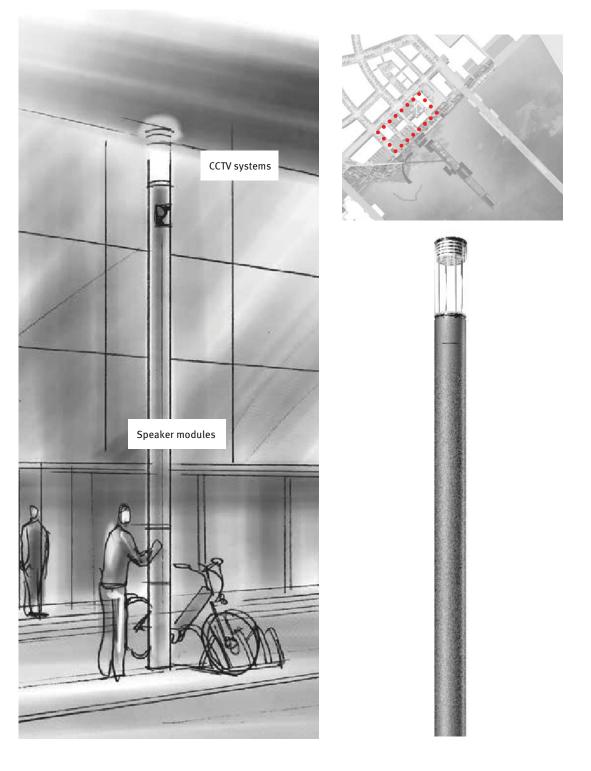




Light levels adjust for time of day.

Integral components.







Fountain is only vertically lighted element.

Smart infrastructure for special events.



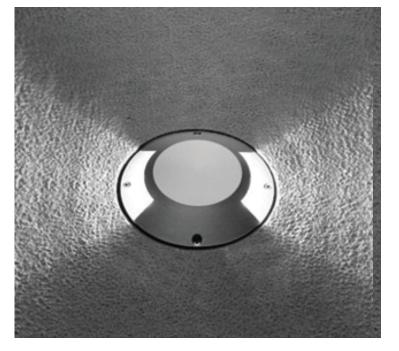


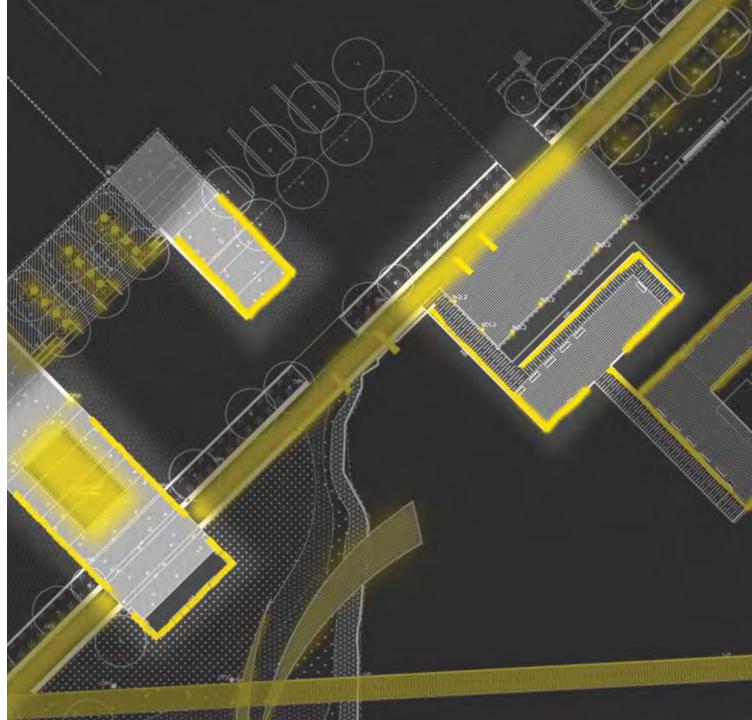






See faces, not light sources. Smart lighting.

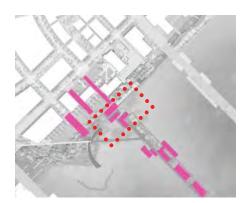




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#### **OVERLOOK DECKS**



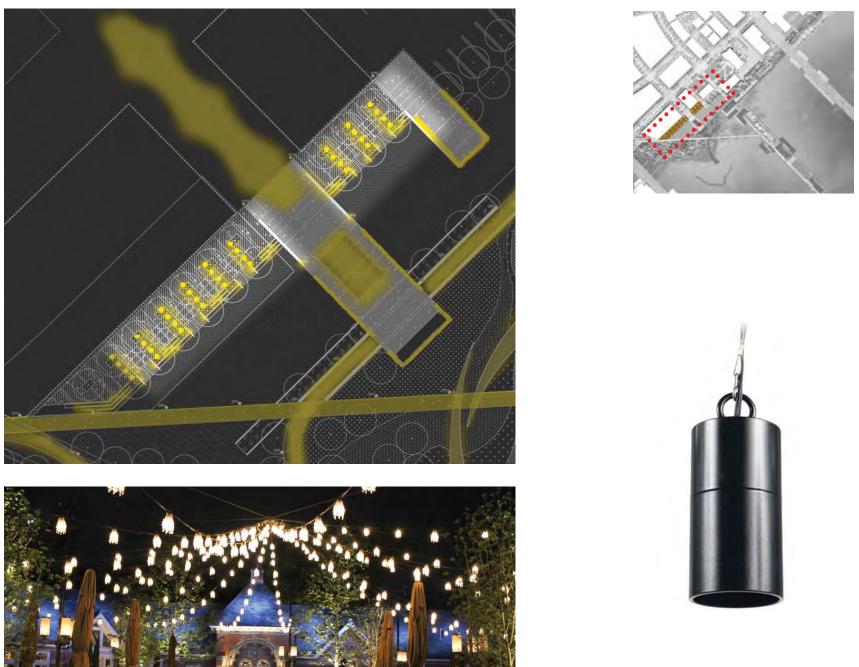




#### LINEAR TERRACE (BY OTHERS)

Terrace lighting provides border of light to northeast.







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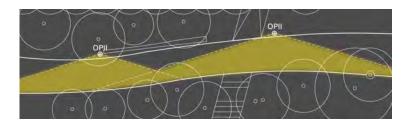
#### Light path but not landscape.



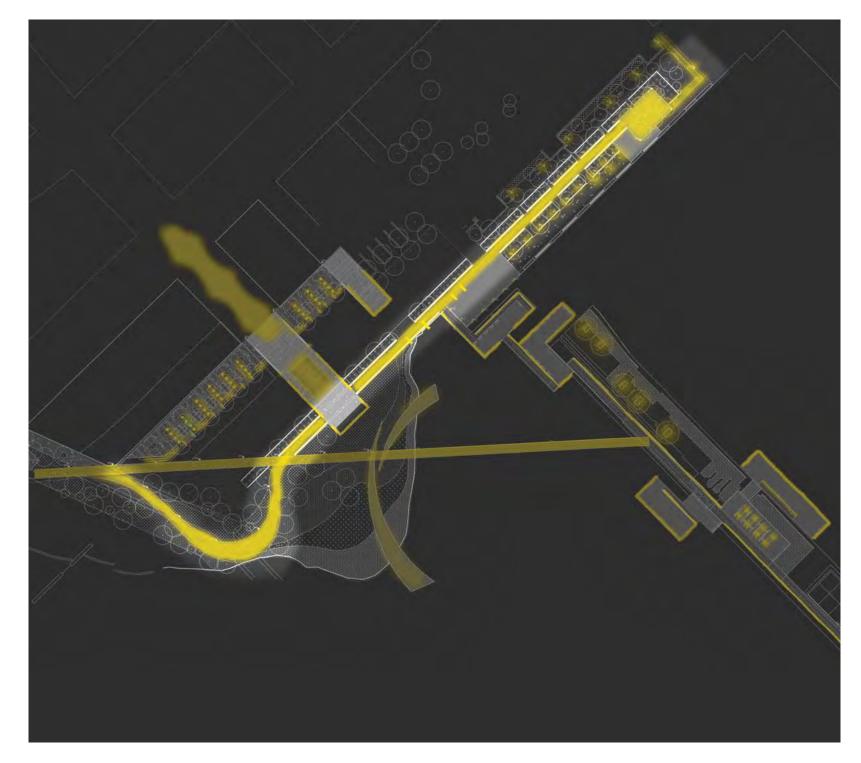
#### **MULTIUSE PATH**

Performance optics basis of lighting design.

Dark sky compliant.







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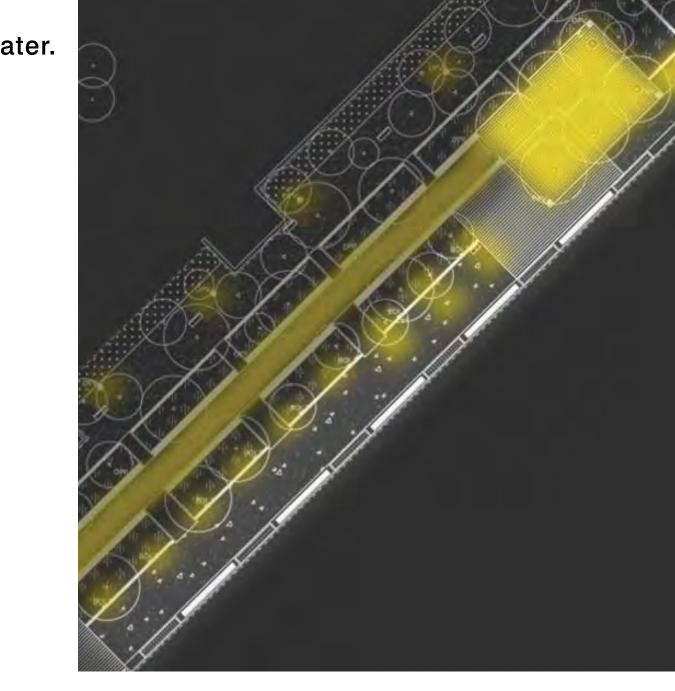
#### **MULTIUSE PATH**



No light between visitor and horizon.

Lighting path and not the water.

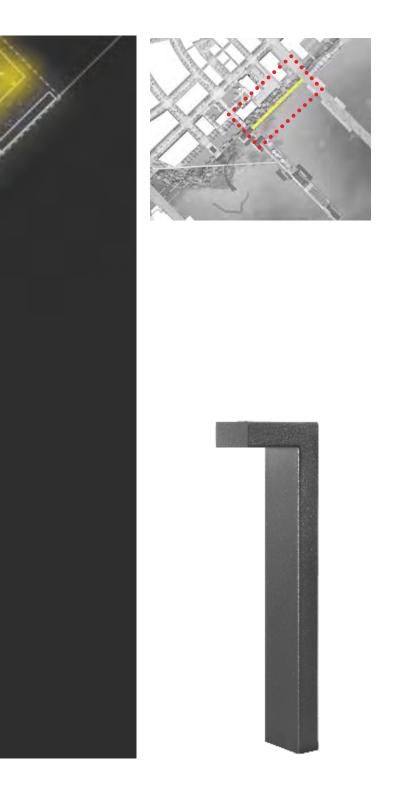
Low level lighting.





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#### LINEAR PARK



## Docks defined by lighted perimeters.

# Piers lighted by handrail lighting.



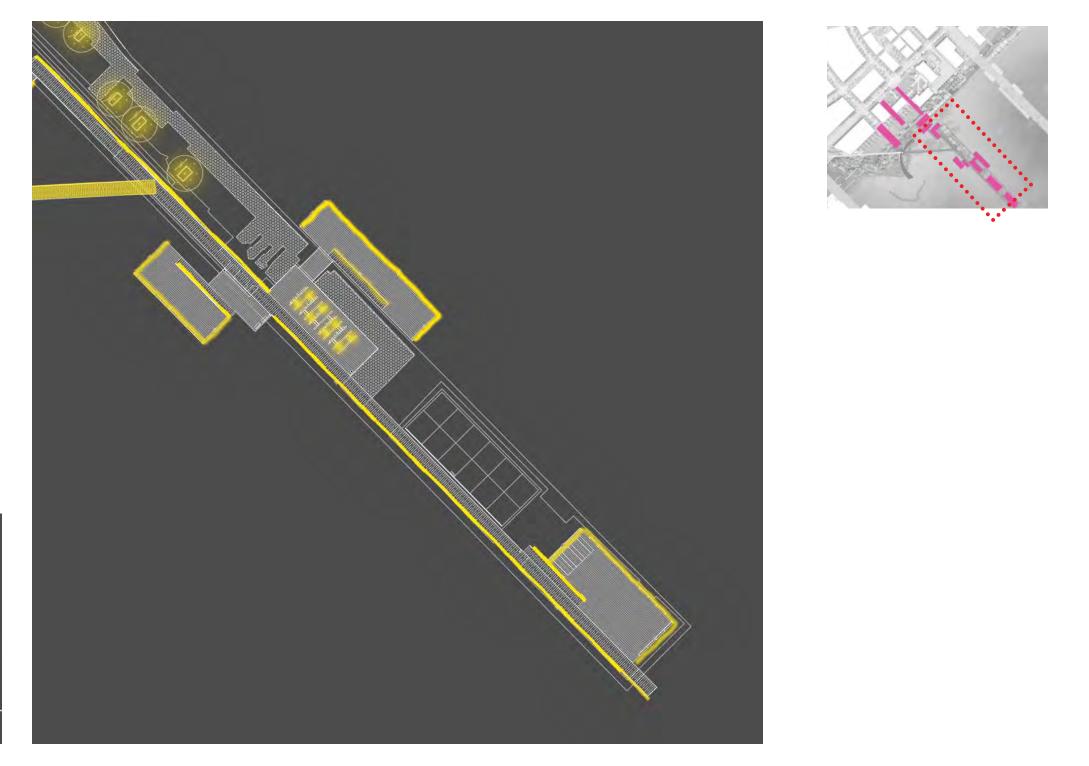


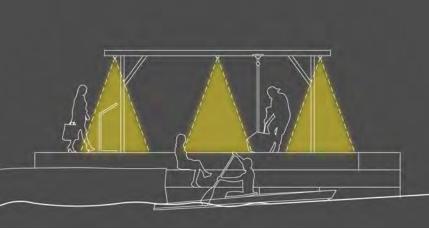






Handrail lighting accentuates path.

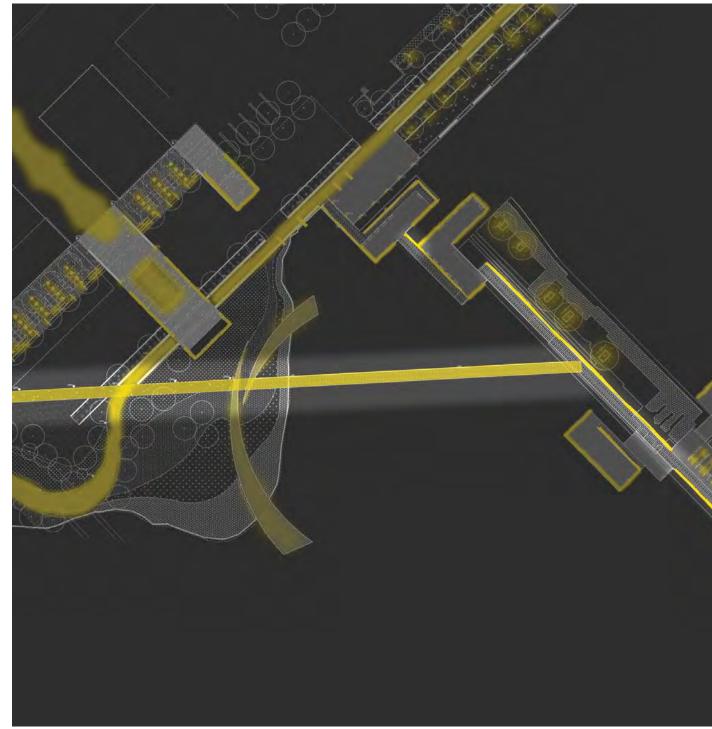


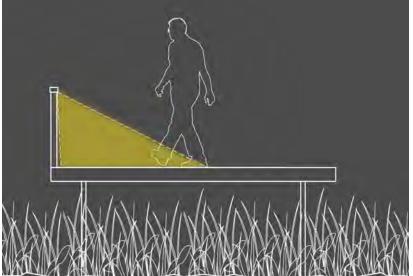


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#### Light walking surface only.





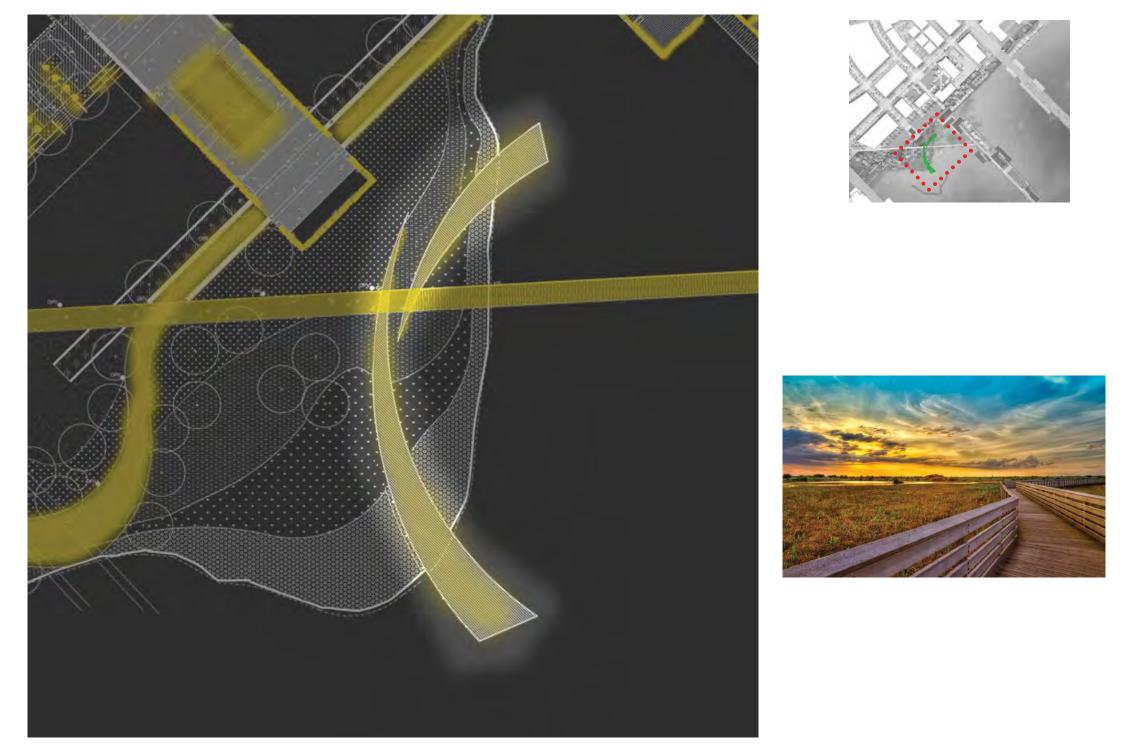
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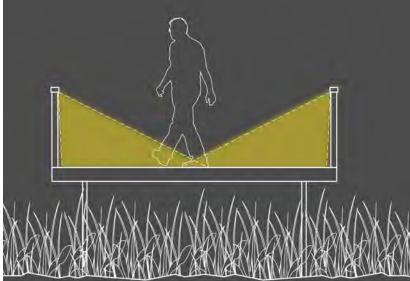
#### **DIAGONAL PATH**





# Ecological areas undisturbed at night.





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# WE ARE FROM THIS CITY. WEAREGOING TO HELP GREAT SOMETHING GREATAIN THIS CH

