

**50<sup>th</sup> ISOCARP**

International Planning Congress  
Urban Transformations - Cities and Water

GDYNIA, POLAND, 23-26 SEPTEMBER 2014



# Transformations Along Urban Waterfronts

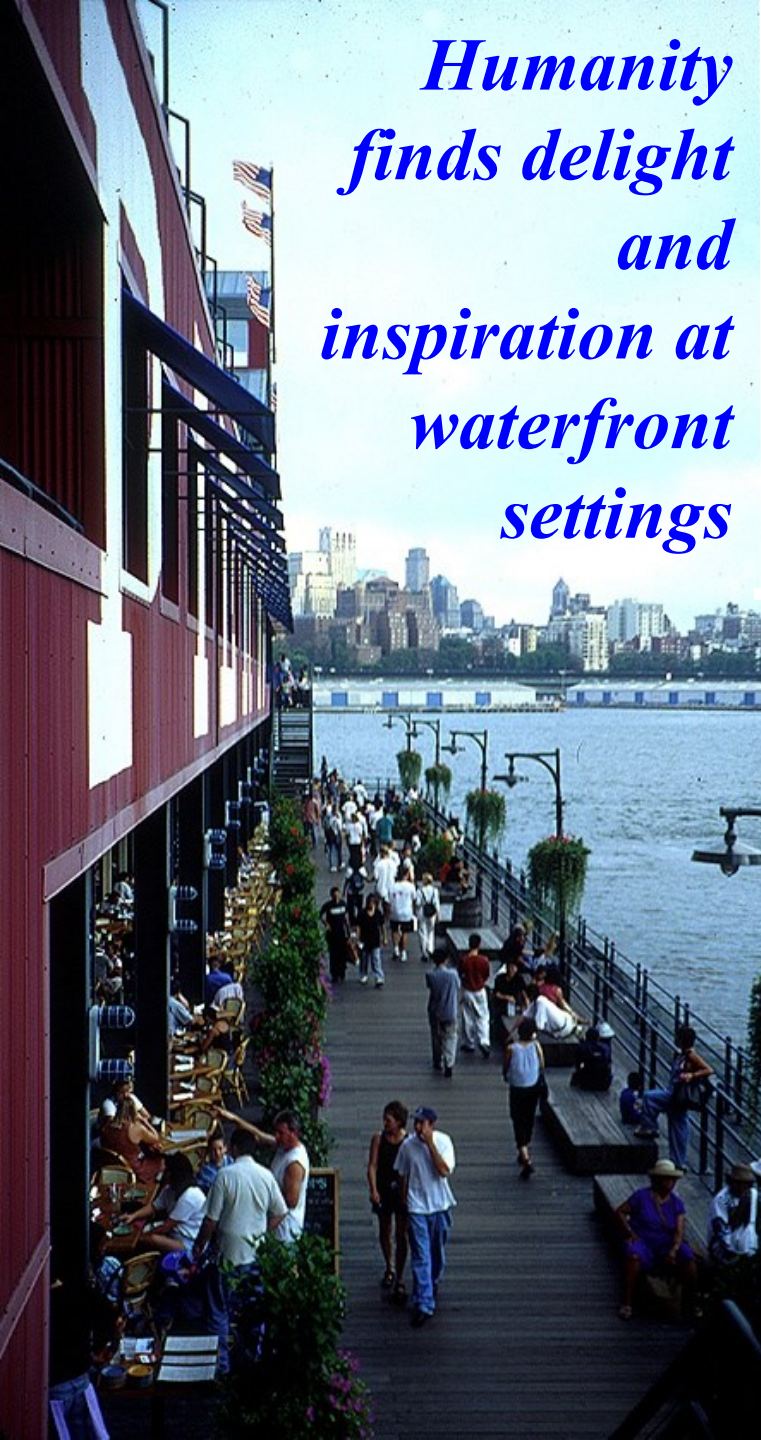
**Alex Krieger**

Professor of Urban Design  
Harvard University

Principal, NBBJ  
Architecture & Urban Design



*Humanity  
finds delight  
and  
inspiration at  
waterfront  
settings*







*Distinctive  
Settings at  
Water's Edge  
Provide  
Significant  
Advantages for a  
City's  
Competitiveness  
in the Global  
Economy*







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## 10 Challenges of Urban Waterfront Planning

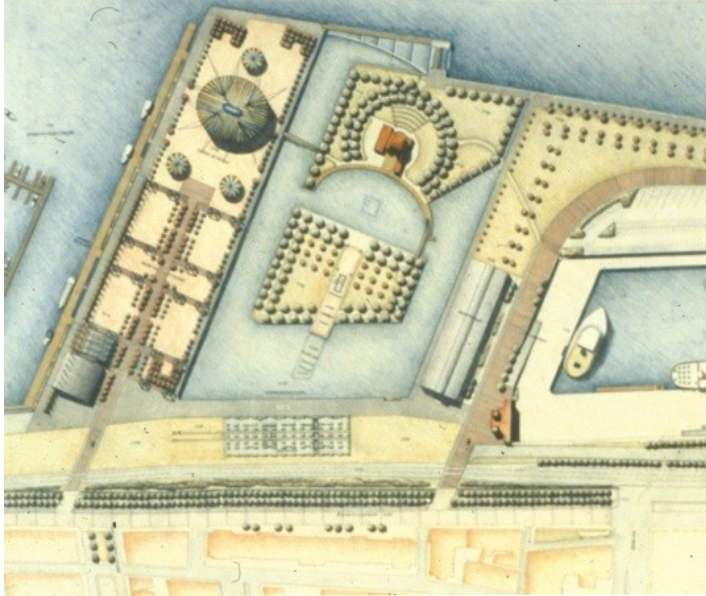




1.

*Transformations  
along urban  
waterfronts are a  
recurring condition  
in the life of a city  
and tends to take  
place during times  
of economic and  
cultural shifts.*

Montreal Waterfront, Canada





# MONTREAL





# MONTREAL





# MONTREAL



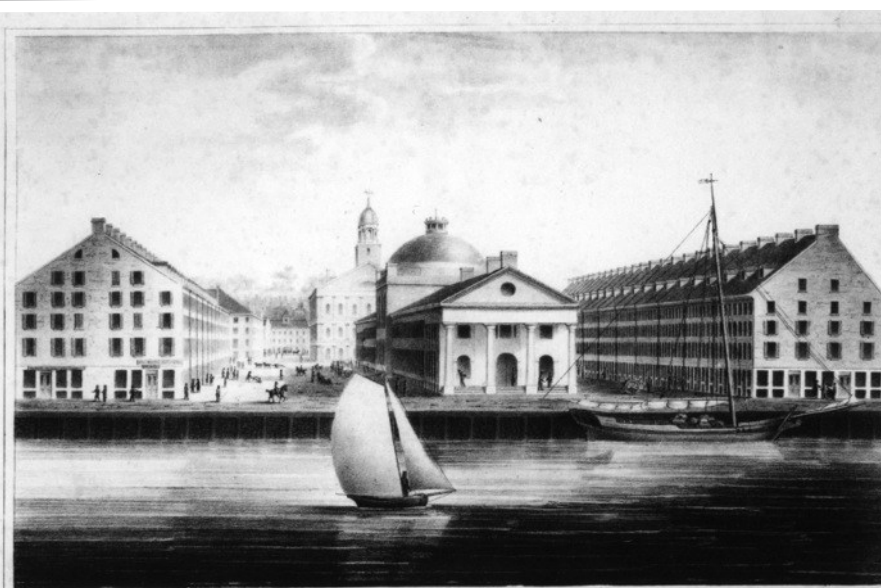
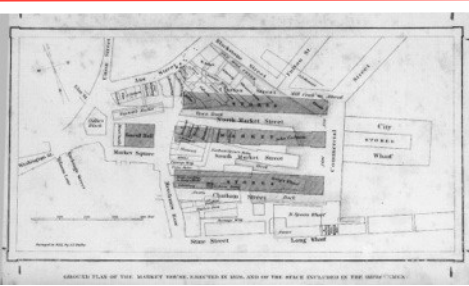


# New York City's Recent Investment in Major Waterfront Parks





2. Along the waterfronts of cities worldwide the human instinct to both preserve and to reinvent are robustly acted out.



EAST VIEW OF FANEUIL HALL MARKET.

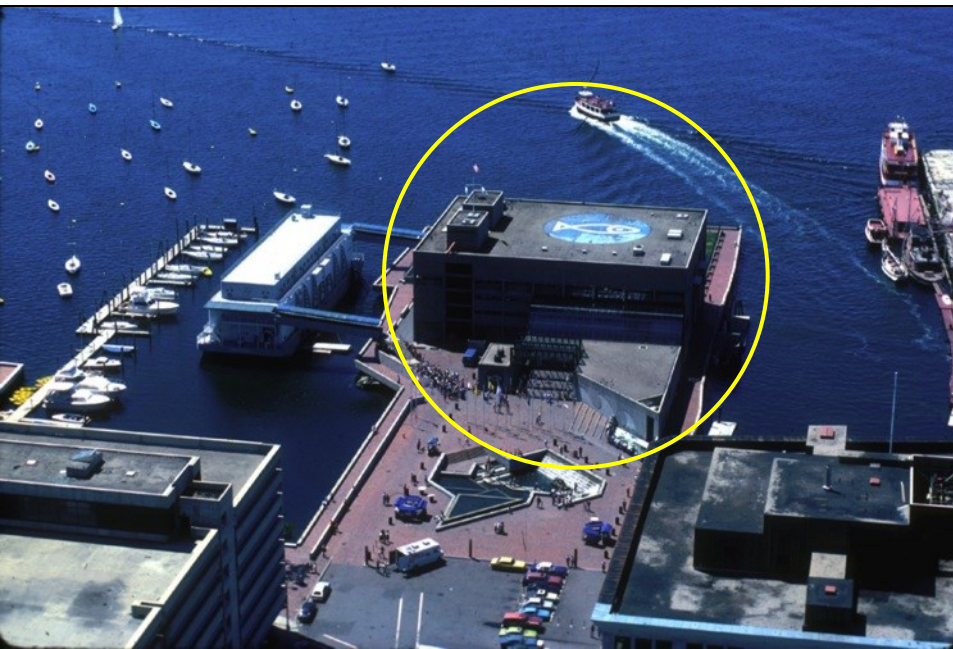
BOSTON, MAY, 1827



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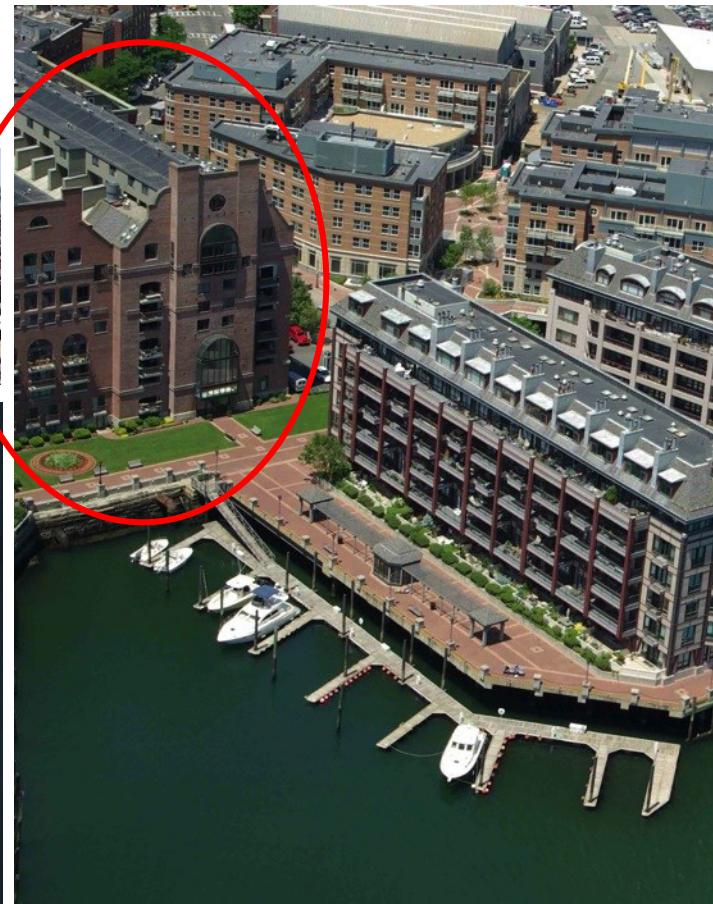




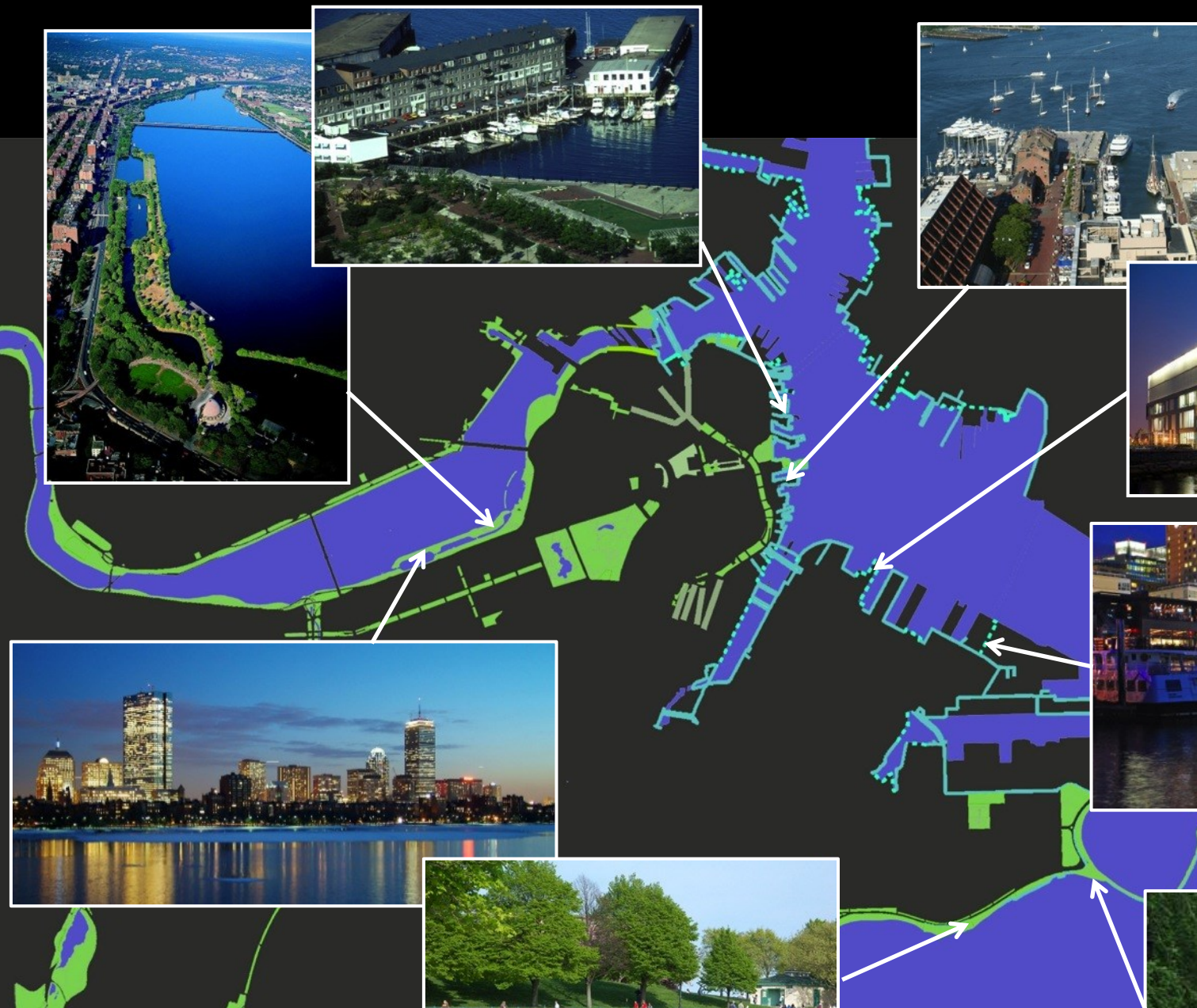




# BATTERY WHARF

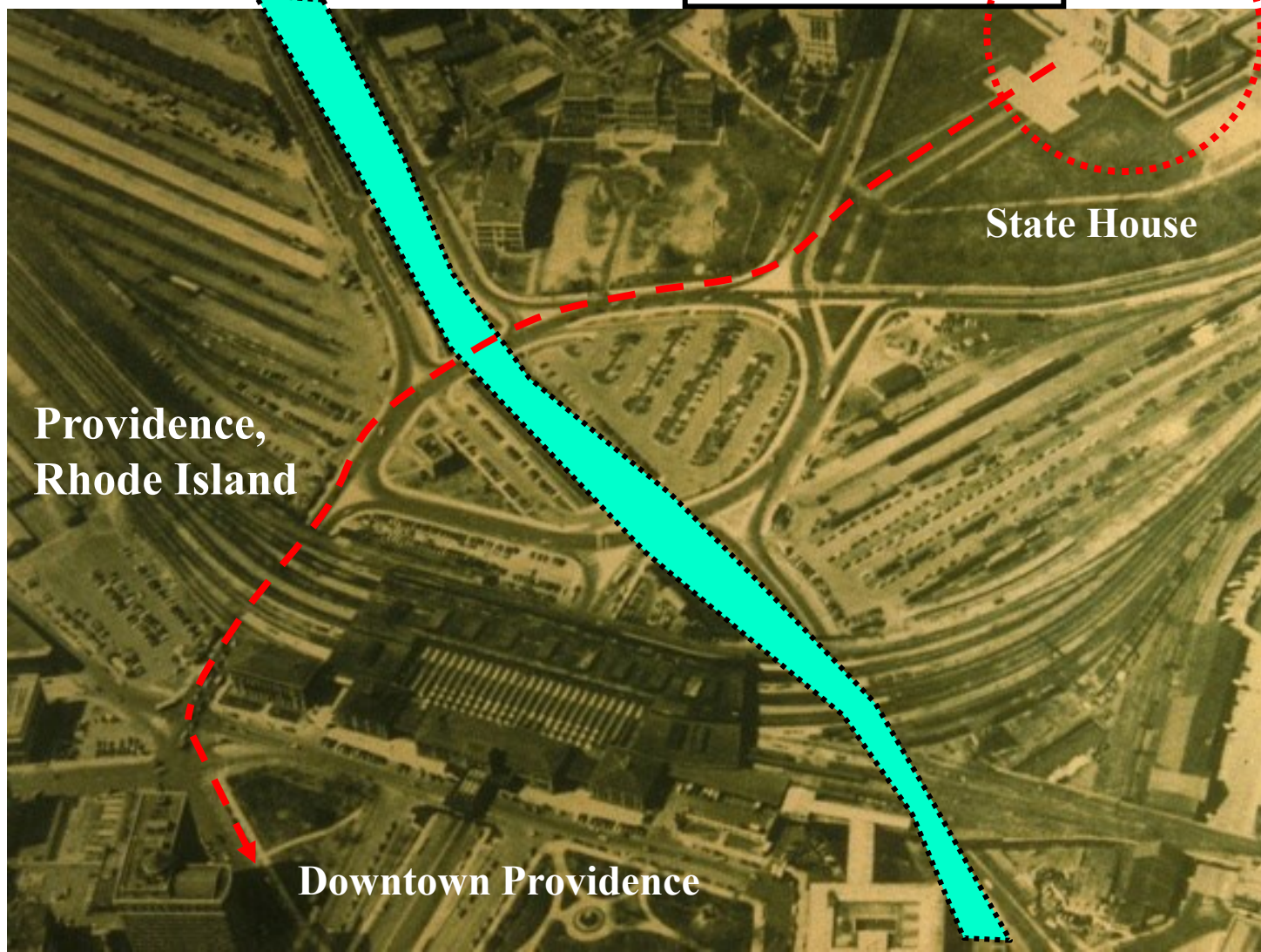
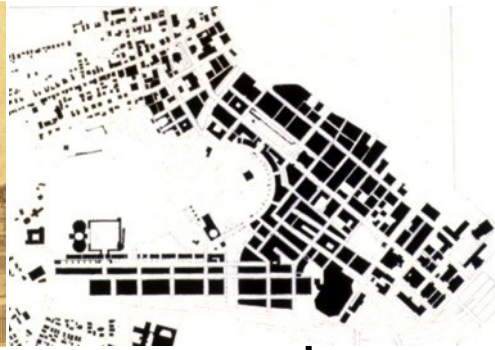








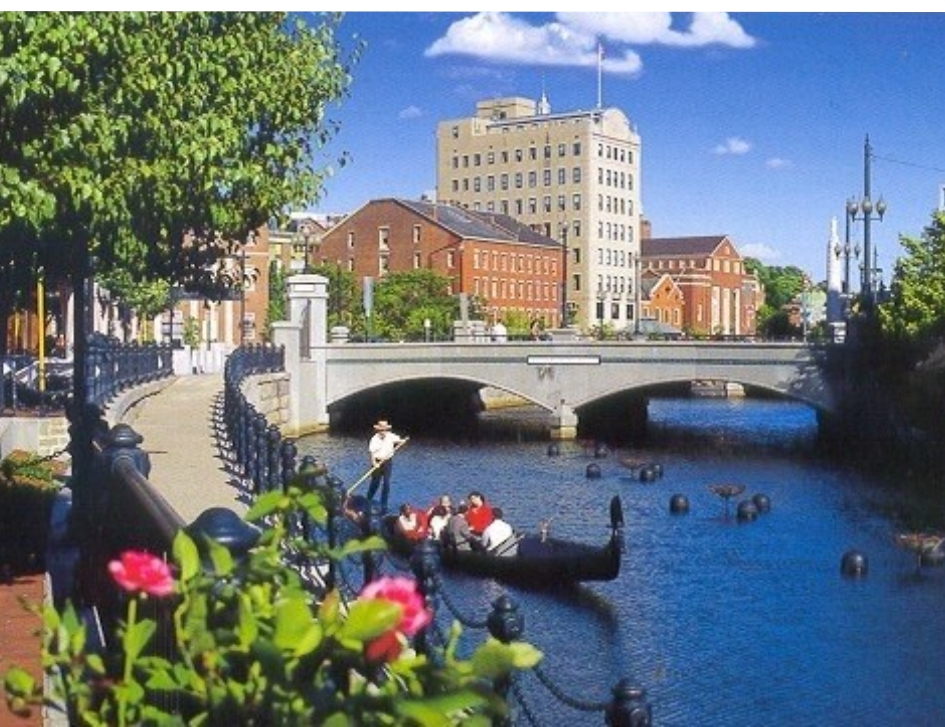
3. *The public increasingly desires and expects access to the water. This usually requires overcoming historic barriers, physical, proprietary and psychological.*









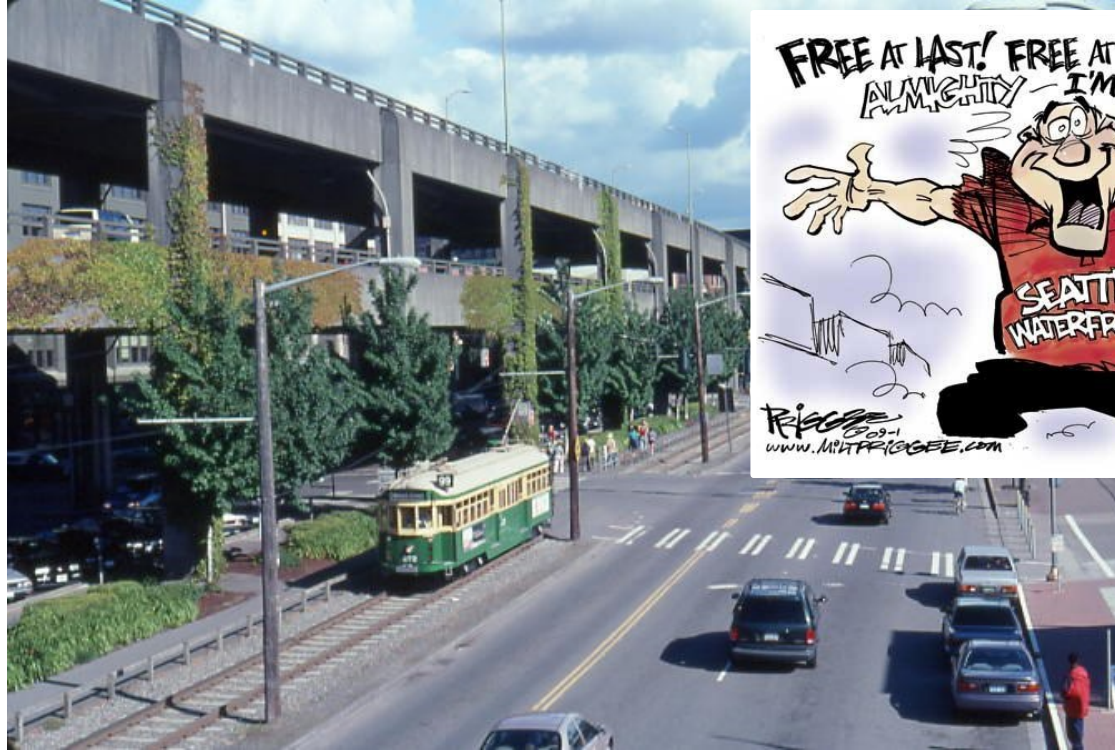








4.  
*Maintaining  
Linear Public  
Connectivity  
While  
Emphasizing the  
Perpendiculars  
from the City  
Fabric to the  
River*





1. Celeste Park  
Jackson Avenue to Market Street
2. Market Street Promenade  
Market Street to Race Street
3. Riversphere  
Race Street to Terpichore
4. Nine Muses Square  
Orange to Henderson to Techoupitoulas
5. Julia Street River Terrace
6. Convention Center Boulevard  
Henderson to Poydras
7. Spanish Plaza  
Poydras to Canal Street
8. Wolenberg Park  
Canal Street to St. Louis
9. Moonwalk  
St. Louis to St. Philip
10. French Market Connection
11. Portage Plaza  
Esplanade and Elysian Fields
12. Mandeville Wharf  
Marigny to Spain
13. Mandeville Rear Apron Connection
14. Press Street Landing  
Spain to Clouet
15. Piety Park  
Clouet to Pauline
16. Poland Fields  
Pauline to Poland Wharf
17. Bywater Point  
Poland Wharf to St. Claude
18. Port of Embarkation Redevelopment  
Chartres to St. Claude
19. Holy Cross Levee Promenade  
St. Claude to Flood Street



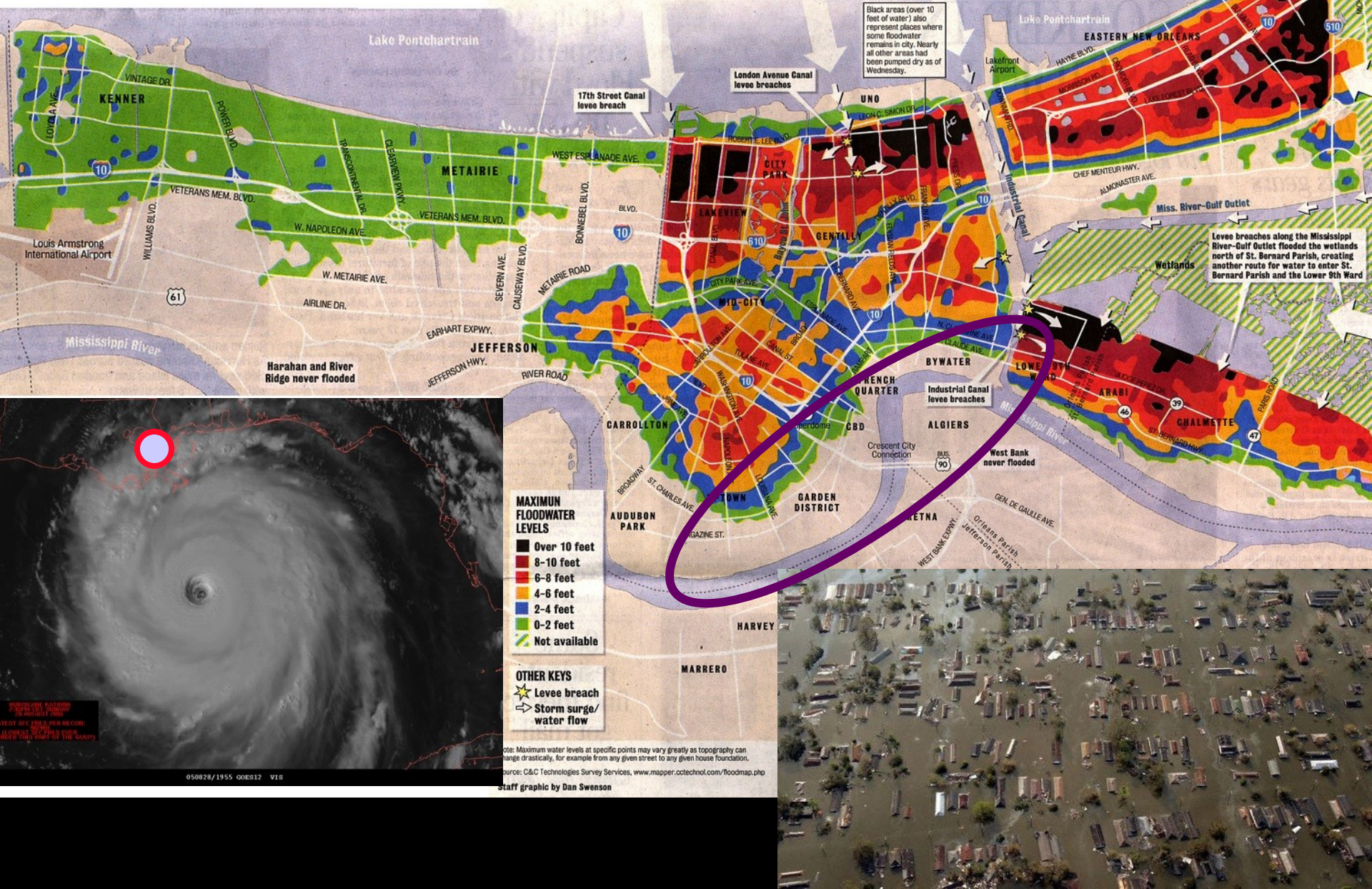
## Post Katrina Development Plan for New Orleans

### *Reinventing the Crescent*

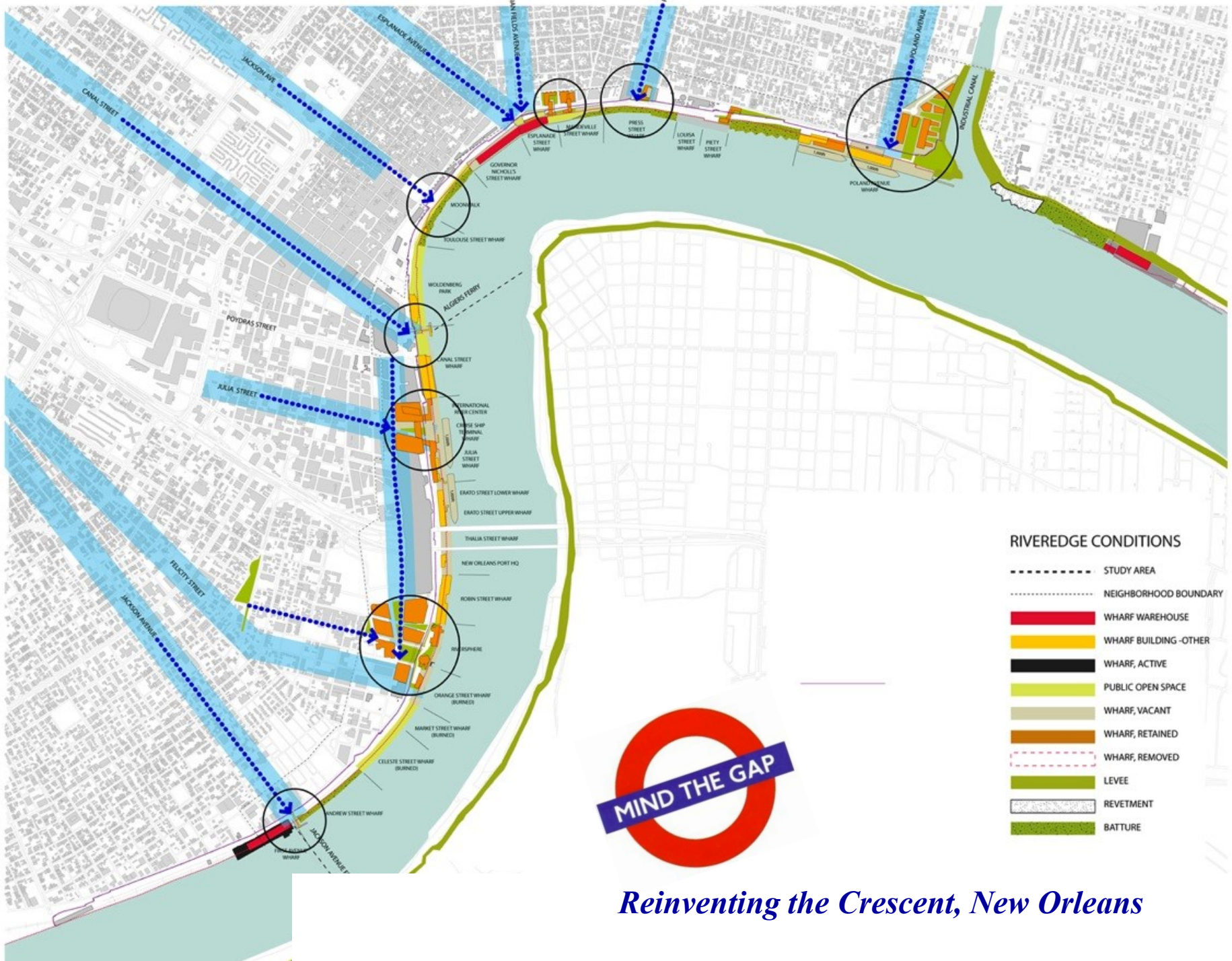


# HOW MUCH WATER DID YOU GET?

Levee breaches from Hurricane Katrina's monster surge left the city under more than 10 feet of floodwater for many unfortunate residents. This map shows maximum water depths that afflicted neighborhoods at the height of the flood, when Lake Pontchartrain leveled off with New Orleans:









# POWER PLANT LANDING RIVERSPHERE 9 MUSES SQUARE

## PROGRAM

- Riverview Performances
- Public Meeting Spaces
- Biological Research
- Water Gardening
- Scientific Lectures & Tours
- Sunbathing
- Interactive Fountains
- Lawn Sports
- Green Roof Gardening
- Bike Riding
- Picnicking
- Riverview Shaded Seating
- Riverview Stadium Seating

## CIRCULATION

- Market St Pedestrian Bridge
- 2 Destination Piers
- Riversphere Platforms
- Riverfront Pedestrian Path
- Vehicular Ramp
- Railway Tunnel
- Link to Convention Boulevard

## LANDSCAPE

- Fountain Gardens
- Research Gardens
- Riverfront Performance Lawn
- Distinctive Courtyards
- Shade Tree Allees
- Batture Pockets
- Accessible Green Roofs
- Flexible Shaded Lawns























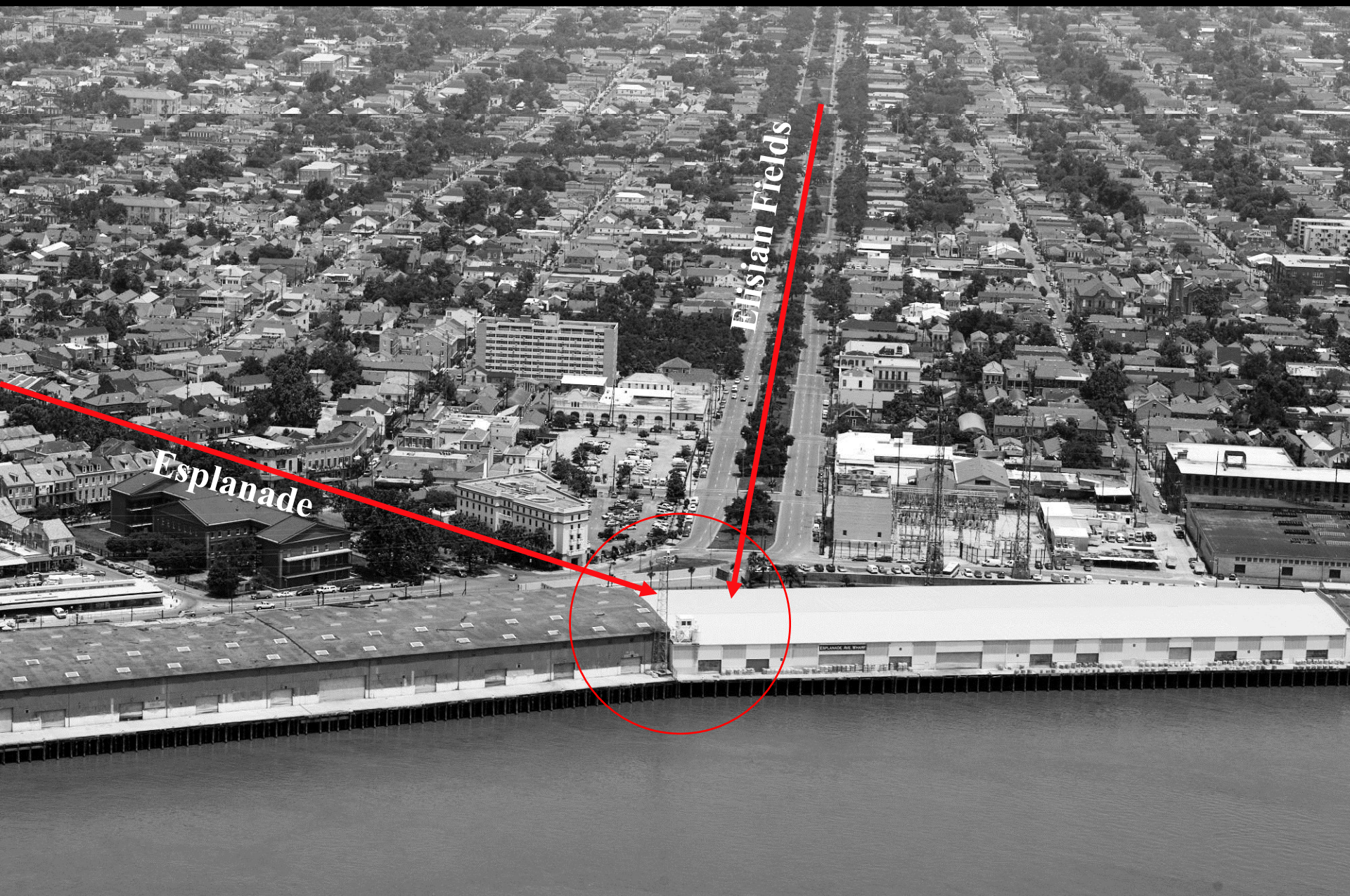








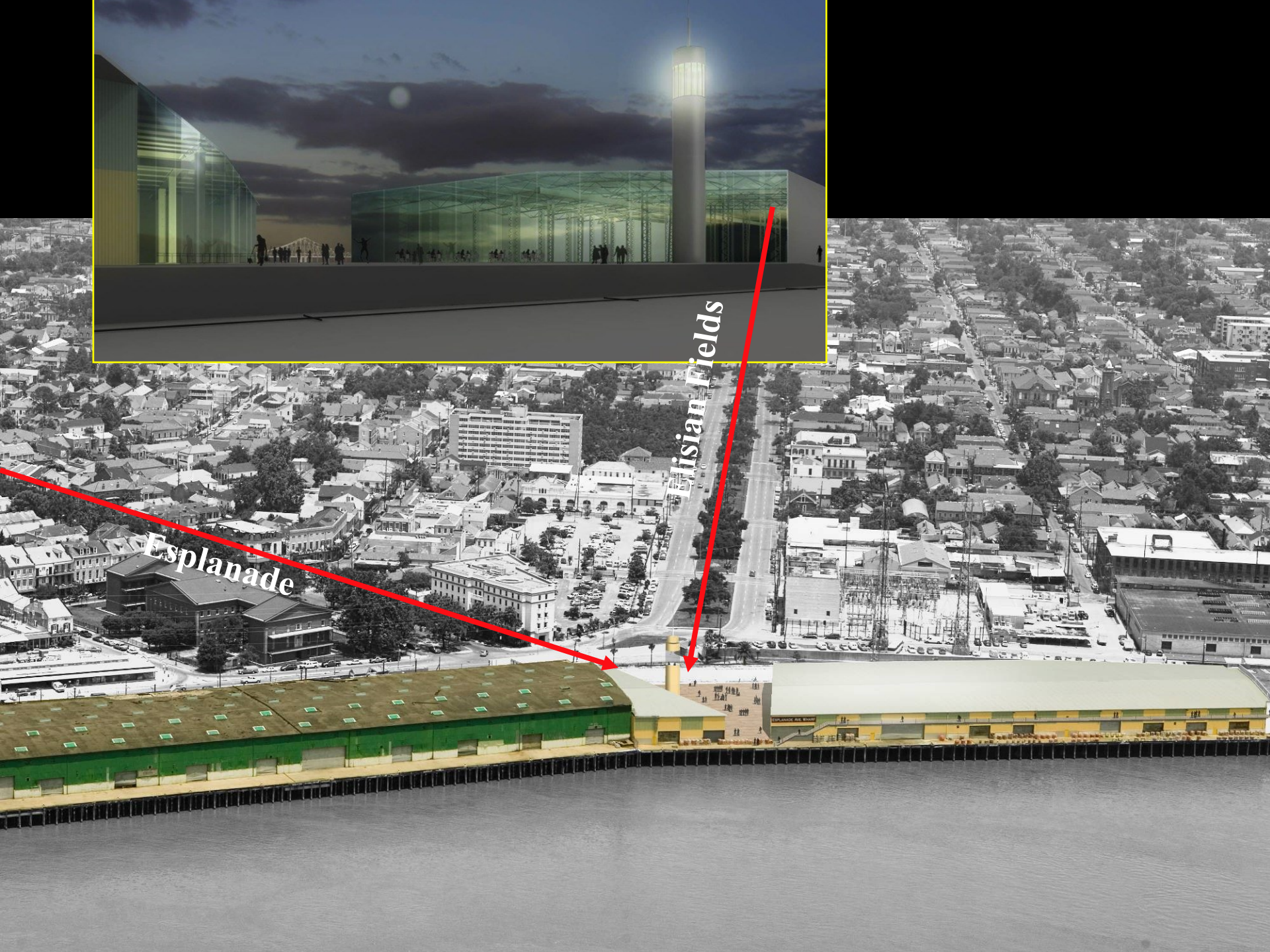




Esplanade

Elisian Fields





Esplanade

Asian Fields









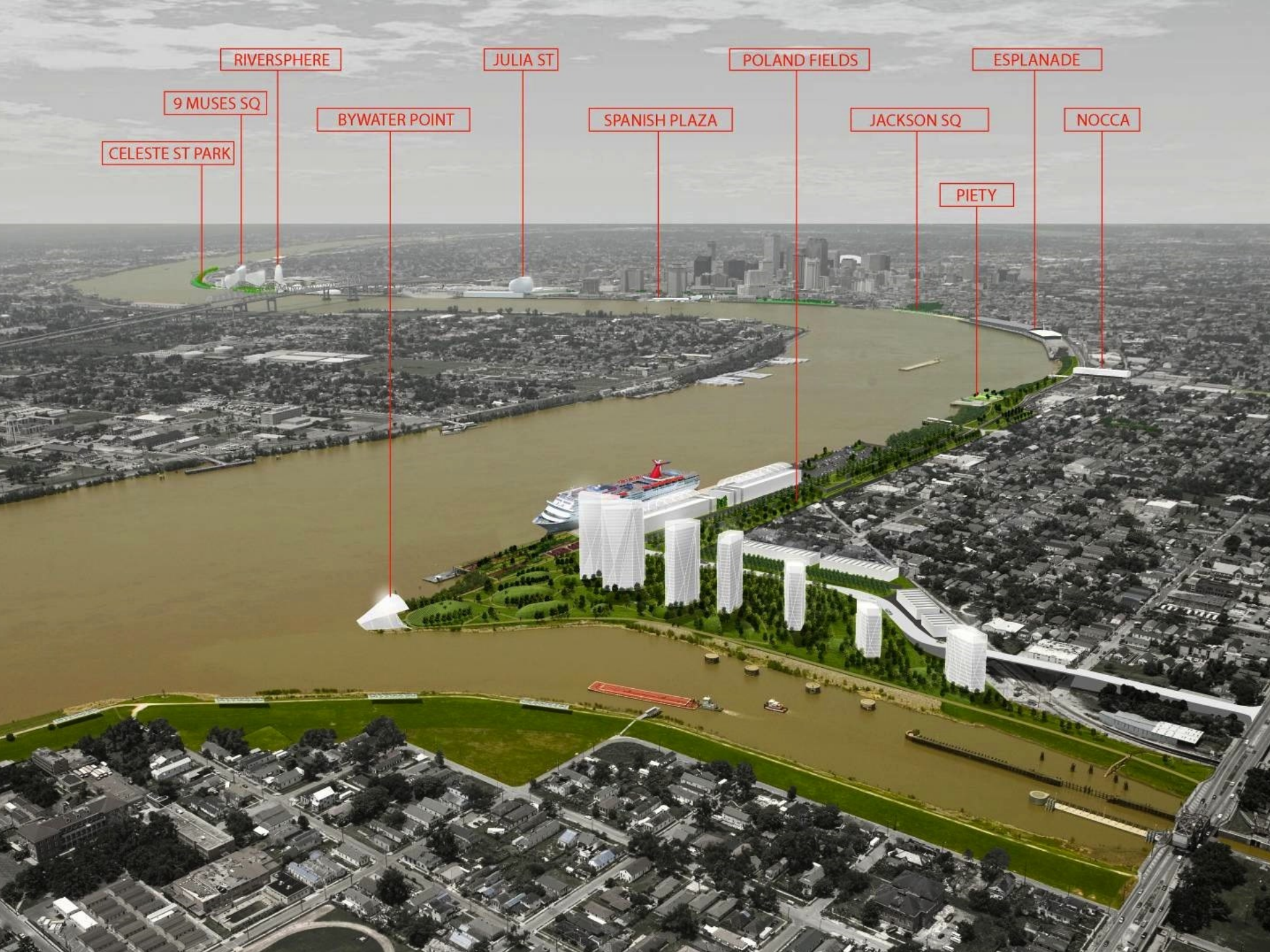












RIVERSPHERE

JULIA ST

POLAND FIELDS

ESPLANADE

9 MUSES SQ

BYWATER POINT

SPANISH PLAZA

JACKSON SQ

NOCCA

CELESTE ST PARK

PIETY



**5. Waterfront  
redevelopments are  
long-term projects  
with long-term  
value to be gained.  
Endangering this  
for short-term  
riches rarely  
produce the most  
desirable results.**



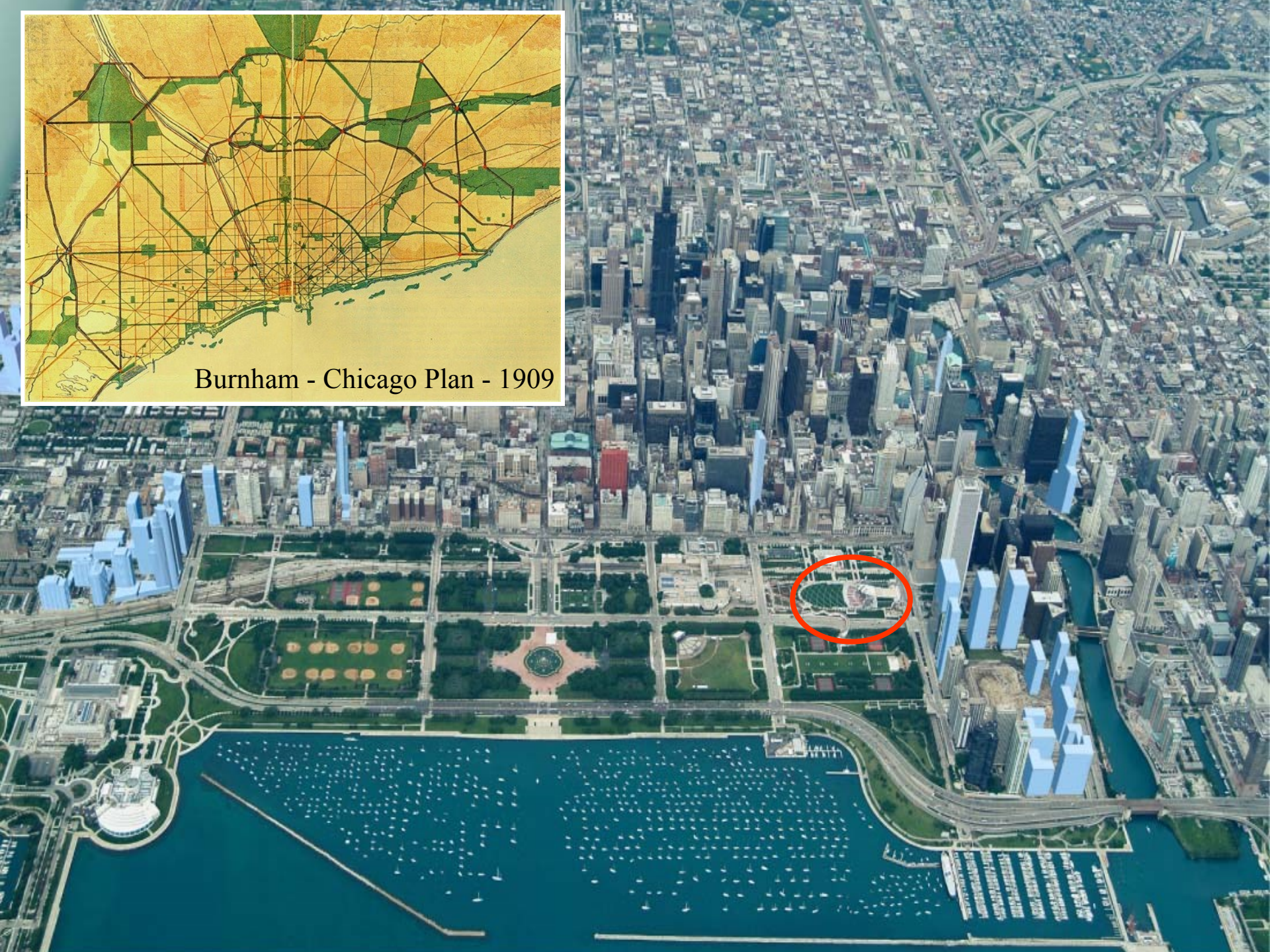
**Chicago's Lakefront**







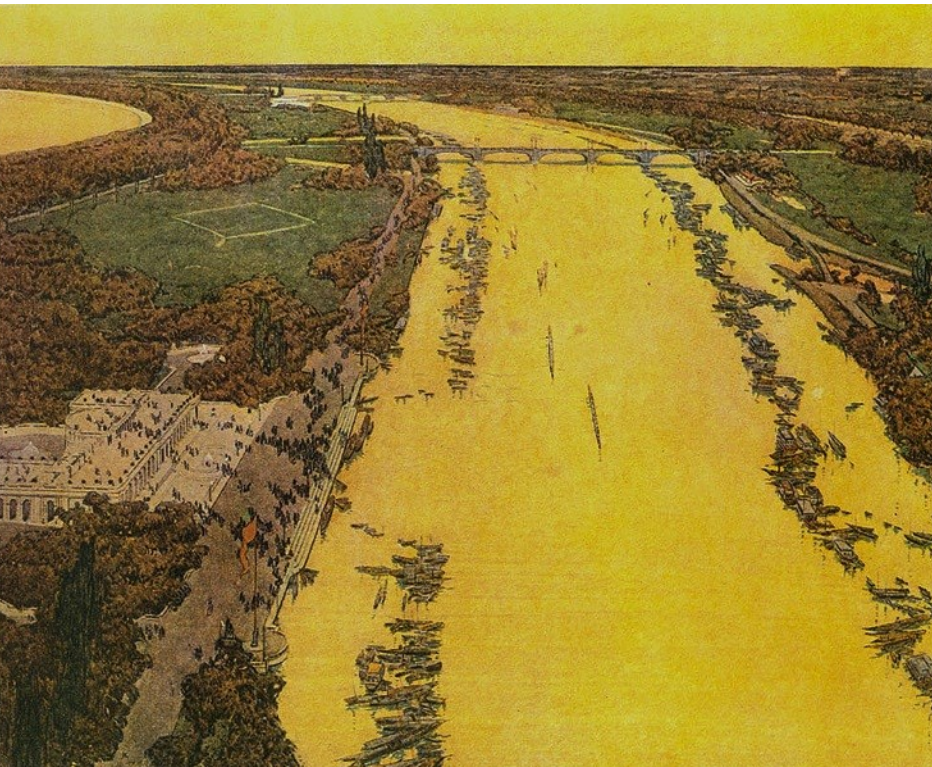
Burnham - Chicago Plan - 1909







c.1920 Chicago c.2000









*6. Wise waterfront planning seeks to unravel unnecessarily polarized visions, and proceeds at two scales: that of the corridor-wide watershed, and that of the strategic [catalytic] project.*

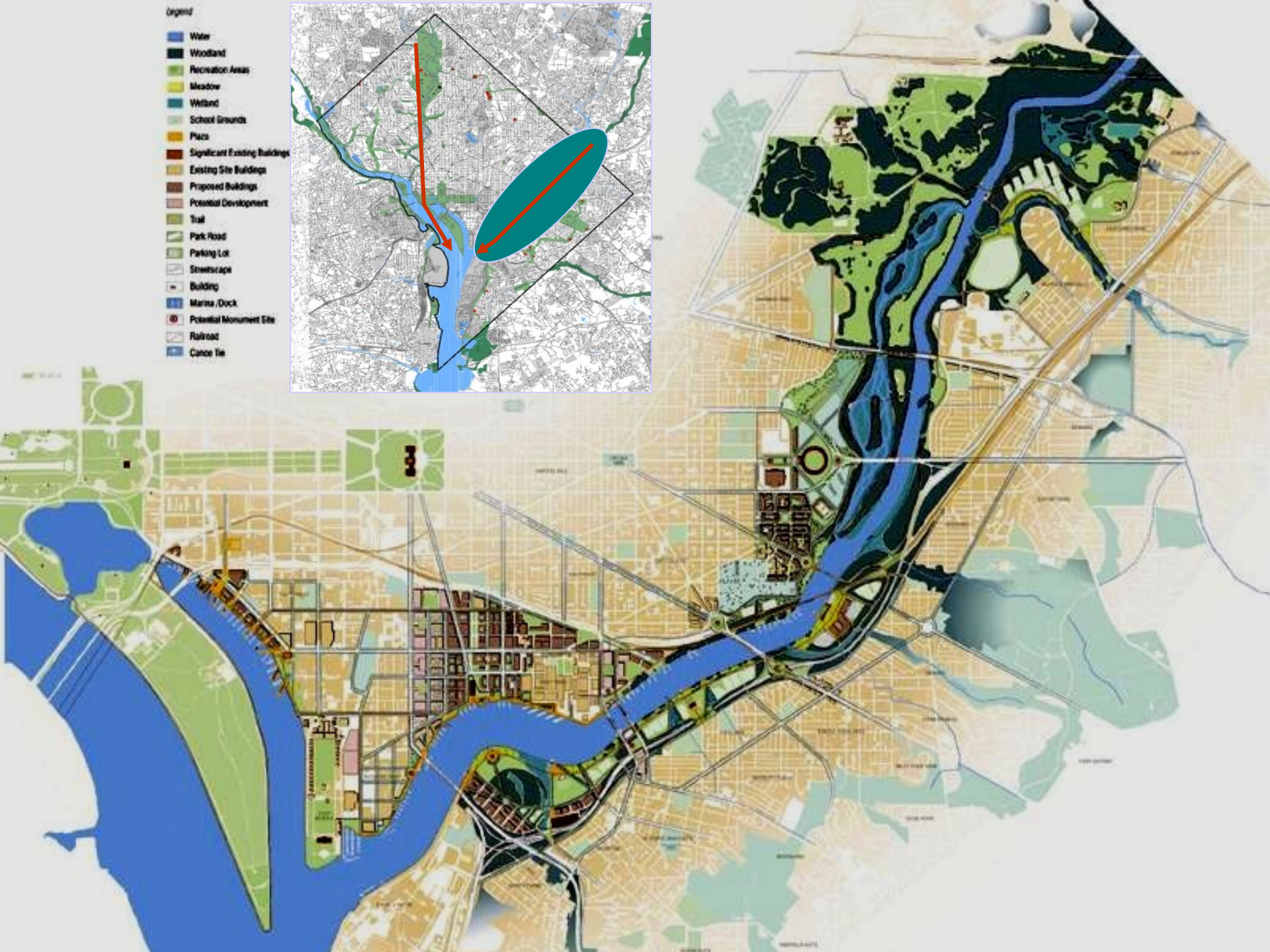
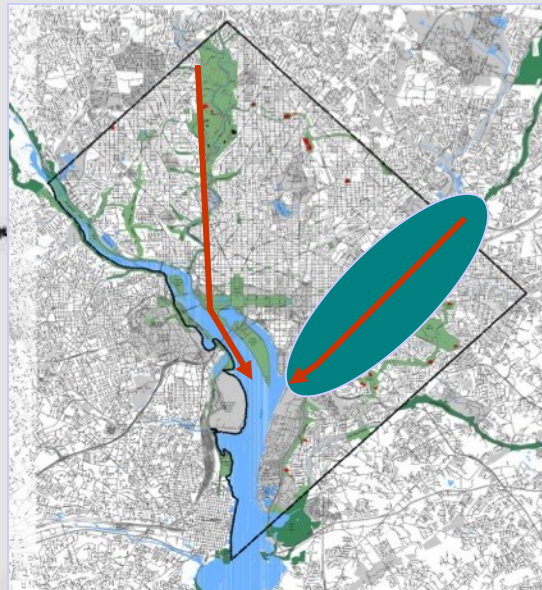
Washington DC





Legend

-  Water
-  Woodland
-  Recreation Areas
-  Meadow
-  Wetland
-  School Grounds
-  Plaza
-  Significant Existing Buildings
-  Existing Site Buildings
-  Proposed Buildings
-  Potential Development
-  Trail
-  Park Road
-  Parking Lot
-  Streetscape
-  Building
-  Marina / Dock
-  Potential Monument Site
-  Canal Tie







South Capital Street Corridor Urban Design Plan



## *A green street.....*

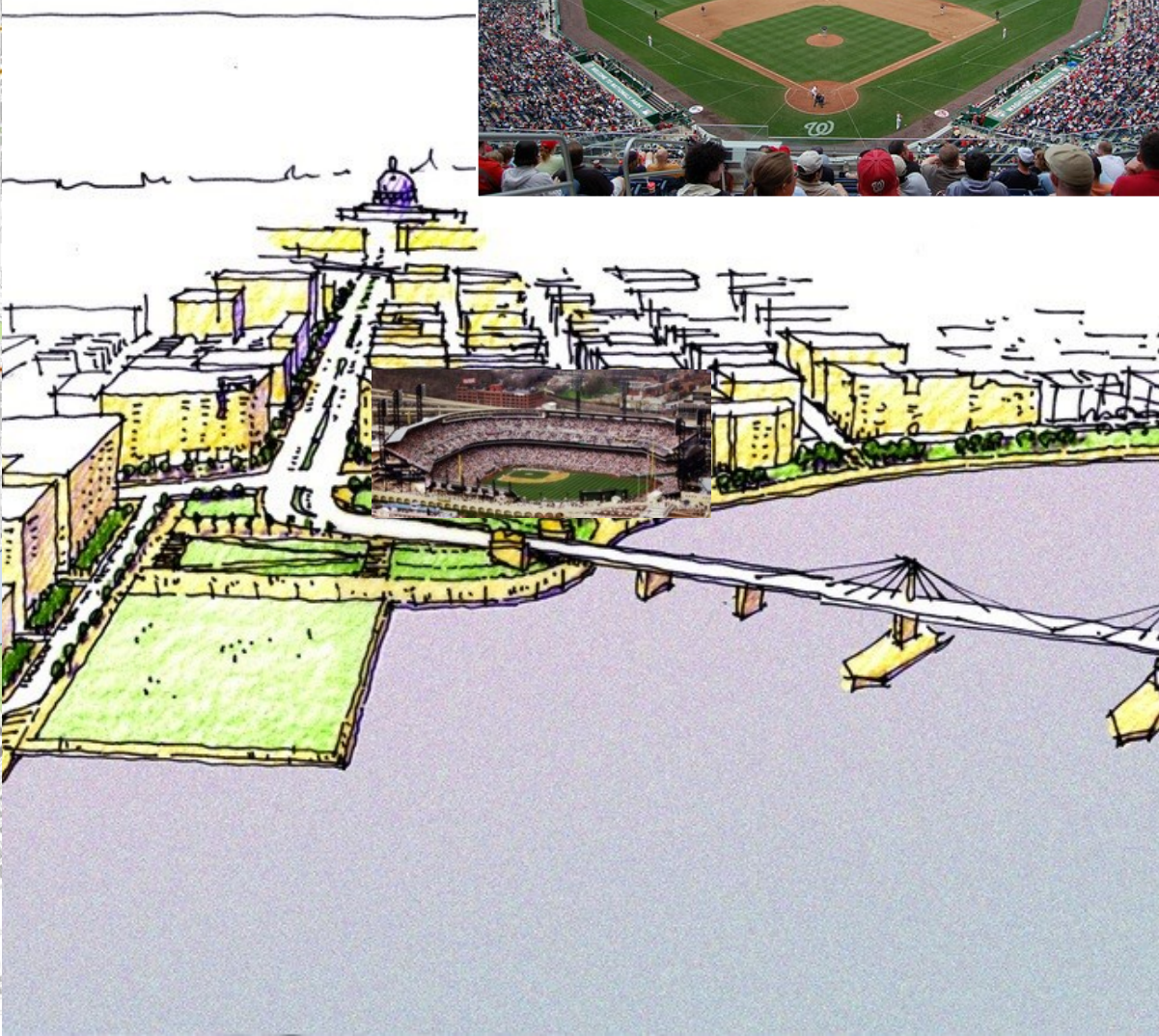
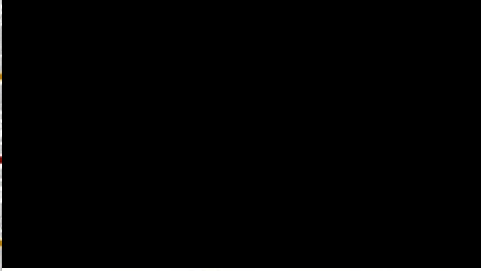
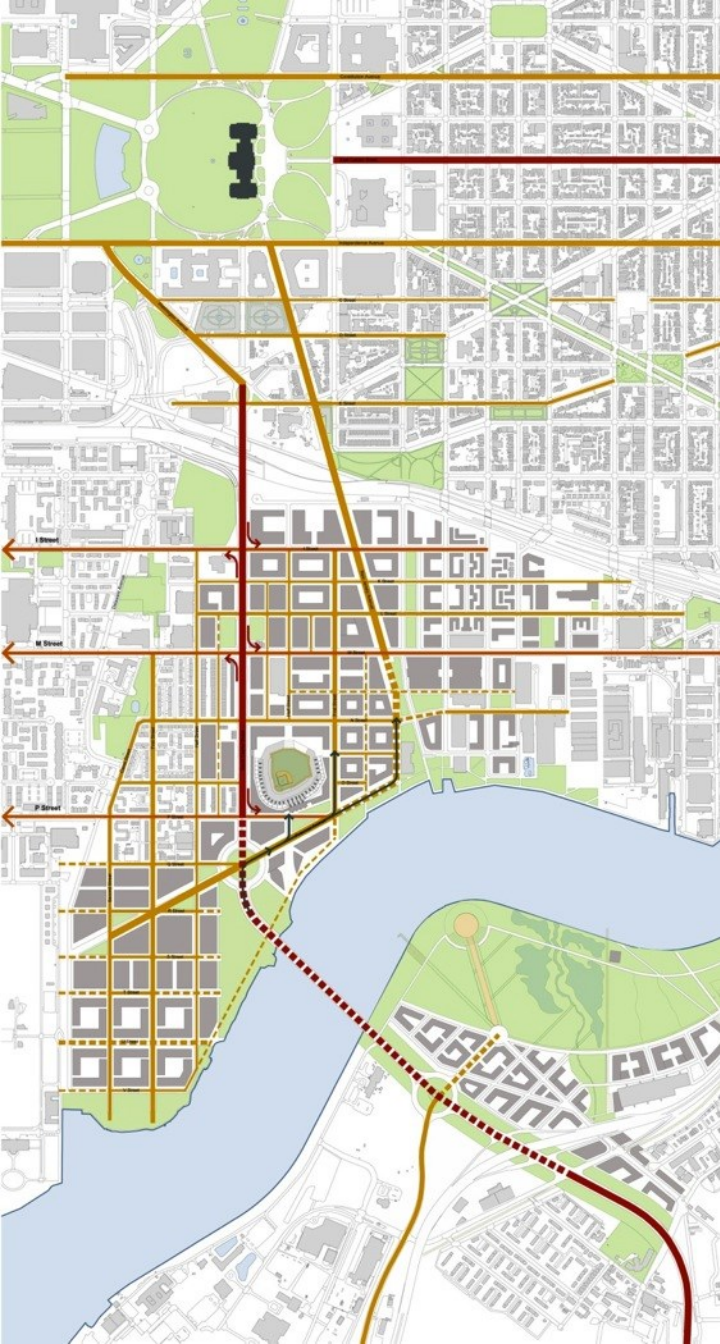
- tree canopy (double row)
- porous paving in parking lane
- porous paving continuous tree lane
- planting at center median
- private gardens in setback



H Street Foggy Bottom







South Capital Street Corridor Plan & Washington Nationals Ballpark



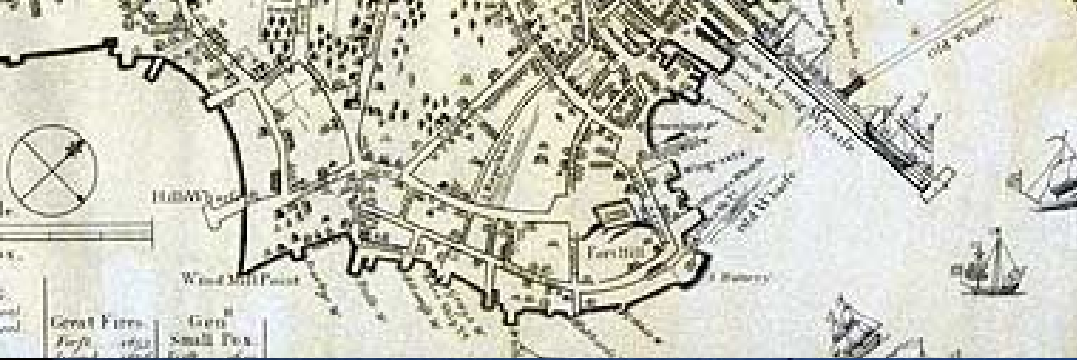




7. *To make riverfronts come alive they must become desirable places for dwelling not just to visit and recreate.*







## Boston's Rows Wharf







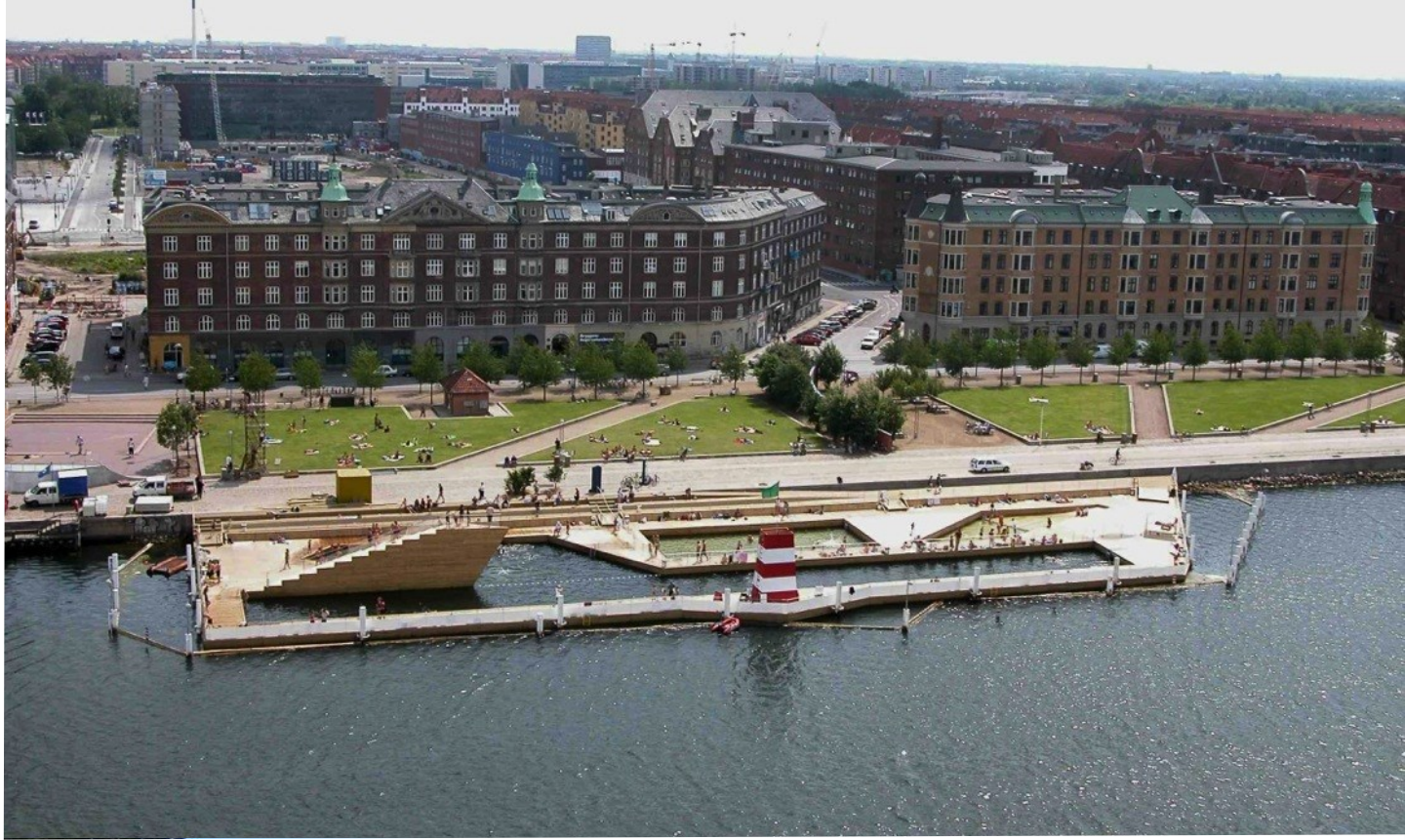


The Vancouver, Canada  
Motto:  
**“LIVING FIRST”**





8. *The success and appeal of landside development is intrinsically tied to the success and appeal of adjacent water uses.*





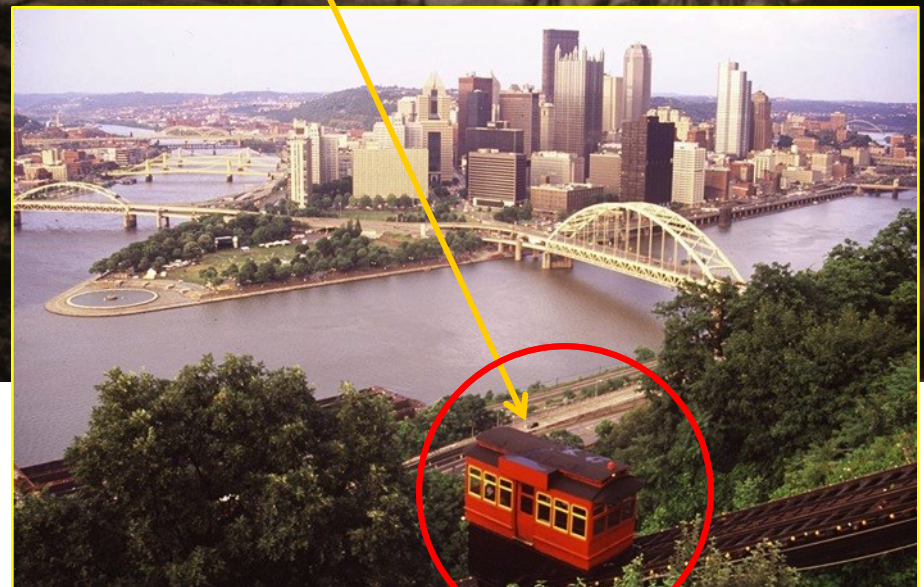
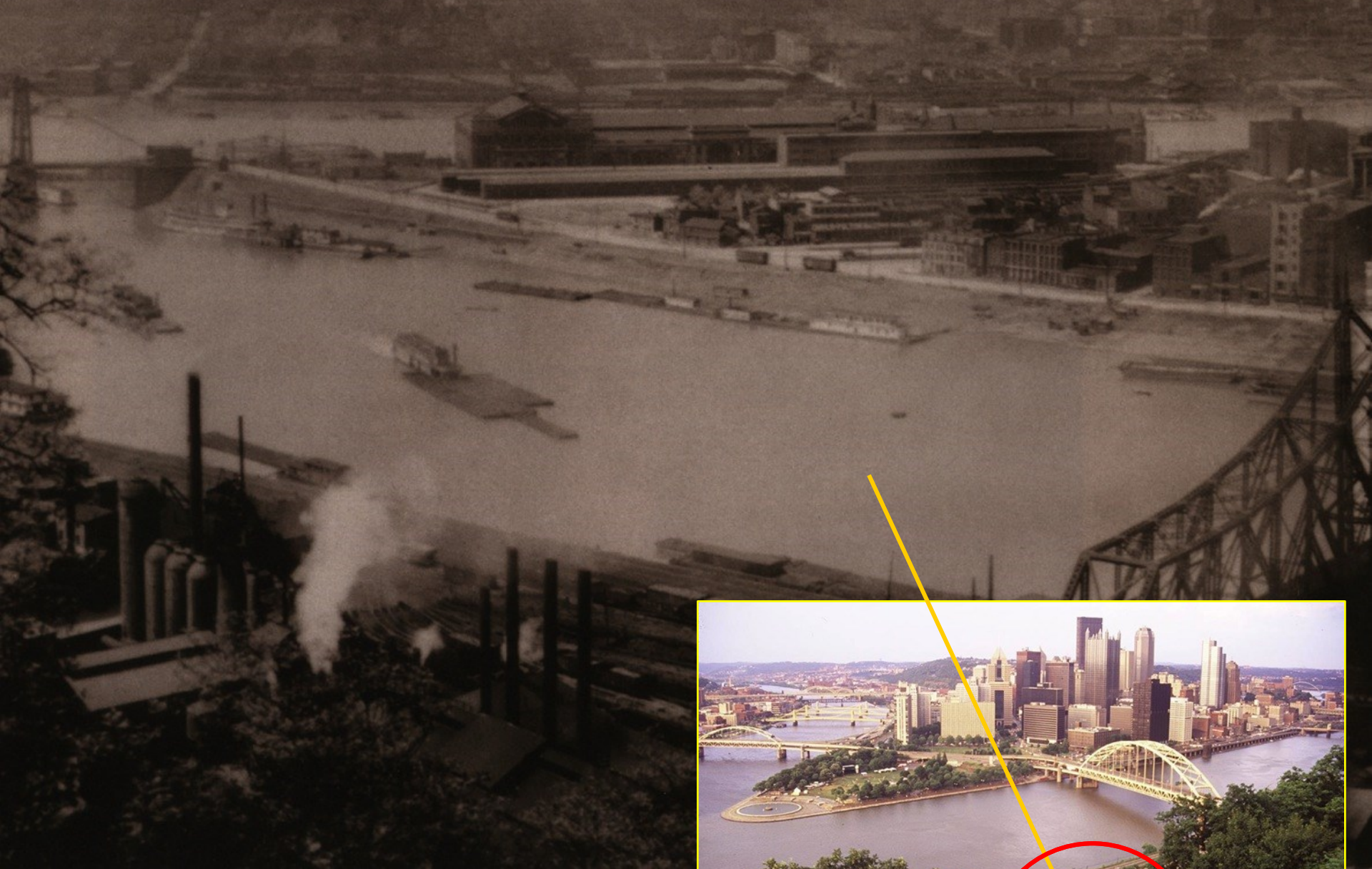




# *Pittsburgh Riverlife: Three Rivers Master Plan*









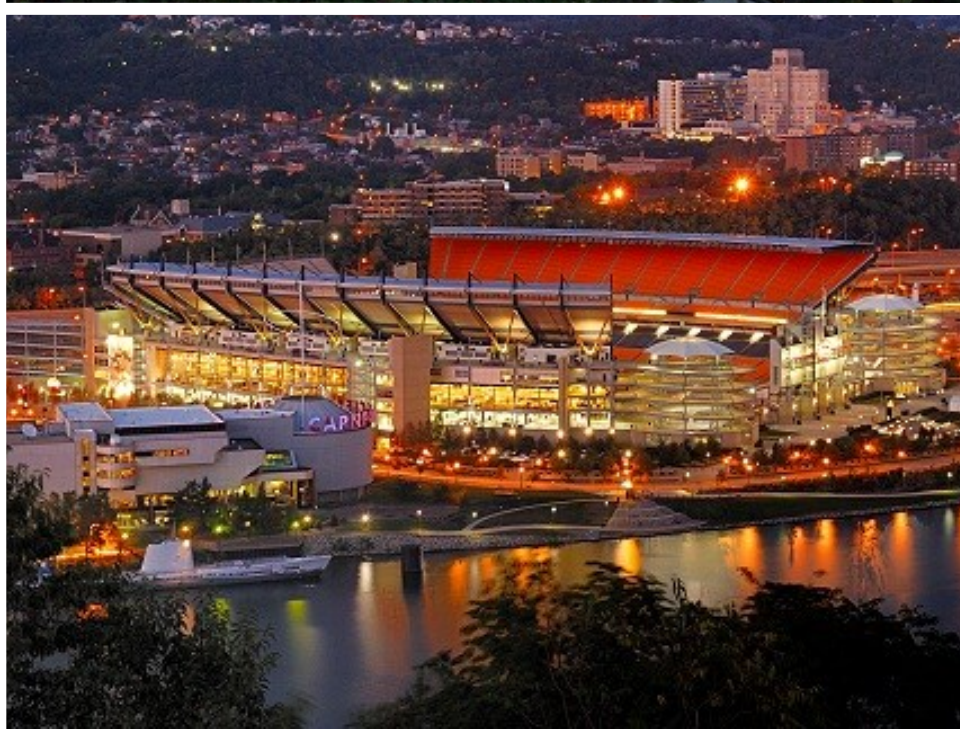






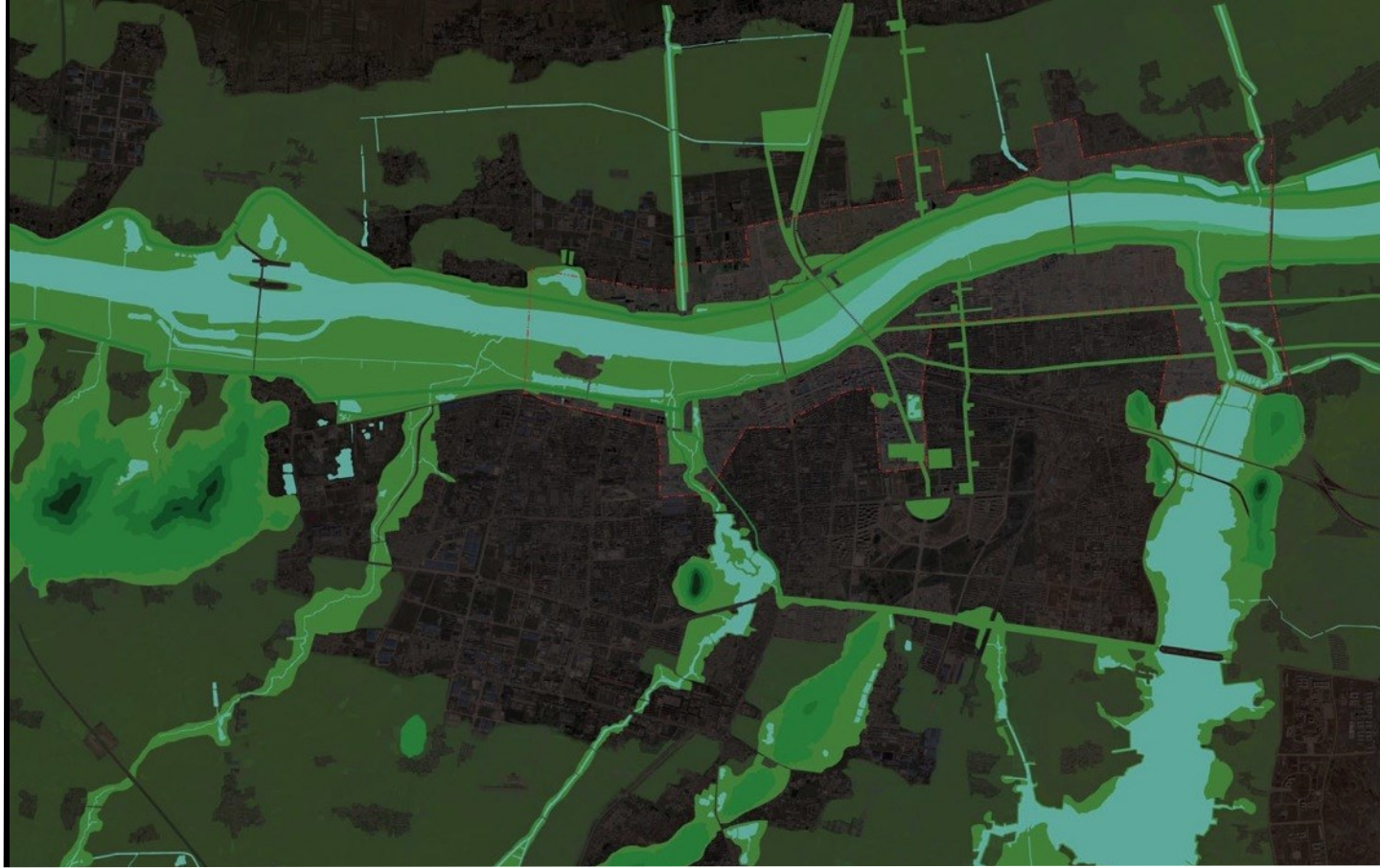
West End







9. *A city's waterfront is its umbilical cord to nature, to the salutary affects of natural beauty, and thus demands intelligent environmental stewardship.*







The Charles River Esplanade,  
Boston & Cambridge, MA



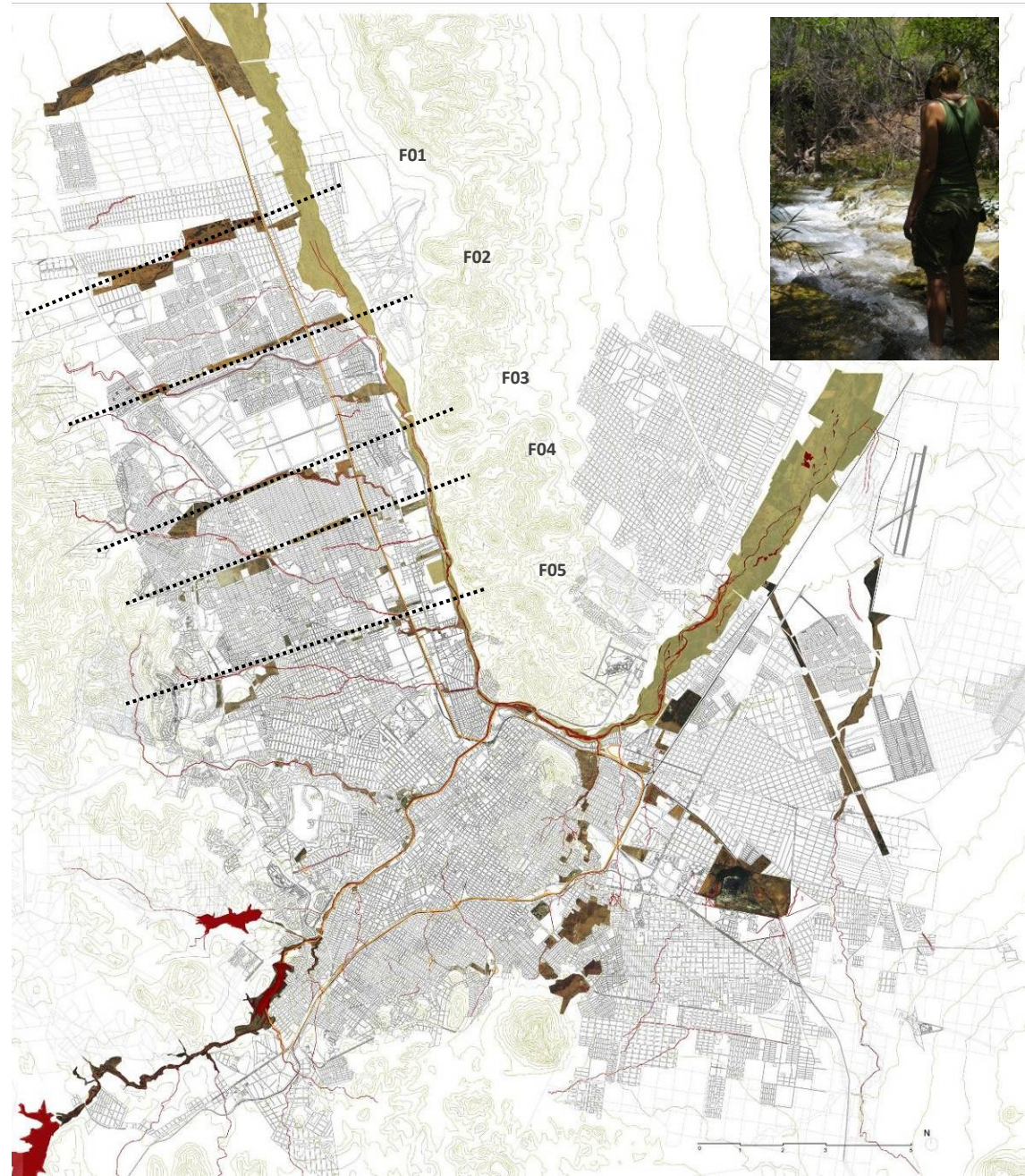


## water retention areas & Water shore treatment & vegetation enhancement



### Main strategies:

- Rain Water Management & Flood Control Infrastructure.
- Finger plan, system of open space areas to increase holding water capacity.
- Buffer zone along the Sacramento & Chuvascar rivers





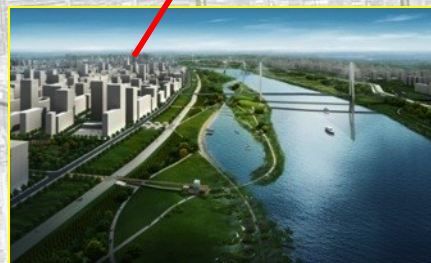
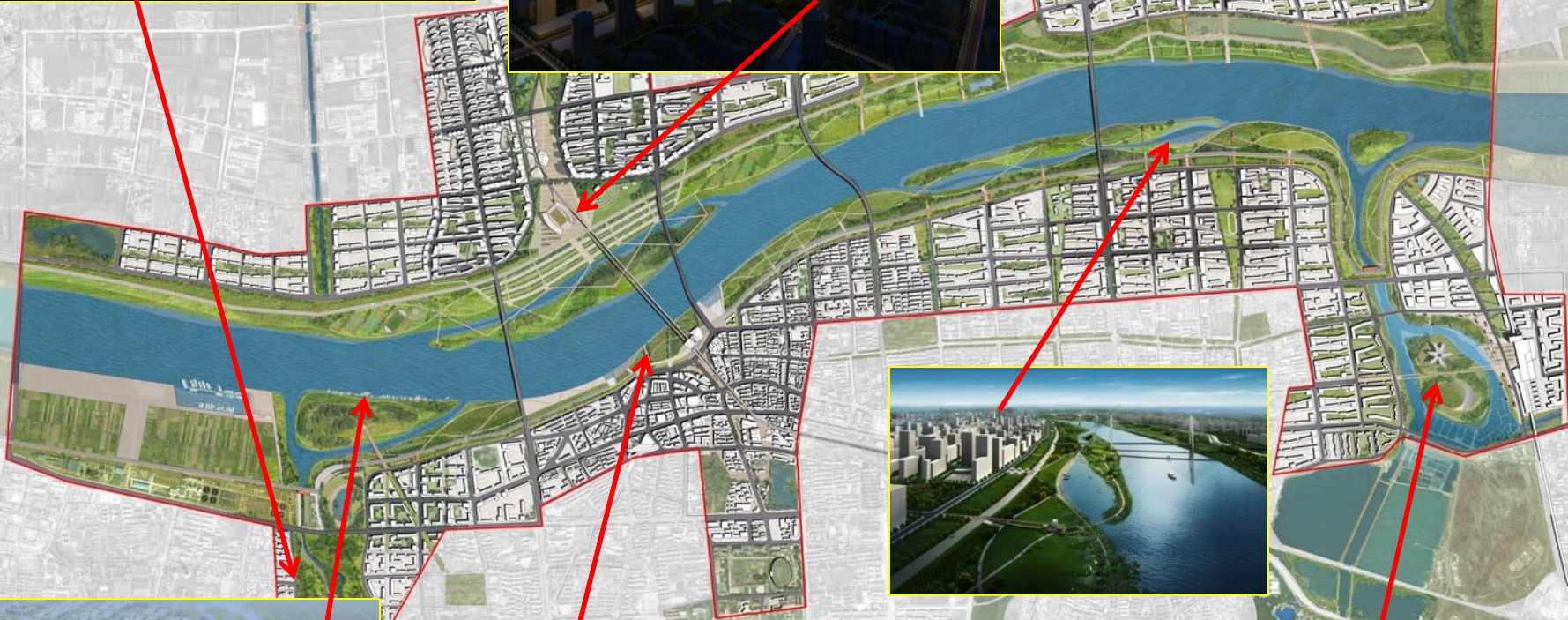
# A Pearl Necklace for Bengbu



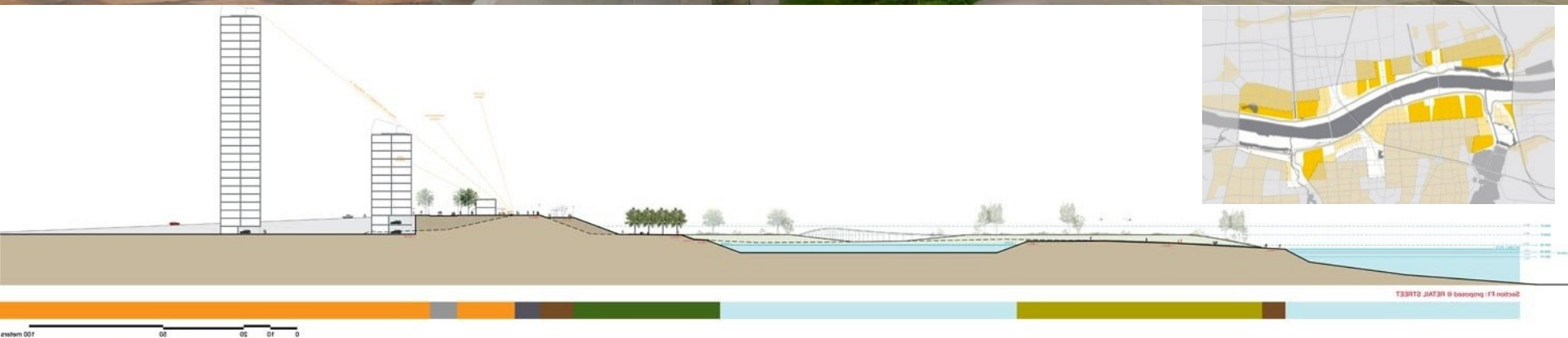
Zhang Gong  
Mtn. Park

Dragon Lake  
Waterfront Park































*10. A city's  
waterfront is the  
setting that  
provides the best  
antidote to  
homogenization or  
generic urban  
development*





**Reconstruction of the Bund, Shanghai, China**  
**2007-2010**

**上海市外滩滨水区城市设计**

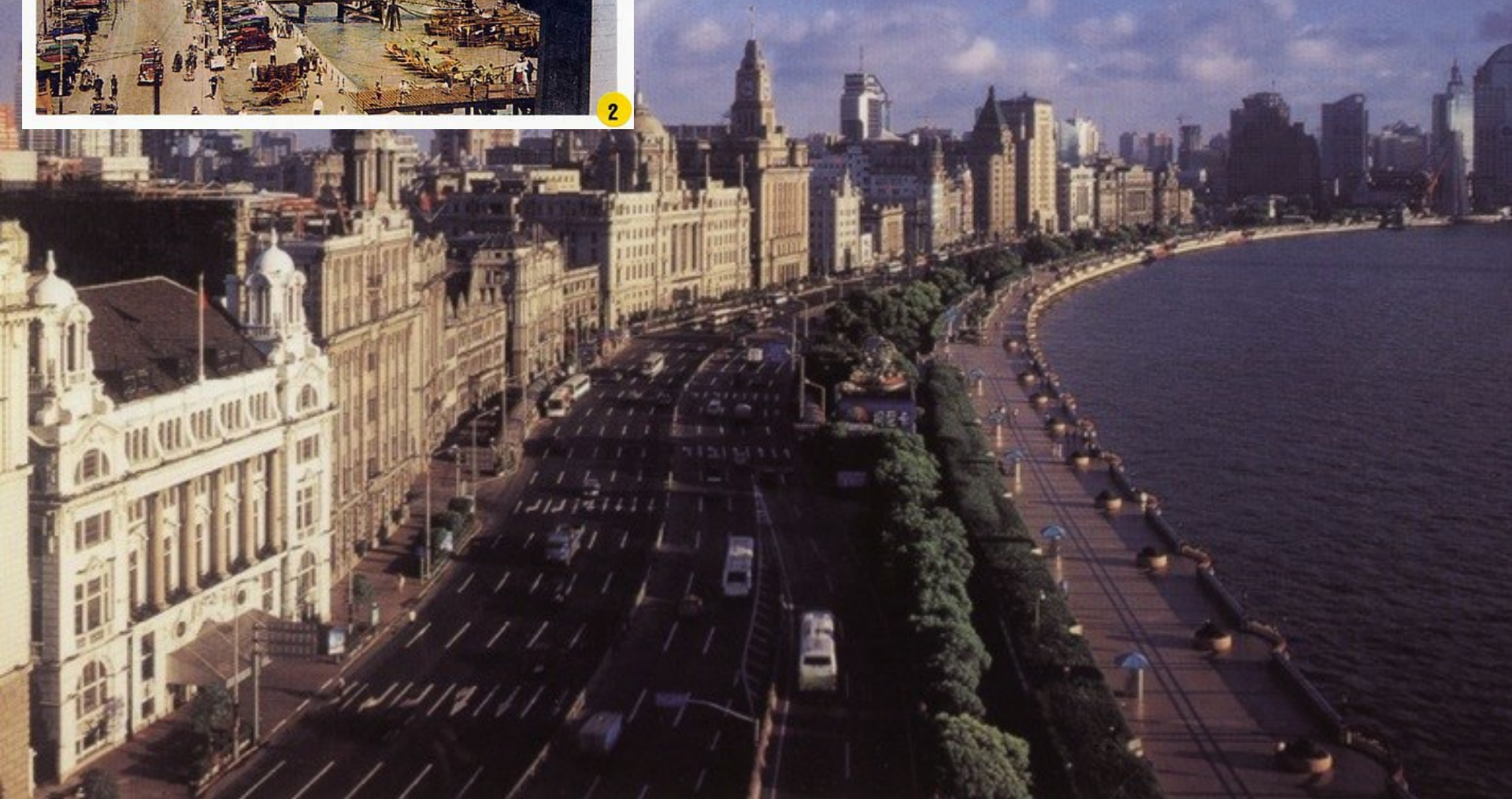




(海上) 平和塔からの黄浦江の展望  
View of bund seen from war memorial (Shanghai)



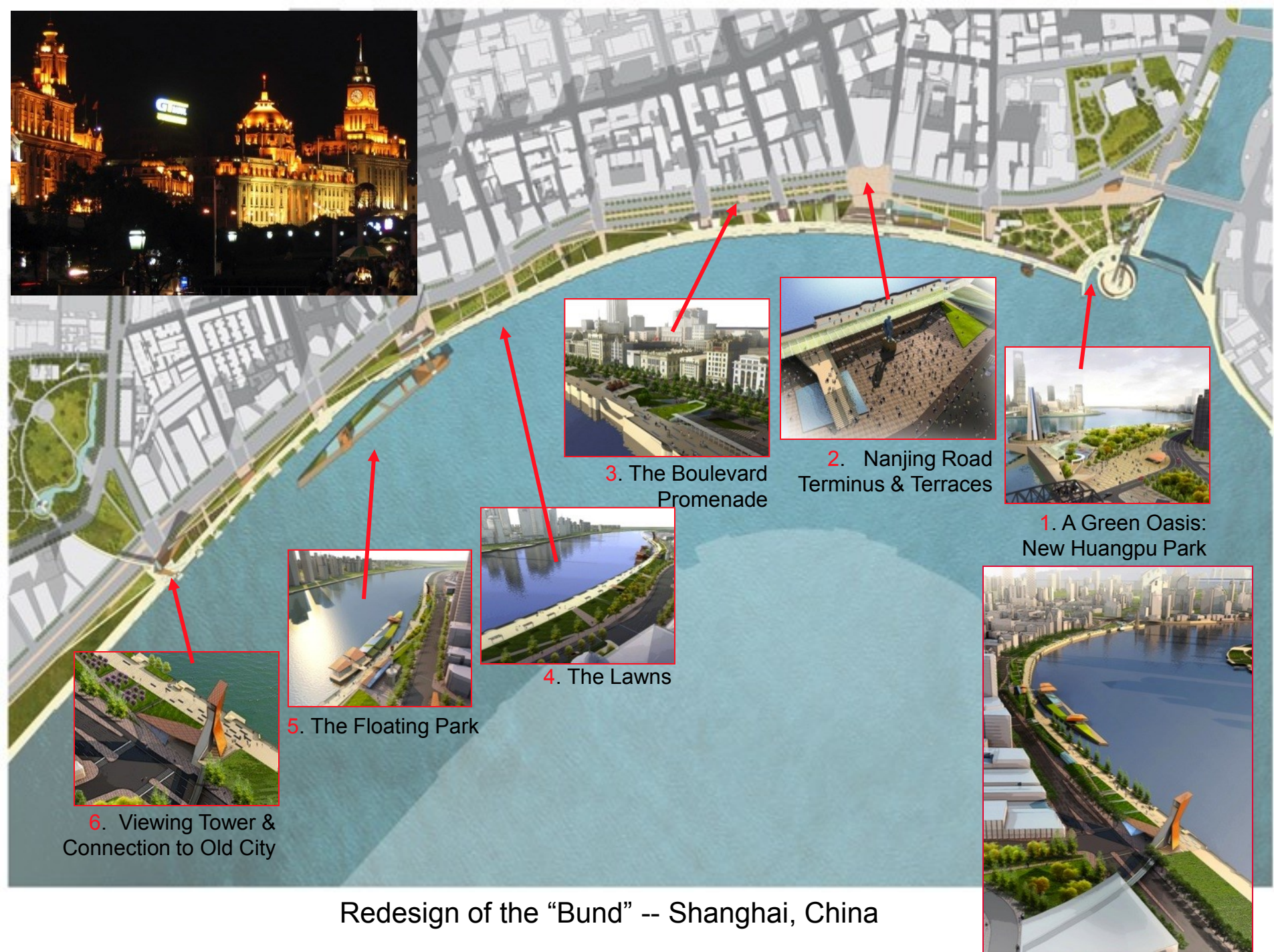
2











Redesign of the "Bund" -- Shanghai, China







### 3. The Boulevard Promenade





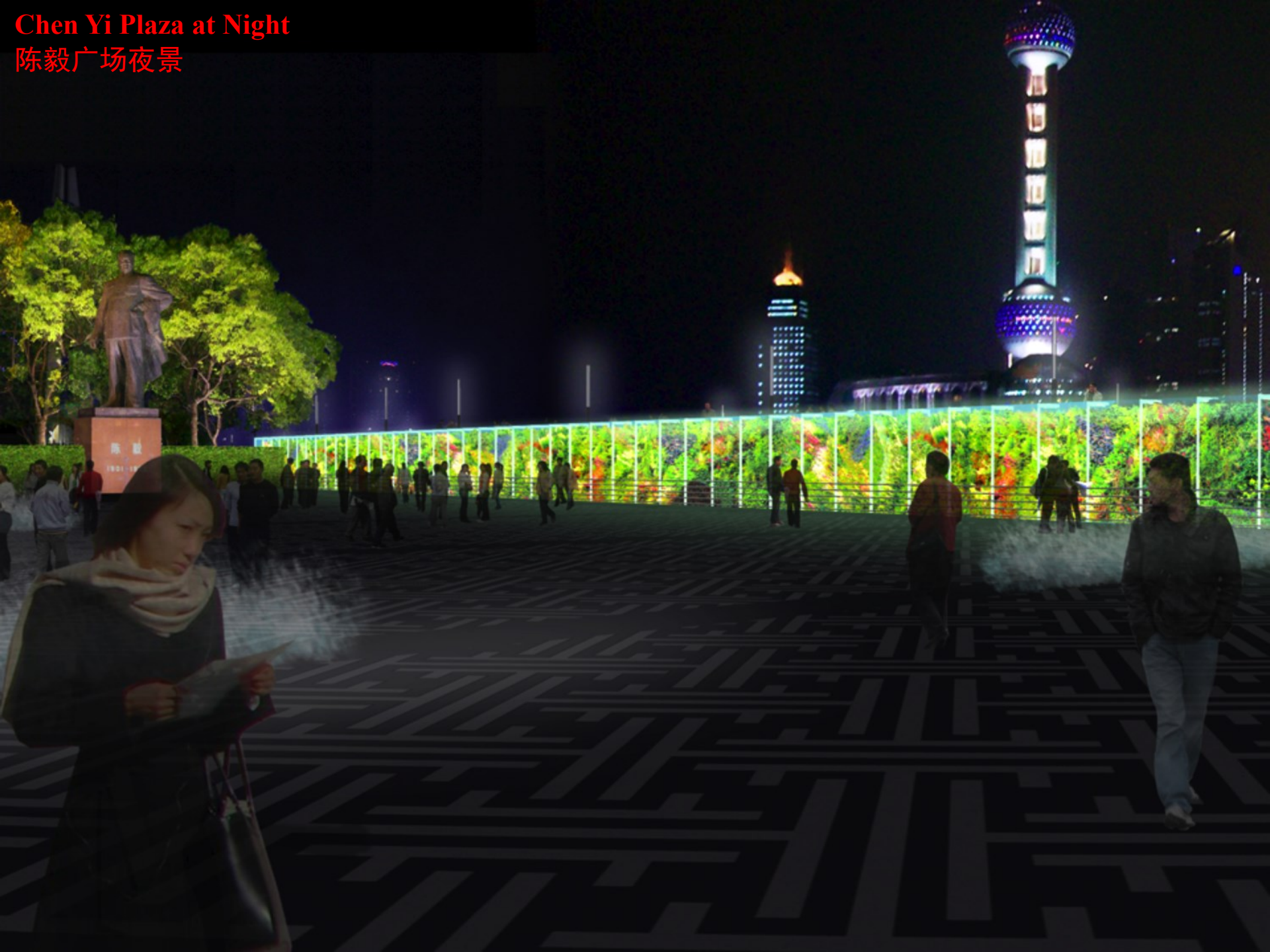








Chen Yi Plaza at Night  
陈毅广场夜景















*Distinctive  
Settings at  
Water's Edge  
Provide  
Significant  
Advantages for a  
City's  
Competitiveness  
in the Global  
Economy*





End



Lee Myung-  
bak  
Mayor of  
Seoul and  
later  
President of  
Korea





# **Cheonggyecheon River Restoration, Seoul, Korea**

## **2002-2006**













