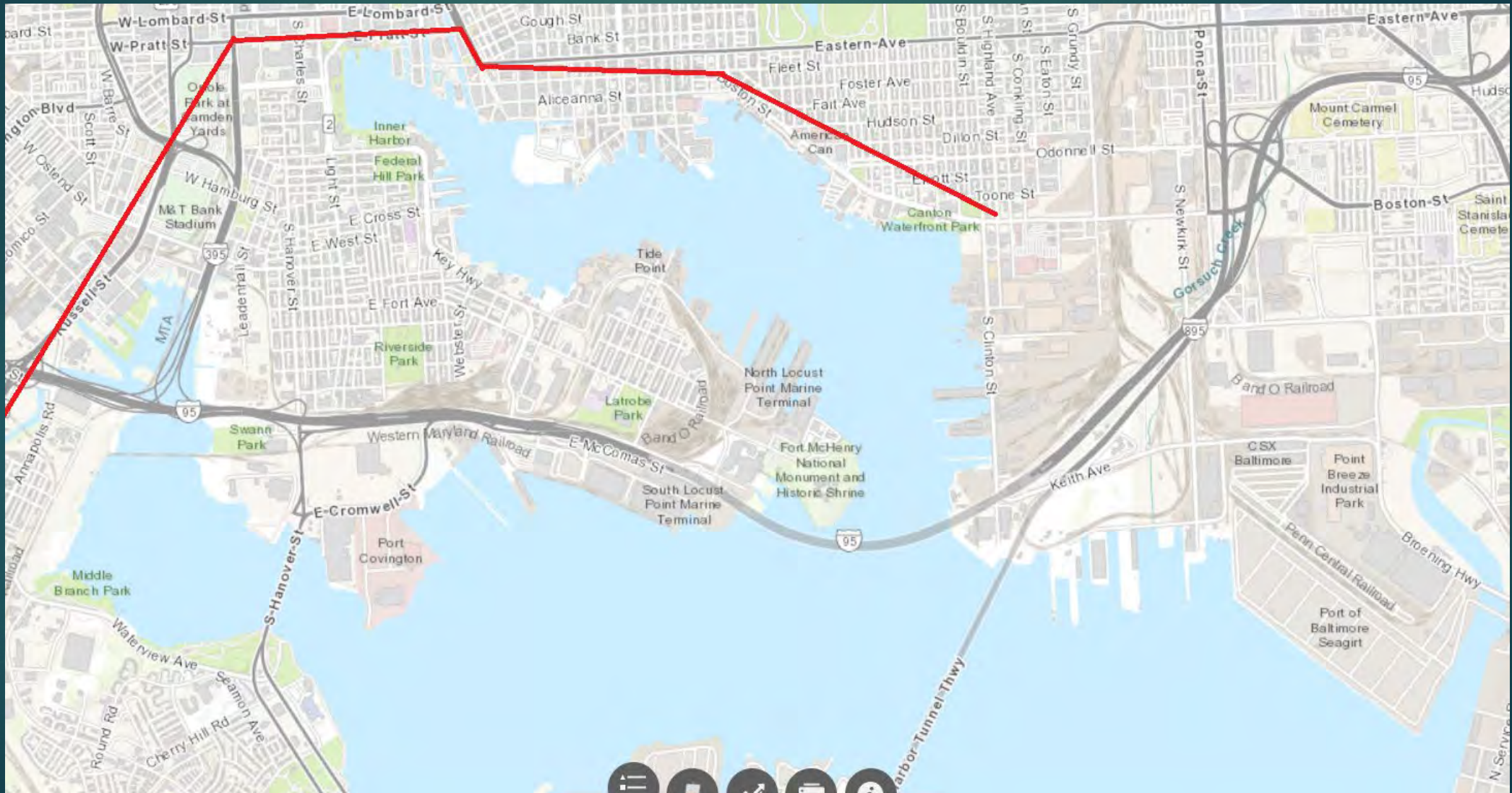


# Coastal Risks & Mitigation Planning

JOANNA BIRCH AND GRACE HANSEN  
BALTIMORE OFFICE OF SUSTAINABILITY

# Where We Work





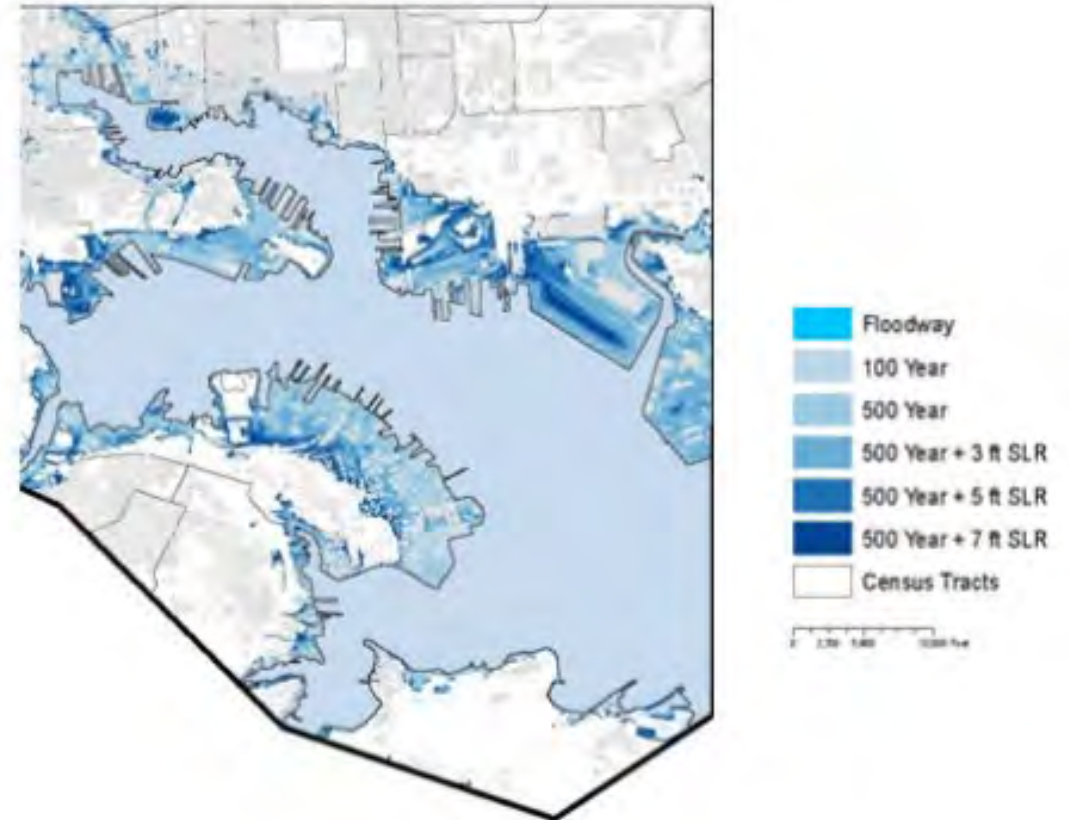
# Our Roles

Jo Birch – Floodplain Manager	Grace Hansen – Critical Area/Coastal Planner
Riverine Floodplain	Coastal Floodplain (S. of Pratt & E. of Russell)
CRS Coordinator	Critical Area Planner (overlap with coastal)
Review and issue permits in 3 permit systems	
Participate in Pre-development meetings	
Support Office of Sustainability staff with technical knowledge for DP3, CAP	
Attend public events in fall & spring to interface with the public	
Respond to requests for regulation requirements from the public, developers, and city agencies	
Work collaboratively with other environmental planners to refine procedures and code	

# Coastal and Flooding Mitigation

- ▶ Flooding and Infrastructure Work Group
- ▶ Community Rating System (CRS)

Figure 18: Industrial Flood Exposure Areas





# Coastal and Flooding Mitigation

- ▶ Comprehensive Watershed Master Plan
- ▶ Disaster Preparedness and Planning Project(DP3)
  - ▶ Floodplain management
  - ▶ Flood maps
  - ▶ Participation in Hydrologic and Hydraulic study
- ▶ Updating Nuisance Flood Plan

Figure 8: Projected Storm Surge Flooding in Baltimore's Inner Harbor



Storm surge potential with Sea Level Rise for Category 1 (blue), Category 2 (green), Category 3 (yellow), and Category 4 (red) hurricanes in the Baltimore Inner Harbor. *Source: USACE Storm Surge Modeling*



# Thank you!

Grace Hansen

Coastal Planner

[Grace.Hansen@Baltimorecity.gov](mailto:Grace.Hansen@Baltimorecity.gov)

Joanna Birch

Floodplain Manager

[Joanna.Birch@Baltimorecity.gov](mailto:Joanna.Birch@Baltimorecity.gov)





# Water Connects Us All

Laura Bankey  
Vice President of Conservation Programs  
[lbkey@aqua.org](mailto:lbkey@aqua.org)



# Exhibits



Water connects all living things – from the depths of the ocean to the top of the rainforest canopy







# Interpretation





# Education





# Arts and Culture

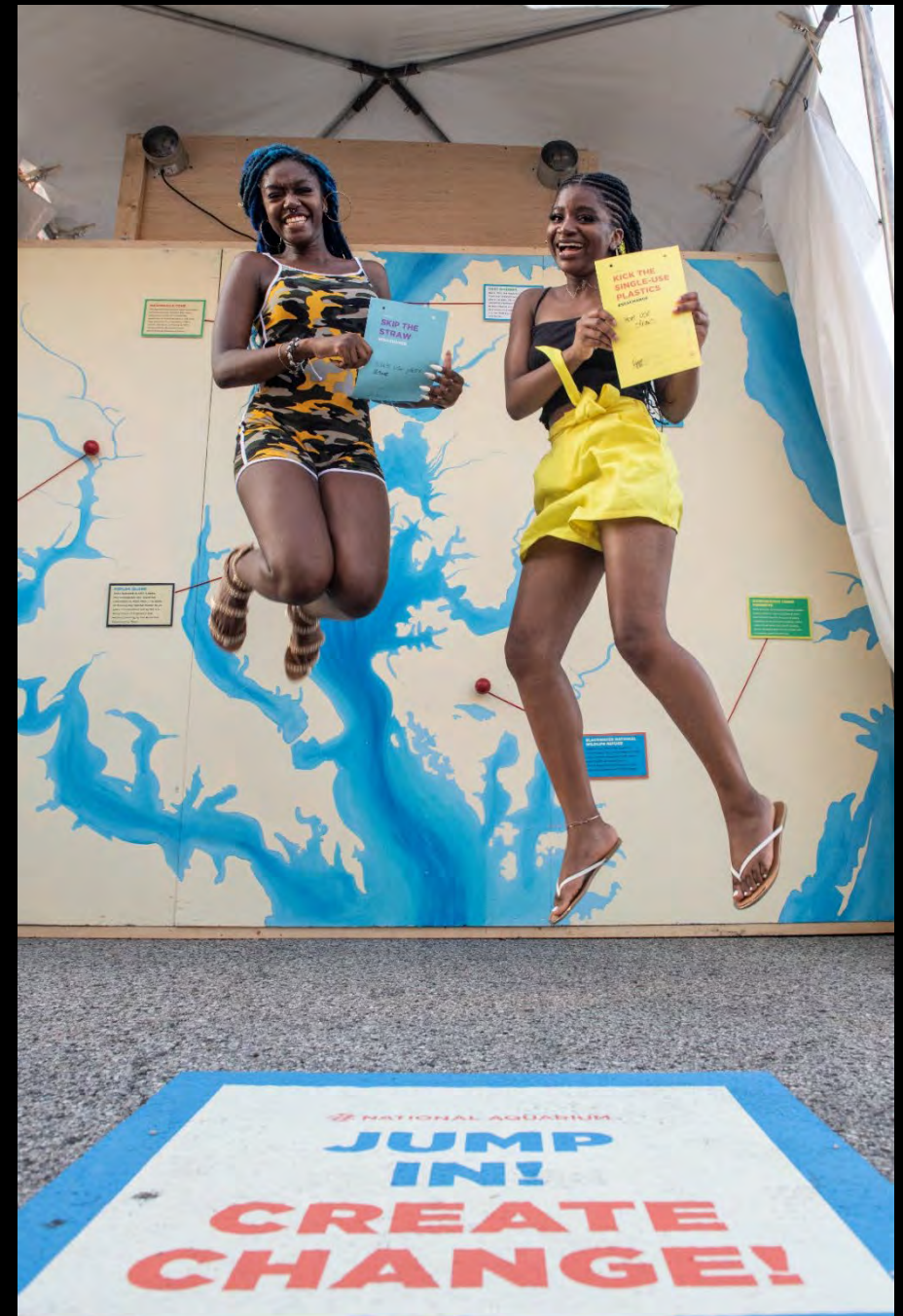




# Advocacy and Policy



Comprehensive Bag Reduction Act bill signing, 2020







Sustainability



# Conservation and Community









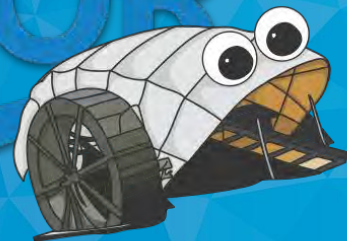


# Thank You

Laura Bankey  
lbankey@aqua.org



# HEALTHY HARBOR



A WATERFRONT PARTNERSHIP INITIATIVE

Adam Lindquist, Vice President  
Healthy Harbor Initiative

**WATERFRONT**  
**PARTNERSHIP**  
OF BALTIMORE



# Mr. Trash Wheel

Use The Power of Nature  
to Clean The Harbor





# Baltimore Blueway

Curated water trails highlighting Baltimore's sights, ecosystems, & landmarks



**BALTIMORE**  
**BLUEWAY**



Explore the Baltimore Blueway's 7 trails and +20 miles of urban shoreline to experience dozens of landmarks and iconic Baltimore sights.

WATERFRONT  
PARTNERSHIP



HEALTHY HARBOR  
A BALTIMORE PARTNERSHIP



# The Great Baltimore Oyster Partnership

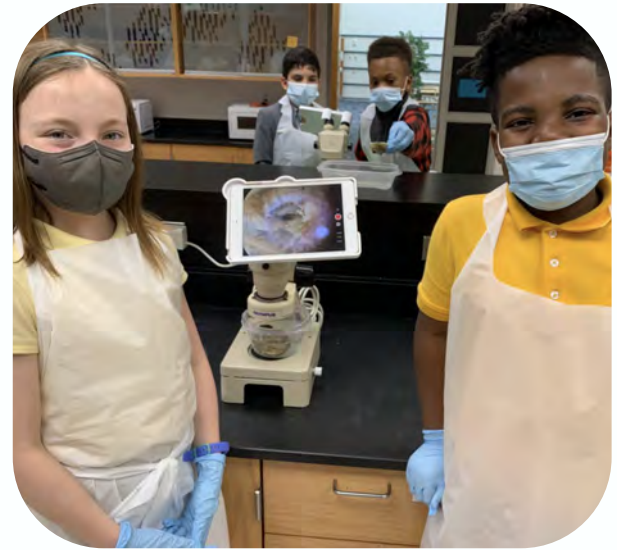
Engaging volunteers to  
grow millions of oysters





# Harbor Scholars

The Harbor as an environmental education resource for city students and teachers.





## Baltimore Floatilla

A paddling rally for clean and accessible waterways

Baltimore  
Floatilla





# Report Card

Annually tracking the restoration of the Harbor



## Sewer system overflows decrease by 97%

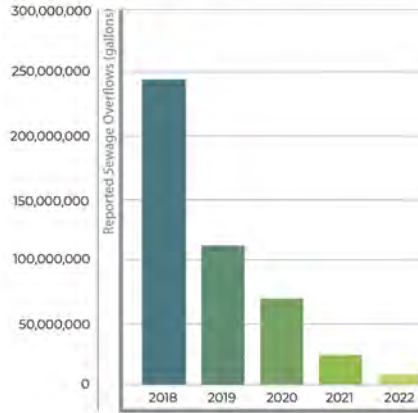
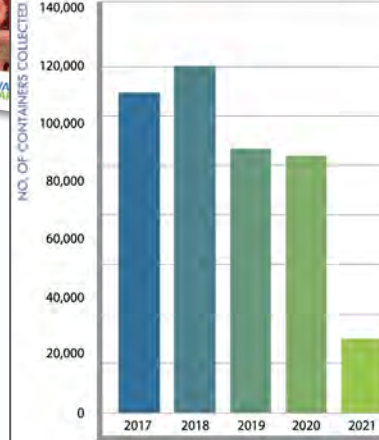
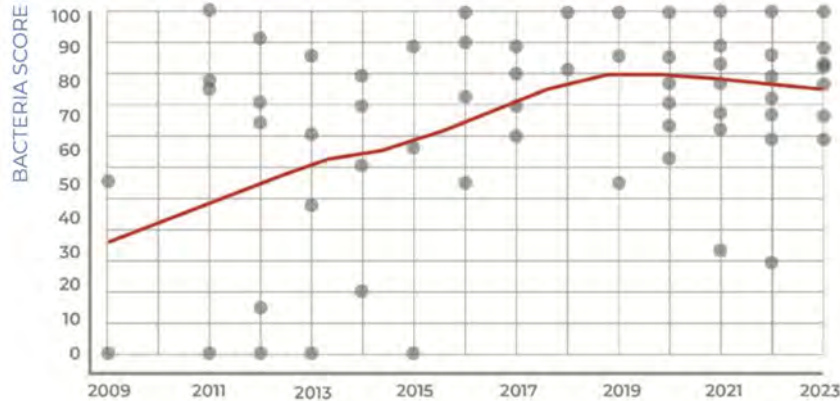


Chart Source: Maryland Department of the Environment.



## INNER HARBOR BACTERIA TRENDS (2009-2021)



Source: MrTrashWheel.com



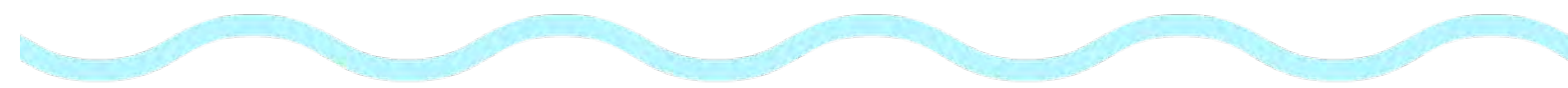
**Thank You For Your Support!**

**Questions or Comments?**

**WATERFRONT  
PARTNERSHIP**



# GHOST RIVERS







LAKE

U D L A K E

HOMWOOD PARK

Lake Stony

Sec. 5. Sec. 12. Sec. 17.  
Sec. 6. Sec. 11. Sec. 13.  
Peabody Heights  
Company's Plat

Sec. 1. Sec. 10. Sec. 14.  
Sec. 3. Sec. 9.

P. B. Sattler  
Estate

P. B. Sattler  
Estate

James Brown

Chamney Brooks

William Cablow

John J. Harris

Wm. T. Timanus

John J. Capron

Stine (The Banker)

Shirk

Brown

Mankin

Dr. Thomas

Donovan

Wm. T. Timanus

John J. Capron

N. Haines & J. Meppley

Shirk

Brown

Mankin

James Brown

Pauls





SUMWALT'S  
ICE POND

SUMWALT RUN



MAP OF  
**BALTIMORE CITY**  
SHOWING  
ORIGINAL SHORE LINES  
AND DRAINAGE













FOCUS  
EKN 7938  
HONOLULU

WATER METER





March 22-26, S.W. 94.  
Gen. view of const. of 42"  
brick & concrete drain in  
Greenwood Av., E. of Conduit  
Ave.

*Handwritten signature or initials in the bottom right corner.*



91  
Y-8-07.



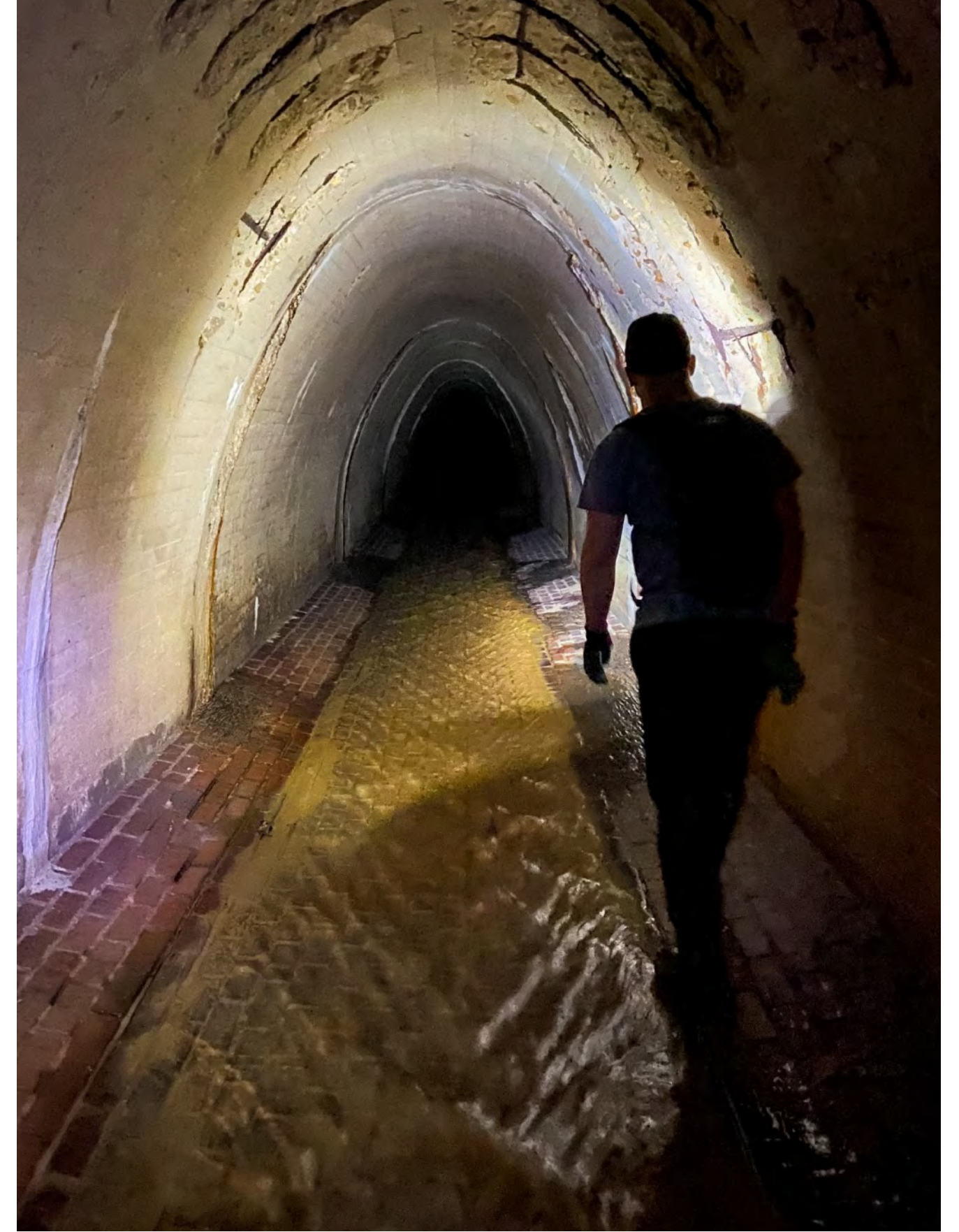




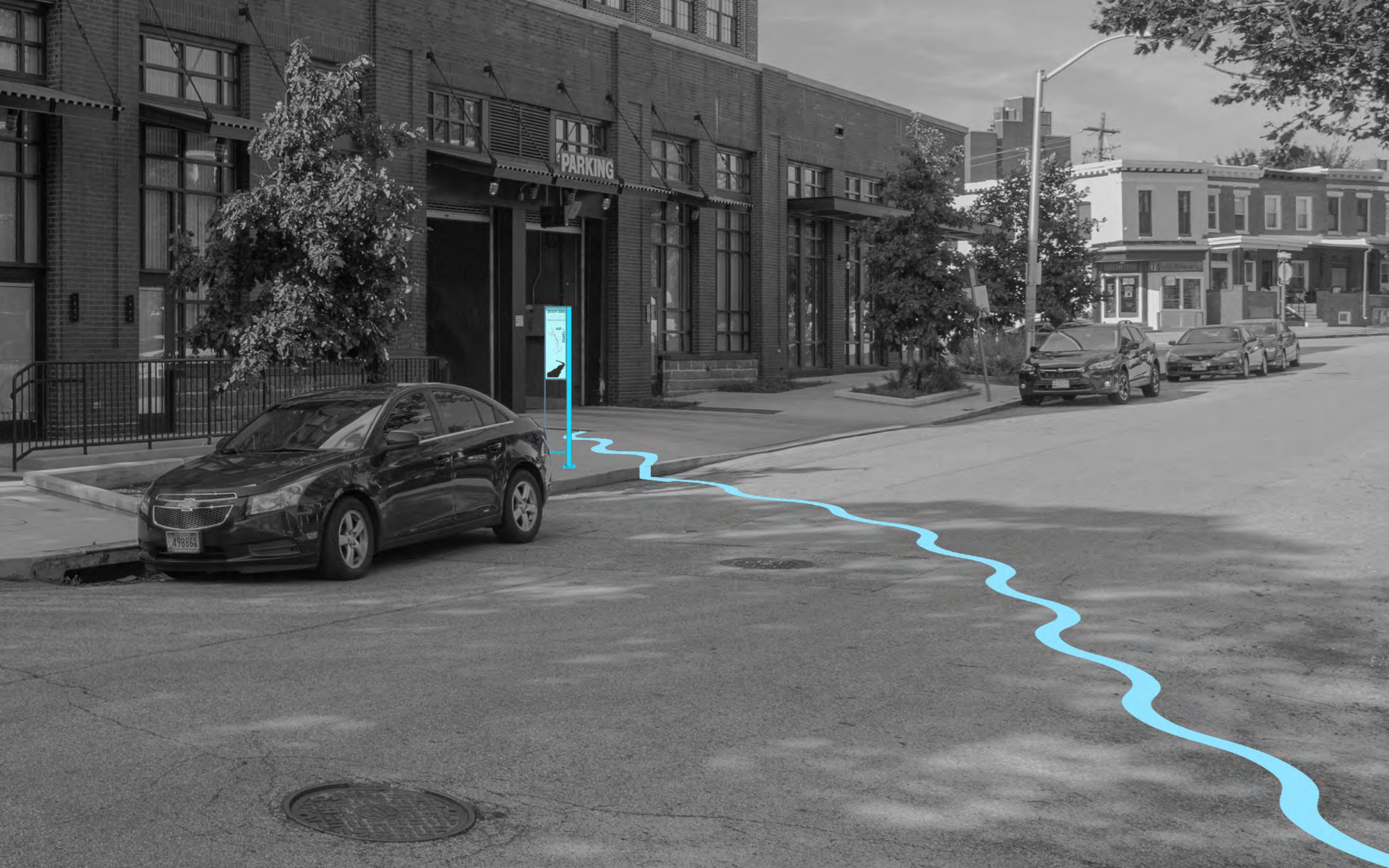










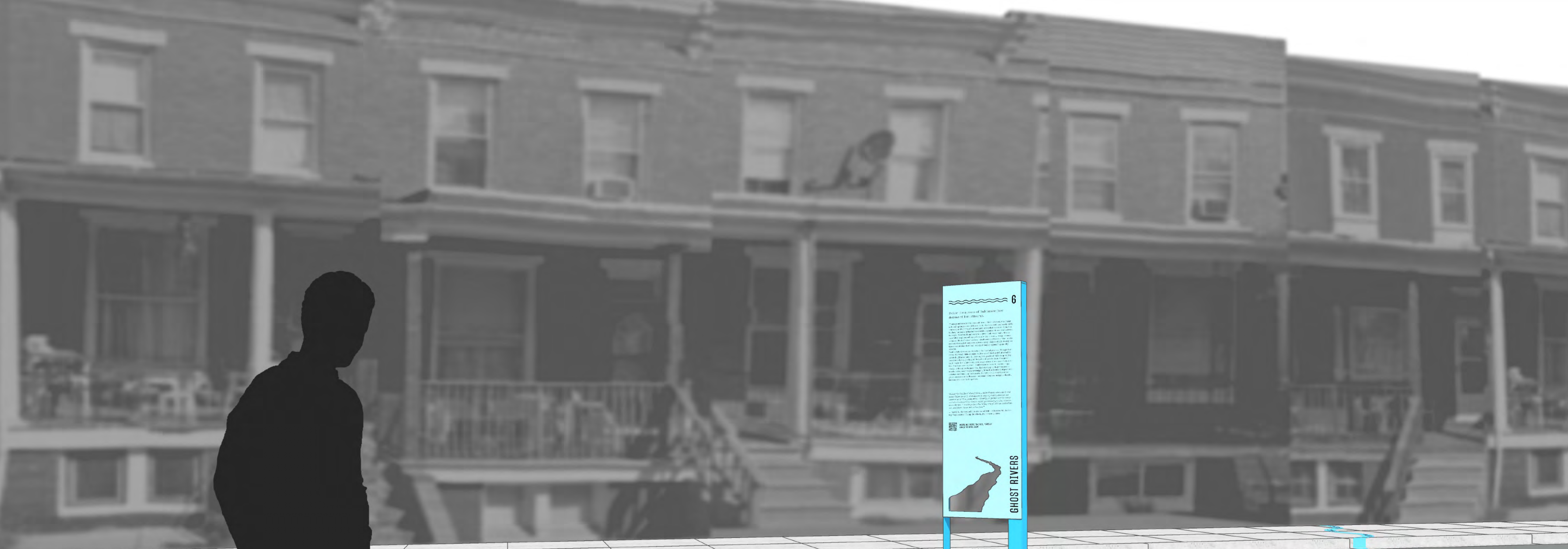
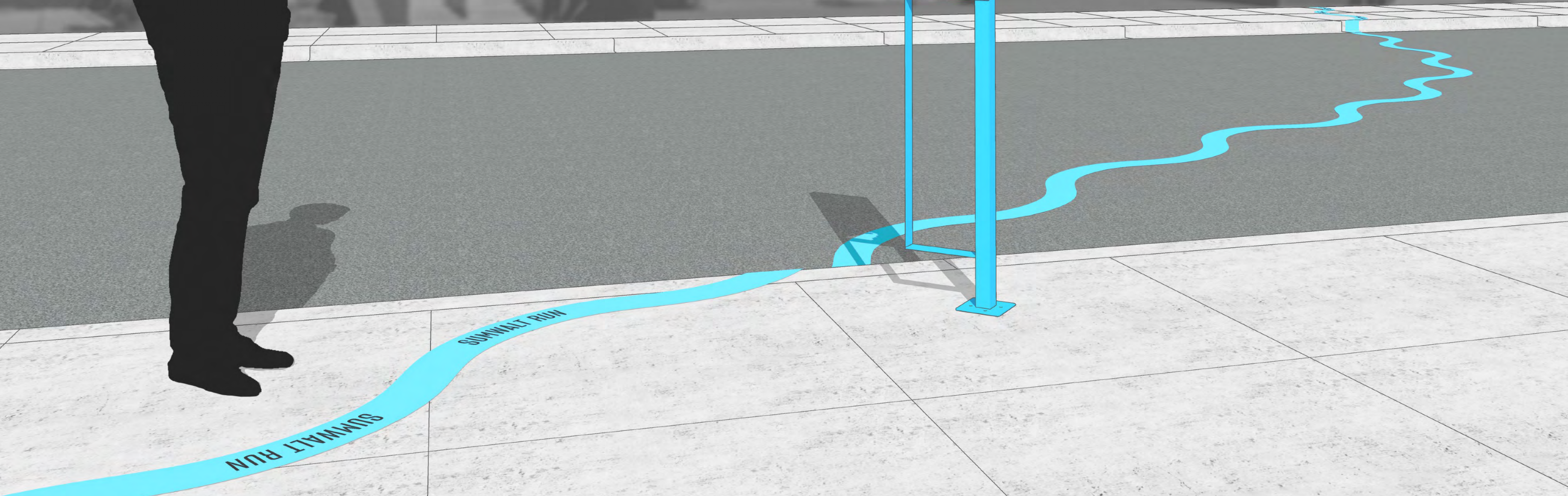
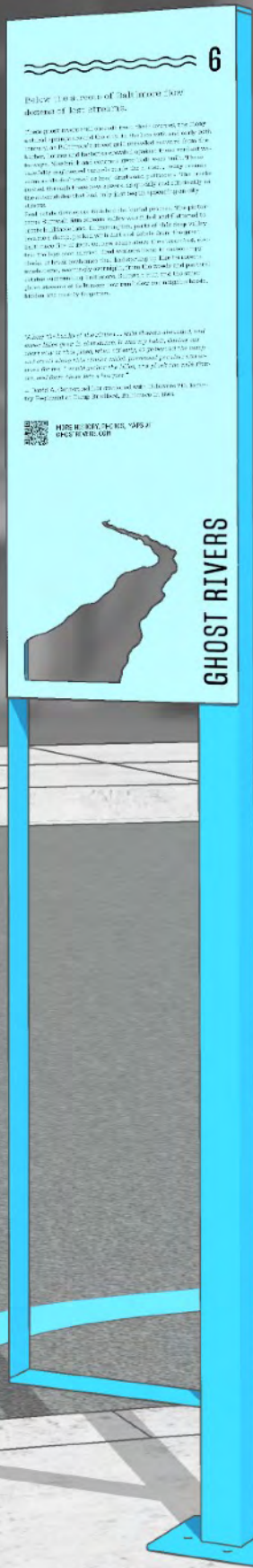


PARKING

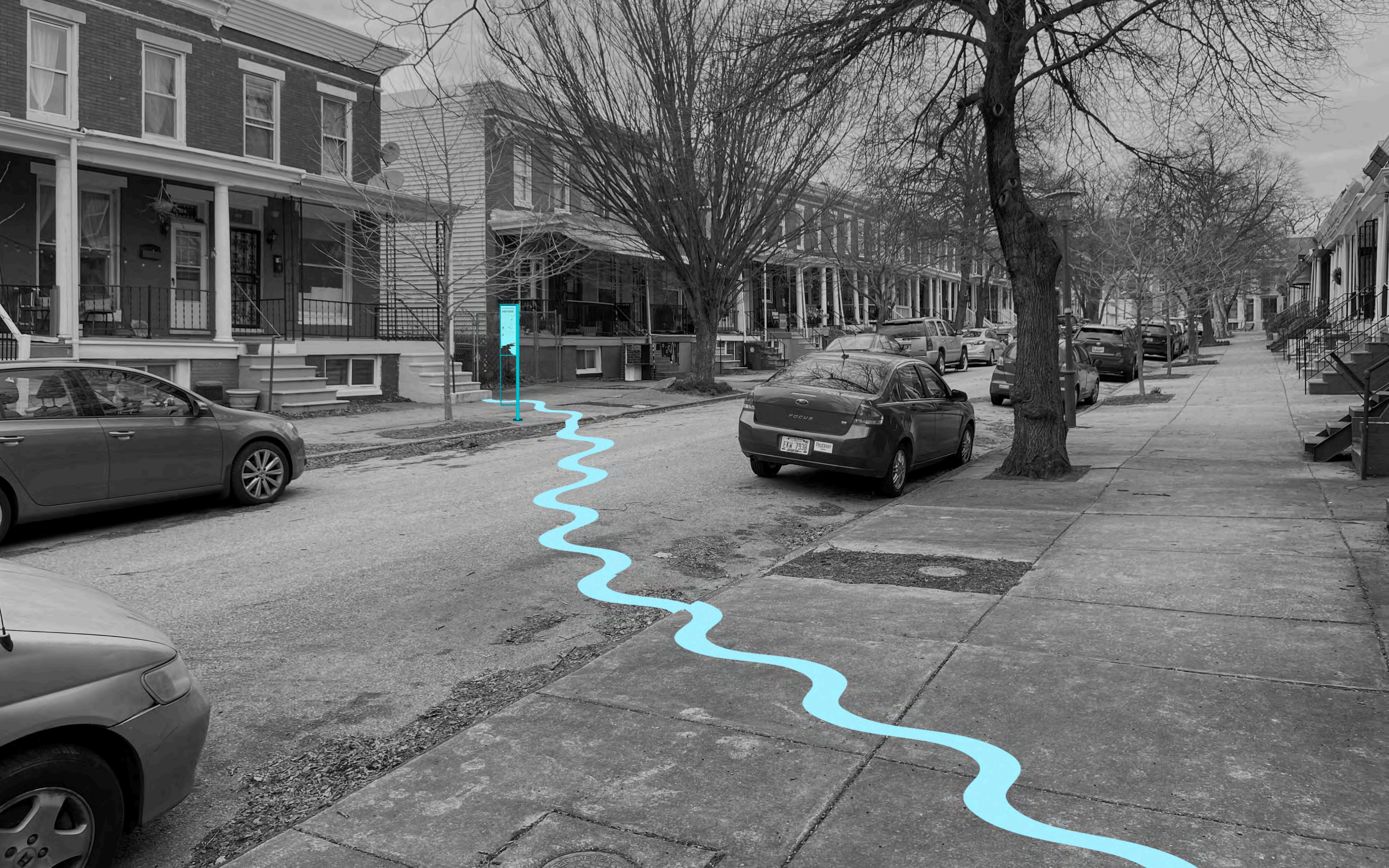
MAP  
STREET

498865













JOHNS HOPKINS  
UNIVERSITY

**ORIGINAL PATH OF  
SUMWALT RUN**

CHARLES  
VILLAGE

WYMAN  
PARK DELL

**SITE OF SUMWALT'S  
ICE POND**

28TH ST.

REMINGTON

HOWARD ST.

CHARLES ST.

25TH ST.

OLD GOUCHER

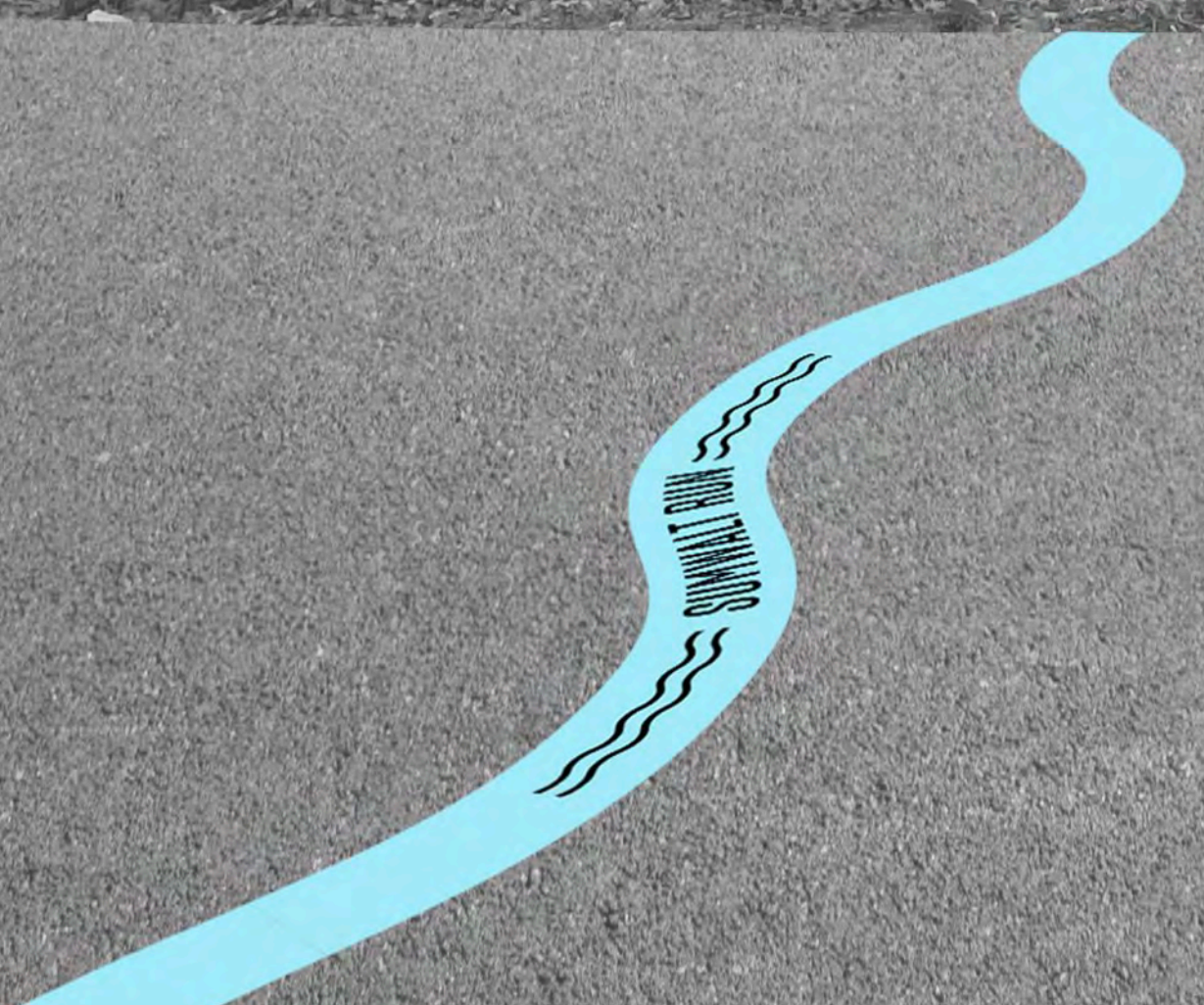
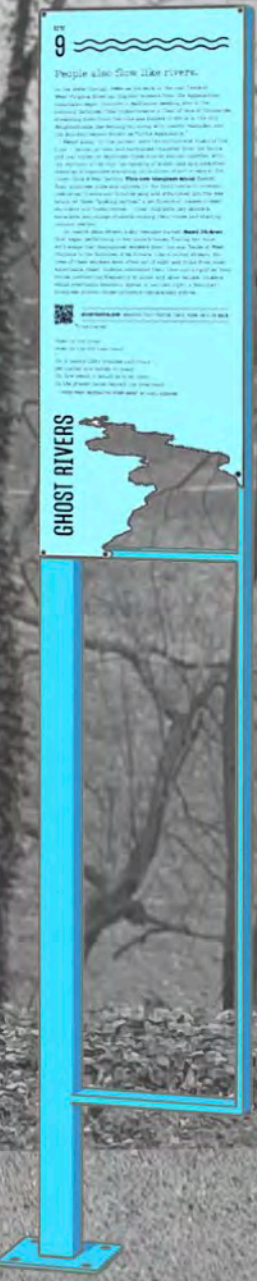
Jones Falls River

I-83 (JFX)

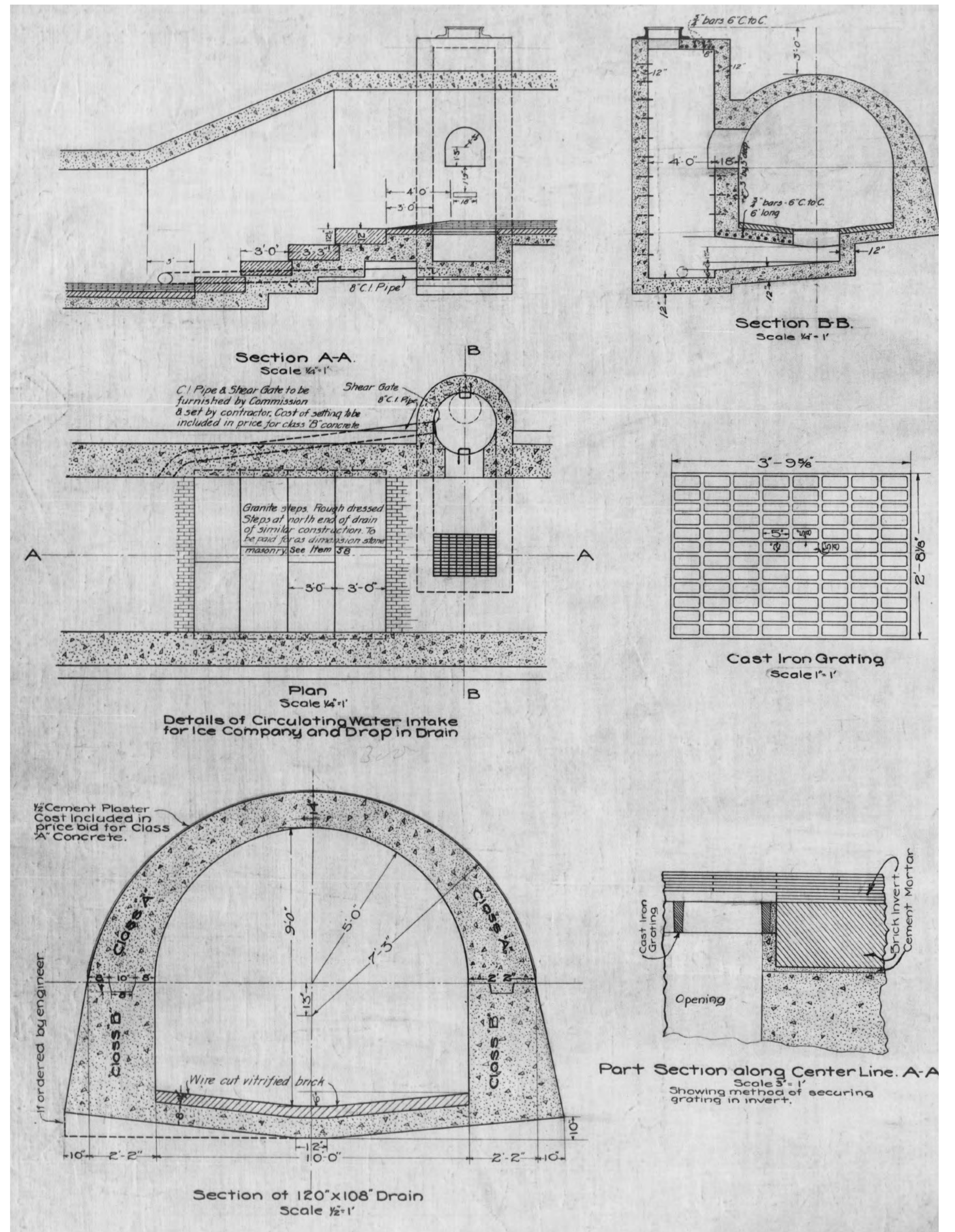
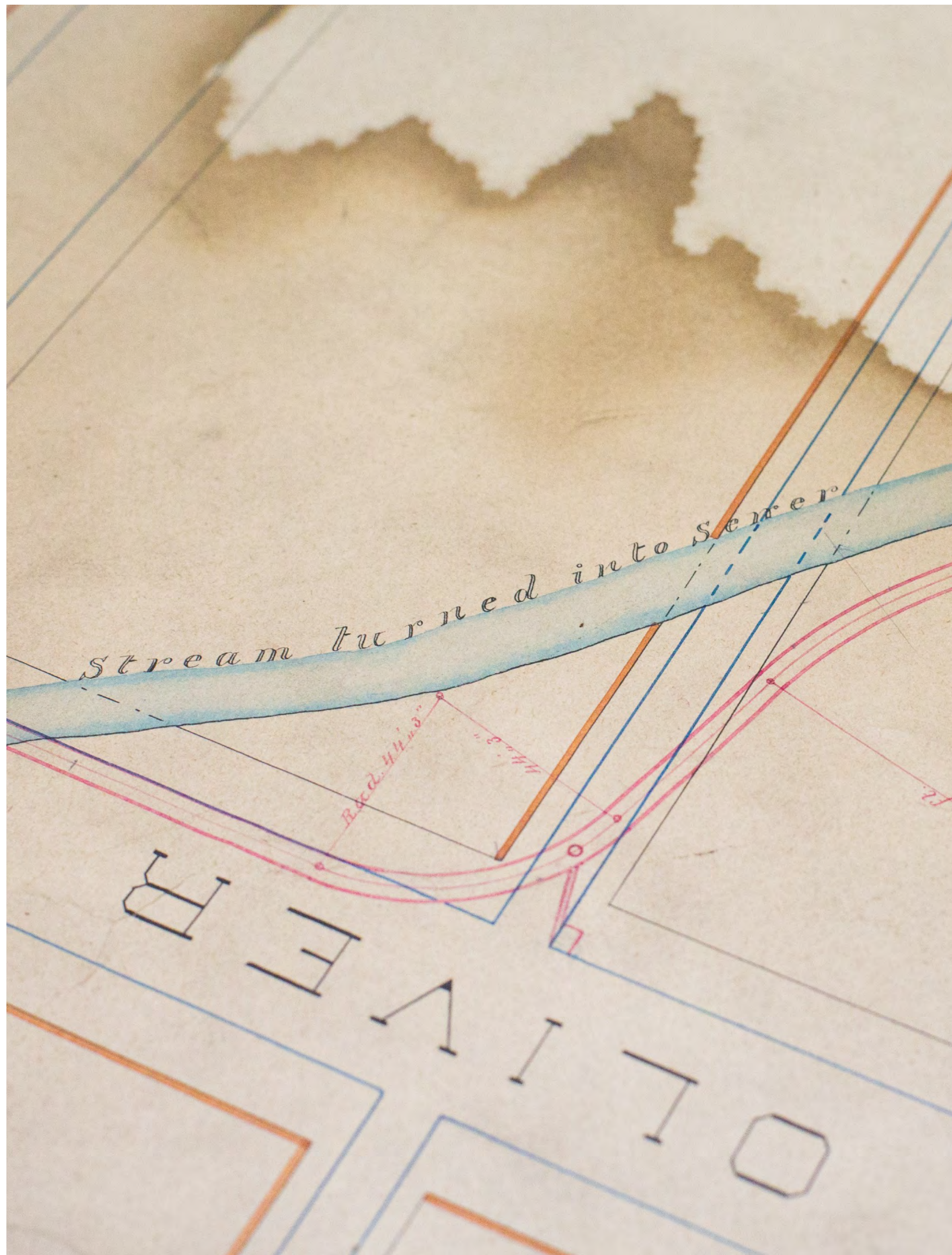
**GHOST RIVERS  
INSTALLATION SITES**  
— 2023    - - - 2024

NORTH AVE.

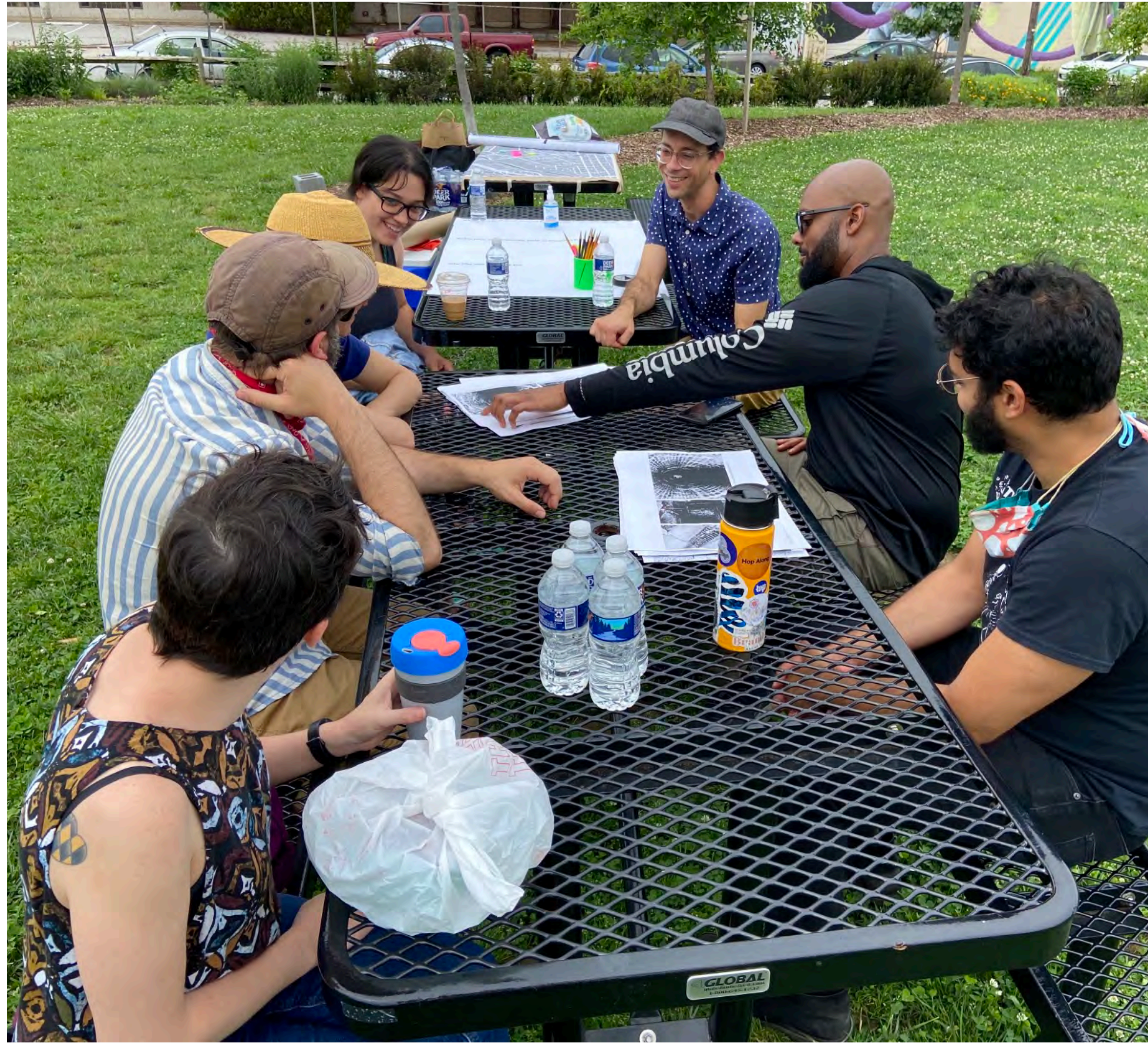














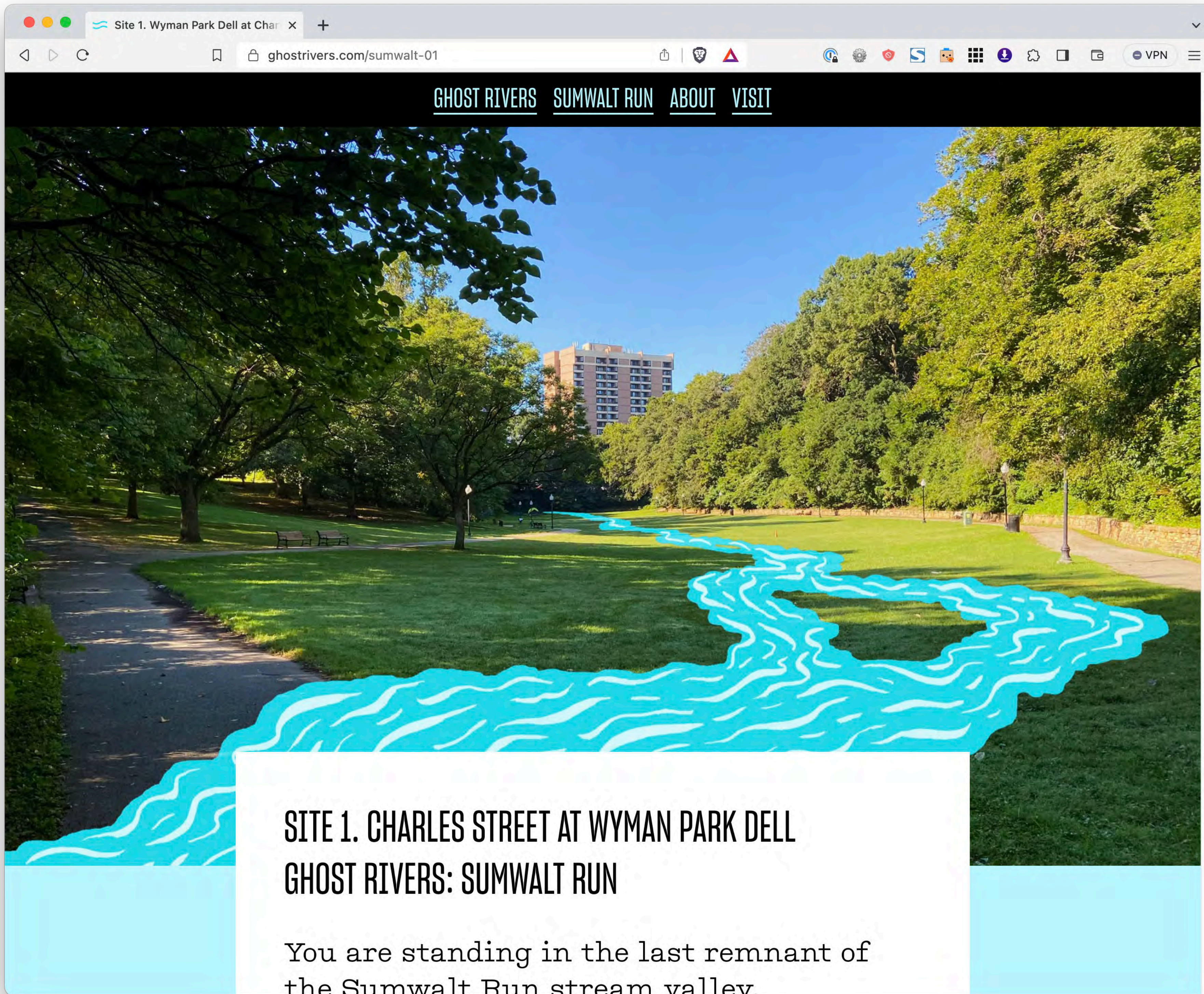
“[AS TEENAGERS] SOMETIMES WE’D GO DRINKING DOWN  
HERE BY STONY RUN. AND IF THE COPS CAME, WE’D RUN  
INTO THE THREE SISTERS [TUNNELS OF STONY RUN] AND  
COME OUT THE OTHER SIDE AT THE JONES FALLS. THE  
COPS WERE TOO SCARED TO FOLLOW US IN THERE.”

— Charles Krout, Remington resident (interviewed in 2021)









## SITE 1. CHARLES STREET AT WYMAN PARK DELL

### GHOST RIVERS: SUMWALT RUN

You are standing in the last remnant of the Sumwalt Run stream valley.