



West Concord  
Assabet River Pedestrian Bridge

# Public Workshop

*26 June 2019*

Town of Concord / LA DALLMAN

# ***PRESENTATION AGENDA***

**-INTRODUCTION**

**-PROJECT OBJECTIVES**

**-CONCORD CONTEXT / EXISTING SITE INFORMATION**

**-PEDESTRIAN BRIDGES**

-Assabet River LANDING

-Assabet River TRELIS

-Assabet River CROSSING

**-DISCUSSION – Q+A**

# Assabet River Crossing – Pedestrian Bridge Public Workshop

## *HISTORY*

### 2001 Redevelopment of 300 Baker Avenue

- Required public access and \$10,000 for transportation demand management solutions

### 2005 Comprehensive Long Range Plan Transportation & Circulation Goal

- Investigate satellite parking and pedestrian access from the Baker Ave. commercial area to the West Concord business area.

# Assabet River Crossing – Pedestrian Bridge Public Workshop

## ***HISTORY***

### 2007 Village Center Study

- Assess potential walkway connecting Baker Ave to West Concord Center
- Explore, create and/or enhance connections and pedestrian greenways

### 2010 West Concord Village Master Plan

- Construct pedestrian bridge over Assabet River

# Assabet River Crossing – Pedestrian Bridge Public Workshop

## *HISTORY*

### 2017 Assabet River Pedestrian Bridge Feasibility Study

- The Town utilizes the \$10,000 TDM funds to hire a consultant to prepare a feasibility study

### 2018 Assabet River Survey

- Detailed survey of the 1,000-foot section is conducted

# Assabet River Crossing – Pedestrian Bridge Public Workshop

## ***HISTORY***

2018 Envision Concord Comprehensive Plan Open Space Core Action Item

- Ensuring the village centers are well connected
- Potential improvements include: a pedestrian bridge over the Assabet River in West Concord

# Assabet River Crossing – Pedestrian Bridge Public Workshop

## *Next Steps*

Final Design, Construction Drawings & Permitting = \$220,000

- Community Preservation Funds

Construction = \$2 Million to \$3.6 Million

- State Grant Programs (CMAQ, MassWorks)
- Town Meeting Funding Authorization

Grace La, Principal, LA DALLMAN

James Dallman, Principal, LA DALLMAN

1999- **LA DALLMAN** Founded in Milwaukee

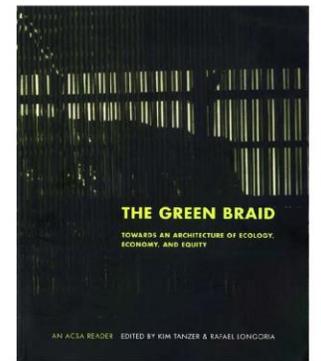
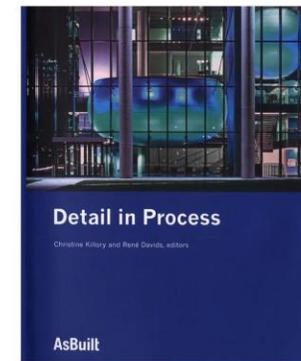
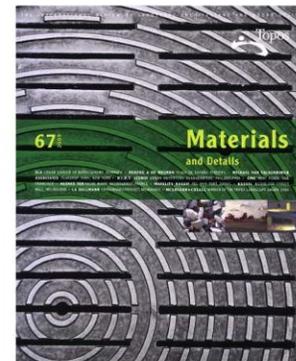
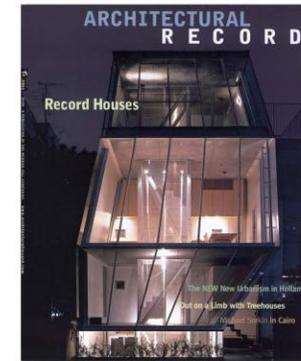
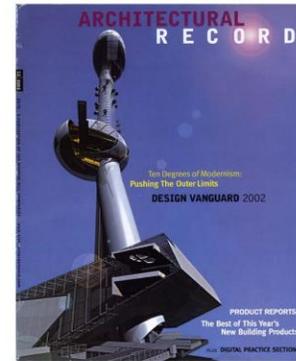
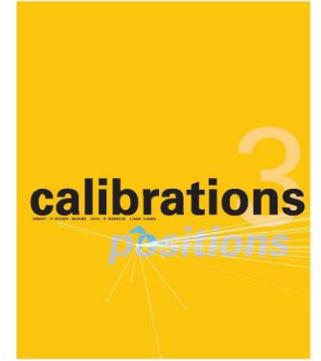
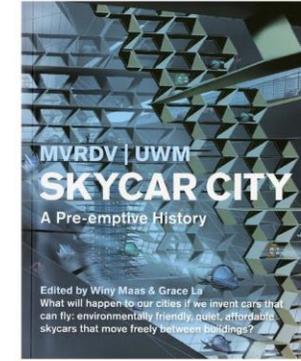
2013- **LA DALLMAN** Opens **BOSTON OFFICE**

Grace La appointed Full Professor & Director of M.Arch Programs (2014-17), Harvard GSD

James Dallman, Visiting Faculty, Harvard GSD

## ABOUT LA DALLMAN:

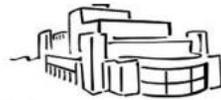
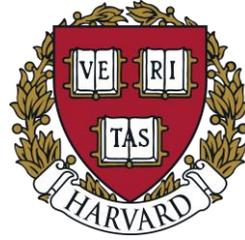
40+ Architecture & Engineering Awards (incl. 8 AIA)  
Two Boston Society of Architects Unbuilt Design Awards  
Bruner Award for Urban Excellence Silver Medal  
Emerging Voices, Architectural League of NY  
Rice Design Alliance, LDA - 1<sup>st</sup> American practice  
Prizes in International Competitions  
Exhibitions and Lectures- National Building Museum,  
Danish Arch Center, Carnegie Museum of Art,  
New Museum, MFA Houston  
National Endowment for the Arts Our Town Grant  
Harvard Joint Center for Housing Grant



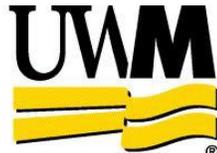
**LA DALLMAN**

## Institution, Foundation and Corporate Clients:

- Harvard University
- Harvard Law School
- Argosy Foundation
- Camp Young Judea Midwest
- Discovery World at Pier Wisconsin
- Friends of the Hank Aaron State Trail
- Marcus Center for the Performing Arts
- Medical College of Wisconsin
- Menomonee Valley Partners
- MillerCoors
- Milwaukee Ballet
- Milwaukee Jewish Federation
- Milwaukee Montessori School
- Skylight Opera Theatre
- University of Wisconsin-MKE Peck School of the Arts



Marcus Center  
for the Performing Arts



UNIVERSITY of WISCONSIN  
**MILWAUKEE**



MILWAUKEE  
JEWISH FEDERATION

## Civic Clients:

- Brady Street Business Improvement District
- City of Milwaukee Department of City Development
- City of Milwaukee Department of Public Works
- Oneida Nation
- Historic Third Ward

## Ideation Clients:

- Central Atlanta Progress
- City of Providence, Rhode Island
- City of Milwaukee Department of City Development
- Friends of Lake Park
- Historic Third Ward Association
- Lakefront Festival of the Arts
- Pittsburgh Children's Museum
- Riverlife Task Force of Pittsburgh
- Schlitz Audubon Nature Preserve



## Commercial Clients:

- Fiduciary Real Estate
- The Hiller Company, LLC
- New Land Enterprises



## Private Clients:

- Chris and Miriam Abele
- Steve Kaplan and Sharon Gray
- Gary and Anne Grunau
- Andrew and Elinor Hoover
- Ken and Jill Iscol
- Matt and Brenda Levatich
- Jerry and Ellin Levy





# ARCHITECT

THE MAGAZINE OF THE AMERICAN INSTITUTE OF ARCHITECTS

## La Dallman

GRACE LA AND JAMES DALLMAN, THE HUSBAND-AND-WIFE DUO BEHIND THE MILWAUKEE-BASED PRACTICE, TALK ABOUT WHEN THE WORKDAY ENDS, AS WELL AS THE MIDWESTERN AGRICULTURE AND INDUSTRY THAT INFORMS THEIR WORK.

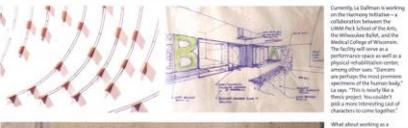
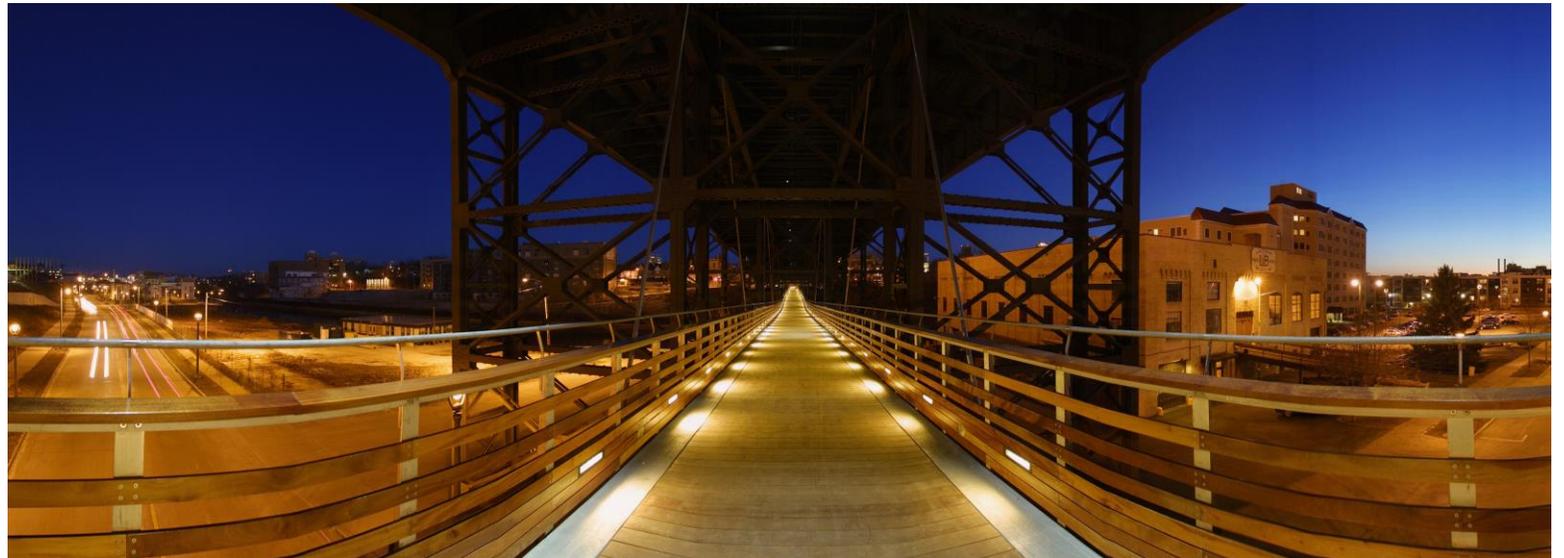
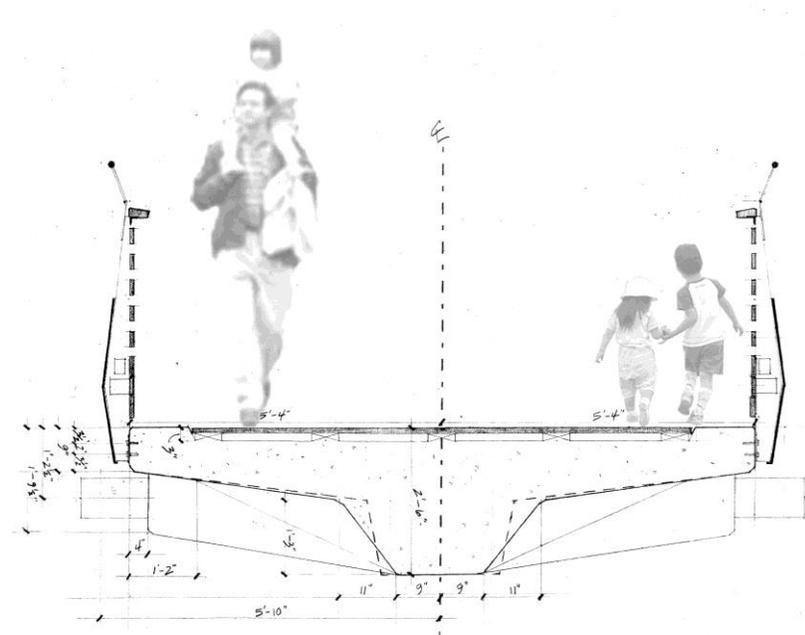
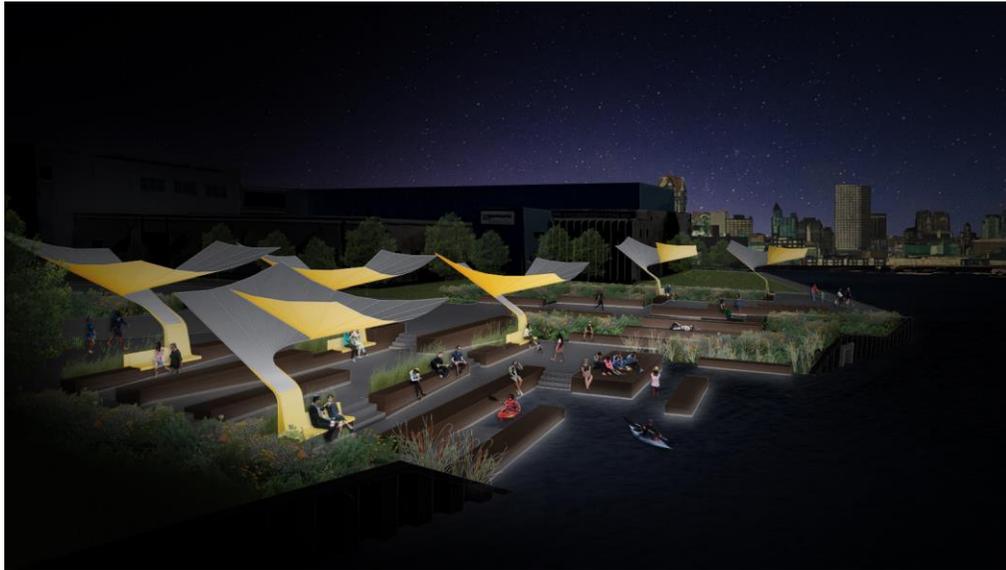
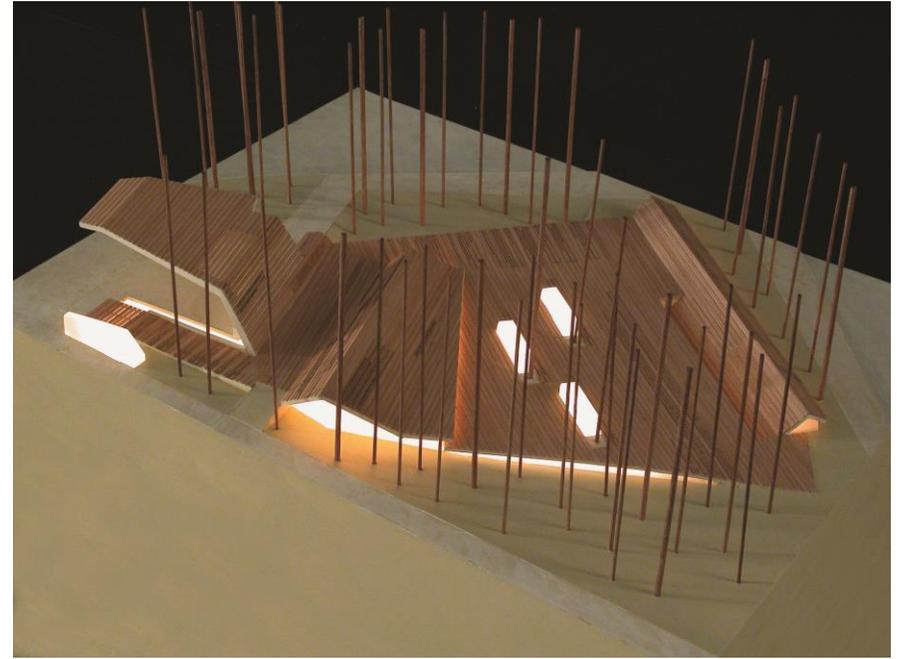


PHOTO: JAMES DALLMAN; ARCHITECTURE: JAMES DALLMAN; PHOTO: JAMES DALLMAN; PHOTO: JAMES DALLMAN





# PROJECT OBJECTIVES

## -CONNECT

*Baker Avenue Business Park* to the *Commuter Rail Station*, and to *West Concord Village* business district.

## -EXTEND

access to the landscape and recreation provided by the *Bruce Freeman Rail Trail*.

## -CONTEMPLATIVE DESTINATION

Provide a *contemplative destination* in a natural setting.

## -SAFE & ACCESSIBLE

Serve the entire community through a *safe* and *accessible* route.

## -SUSTAINABLE STRATEGIES

## -COORDINATE

with *ENVISION CONCORD – BRIDGE TO 2030* plan

# CONCORD CONTEXT

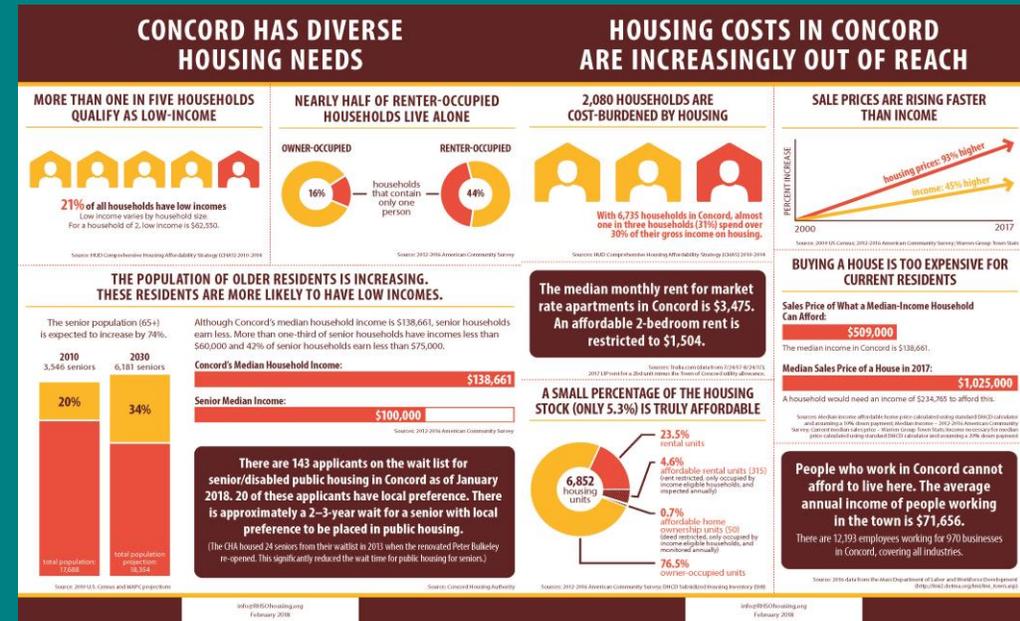
Town of Concord Webpage - *identity*

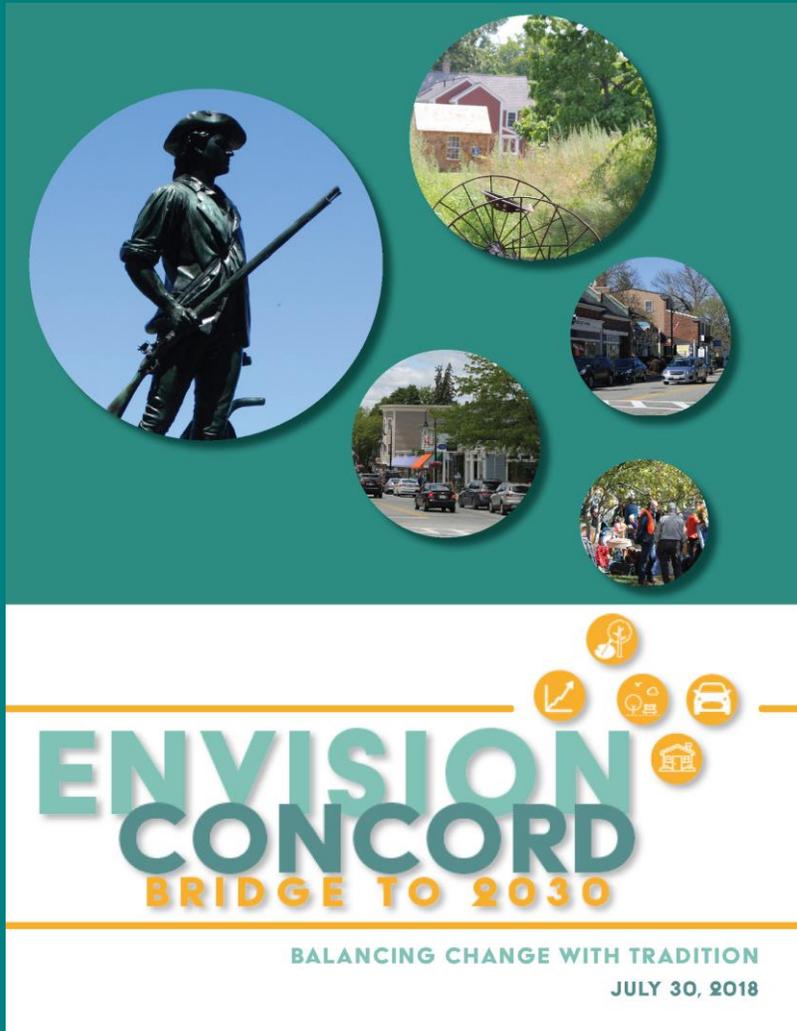
Concord Infographic - *demographic shifts*

West Concord Master Plan - *connectivity*



## WEST CONCORD VILLAGE GRAPHIC MASTER PLAN





## *"Balance Change with Tradition"*

Respond to trends/needs:

- thriving community
- strong history + character
- visitor destination
  
- aging population
- employer/workforce mismatch
- support local businesses
  
- evolving housing needs
- evolving transportation needs

# Concord Bridges

*Print depicting the battle by Amos Doolittle*



**"Concord Hymn"**  
*"By the rude bridge that arched the flood,  
Their flag to April's breeze unfurled,  
Here once the embattled farmers stood  
And fired the shot heard round the world."*

1836 Ralph Waldo Emerson



***The North Bridge (often referred to colloquially as the "Old North Bridge"), site of the Battle of Concord, the first battle of the American War of Independence. The original bridge was built in 1765 and demolished in 1793, then rebuilt in 1875, 1889, 1909 and the current reproduction in 1956, restored in 2005.***

LA DALLMAN

# Concord Bridges



*Replica of the North Bridge built in 1956 and restored in 2005*



*Replica of the North Bridge built in 1909*

## *Timber Stringer Bridge*

*The original North Bridge was built in 1765 and demolished in 1793, then rebuilt in 1875, 1889, 1909 and the current reproduction in 1956, restored in 2005.*

# Concord Bridges

*Elm Street Bridge Across the  
Sudbury River, Concord*

*Stone Arch*

*Built 1874*

*Rehabilitated 1932*



**LA DALLMAN**

# Concord Bridges



***Railroad Bridge for MBTA Fitchburg  
Line, across Route 62 / Main Street***

***50' span, through-plate steel girder  
on coursed ashlar stone abutments***

***Built 1874***

***Rehabilitated 1932***

photography by ian martin ©2014

# Concord Bridges



*Old South Bridge, carrying Route 62 /  
Main Street across Sudbury River*

*72' span*

*Closed-spandrel Concrete Deck Arch*

*Built 1909*

*Bridges on this site since the 1700's*

# Concord Bridges



*Arched Wood Truss Bridge*  
*Location: near Nashoba Brook Bakery*

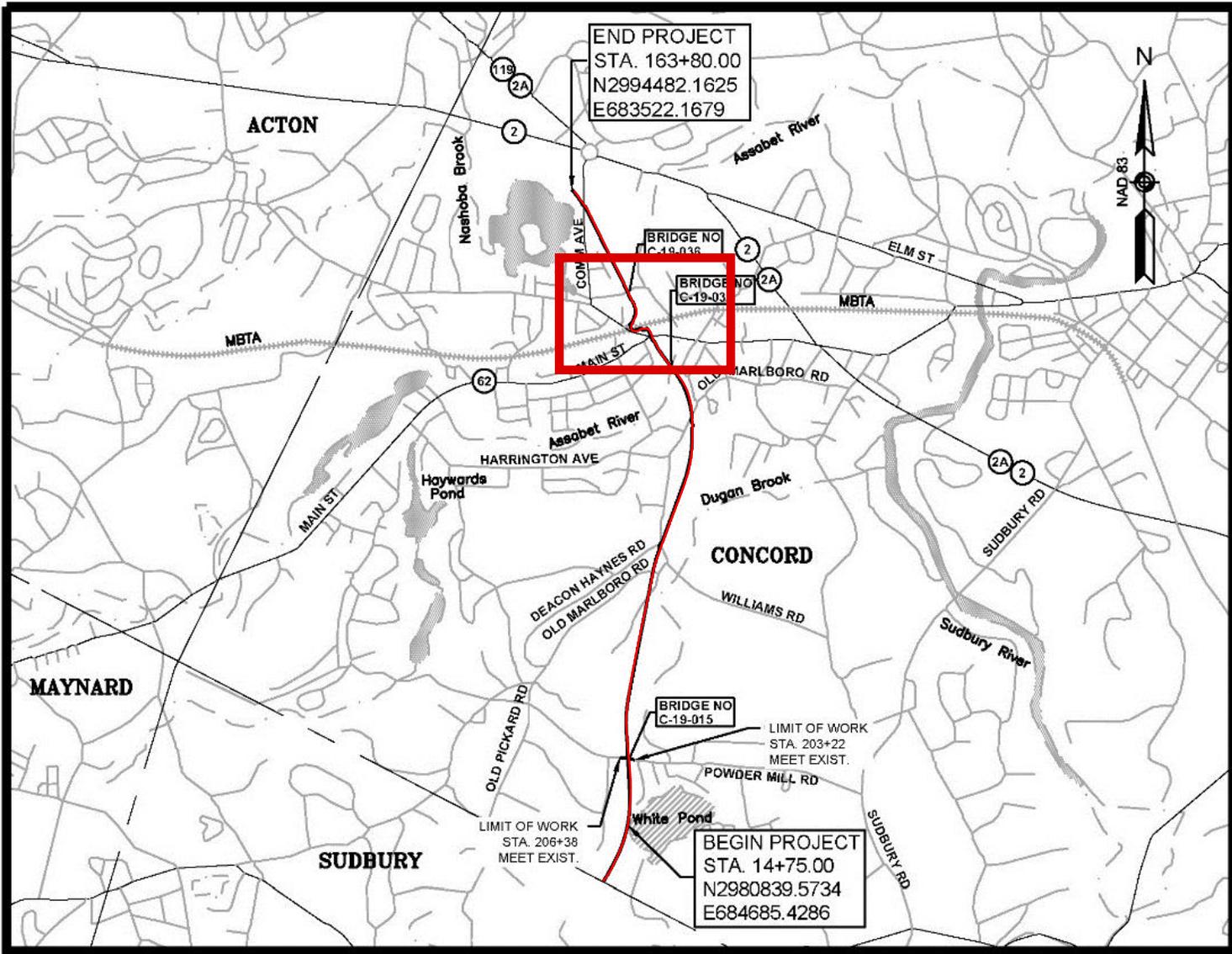
# ***EXISTING SITE INFORMATION***

**-BRUCE FREEMAN RAIL TRAIL**

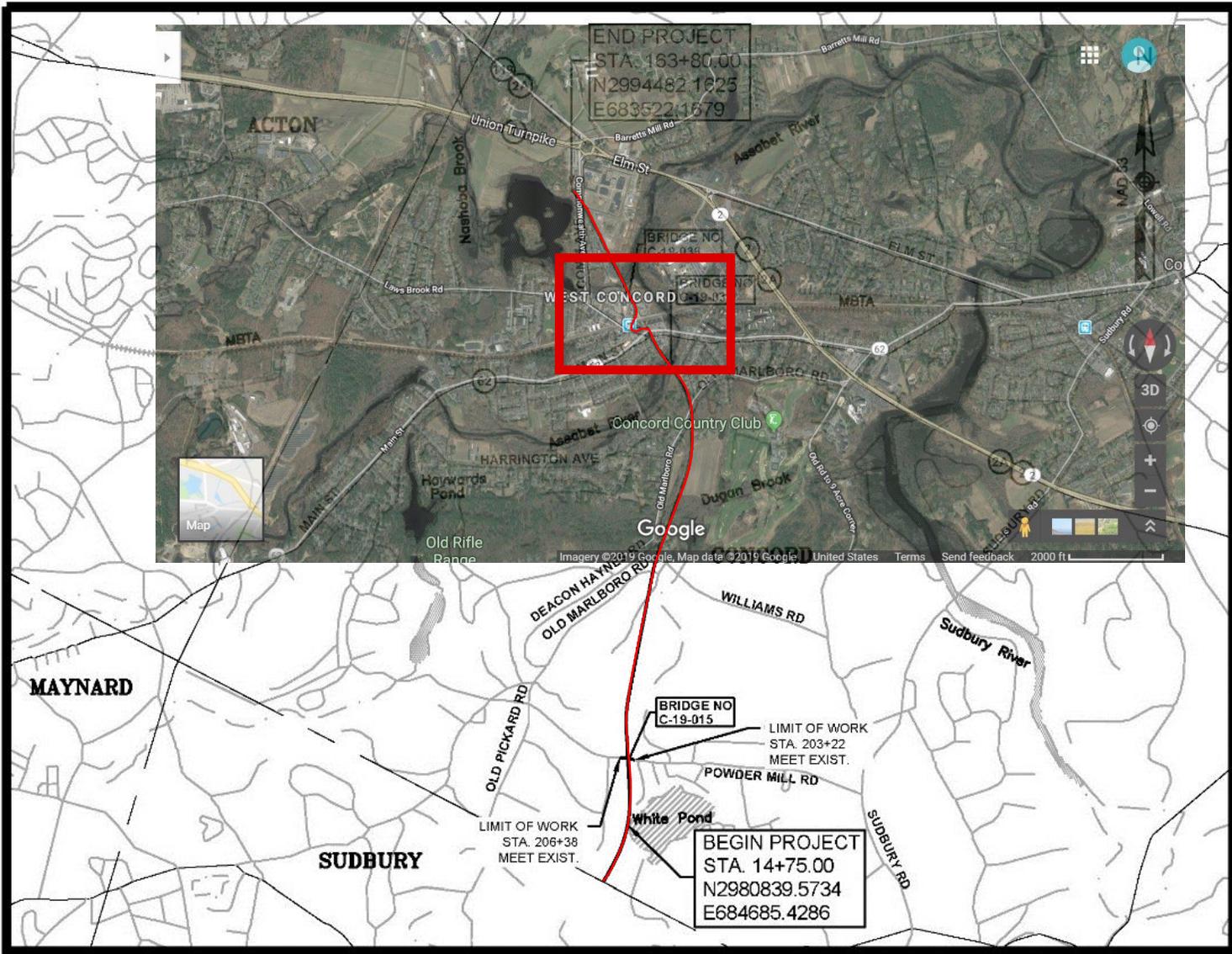
**-AERIALS**

**-SITE SURVEY**

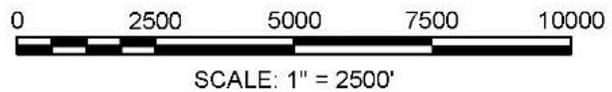
**-PHOTOGRAPHS**

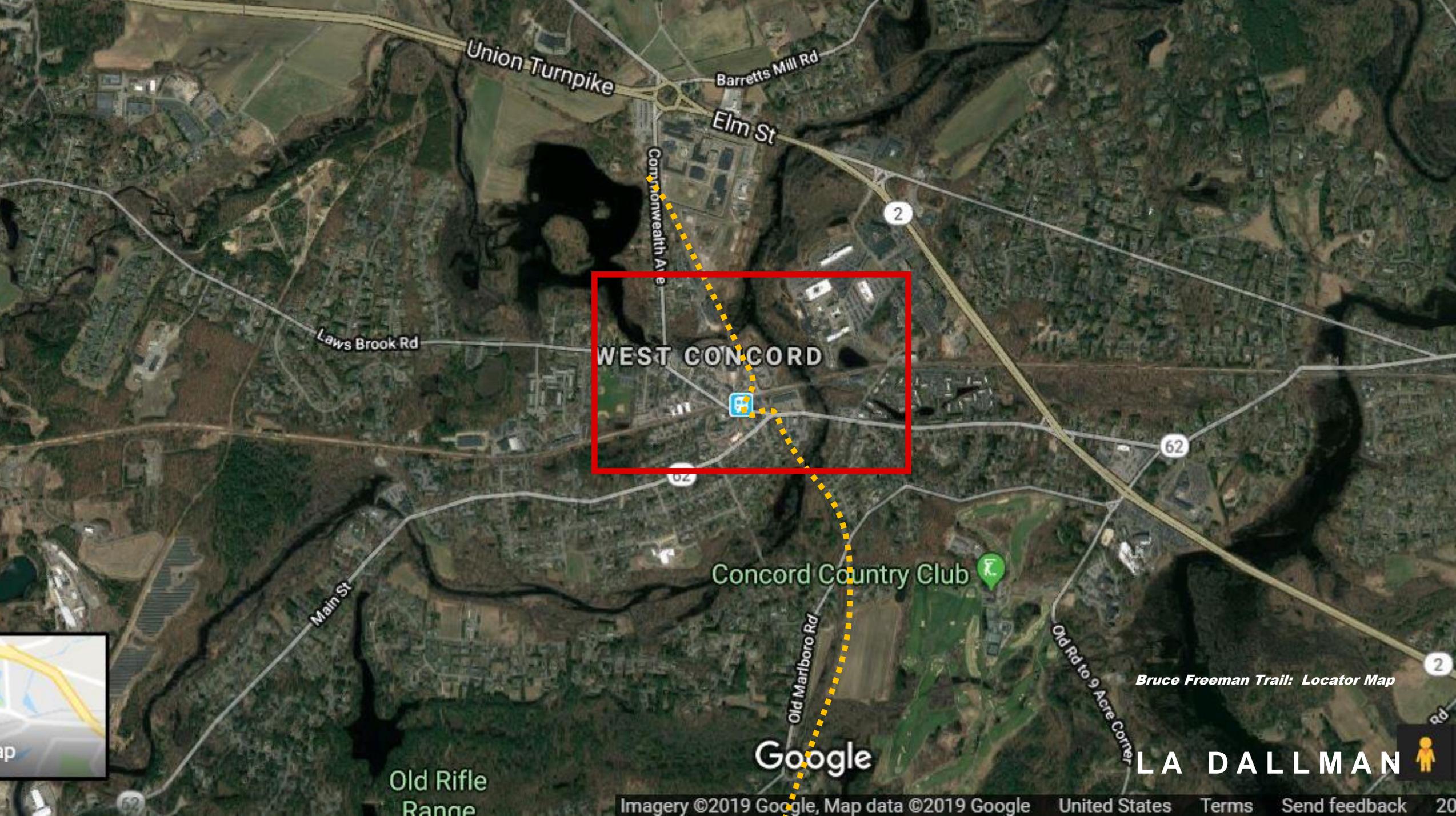


*BFRT: Locator Map*



***BFRT: Locator Map***





Union Turnpike

Barretts Mill Rd

Elm St

Commonwealth Ave

Laws Brook Rd

WEST CONCORD

Concord Country Club

Main St

Old Marlboro Rd

Old Rd to 9 Acre Corner

Old Rifle Range

Bruce Freeman Trail: Locator Map

Google

LA DALLMAN

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United States Terms Send feedback

20

WARNER'S POND



NASHOBA BROOK

ASSABET RIVER

300 BAKER AVENUE

CONCORD PARK SENIOR LIVING

COMMUTER RAIL

COMMONWEALTH AVE

COMMONWEALTH AVE

MAIN ST

COMMUTER RAIL

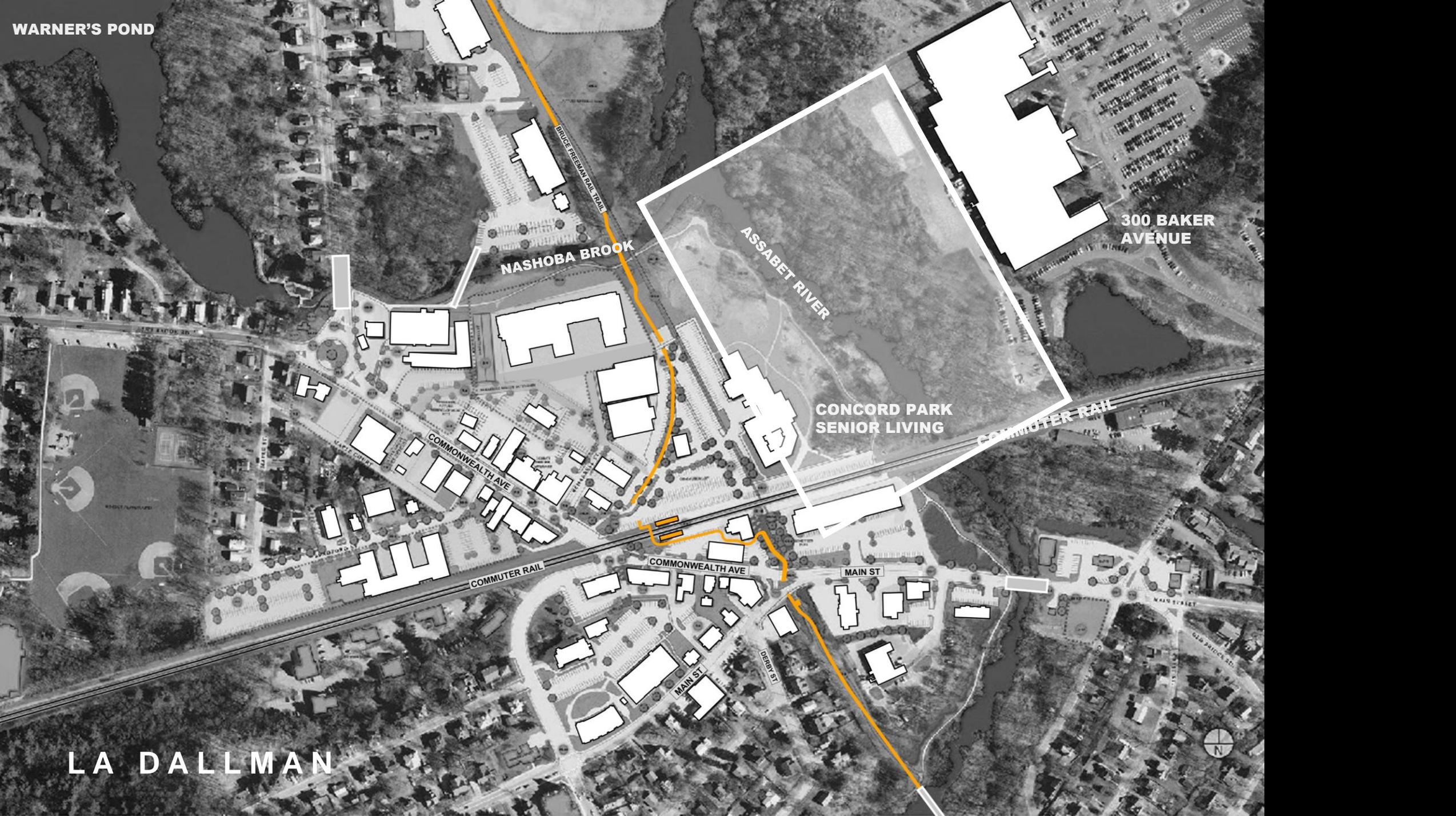
MAIN ST

DEBBY ST



LA DALLMAN

WARNER'S POND



NASHOBA BROOK

ASSABET RIVER

300 BAKER AVENUE

CONCORD PARK SENIOR LIVING

COMMUTER RAIL

COMMONWEALTH AVE

COMMONWEALTH AVE

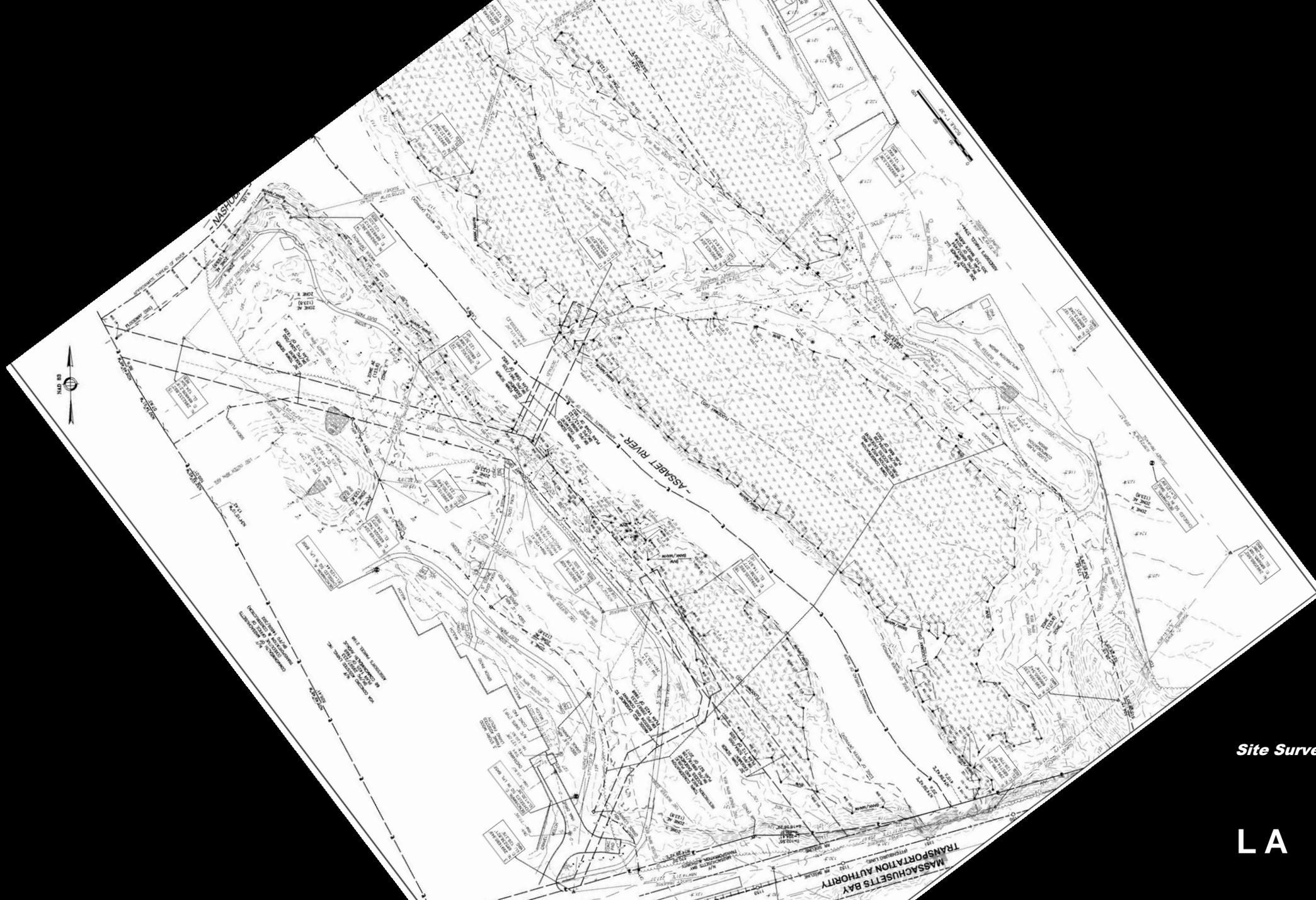
MAIN ST

MAIN ST

DEBBY ST

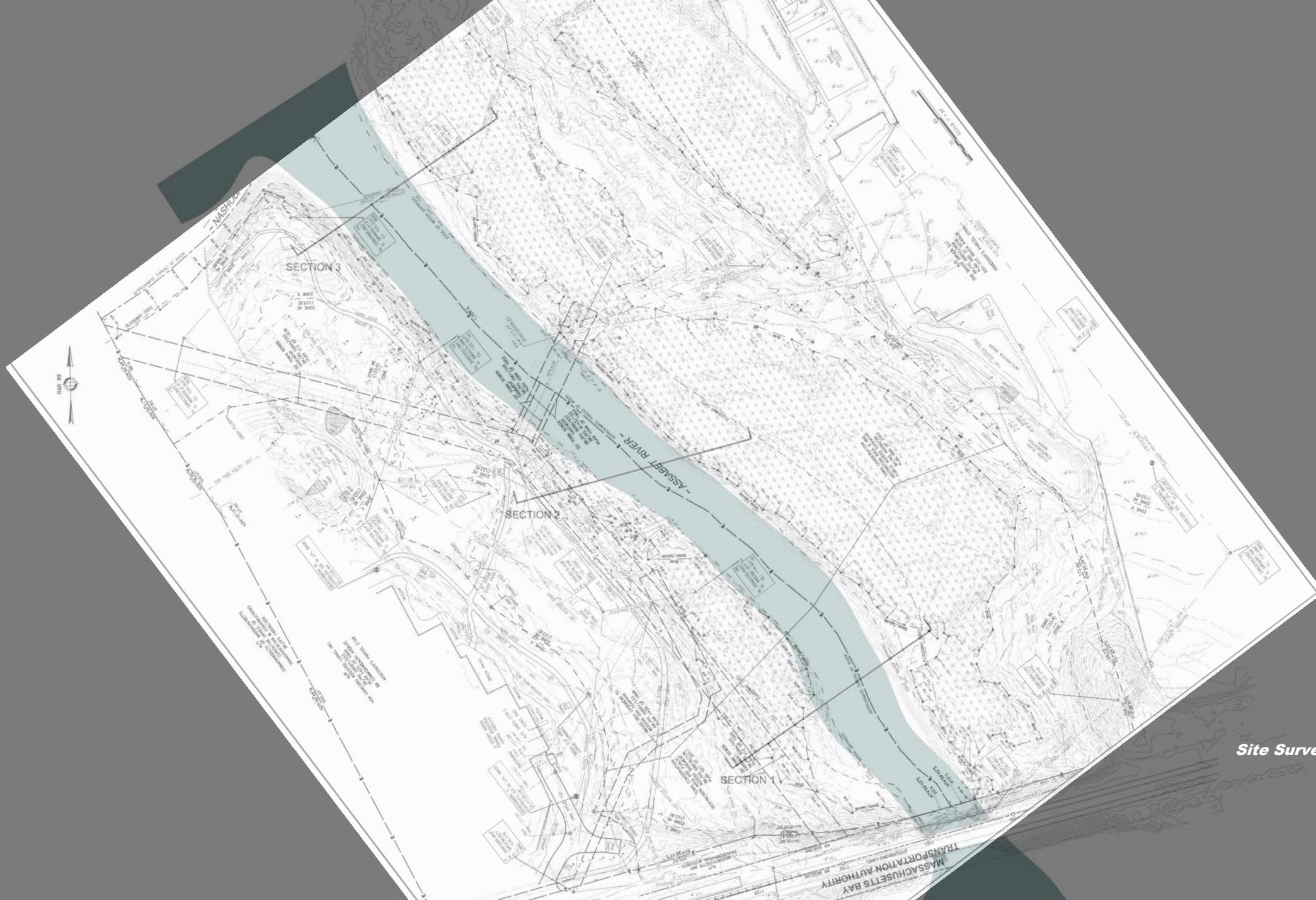
COMMUTER RAIL

LA DALLMAN



*Site Survey : Oriented North*

**LA DALLMAN**



*Site Survey : Oriented North*

N  
SITE PLAN  
SCALE : 1" = 100'



LA DALLMAN

^  
N  
SITE PLAN  
SCALE : 1" = 100'



*View looking North along the Assabet River*

**LA DALLMAN**



*Beaver activity on the Assabet River*

**LA DALLMAN**



*View looking East across the Assabet River*

**LA DALLMAN**

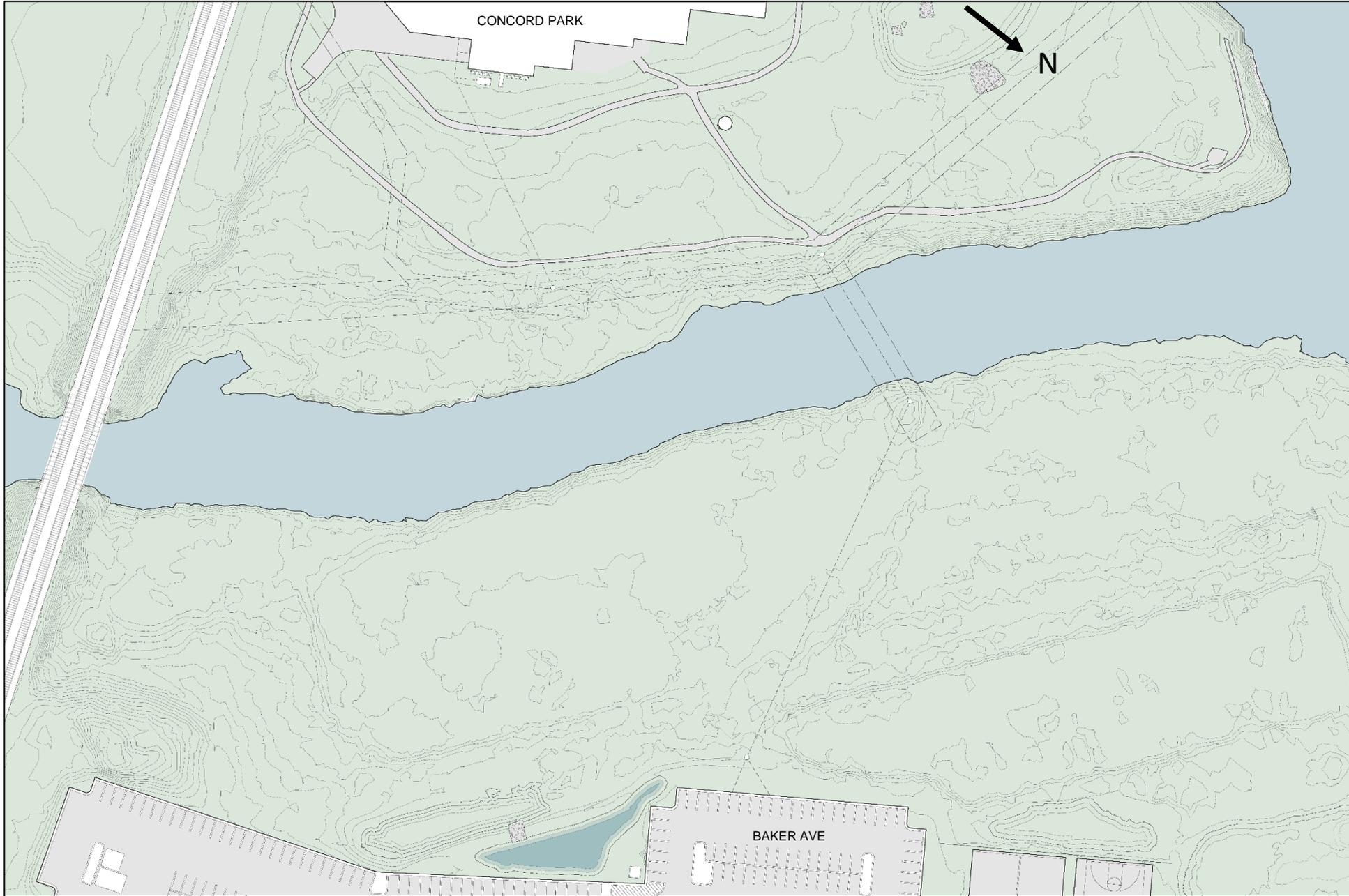
# ***SITE CONDITIONS***

**-RIVER / FLOODWAY / FLOODPLAIN**

**-SITE SECTIONS**

**-POSSIBLE BRIDGE LOCATIONS**



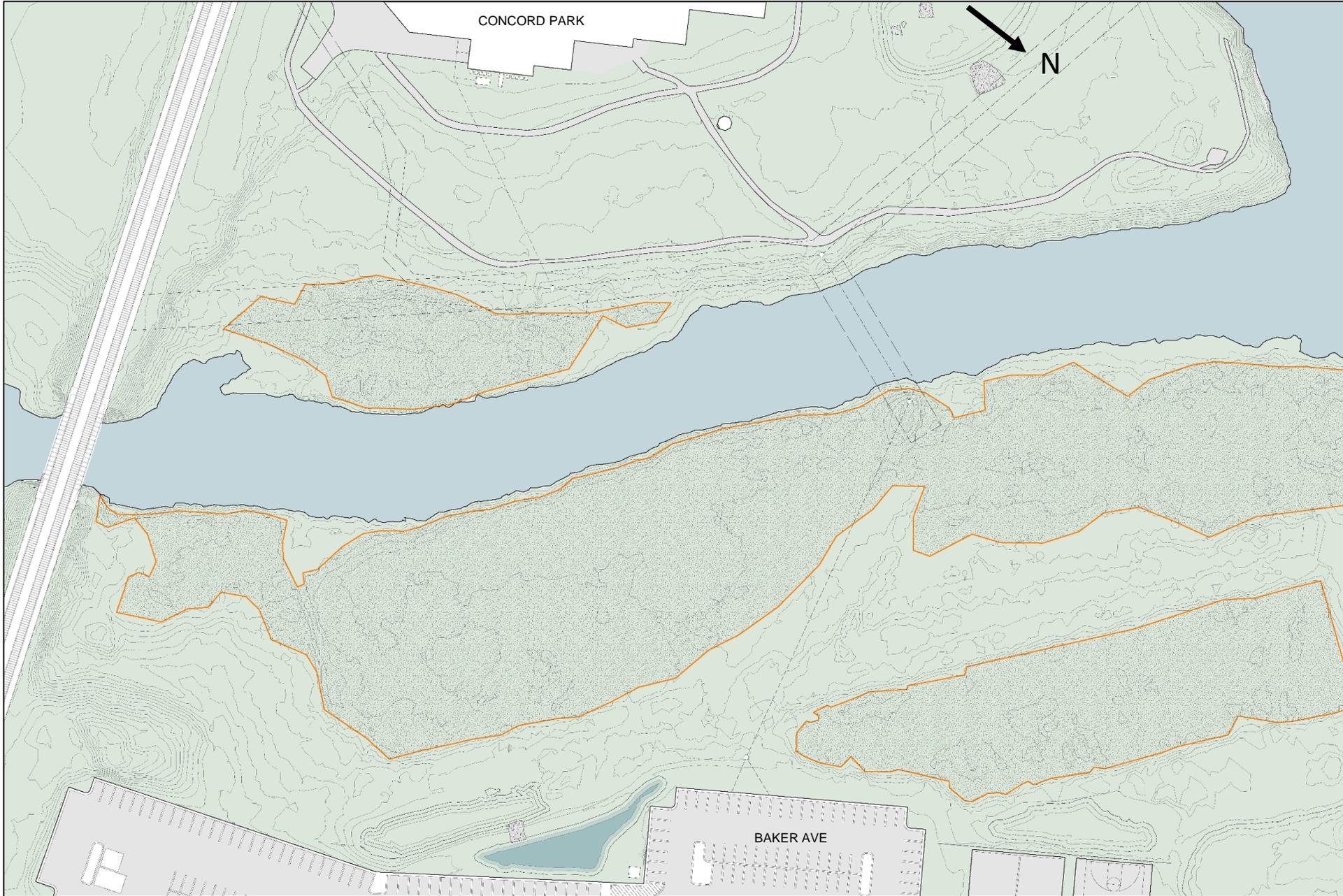


CONCORD PARK

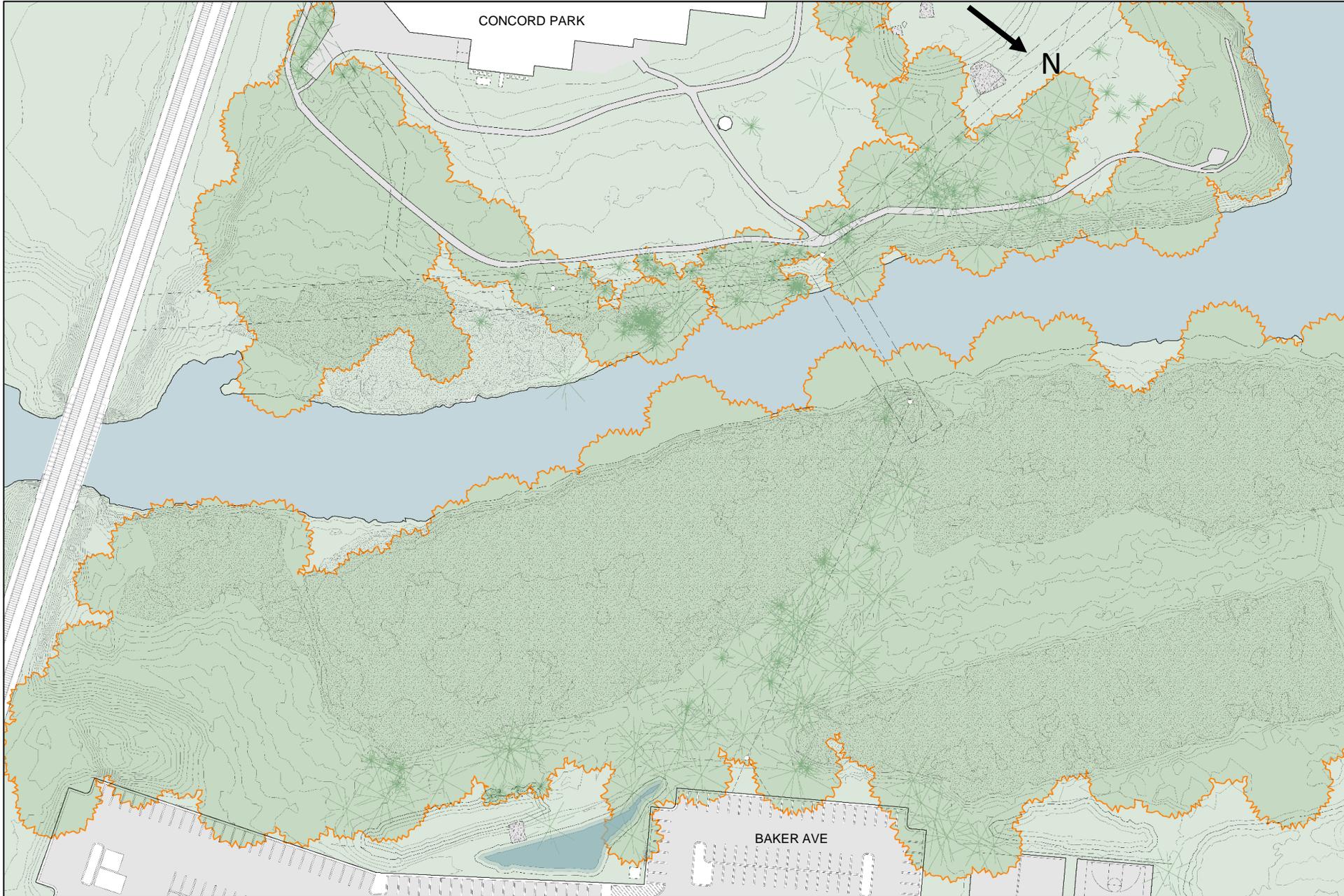
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BAKER AVE

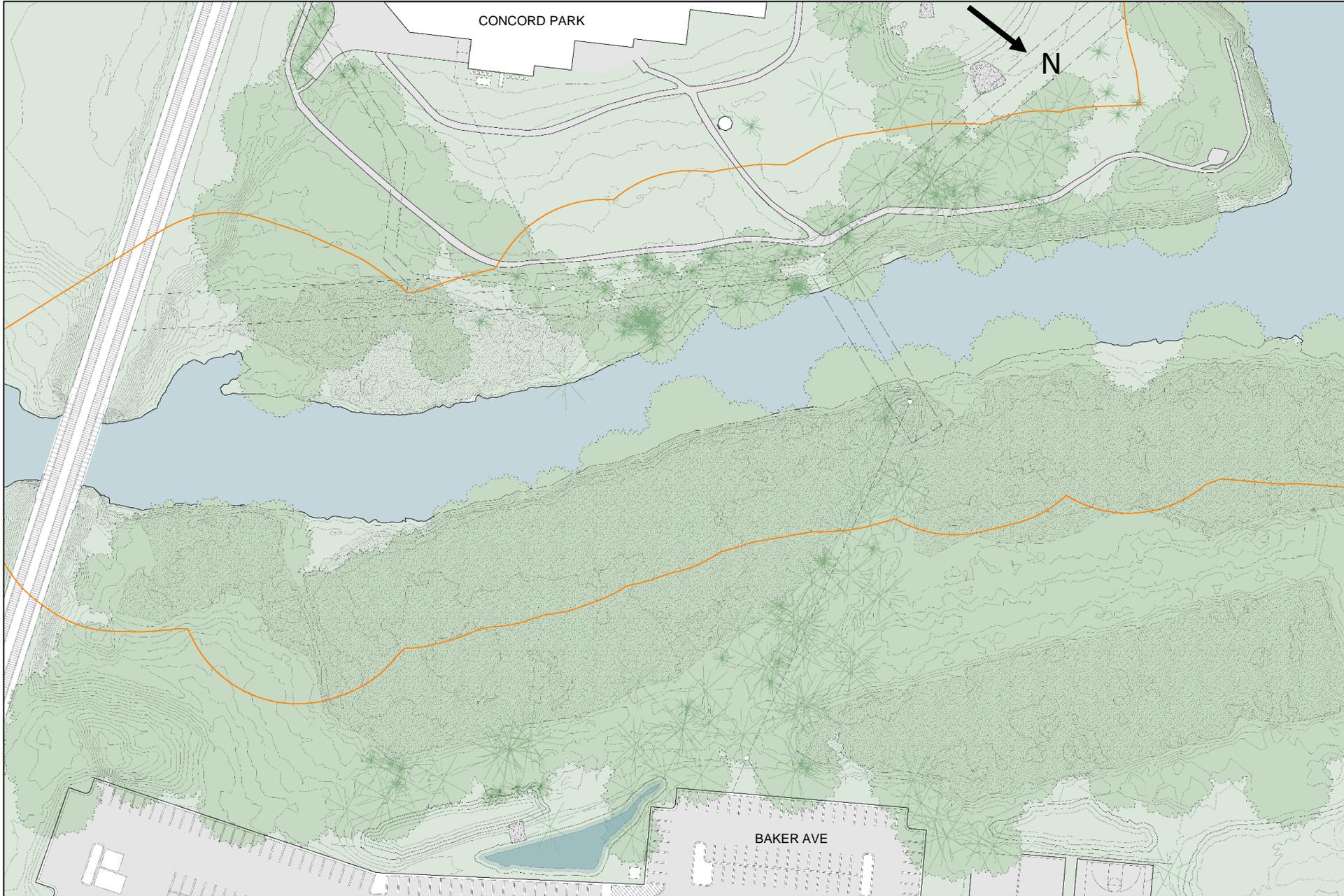
**RIVER**  
**Current Datum**



***BVW***  
***Boring Vegetated Wetland***



***TREE CANOPY***



CONCORD PARK

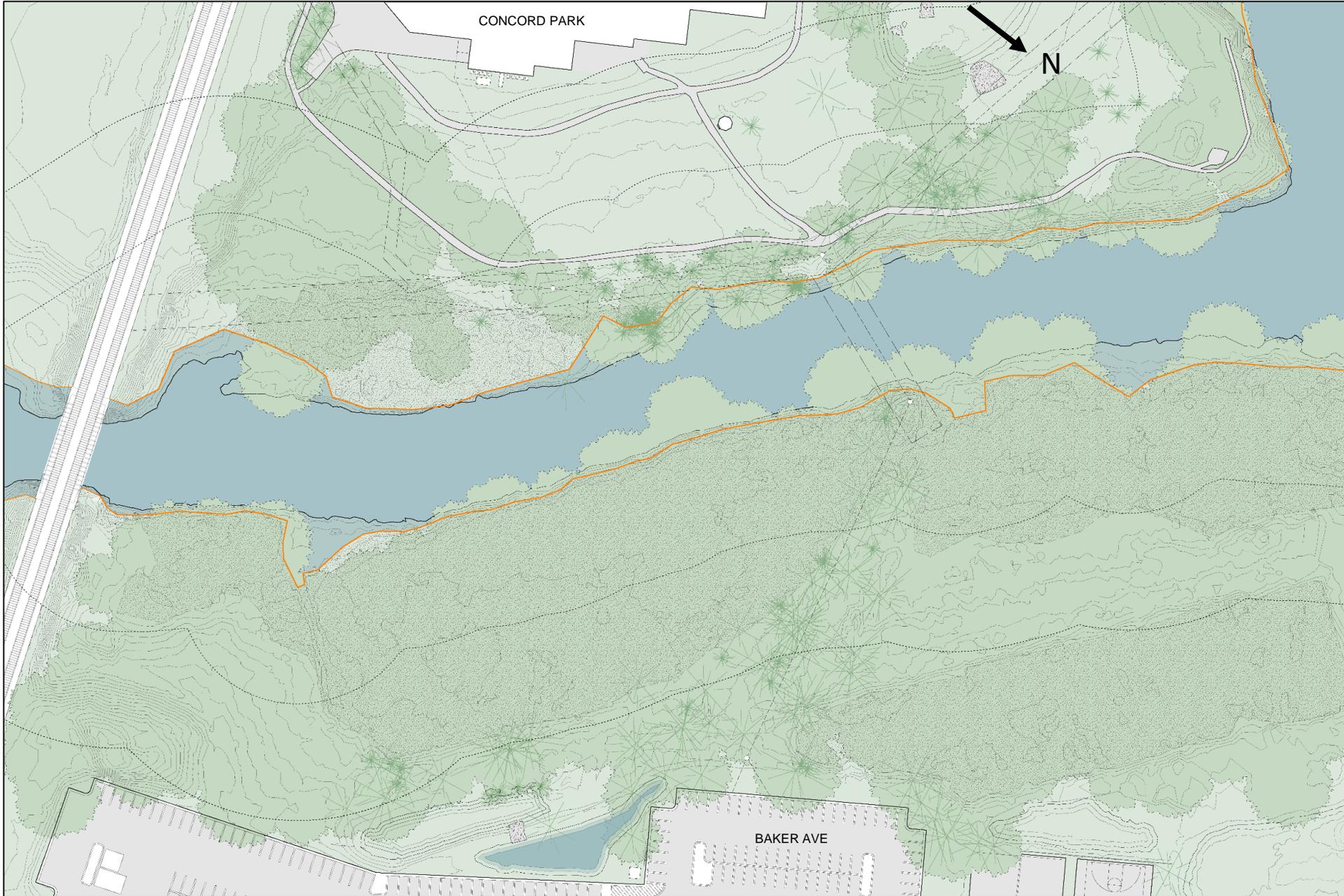
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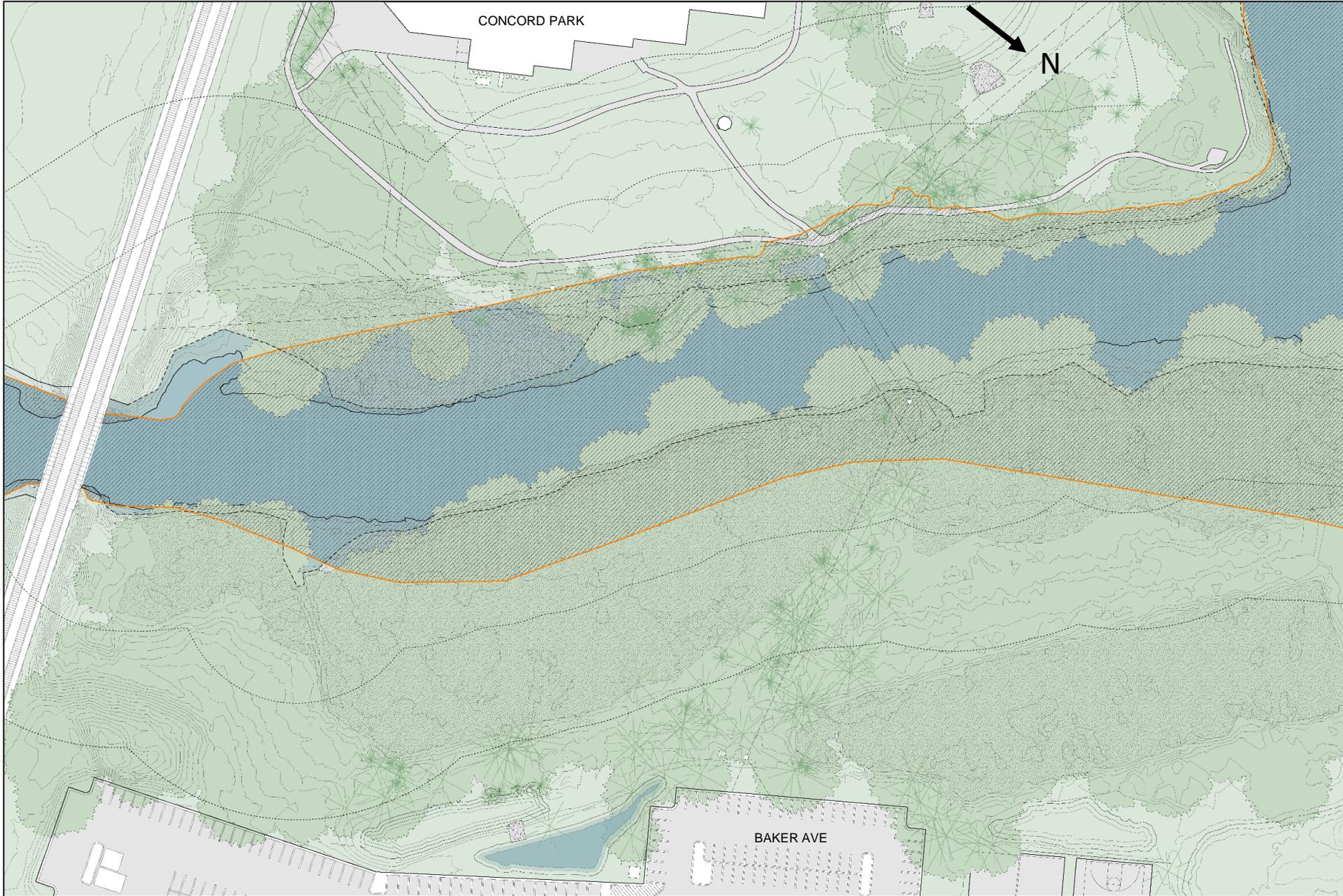
***100' INNER RPN-RFA***



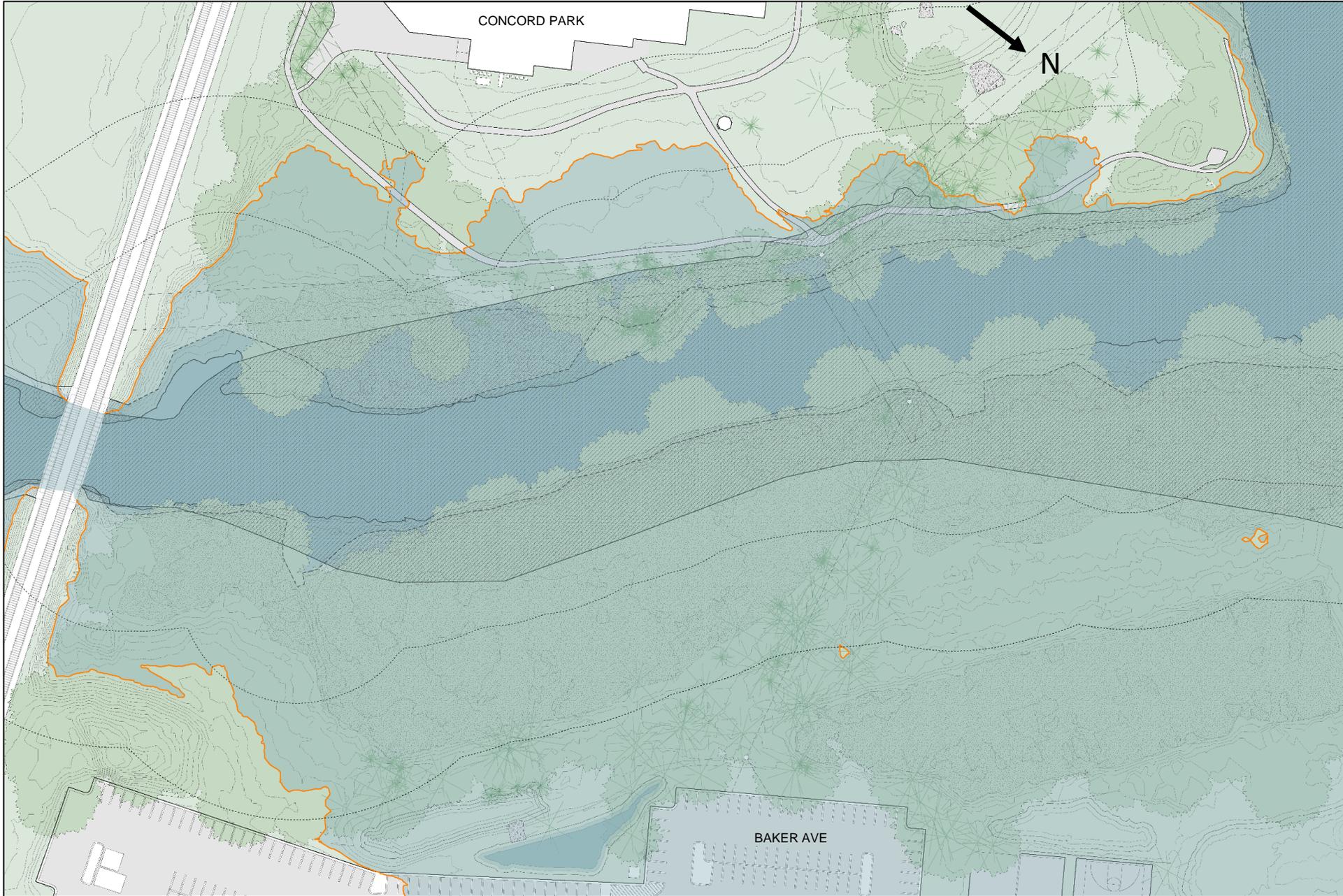
***100' OUTER RPN-RFA***



***BANK - MAHW***  
***Mean Annual High Water***



***FLOODWAY***



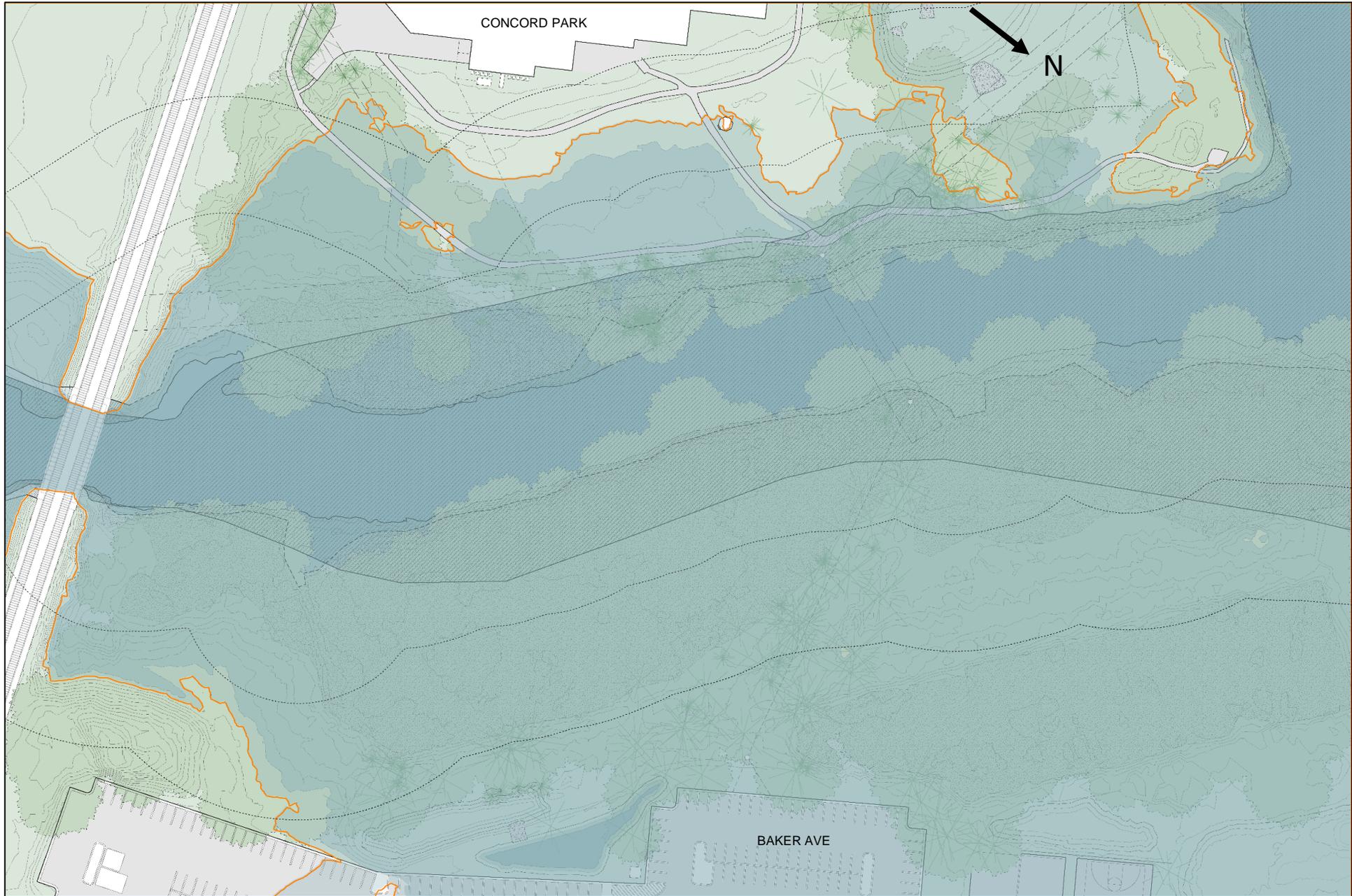
CONCORD PARK

N

BAKER AVE

**FLOODPLAIN**

**10 Year Projection**



**FLOODPLAIN**  
*100 Year Projection*

# ***SITE STRATEGIES***

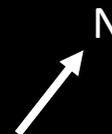
**-CONNECTIONS**

**-POTENTIAL BRIDGE LOCATIONS**



LA DALLMAN

SITE PLAN  
SCALE: 1" = 200'

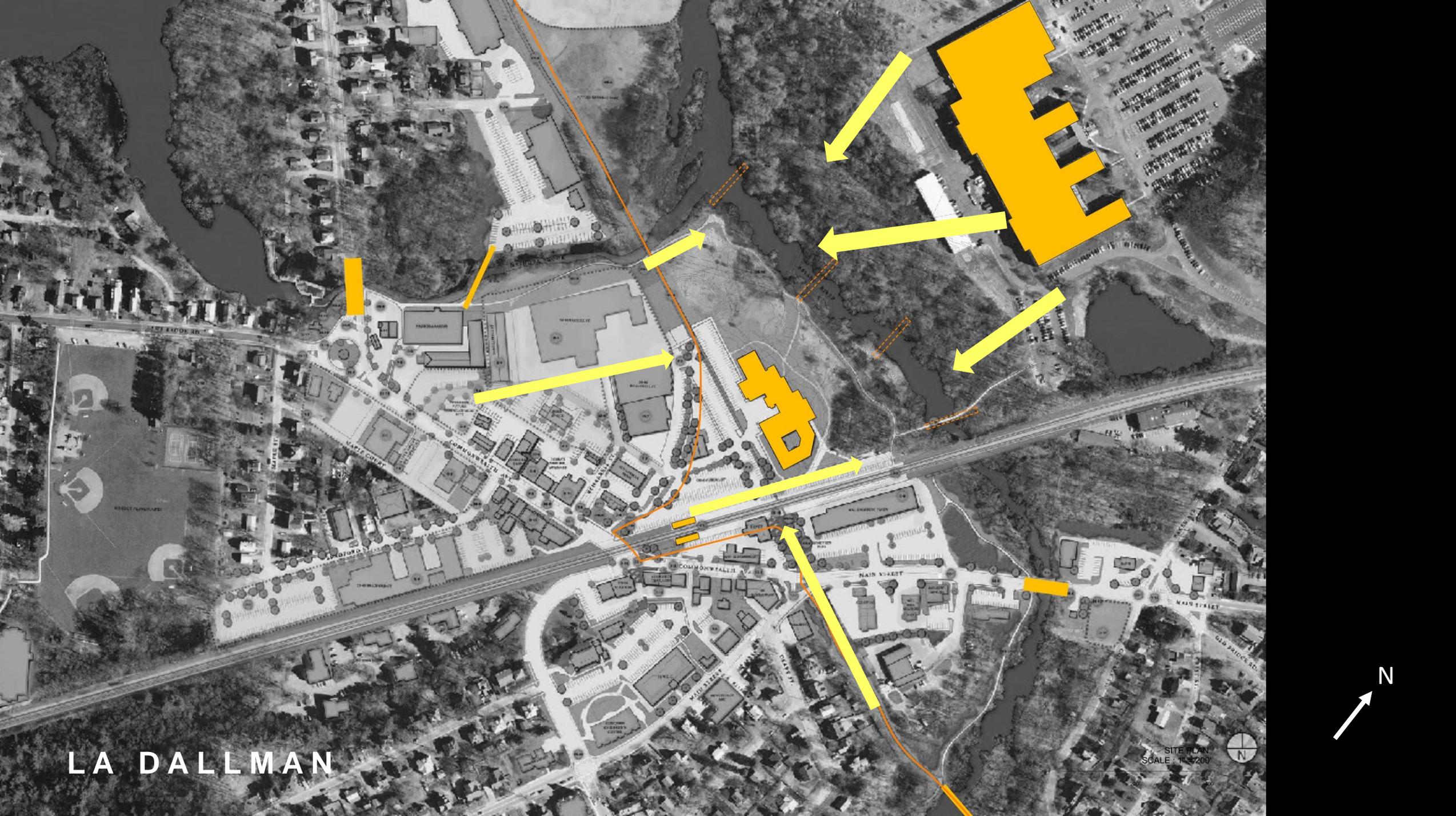




LA DALLMAN

SITE PLAN  
SCALE: 1" = 200'





LA DALLMAN

SITE PLAN  
SCALE: 1" = 200'

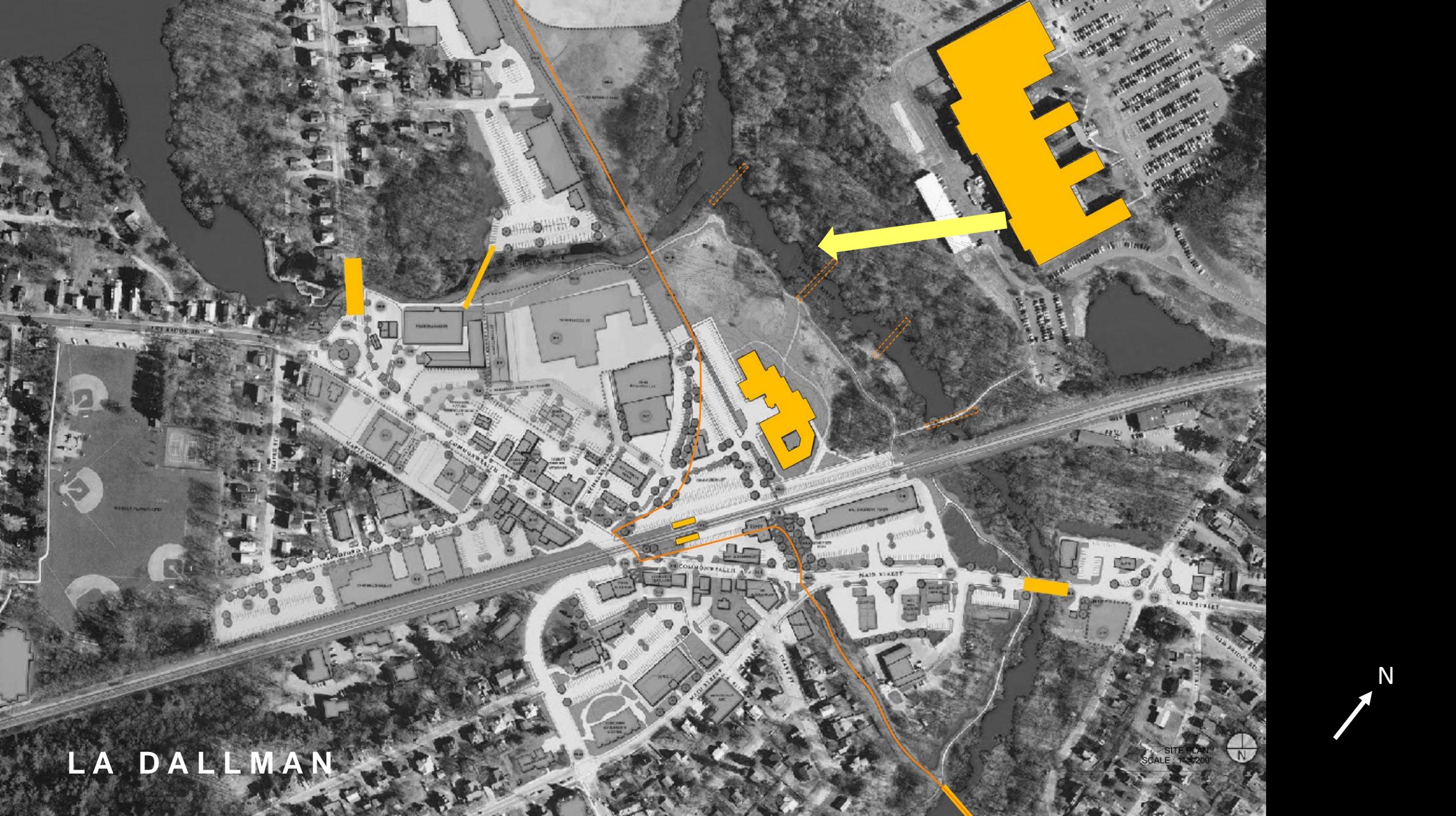




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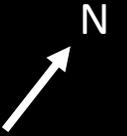
SITE PLAN  
SCALE: 1" = 200'





LA DALLMAN

SITE PLAN  
SCALE: 1" = 200'









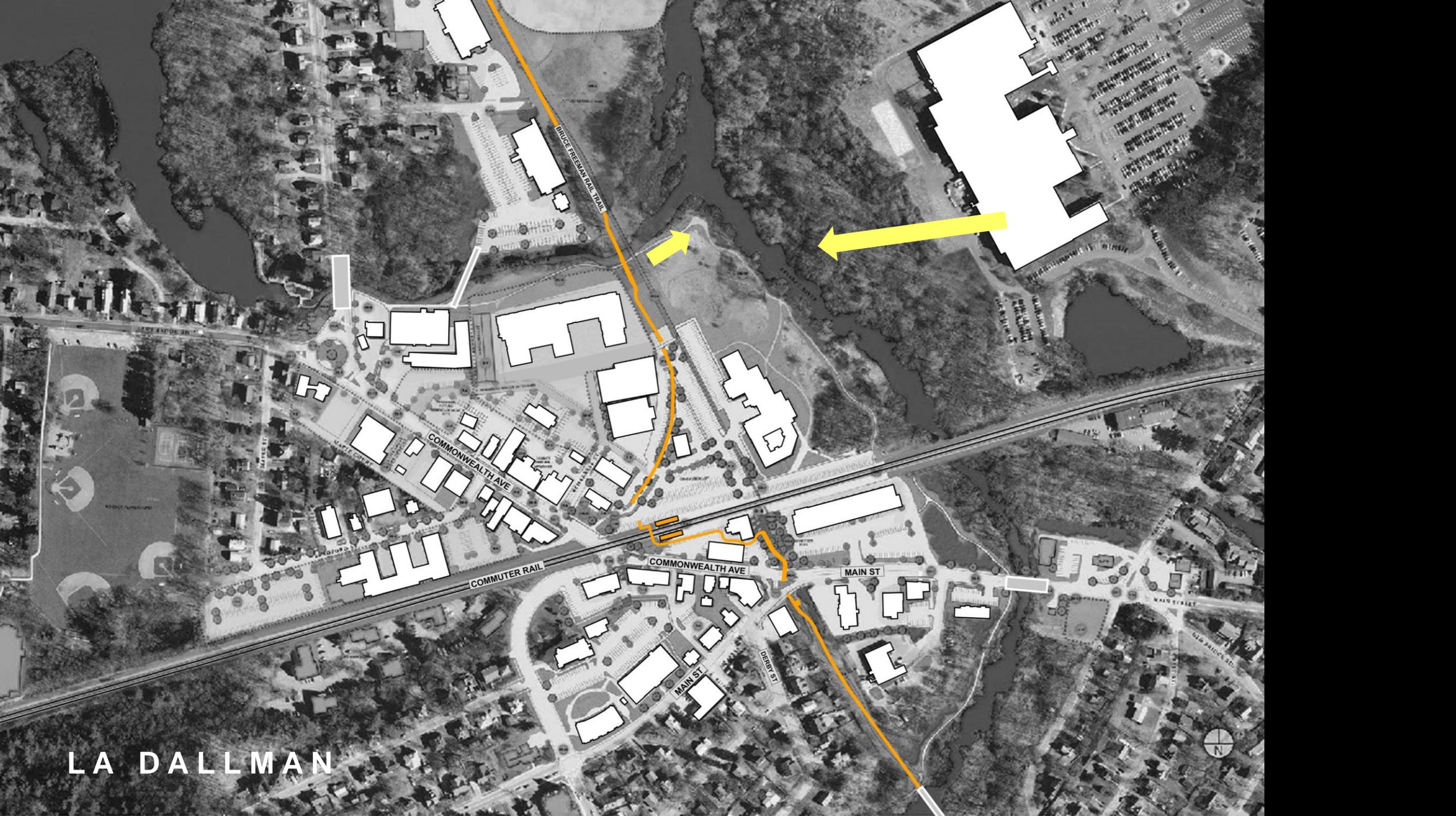




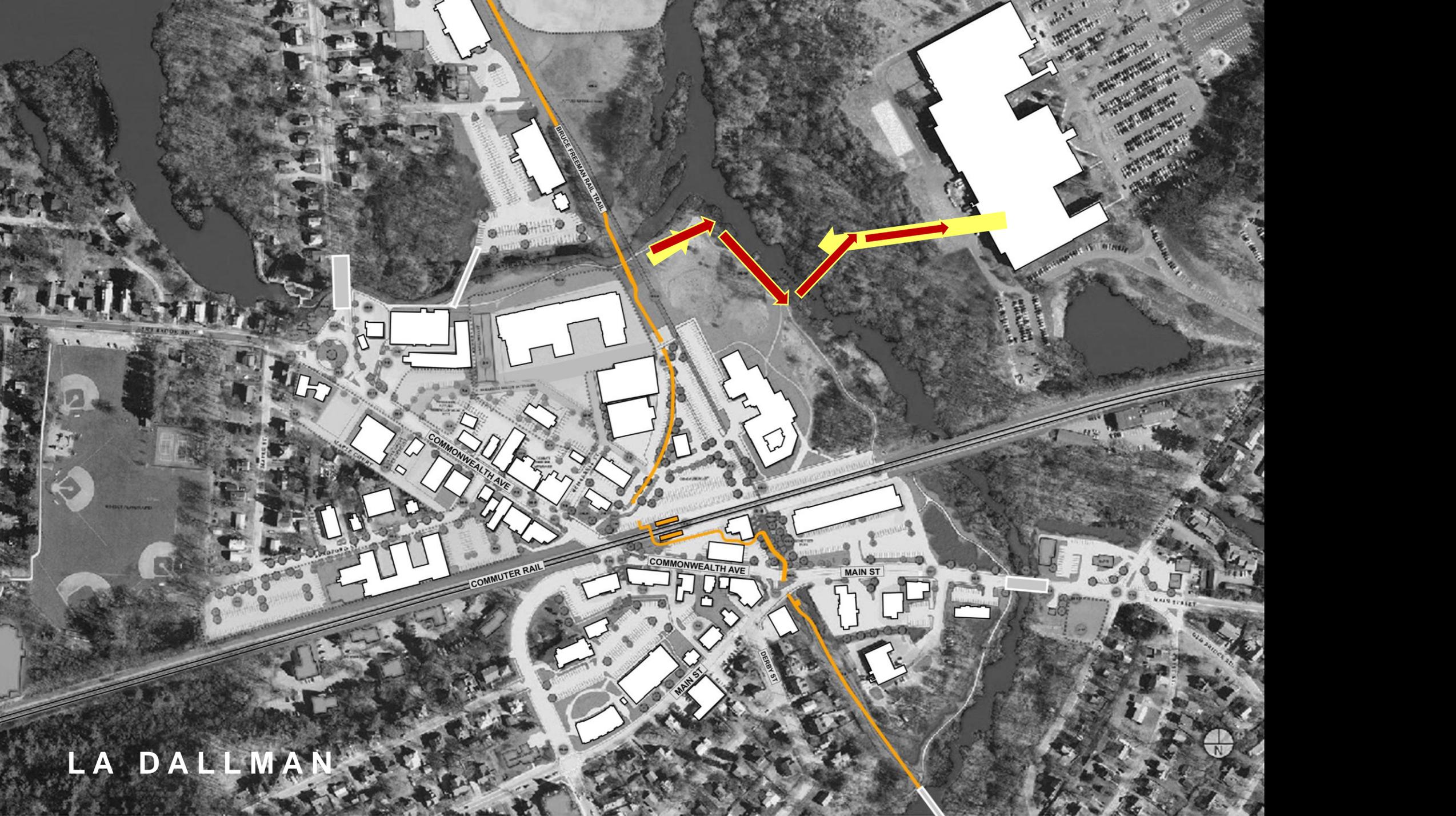


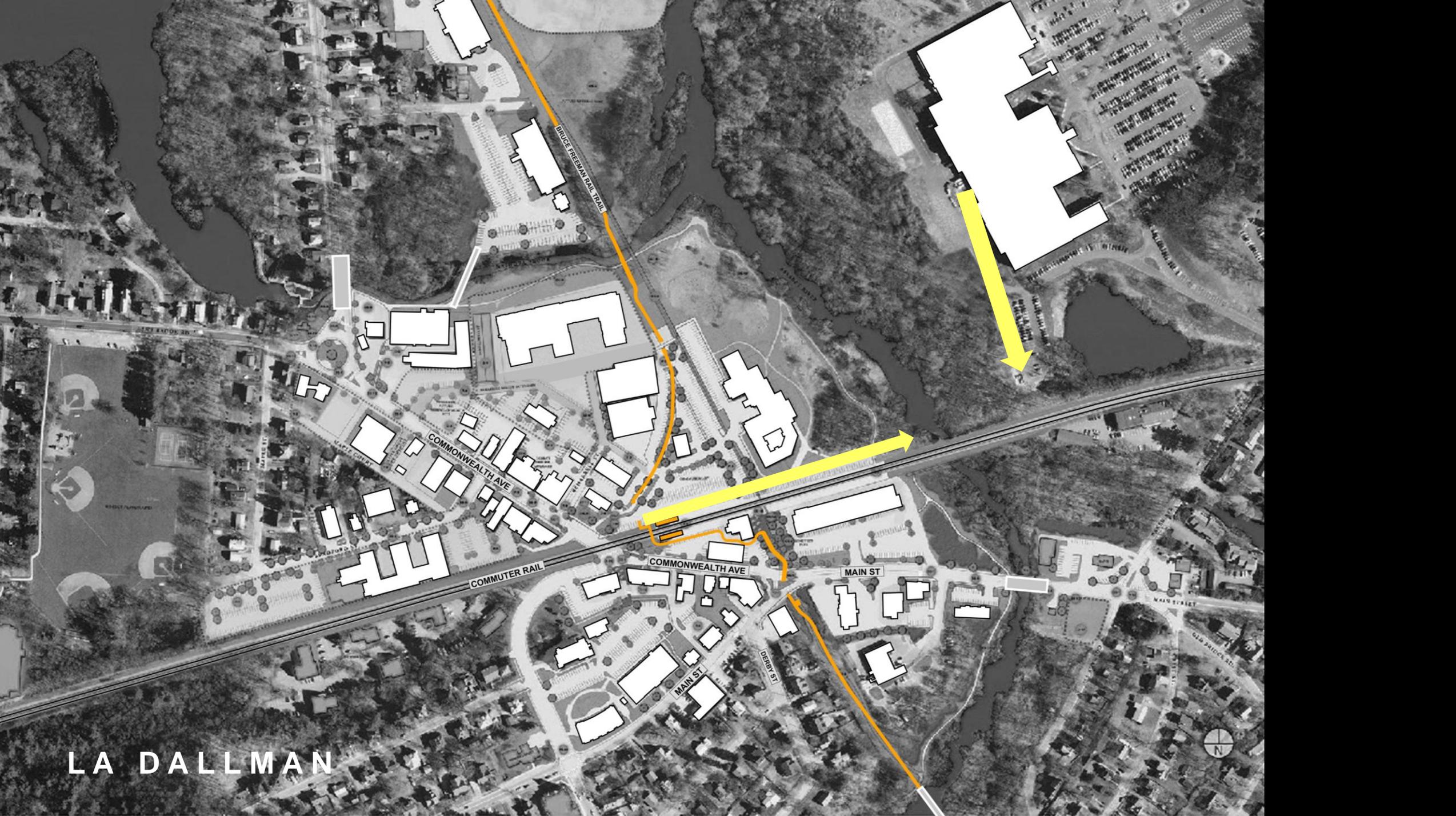
LA DALLMAN





LA DALLMAN

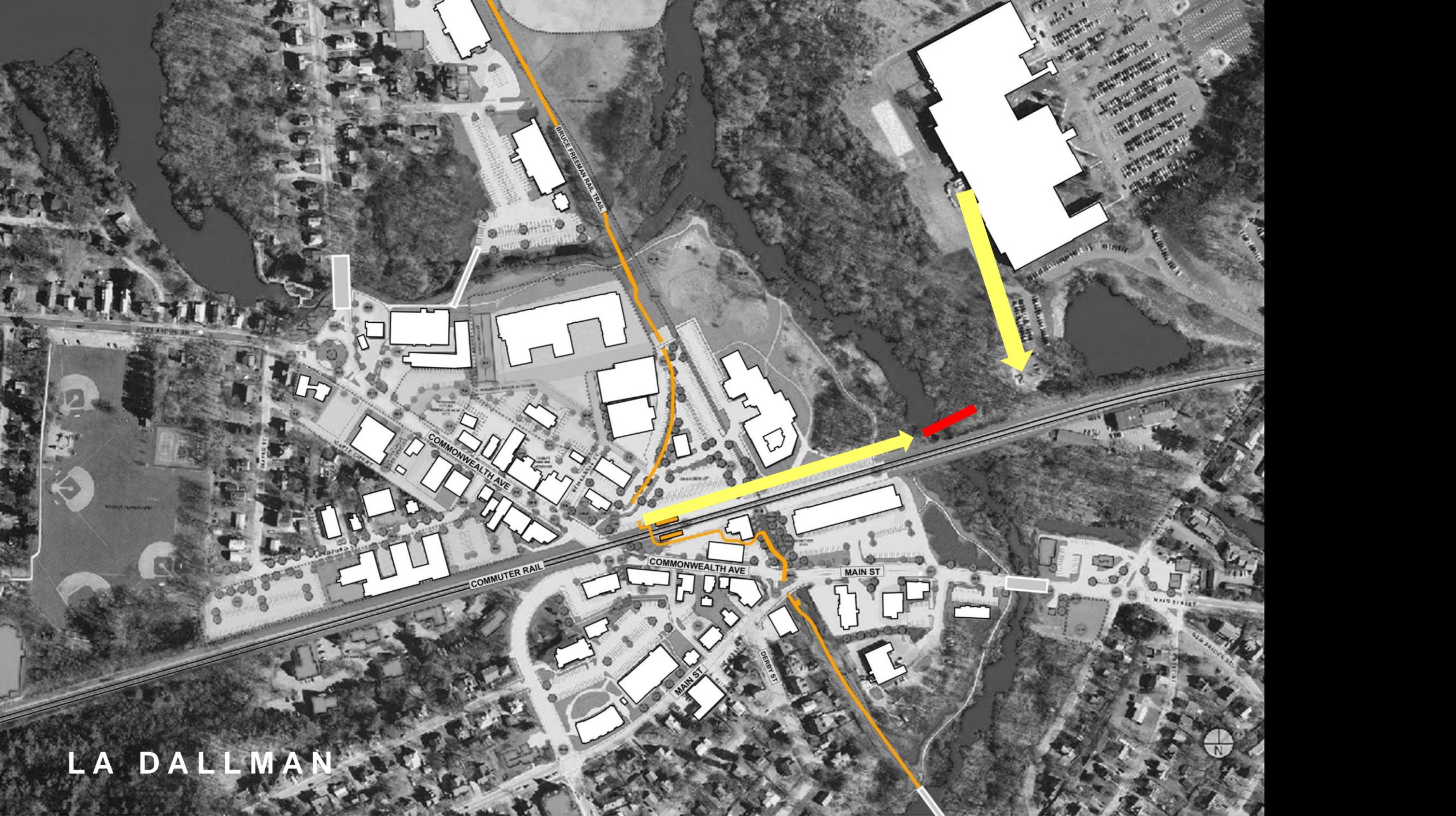




LA DALLMAN



LA DALLMAN



LA DALLMAN



LA DALLMAN





# ***BRIDGE CONCEPTS***

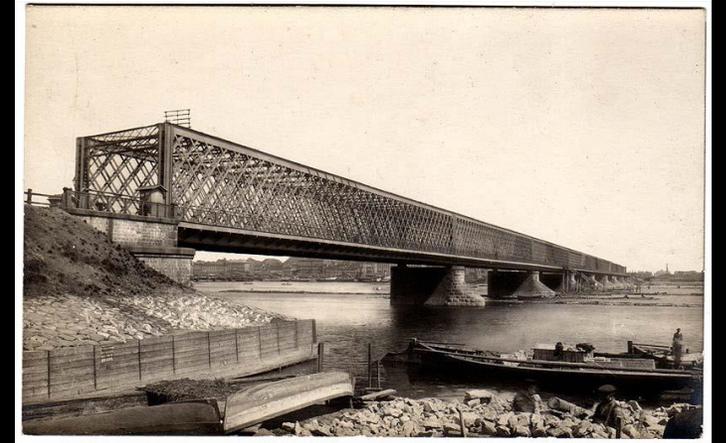
**STRUCTURAL TYPES**



BEAM



ARCH



TUBE



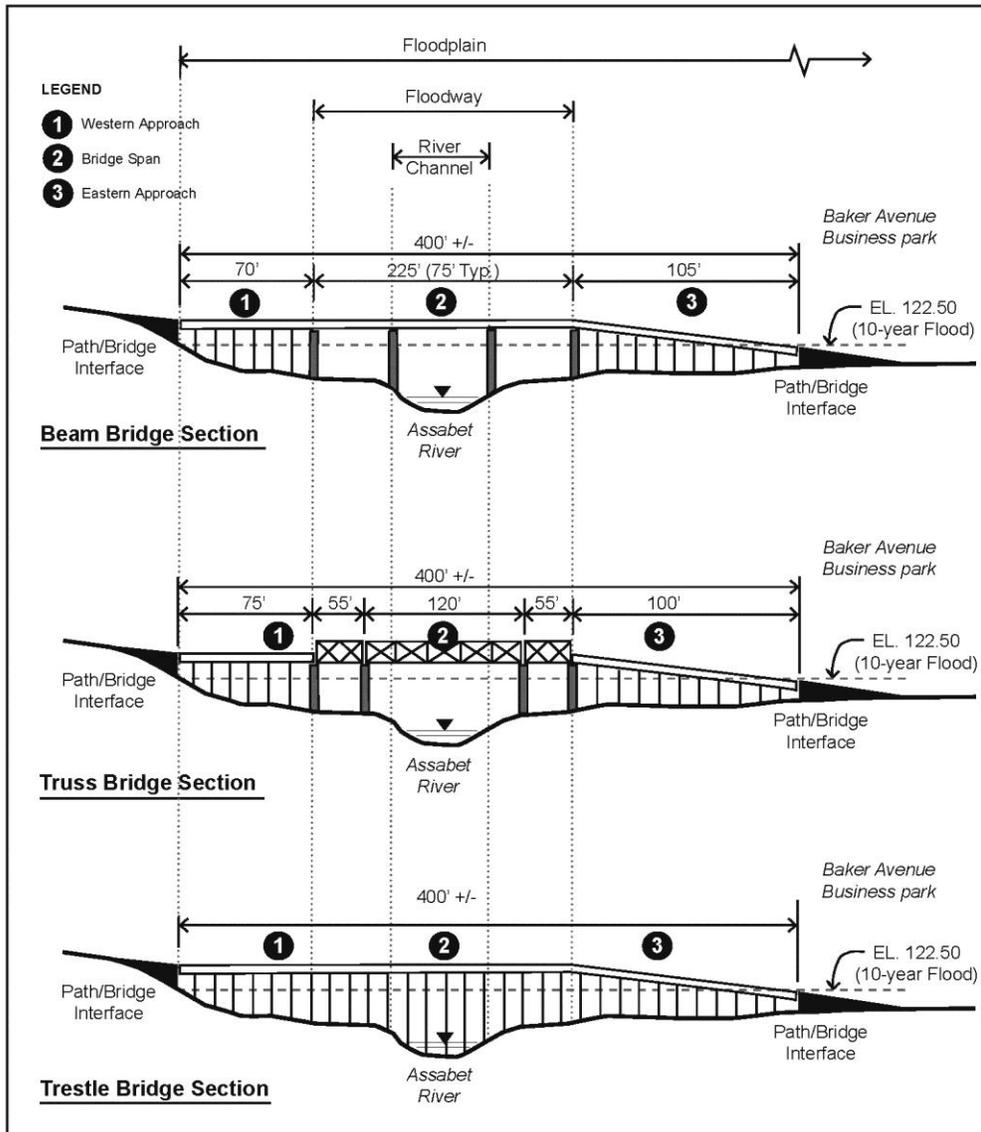
CANTILEVERED TRUSS



SUSPENSION



CABLE-STAYED



Not to Scale

**Figure 13: Schematic Sections**

Study for a Pedestrian Bridge  
over the Assabet River  
West Concord, MA



**GPI** Greenman-Pedersen, Inc.

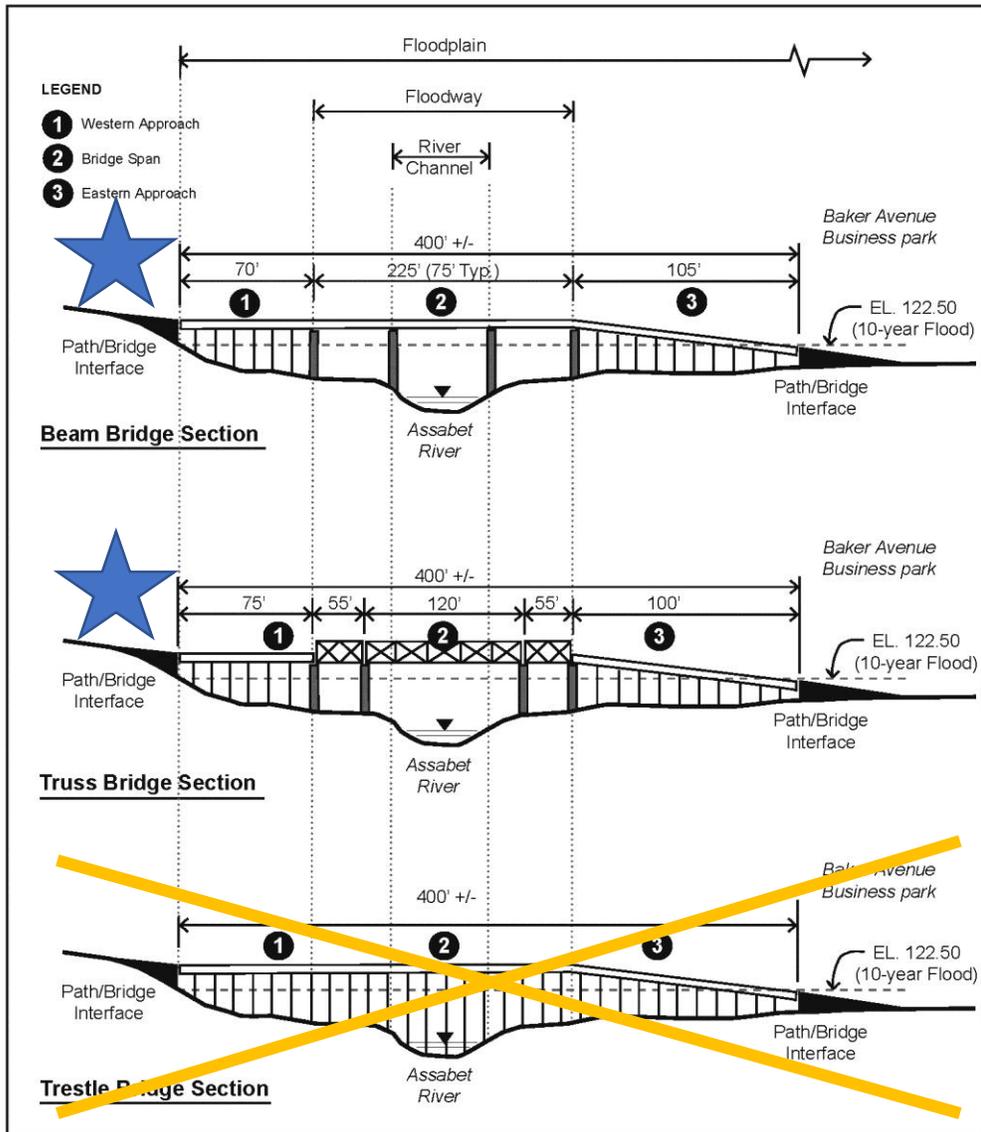


Figure 13: Schematic Sections

Study for a Pedestrian Bridge  
over the Assabet River  
West Concord, MA

Not to Scale



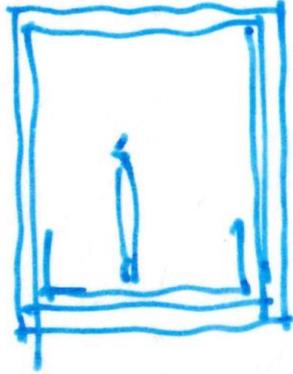
**GPI** Greenman-Pedersen, Inc.

SECTION 3  
SCALE: 1" = 50'

SECTION 2  
SCALE: 1" = 50'

SECTION 1  
SCALE: 1" = 50'

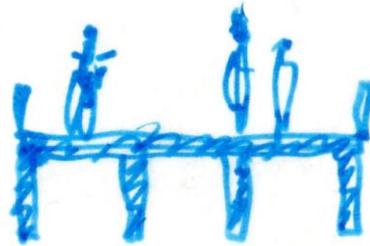
TRUSS



STRUCTURAL  
HAND RAIL



BEAMS

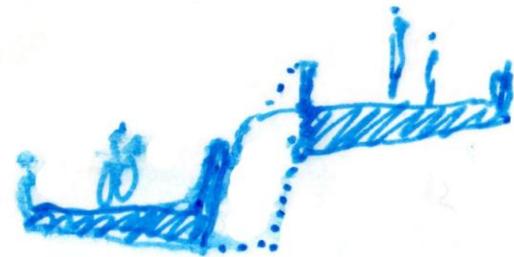
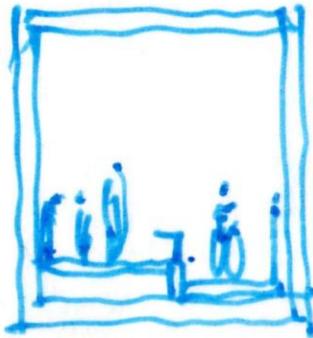


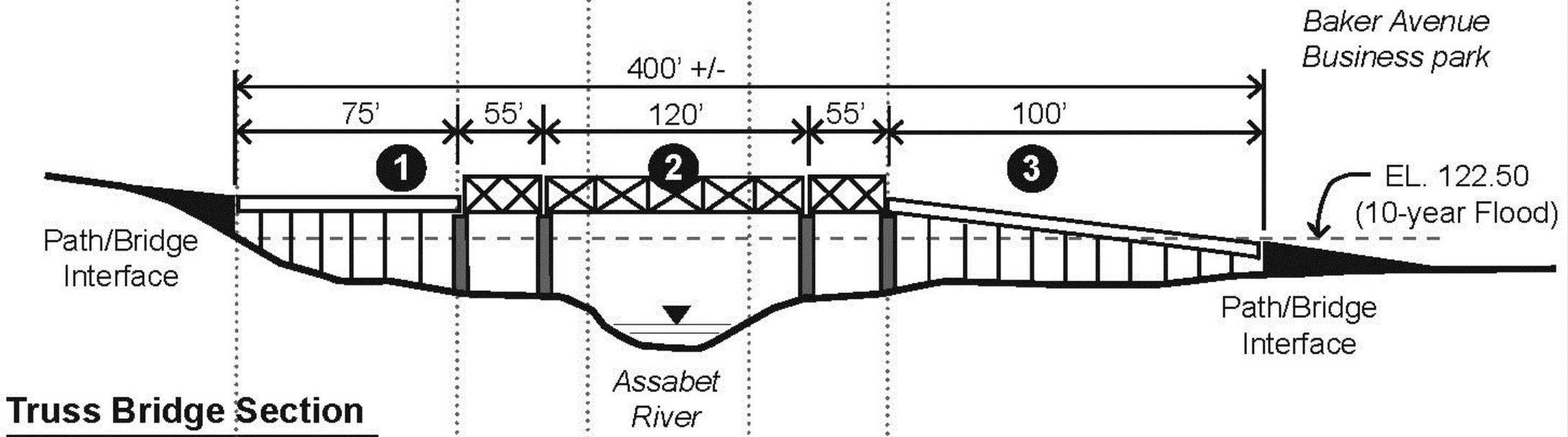
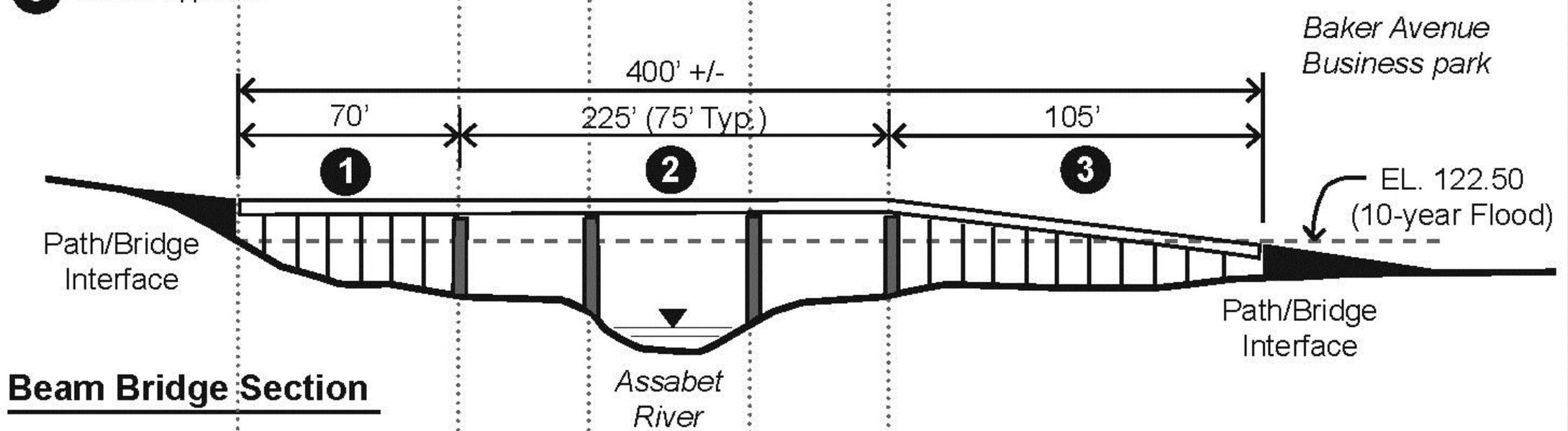
HYBRID

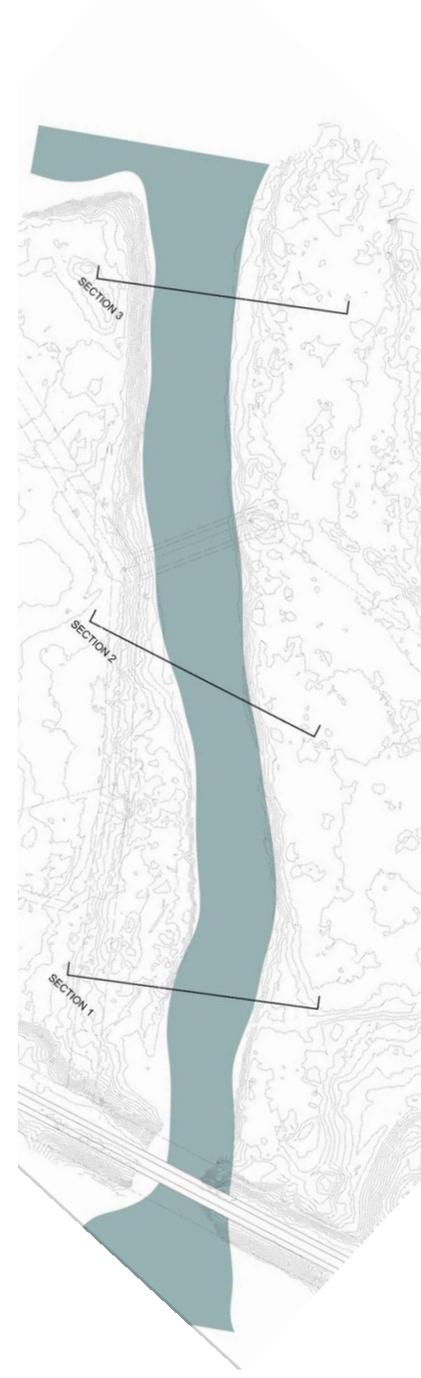
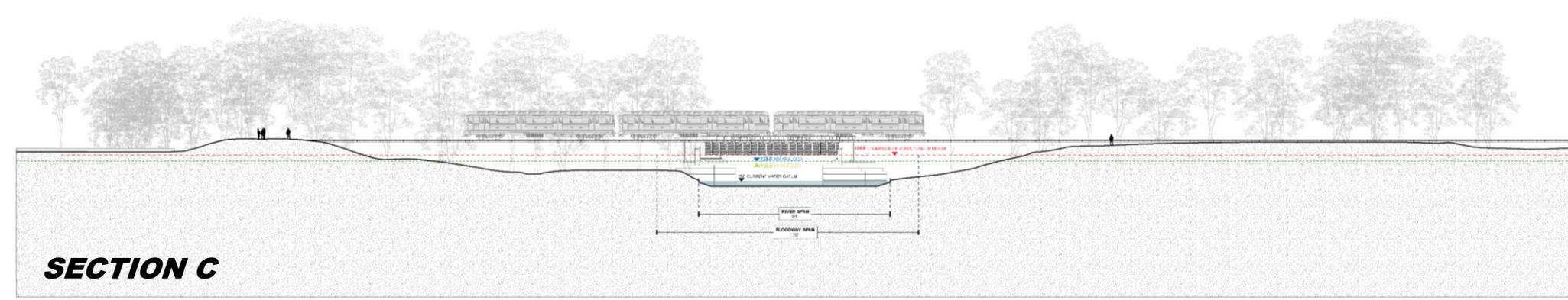
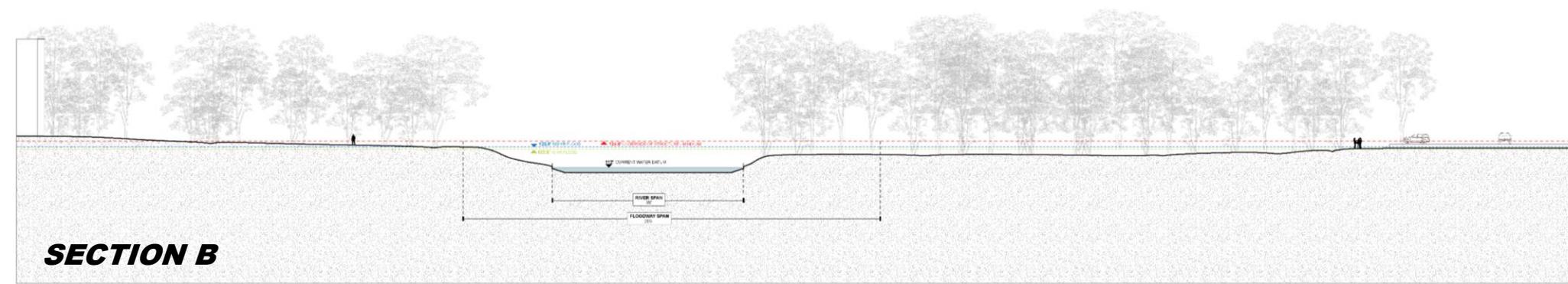
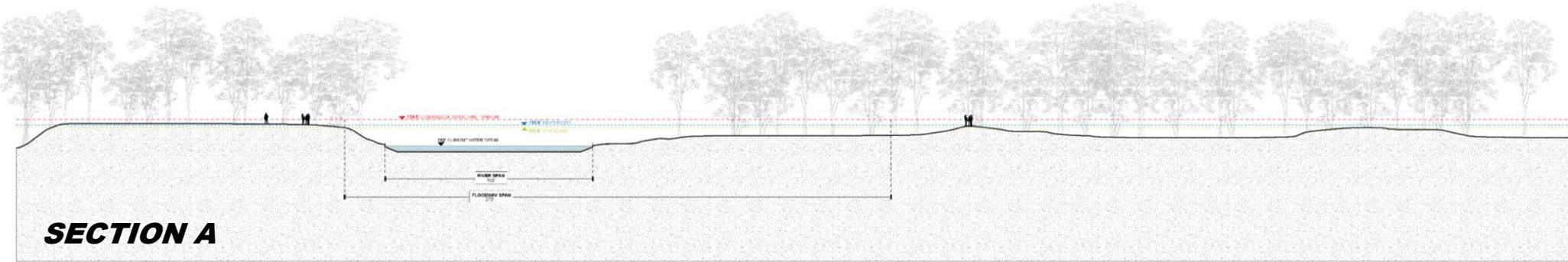


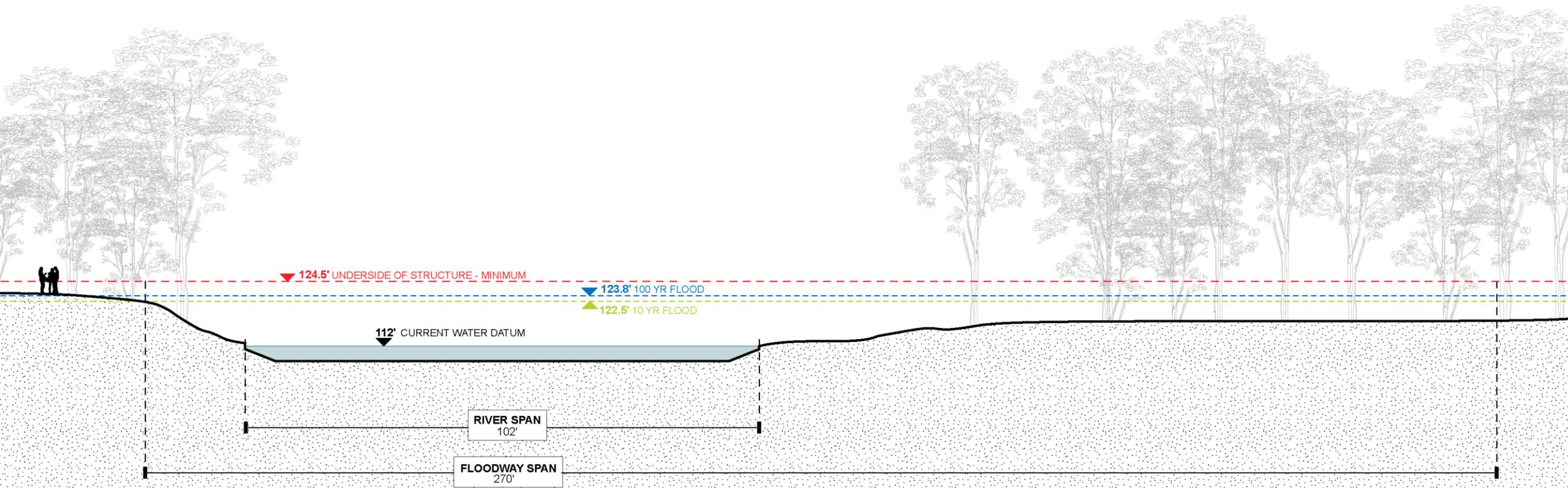
FAST

SLOW



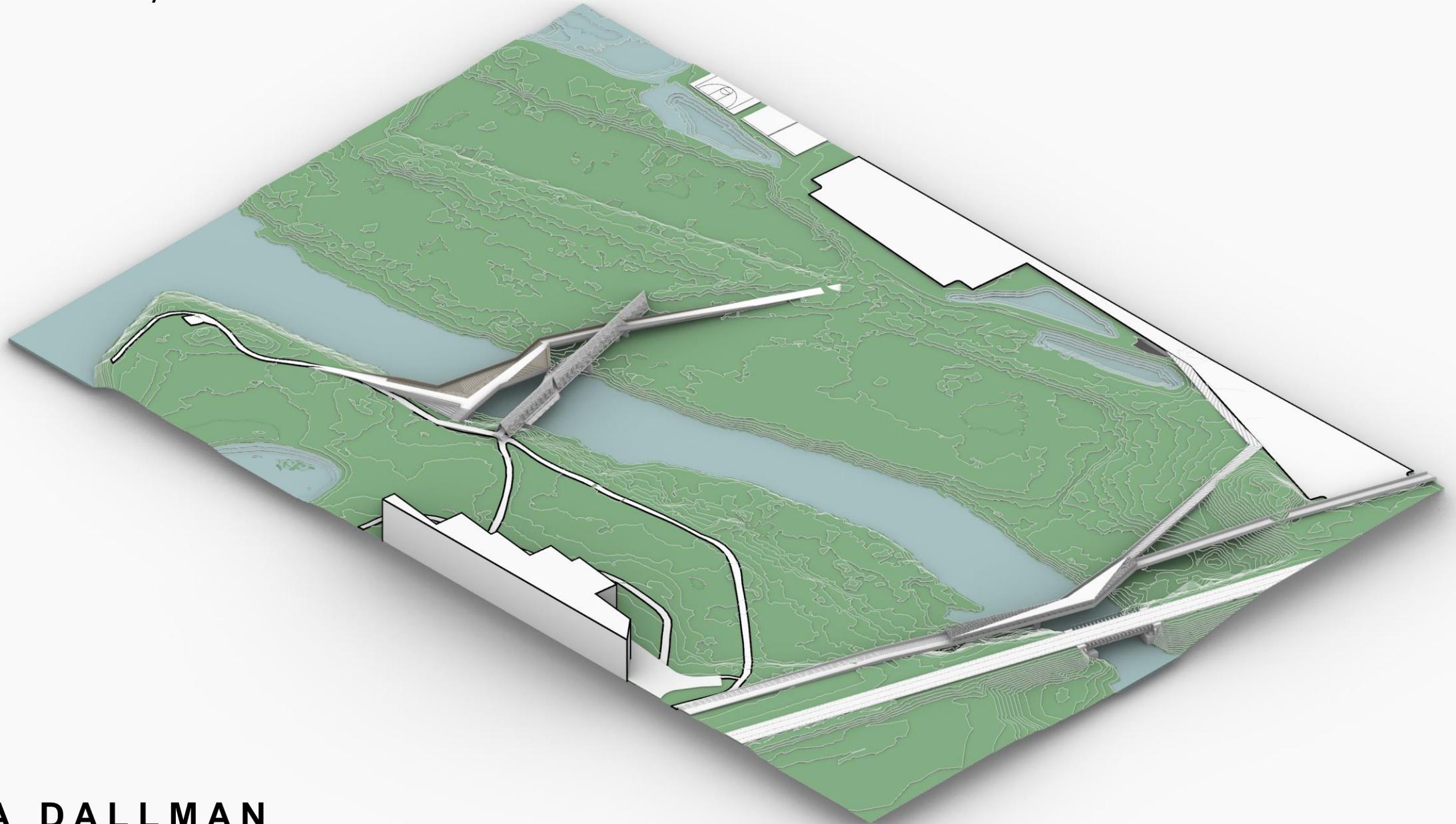






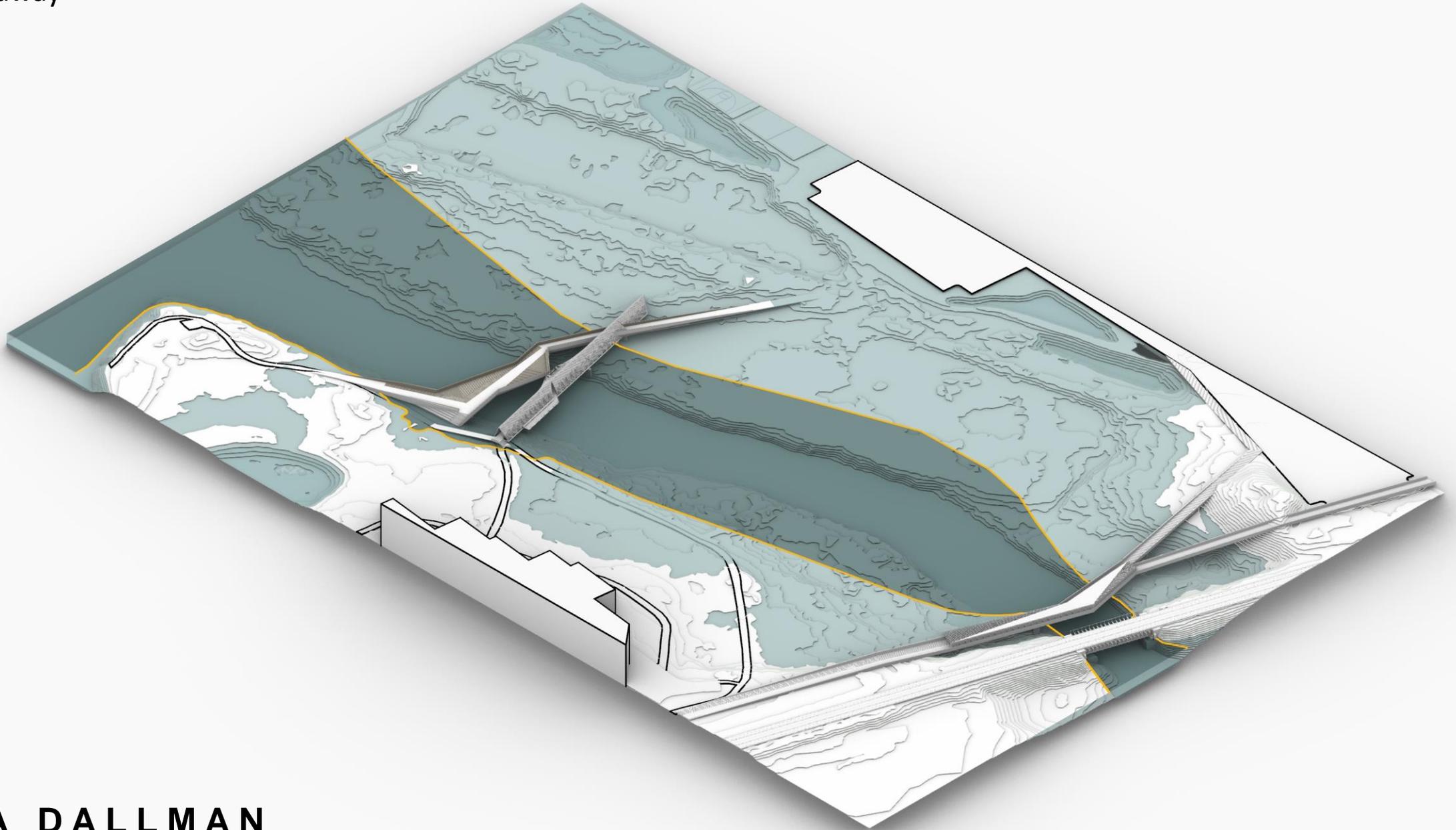
**SECTION A**  
**Existing Conditions**

Current Riverway



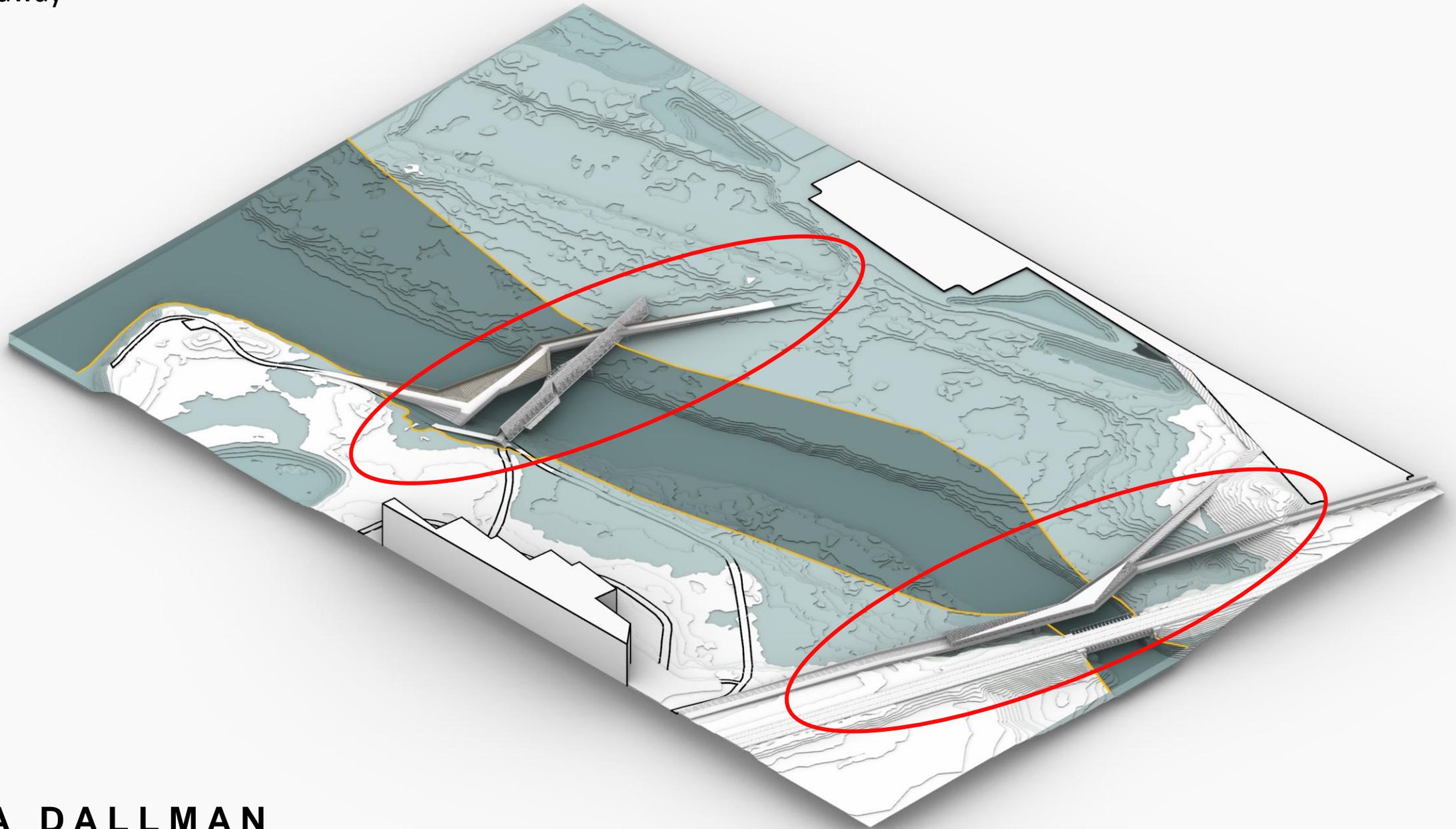
LA DALLMAN

Floodway



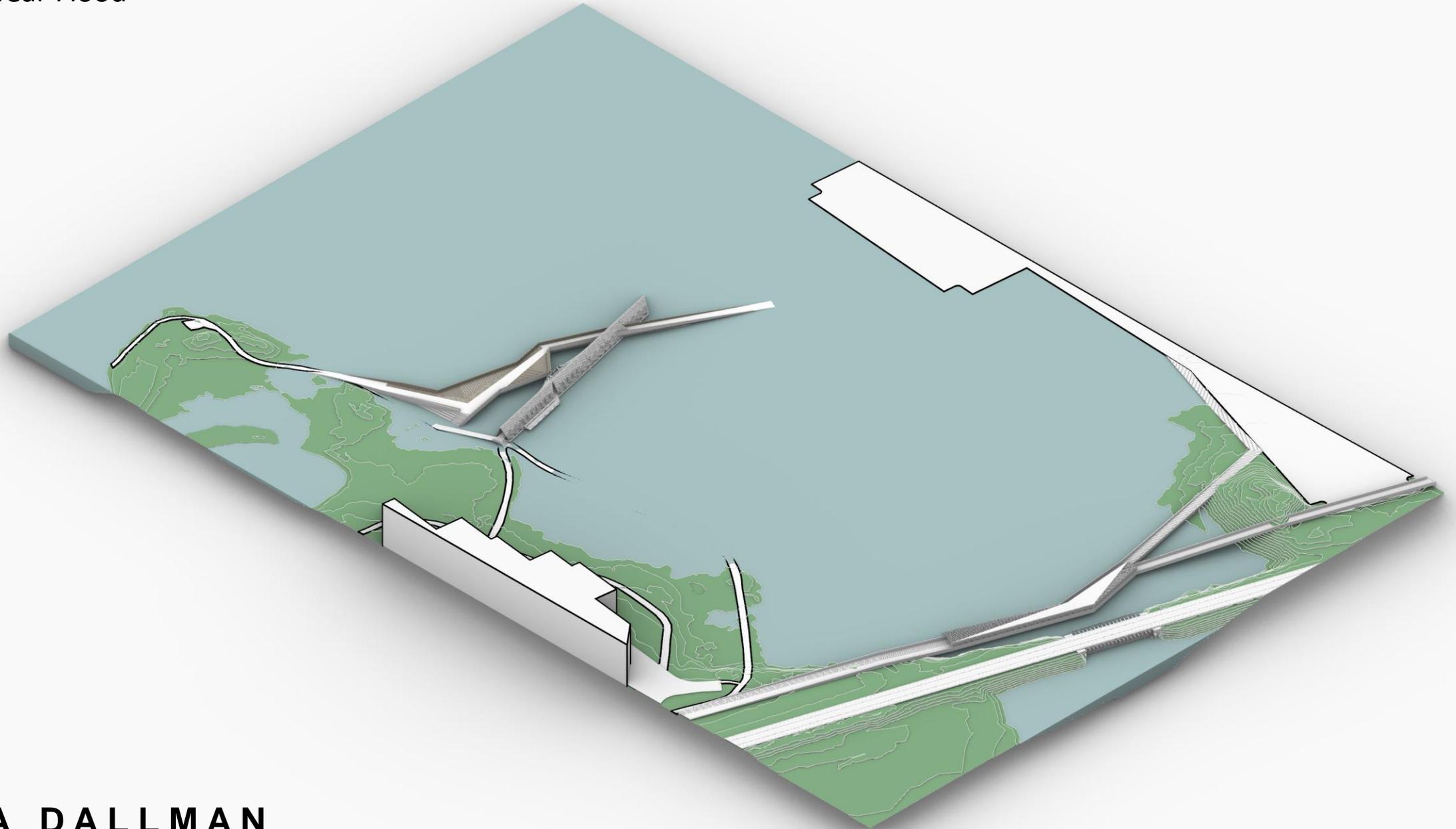
LA DALLMAN

Floodway



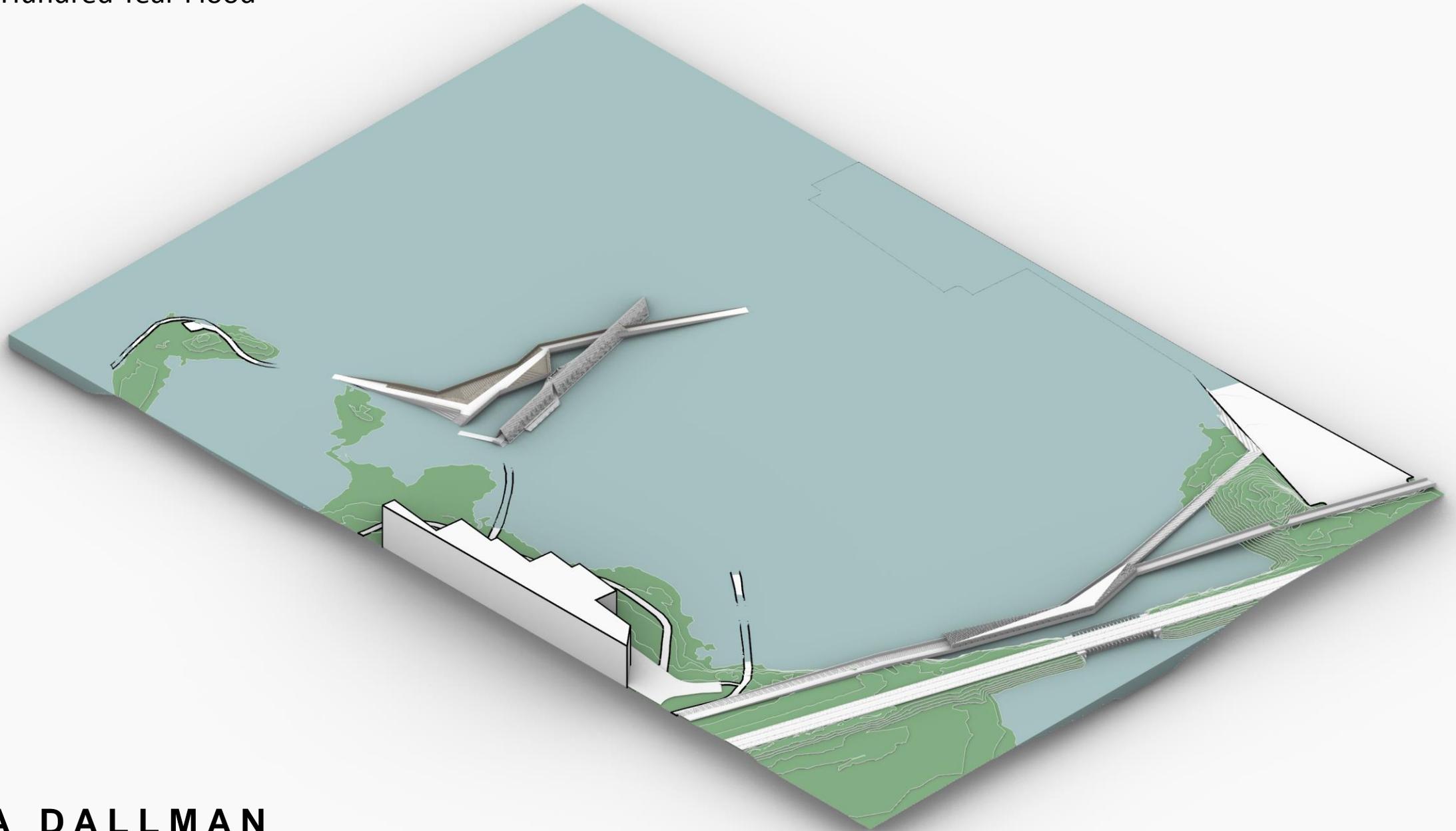
LA DALLMAN

Ten Year Flood



LA DALLMAN

One Hundred Year Flood



LA DALLMAN

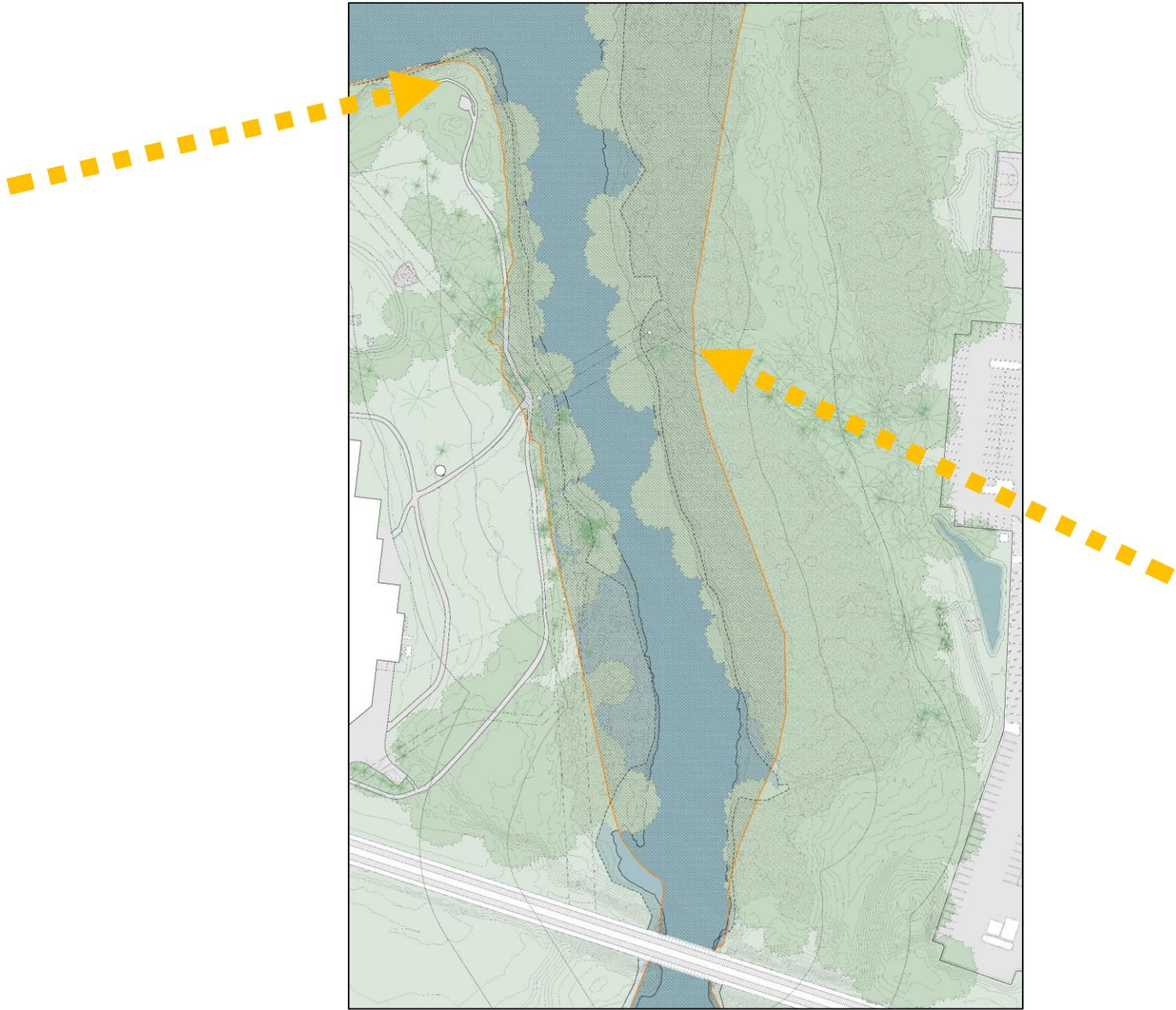
# ***BRIDGE CONCEPTS***

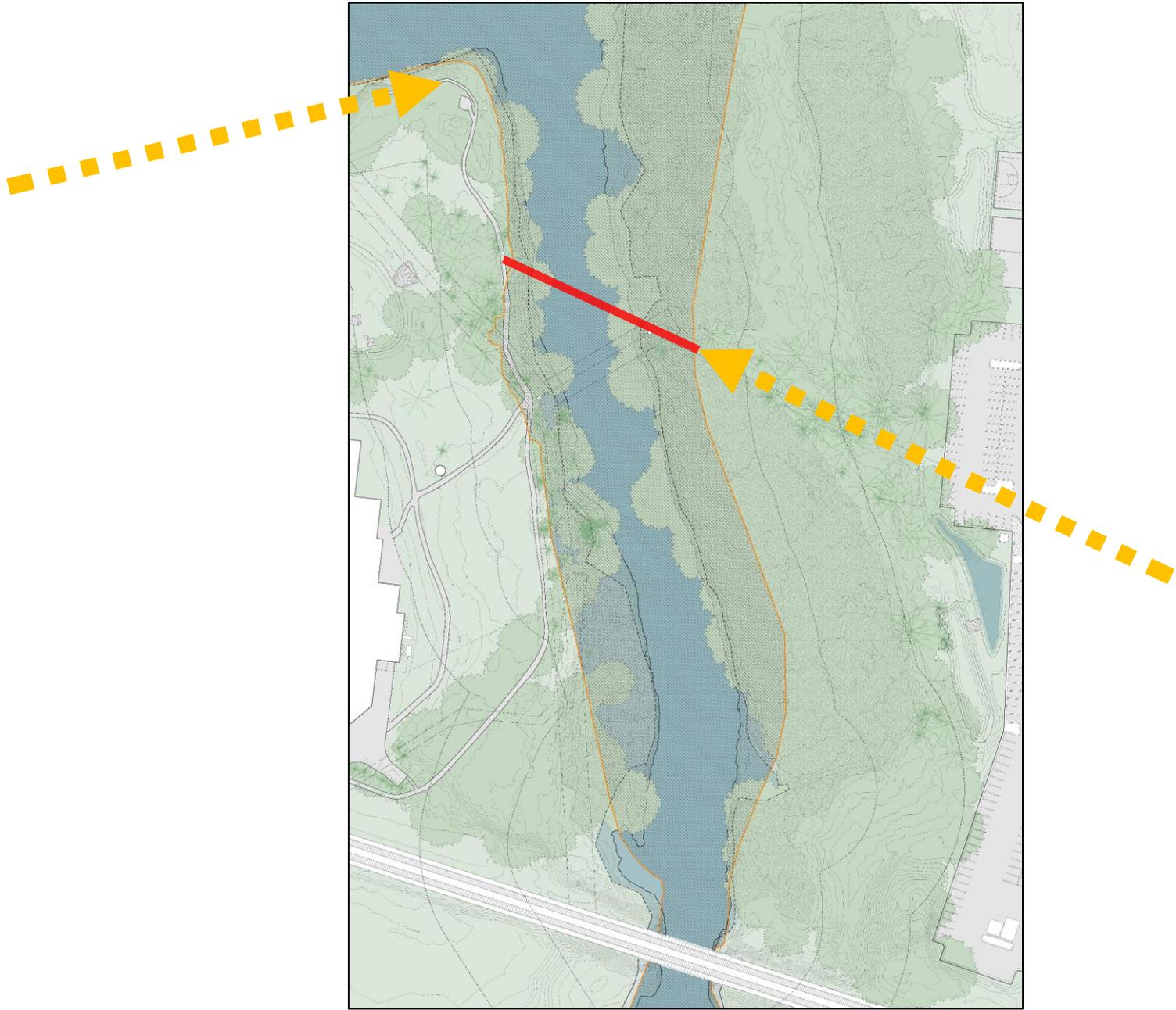
## **THREE PEDESTRIAN BRIDGE SCHEMES**

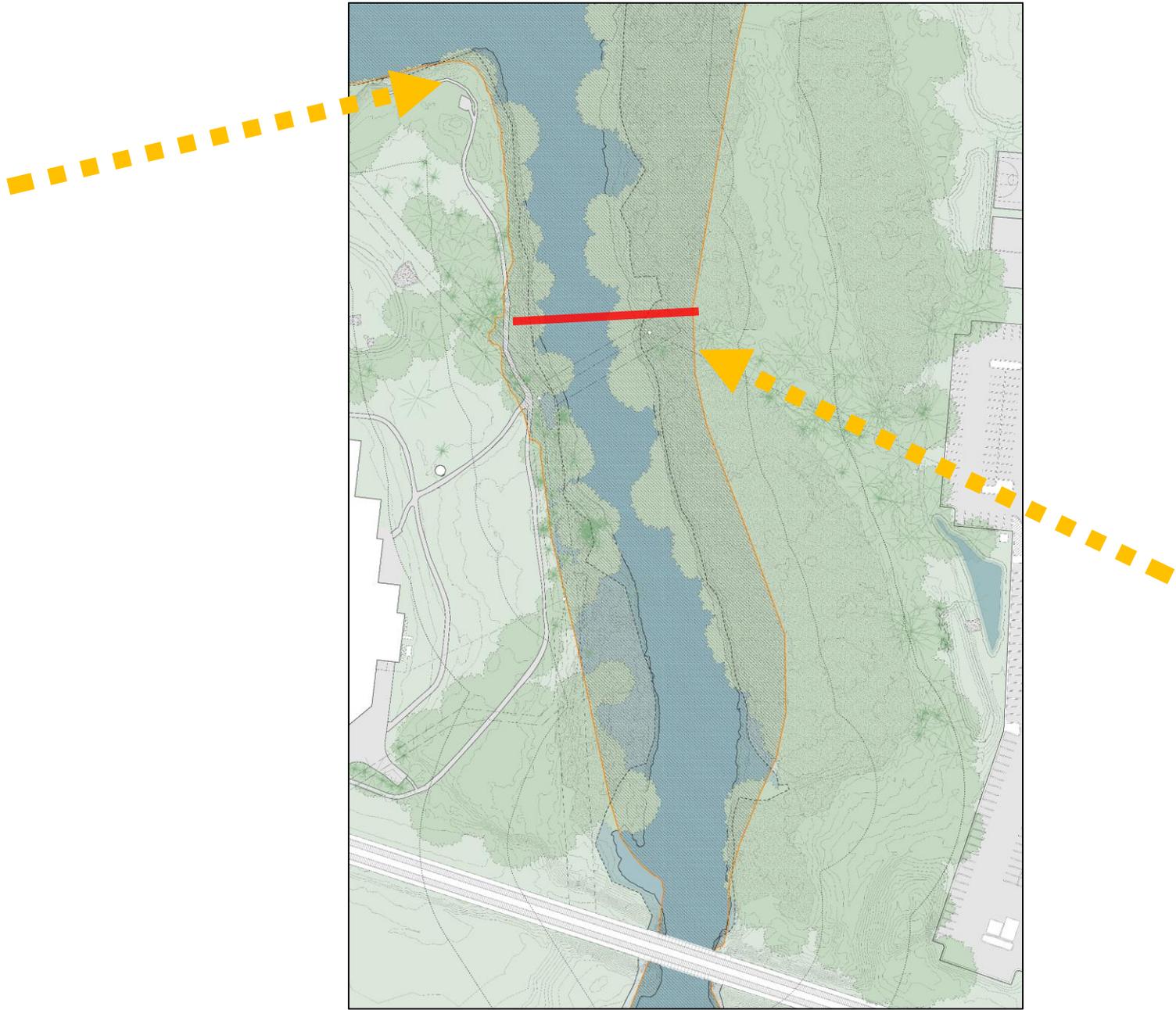
- Assabet River LANDING
- Assabet River TRELIS
- Assabet River CROSSING

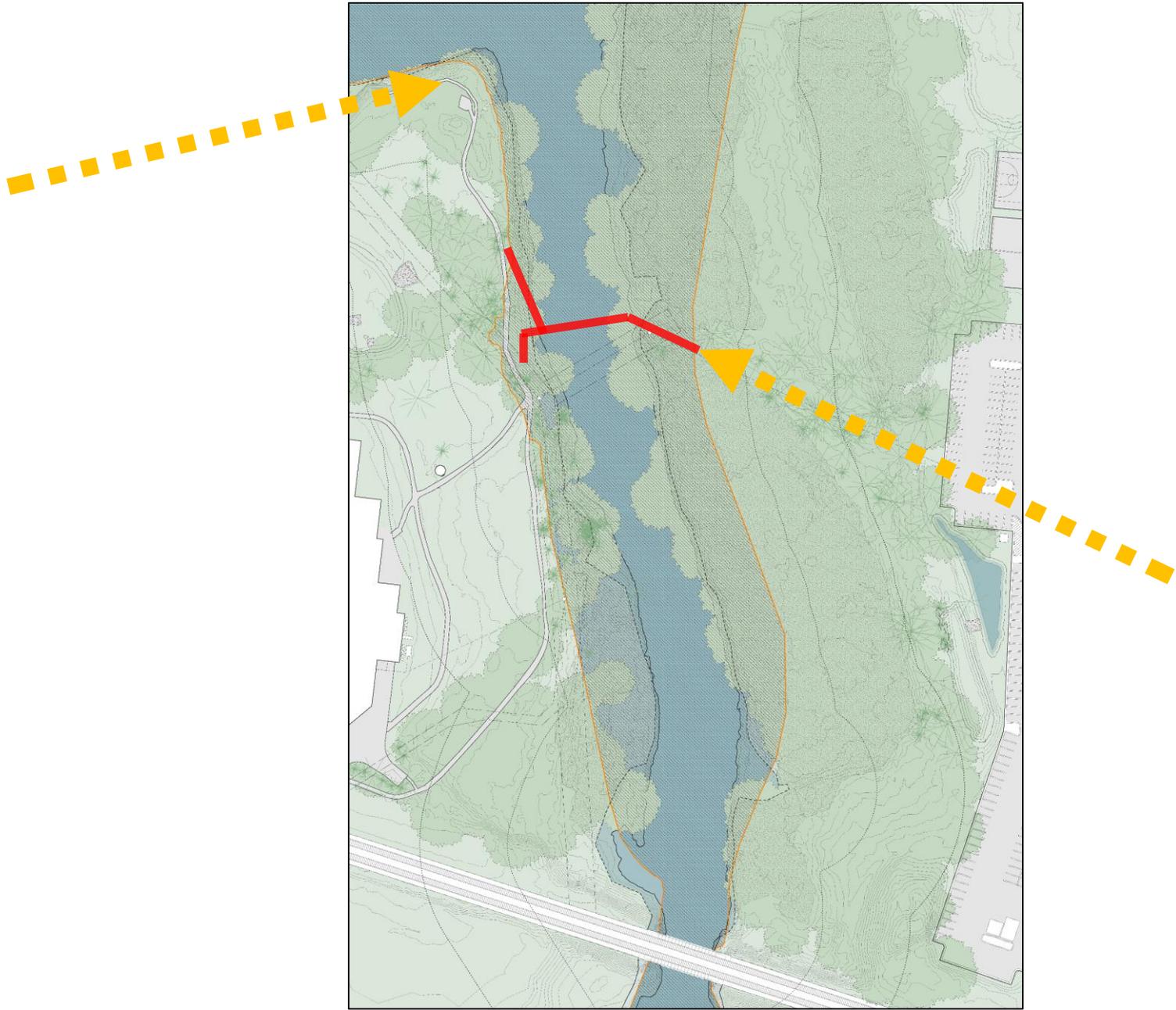
*Assabet River* ***Landing***

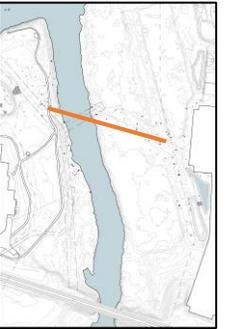
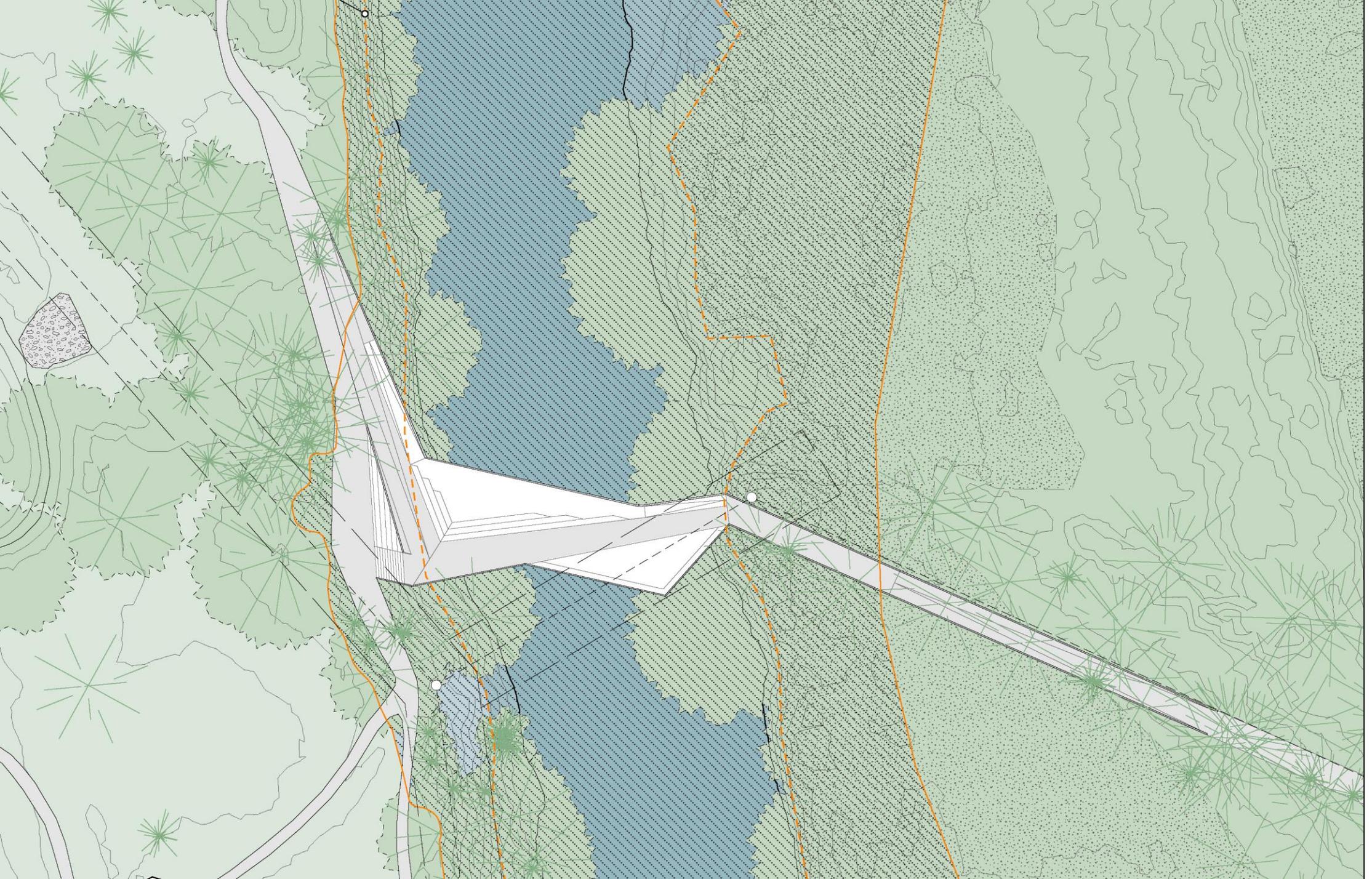


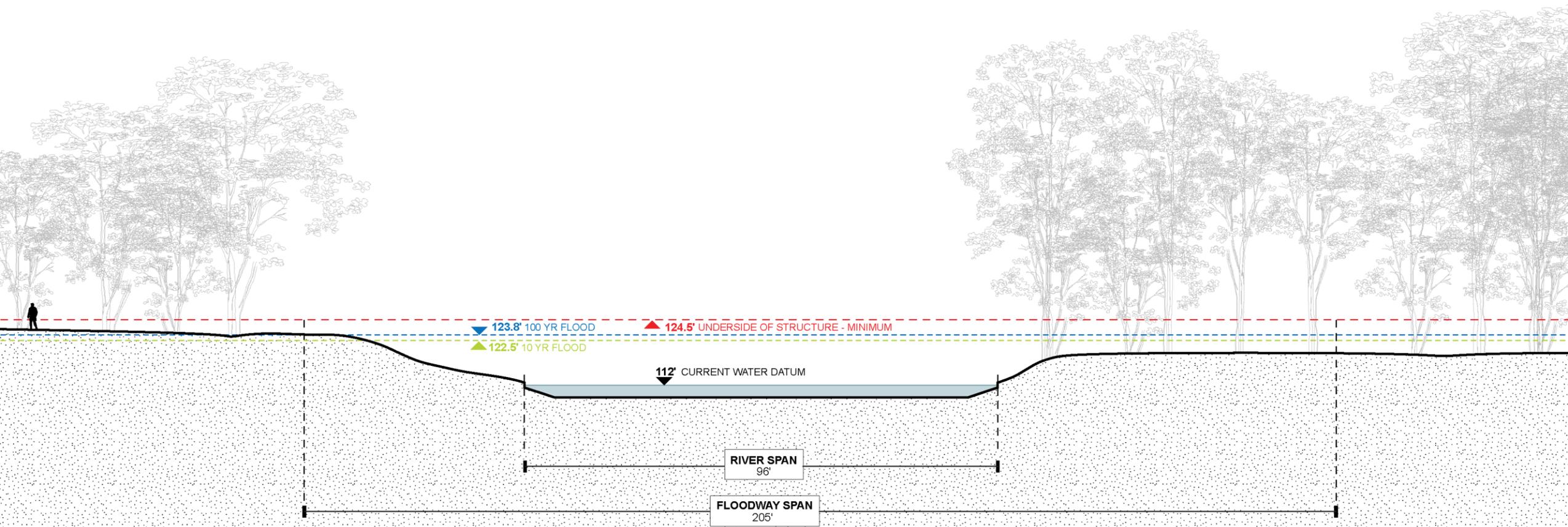




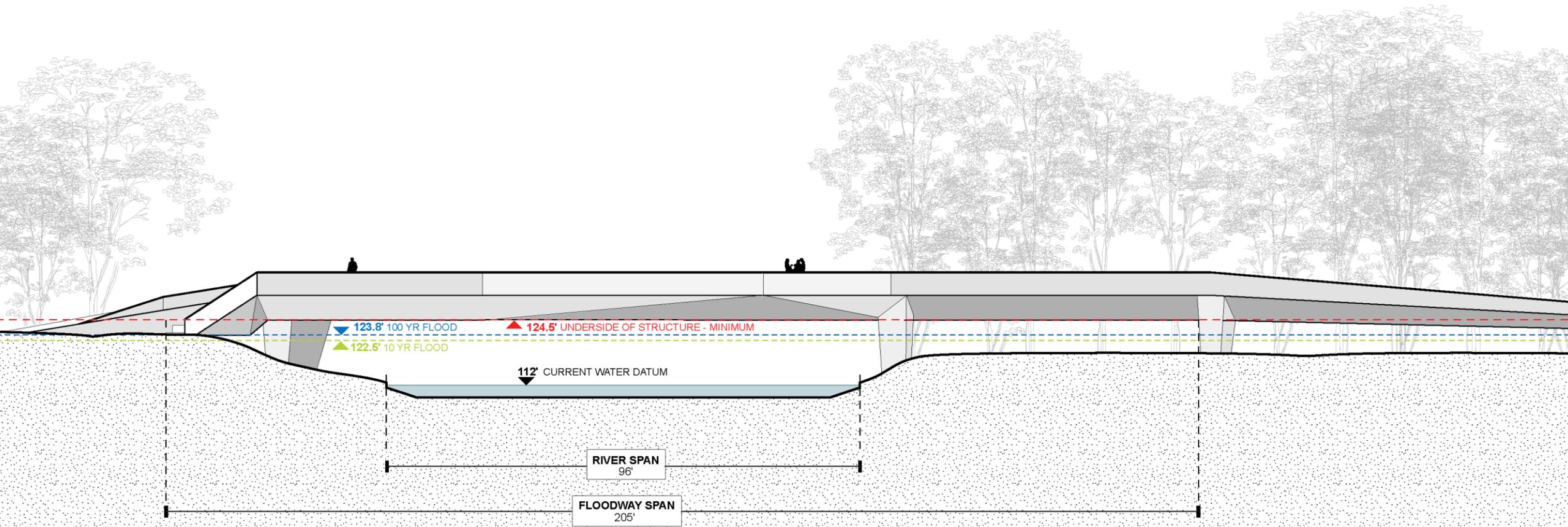






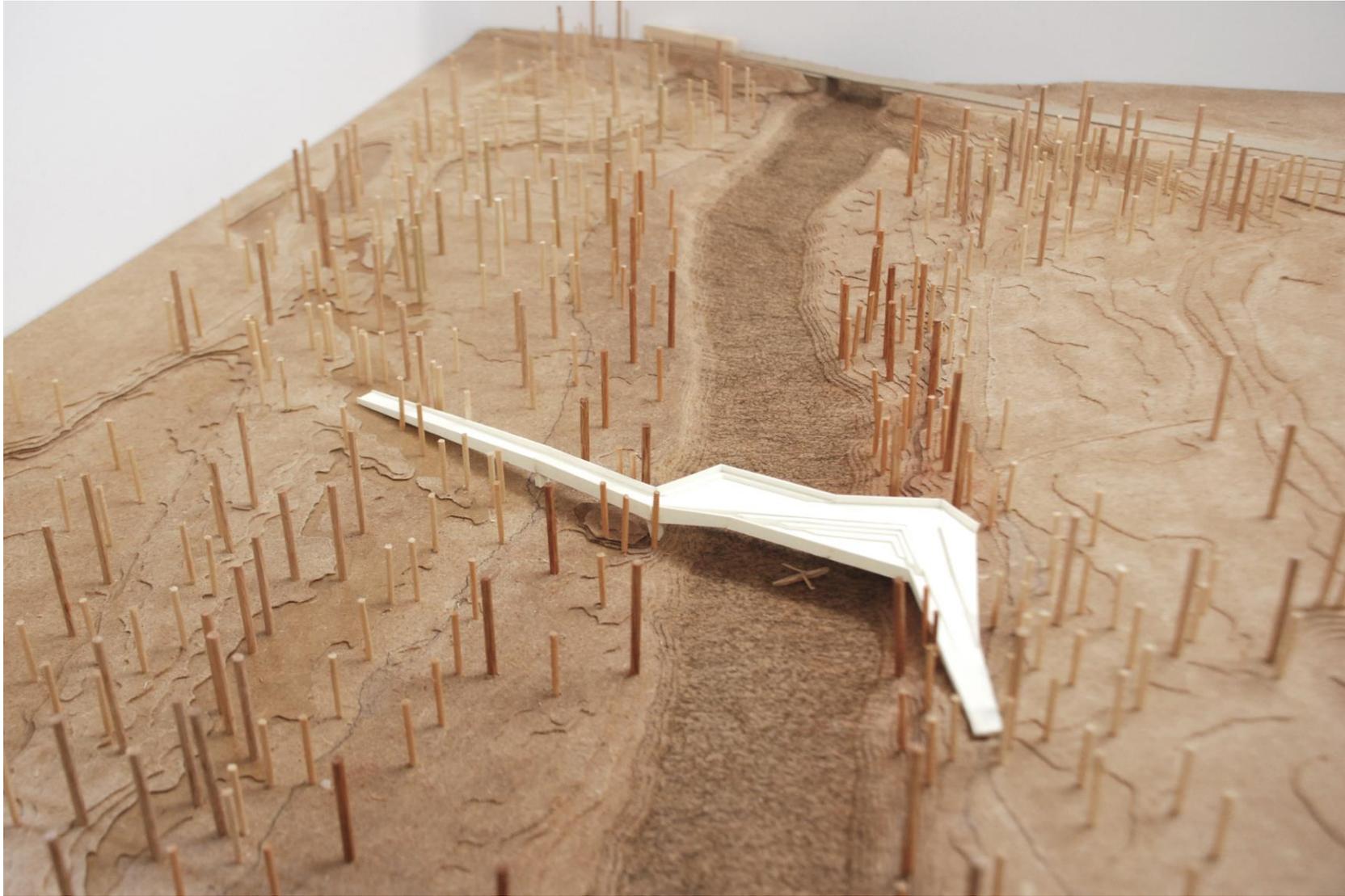


**SECTION B**  
**Existing Conditions**









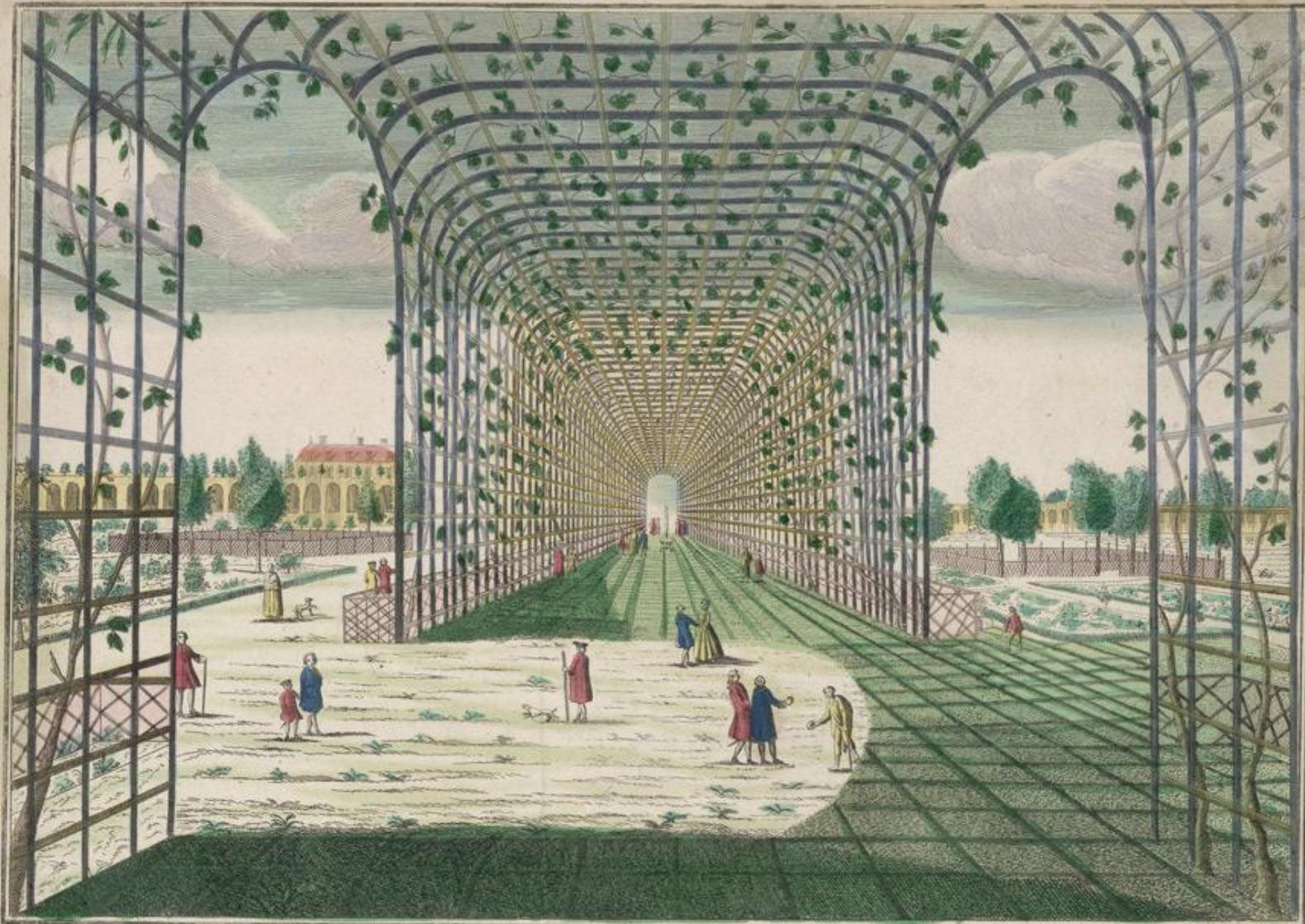








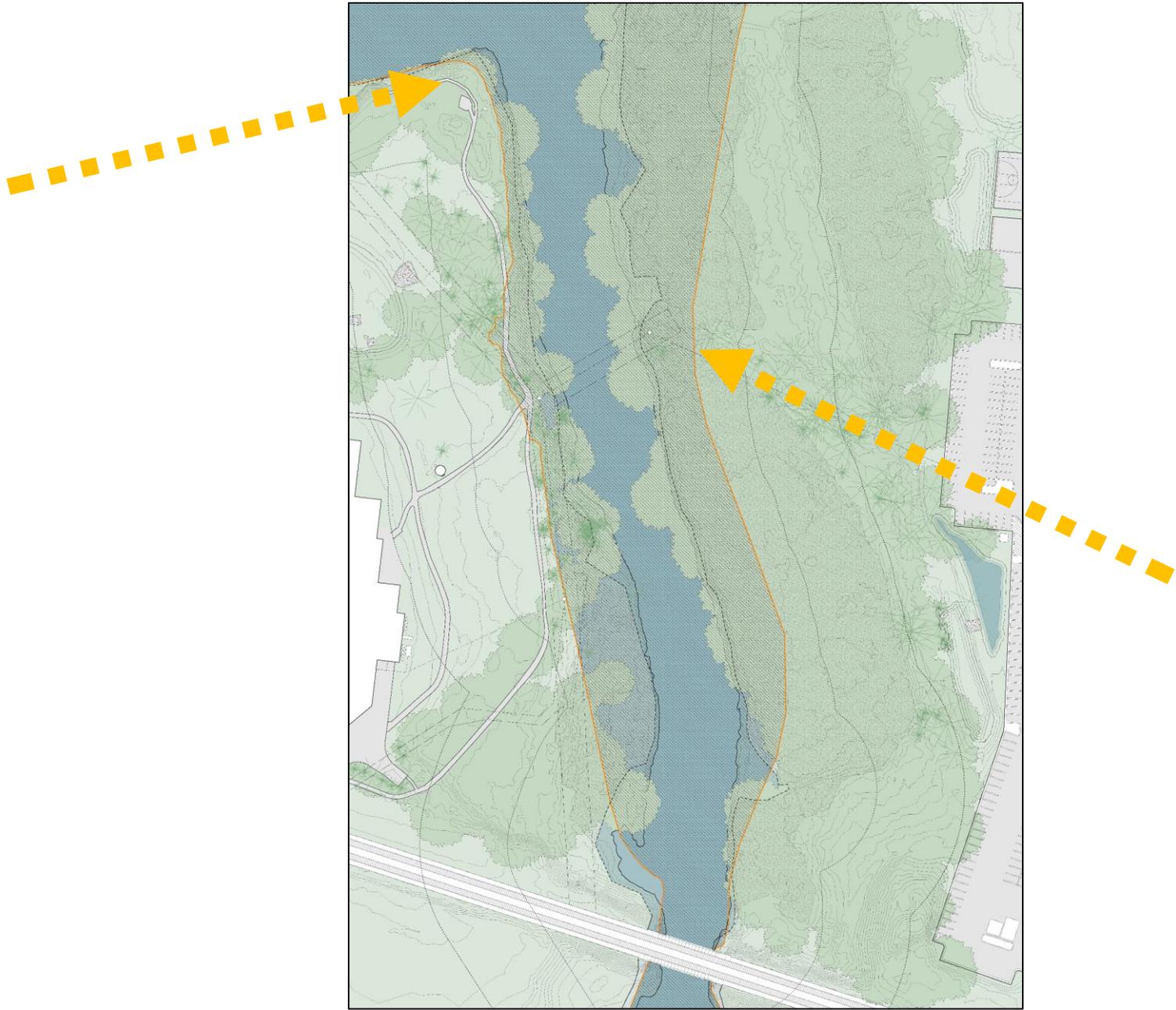
*Assabet River* **Trellis**

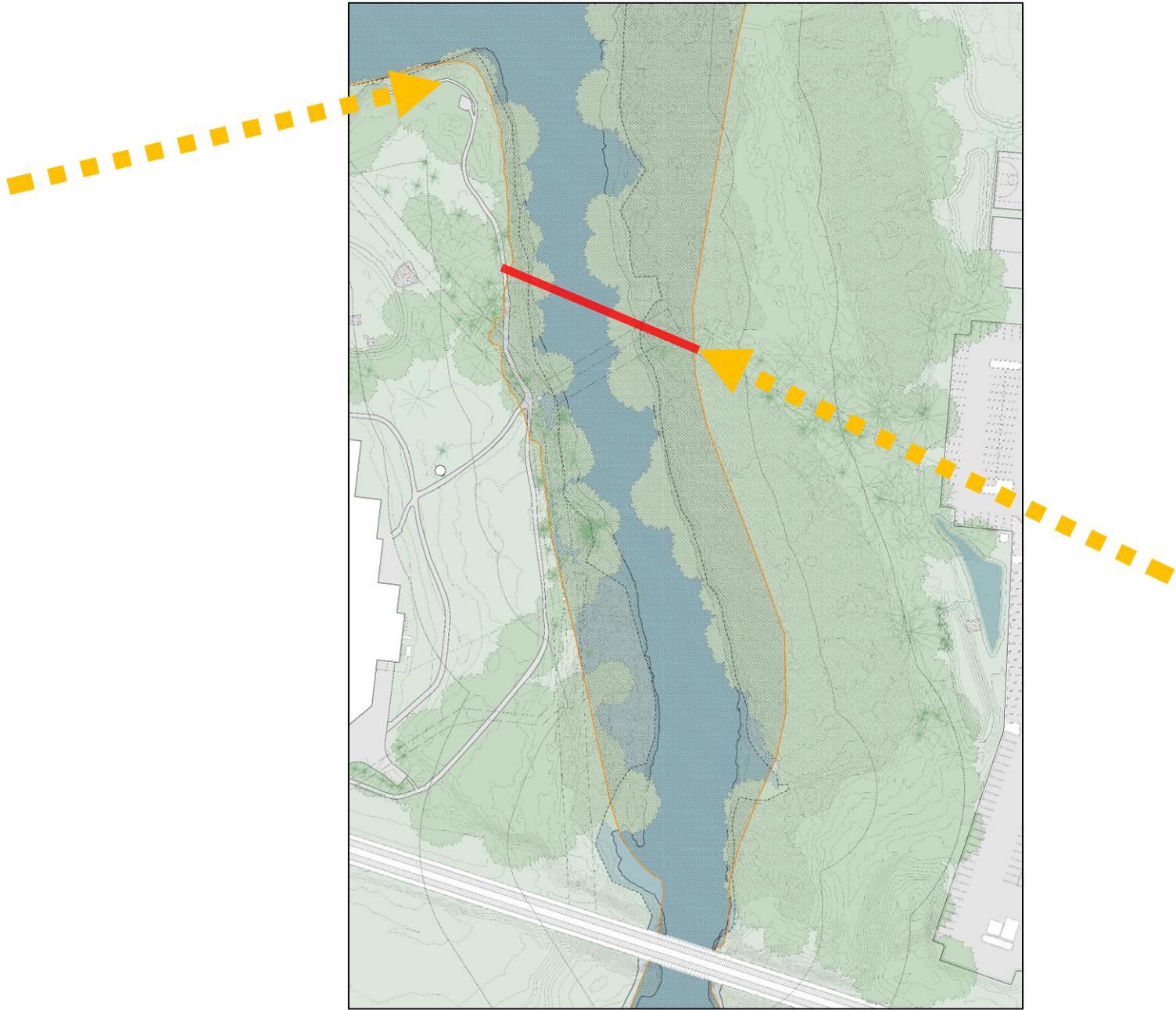


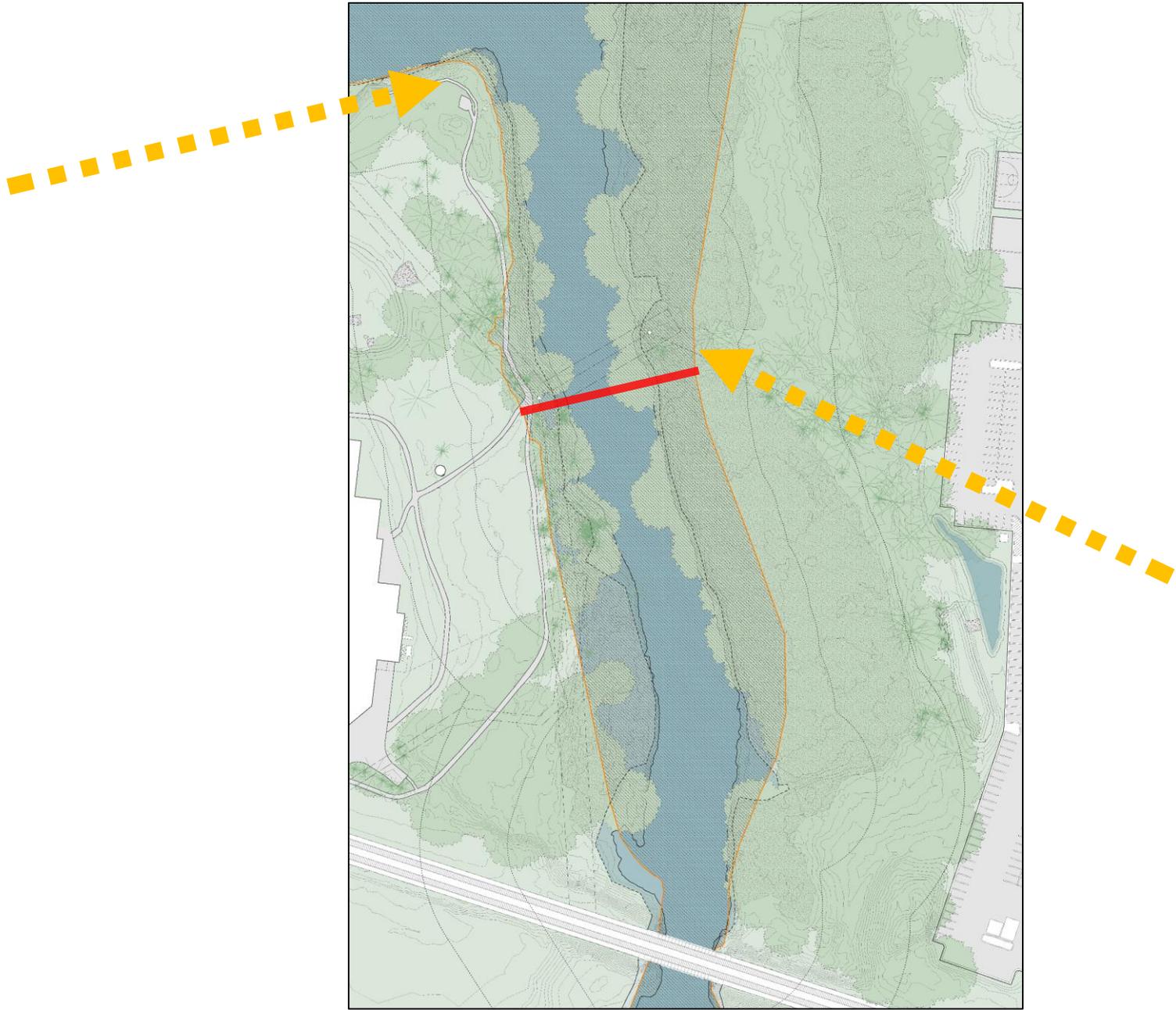
*Prospectus Cameratae Vineae in Hortis Gubernatoris Pondicherii in Indiis Orientalibus ad oram Coromandelis*  
24 2.

Trellis Arcade, Governor's Garden at Pondicherry in Tamil Nadu, published in India in the late 18th century.

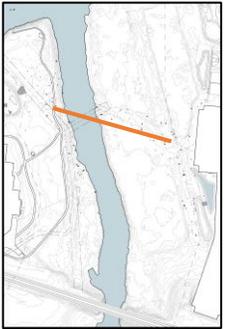
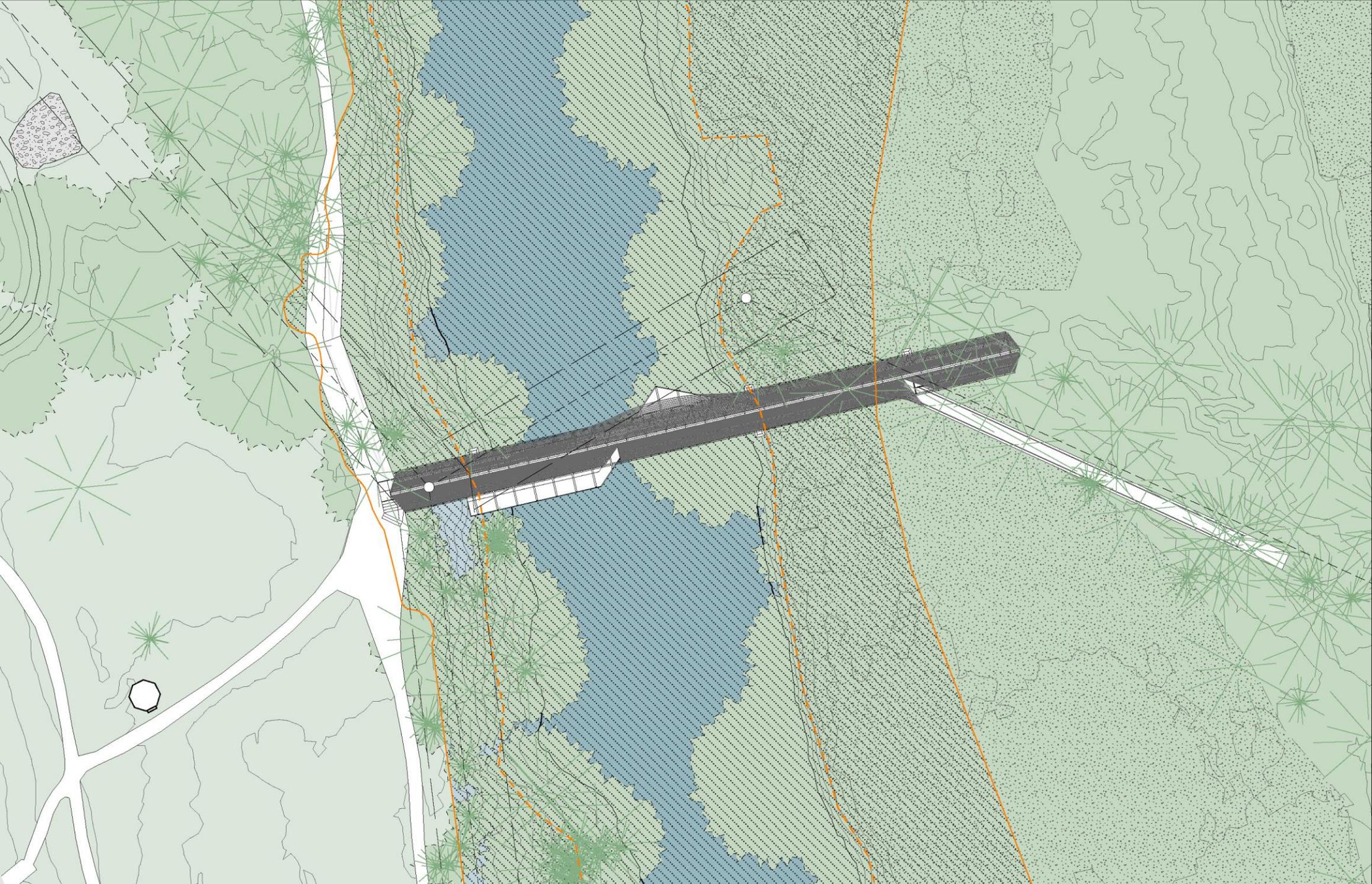


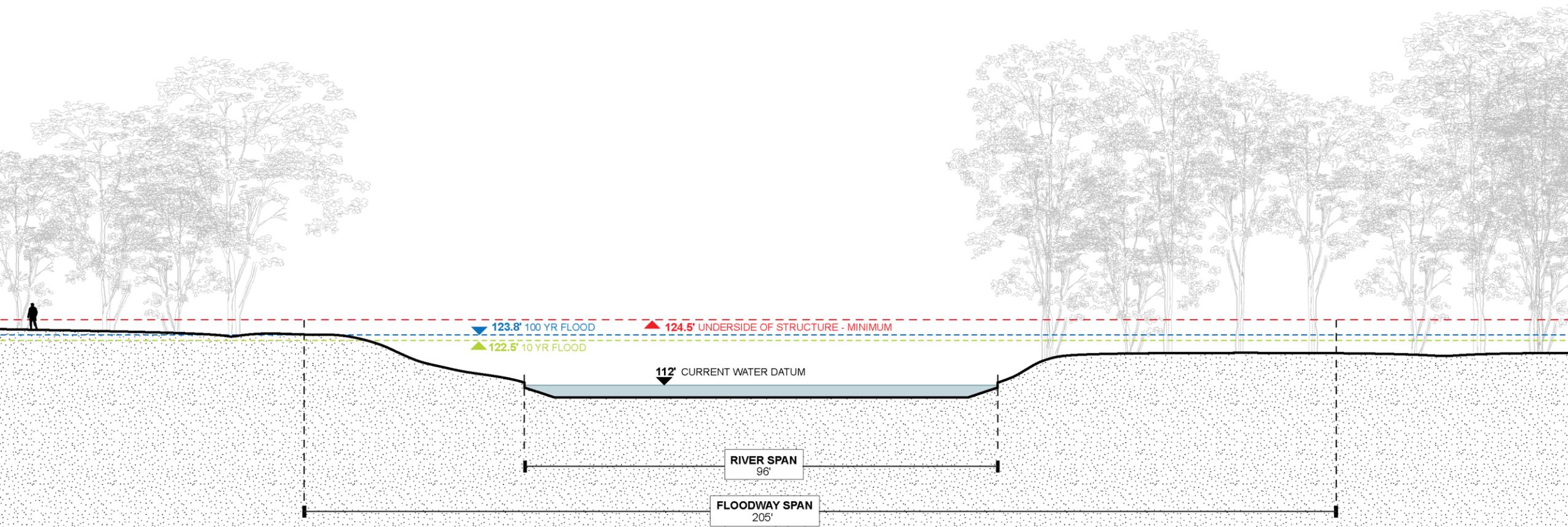




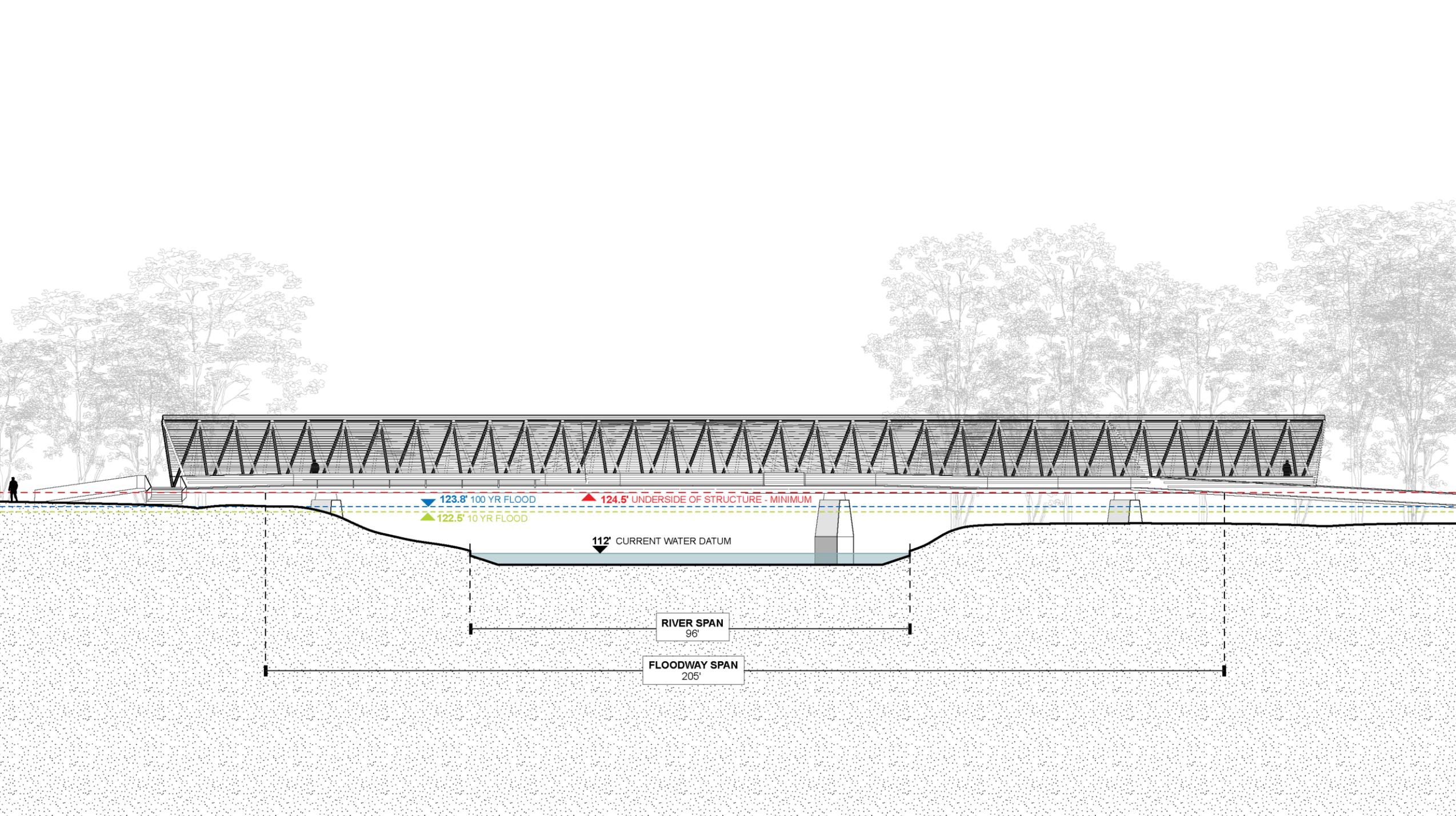








**SECTION B**  
**Existing Conditions**









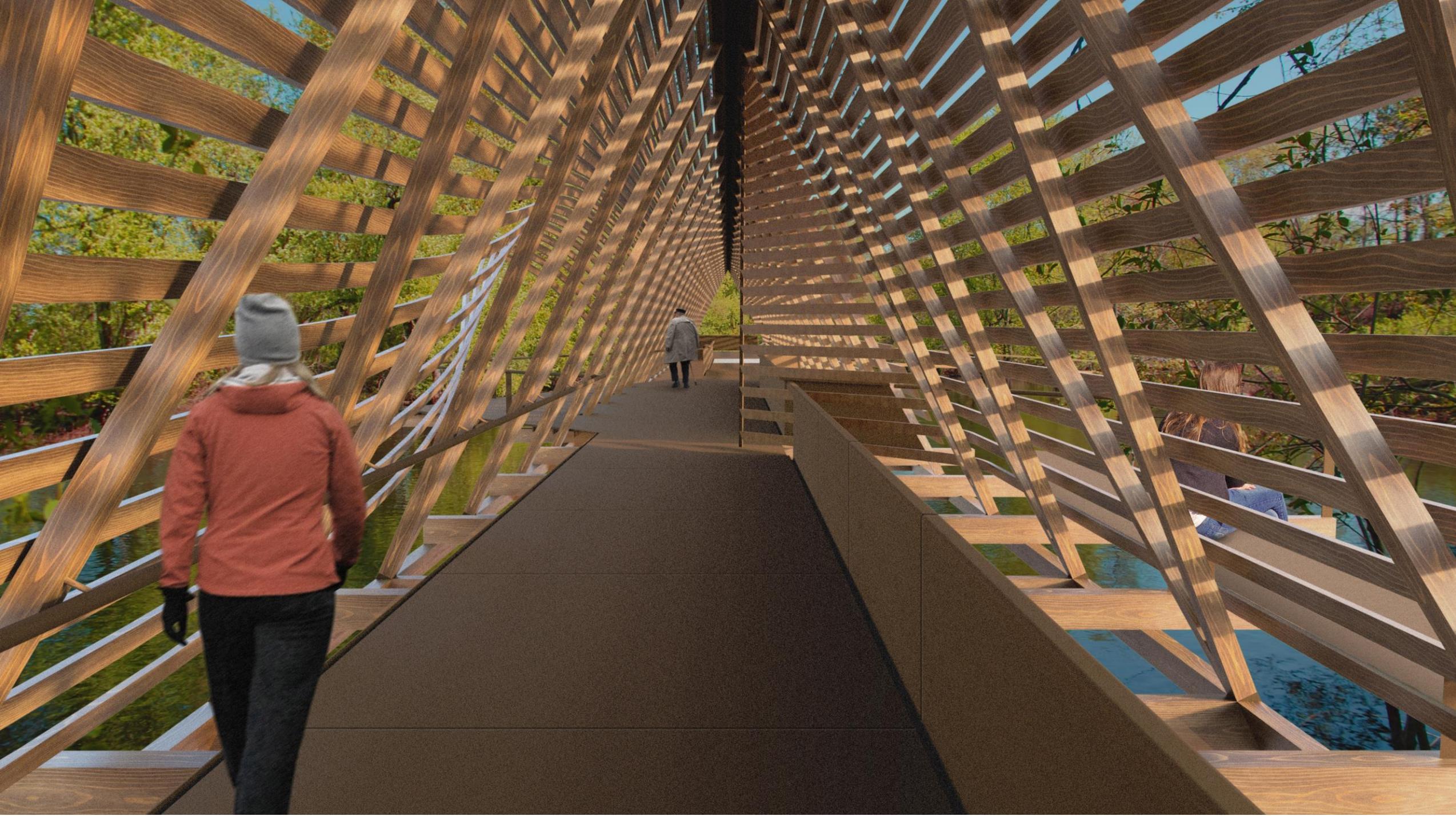
*View looking East across the Assabet River*

**LA DALLMAN**



*View looking East across the Assabet River*

**LA DALLMAN**







*Assabet River* ***Crossing***

LA DALLMAN

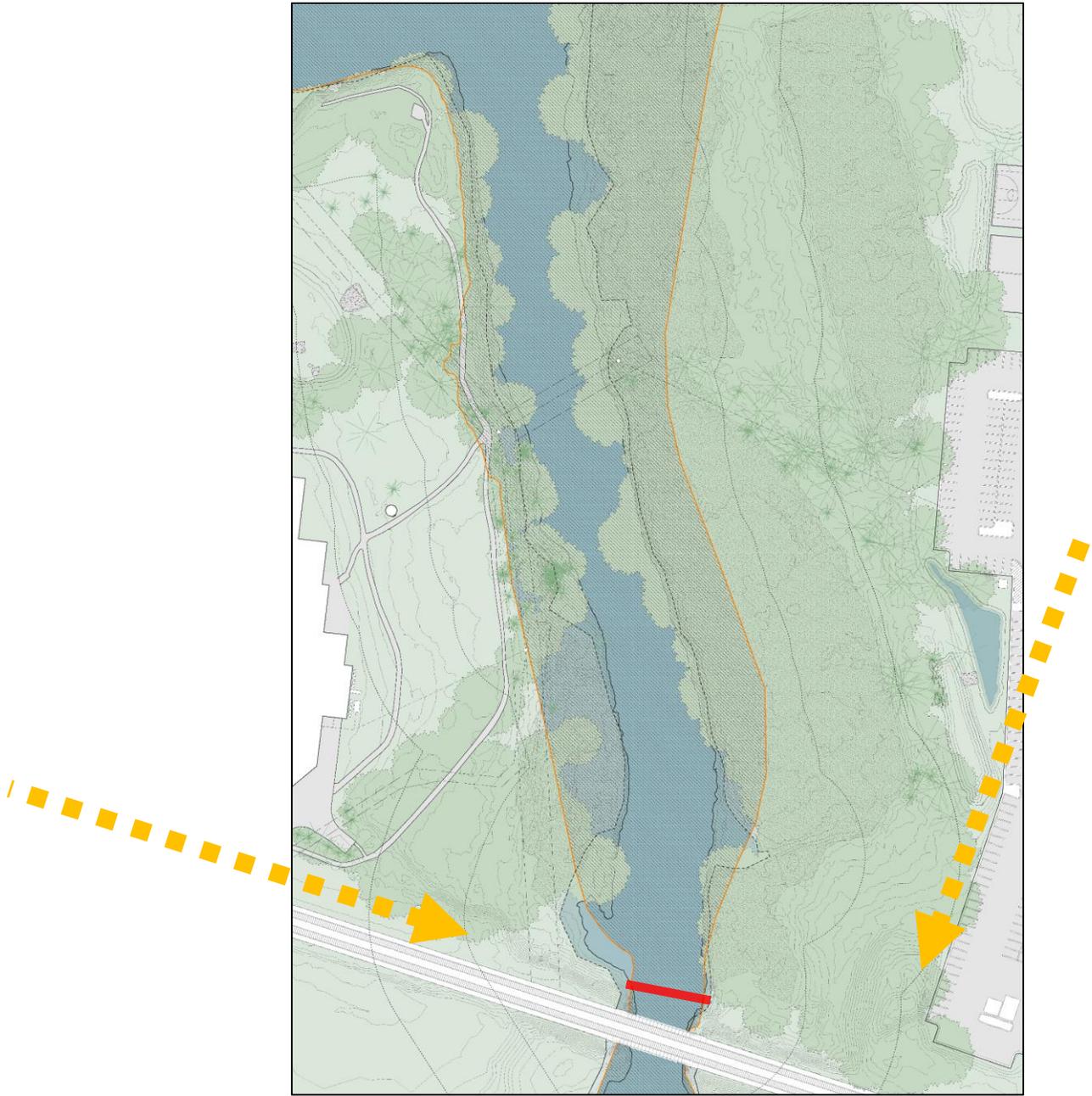


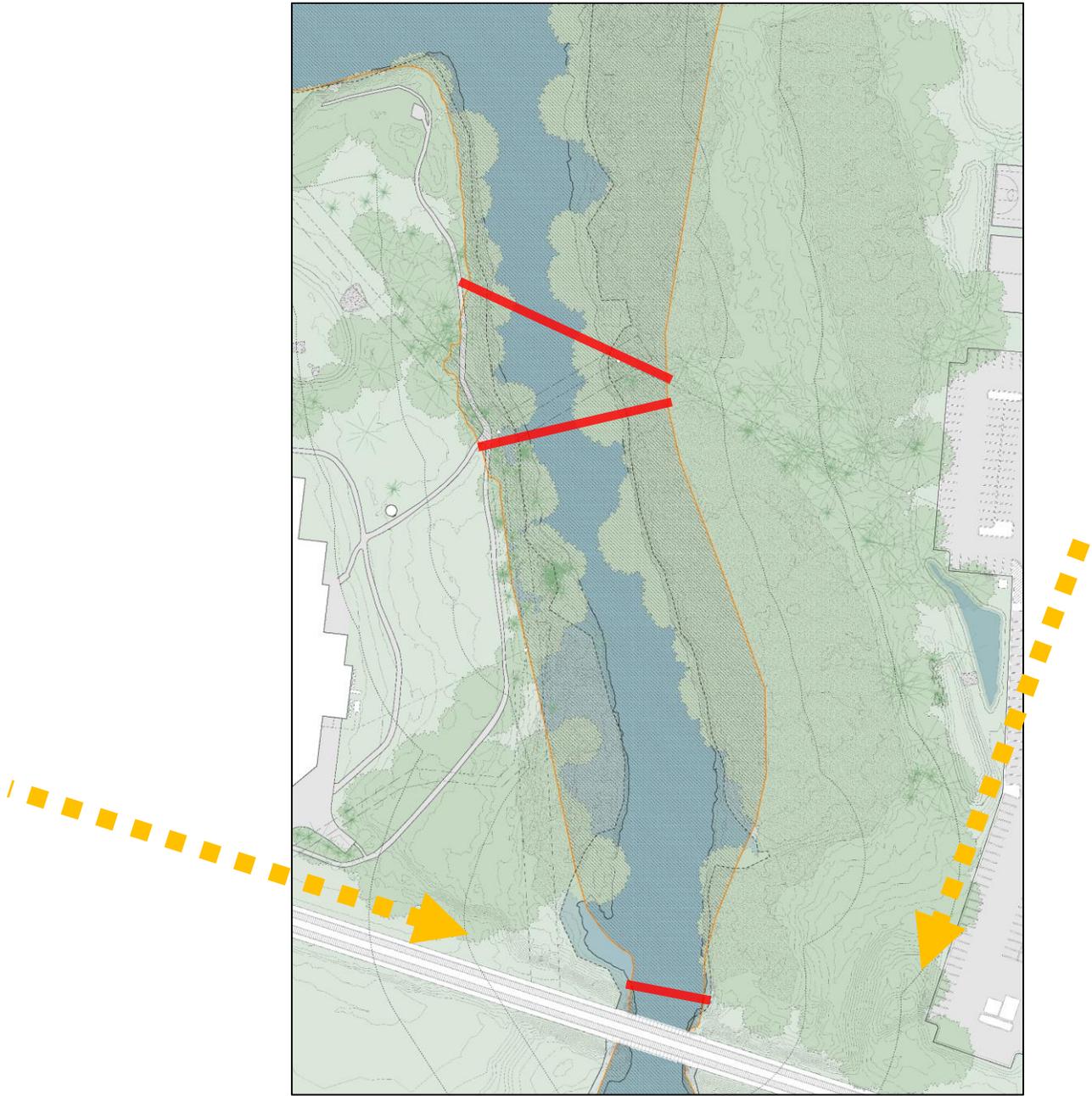
Twisted Valley Bridge, Elche Spain, Grupo Aranea

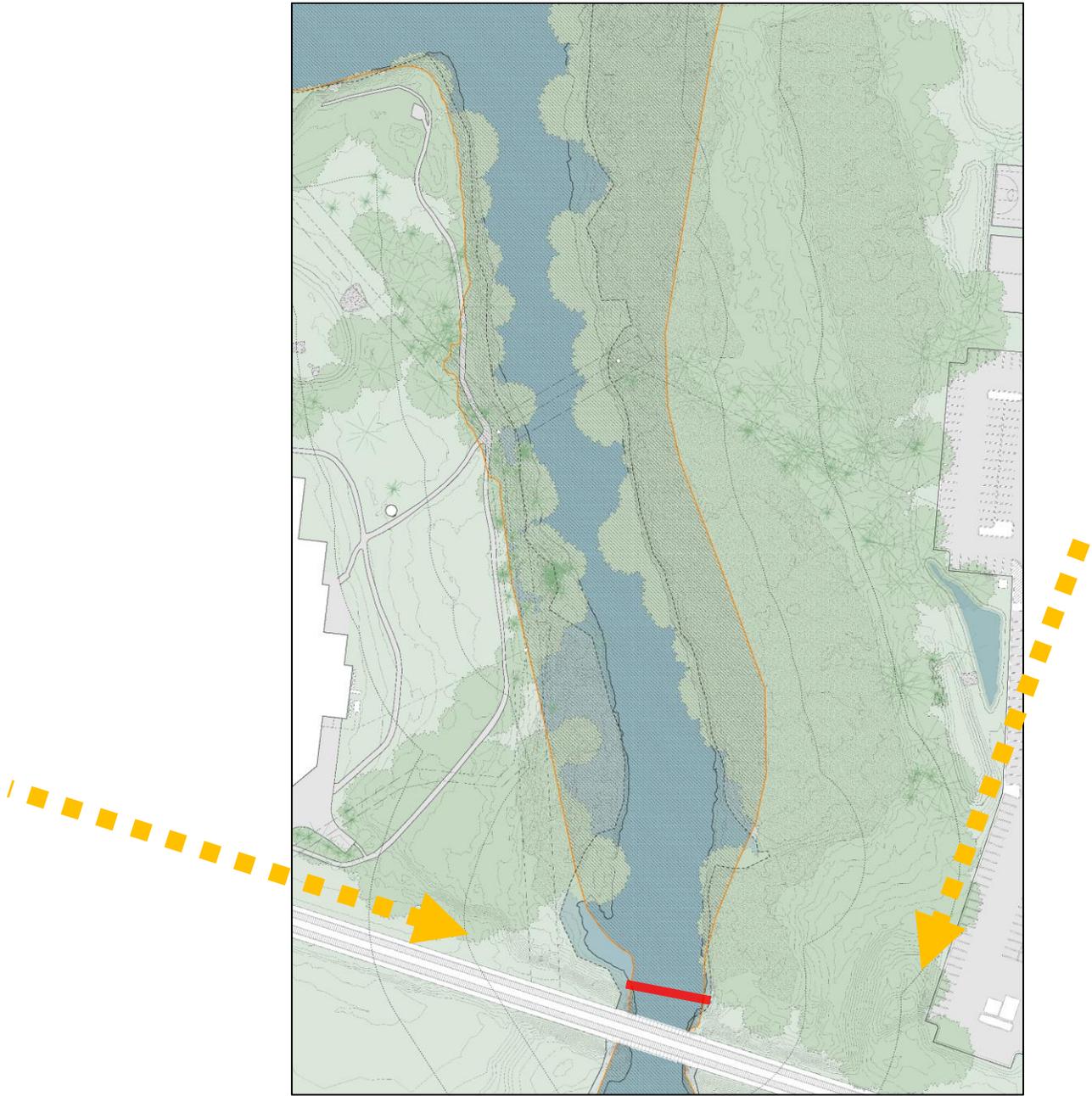


Mursteg Bridge, Austria, Conzett Bronzini

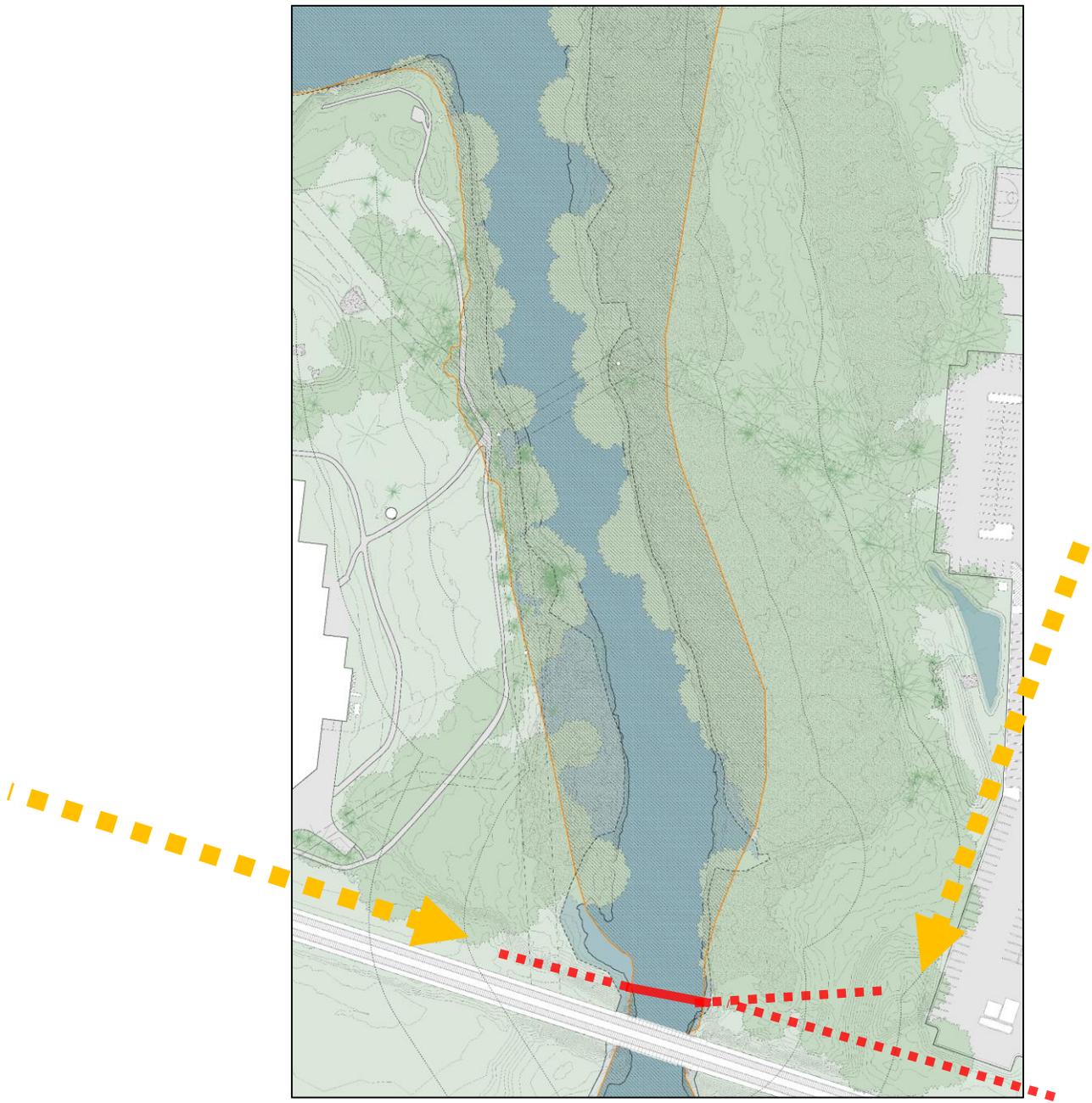


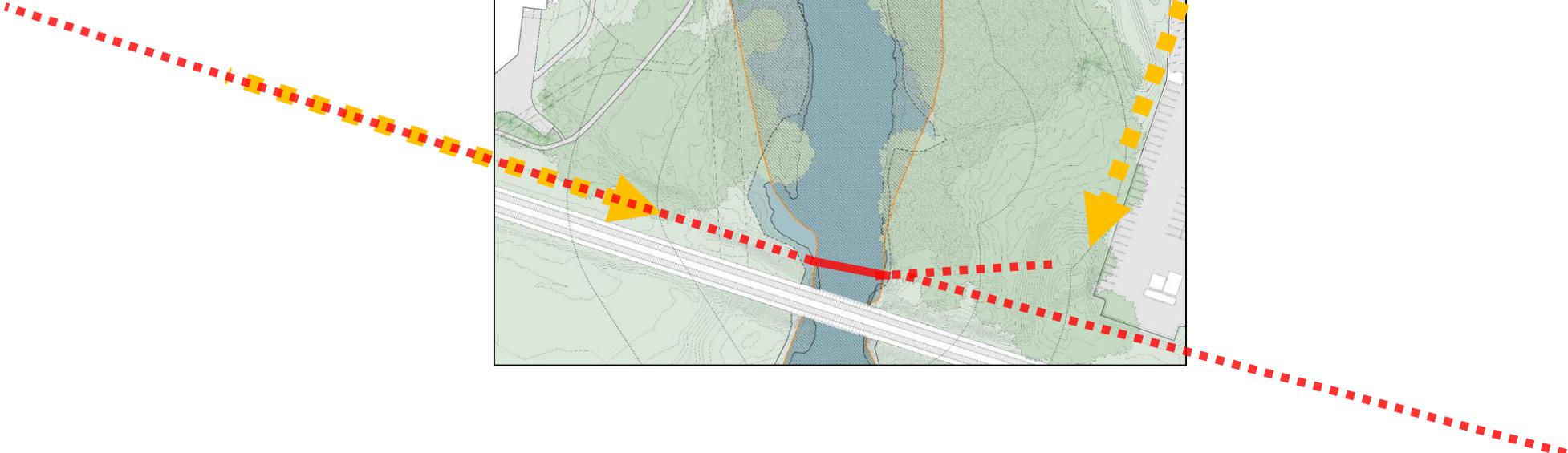
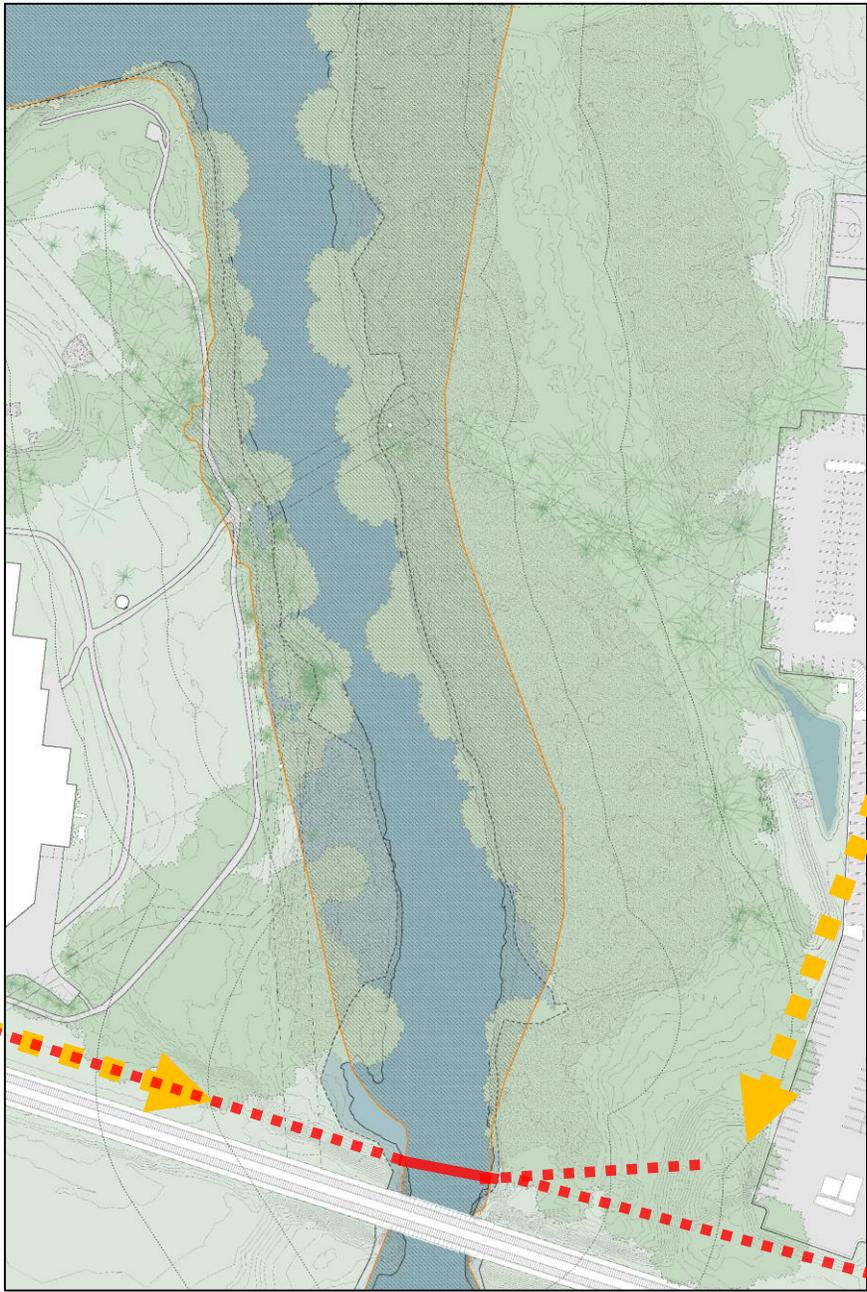


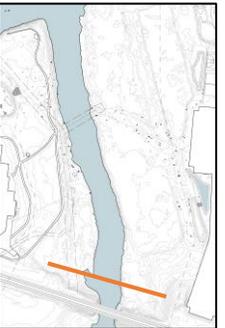
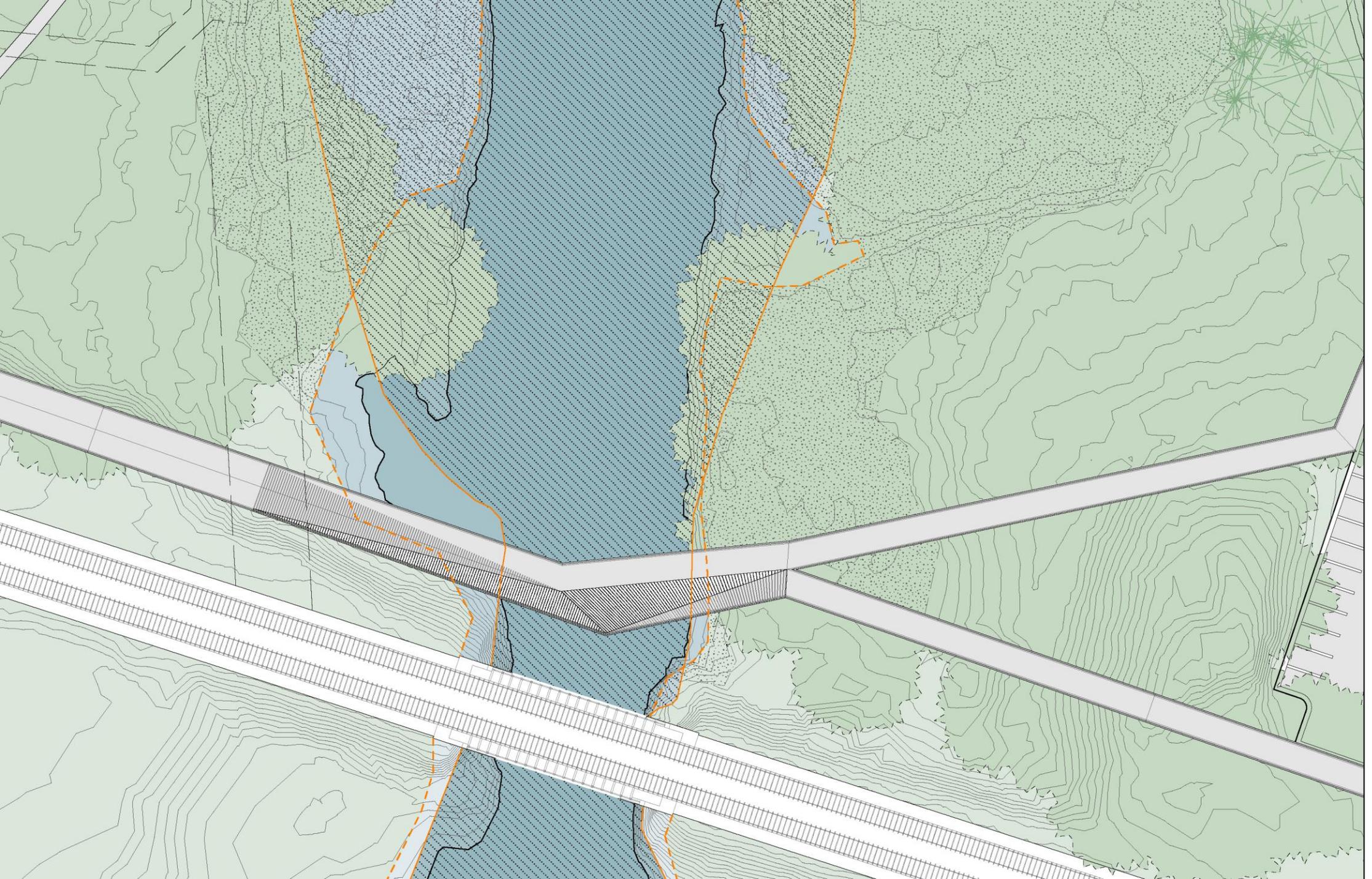


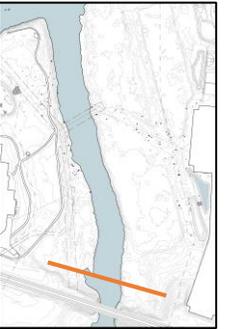
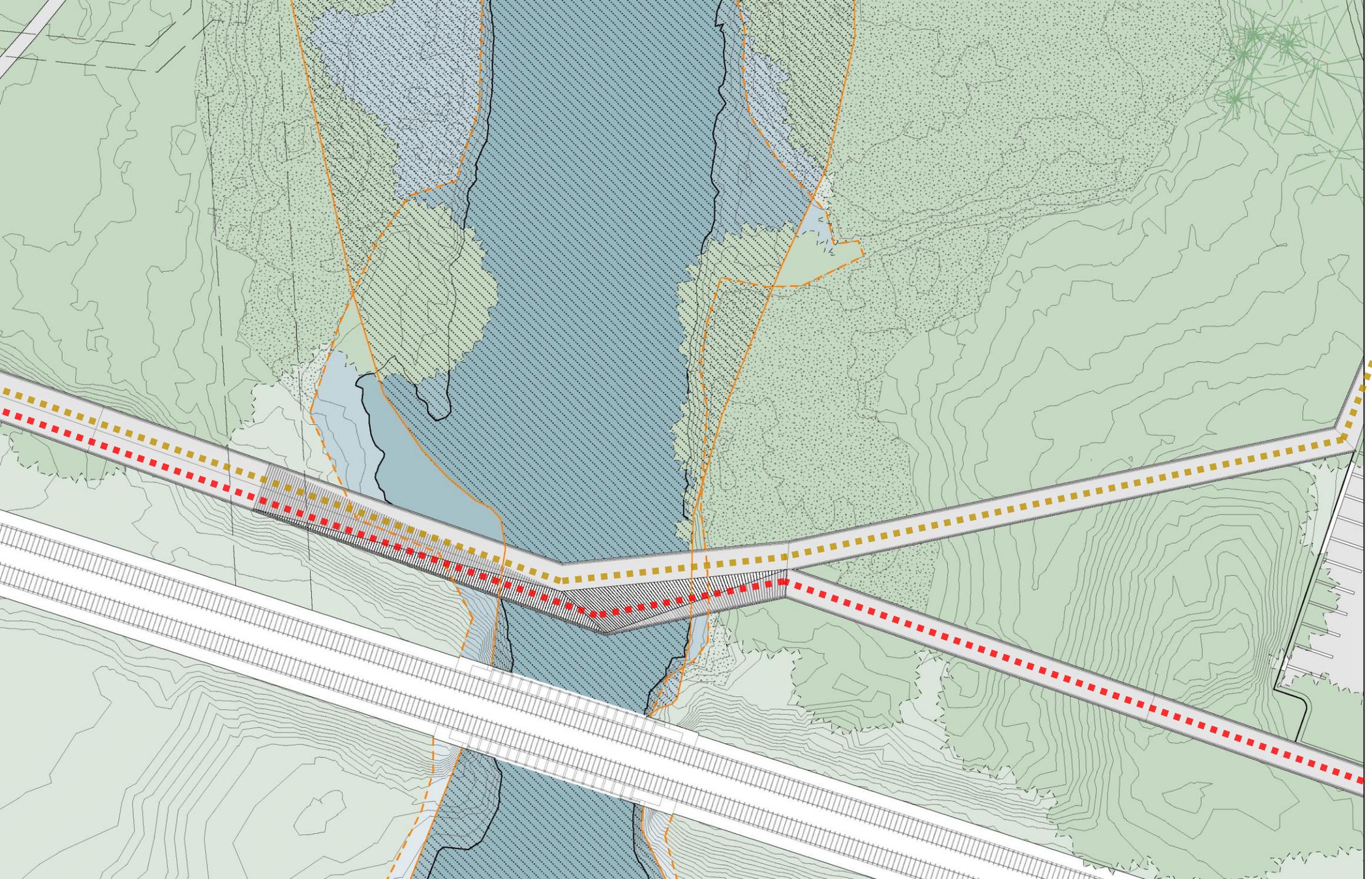


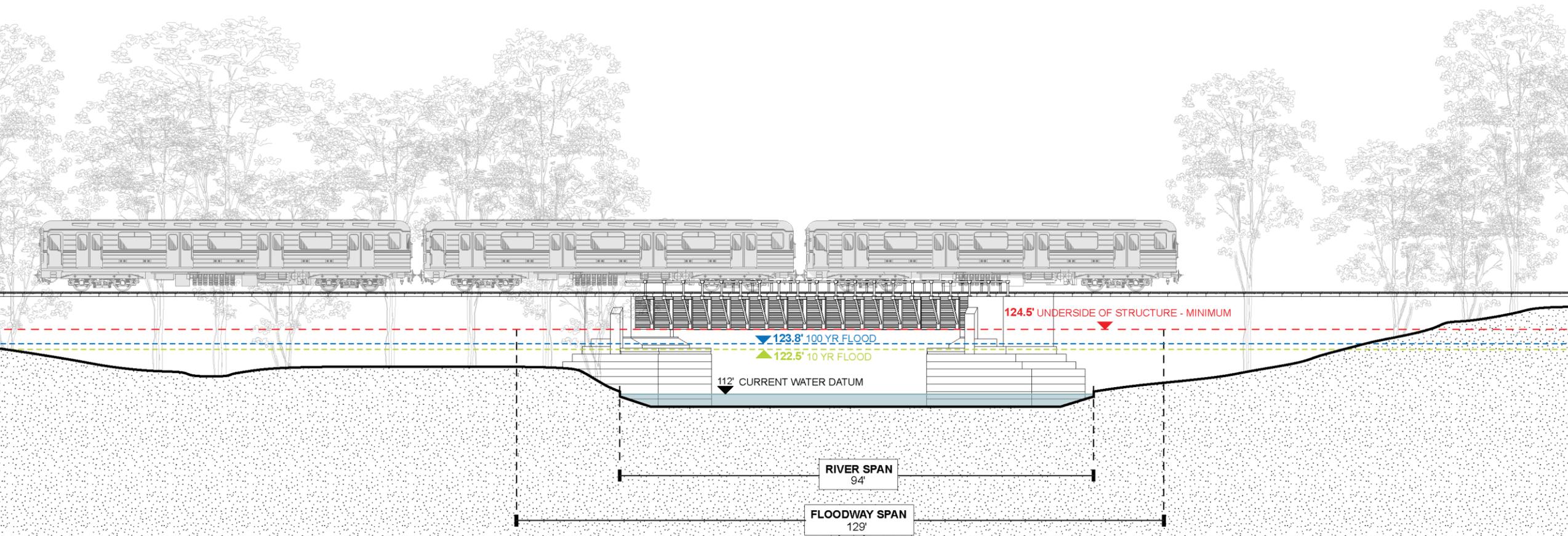




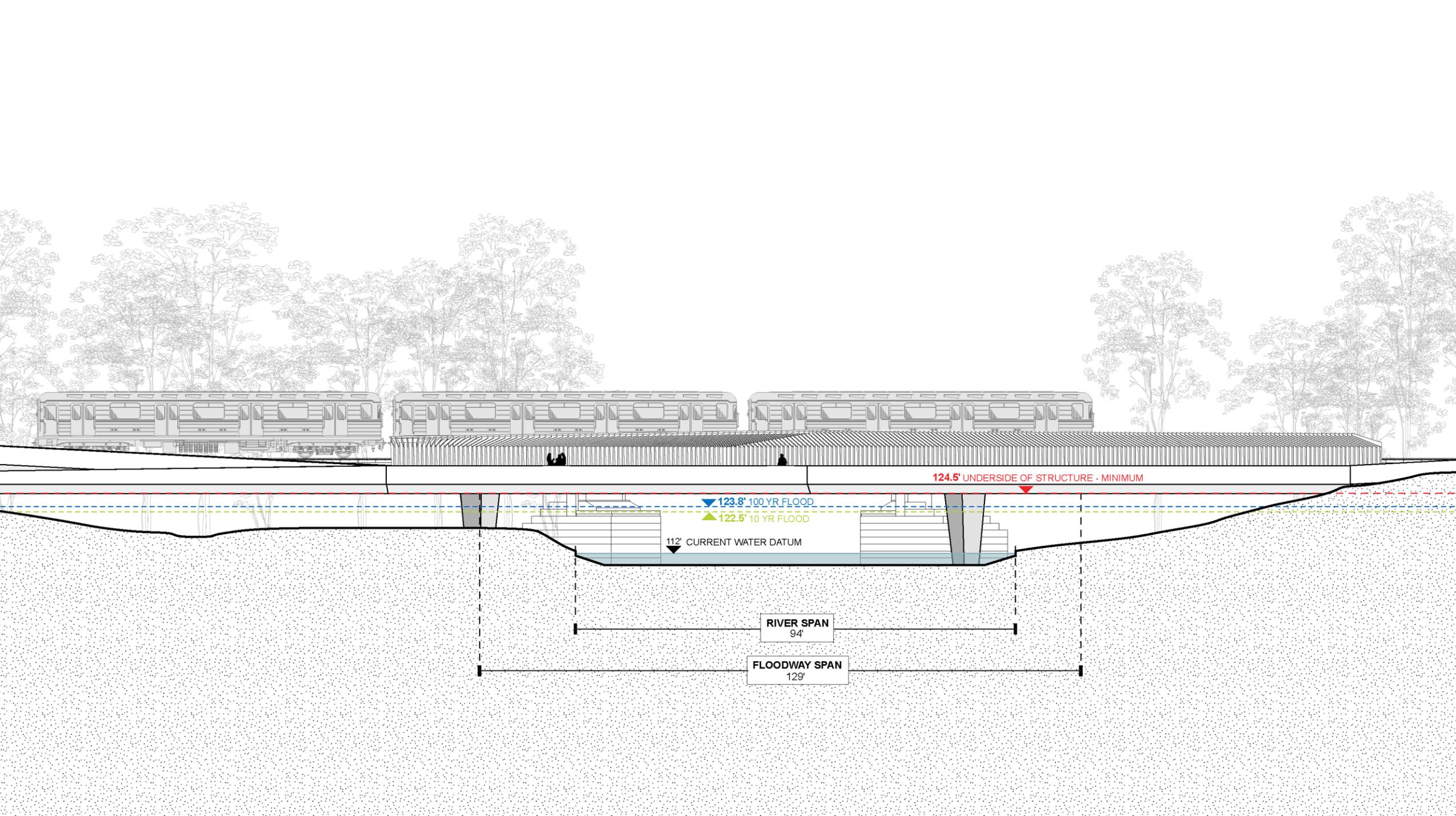








**SECTION C**  
**Existing Conditions**









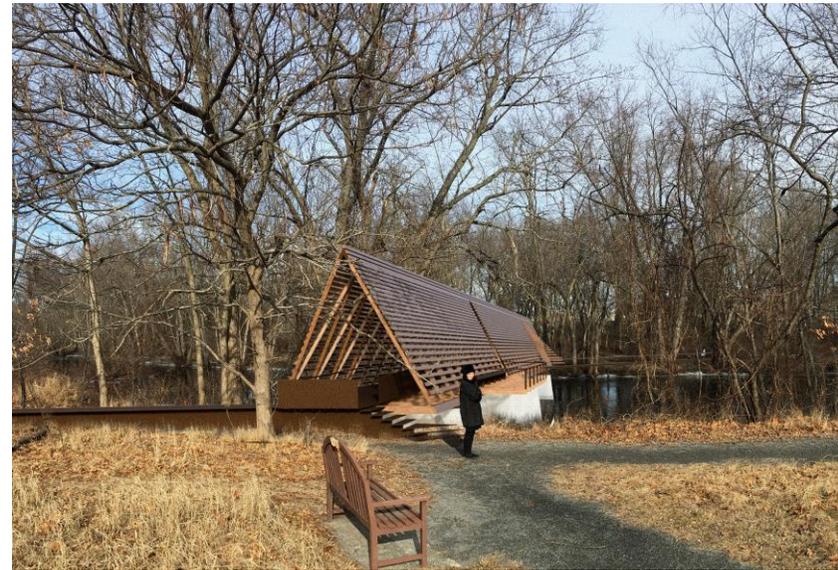
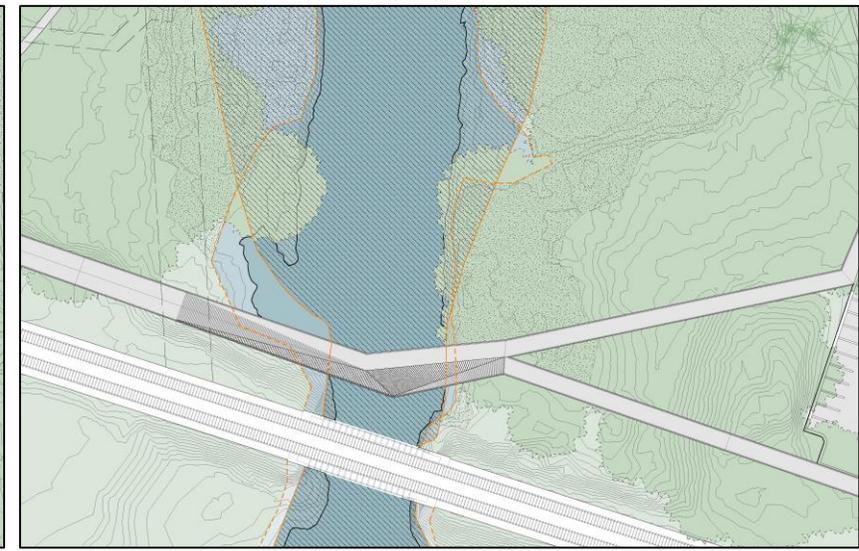








Q+A



Assabet River **Landing**

Assabet River **Trellis**

Assabet River **Crossing**

- 1) Preferences regarding the possible routes?**
- 2) Use and activities that could be incorporated?**
- 3) What materials would you find desirable?**
- 4) Pros and Cons of each bridge location/design?**
- 5) What qualities would make this bridge the most:**
  - Compelling?**
  - Useful?**
  - Safe?**



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**FIN**