

CHRISTINA RIVER BRIDGE PROJECT

May 2011

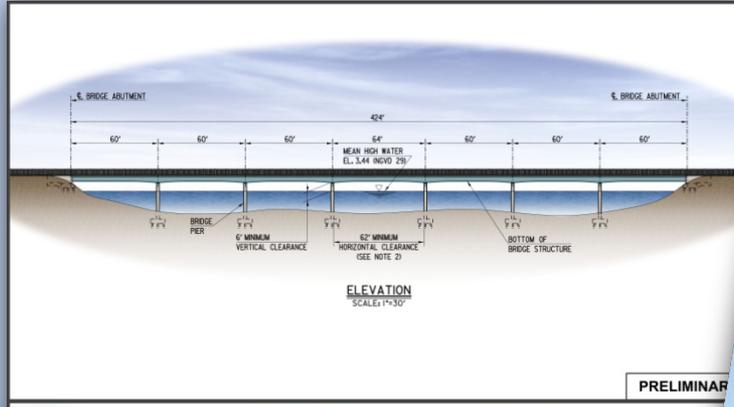


AGENDA

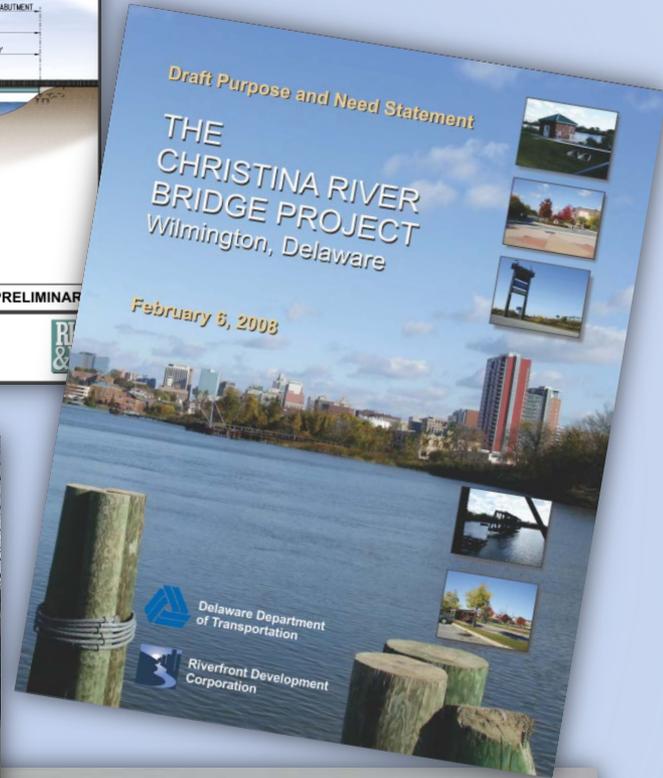


- ❖ **Project History**
- ❖ **Purpose and Need**
- ❖ **Livability Principles**
- ❖ **Existing Conditions/Resources**
- ❖ **Navigation/Bridge Clearance**
- ❖ **Study Alternatives**
- ❖ **Recommended Alternative**
- ❖ **Draft Schedule**

PROJECT HISTORY



**ELEVATION OF PROPOSED BRIDGE
OVER THE CHRISTINA RIVER
WILMINGTON, DELAWARE**



PURPOSE AND NEED

PURPOSE



- ❖ To ensure that infrastructure enables the Wilmington Riverfront area to continue to effectively redevelop, while accommodating growing transportation demands from increased development.

PURPOSE AND NEED

NEEDS FOR THE PROJECT



❖ Needs:

- Economic Development
- Livability
- System Linkage between both sides of the River
- Community Mobility and Multi-modal Access
- Congestion relief

❖ Funding Sources:

- US Congressional earmark
- 20% State participation



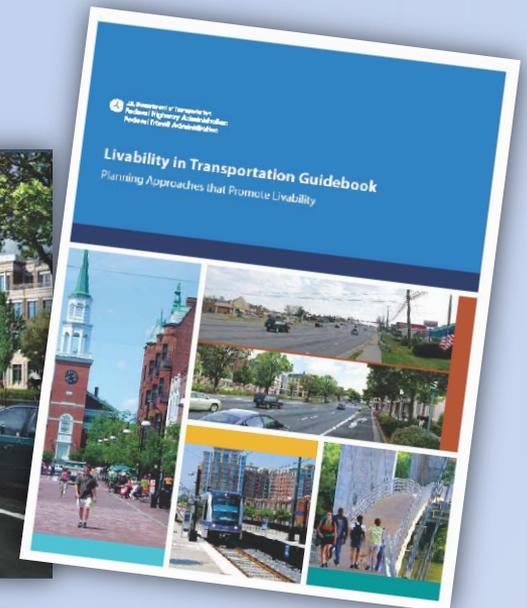


❖ FHWA Livability Initiative

▪ Livability

- » Is about tying the quality and location of transportation facilities to broader opportunities such as, access to good jobs, affordable housing, quality schools, and safe streets.
- » This includes addressing safety and capacity issues on all roads through better planning and design, maximizing and expanding new technologies.
- » For example, “being able to take your kids to school, go to work, see a doctor, drop by the grocery or post office, go out to dinner and a movie, and play with your kids at the park, all without having to get into your car.”

~ Secretary Ray LaHood,
US Department of Transportation



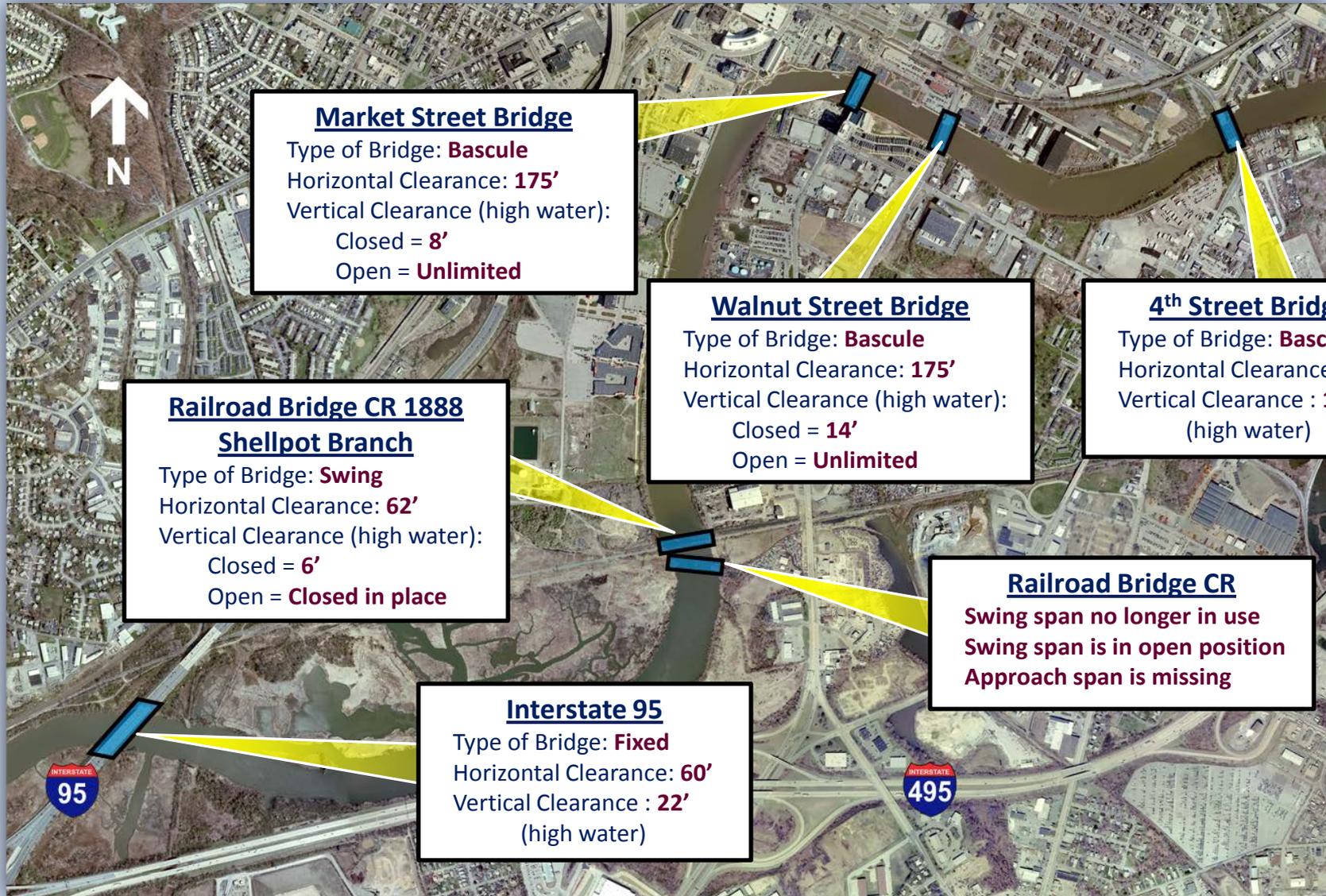
EXISTING CONDITIONS

ENVIRONMENTAL FEATURES



NAVIGATION/ BRIDGE CLEARANCE

DOCKS AND BRIDGES



Market Street Bridge

Type of Bridge: **Bascule**
Horizontal Clearance: **175'**
Vertical Clearance (high water):
Closed = **8'**
Open = **Unlimited**

Walnut Street Bridge

Type of Bridge: **Bascule**
Horizontal Clearance: **175'**
Vertical Clearance (high water):
Closed = **14'**
Open = **Unlimited**

4th Street Bridge

Type of Bridge: **Bascule**
Horizontal Clearance: **145'**
Vertical Clearance : **14'**
(high water)

Railroad Bridge CR 1888

Shellpot Branch

Type of Bridge: **Swing**
Horizontal Clearance: **62'**
Vertical Clearance (high water):
Closed = **6'**
Open = **Closed in place**

Railroad Bridge CR

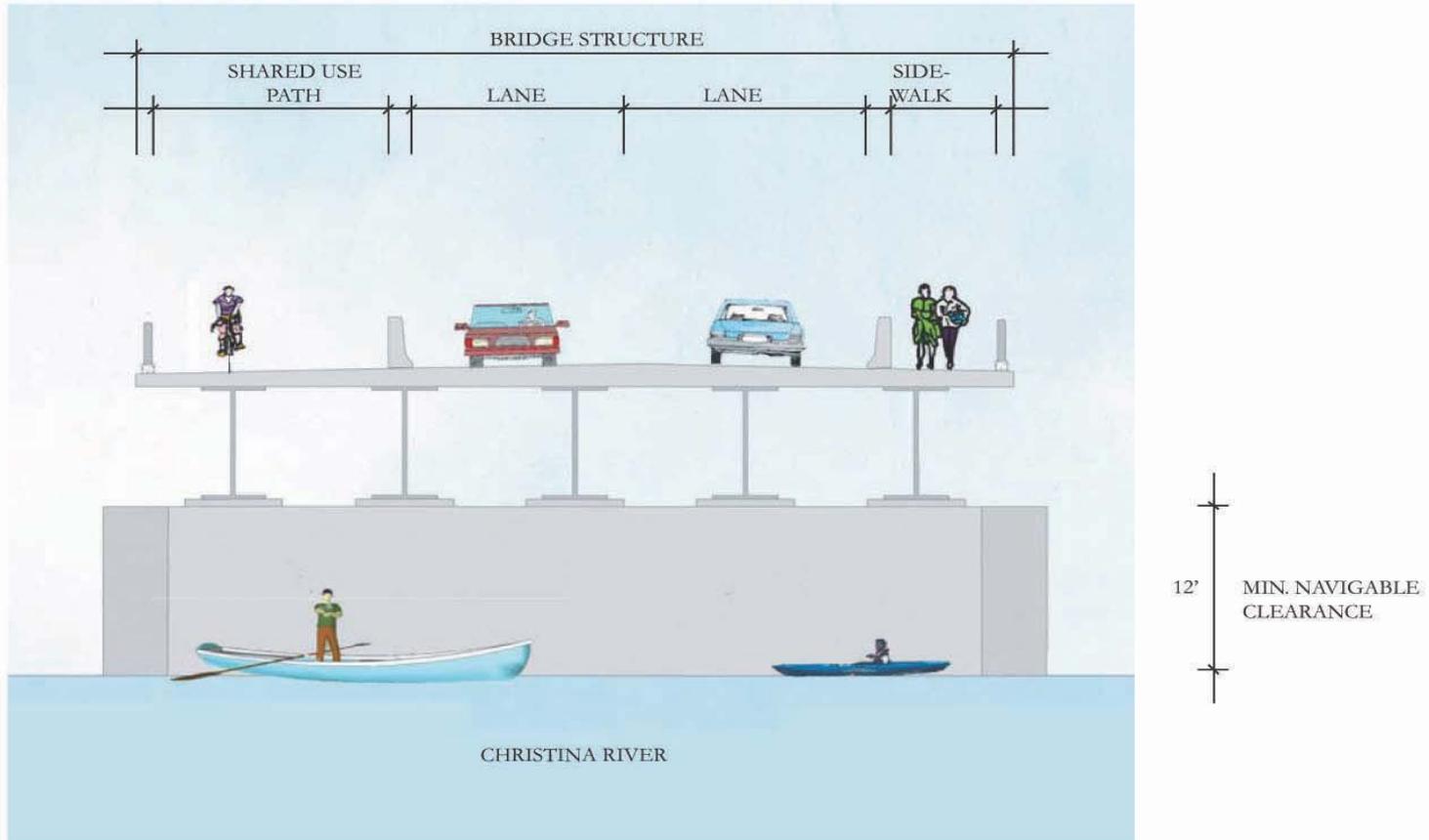
Swing span no longer in use
Swing span is in open position
Approach span is missing

Interstate 95

Type of Bridge: **Fixed**
Horizontal Clearance: **60'**
Vertical Clearance : **22'**
(high water)

STUDY ALTERNATIVES

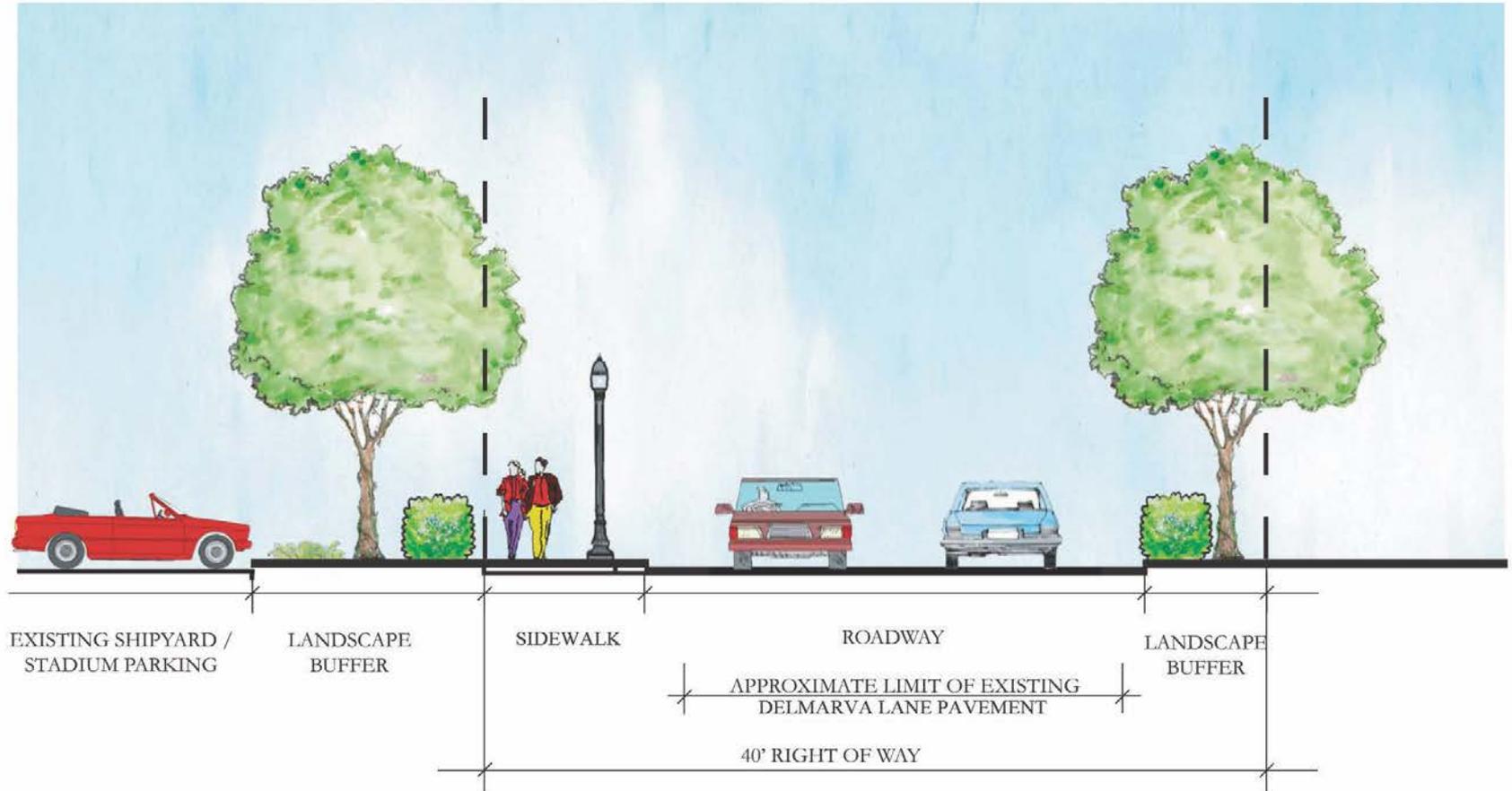
BRIDGE TYPICAL SECTION – LOOKING EAST



Bridge Section Looking East

STUDY ALTERNATIVES

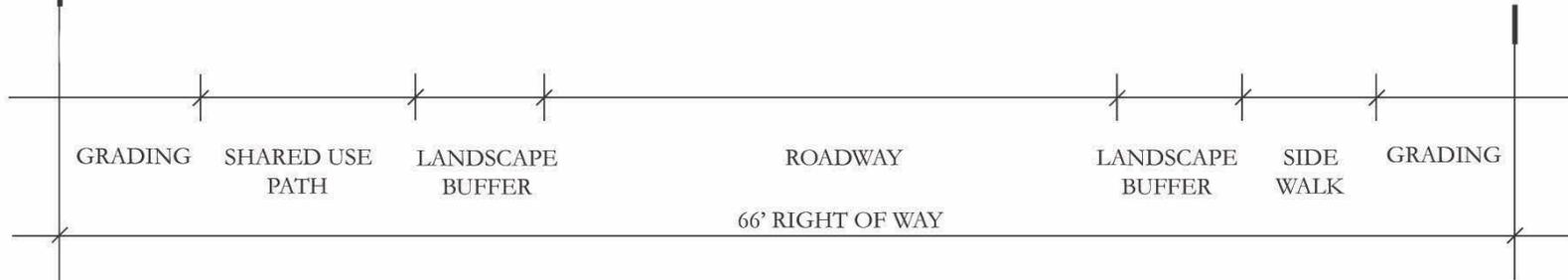
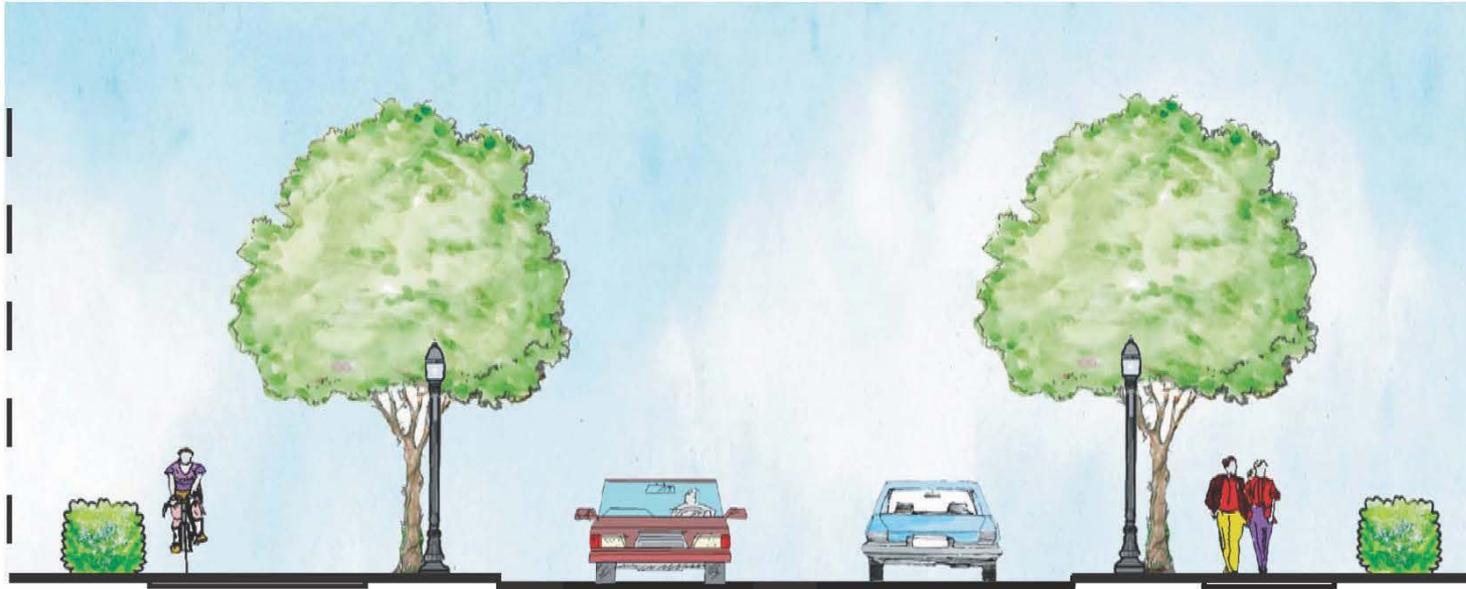
WEST BRIDGE APPROACH



Delmarva Lane, West Bridge Approach

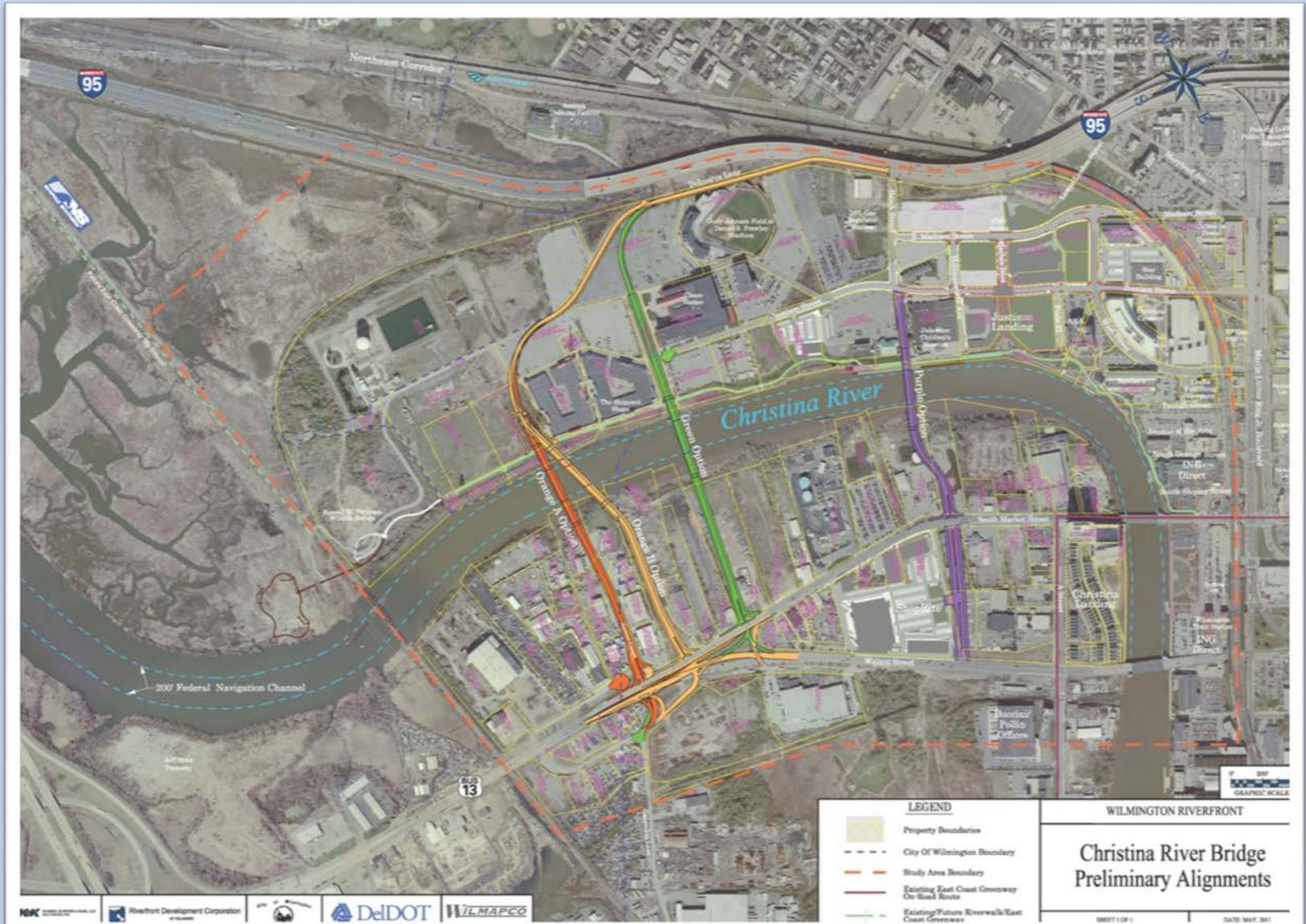
STUDY ALTERNATIVES

EAST BRIDGE APPROACH



STUDY ALTERNATIVES

OVERVIEW



STUDY ALTERNATIVES

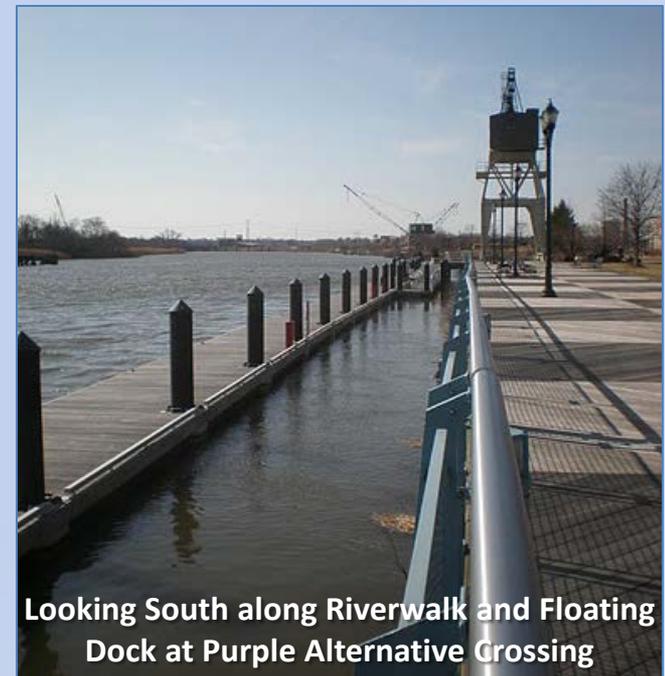
PURPLE ALTERNATIVE – EXISTING CONDITIONS



Looking east from Riverwalk at Beech Street



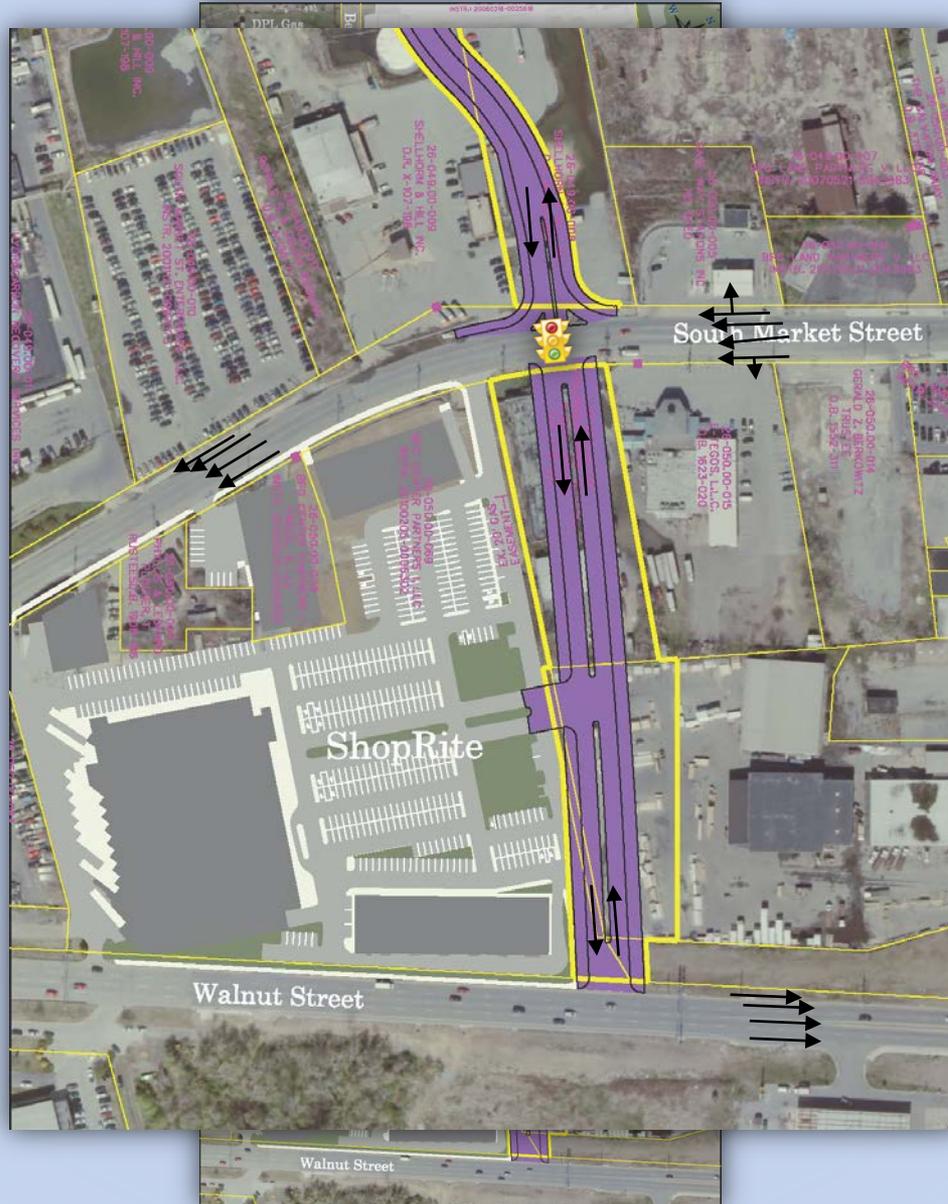
From Justison St at Beech St Intersection



Looking South along Riverwalk and Floating Dock at Purple Alternative Crossing

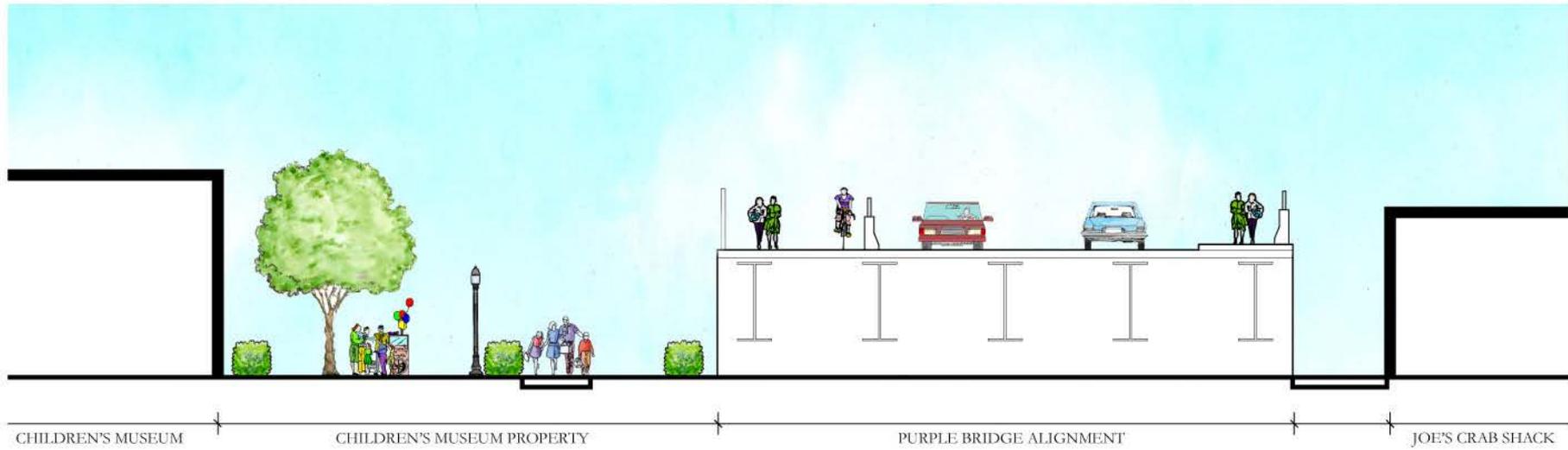
STUDY ALTERNATIVES

PURPLE ALTERNATIVE



STUDY ALTERNATIVES

PURPLE ALTERNATIVE

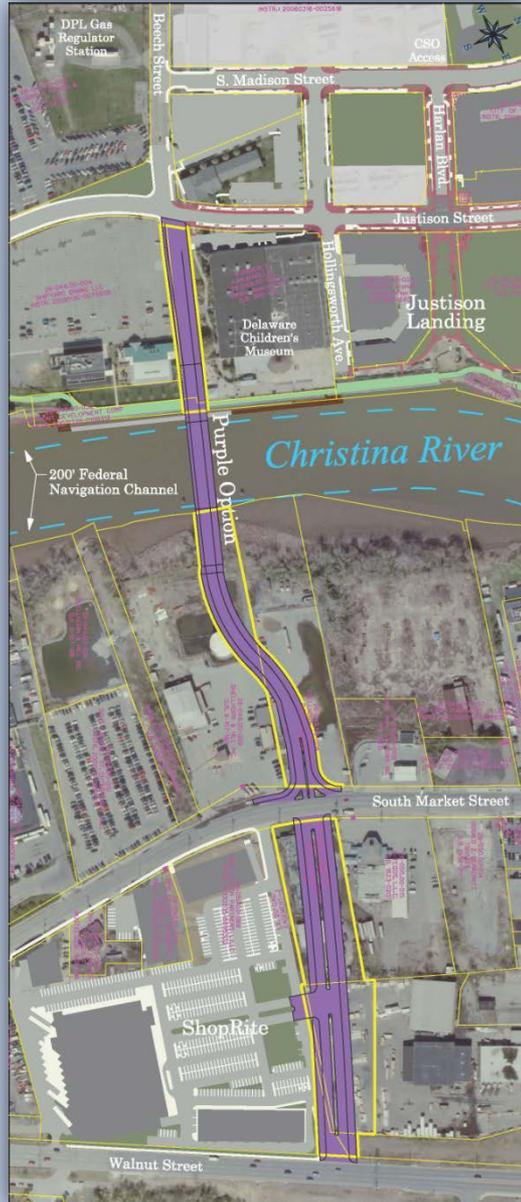


Purple Bridge Option - Section Looking East

Scale: 1/16" = 1'-0"

STUDY ALTERNATIVES

PURPLE ALTERNATIVE



- Shortest route between existing development
- Preserves Riverwalk along water
- Expands urban street grid
- Perpendicular crossing

- Promotes livability- connects communities
- Partially improves regional circulation

- Minimizes redevelopment opportunities
- Children's Museum displaced
- 1 Market Street business displaced
- Impacts restaurant parking
- Impacts floating docks (2)
- Proximity to Market & Walnut Street Bridges – minimizes MLK traffic diversion
- Operation of Justison/ Beech intersection will deteriorate
- Event traffic restricted to current operations
- Limits Kalmar Nyckel operation

STUDY ALTERNATIVES

GREEN ALTERNATIVE – EXISTING CONDITIONS



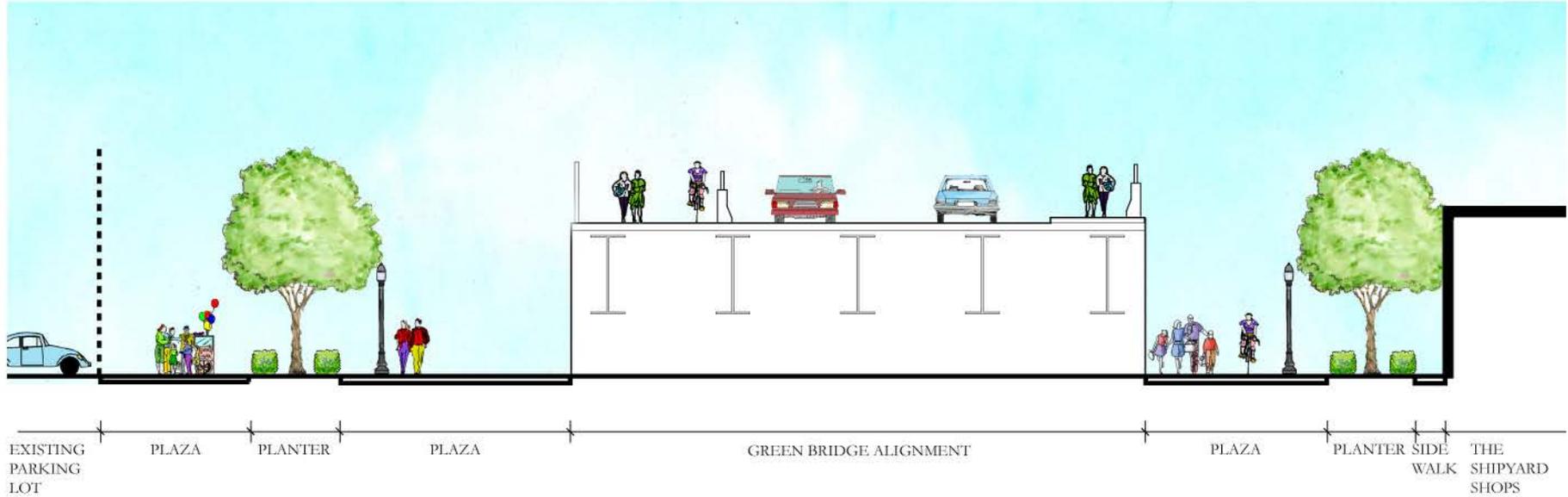
Looking east from Justison St
at Green Alternative Crossing



Looking east from Green Alternative Crossing

STUDY ALTERNATIVES

GREEN ALTERNATIVE



Green Bridge Option - Section Looking East

Scale: 1/16" = 1'-0"

STUDY ALTERNATIVES

GREEN ALTERNATIVE



- Preserves Riverwalk along water
- Improves regional circulation
- Perpendicular crossing
- No total parcel takes

- Promotes livability- connects communities
- Improves traffic operations during events

- Minimizes redevelopment opportunities
- Impacts dock
- Removes intersection at Justison Street
- Impacts stadium parking
- Greatest property impacts
- Compromises existing urban grid
- 2 Market Street businesses displaced

STUDY ALTERNATIVES

ORANGE A ALTERNATIVE – EXISTING CONDITIONS



Looking east from Orange A Alternative Crossing

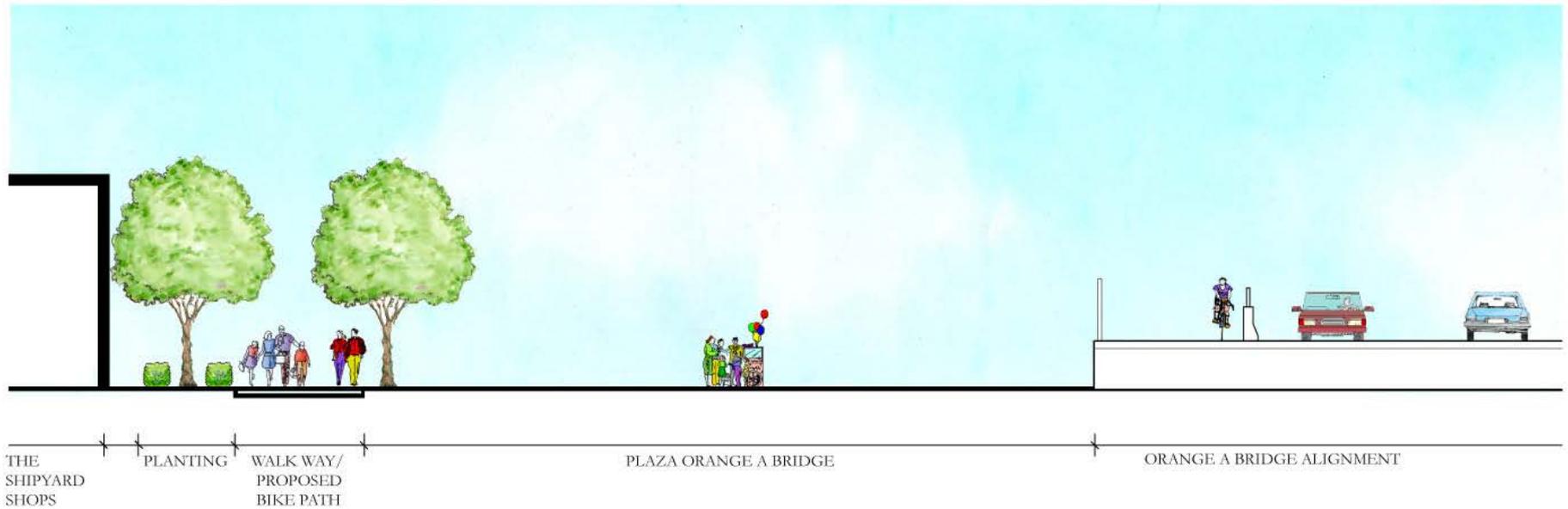
STUDY ALTERNATIVES

ORANGE A ALTERNATIVE – EAST BANK



STUDY ALTERNATIVES

ORANGE A ALTERNATIVE



Orange A Option - Westbank Section Looking East

Scale: 1/16" = 1'-0"

STUDY ALTERNATIVES

ORANGE A ALTERNATIVE



- Improves regional circulation
- Perpendicular crossing
- No dock impacts
- Maximizes redevelopment opportunities
- Improves event traffic congestion
- Expands urban grid
- Direct connection to Greenway

- Promotes livability- connects communities

- Minor impacts to stadium parking
- Impacts to Shipyard Shops parking
- 3 Market Street businesses displaced
- 3 total parcel takes
- 6 business entrances impacted
- Least desirable access management

STUDY ALTERNATIVES

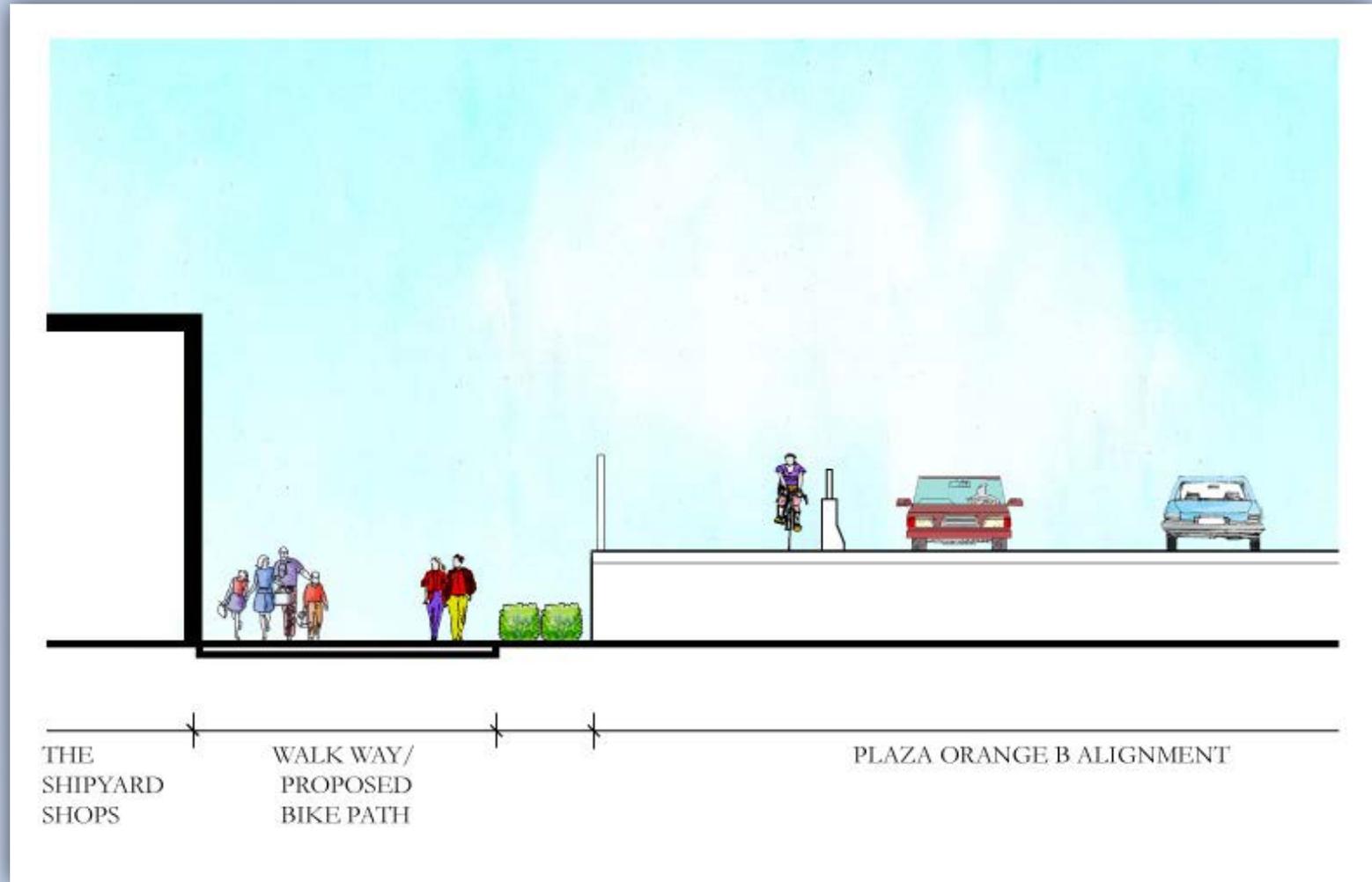
ORANGE B ALTERNATIVE – EXISTING CONDITIONS



Looking east from Orange B Alternative Crossing

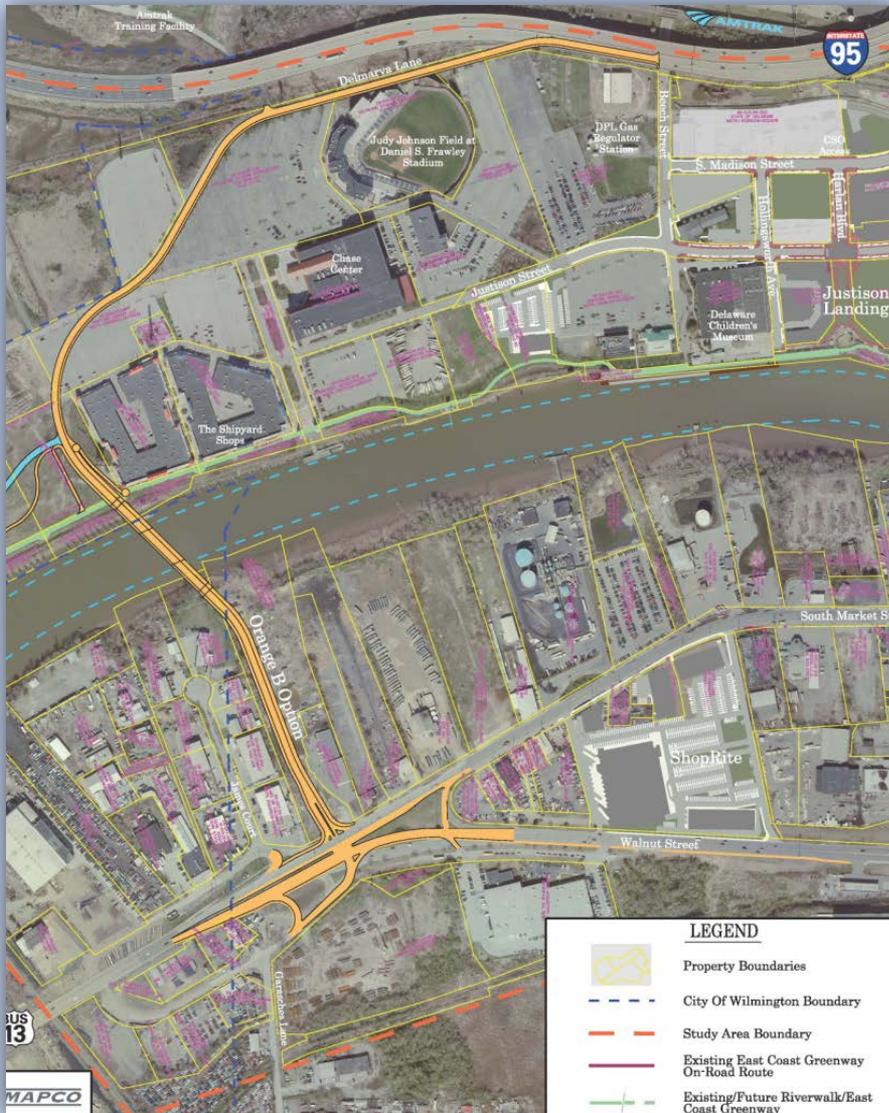
STUDY ALTERNATIVES

ORANGE B ALTERNATIVE – RECOMMENDED



STUDY ALTERNATIVES

ORANGE B ALTERNATIVE - RECOMMENDED



- Takes advantage of State-owned right-of-way
- Improves regional circulation
- No docks impacts
- Maximizes redevelopment opportunities
- Improves event traffic congestion
- Expands urban grid
- Direct connection to Greenway
- No total takes or business displacements

- Promotes livability- connects communities

- Minor impacts to stadium parking
- Impacts to Shipyard Shops parking
- Not a perpendicular crossing – longer span
- Greater impacts to Waters of US and wetlands due to skewed crossing

SCHEDULE



❖ Public Meeting to present Recommended Alternative	May 2011
❖ Draft Environmental Assessment (EA) presented at Agency Meeting	May 2011
❖ Final EA	August 2011
❖ Finding of No Significant Impacts (FONSI)	October 2011
❖ Final Design	October 2011- May 2013
❖ Approximate Bridge Construction Start	Fall 2013
❖ Approximate Bridge Opening	Fall 2015