

I-295/I-76/Route 42 Interchange Reconstruction

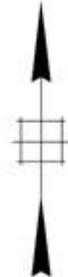
PRESENTATION OUTLINE

- *Alternatives Review*
- *Agency Comments*
- *Enhancement Opportunities*

May 13, 2003



ALTERNATIVE A



ALTERNATIVE A

- Shifts I-295 to the west side of Rt.424-76 toward Bellmawr Park
- Northbound and Southbound I-295 are side-by-side.
- I-295 3rd Level Viaduct over Ramp C and Browning Road
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A — Ramp Designation

Cyan — Roadway

Magenta — Bridge

Green — Ramps of Missing Moves.

PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE A

ALTERNATIVE A1



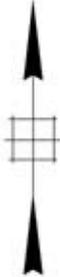
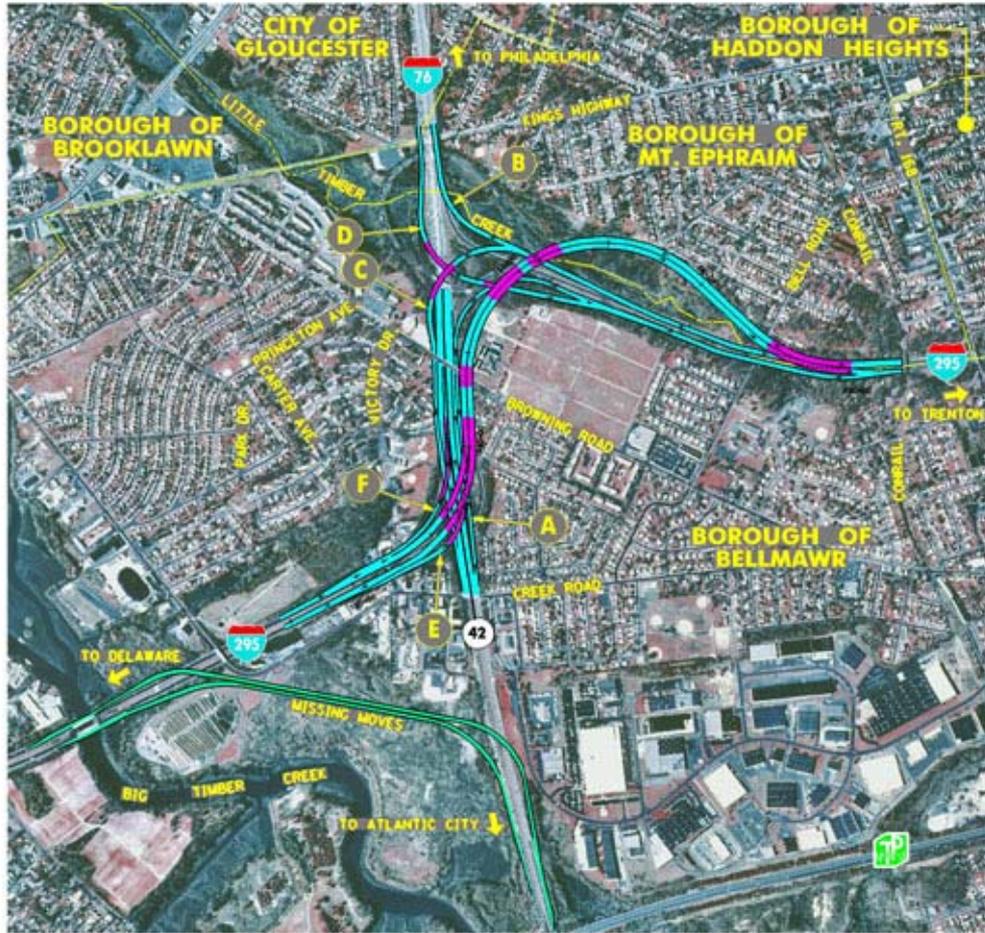
ALTERNATIVE A1 (Revised Ramp C)

- Shifts I-295 to the west side of Rt.421-76 toward Bellmawr Park
- Northbound and Southbound I-295 are side-by-side.
- I-295 3rd Level Viaduct over Ramp C and Browning Road
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

-  - Ramp Designation
-  - Roadway
-  - Bridge
-  - Ramps of Missing Moves.

**PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE A1**

ALTERNATIVE B



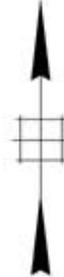
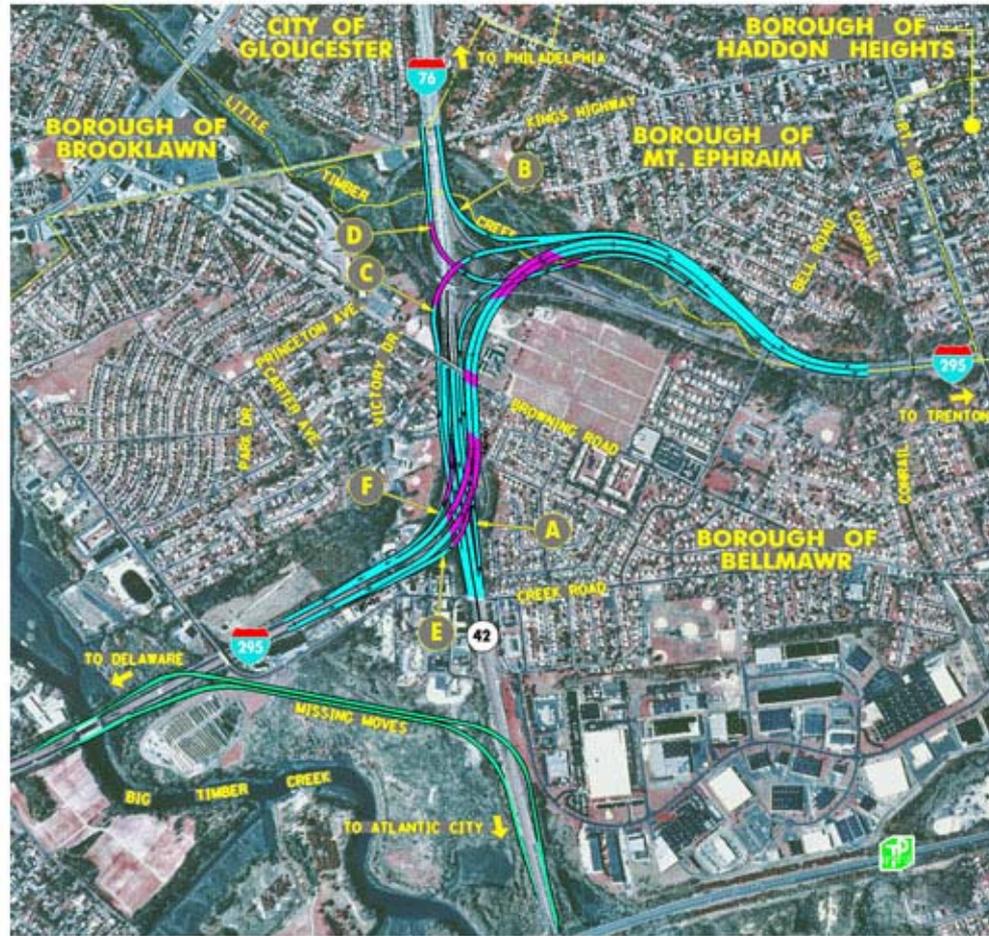
ALTERNATIVE B

- Shifts I-295 to the east side of Rt.42/I-76.
- Shifts I-295 North toward Mt. Ephraim
- Northbound and Southbound I-295 are side-by-side.
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

- Ramp Designation
- Roadway
- Bridge
- Ramps of Missing Moves.

PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE B

ALTERNATIVE B2



ALTERNATIVE B2

- Shifts I-295 to the east side of Rt.42-I-76.
- Shifts I-295 North toward Mt. Ephraim
- Northbound and Southbound I-295 are side-by-side.
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A — Ramp Designation

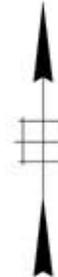
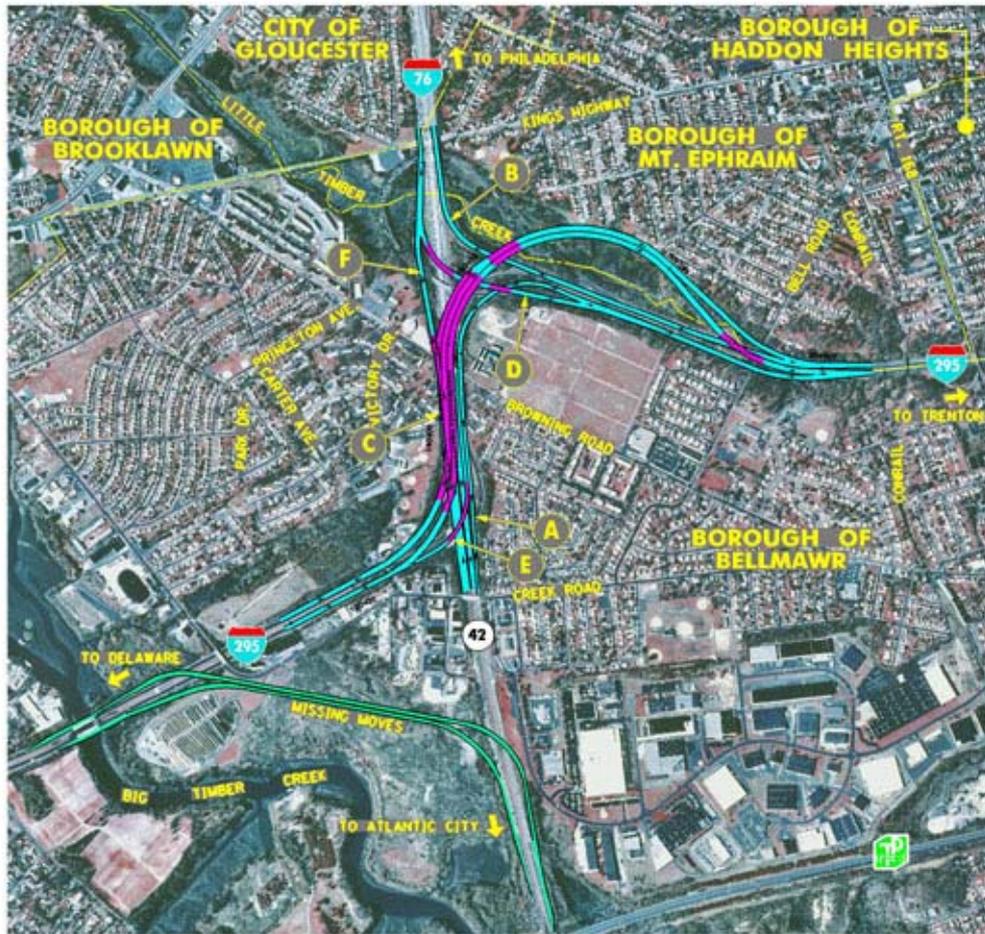
 — Roadway

 — Bridge

 — Ramps of Missing Moves.

**PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE B2**

ALTERNATIVE C



ALTERNATIVE C

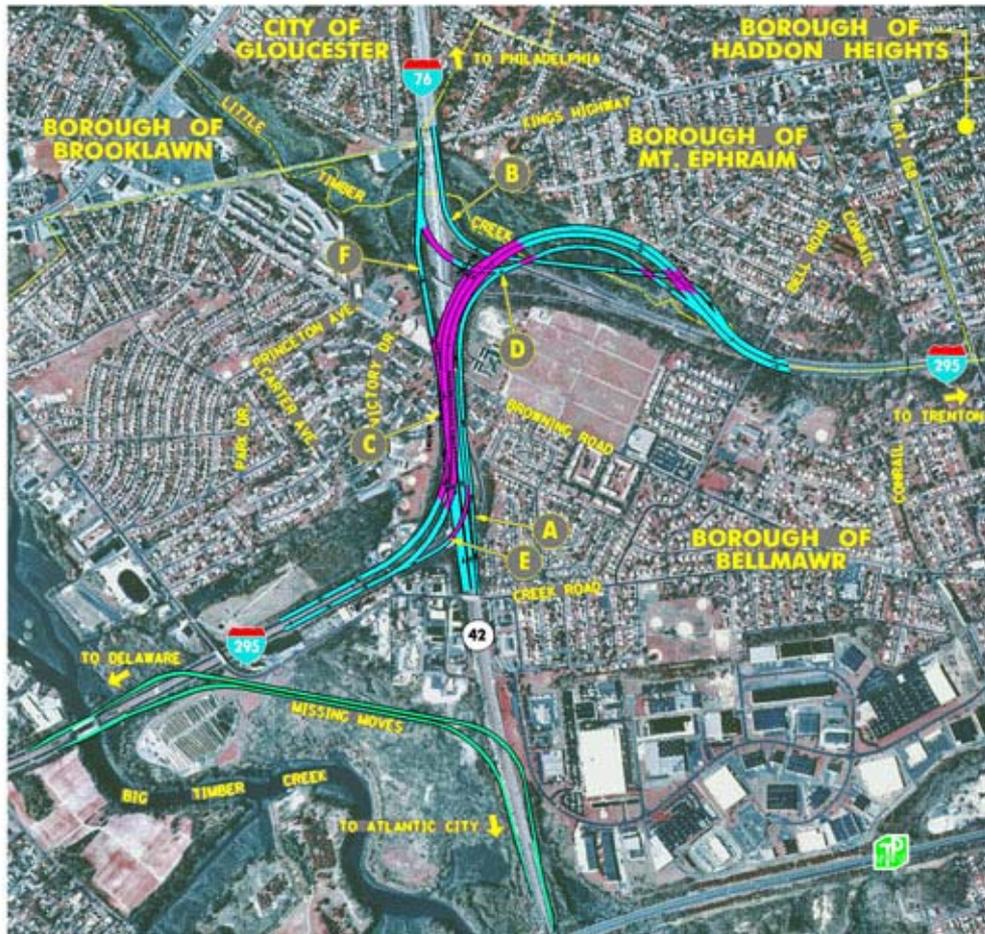
- Northbound and Southbound I-295 are side-by-side.
- I-295 placed above Rt.421-76.
- I-295 3rd Level Viaduct over Ramp C and Browning Road
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- I-295 shifts north toward Mt. Ephraim
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A — Ramp Designation

- Roadway
- Bridge
- Ramps of Missing Moves

PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE C

ALTERNATIVE C2



ALTERNATIVE C2

- Northbound and Southbound I-295 are side-by-side.
- I-295 placed above Rt.42-76
- I-295 3rd Level Viaduct over Ramp C and Browning Road
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- I-295 shifts north toward Mt. Ephraim
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A — Ramp Designation

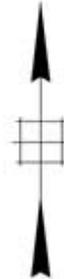
— Roadway

— Bridge

— Ramps of Missing Moves.

PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE C2

ALTERNATIVE D



ALTERNATIVE D

- Northbound and Southbound I-295 are side-by-side
- Shifts I-295 over parts of both the ballpark and the cemetery
- I-295 crosses Rt.42/I-76 on a skew
- I-295 3rd Level Viaduct over Ramp C and Browning Road
- Ramp D 3rd Level Viaduct over I-76/Rt. 42 and Ramp C
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A ← Ramp Designation

-  - Roadway
-  - Bridge
-  - Ramps of Missing Moves.

**PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE D**

ALTERNATIVE E



ALTERNATIVE E

- Northbound and southbound I-295 are side-by-side.
- I-295 3rd Level Viaduct over I-76 Rt. 42 and Ramp E
- I-295 follows the most direct path
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 65 mph
- Ramp Speed Limits: 40 mph

A — Ramp Designation

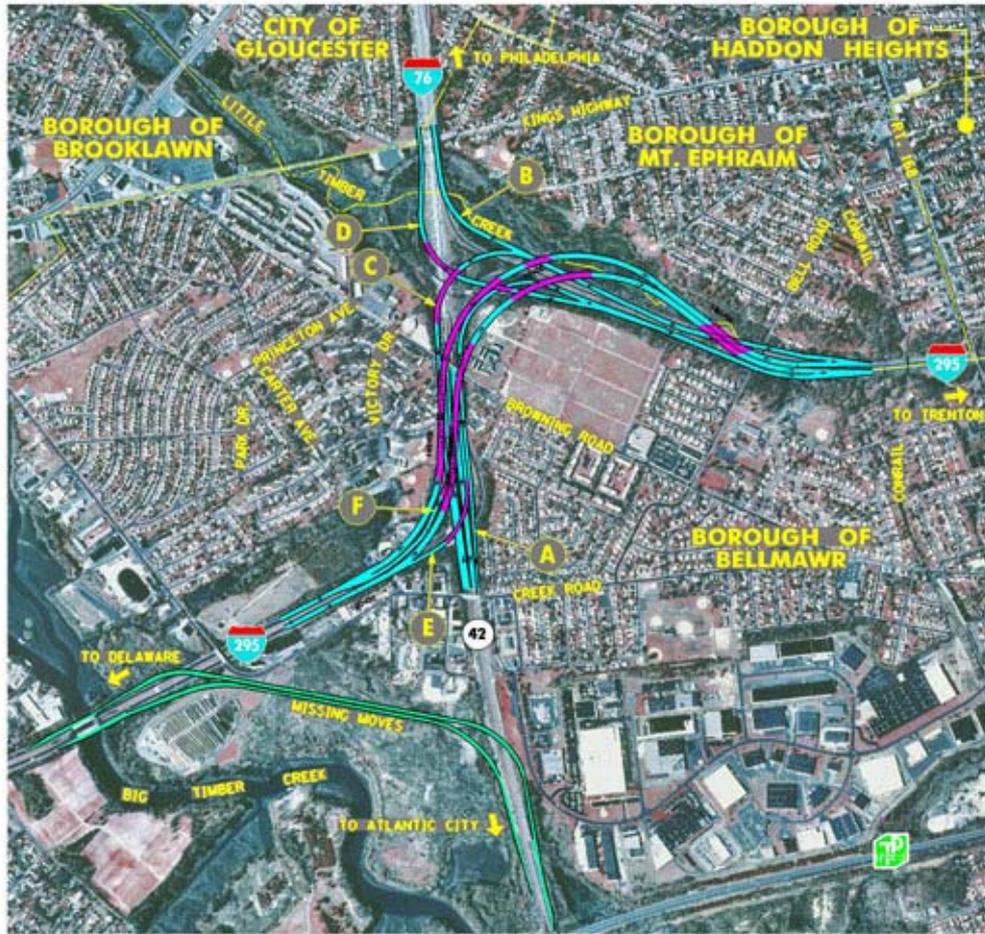
 — Roadway

 — Bridge

 — Ramps of Missing Moves.

**PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE E**

ALTERNATIVE F



ALTERNATIVE F

- Northbound and Southbound I-295 follow separate alignments.
- Northbound I-295 shifted to east side of Rt.42/I-76.
- Southbound I-295 shifted to west side of Rt.42/I-76.
- I-295 Northbound 3rd Level Viaduct over Ramp A and Browning Road
- I-295 Southbound 3rd Level Viaduct over Ramp A and Ramp D
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

-  - Ramp Designation
-  - Roadway
-  - Bridge
-  - Ramps of Missing Moves.

PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE F

ALTERNATIVE G



ALTERNATIVE G

- Northbound I-295 placed above Southbound I-295 using a Double-Decker Configuration
- I-295 4th Level Viaduct over Ramp A and Browning Road
- I-295 4th Level Viaduct over Ramp C and Ramp F
- I-295 3rd Level Viaduct over Ramp AD
- I-295 3rd Level Viaduct over Ramp BC
- I-295 3rd Level Viaduct over I-76 Rt. 42
- Ramp C has a left hand exit
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A ← Ramp Designation

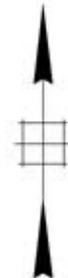
 Roadway

 Bridge

 Ramps of Missing Moves

**PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE G**

ALTERNATIVE H



ALTERNATIVE H

- Northbound I-295 placed above Southbound I-295 using a Double-Decker Configuration
- I-295 4th Level Viaduct over Ramp A and Browning Road
- I-295 4th Level Viaduct over Ramp C and Ramp F
- I-295 3rd Level Viaduct over Ramp A /D
- I-295 3rd Level Viaduct over Ramp B /C
- I-295 3rd Level Viaduct over I-76 /Rt. 42
- Ramp C 3rd Level Viaduct over I-76 /Rt. 42 and Ramp D
- Removes express /local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

- A — Ramp Designation
- — Roadway
- — Bridge
- — Ramps of Missing Moves.

**PRELIMINARY
I-295 /I-76 /ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE H**



ALTERNATIVE I



ALTERNATIVE I

- Northbound and Southbound I-295 are side-by-side.
- I-295 crosses the cemetery
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

-  Ramp Designation
-  Roadway
-  Bridge
-  Ramps of Missing Moves

PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE I

ALTERNATIVE J



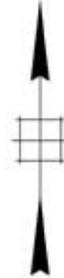
ALTERNATIVE J

- Northbound and southbound I-295 are side-by-side
- Mainline I-295 is a tunnel underneath I-76 / Rt. 42
- Removes express / local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

- A** - Ramp Designation
- Yellow** - Boat Section
- Orange** - Tunnel
- Cyan** - Roadway
- Magenta** - Bridge
- Green** - Ramps of Missing Moves.

PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE J

ALTERNATIVE K



ALTERNATIVE K

- Based on Alternative D alignment
- Northbound and southbound I-295 are side-by-side
- Mainline I-295 is a tunnel underneath I-76 /Rt. 42
- Removes express /local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

- A** — Ramp Designation
- Boot Section
- Full Tunnel Depth
- Roadway
- Bridge
- Ramps of Missing Moves

**PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE K**

ALTERNATIVE L



ALTERNATIVE L

- Based on Alternative A alignment
- Northbound and southbound I-295 are side-by-side
- Mainline I-295 is a tunnel underneath I-76 /Rt. 42
- Removes express /local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

- A** — Ramp Designation
- Boat Section
- Full Tunnel Depth
- Roadway
- Bridge
- Ramps of Missing Moves.

**PRELIMINARY
I-295 / I-76 / ROUTE 42 INTERCHANGE
RECONSTRUCTION PROJECT
ALTERNATIVE L**

Agency Comments Received After ACM #4

- EPA
 - ◆ Satisfied that “one-solution” alternatives are being adequately addressed between planning process and design charette
 - ◆ Recognized independent utility as FHWA prerogative
 - ◆ Consider environmental impacts to project area “holistically”
 - ◆ Discuss environmental impacts of both projects in DEIS



Agency Comments Received After ACM #4

DRBC

- ◆ Provide preliminary wetlands impact calculations for all alternatives to date
- ◆ Consider Alternative paralleling the NJ TPK alignment

ACOE

- ◆ Borrow/ waste sites
- ◆ Wetlands mitigation sites
- ◆ Stormwater facilities



Enhancement Opportunities: Goals

- Capitalize on all opportunities to improve the environment as related to this project
- Demonstrate a watershed approach to stormwater management to achieve optimal water quality improvements
- Restore habitat to increase vigor and diversity of natural plant communities within and adjacent to the highway corridor
- Improve recreational and educational opportunities for adjacent communities
- Partner with state and federal permitting agencies



Enhancement Opportunities: Ecological Opportunities

- Water quality improvement through:
 - ◆ Utilization of BMP's to remove sediment, contaminants, metals, etc. at the source
 - ◆ Replication of the natural hydrologic regime
 - ◆ Stream restoration
- Habitat restoration – upland and wetland
- Greenway/ wildlife connections
- Invasive plant management

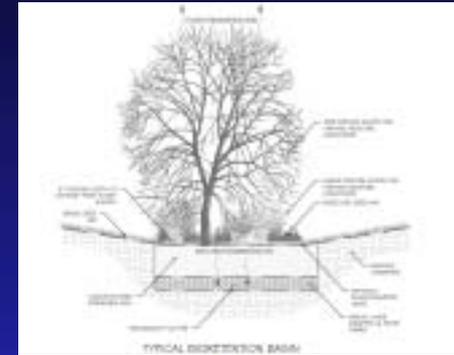
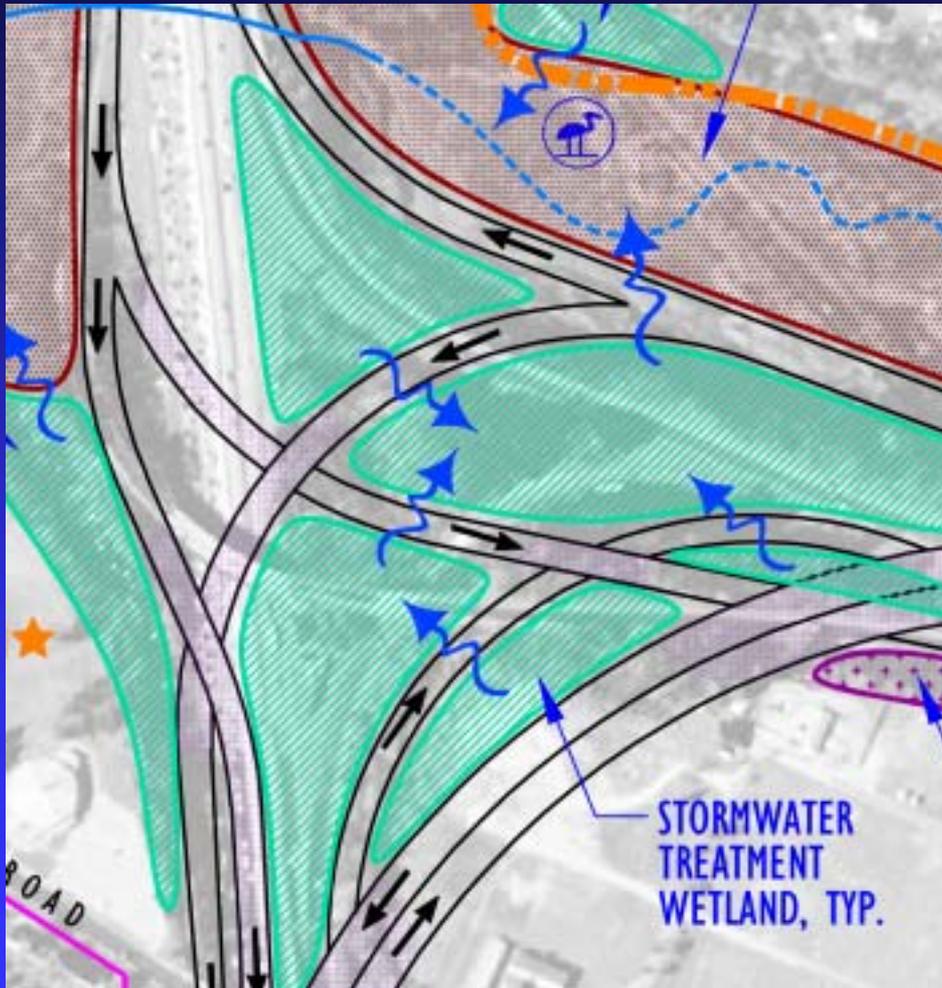


Enhancement Opportunities: **Cultural Opportunities**

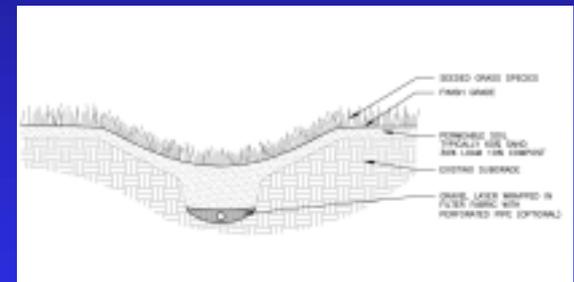
- Connect communities and parks using multi-use paths and boardwalks
- Watchable wildlife
- Environmental education
- Improvement of local quality of life



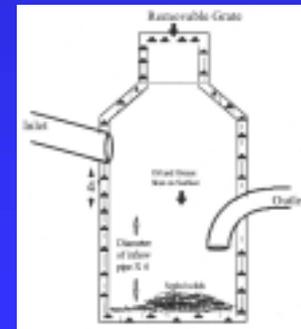
Treating Highway Runoff



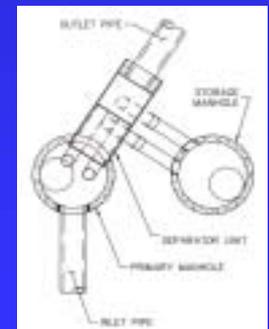
Biofiltration basin



Water quality swale



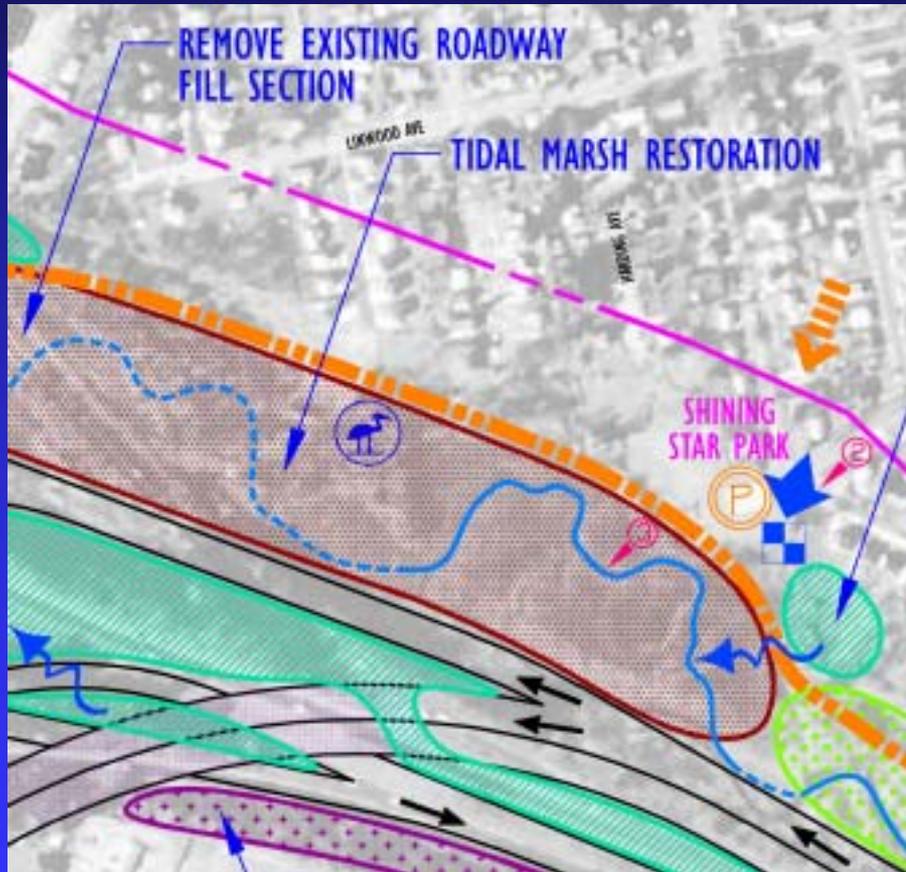
Deep sump catch basin



Water quality inlet



Tidal Restoration Opportunities

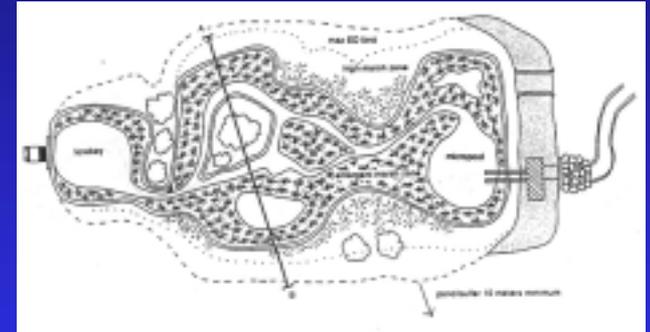


Water quality inlet



Winthrop Ave culvert

Schematic of constructed wetland



Phragmites invading tidal marsh at Shining Star Park



Tidal marsh restoration

Habitat Restoration/Greenway

Multi-use greenway connects neighborhood parks, playgrounds, and open space



Upland habitat restoration includes gully/ slope stabilization and invasive plant management

Little Timber Creek degraded by sediments, stormwater inputs, and invasive species

