

*Agency Coordination Meeting #11*

# **I-295/I-76/Route 42 Direct Connection**

Camden County

*October 28, 2009*

*Presented by NJ Department of Transportation*





# **I-295/I-76/Route 42 Direct Connection**

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

# **AGENDA**

- 1. INTRODUCTION**  
Bruce Riegel/JoAnn Asadpour, NJDOT
- 2. MEETING OBJECTIVE**  
Ileana Ivanciu, Dewberry
- 3. DESCRIPTION OF PREFERRED ALTERNATIVE**  
Craig Johnson, Dewberry
- 4. WETLANDS**  
Brian Sayre, Dewberry
- 5. FLOOD HAZARD AREA**  
Eric Boschen, Dewberry
- 6. MITIGATION**  
Eric Boschen, Dewberry
- 7. STORMWATER MANAGEMENT**  
Eric Boschen, Dewberry
- 8. OTHER CONCERNS**  
Brian Sayre/Jim Heeren, Dewberry
- 9. DISCUSSION**



# INTRODUCTION

*Bruce Riegel/JoAnn Asadpour*  
NJDOT

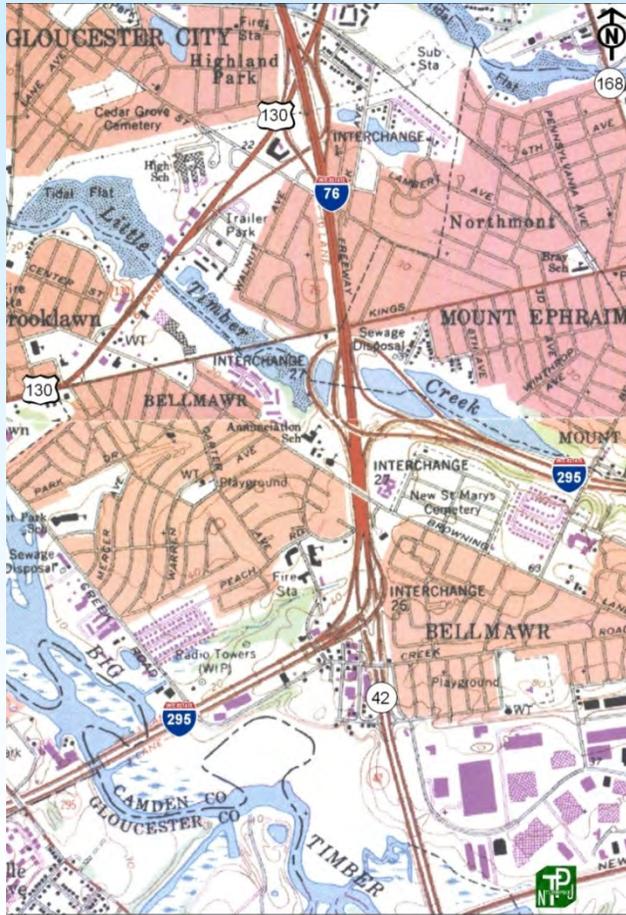


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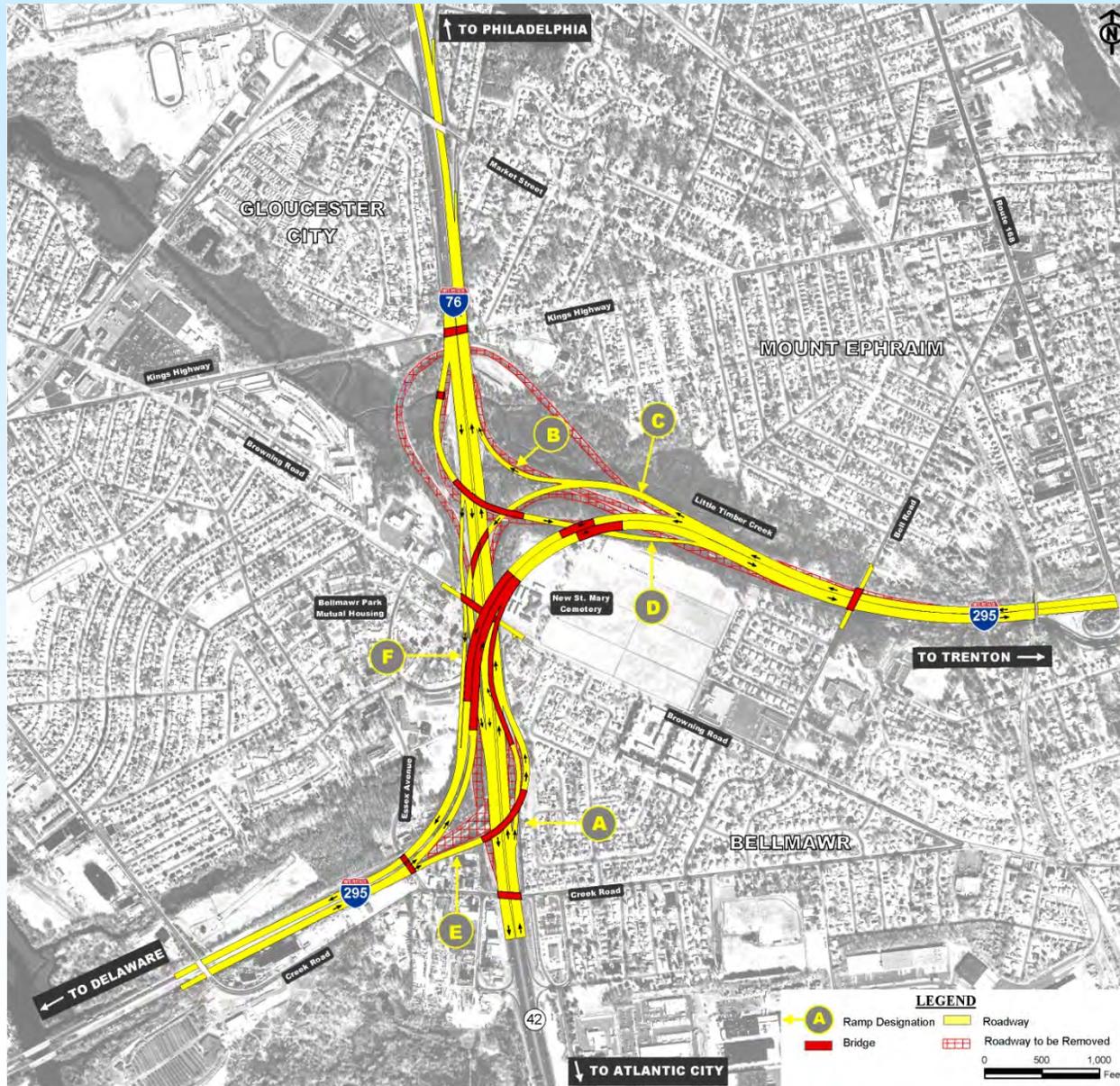
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# PROJECT AREA MAP



# PREFERRED ALTERNATIVE



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# DESIGN AND CONSTRUCTION SCHEDULE

- Preliminary Design      August 2010
- Permit Submissions      Spring 2011
- Final Designs              Fall 2011
- Anticipate four construction contracts
  - ✓ Funding could influence schedule
  - ✓ Start 2012
  - ✓ Complete by 2017



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## AGENCIES INVOLVED

- NJDEP (various units)
- EPA
- USACE
- DVRPC
- US Fish and Wildlife Service
- US Department of Commerce
- National Marine Fisheries Service
- Coast Guard
- Delaware River Basin Commission

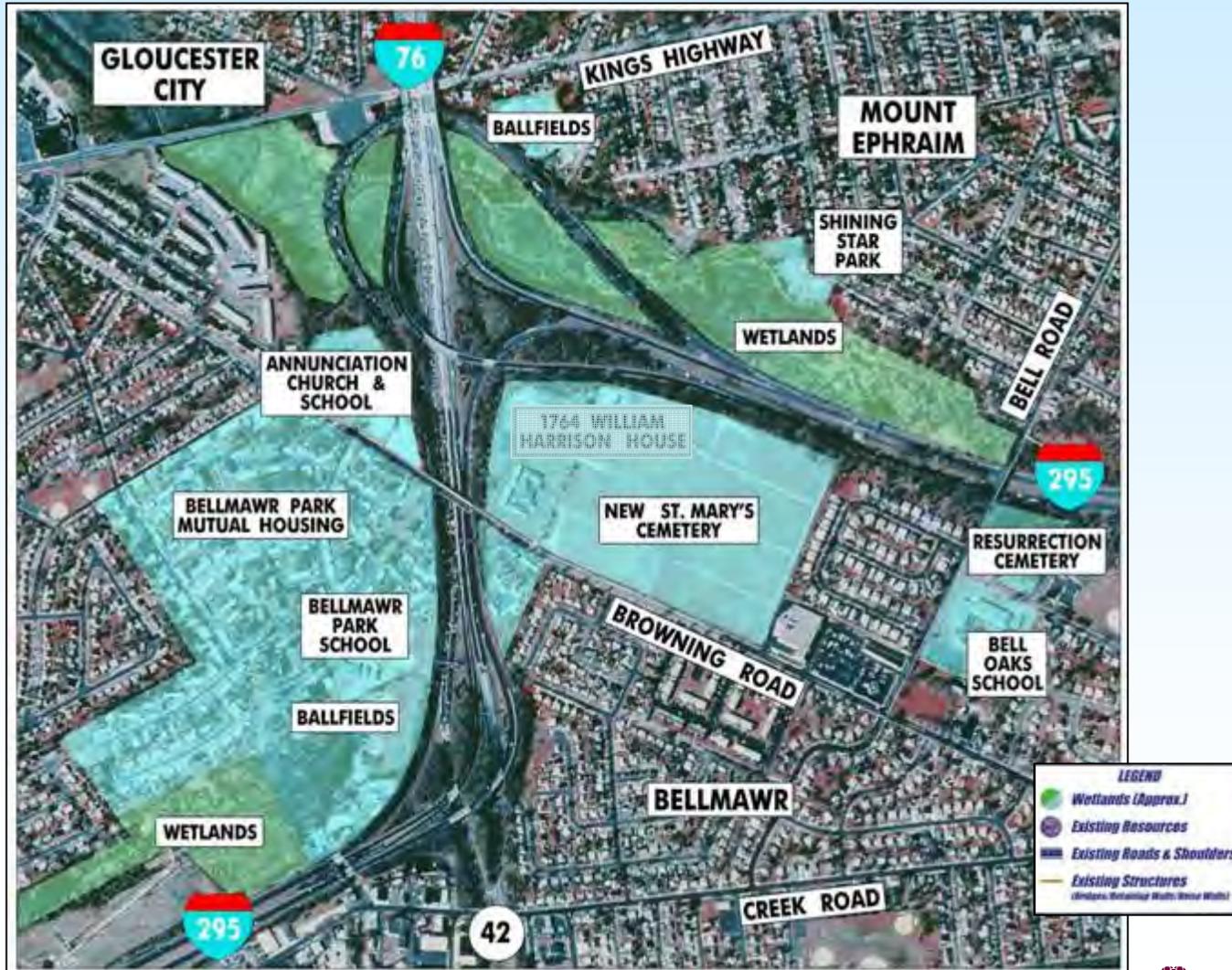


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# CONSTRAINTS



## I-295/I-76/Route 42 Direct Connection

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# ENVIRONMENTAL DOCUMENTATION

- Draft Environmental Impact Statement (DEIS)
  - ✓ November 2007
- Final Environmental Impact Statement (FEIS)
  - ✓ December 2008
- Record of Decision (ROD)
  - ✓ Signed by FHWA on Friday, March 20, 2009
  - ✓ Allows for project's detailed design phase to begin



# MEETING OBJECTIVE

*Ileana Ivanciu*  
Dewberry





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# MEETING OBJECTIVE

- Discuss Permitting Needs
- Process
- Schedule

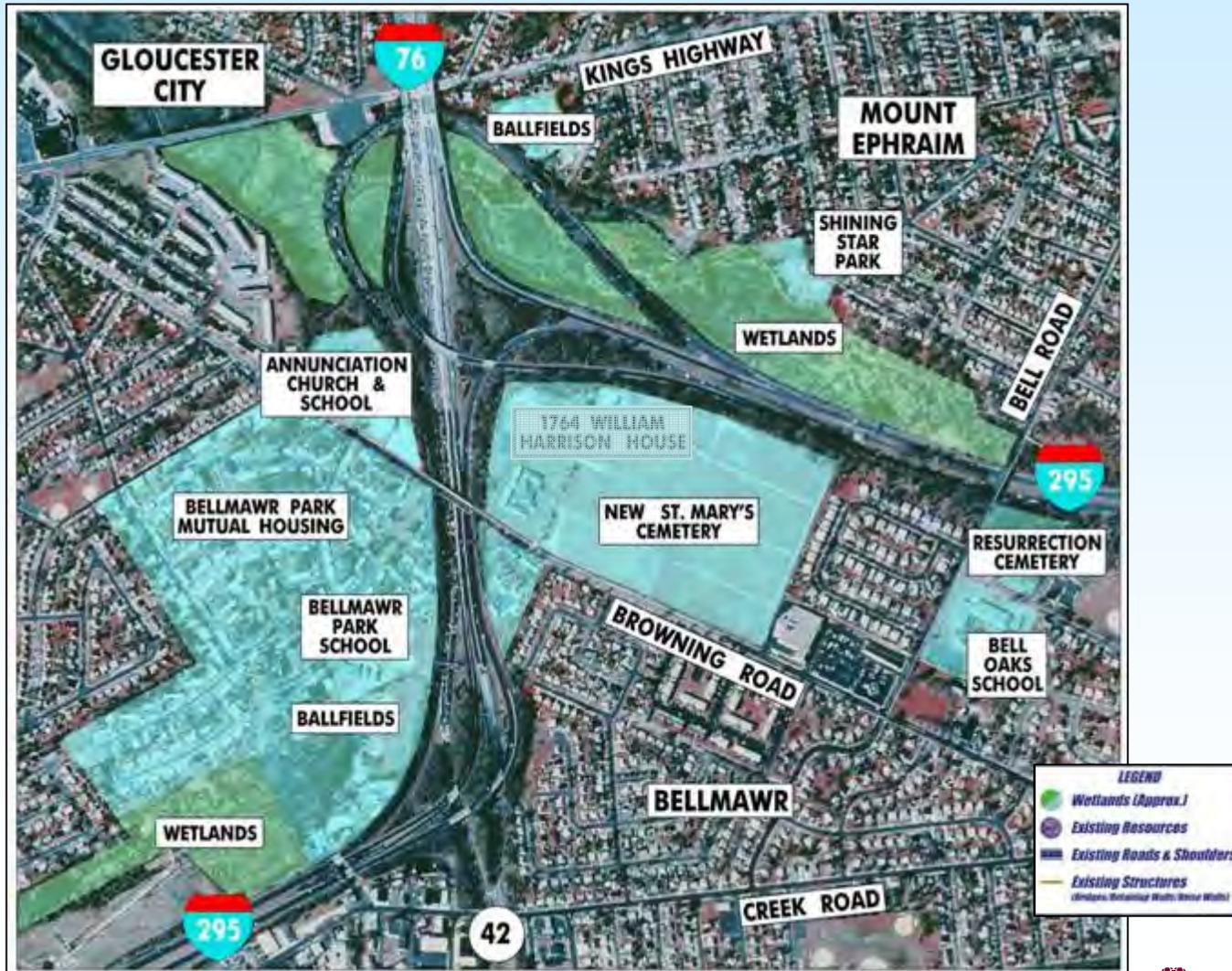


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# CONSTRAINTS



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# STREAMLINING THE ENVIRONMENTAL PROCESS

- Open & Honest Process
- Clearly Defined Expectations
- Consistent Participation
- Open Communication

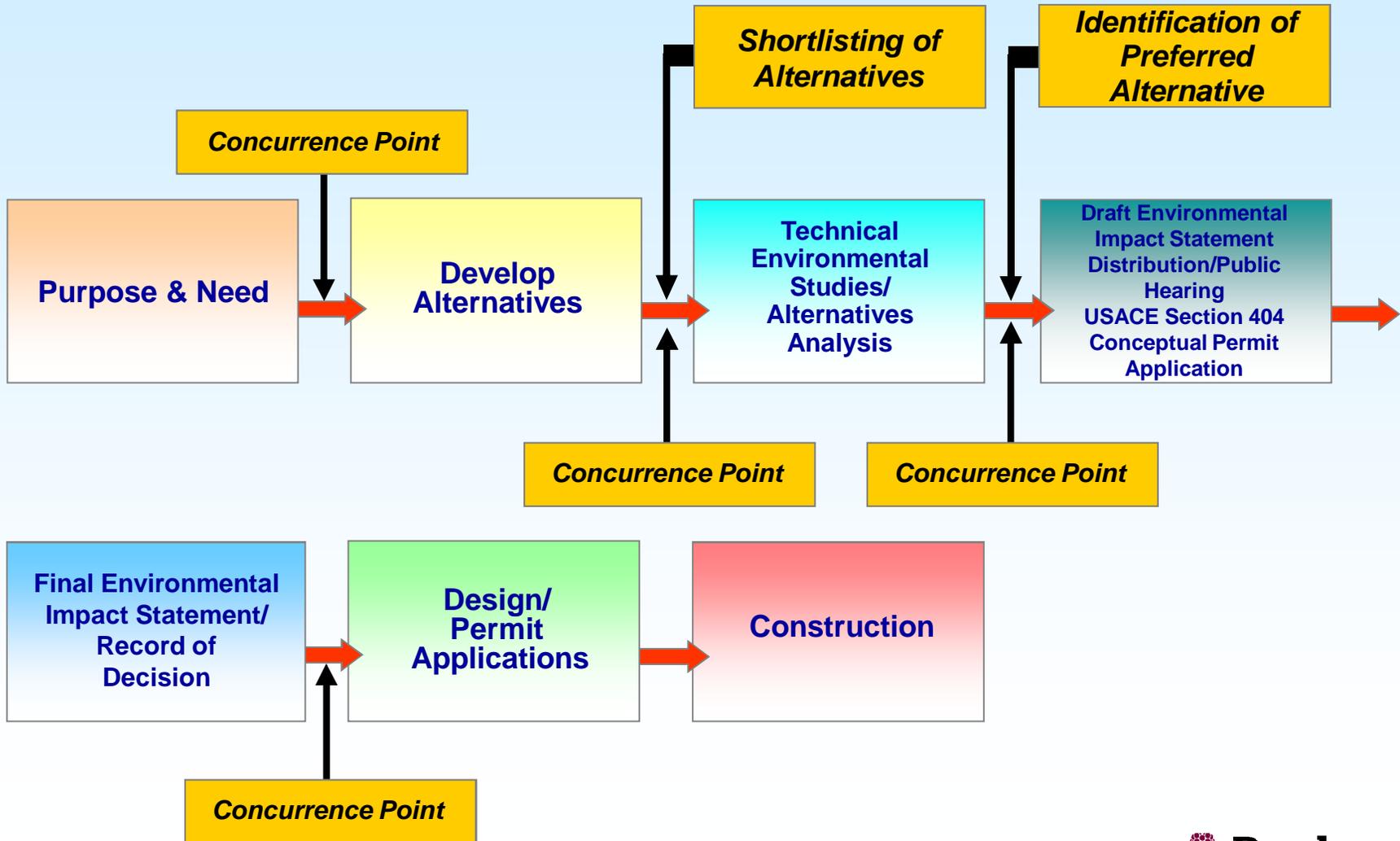


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# NEPA / 404 PROCESS





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# STREAMLINING GOALS

- Select Best Alternative to Avoid, Minimize and Mitigate Impacts to the Greatest Extent Possible
- Build Consensus During the Process
- Minimize Environmental Review Time
- No Surprises at the Permitting Stage





## I-295/I-76/Route 42 Direct Connection

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# STREAMLINING PRINCIPLES

- Each agency will be respected for its role and responsibility
- Work together to find an acceptable, though not necessarily perfect, solution compatible with the agency's mission and with the project's purpose and need
- Agencies will strive to provide sufficient staffing to be an effective player
- Conflict resolution can be initiated by any agency at any stage to resolve any concerns

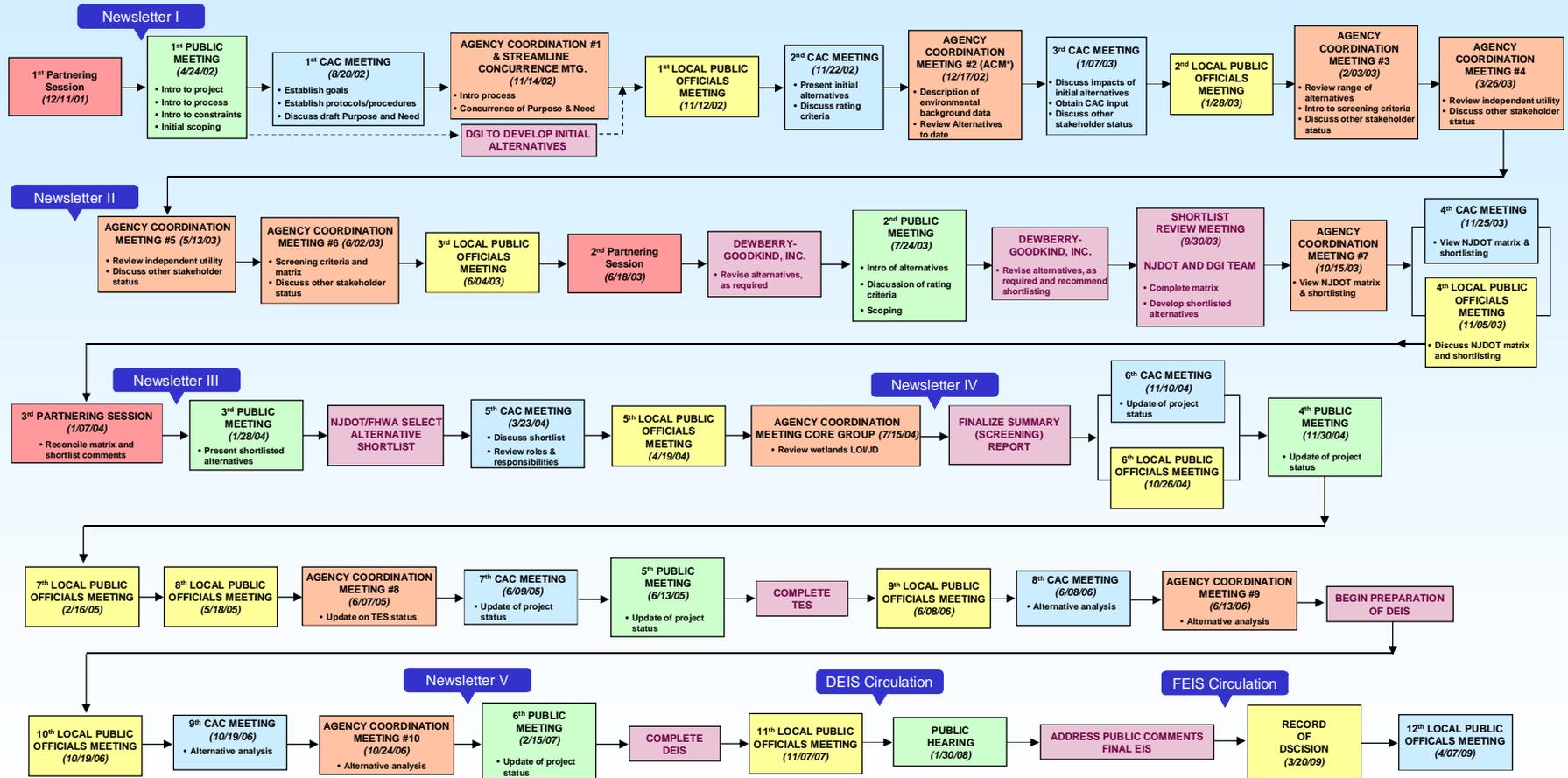


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# PROJECT FLOW CHART





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# MEASURES OF SUCCESS

- Concurrence on Project Purpose and Need
- Independent Utility
- Field Work to Define Wetlands Jurisdiction and Verify Field Delineation
- Alternatives Development
- Alternatives Screening
- Alternatives Recommended for Further Study
- Alternatives Analysis
- EIS/Section 4(f) Evaluation
- USACE Permit Application
- Memorandum of Agreement
- Record of Decision



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# PERMITTING STATUS

- JD and LOI issued February 2005
- USACE – Nationwide Permit 6 issued for boring program – April 2009
- LOI Extension required before February 2010
  - ✓ Field visit to verify line
- USACE Provisional permit anticipated before February 2010



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# PERMITS/APPROVALS

## ➤ NJDEP - LURP

- ✓ Individual Freshwater Wetlands
- ✓ Coastal Wetlands
- ✓ Waterfront Development
- ✓ Water Quality Certificate
- ✓ Coastal Zone Management Compliance Statement
- ✓ Individual Flood Hazard Area
- ✓ Stormwater Management Review
- ✓ Tidelands Instrument



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## SCHEDULE

- Pre-application Spring 2010
- Preliminary Design August 2010
- Permit Submissions Spring 2011
- Permit Approvals Fall 2011
- Final Designs Fall 2011
- Construction 2012-2017

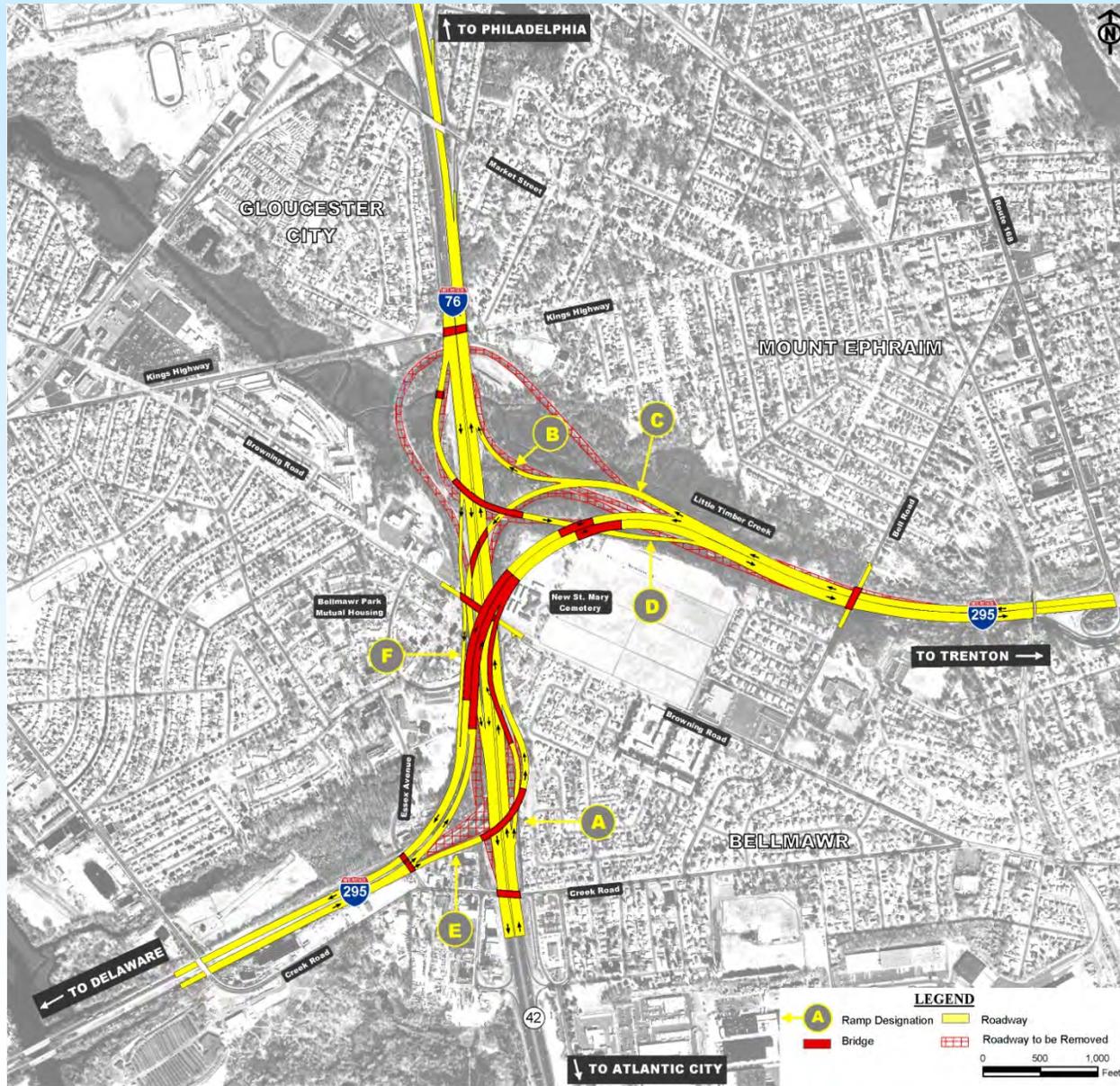


# DESCRIPTION OF PREFERRED ALTERNATIVE

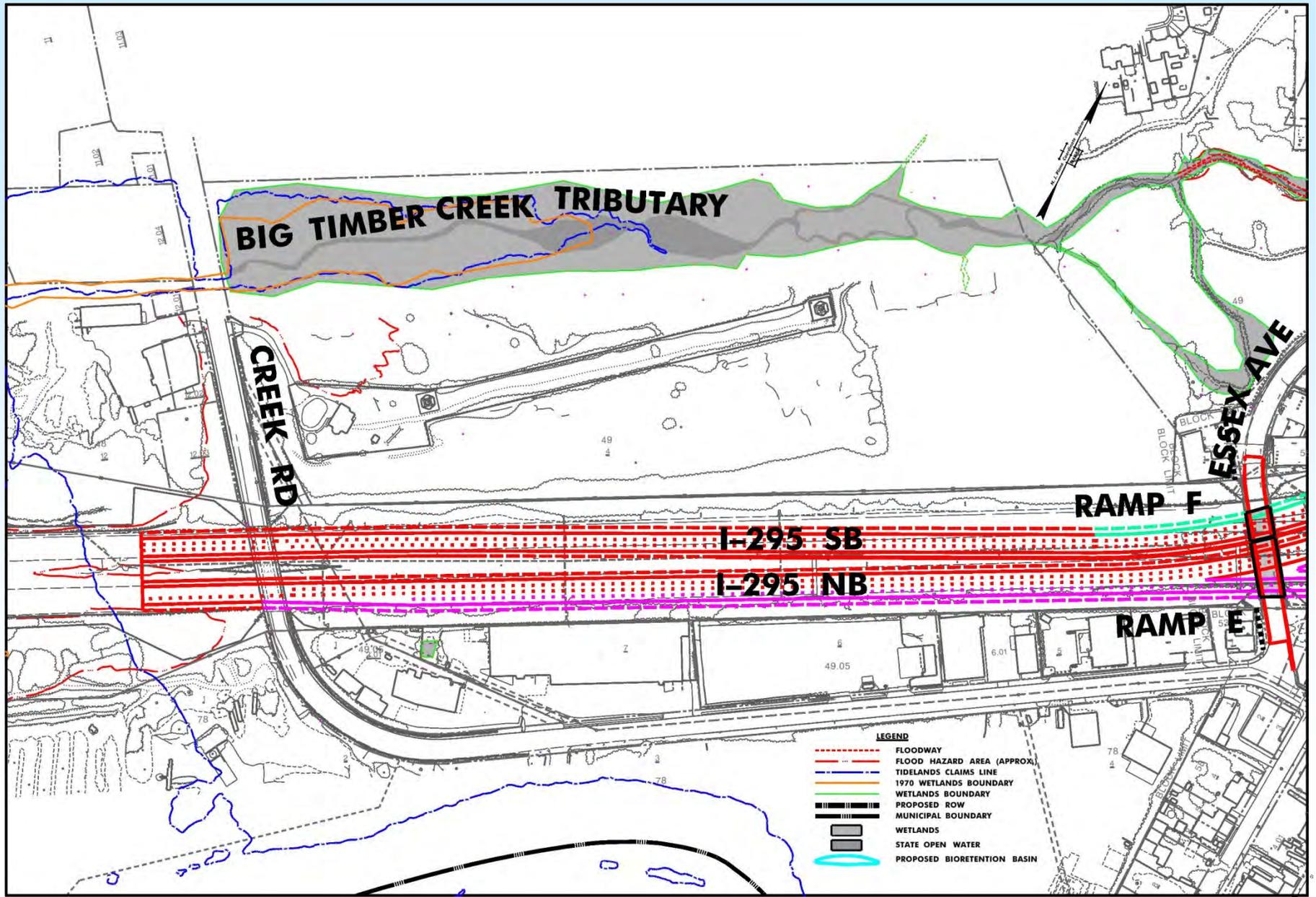
*Craig Johnson*  
Dewberry



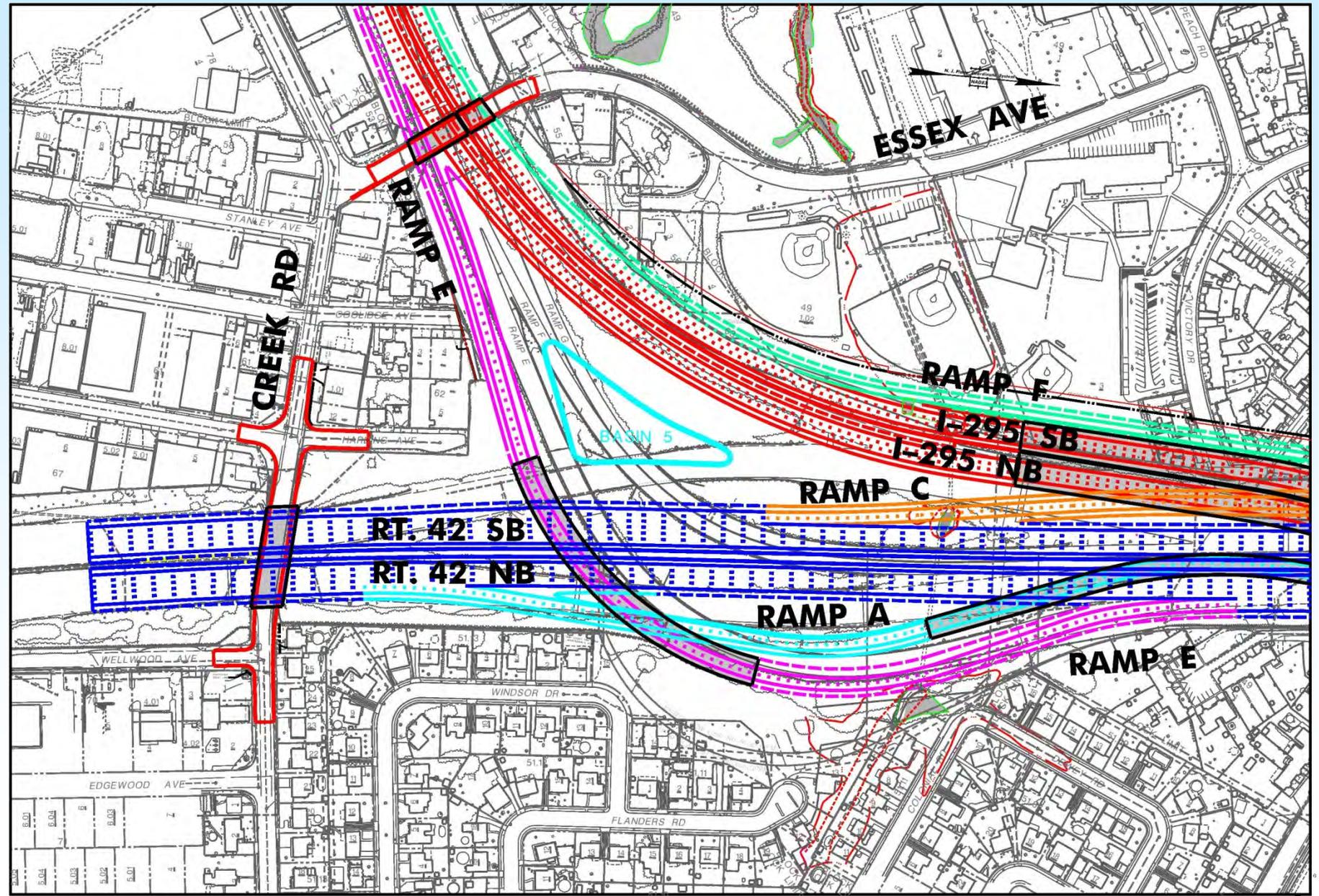
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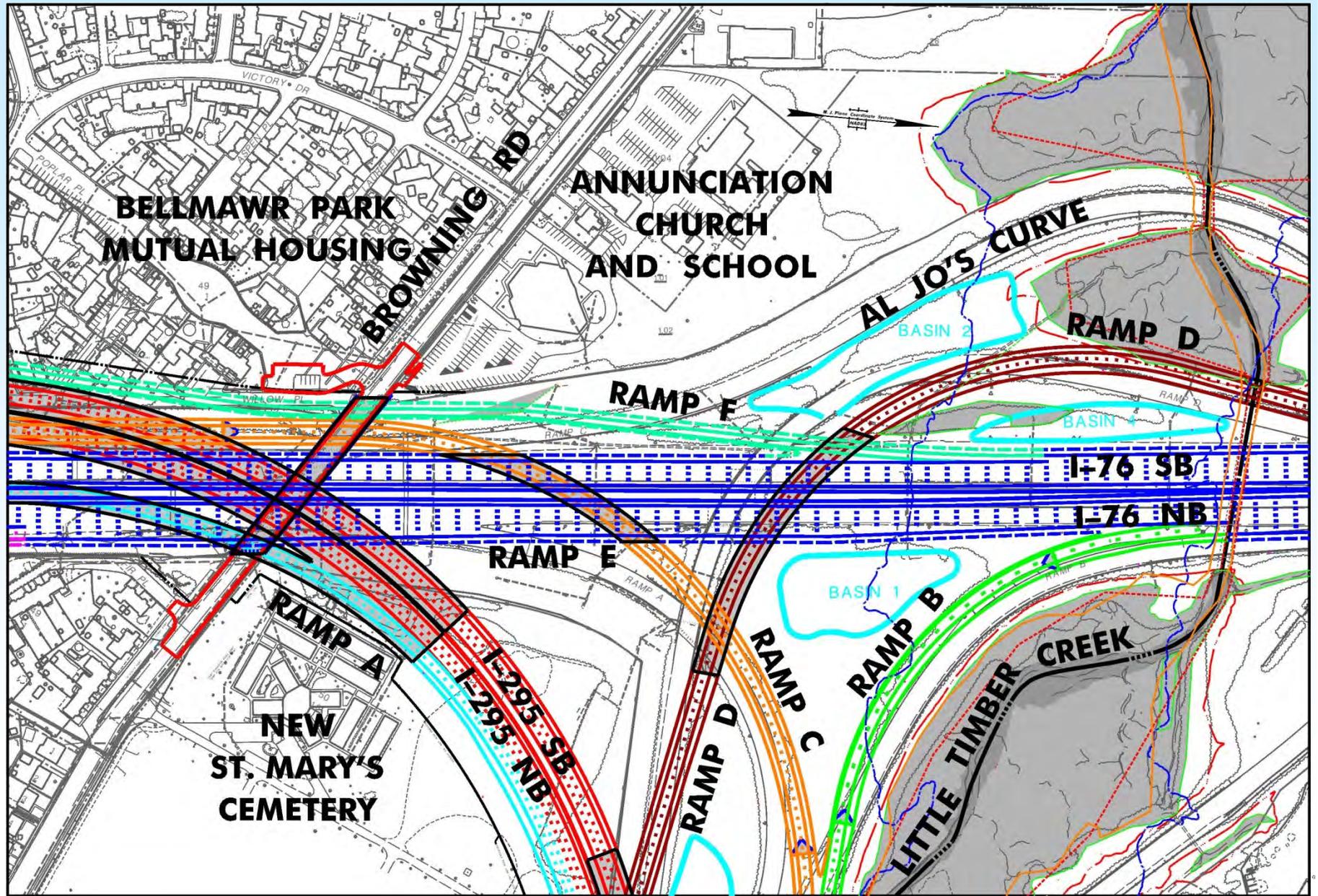
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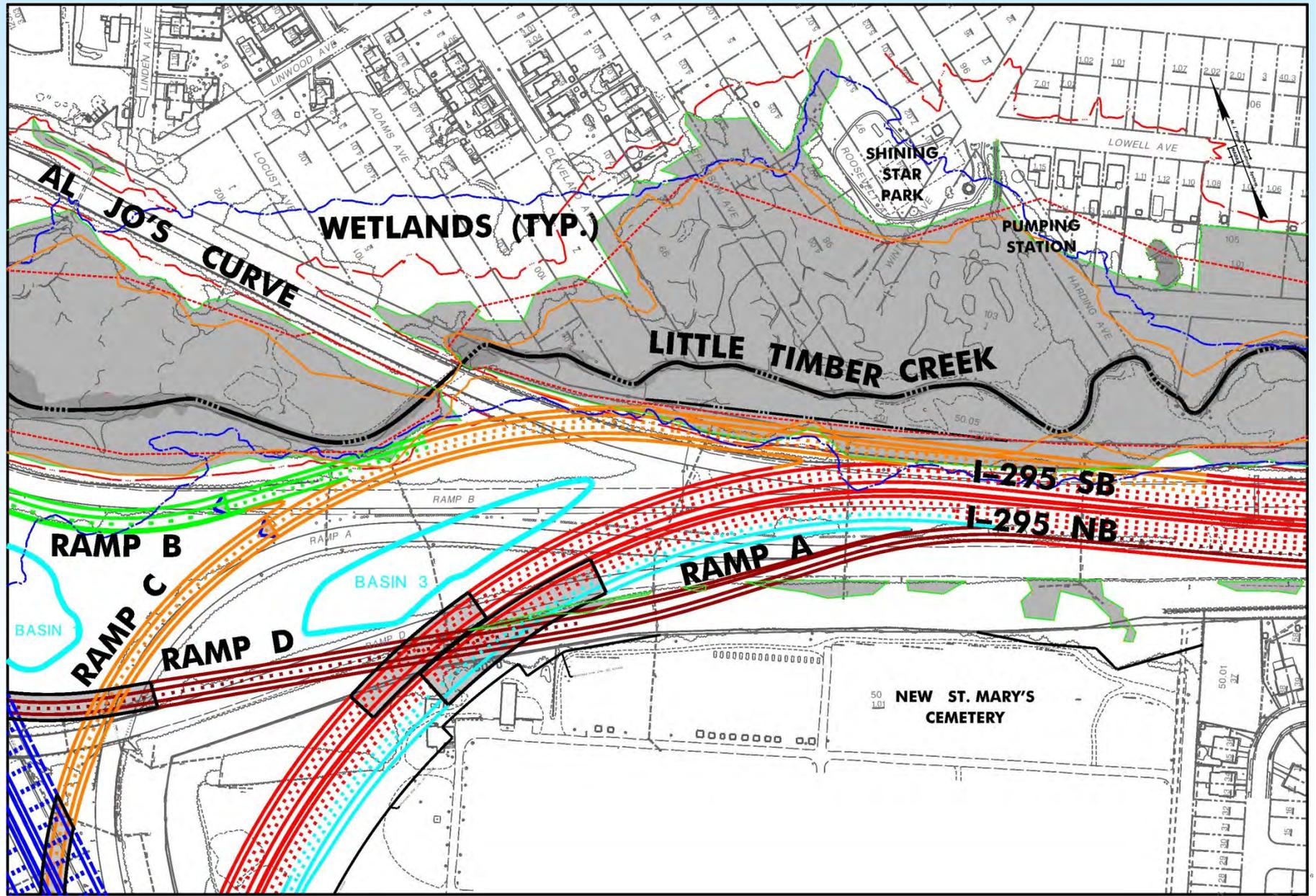
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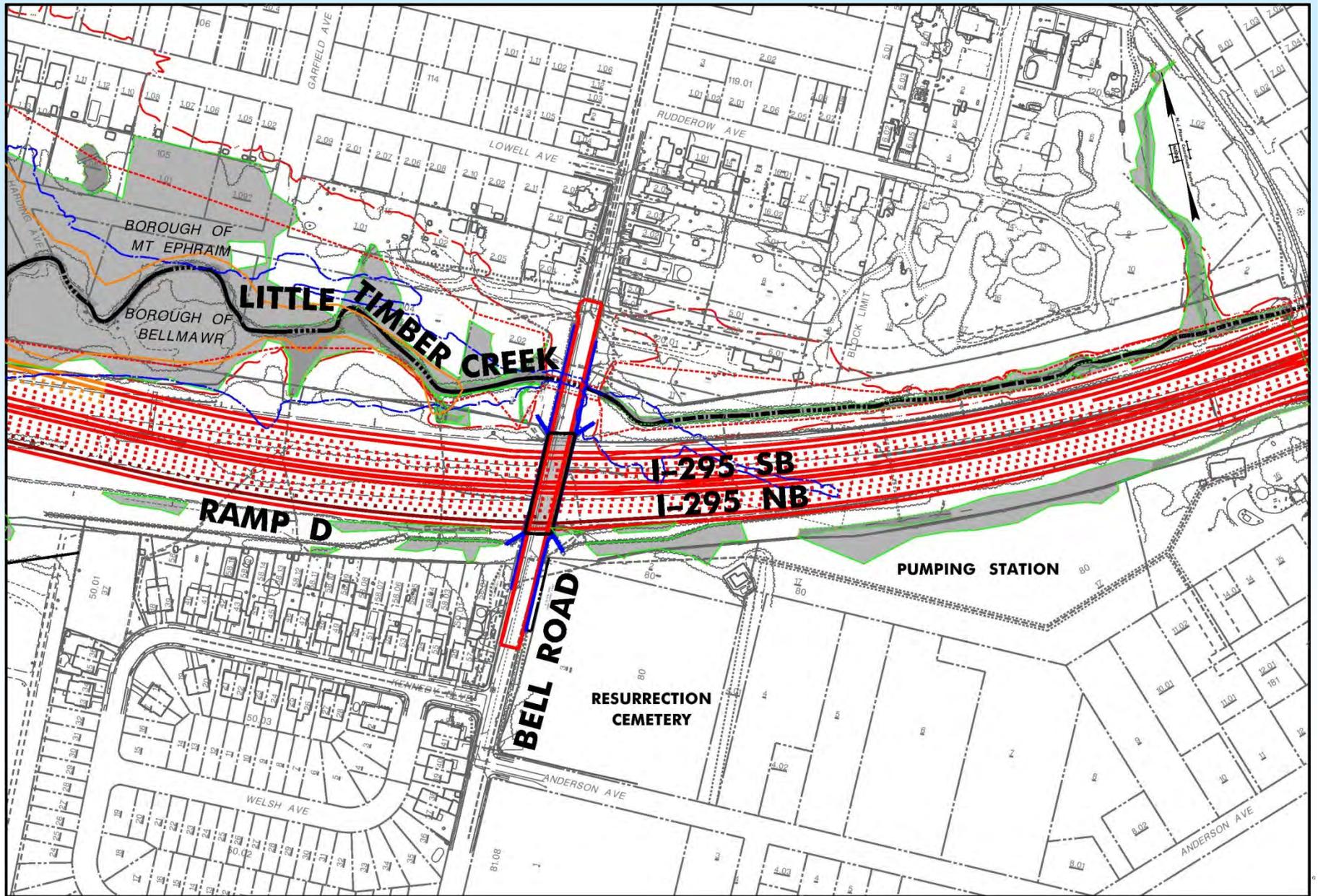
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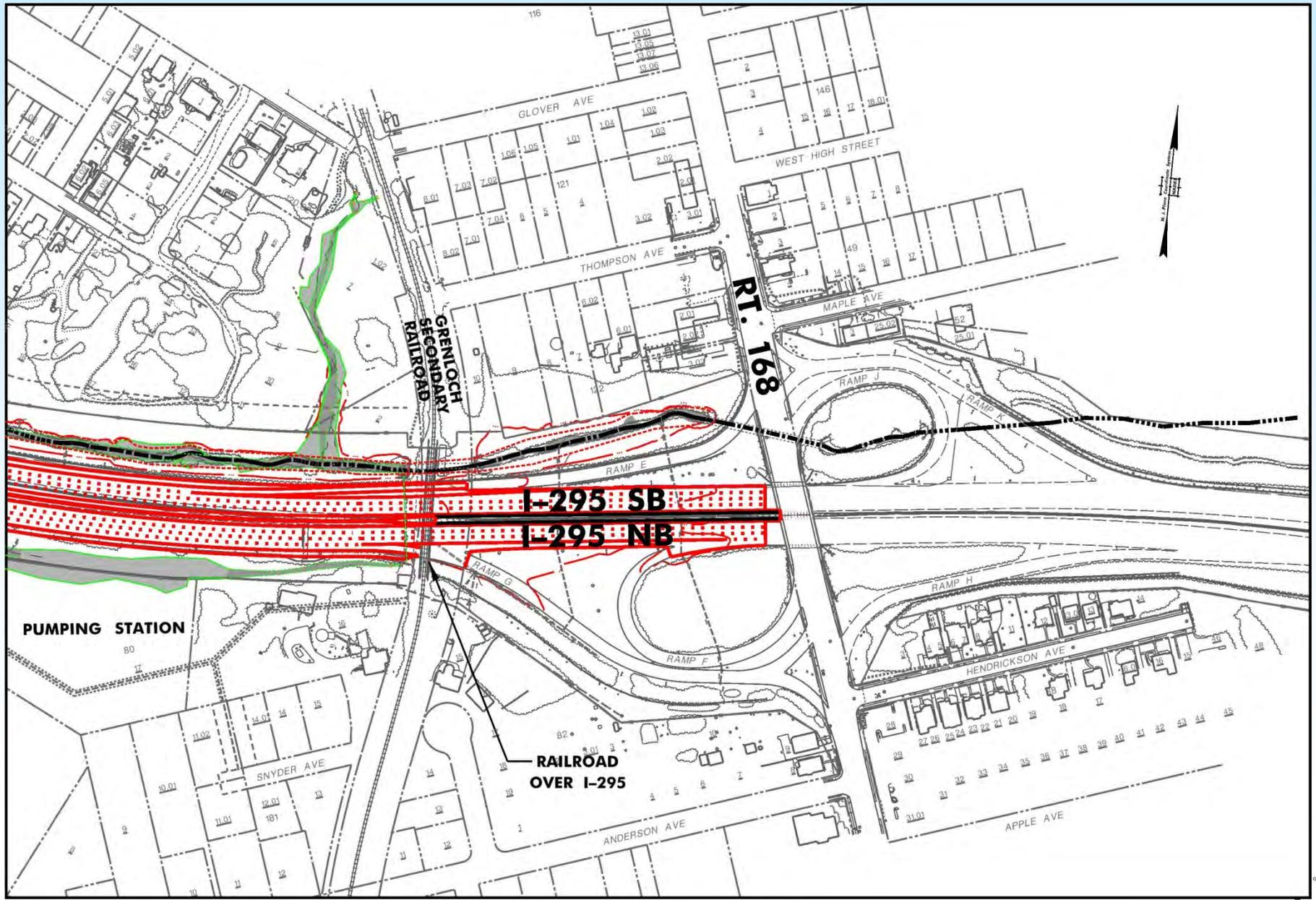
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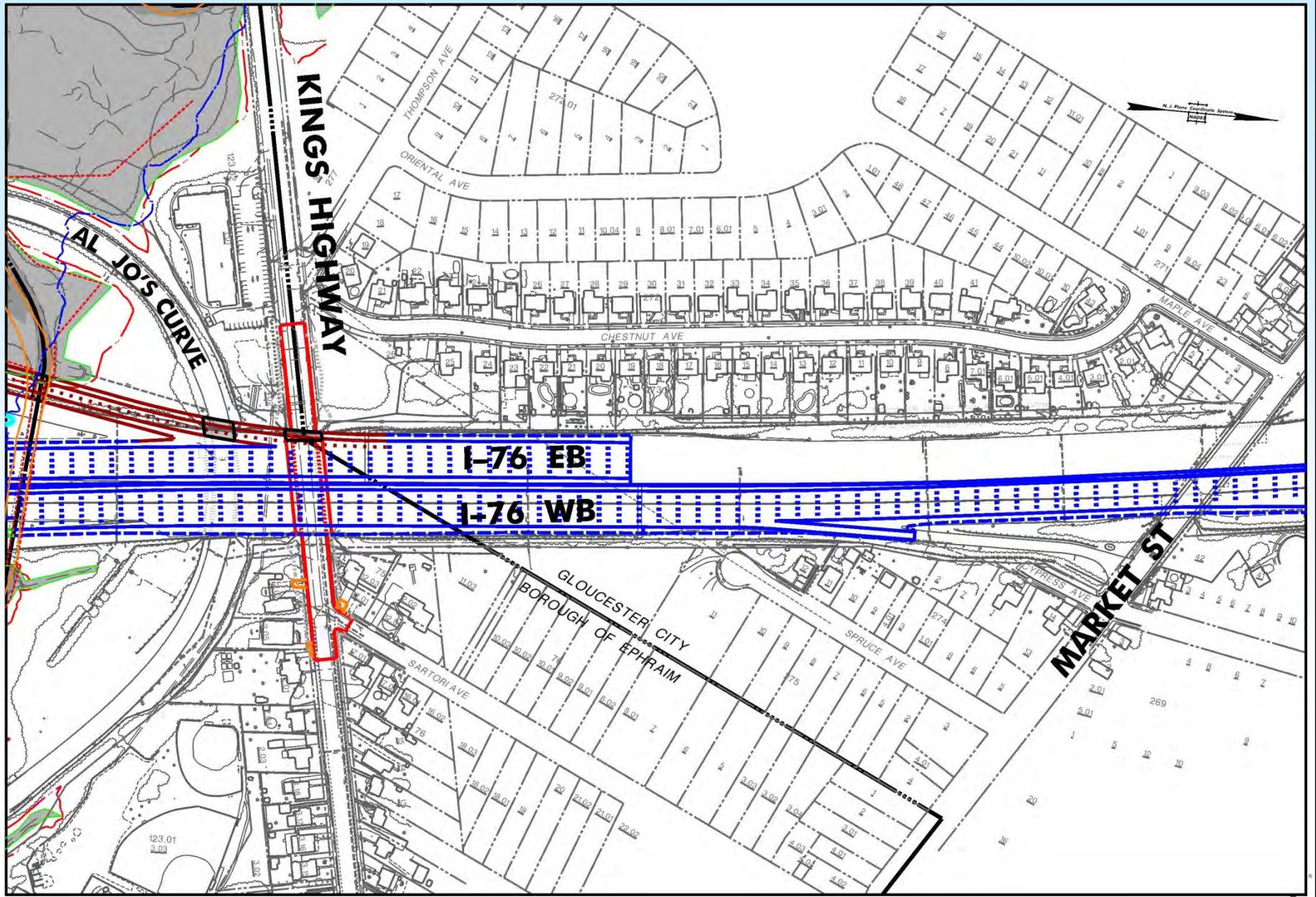
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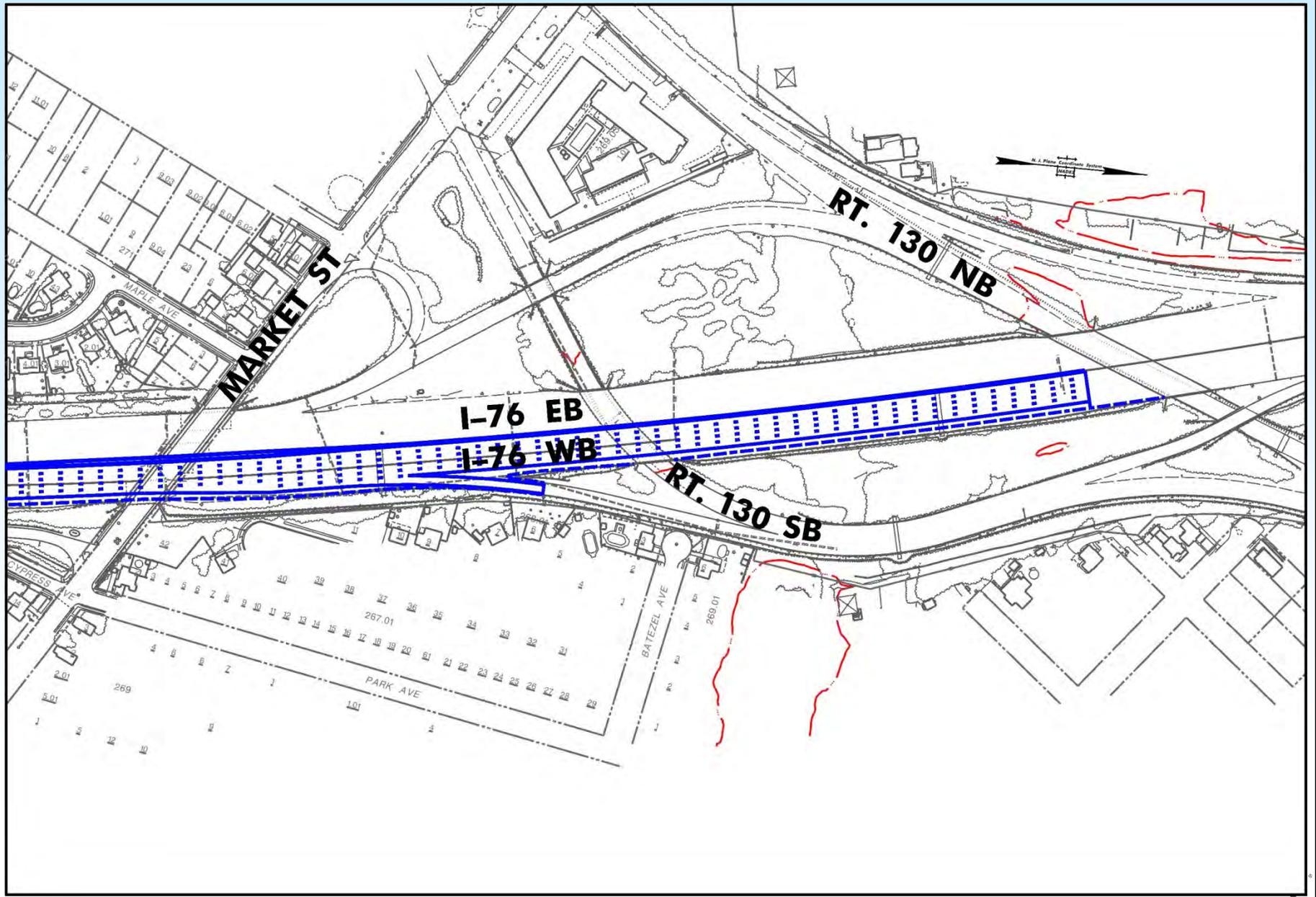
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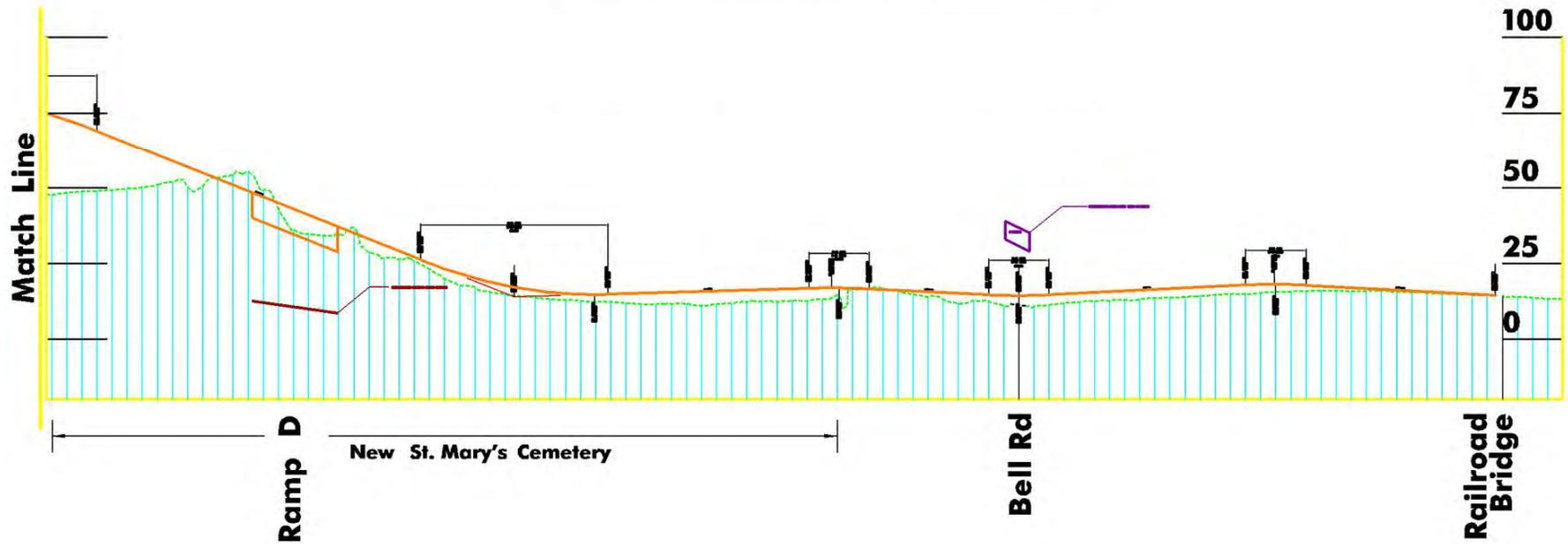
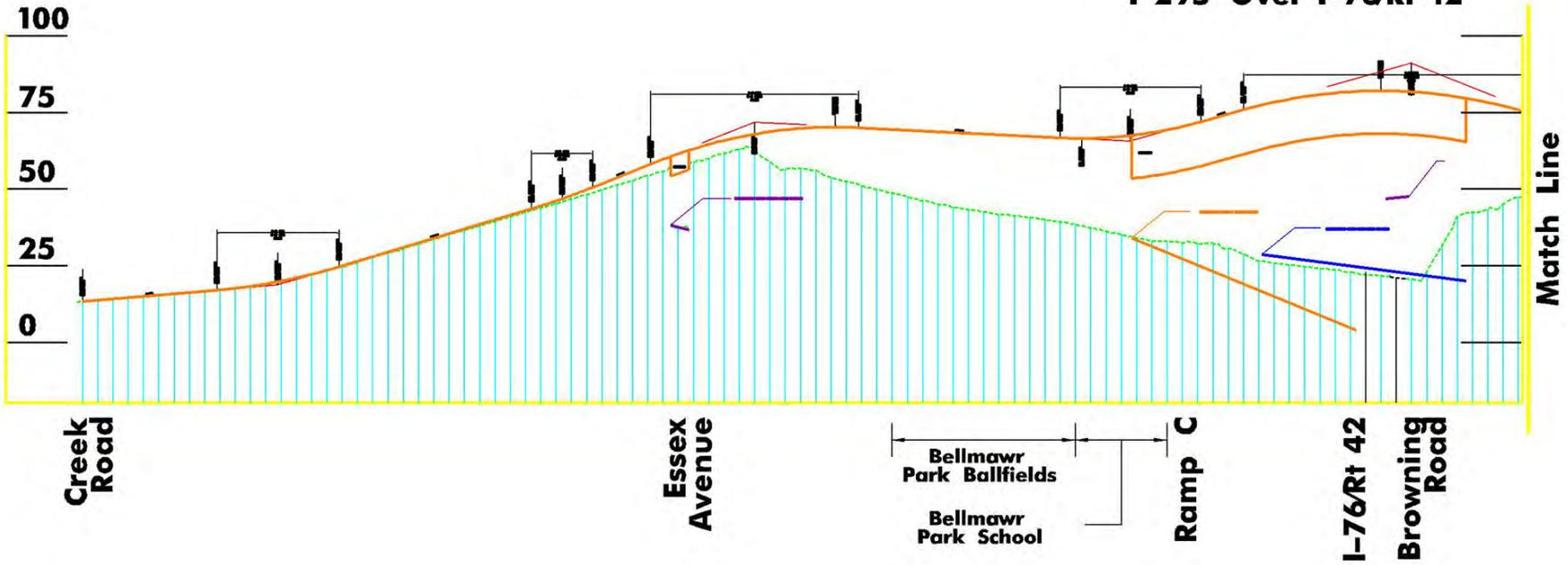
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# I-295 Over I-76/Rt 42



**ESSEX AVENUE LOOKING EAST**



**EXISTING CONDITIONS**

**ESSEX AVENUE LOOKING EAST**



**PREFERRED ALTERNATIVE**

**BROWNING ROAD LOOKING WEST**



**EXISTING CONDITIONS**

**BROWNING ROAD LOOKING WEST**



**PREFERRED ALTERNATIVE**

SHINING STAR PARK LOOKING SOUTH



EXISTING CONDITIONS

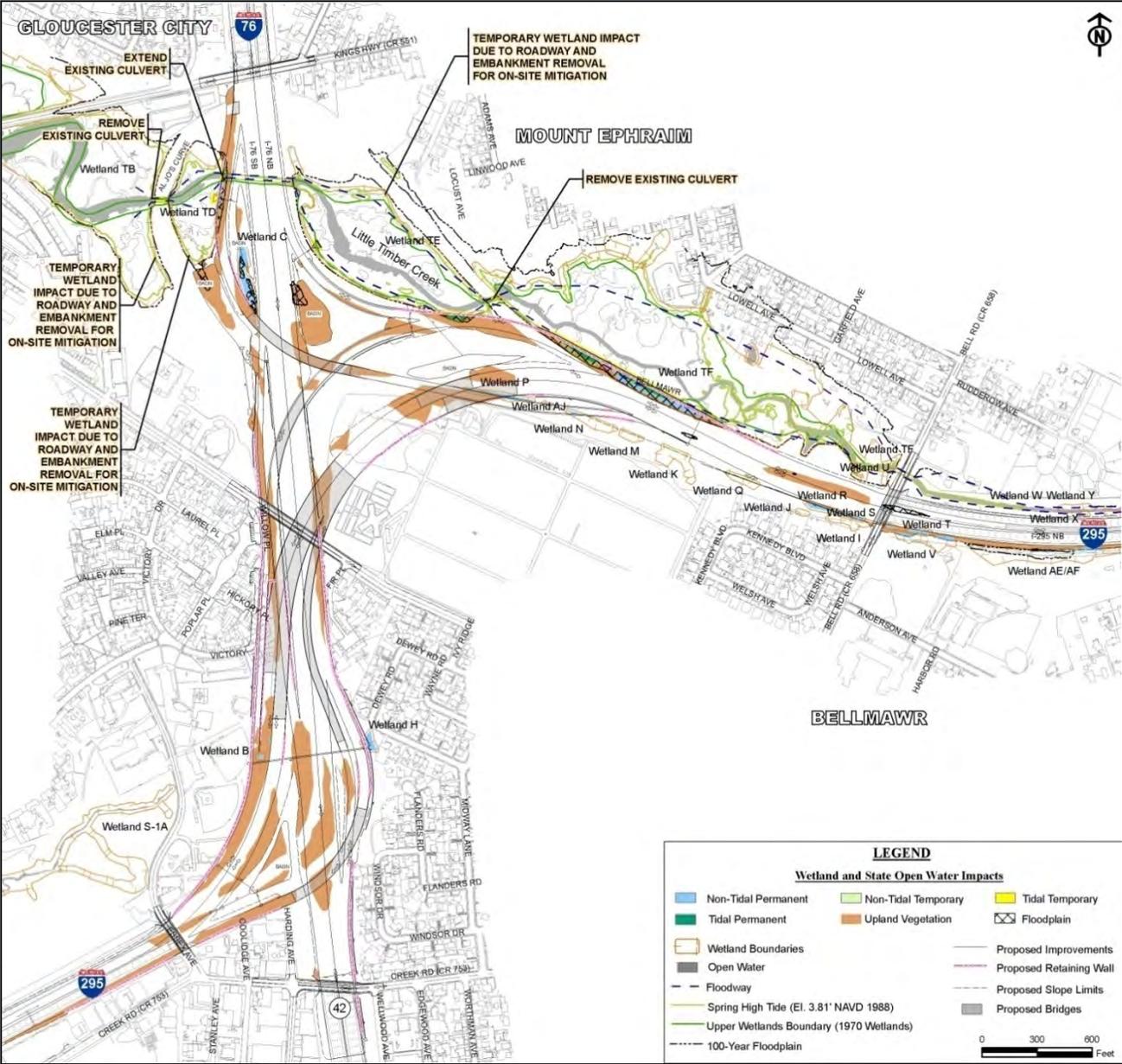


# WETLANDS

*Brian Sayre*  
Dewberry



# WETLANDS



# WETLANDS



Q: 2652:technical/GIS/DEIS/CONCEPTUAL\_404 PERMIT/Ecological Impacts Figure 2

Source: Dewberry Goodkind Inc. 2005, Dresdner Robin Wetland Delineation Fall 2003, and Dresdner Robin Analysis 2005



# WETLANDS

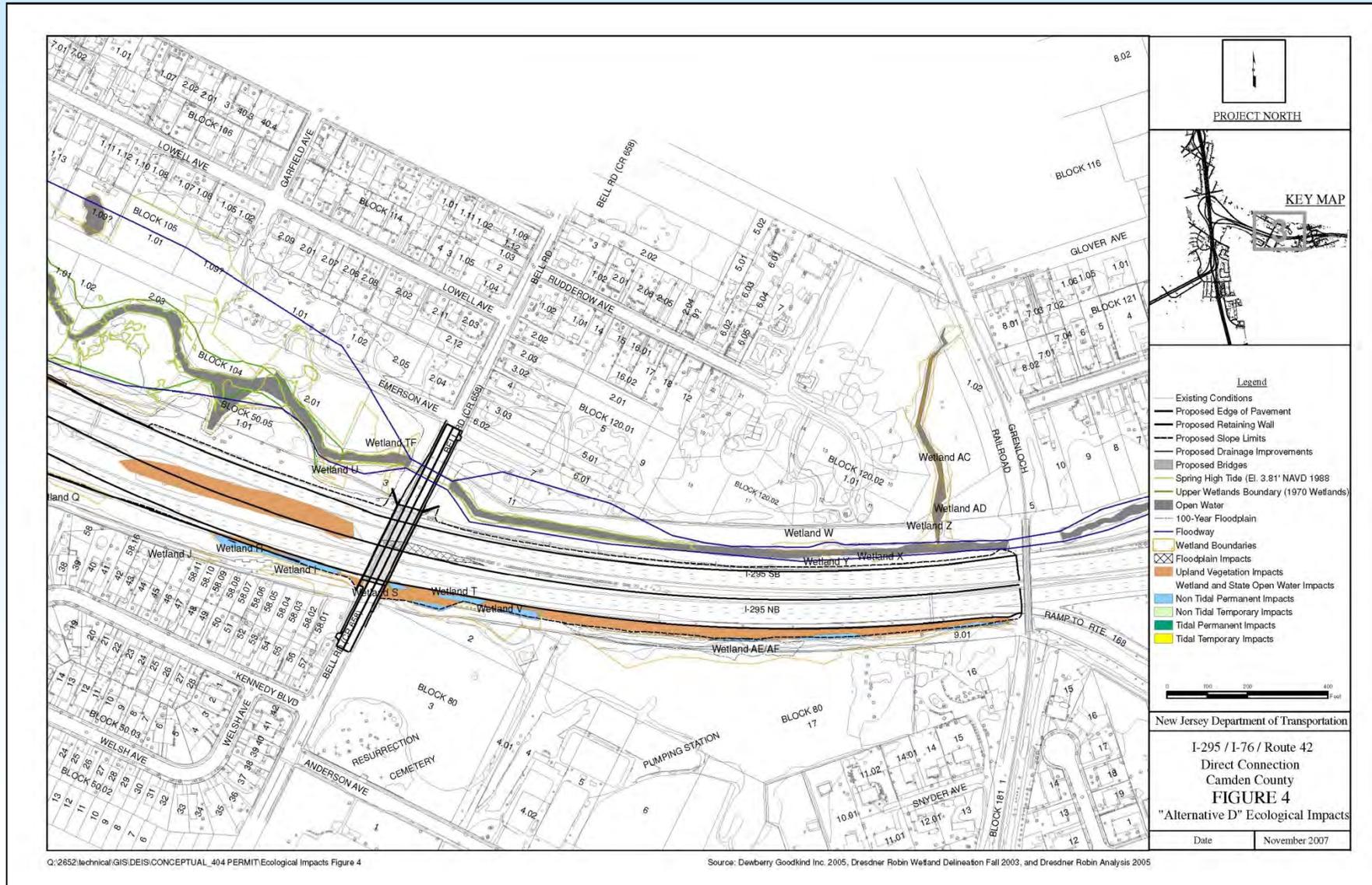


Q:\2652\technical\GIS\DEIS\CONCEPTUAL\_404 PERMIT\Ecological Impacts Figure 3

Source: Dawberry Goodkind Inc. 2005, Dresdner Robin Wetland Delineation Fall 2003, and Dresdner Robin Analysis 2005



# WETLANDS



Q:\2652\technical\GIS\DEIS\CONCEPTUAL\_404 PERMIT\Ecological Impacts Figure 4

Source: Dewberry Goodkind Inc. 2005, Dresdner Robin Wetland Delineation Fall 2003, and Dresdner Robin Analysis 2005



# WETLANDS



Q: 2652:technical:GIS:DEIS:CONCEPTUAL\_404 PERMIT:Ecological Impacts Figure 5

Source: Dewberry Goodkind Inc. 2005, Dresdner Robin Wetland Delineation Fall 2003, and Dresdner Robin Analysis 2005



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## WETLAND IMPACTS

WETLAND RESOURCES	PERMANENT IMPACTS (ACRES)	TEMPORARY IMPACTS (ACRES)
<i>Freshwater Tidal</i>	0.6	0.6
<i>State Open Water (Tidal)</i>	0.01	0.1
<i>Freshwater (Non-Tidal)</i>	1.3	0.3
<i>State Open Water (Non-Tidal)</i>	0.04	0
<i>Total Wetland and SOW Impacts</i>	1.97	0.98
<i>Wetland Transition Area Impact</i>	3.6	NA



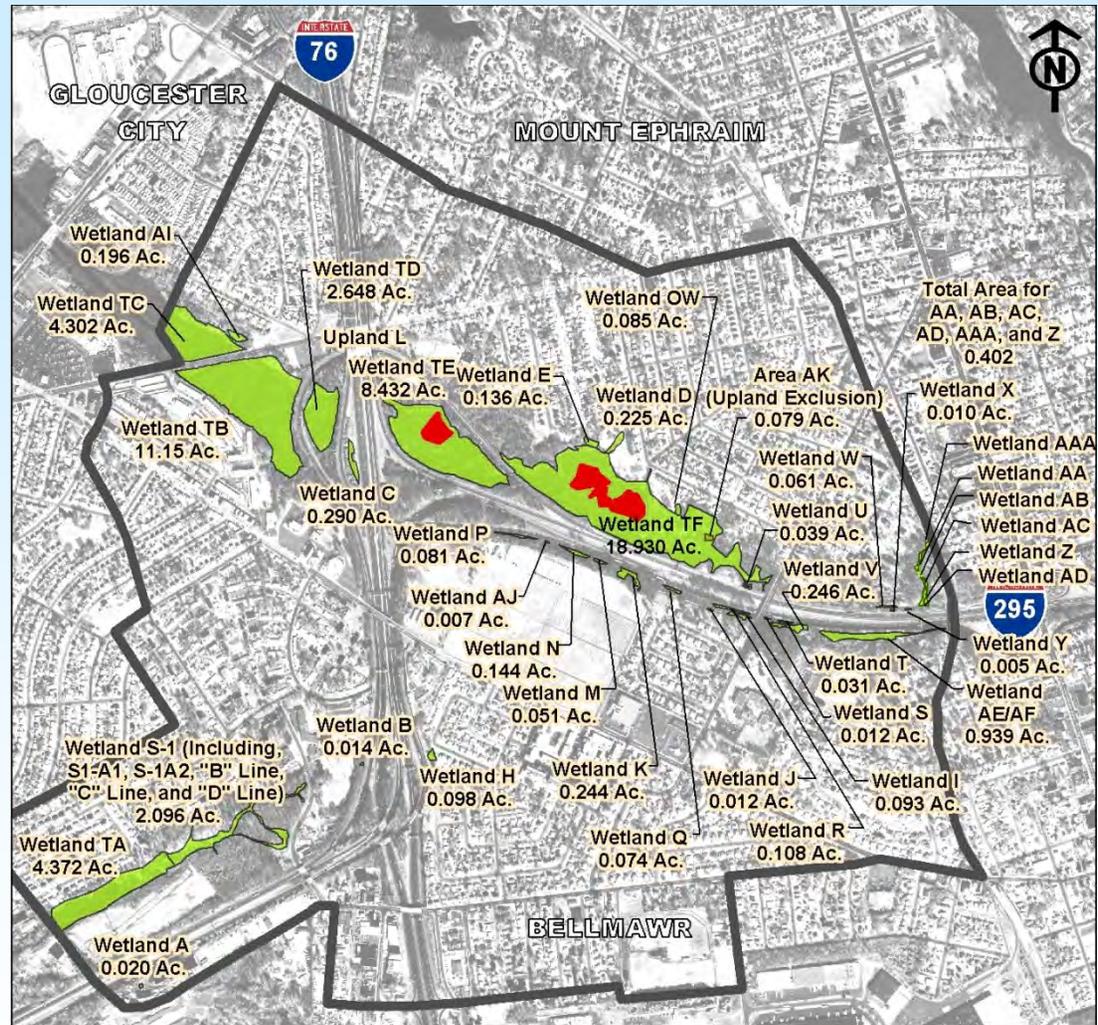
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# WILD RICE



## LEGEND

- Study Area Boundary
  - Delineated Wetlands
  - Delineated Upland Exclusion Area
  - Surveyed Limit of Areas with Wild Rice
- 0 1,000 2,000 Feet



# FLOOD HAZARD AREA

*Eric Boschen*  
Dewberry



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# FLOOD HAZARD AREA

## Regulated Waters, Areas and Activities

- Requires Individual Permit and Verification
- Regulated Waters:
  - ✓ Little Timber Creek (LTC) and Tributary
  - ✓ Big Timber Creek (BTC) Tributary
- Regulated Areas:
  - ✓ Flood Hazard Area: LTC and BTC Tributary
  - ✓ Riparian Zone: LTC, LTC Tributary, BTC Tributary
- Regulated Activities Include:
  - ✓ Bridges & Culverts
  - ✓ Grading, Fill and Vegetation Disturbance
  - ✓ Outfalls
  - ✓ Stormwater Management (6 Basins)



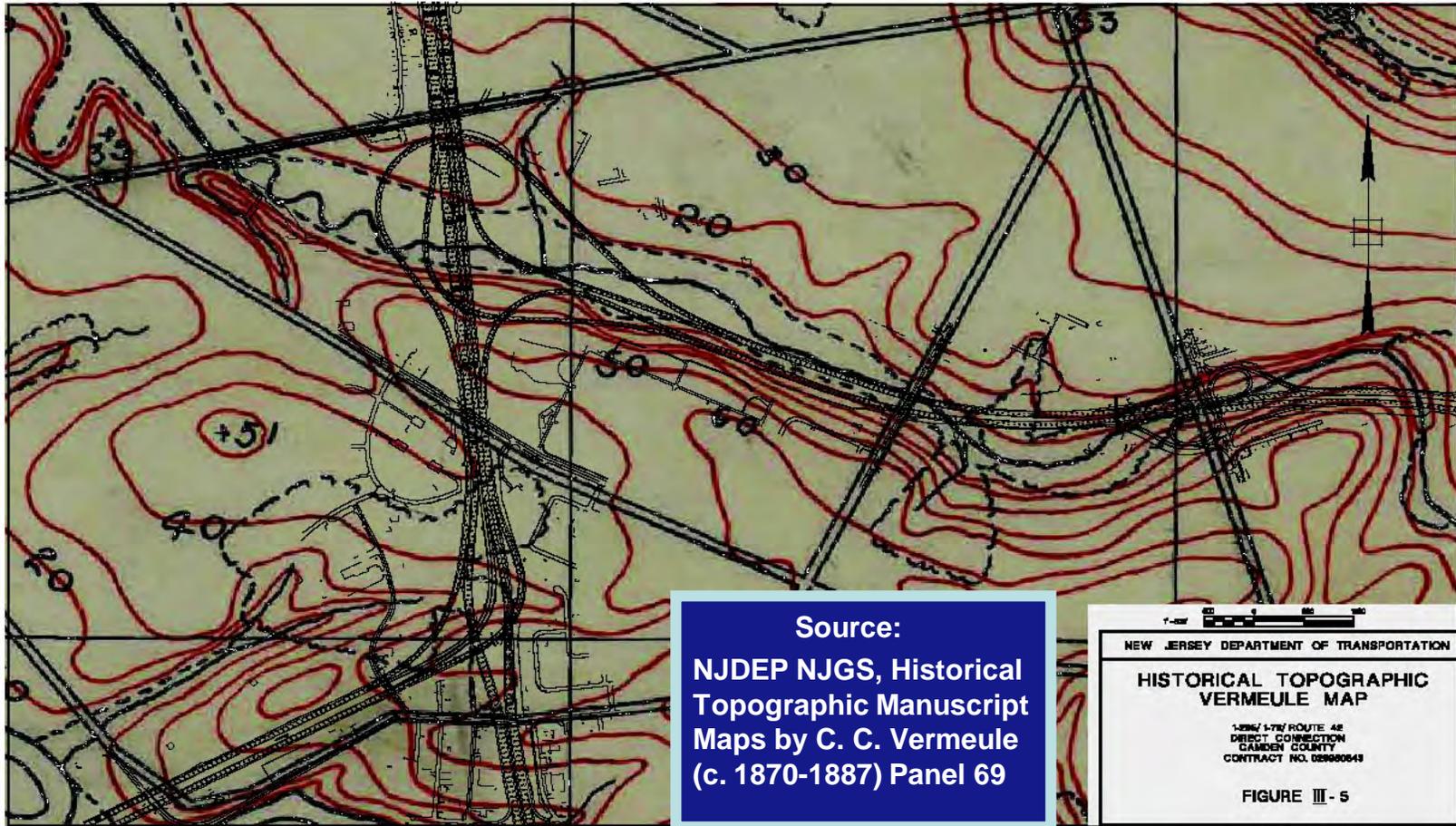
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# FLOOD HAZARD AREA

## Regulated Waters – Historic Mapping



Confirmed Regulated Waters and Areas Based on  
NJDEP Historical Topographic Manuscript Maps.





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# FLOOD HAZARD AREA

## Flood Hazard Area and Riparian Zone Limits

- Waterways Not Delineated by NJDEP and FEMA
- Computed FHA and Floodway Limits (NJDEP Method 6)
- Little Timber Creek:
  - ✓ Delaware River 100-Year Tidal Controls to Bell Road
  - ✓ Fluvial Control Upstream of Bell Road
- Big Timber Creek Tributary:
  - ✓ Fluvial Control Within Project Limits
- Riparian Zone:
  - ✓ 150' Based on Acid Producing Soils Formations



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# FLOOD HAZARD AREA

## Flood Hazard Area and Riparian Zone Limits Little Timber Creek



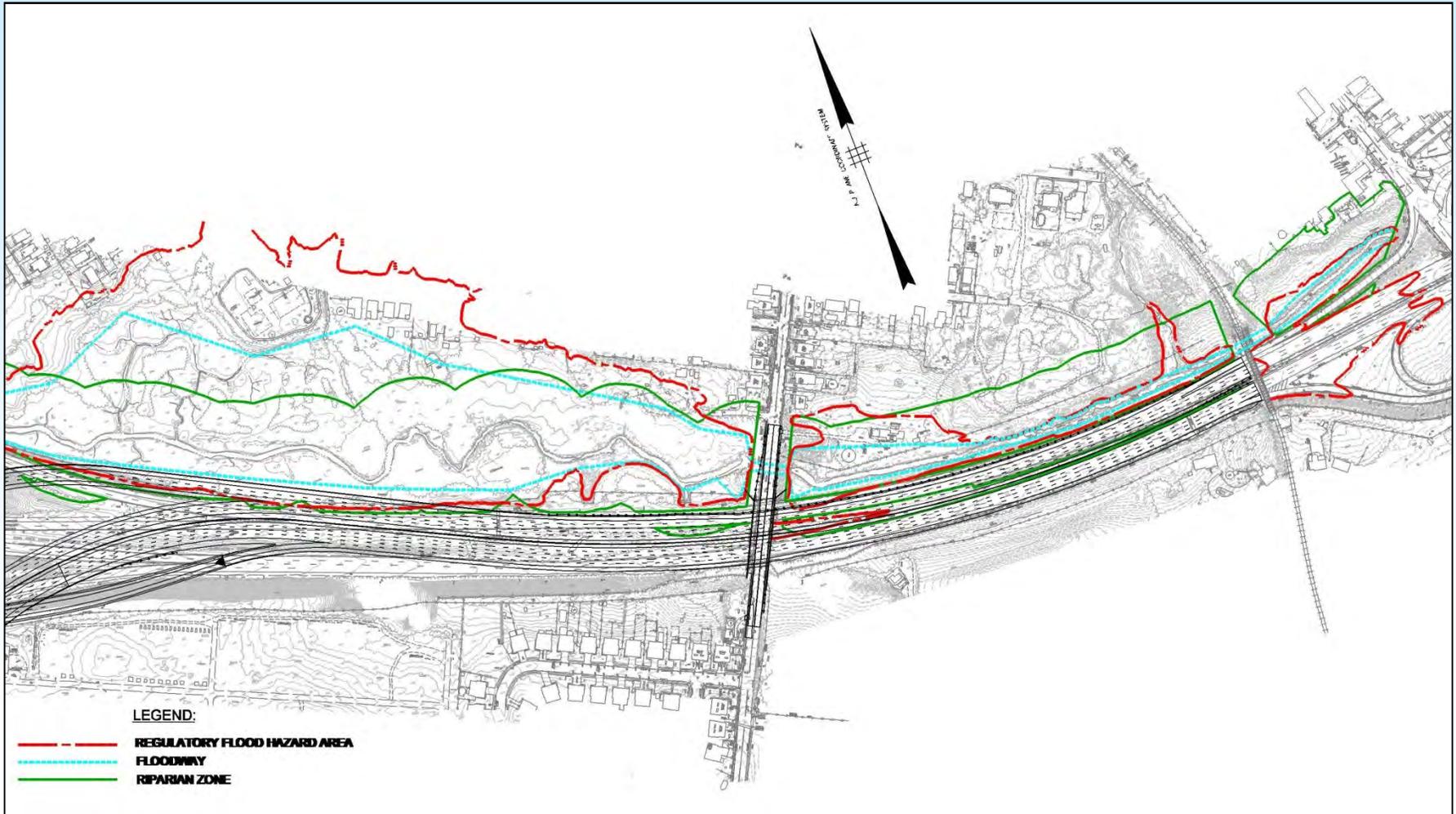
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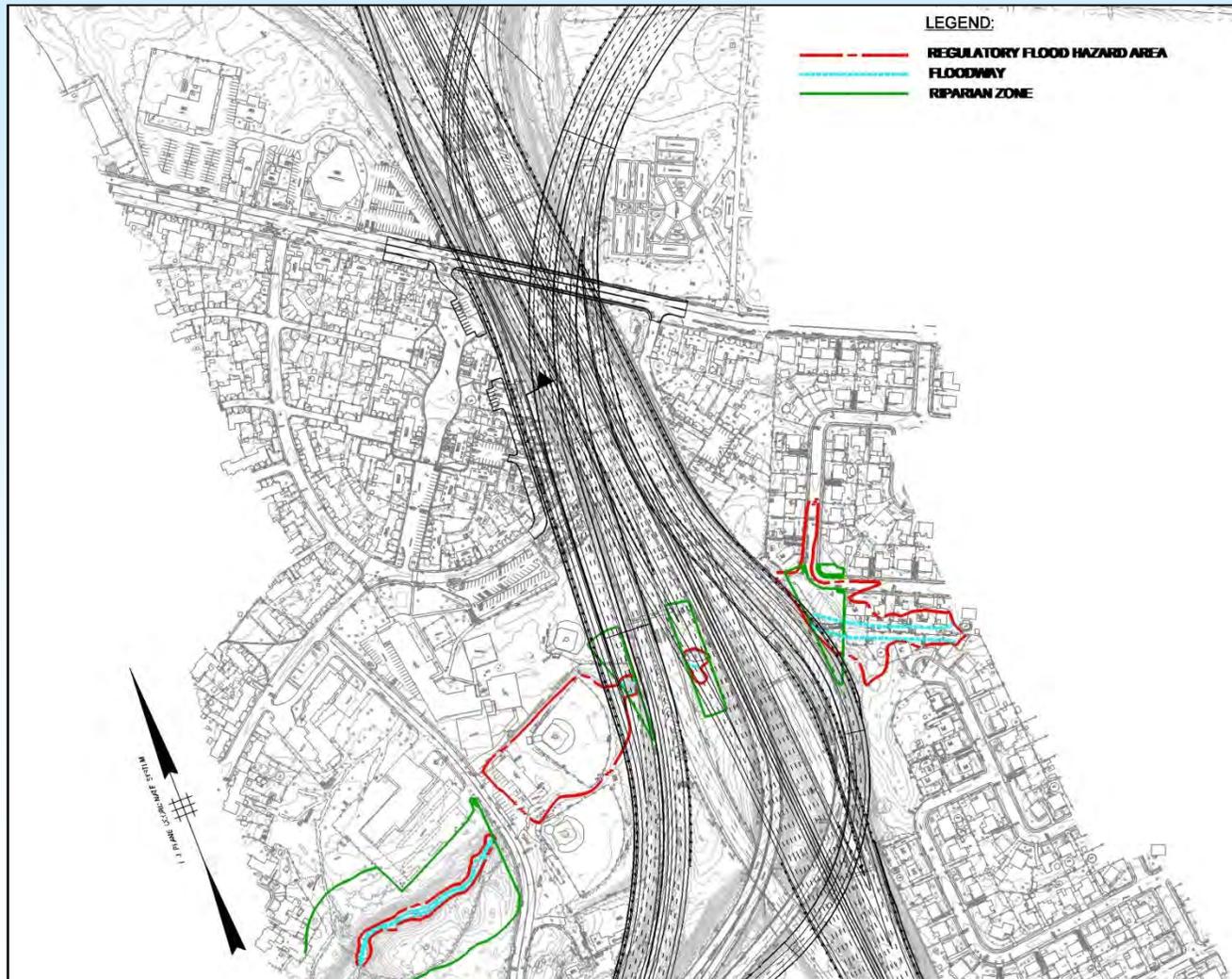
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# FLOOD HAZARD AREA

## Flood Hazard Area and Riparian Zone Limits Big Timber Creek Tributary



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# FLOOD HAZARD AREA

## Flood Hazard Area Impacts

### Little Timber Creek

- Tidal Control Downstream of Bell Road:
  - ✓ Water Surface Elevation & Net Fill Requirements – Not Applicable
  - ✓ Extend Culvert at Ramp D
  - ✓ Minor Fill for Walls & Roadway Improvements
  - ✓ Remove Portion of Al Jo's Curve
- Fluvial Control Upstream of Bell Road:
  - ✓ No Change in FHA Design Flood Elevation
  - ✓ Minor Fill for Roadway Improvements
  - ✓ Minimize Impacts with Walls
  - ✓ Compensating Excavation Upstream of Bell Road

### Big Timber Creek Tributary

- I-76 Culvert Replacement
- Maintain Existing FHA Design Flood Elevation
- Minimal Flood Fringe Fill



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## FLOOD HAZARD AREA Riparian Zone Impacts

WATERWAY	REGULATED AREA	TEMPORARY IMPACTS GRASS (ACRES)	PERMANENT IMPACTS		
			TREES (ACRES)	GRASS (ACRES)	TOTAL (ACRES)
LTC and Tributary	Riparian Zone	0.9	2.3	1.5	3.8
	Wetlands/Riparian Zone	0	0.8	0.5	1.3
BTC Tributary	Riparian Zone	0	0.6	0.3	0.9

- Total Permanent Impacts = 6.0 Acres
- Allowable Impacts – Various Activities = 1.3 Acres
- Excess Impacts = 4.7 Acres
- Preliminary Estimate of Mitigation Required = 9.4 Acres (Based on 2:1)

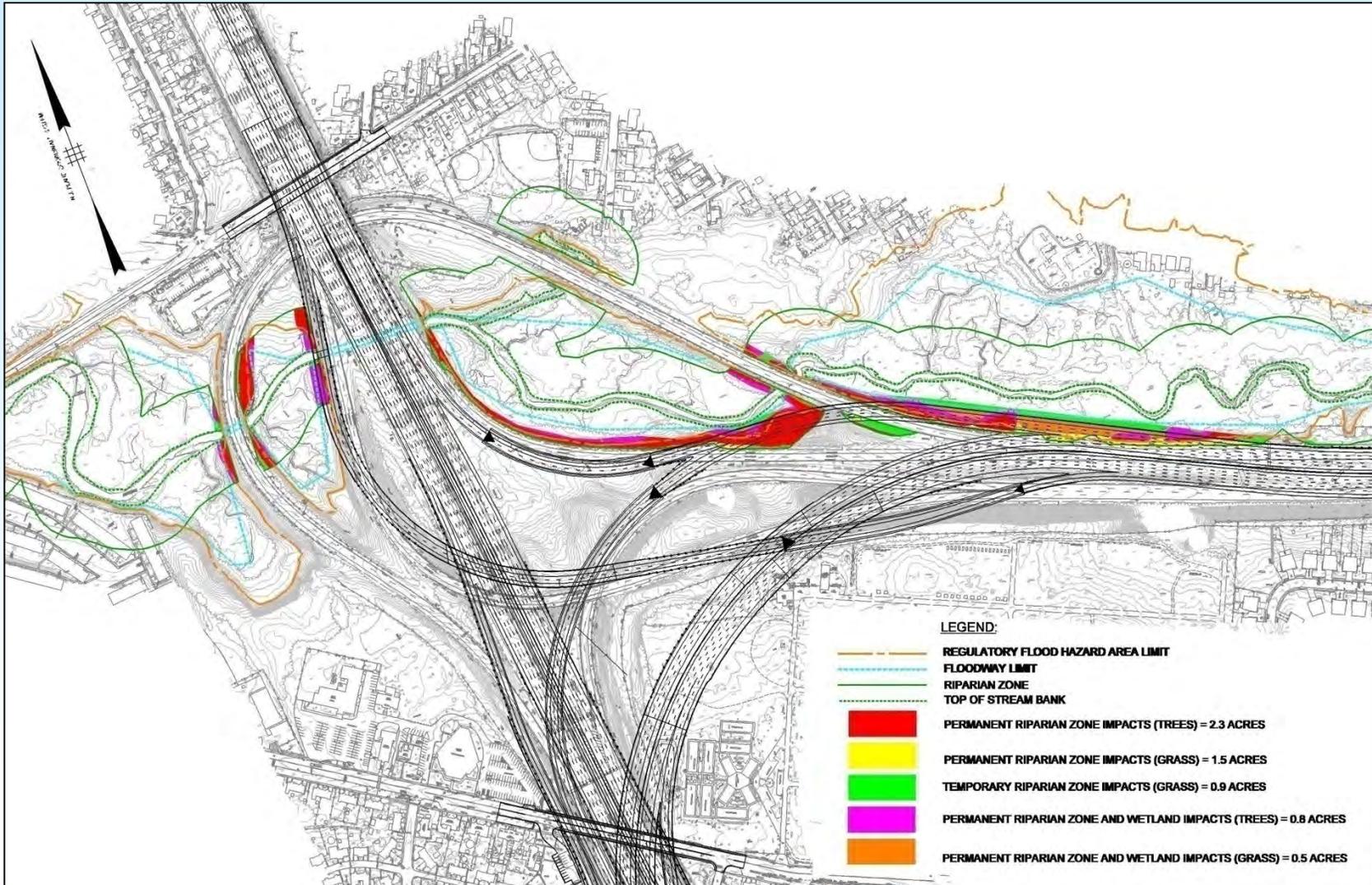


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## FLOOD HAZARD AREA Riparian Zone Impacts – Little Timber Creek

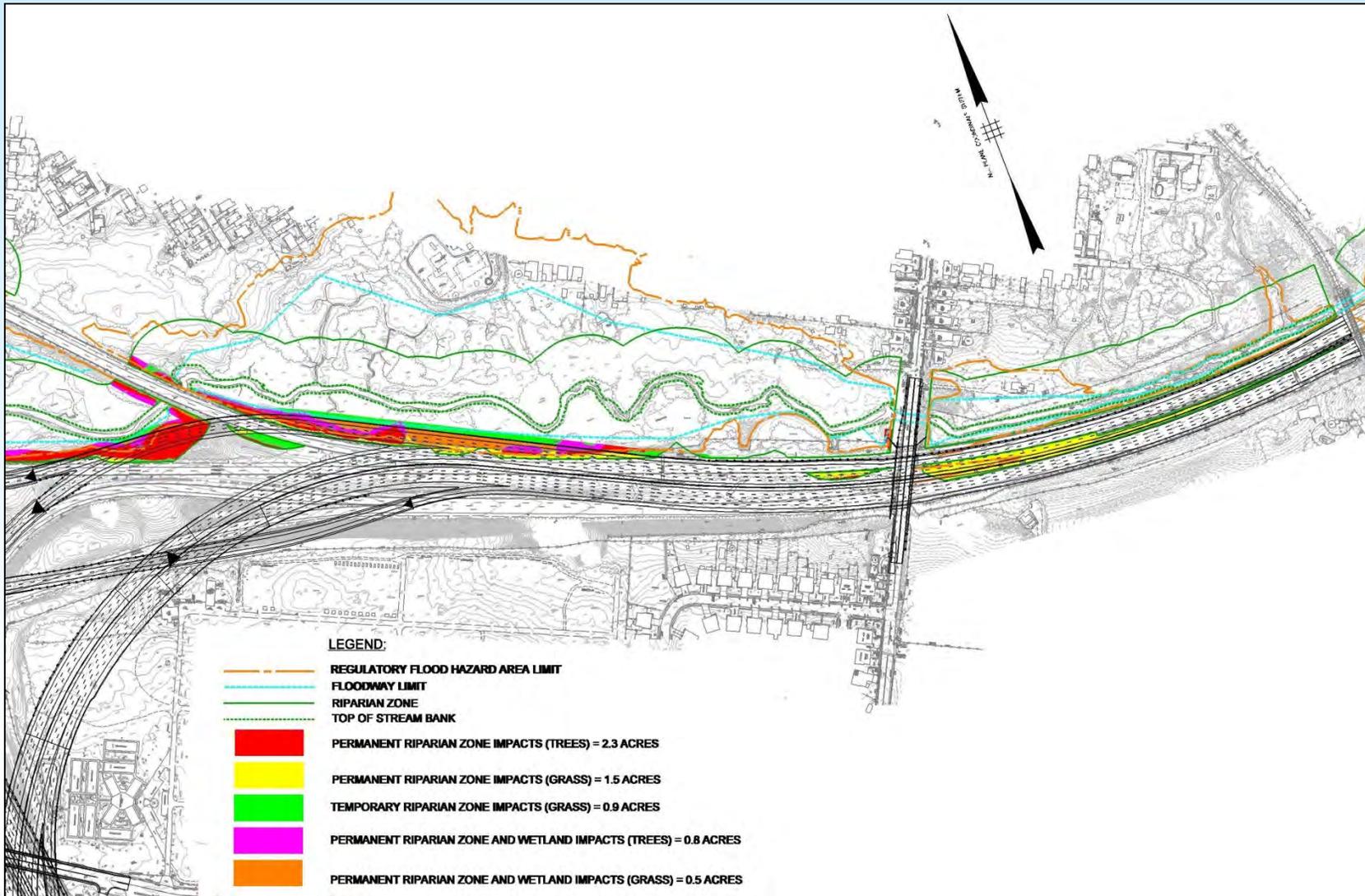


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# FLOOD HAZARD AREA Riparian Zone Impacts – Little Timber Creek



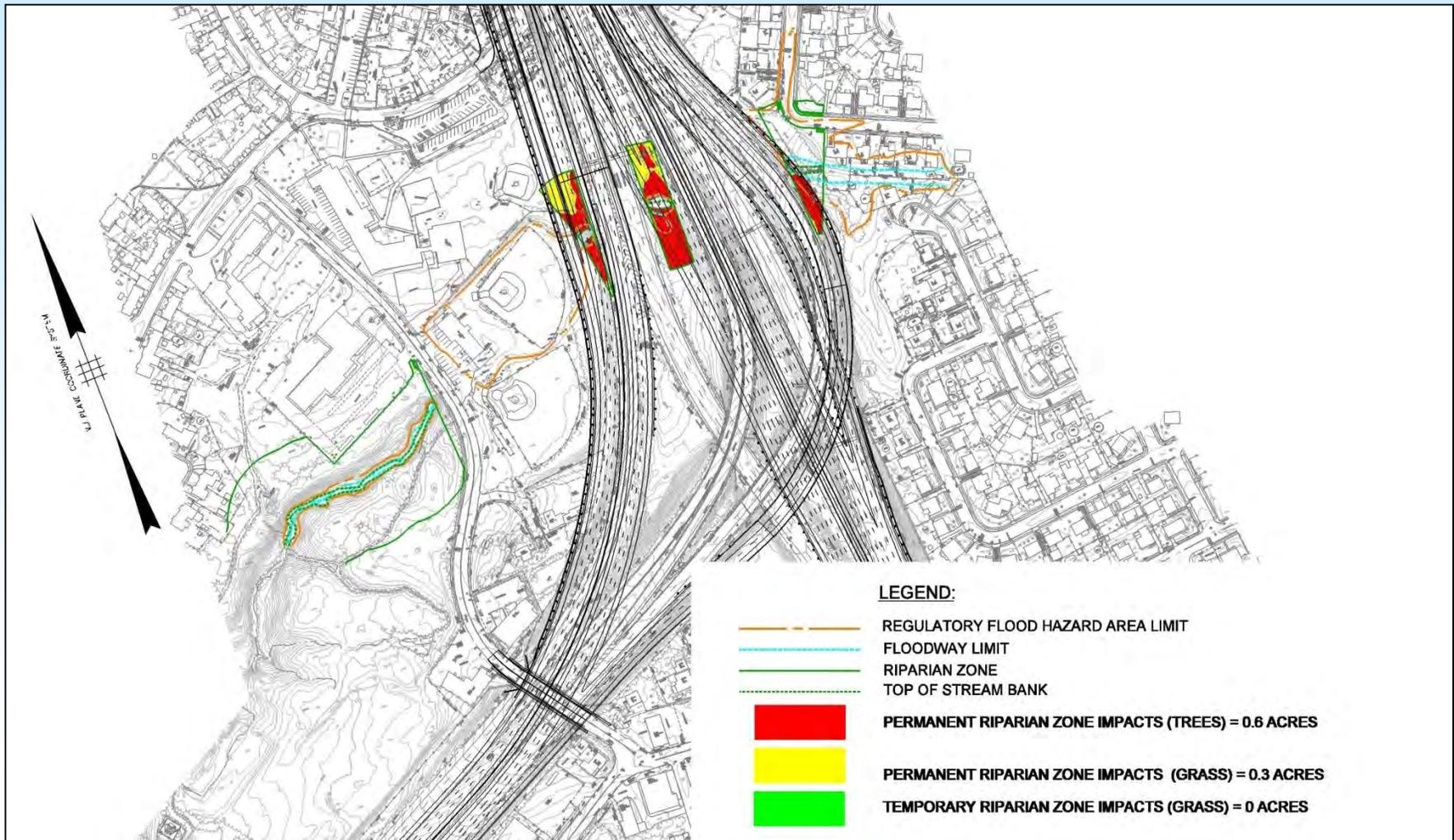
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# FLOOD HAZARD AREA

## Riparian Zone Impacts – Big Timber Creek Tributary



# MITIGATION

*Eric Boschen/Brian Sayre*  
Dewberry

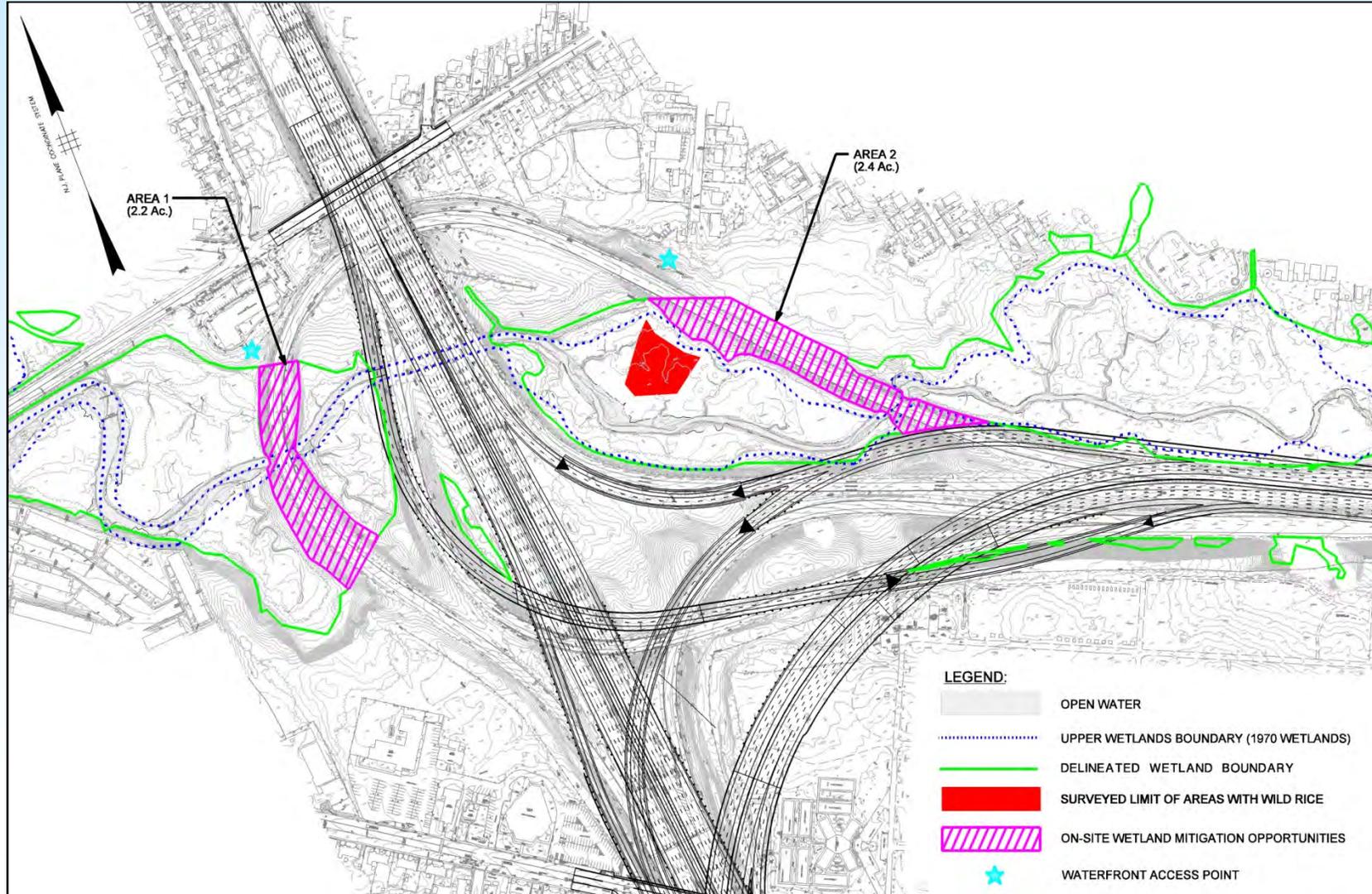


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# MITIGATION Wetlands/Waterfront Access





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# MITIGATION

## Riparian Zone

### Proposed Mitigation:

- Located along Little Timber Creek and Tributary
- Mitigation:
  - ✓ Pavement Removal, Tree Planting Enhancement = 7.3 Acres
  - ✓ Includes Combined Wetland/Riparian Zone mitigation = 1.1 Acres
- Remaining Mitigation through Expanded Riparian Zone Enhancement and/or Preservation

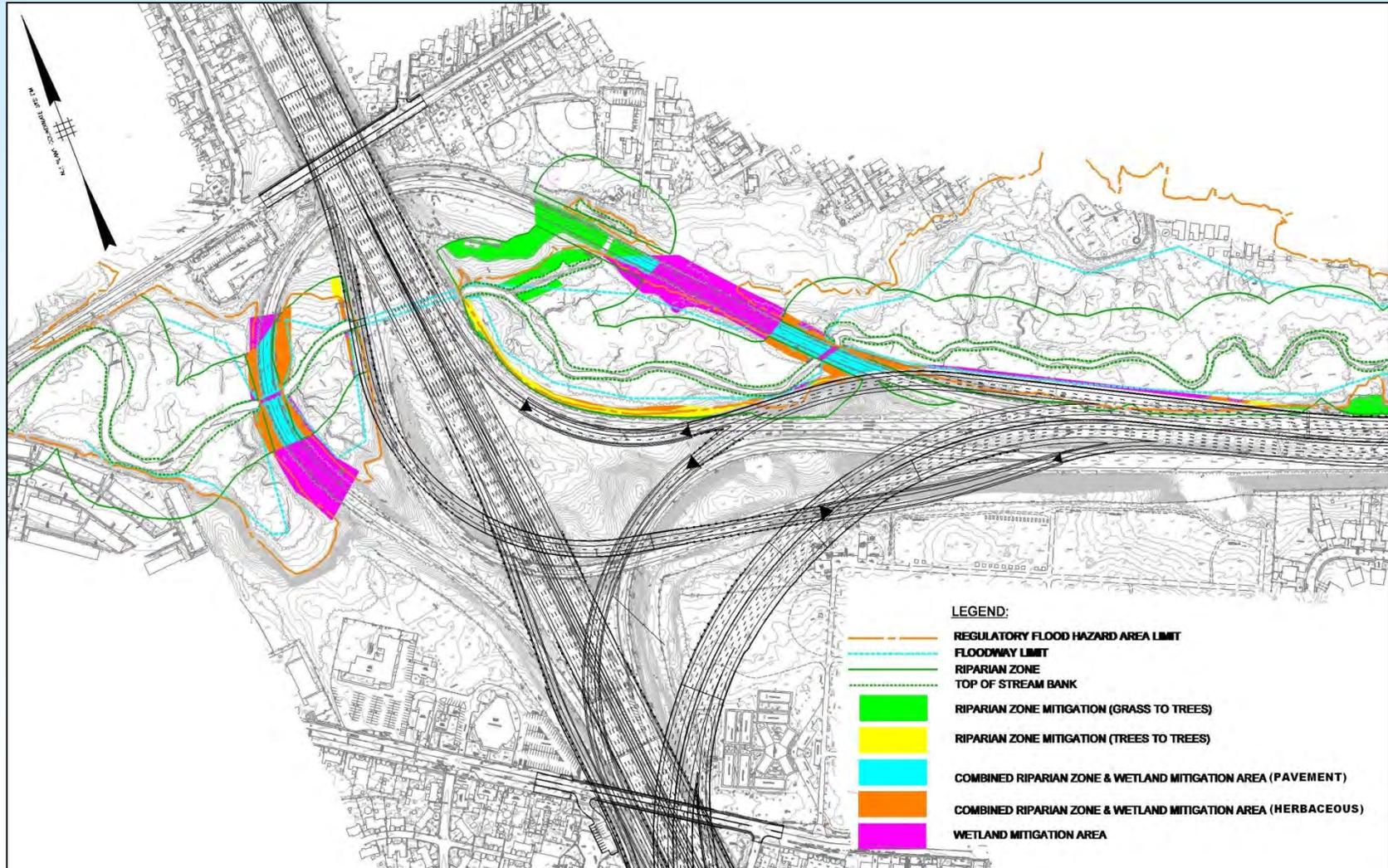


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# MITIGATION Riparian Zone

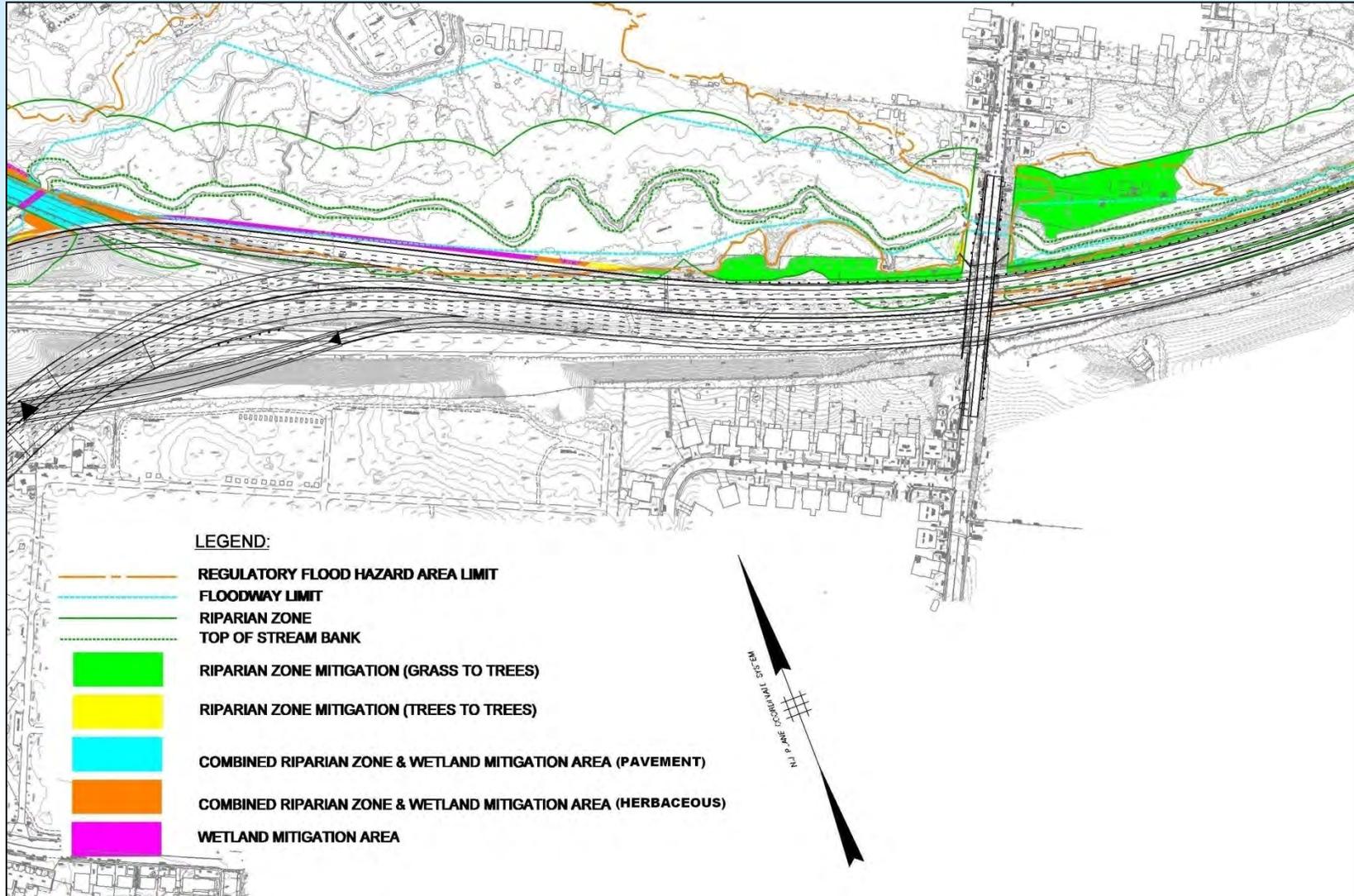


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# MITIGATION Riparian Zone



# STORMWATER MANAGEMENT

*Eric Boschen*  
Dewberry





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# STORMWATER MANAGEMENT

- Watershed: Woodbury / Big Timber / Newton Creeks
- Subwatersheds:
  - ✓ Big Timber Creek (Below NB/SB Confluence)
  - ✓ Little Timber Creek (Gloucester City)
- Drainage Patterns:
  - ✓ 60% Drains to Tidal Waters (LTC Downstream of Bell Road)
  - ✓ 40% Drains to Fluvial Waters (LTC Upstream of Bell Road, BTC Tributary)
- Preliminary Impervious Cover Changes:
  - ✓ New Pavement: 40 Acres
  - ✓ Reconstructed Pavement: 46 Acres
  - ✓ Pavement Removed: 15 Acres





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# STORMWATER MANAGEMENT

## Stormwater Management Requirements:

- Tidal Waterways: Water Quality Treatment, Groundwater Recharge
- Fluvial Waterways: Water Quality and Quantity Treatment, Groundwater Recharge

## Proposed Structural Best Management Practices:

- Basins (6 Total):
  - ✓ LTC Subwatershed (5 Basins)
  - ✓ BTC Tributary (1 Basin)



# OTHER CONCERNS

*Brian Sayre/Jim Heeren*  
Dewberry



# TIDELANDS

## I-295/I-76/Route 42 Direct Connection

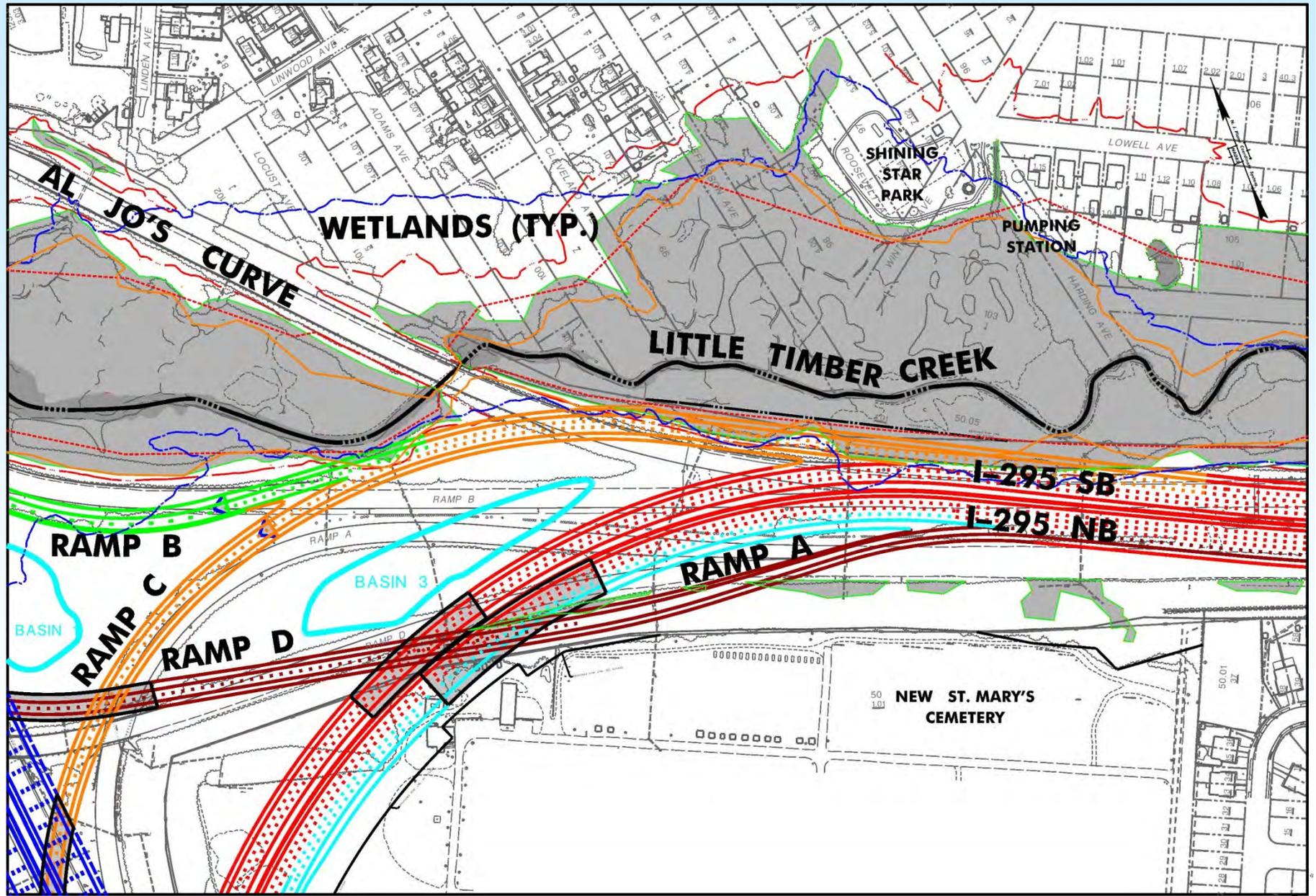
Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

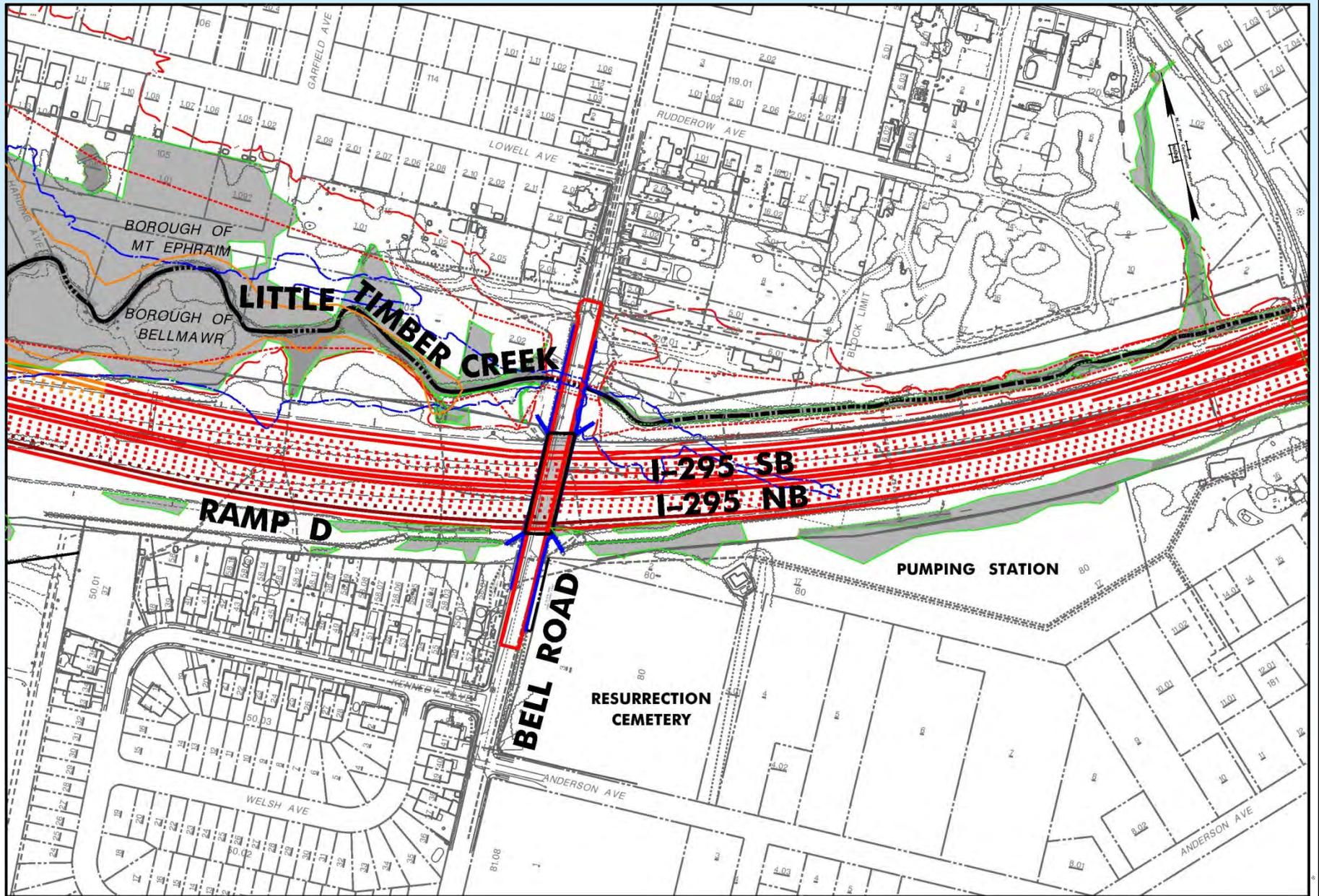
- Existing Tidelands grant needs to be extended to the limits of the Tidelands Claim line north of Bell Road
- New Tidelands instrument required for new ROW being acquired across from Shining Star Park



# TIDELANDS



# TIDELANDS





**I-295/I-76/Route 42  
Direct Connection**

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

# PERMITS/APPROVALS

- Pollution Discharge Elimination System Permit (NJPDES)
- Reforestation
- Green Acres
- Contaminated Materials
- Cultural Resources



## I-295/I-76/Route 42 Direct Connection

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

# REFORESTATION

- Determine forest area based on NJDEP grids
- Determine proposed deforestation area
- Reforestation plan developed with NJDEP Parks and Forestry
- Public Forum



# GREEN ACRES

## I-295/I-76/Route 42 Direct Connection

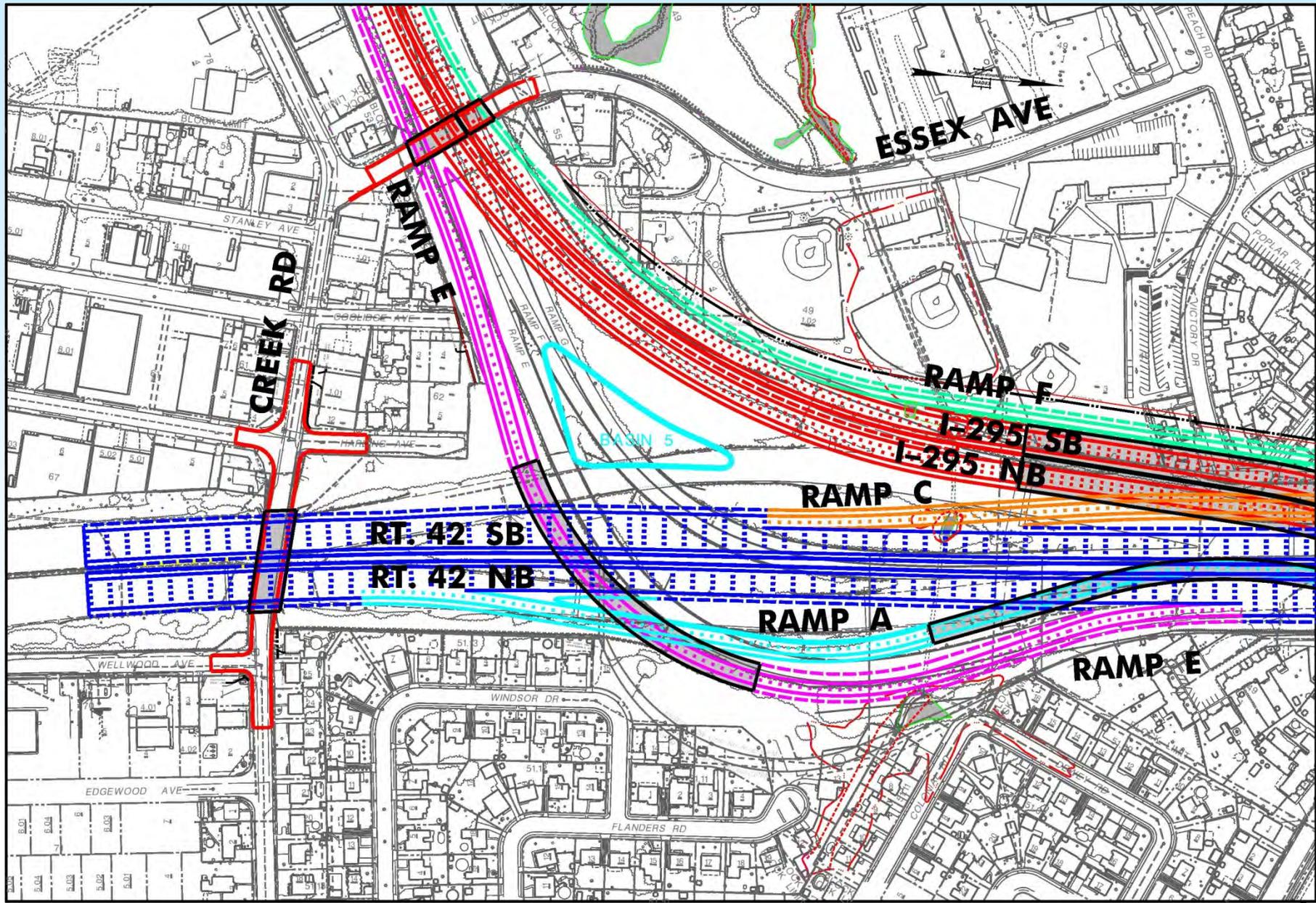
Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

- Field meeting – April 2009
- Encumbered property
  - ✓ Bellmawr Baseball Fields (Disposal of 0.8 acres)
- Scoping Meeting – Early 2010



# GREEN ACRES





## I-295/I-76/Route 42 Direct Connection

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

# CONTAMINATED MATERIALS

- Limited Site Investigation
  - ✓ Bill Seas Towing
  
- Remedial Action Workplan
  - ✓ Bill Seas Towing
  - ✓ Historic Fill Areas

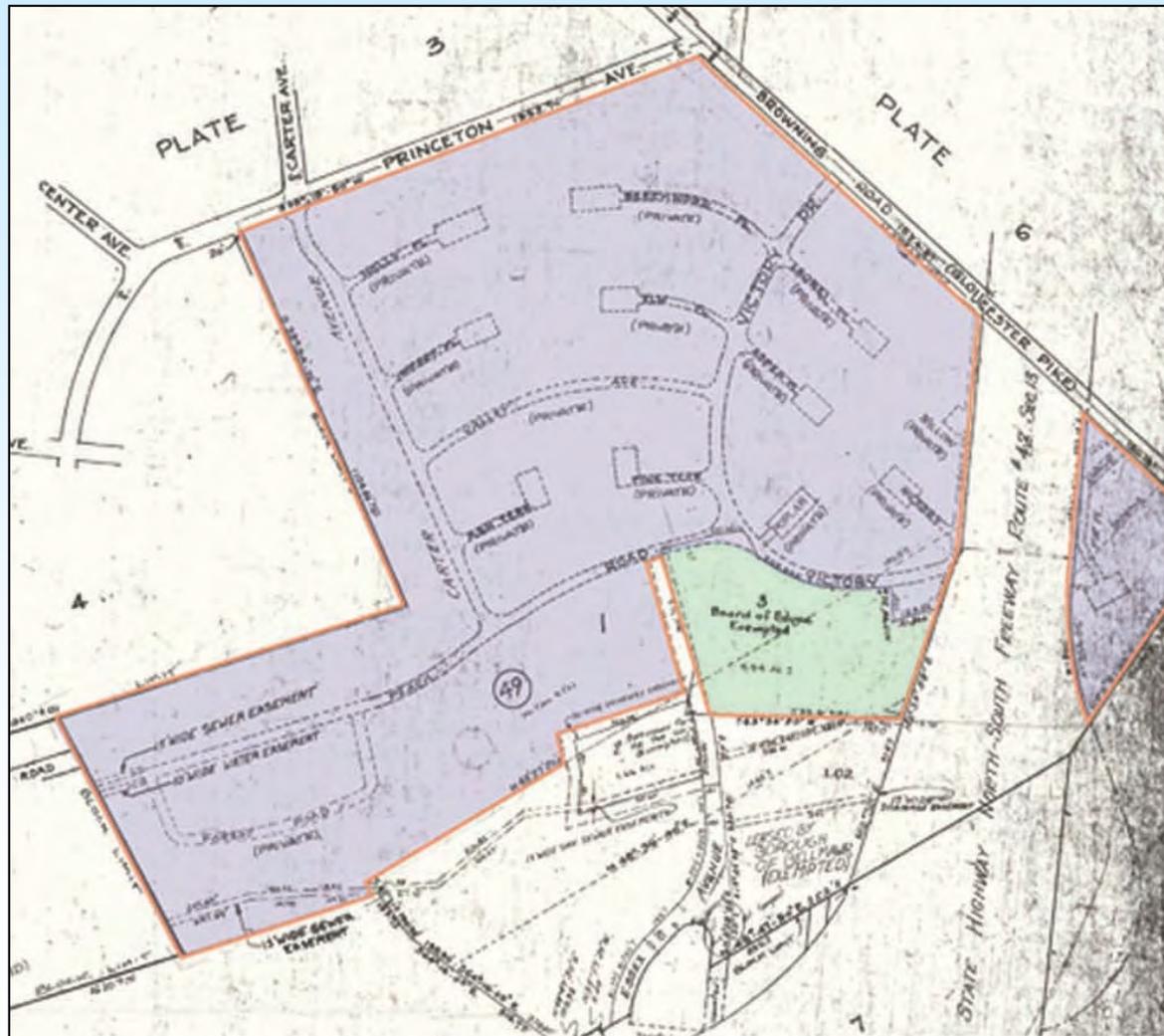


# I-295/I-76/Route 42 Direct Connection

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

# NATIONAL REGISTER ELIGIBLE RESOURCES





**I-295/I-76/Route 42  
Direct Connection**

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

# CULTURAL RESOURCES MITIGATION

- Memorandum of Agreement
  - ✓ Conservation Plan
  - ✓ HABS Recordation
  - ✓ National Register Nomination
  - ✓ Signage
  - ✓ New construction
  - ✓ Website



## I-295/I-76/Route 42 Direct Connection

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

## SCHEDULE

- Pre-application Spring 2010
- Preliminary Design August 2010
- Permit Submissions Spring 2011
- Final Designs Fall 2011



## I-295/I-76/Route 42 Direct Connection

Camden County

[www.state.nj.us/transportation/works/studies/rt295](http://www.state.nj.us/transportation/works/studies/rt295)

# SUMMARY OF PERMITS/APPROVALS

- USACE - Provisional Permit
- NJDEP - LURP
  - ✓ Individual Freshwater Wetlands
  - ✓ Coastal Wetlands
  - ✓ Waterfront Development
  - ✓ Water Quality Certificate
  - ✓ Coastal Zone Management Compliance Statement
  - ✓ Individual Flood Hazard Area
  - ✓ Stormwater Management Review
  - ✓ Tidelands Instrument
- NJDEP - Parks & Forestry - Reforestation
- NJDEP - Green Acres
- NJDEP - Site Remediation - Remedial Action Workplan
- NJDEP - Historic Preservation - MOA commitments



# DISCUSSION

