



# **I-64/I-264 Ramp Improvements and I-264/Witchduck Road Interchange & Ramp Extension**

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VDOT Hampton Roads District PMO**

**July 2016**

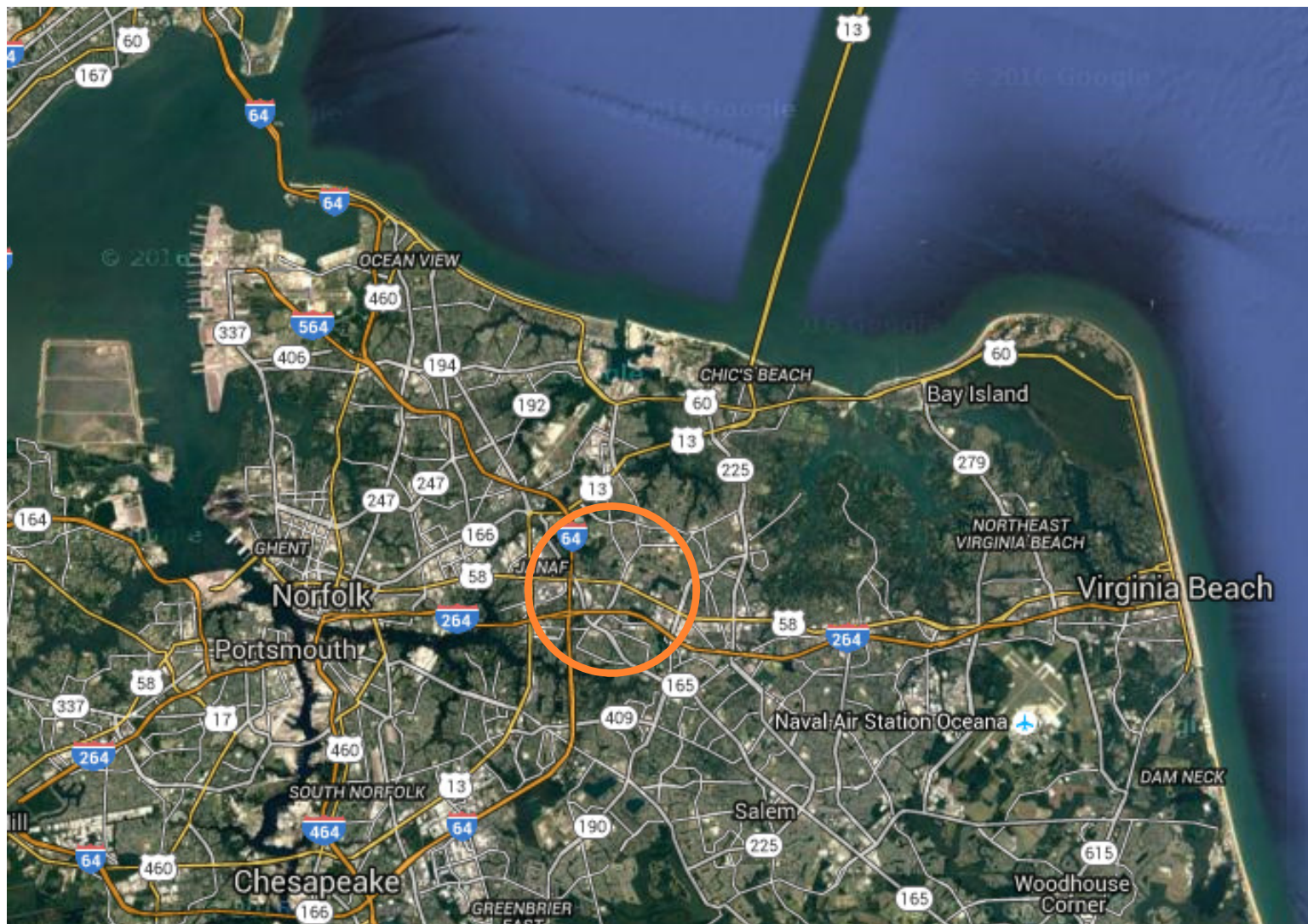
# Topics

- Background
- Purpose & Need
- Alternatives
- Design Overview
- Unique Features
- Questions / Answers





## Area Map



# Project Background

- One of the Commonwealth's busiest interchanges
- Heavy traffic volumes
- High crash rates
- Varying speeds
- Poor geometry
- Key point for evacuation routes



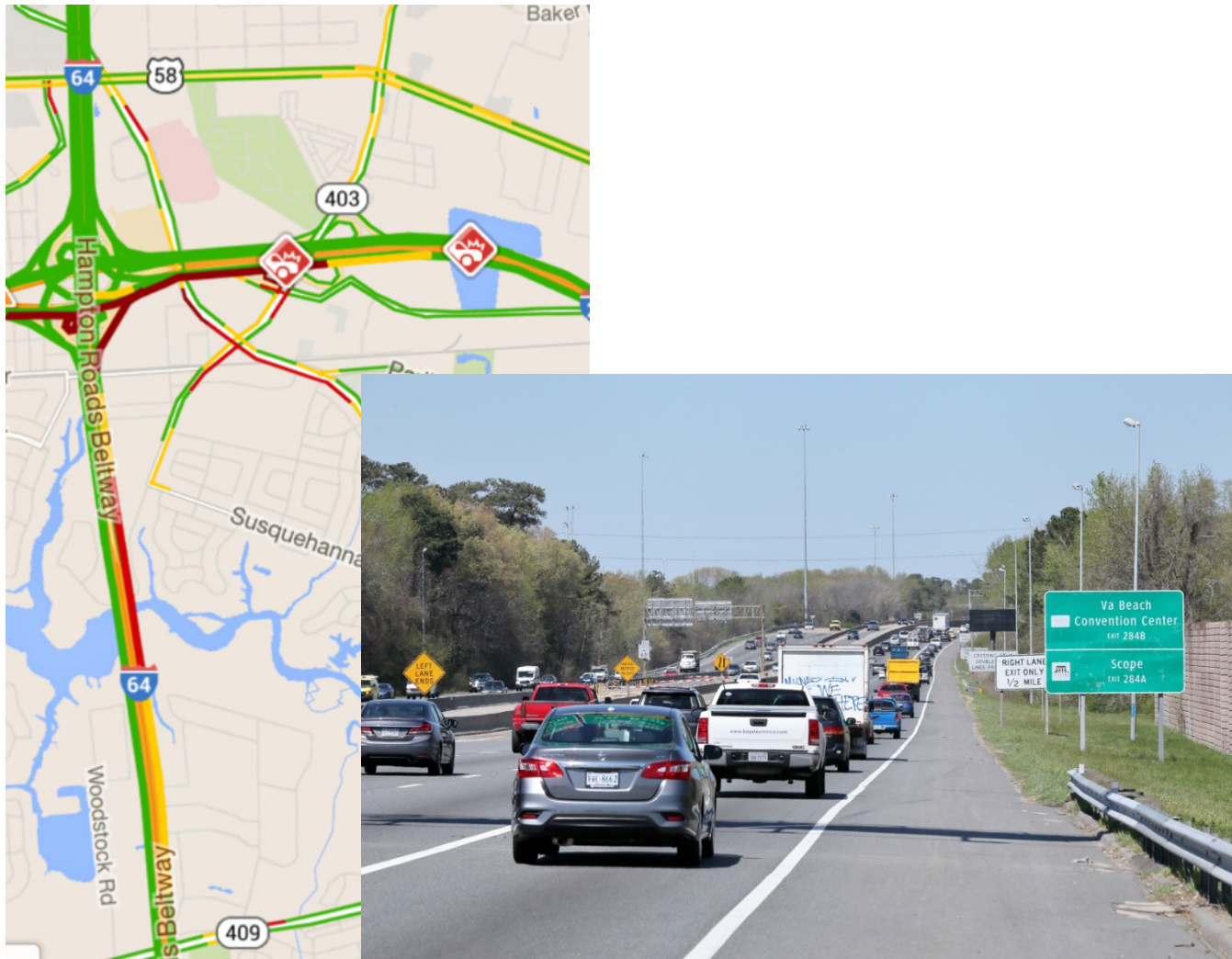
# Project Background

- **National level – NHS**
  - Routes most critical to national defense, mobility and commerce
- **State level – Corridor of Statewide Significance (CoSS)**
  - Multiple modes/extended freight corridor; connection among regions/states; high volume of travel; unique statewide function.
- **Regional level – circumferential freeway loop in Hampton Roads**
- **Local level – principal interstate urban arterials**
  - Highest volumes served in each jurisdiction
  - Commuter routes
  - Oceanfront resort area

## Project Purpose & Need

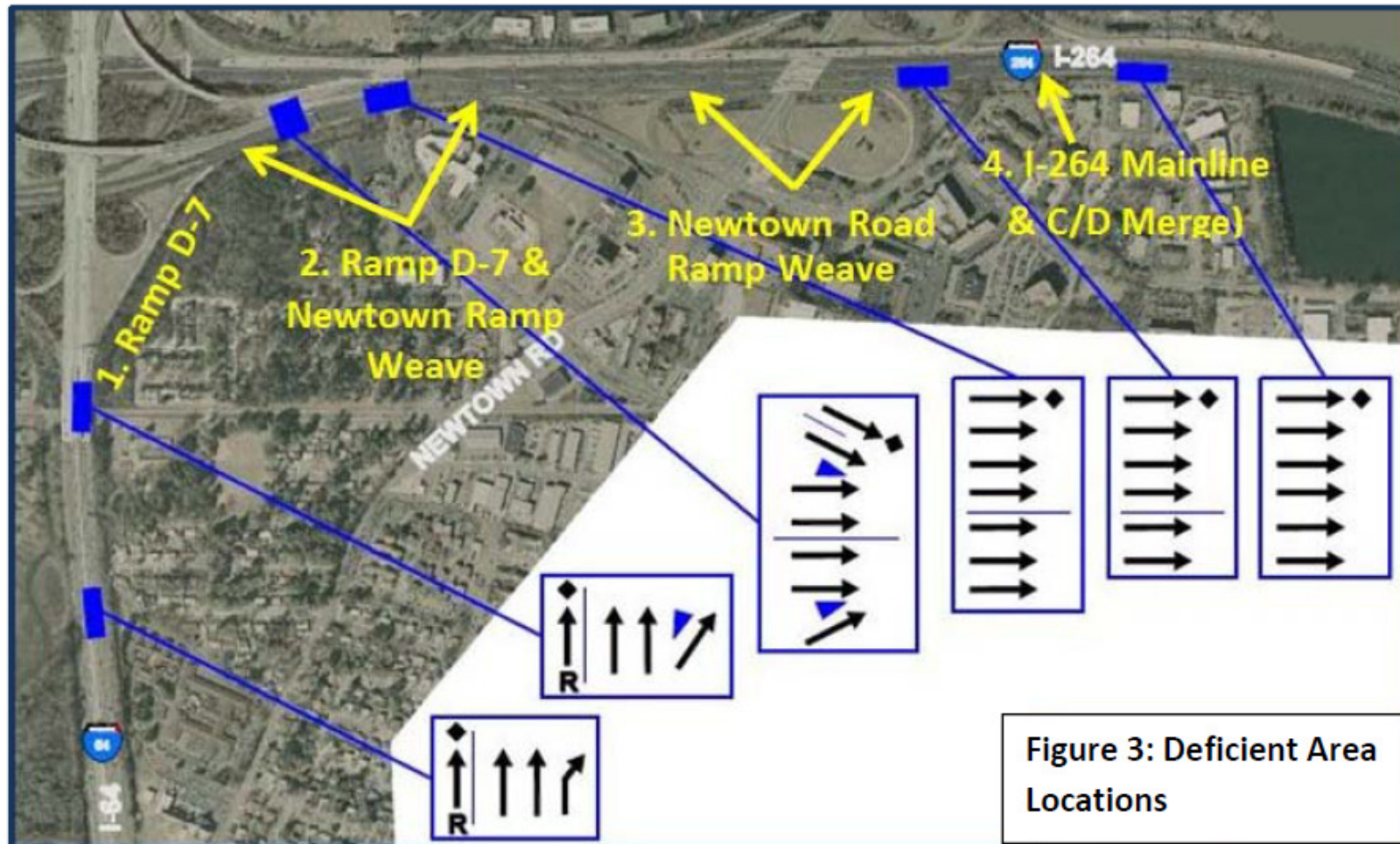
**The purpose of the project is to address deficiencies in safety, capacity and geometry of the current I-64/I-264 interchange.**

# Congestion





## Deficiency Areas



## Project Timeline

- I-264 HOV Feasibility Study 1997
- I-264 Corridor Study 2001-2006
- Preliminary Engineering Begins 2006
- Citizen Information Meeting 2008
- Interchange Modification Report 2011
- Public Hearing 2011
- Design Exception Approval 2014
- Split Projects 4/2015
- Begin RW Acquisition 2015
- Construction Advertisement – I 4/2016
- Construction Advertisement – II 1/2017

# Interchange Modification Report (IMR)

**12 Newtown Interchange Alternatives**

**9 Witchduck Interchange Alternatives**

## **Evaluation Criteria**

- **Mainline Capacity**
- **Weave Removal**
- **Local Street Spillback**
- **Safety**
- **Construction Cost**
- **RW Impacts**
- **Environmental Impacts**
- **Interstate-to-Interstate Access**
- **Lane Balance/Lane Continuity**
- **Conform with I-264 Corridor Study**
- **Ability to Sign**

**IMR Approved by FHWA – 11/2011**

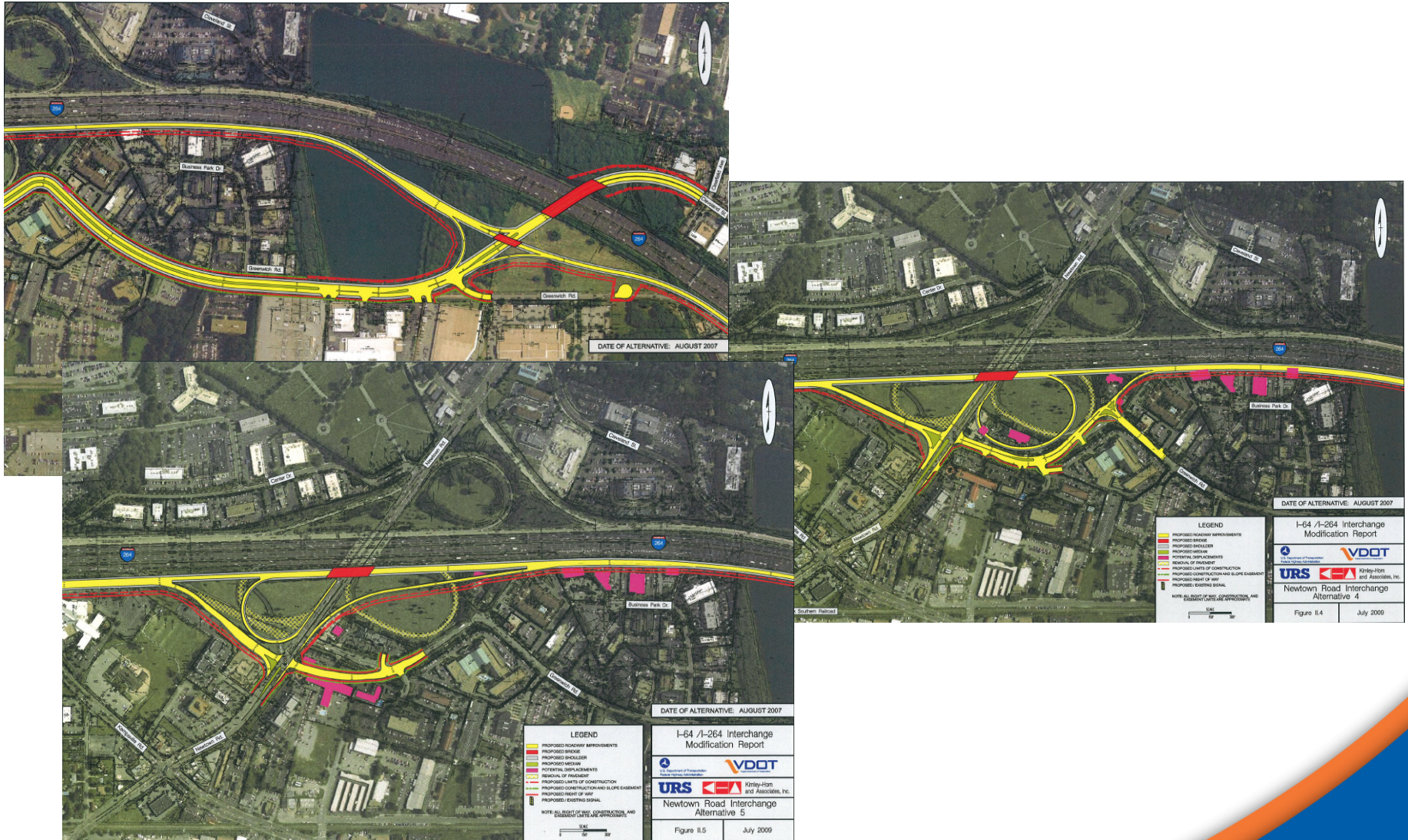


# Newtown Interchange Alternatives





# Newtown Interchange Alternatives



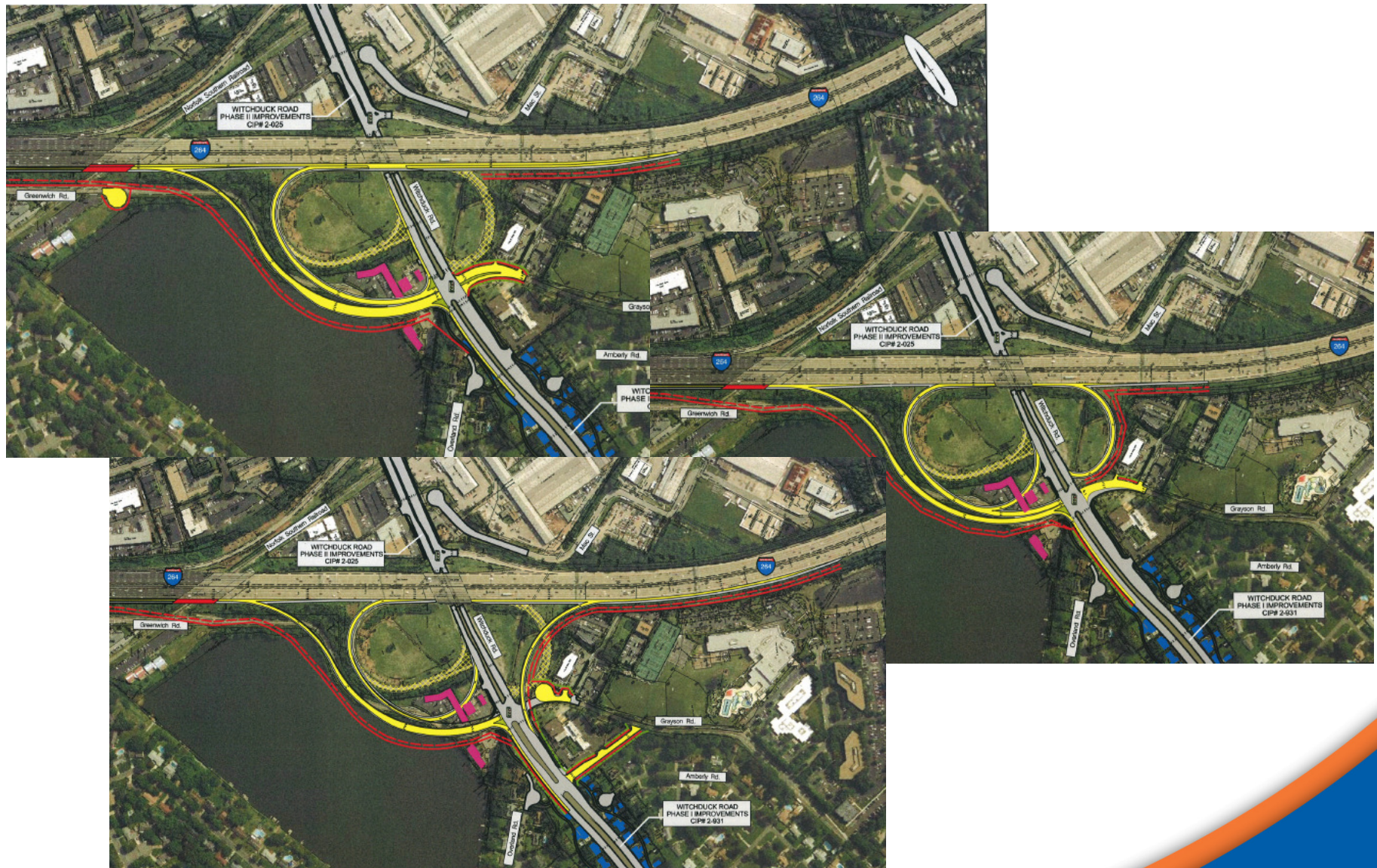


# Witchduck Interchange Alternatives





# Witchduck Interchange Alternatives





## Proposed Design





# I-64/I-264 Ramp Improvements (Phase I)

## Existing Conditions





## Proposed Design



# I-64/I-264 Ramp Improvements (Phase I)

## Project Schedule

- |                               |                   |
|-------------------------------|-------------------|
| • Advertised for Construction | April 26, 2016    |
| • Bid Letting                 | July 6, 2016      |
| • Construction Start          | September 1, 2016 |
| • Construction Completion     | October 24, 2019  |

## Project Budget

- |      |           |
|------|-----------|
| • PE | \$9.4 M   |
| • RW | \$11.6 M  |
| • CN | \$137.0 M |

# **I-64/I-264 Ramp Improvements (Phase I)**

## **Current Project Status**

- **Bids**
- **Contract Award**
- **Stakeholder Meetings**
  - **Churches**
  - **Civic Leagues**
  - **Businesses**
- **Project Website**
- **RW Acquisition**
- **Utility Relocations**

# **I-64/I-264 Ramp Improvements (Phase I)**

## **Construction**

- **NTP – September 1, 2016**
- **FCD – October 24, 2019**
- **Early Completion / Incentives**
- **Phasing**
- **Closures**
- **Public Involvement**



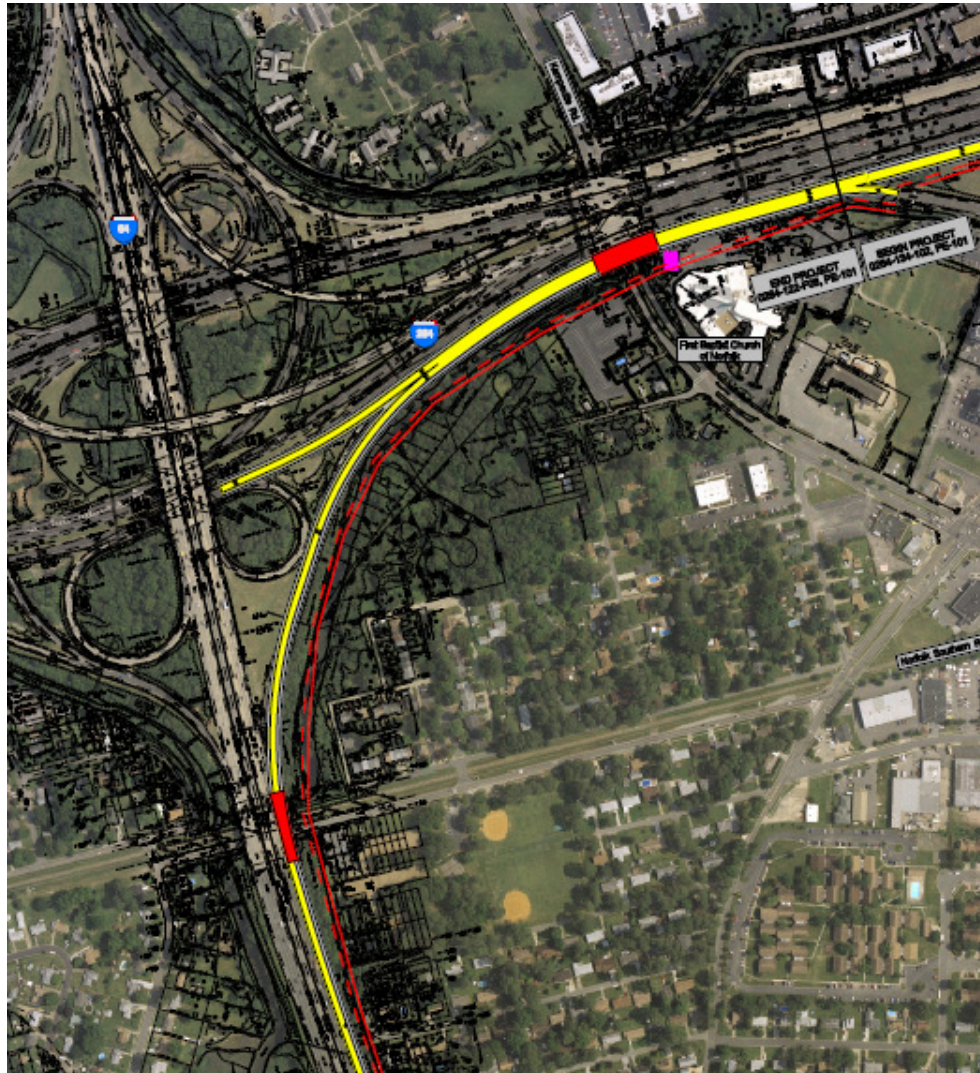
# **I-64/I-264 Ramp Improvements (Phase I)**

## **Unique Project Features**

- **Original Concept**
- **HRTAC**
- **Schedule**
- **Environmental**
- **HRT**
- **RW and Utilities**

# I-64/I-264 Ramp Improvements (Phase I)

## Original Concept



# I-64/I-264 Ramp Improvements (Phase I)

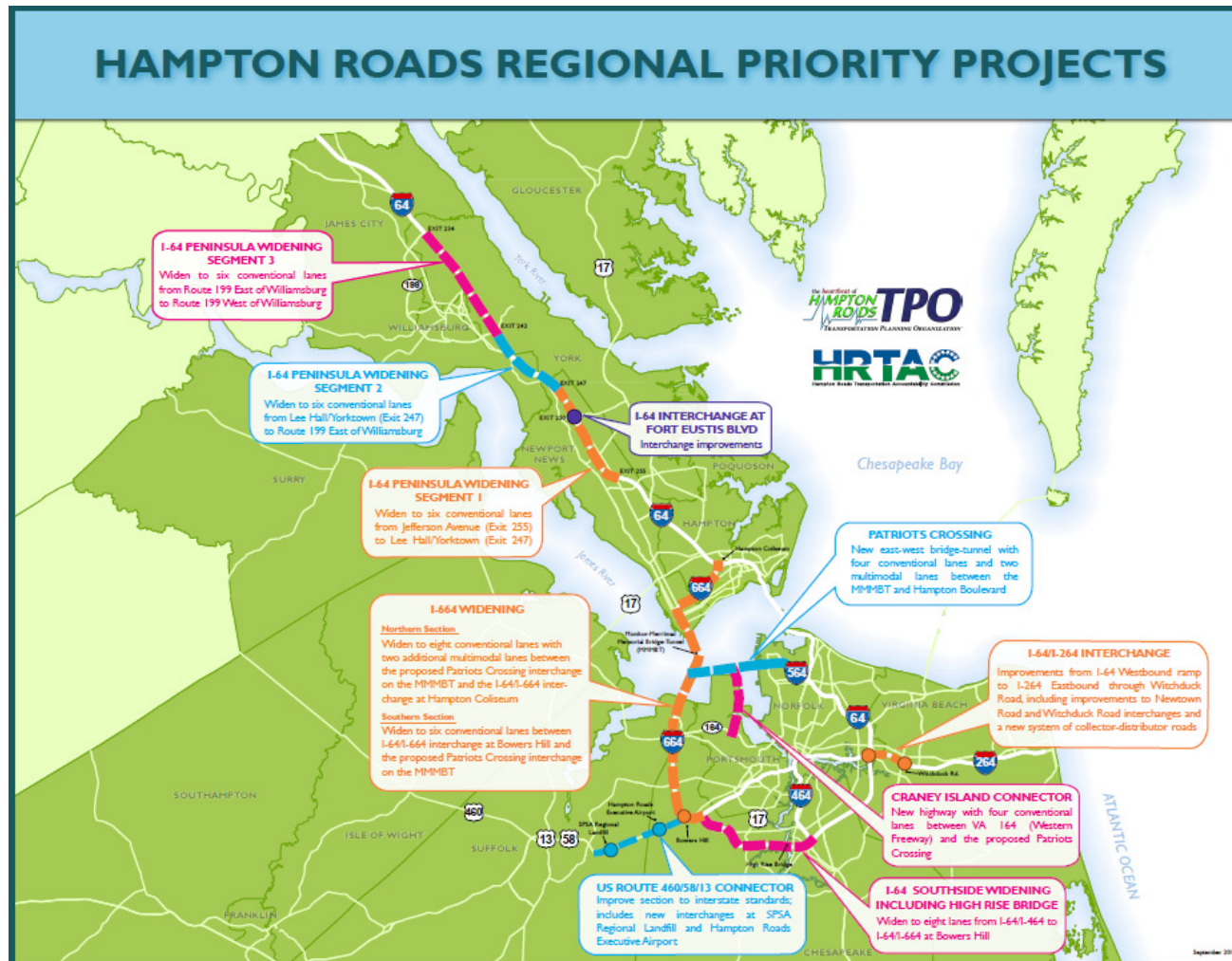
CIM Design (2008)





# I-64/I-264 Ramp Improvements (Phase I)

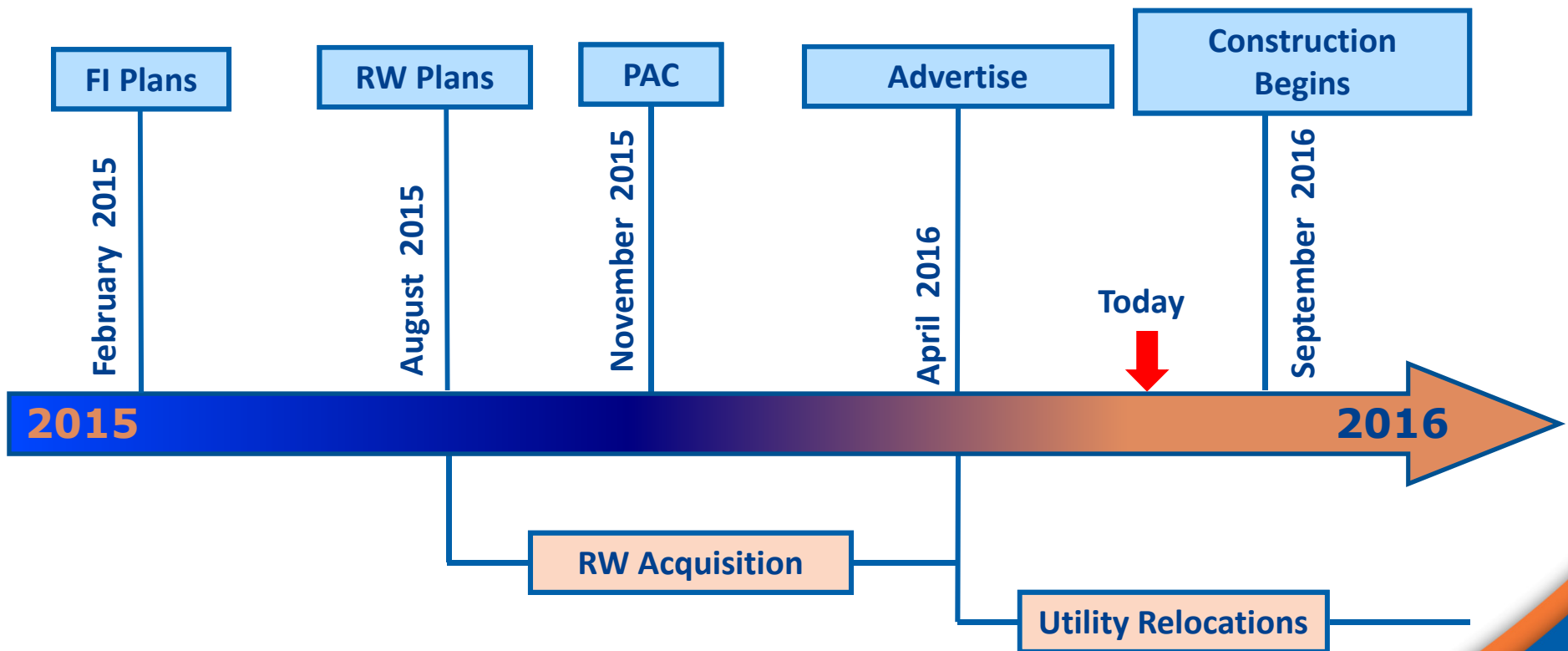
## HRTAC





# I-64/I-264 Ramp Improvements (Phase I)

## Design Schedule



# **I-64/I-264 Ramp Improvements (Phase I)**

## **Environmental**

- **NEPA CE**
- **Threatened & Endangered Species**
- **HazMat**
- **Sound Barriers**
- **Cemetery**
- **Permits**
  - **Individual Permit**
  - **Tidal Channel**
- **Cultural Resources**

# I-64/I-264 Ramp Improvements (Phase I)

## Nosehs Creek





# I-64/I-264 Ramp Improvements (Phase I)

## Archeological Sites

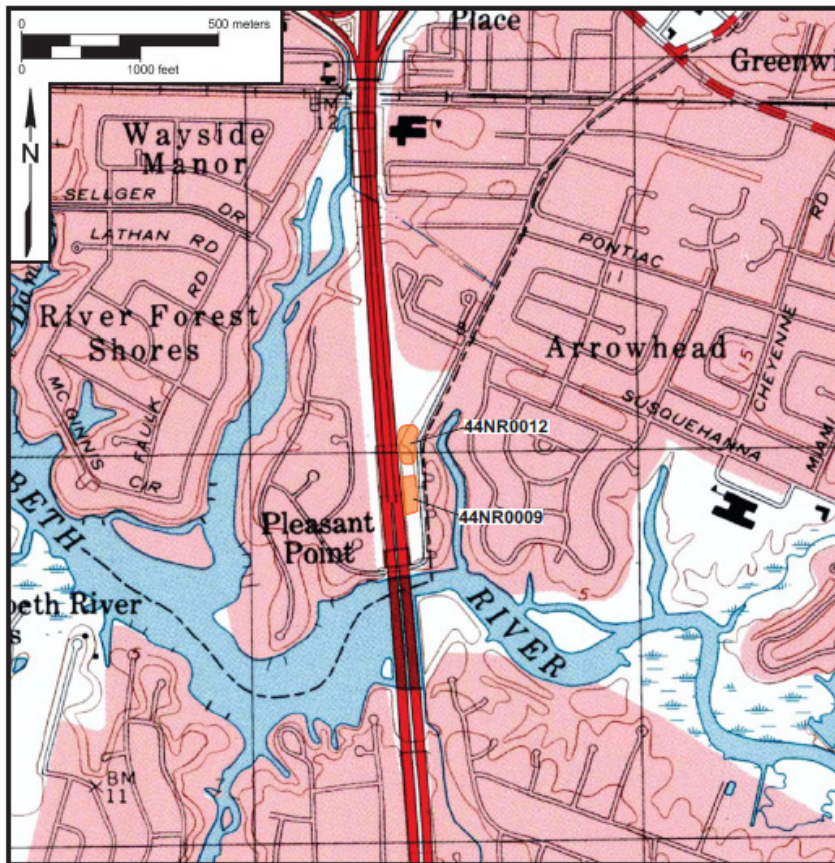


Figure 1. Project area and environs (USGS 1994).



Figure 2. Detail from a 1781 map showing individual buildings at Newtown (Anonymous 1781).

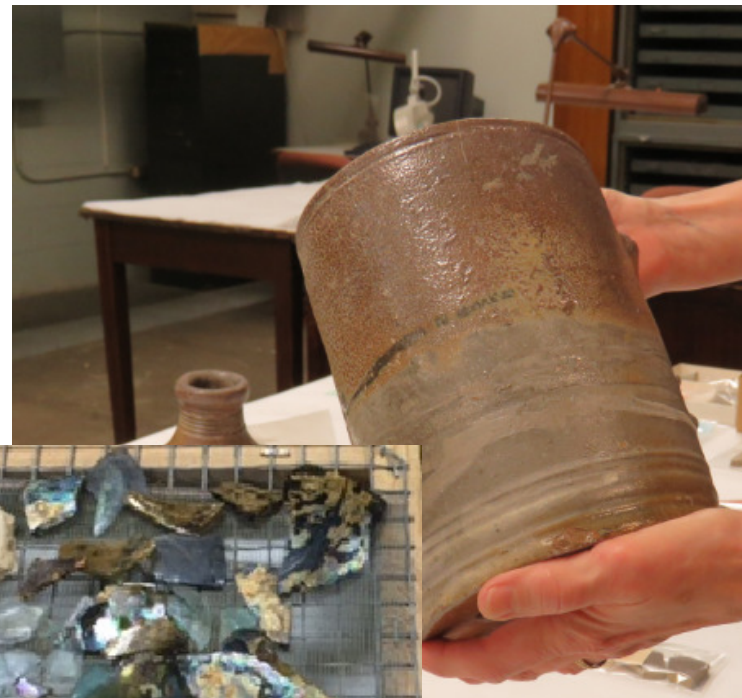


## I-64/I-264 Ramp Improvements (Phase I)





## I-64/I-264 Ramp Improvements (Phase I)





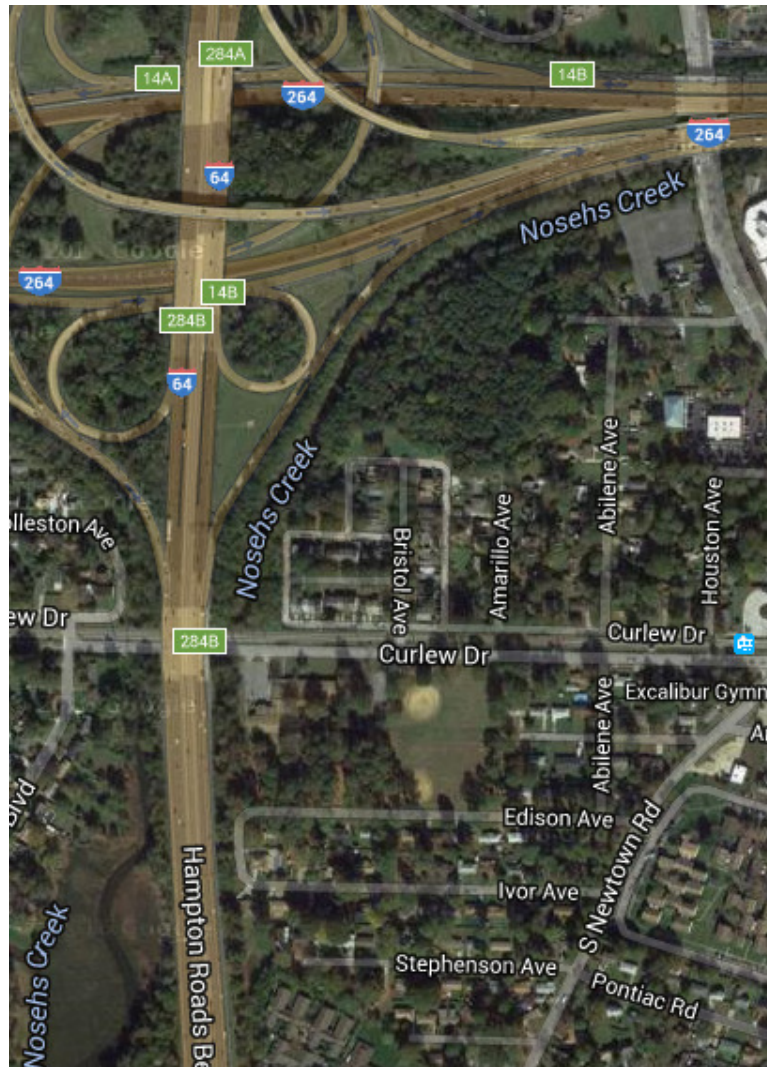
## I-64/I-264 Ramp Improvements (Phase I)





# I-64/I-264 Ramp Improvements (Phase I)

## Hampton Roads Transit (HRT)



Map data:

2016 Google Imagery



# I-64/I-264 Ramp Improvements (Phase I)

## Right of Way and Utilities

### Right of Way

- 18 parcels

### Utilities

- Phased relocations
- Transmission lines
- Construction sequence





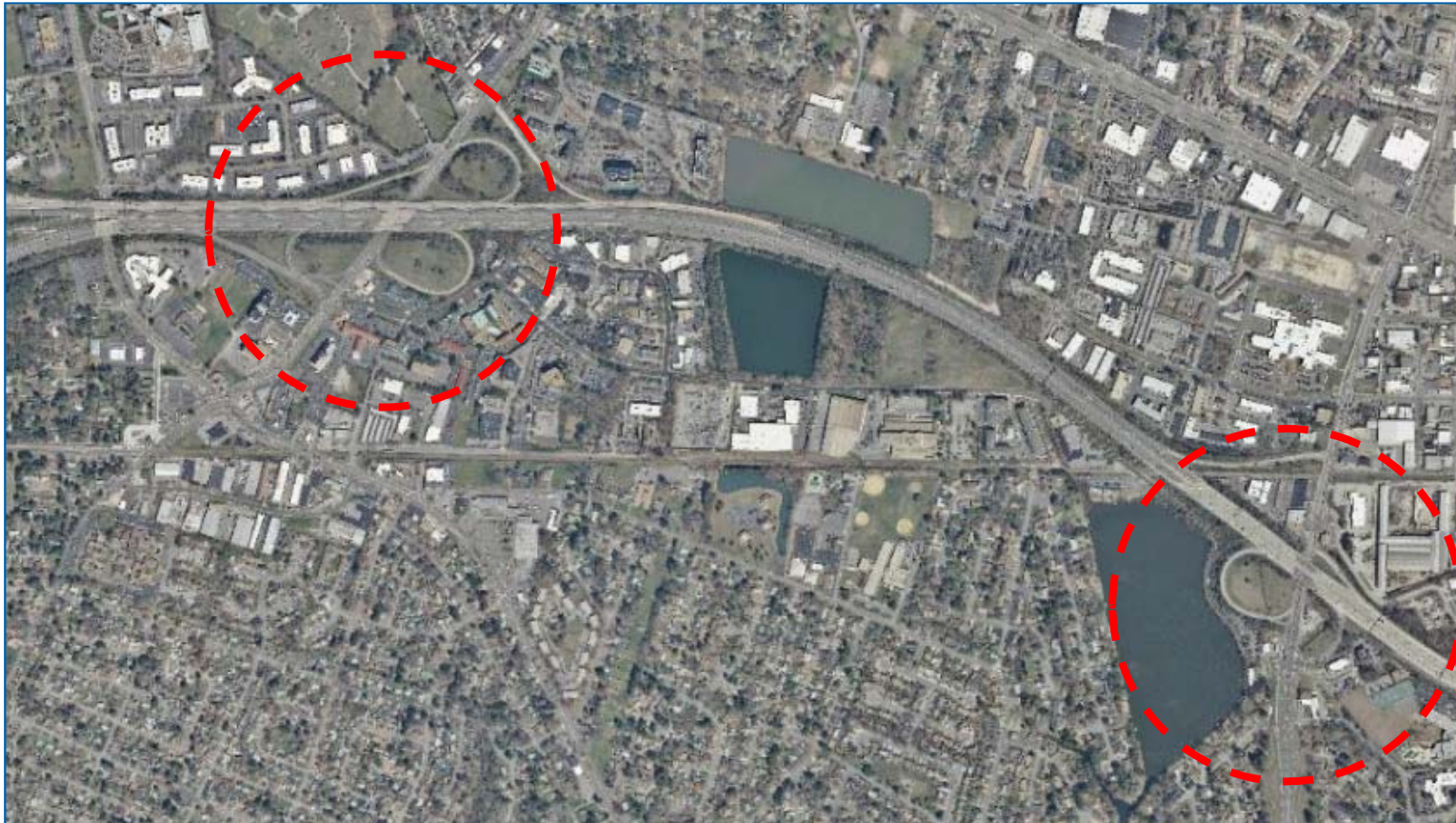
## Proposed Design





# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

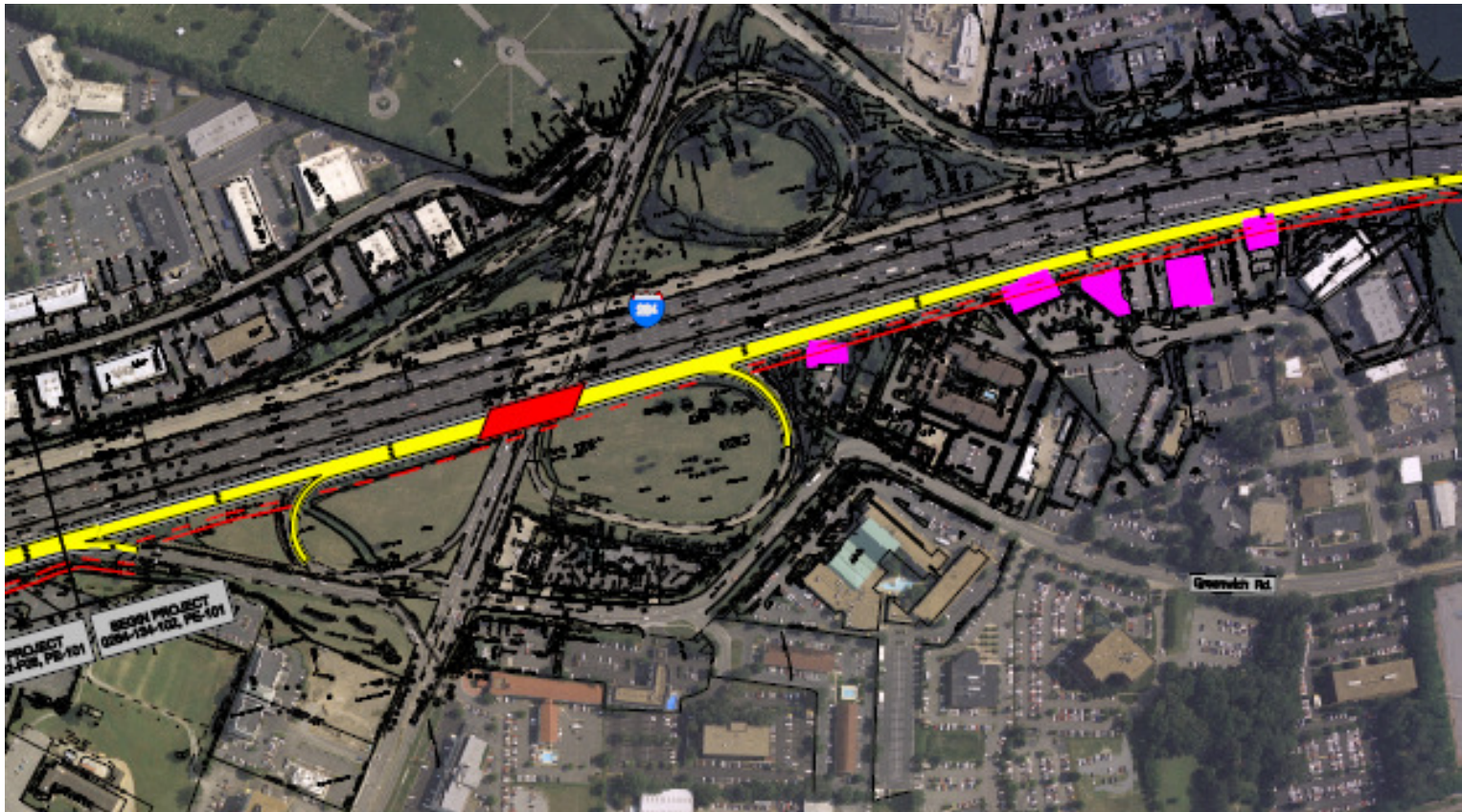
## Existing Conditions





# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

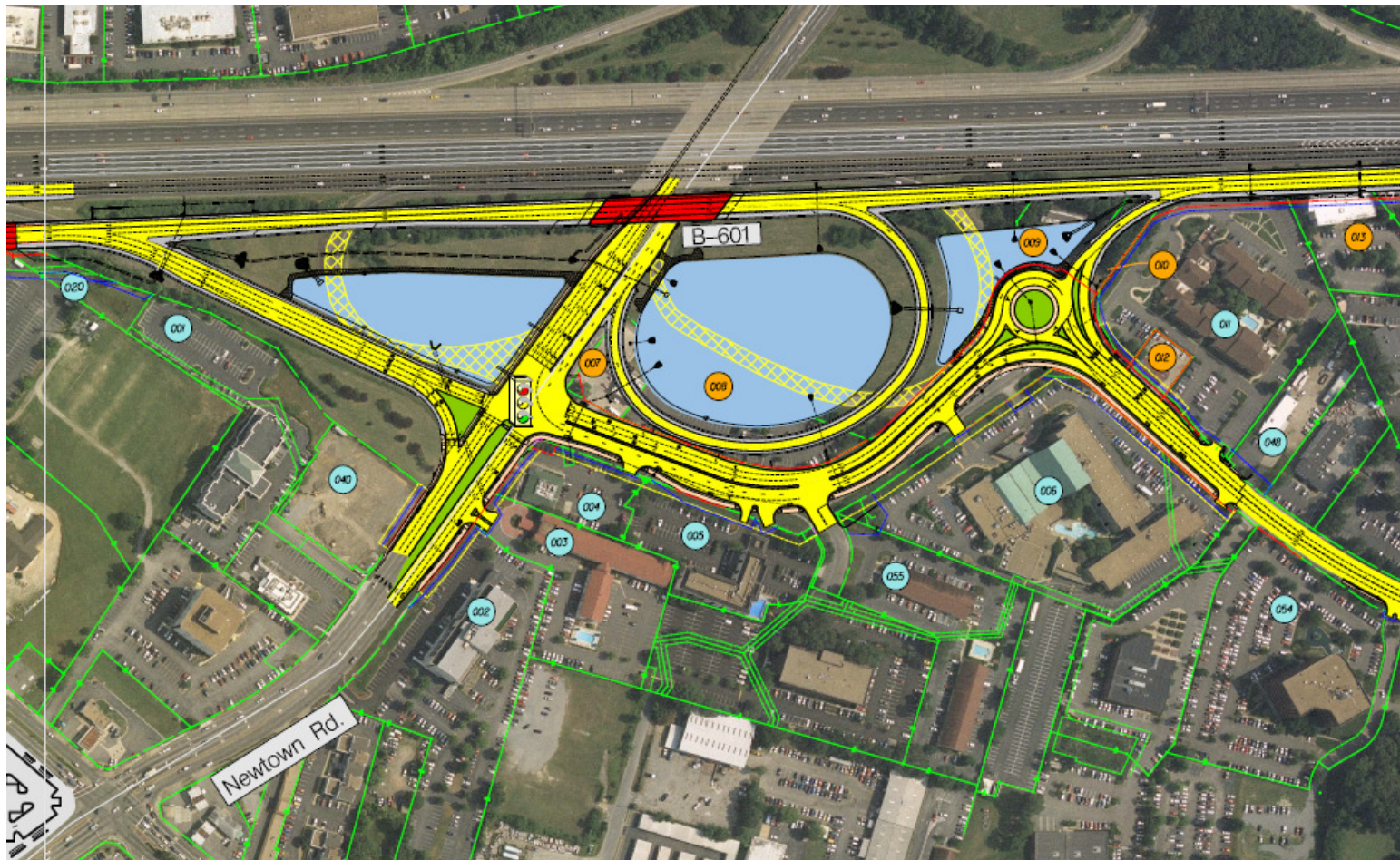
## Original Concept – Newtown Interchange





# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

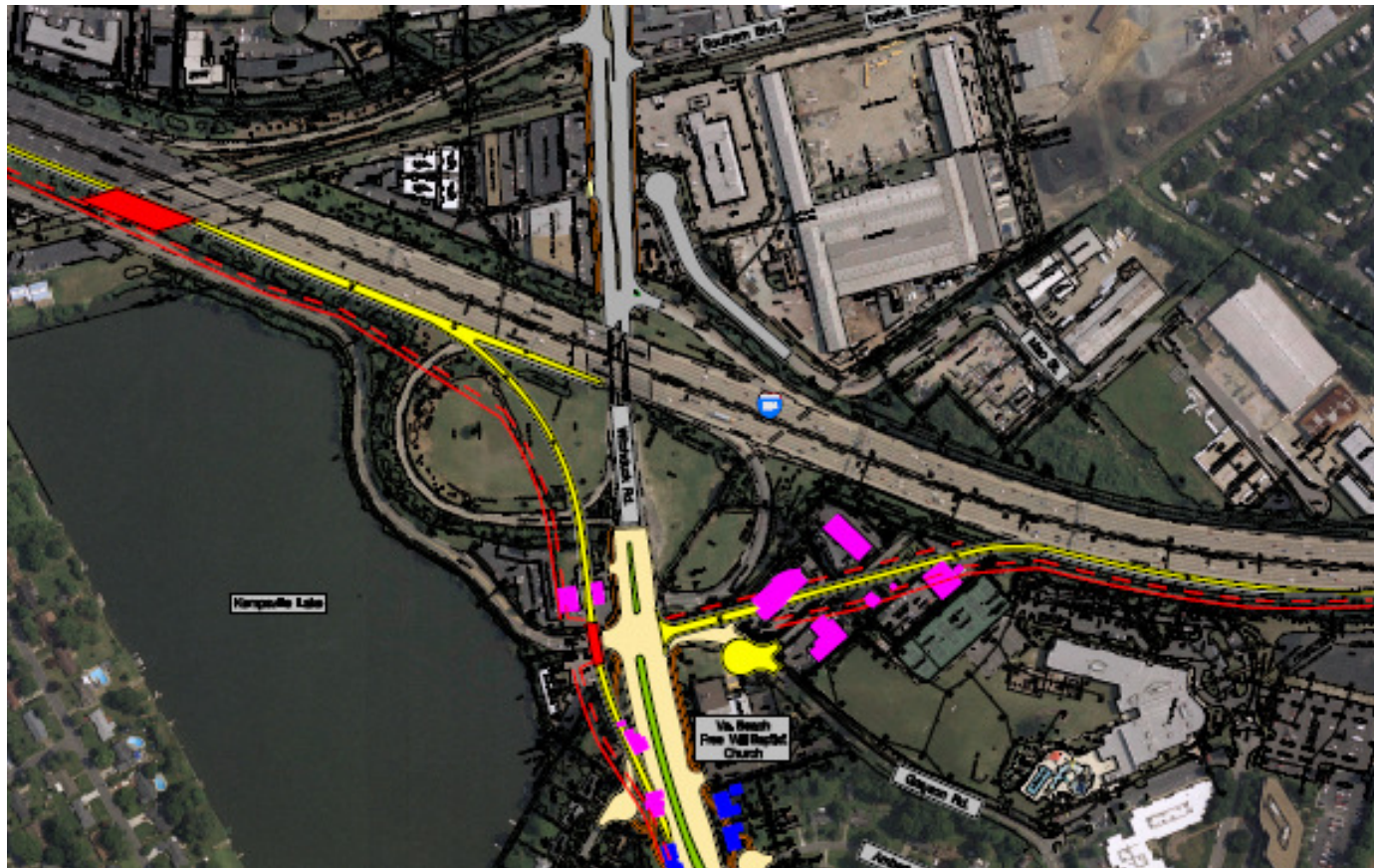
## Proposed Design – Newtown Interchange





# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

## Original Concept – Witchduck Interchange



# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

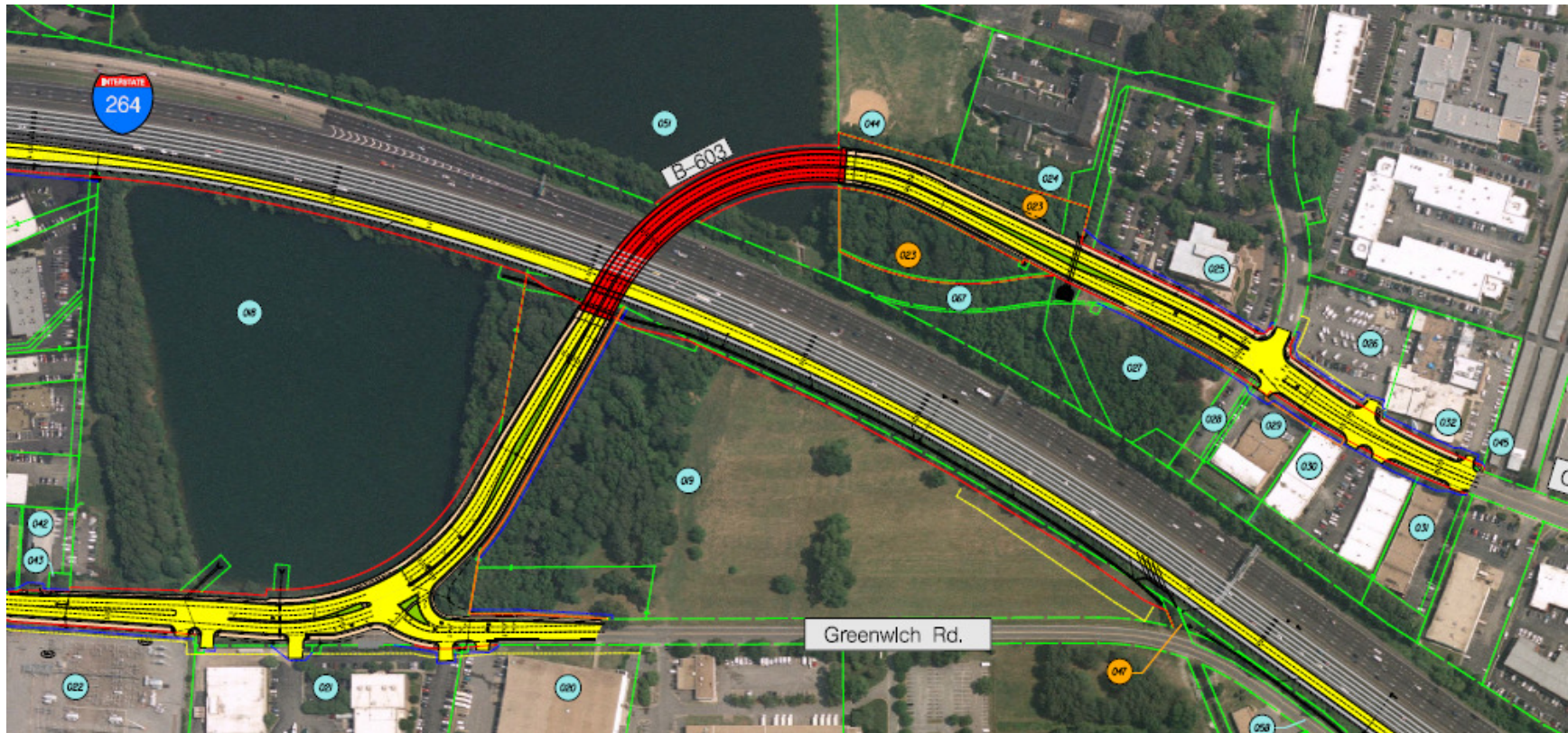
## Proposed Design – Witchduck Interchange





# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

## Proposed Design – Greenwich Overpass



# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

## Project Schedule

- Construction Advertisement January 2017
- Construction Duration

## Project Budget

- PE \$13.1 M
- RW \$54.4 M
- CN \$123.8 M



# **I-264/Witchduck Road Interchange & Ramp Extension (Phase II)**

## **Current Project Status**

- **Pre-Advertisement Conference**
- **Final Plans & Specs**
- **Permits**

# **I-264/Witchduck Road Interchange & Ramp Extension (Phase II)**

## **Unique Project Features**

- **HRTAC**
- **HRT VB Light Rail Extension**
- **RW and Utilities**
- **Construction Phasing**
- **Greenwich Overpass Bridge**
- **Design Exceptions**
- **Adjacent Construction**



# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

## HRT Coordination Light Rail Extension to Virginia Beach



# **I-264/Witchduck Road Interchange & Ramp Extension (Phase II)**

## **Right of Way and Utilities**

- **80+ Parcels**
- **14 Total Takes**
- **30+ Relocations**
- **Advanced Total Take Acquisition**
- **Phased RW Acquisition**
- **Phased Utility Relocations**
- **Construction Phasing**



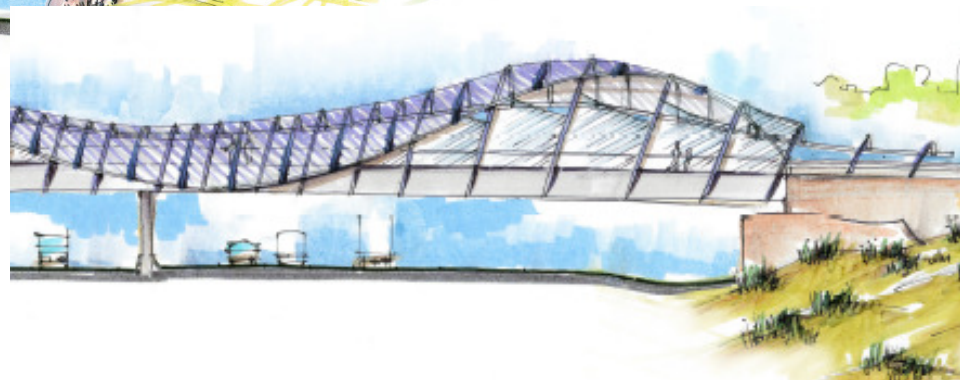
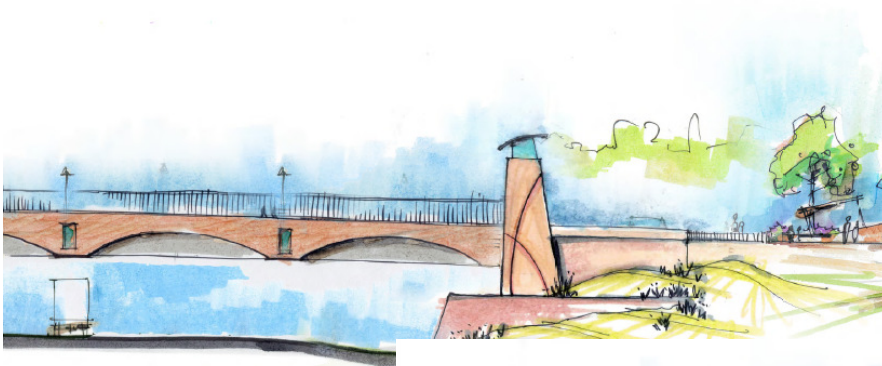
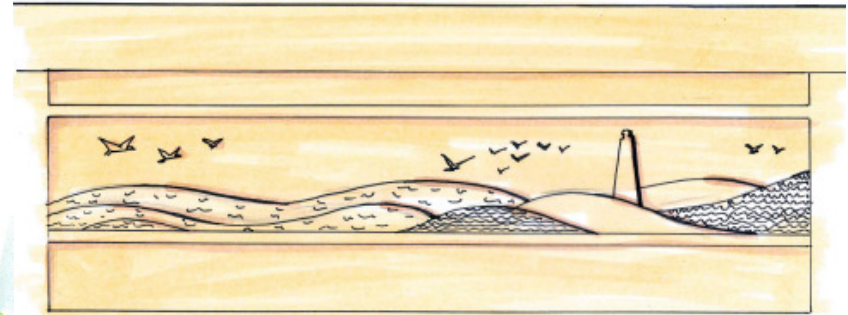
# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

## Greenwich Overpass Bridge



# I-264/Witchduck Road Interchange & Ramp Extension (Phase II)

## Greenwich Overpass Bridge Aesthetics





# **I-264/Witchduck Road Interchange & Ramp Extension (Phase II)**

## **Design Exceptions and Waivers**

### **Design Exceptions**

- **Median Shoulder Width**
- **Bridge Shoulder Width**
- **Vertical Clearance**

### **Design Waivers**

- **Total Outside Shoulder Width**

# **I-264/Witchduck Road Interchange & Ramp Extension (Phase II)**

## **Adjacent Construction Projects**

- **Phase I**
- **Witchduck Road Phase II**
- **Cleveland / Clearfield Intersection Improvements**
- **HRT Light Rail Extension to Virginia Beach**
- **Indian River / Kempsville Intersection Improvements**
- **Military CFI**



*Questions?*