





US Army Corps  
of Engineers®  
New Orleans District

# Why are we here tonight?

**To discuss the status of completed, in-progress and potential improvements to the hurricane protection system in St. Charles Parish (East Bank) and along the Jefferson Parish Lakefront.**



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# National Environmental Policy Act: NEPA

- Required for all major Federal actions
- Analyze potential impacts to the human and natural environment and investigate reasonable alternatives
- Public Involvement is KEY! We want to hear from you!
- Goal: more informed decision making through public involvement
- Analyses documented in:
  - Environmental Assessments (EA)
  - Environmental Impact Statements (EIS)
  - Individual Environmental Reports (IER)

# NEPA Process and Path Ahead

- The NEPA process began with public scoping meetings for IERs 1, 2 and 3 on April 4, 2007
- From April 2007 through today, current project alternatives were developed, impacts were analyzed, and public input was solicited
- Draft IER 30-Day Public Review Period:
  - IER 1 – January 11, 2008 – February 9, 2008
  - IER 2 – February 1, 2008 – March 3, 2008
  - IER 3 – February 5, 2008 – March 5, 2008



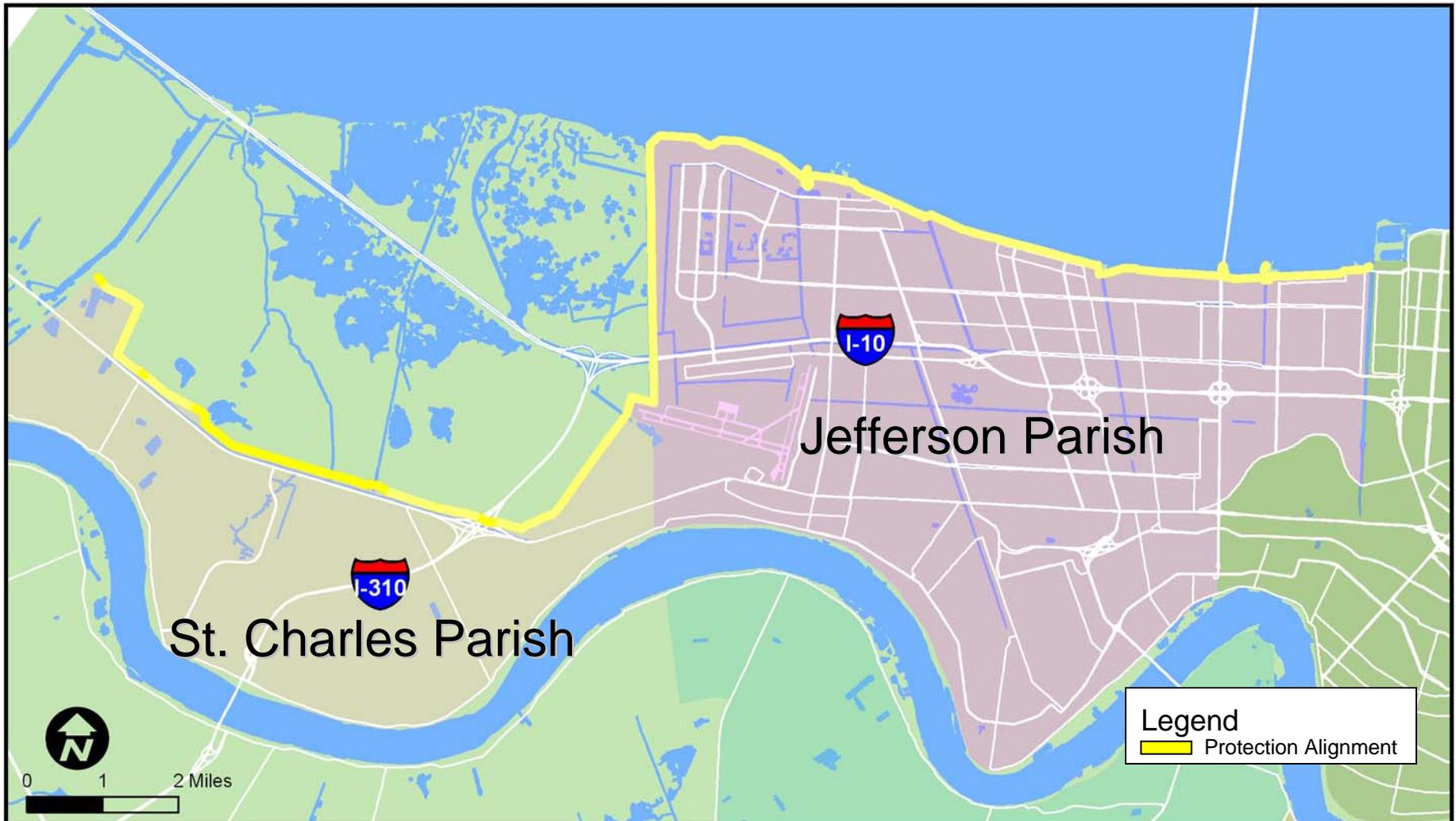
# NEPA Process and Path Ahead

- Final decision regarding IER recommendations will be made in 2008
  - IER 1 – February 25, 2008
  - IER 2 – March 20, 2008
  - IER 3 – March 17, 2008



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# Lake Pontchartrain and Vicinity Hurricane Protection Project

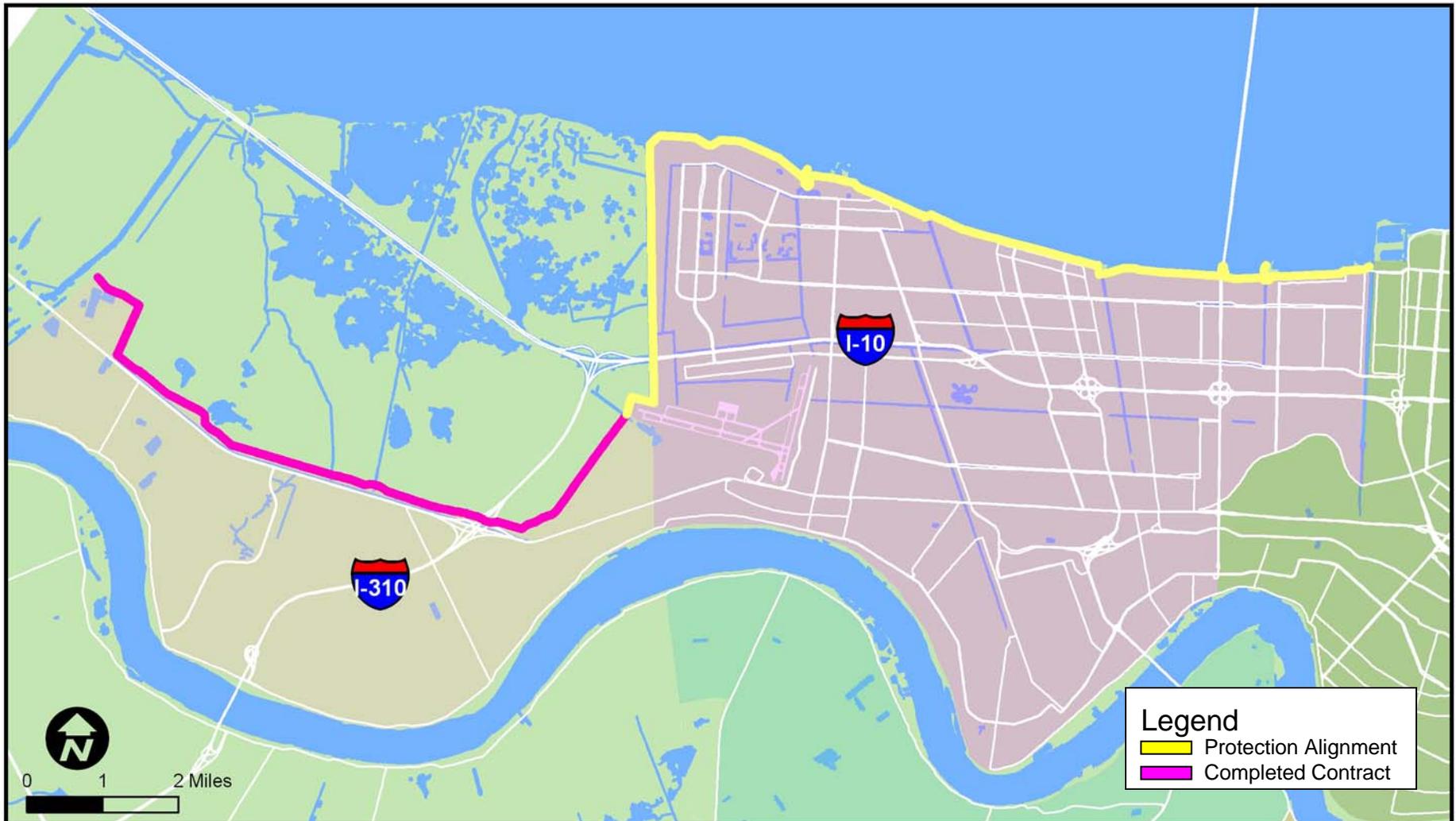




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# Areas Raised Immediately Post-Katrina

3.5 miles in St. Charles raised to +10.7 ft

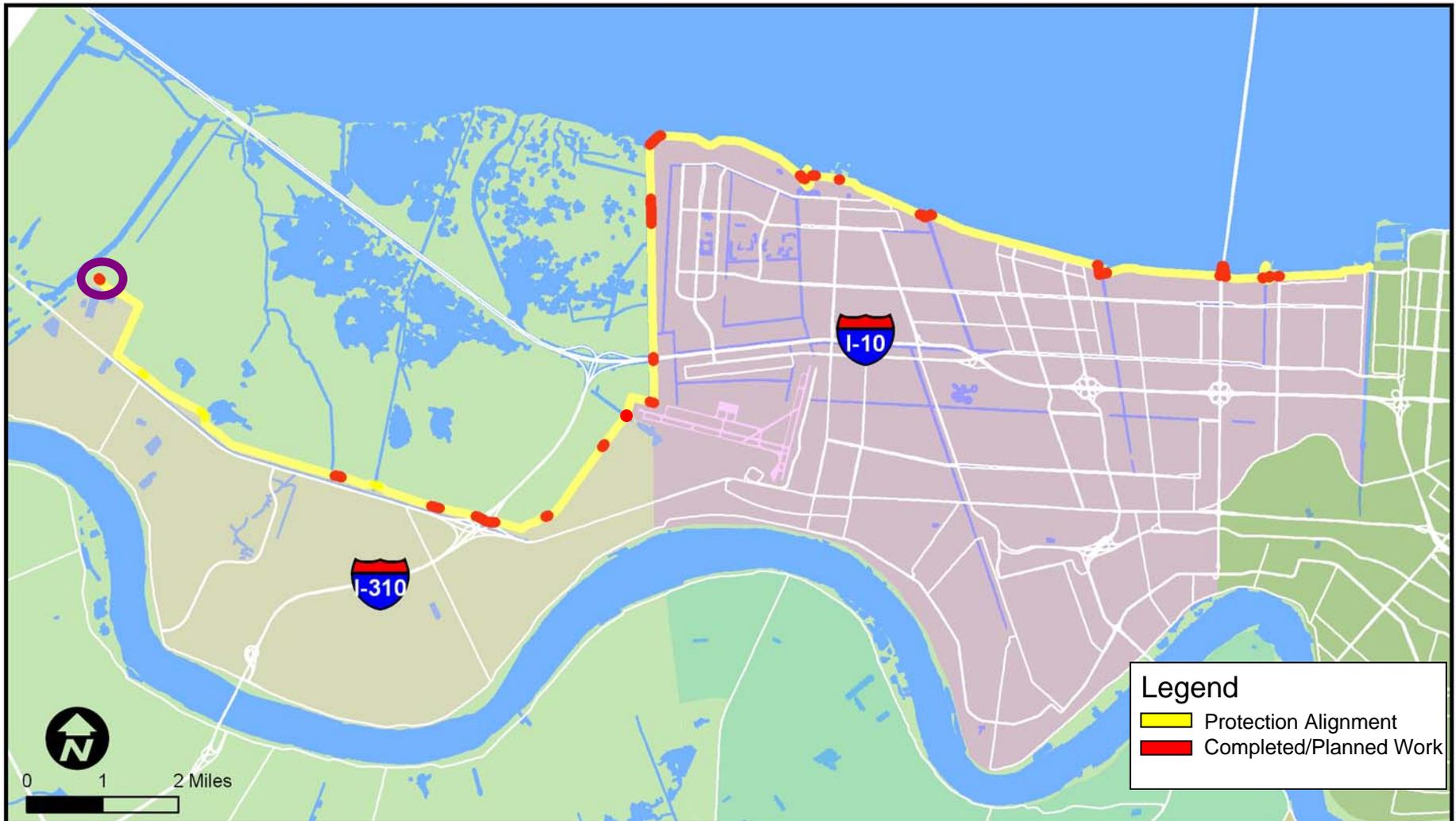




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# Near-Term Risk Mitigation

Over 11,000 ft of I-wall, transitions, and structures are being reinforced or armored to increase reliability. The majority of this work has been completed.





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# Bayou Trepagnier Pump Station



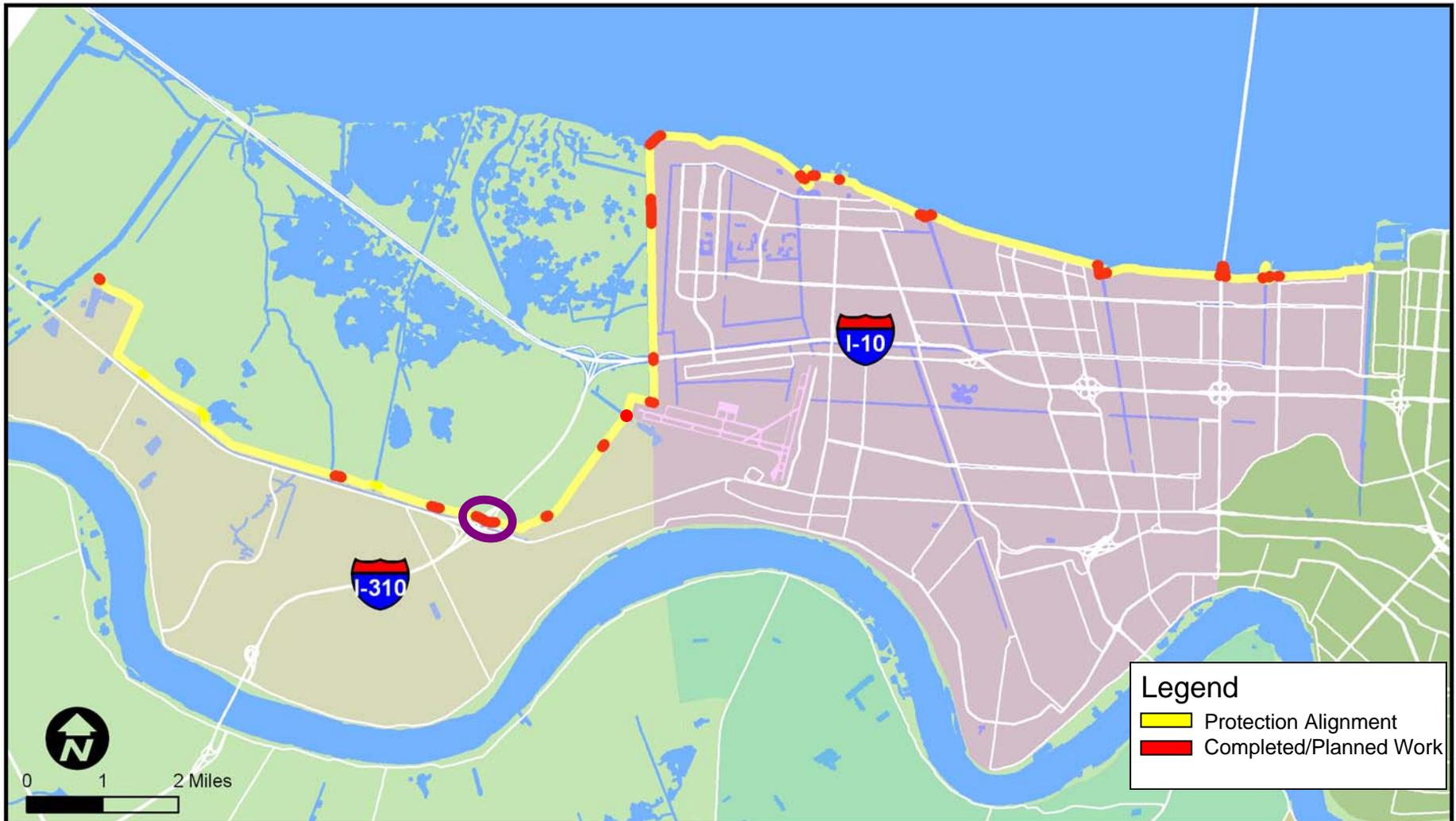
- Added earthen stability berms
- Added slope paving for scour protection
- Armored transitions



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# Floodwall under I-310



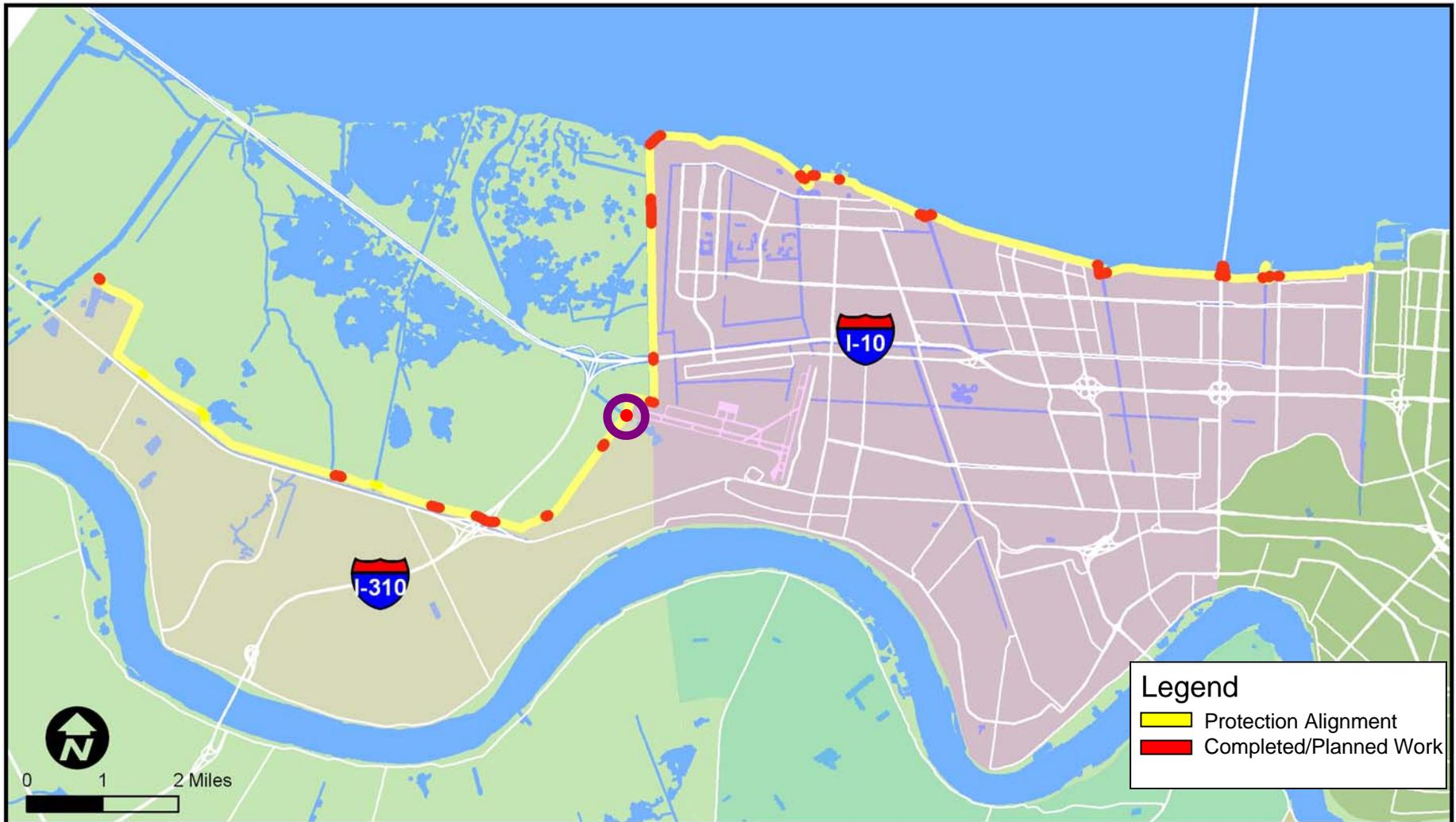
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# Canadian National Railroad Gate



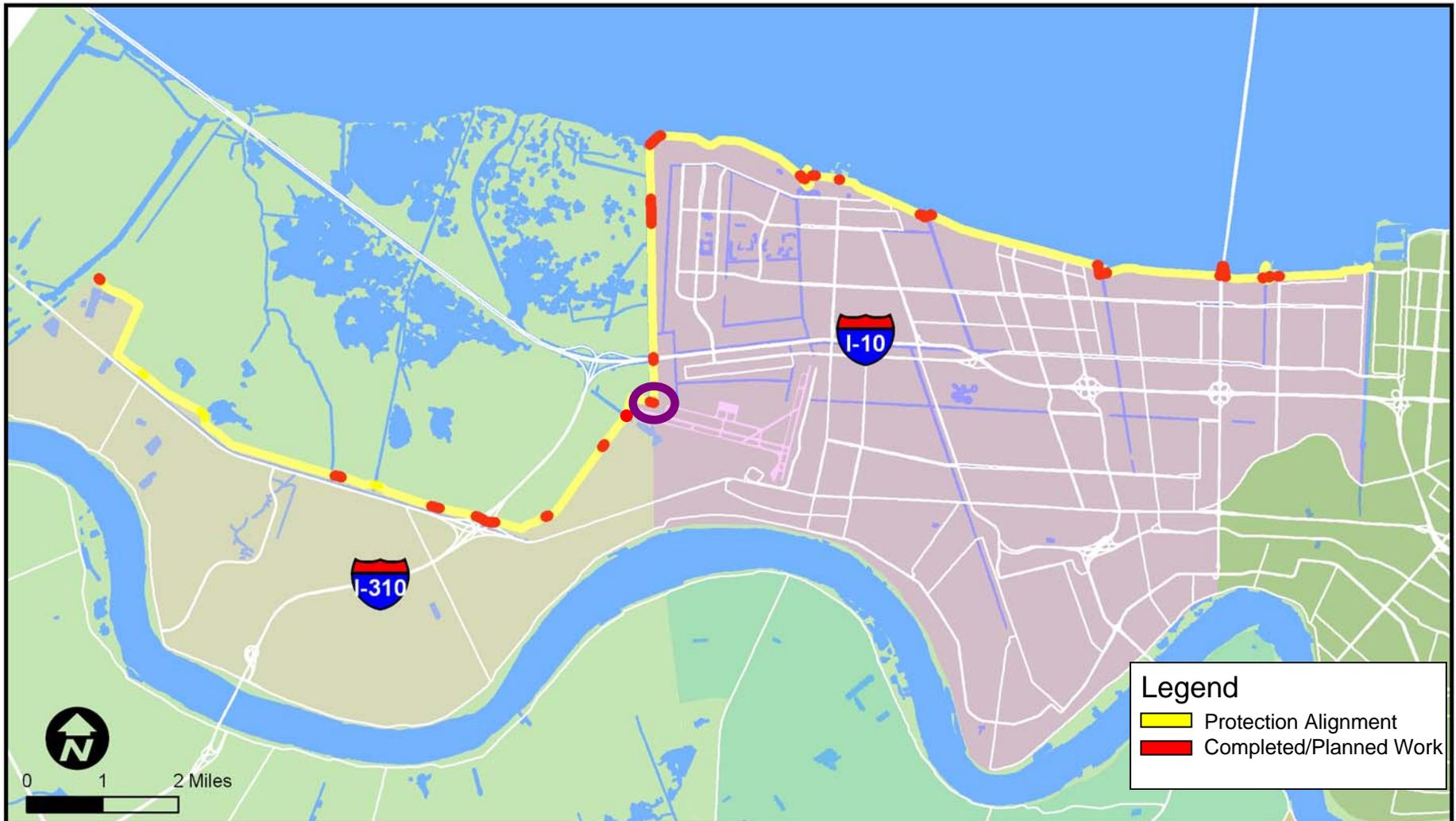
- Added earthen stability berms
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# Near-Term Risk Mitigation

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# West Return Floodwall at Airport



- Removed old sheet piling
- Drove new 60 ft PZ-35 sheet pilings
- Added slope paving for scour protection
- Armored transitions
- Filled in low area on airport property

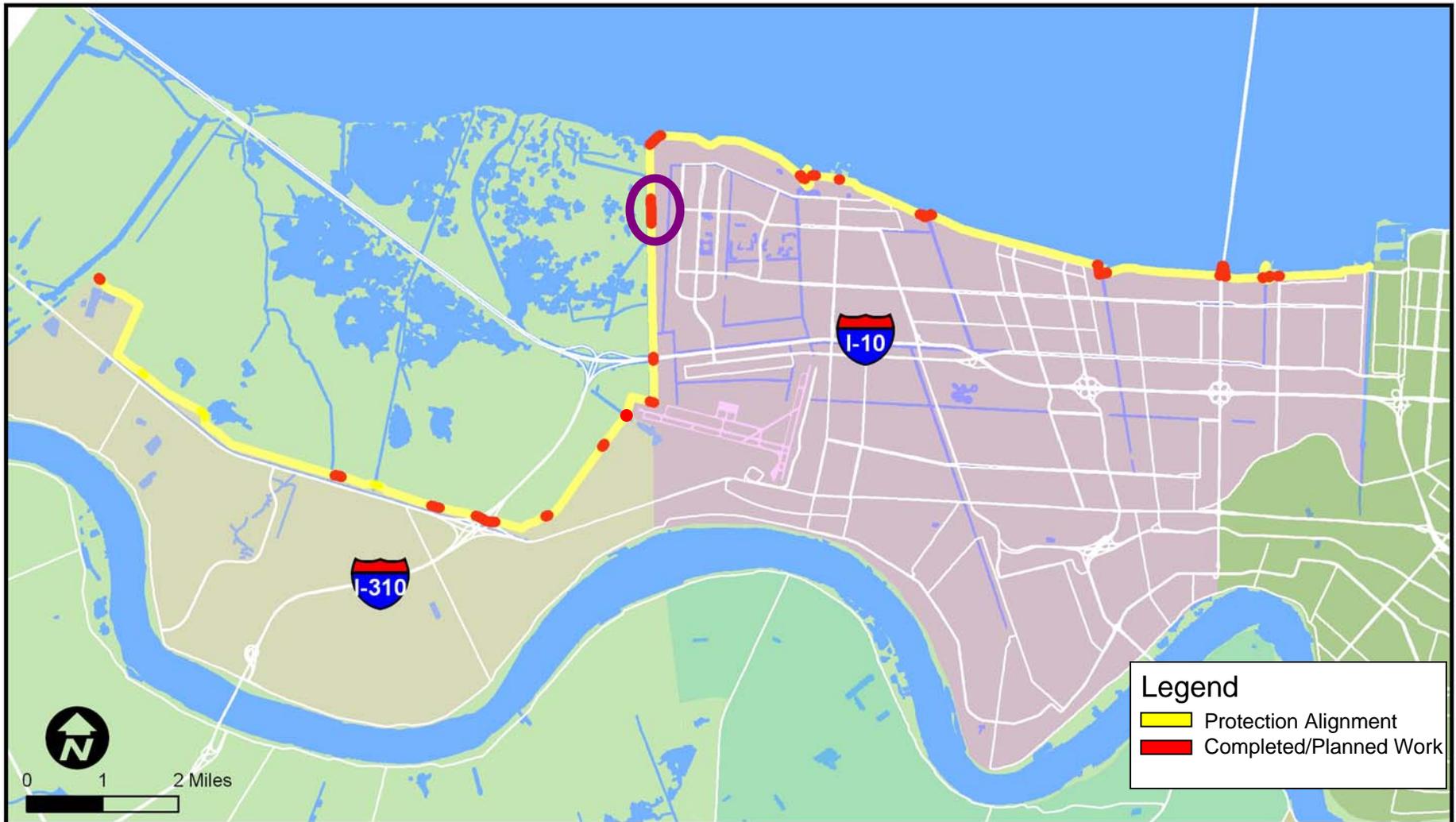




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# Near-Term Risk Mitigation

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# West Return – Vintage Floodwall



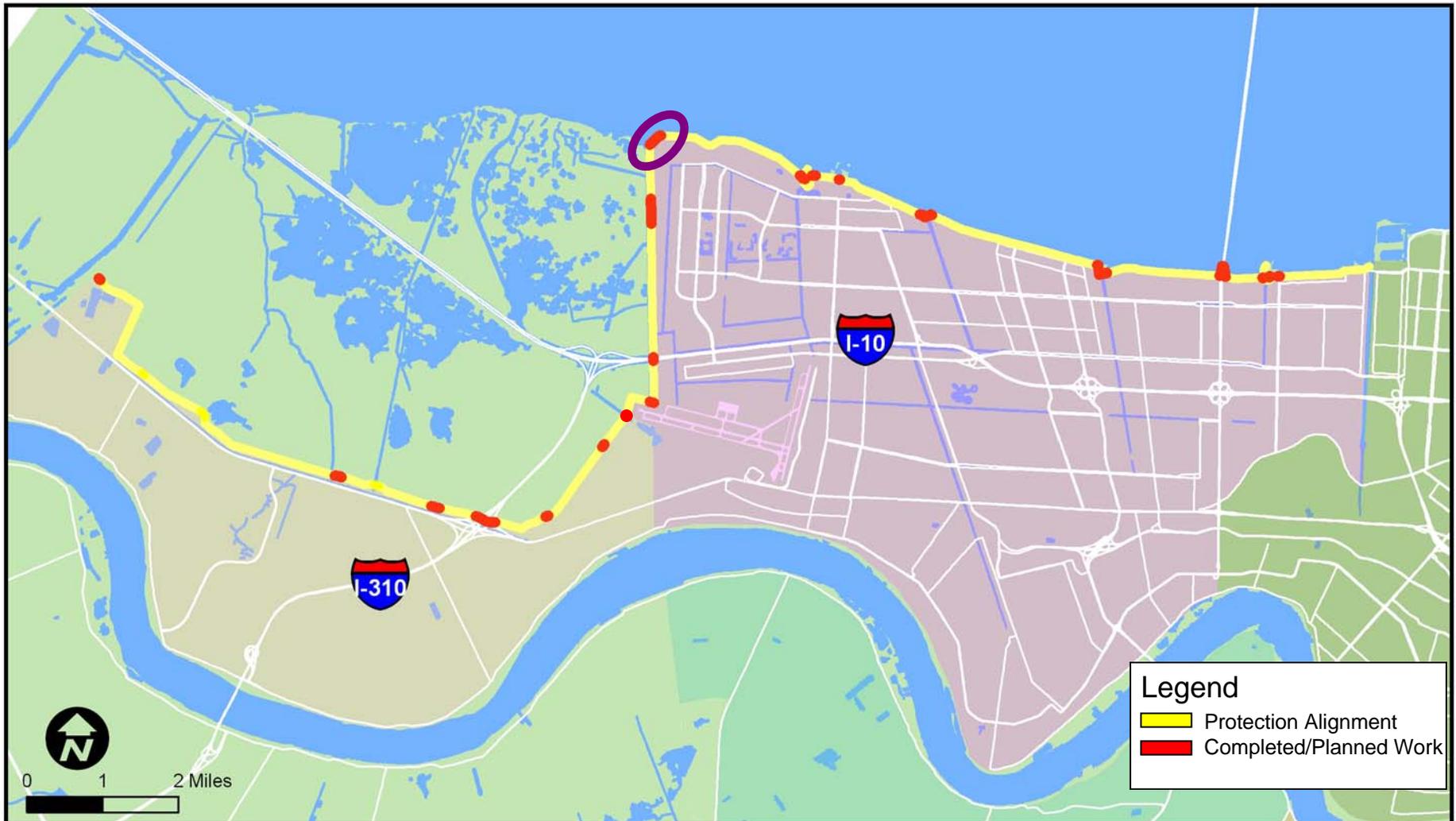
- Drove new 60 ft PZ-35 sheet piling offset from original wall
- Added slope paving for scour protection



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# Near-Term Risk Mitigation

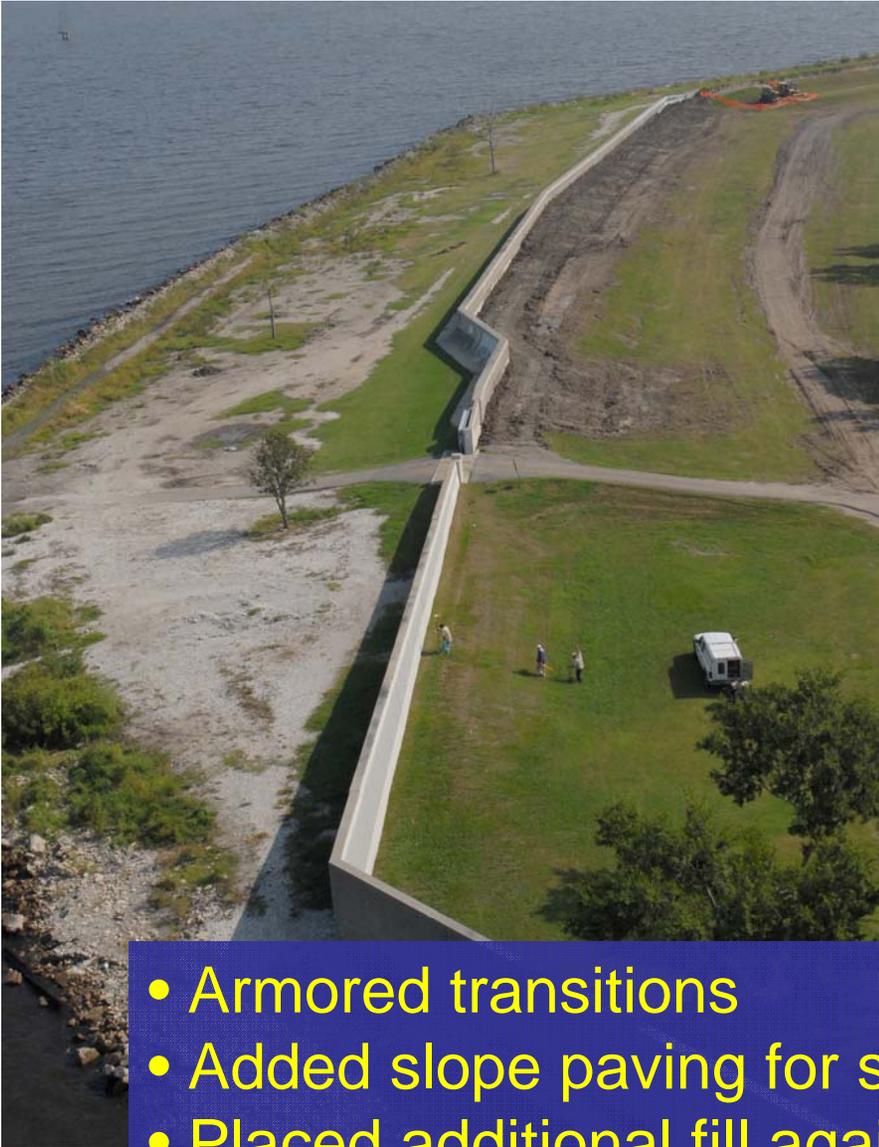
Over 11,000 ft of I-wall, transitions, and structures are being reinforced or armored to increase reliability. The majority of this work has been completed.





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# Kenner Recurve I-wall



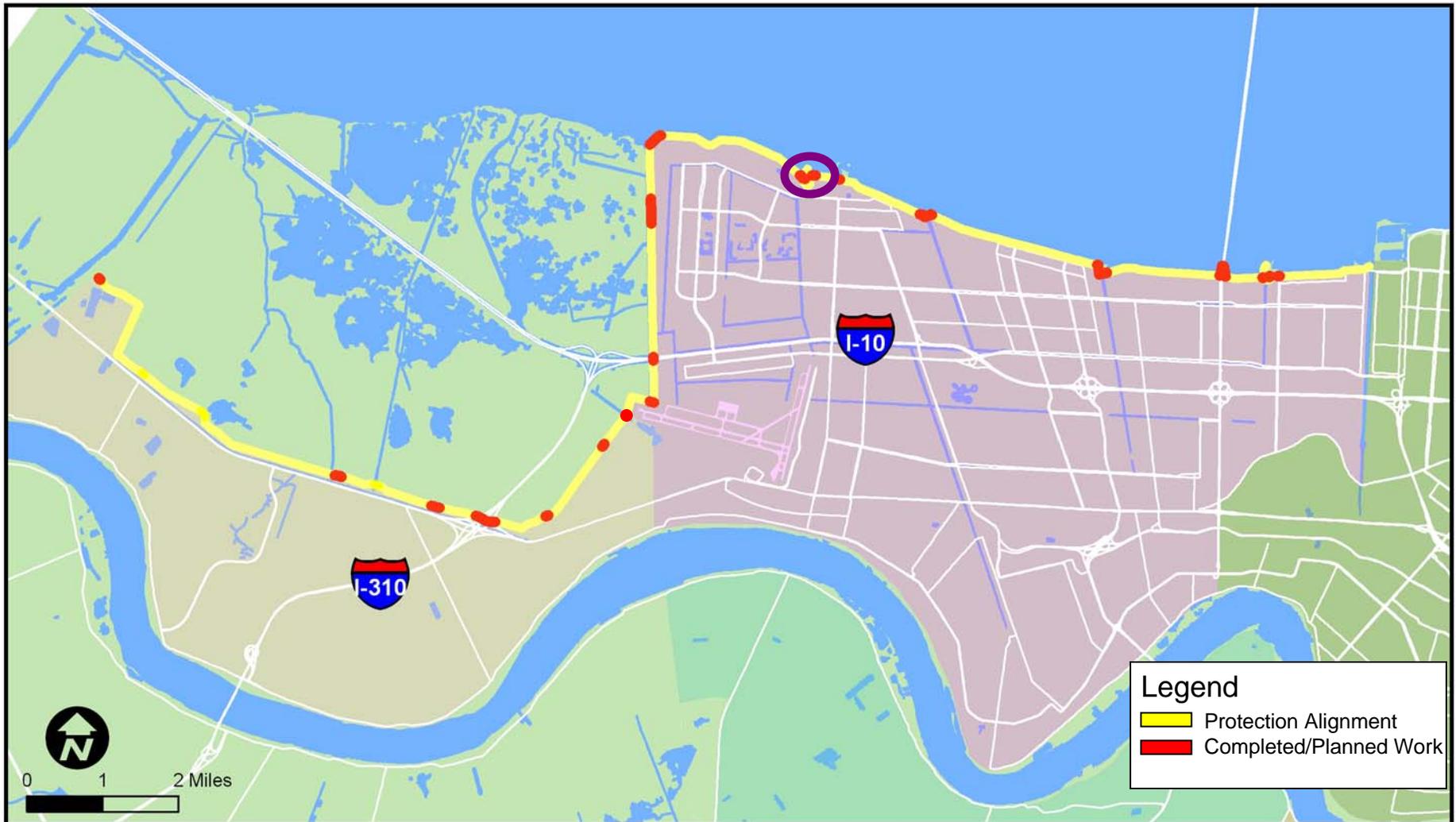
- Armored transitions
- Added slope paving for scour protection
- Placed additional fill against floodwall



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# Near-Term Risk Mitigation

Over 11,000 ft of I-wall, transitions, and structures are being reinforced or armored to increase reliability. The majority of this work has been completed.





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# Duncan PS #4 Tie-ins



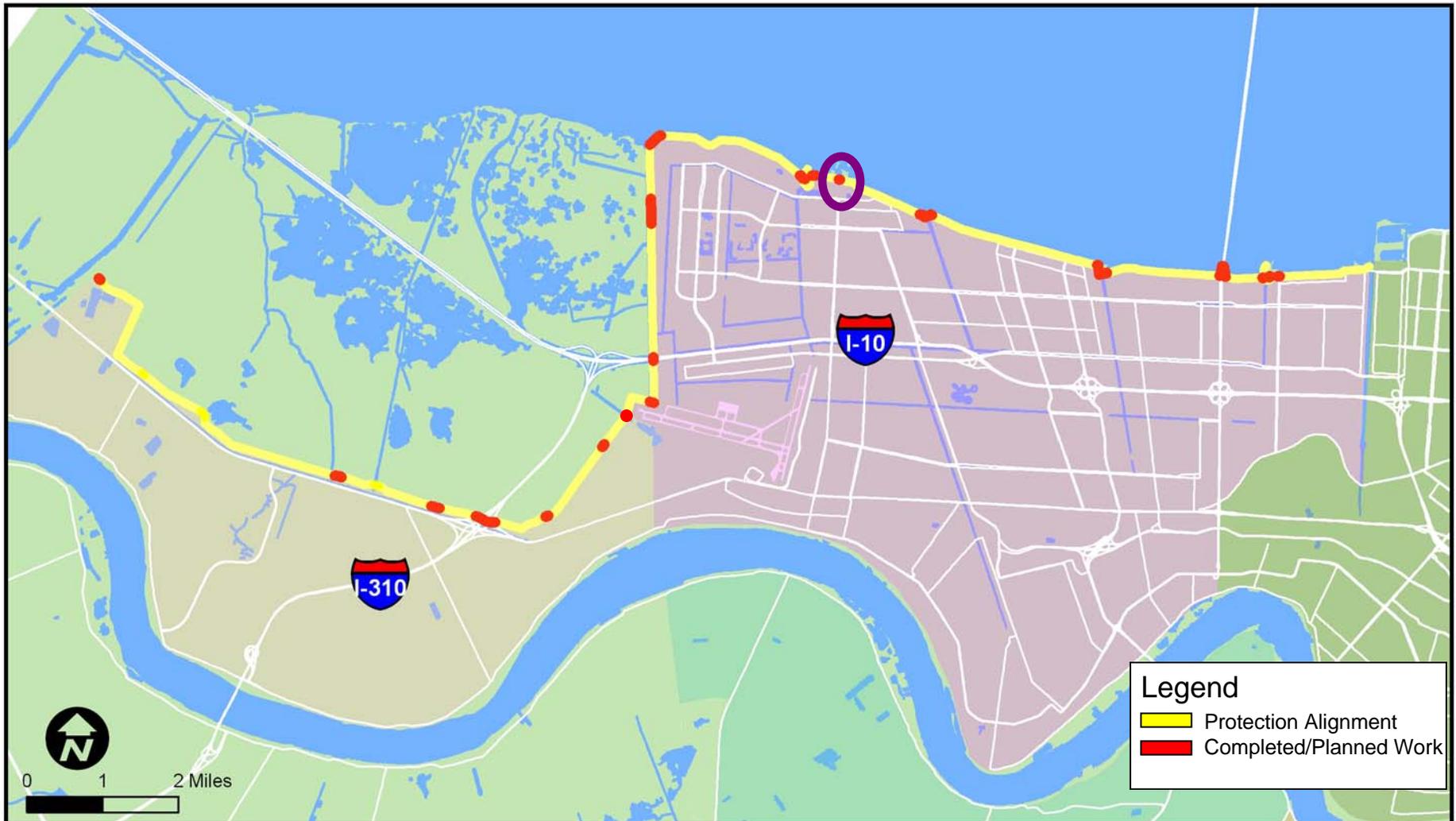
- Added slope paving for scour protection
- Armored transitions
- Placed additional material against floodwall



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# Near-Term Risk Mitigation

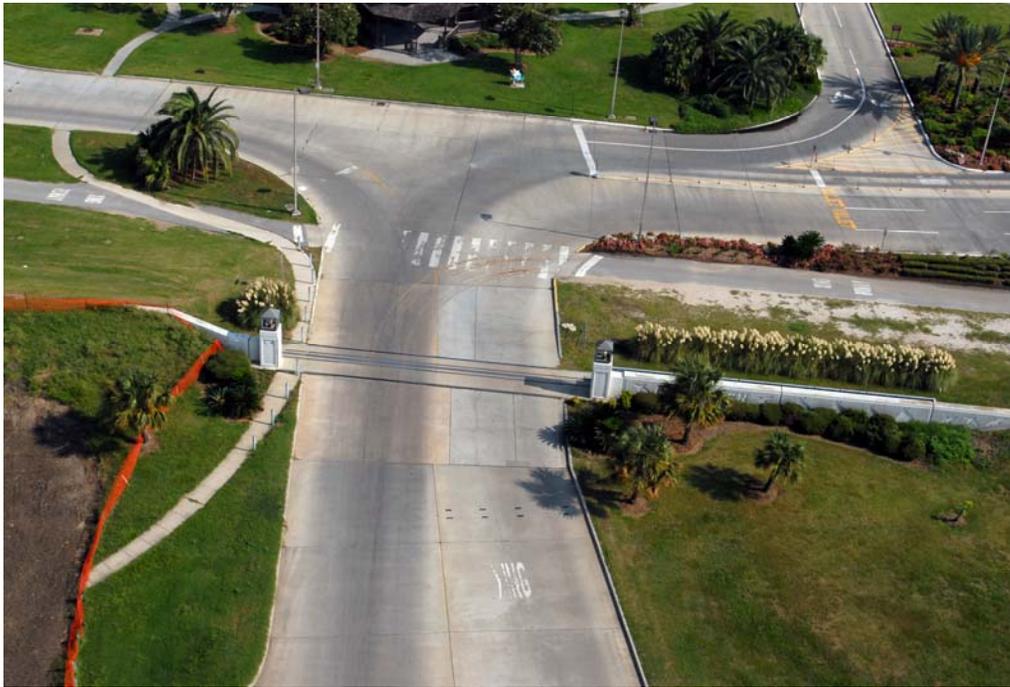
Over 11,000 ft of I-wall, transitions, and structures are being reinforced or armored to increase reliability. The majority of this work has been completed.





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# Gate at Williams Blvd



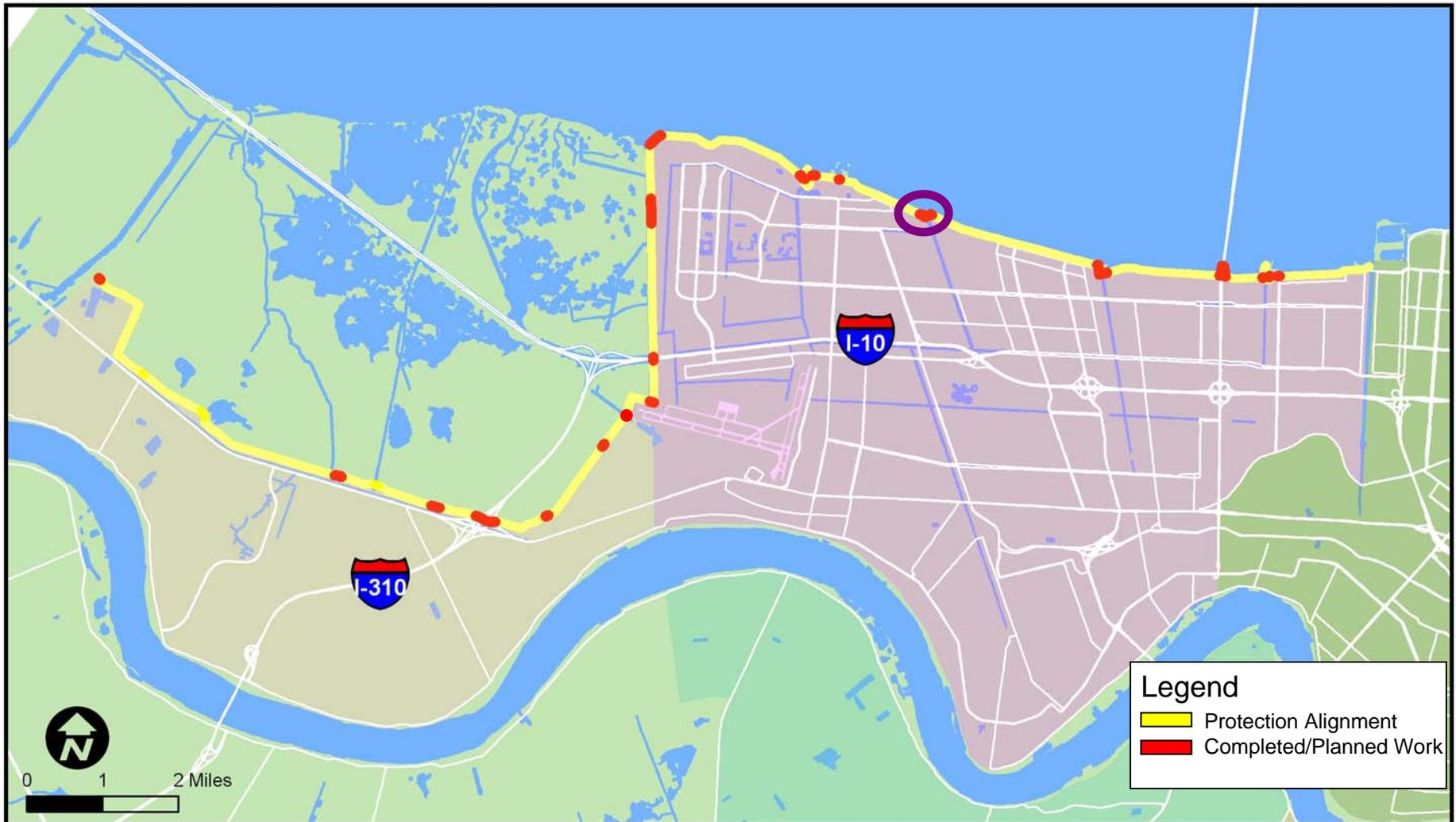
- Added slope paving for scour protection
- Armored transitions



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# Near-Term Risk Mitigation

Over 11,000 ft of I-wall, transitions, and structures are being reinforced or armored to increase reliability. The majority of this work has been completed.





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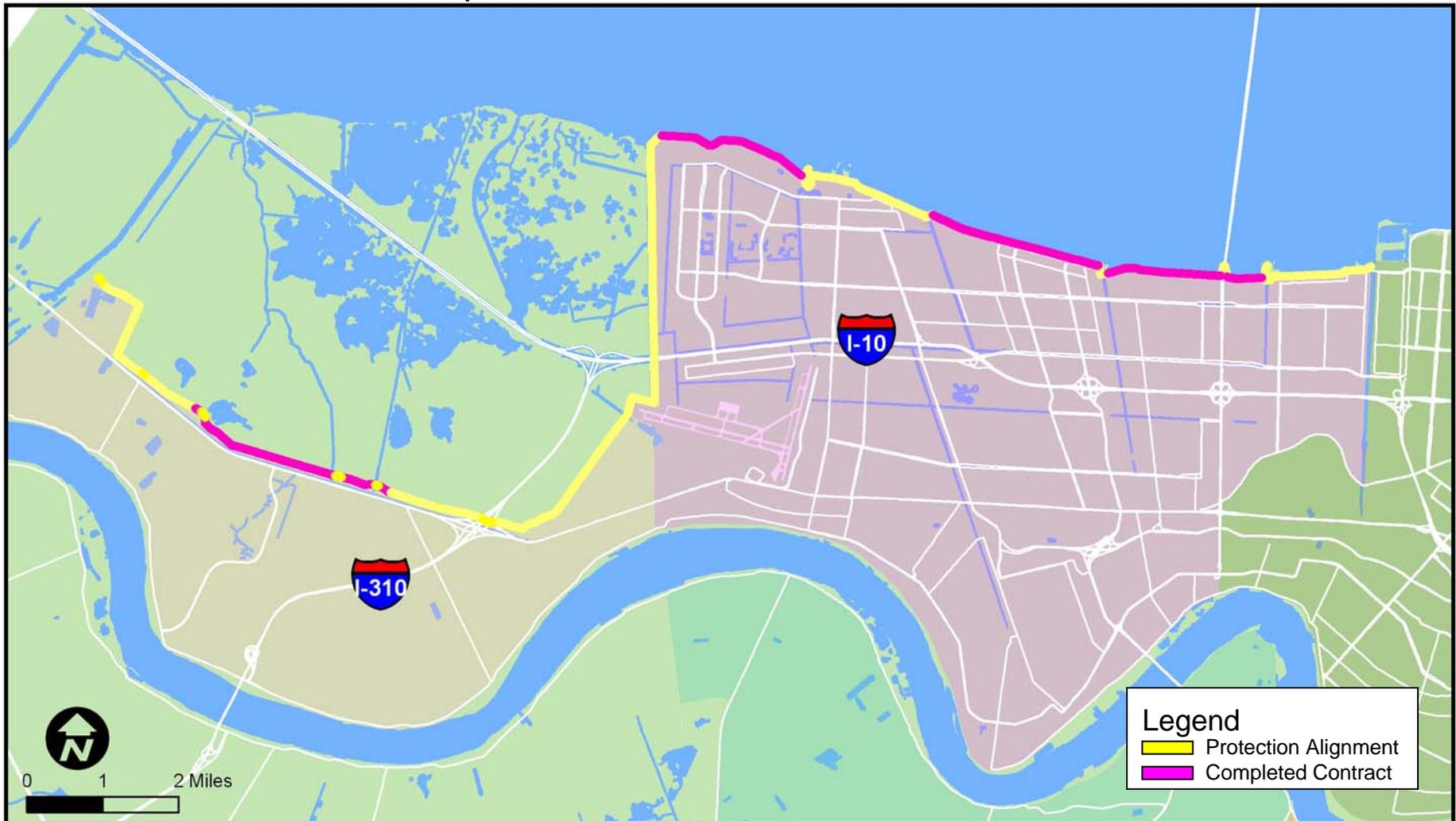
# Elmwood PS #3 Tie-ins



- Removed old sheet piling
- Drove new 60 ft PZ-35 sheet piling
- Armored transitions
- Added slope paving for scour protection

# Levees Raised to Previously Authorized Elevation

- 6.3 miles completed in Jefferson Parish
- 2.2 miles completed in St. Charles Parish





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# Levees Being Raised to Previously Authorized Elevation

- 3.5 miles in design in Jefferson Parish
- 6 miles in St. Charles Parish currently under construction





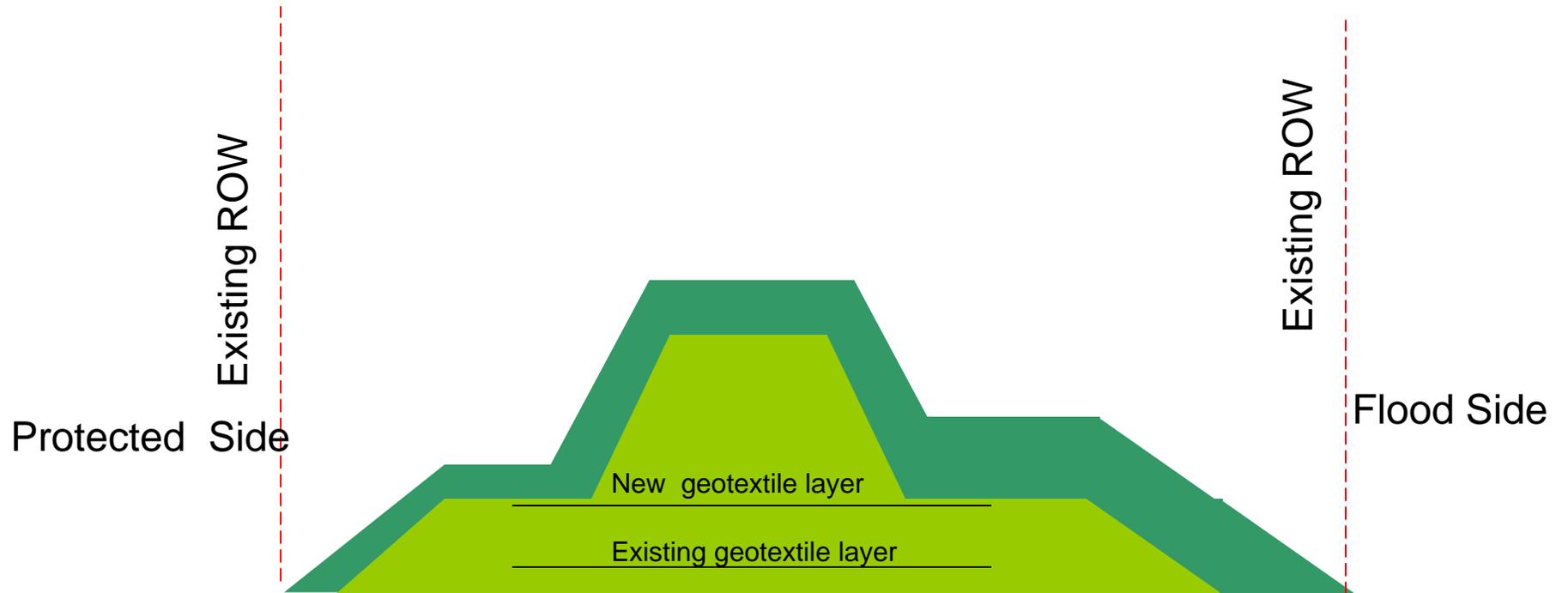
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# **100-yr Alternatives St. Charles Parish IER-01**



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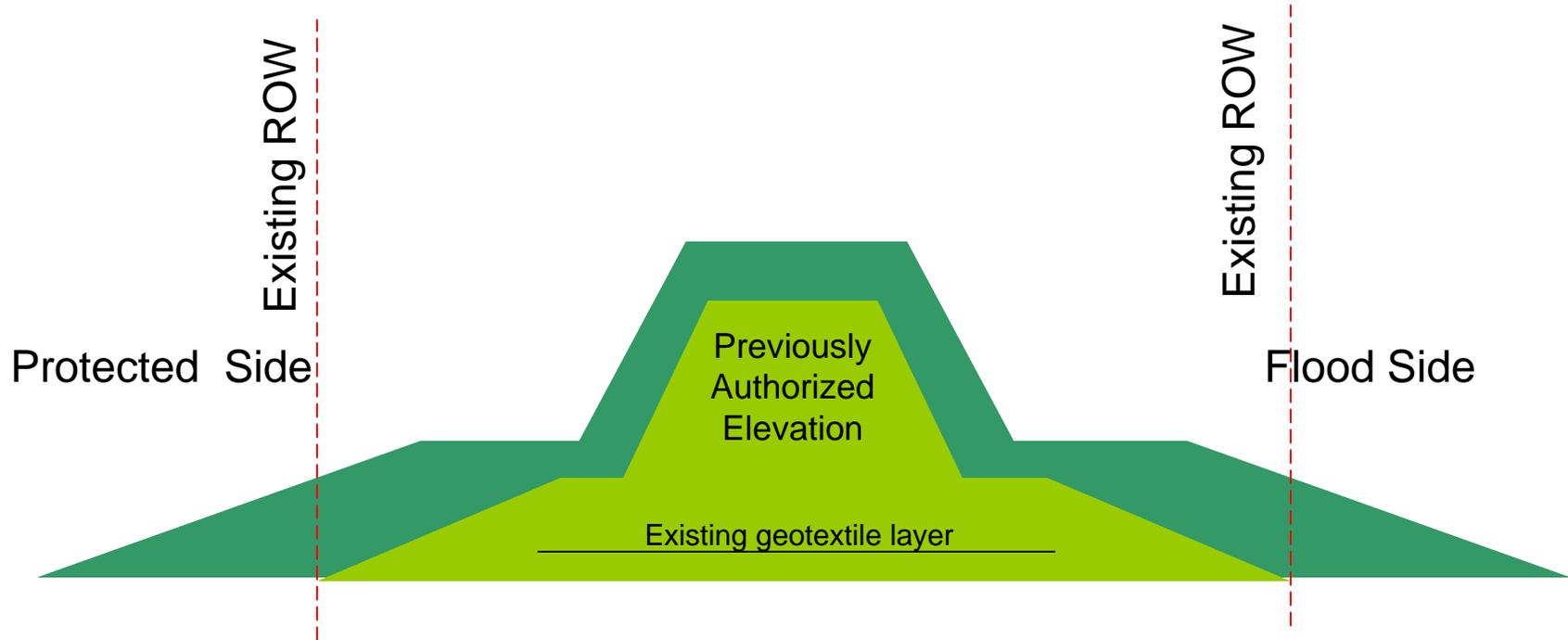
# St. Charles 100-yr Option with Additional Geotextile





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# St. Charles 100-yr Option without Additional Geotextile





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# 100-year Project Footprint



## Legend

-  Necessary Right of Way for 100-year protection, flood side
-  Existing Right of Way
-  Necessary Right of Way for 100-year protection, protected side
-  Structures and pipelines that will not require any new Right of Way



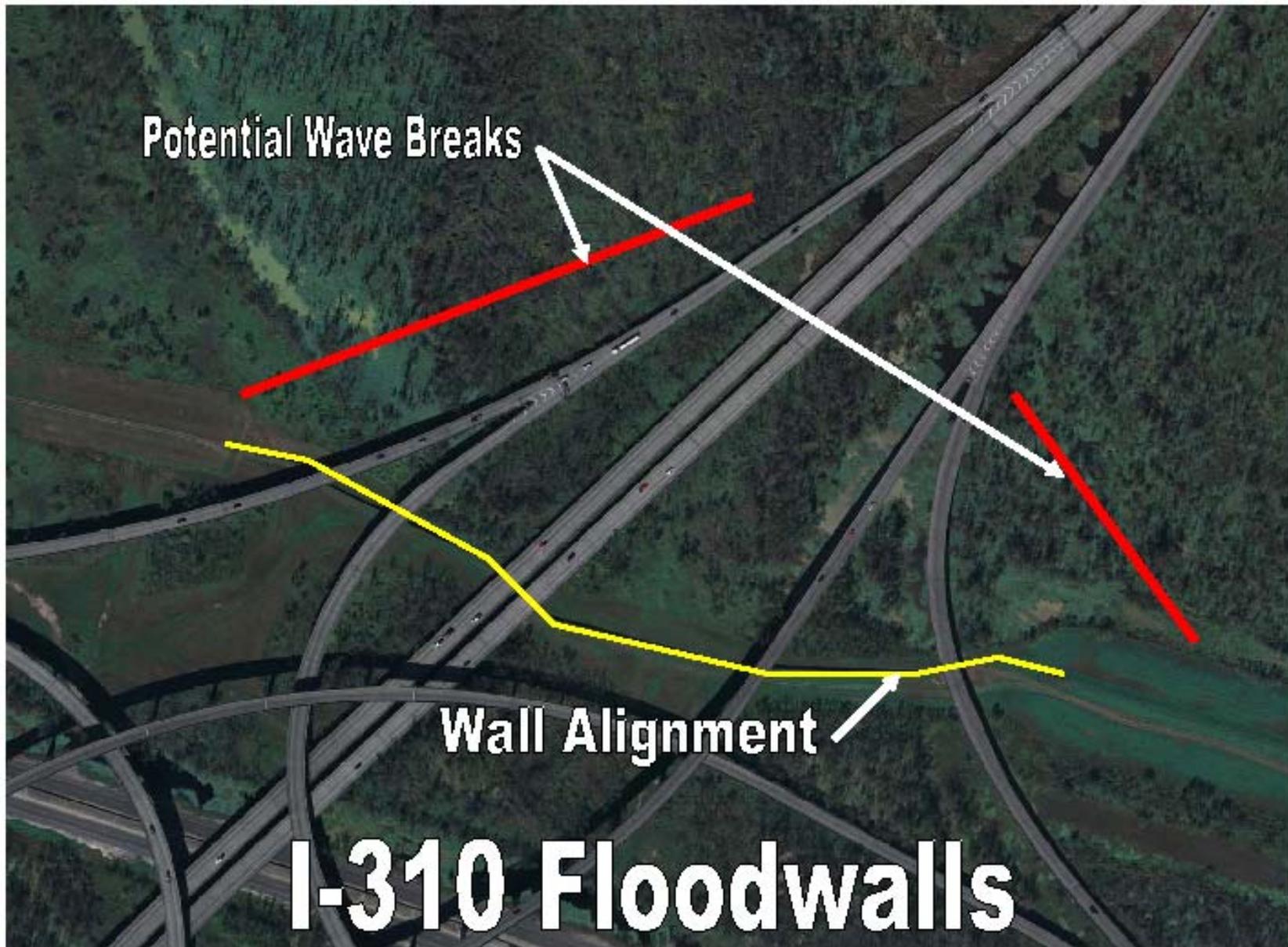
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# 100-year Project Footprint



## Legend

-  Necessary Right of Way for 100-year protection, flood side
-  Existing Right of Way
-  Necessary Right of Way for 100-year protection, protected side
-  Structures and pipelines that will not require any new Right of Way



Potential Wave Breaks

Wall Alignment

# I-310 Floodwalls

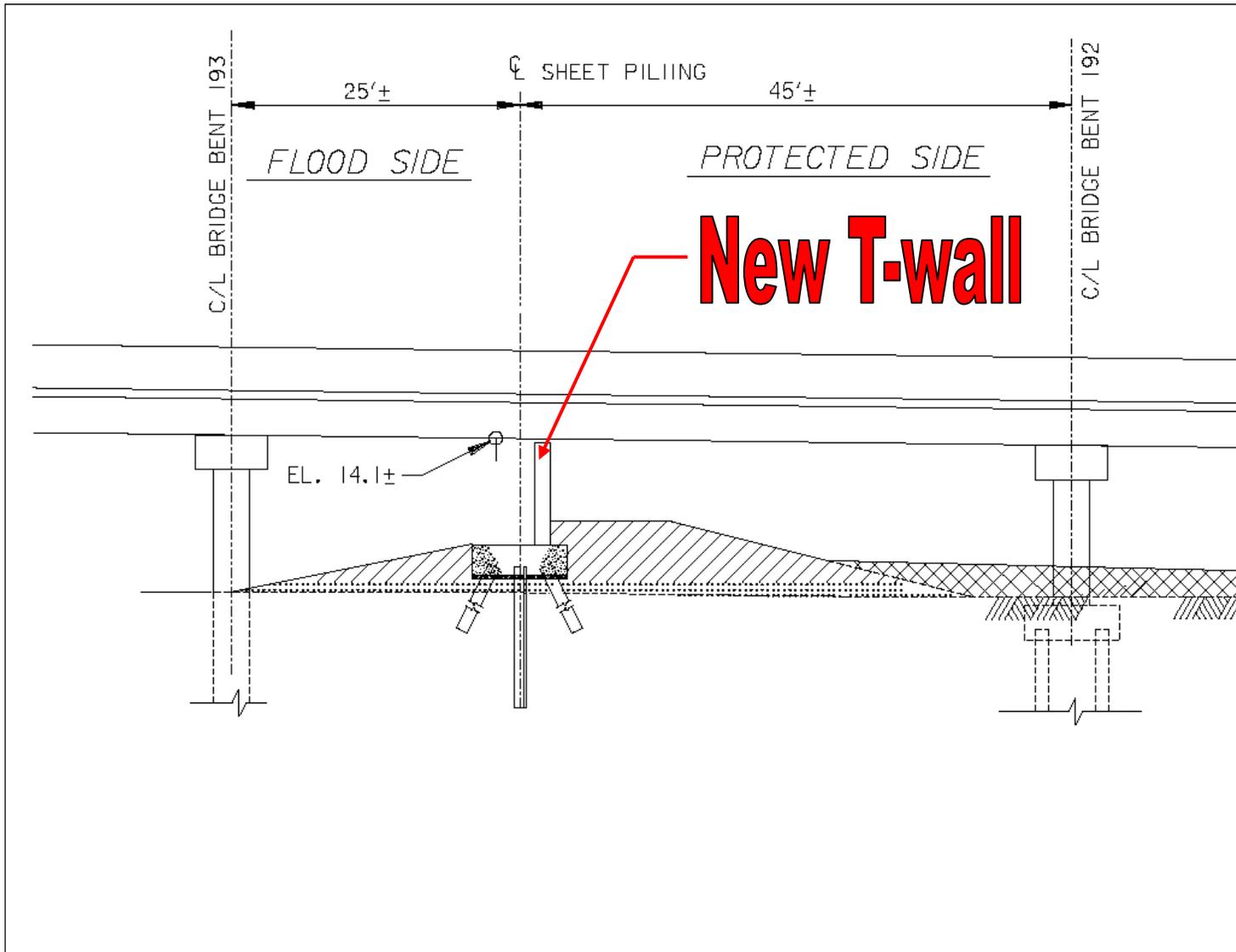
Option 1: Uses wave breaks

Option 2: No wave breaks



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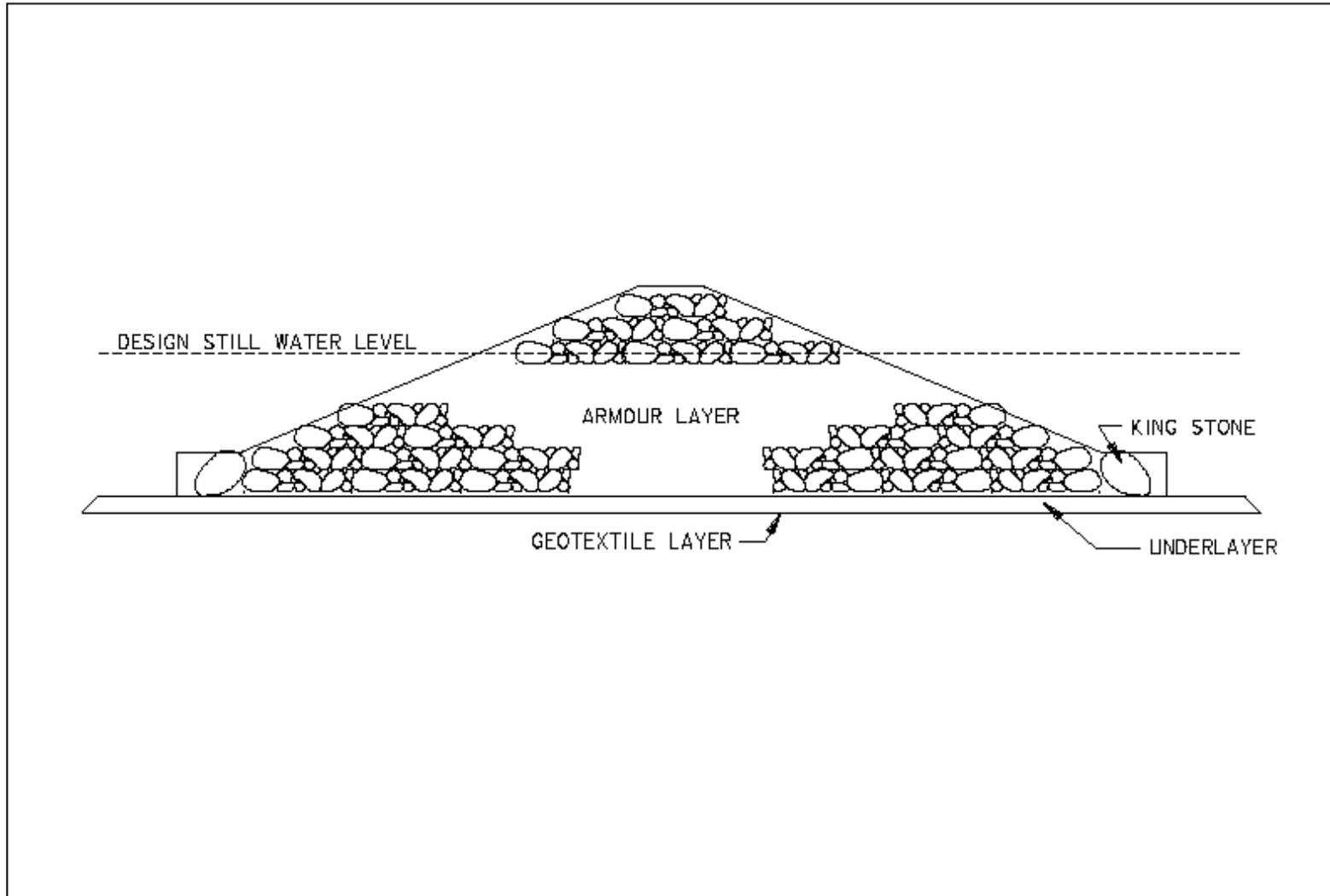
# Floodwall Under 1-310





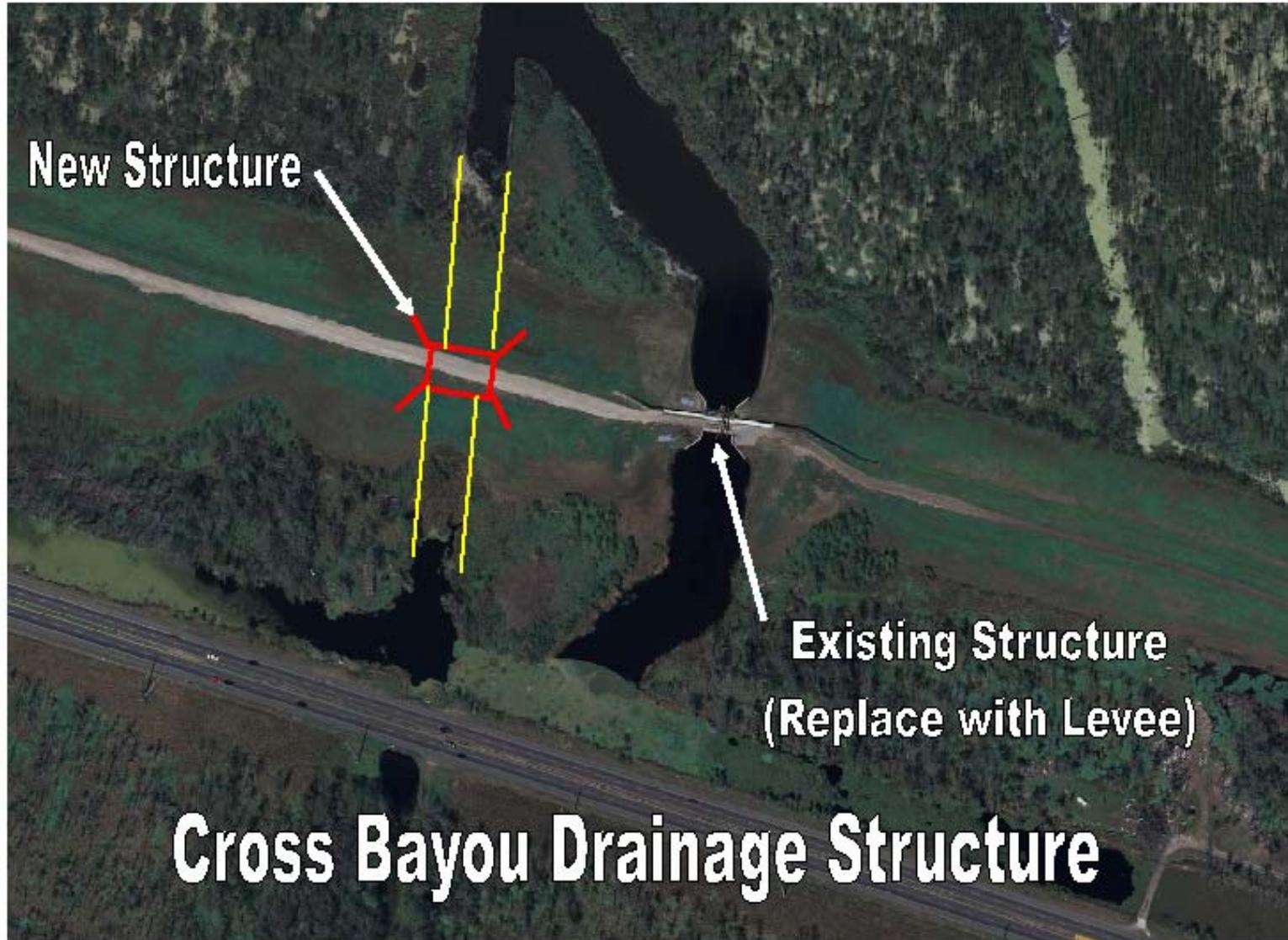
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# Typical Cross Section Through Breakwaters



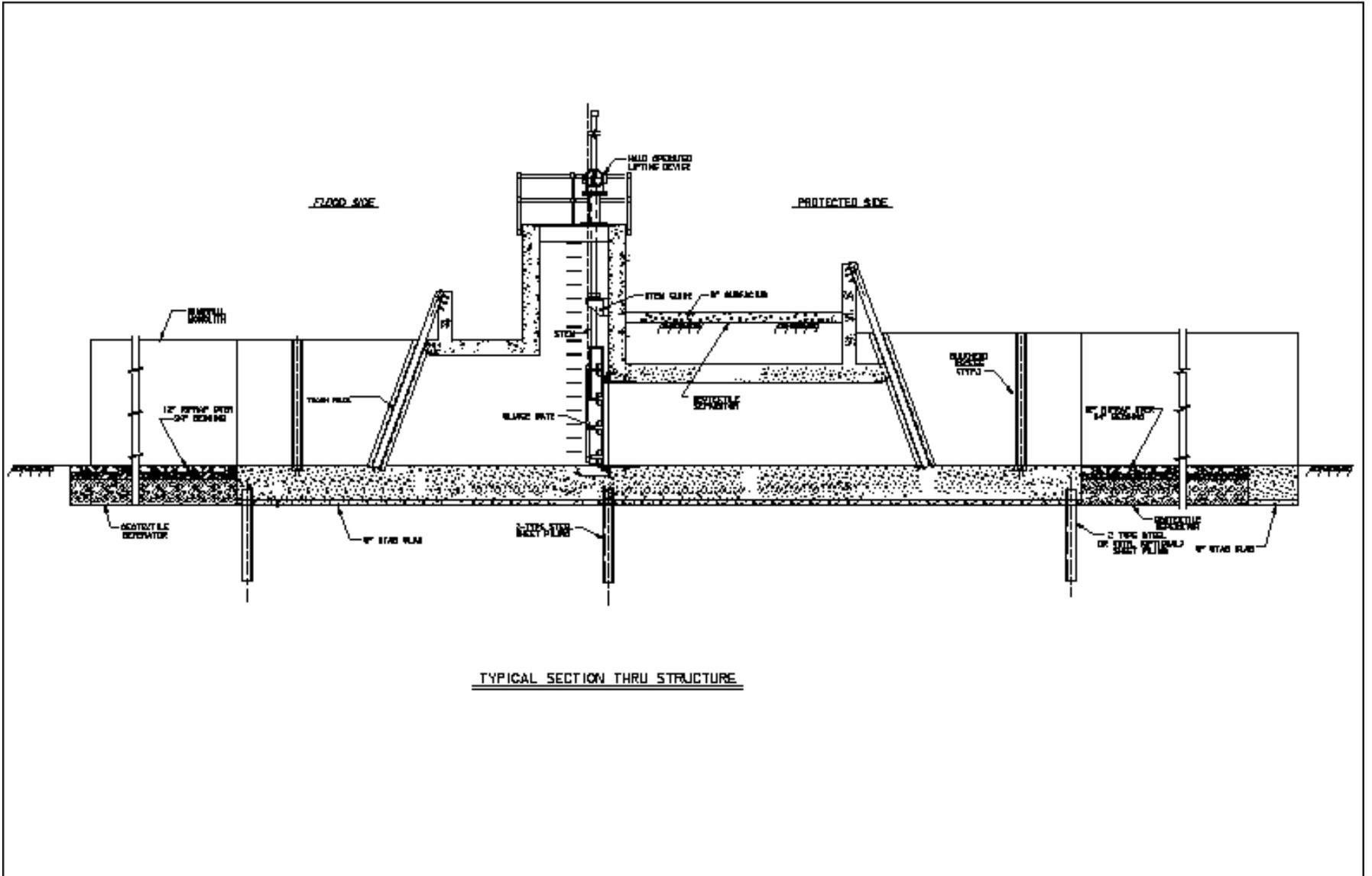


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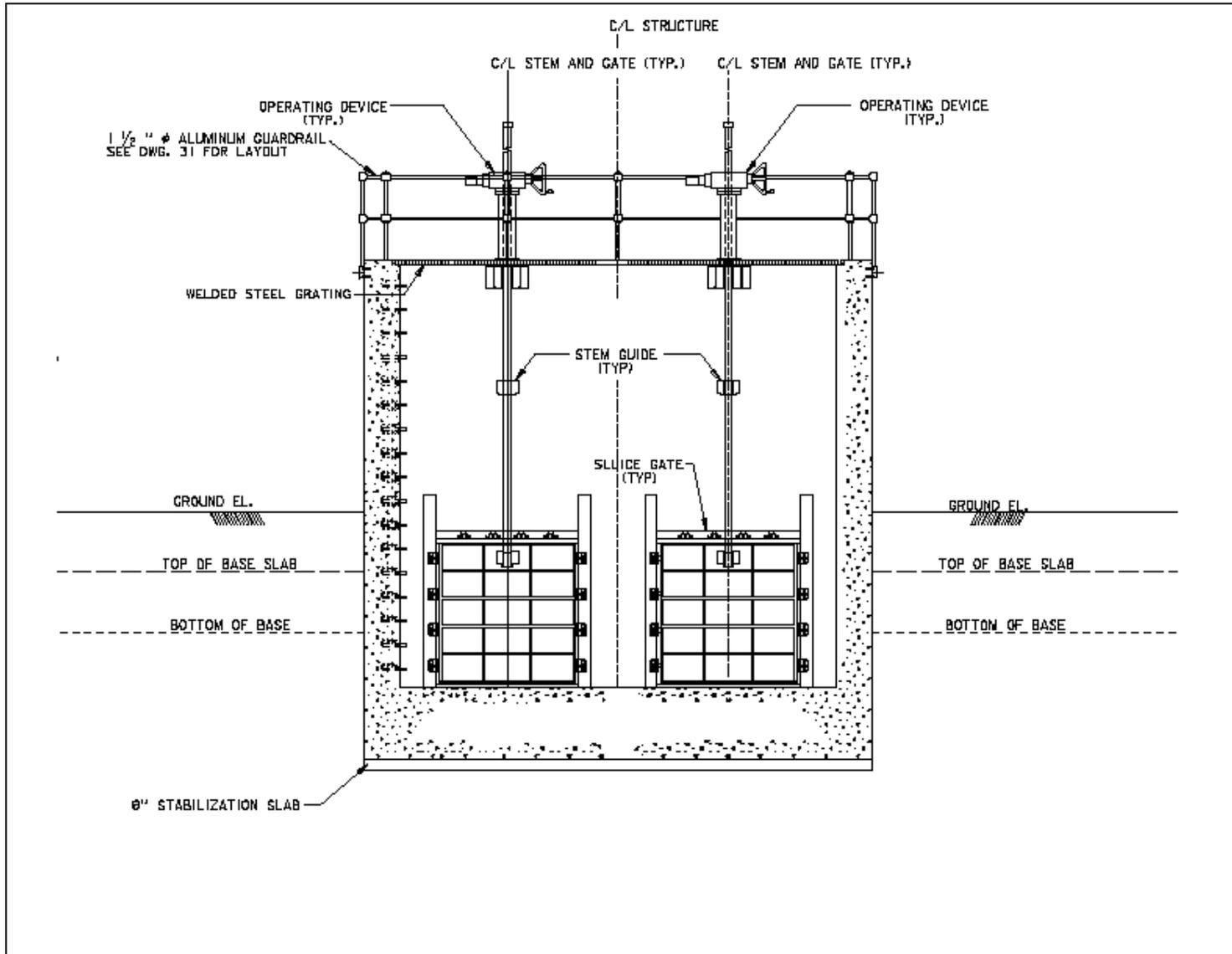
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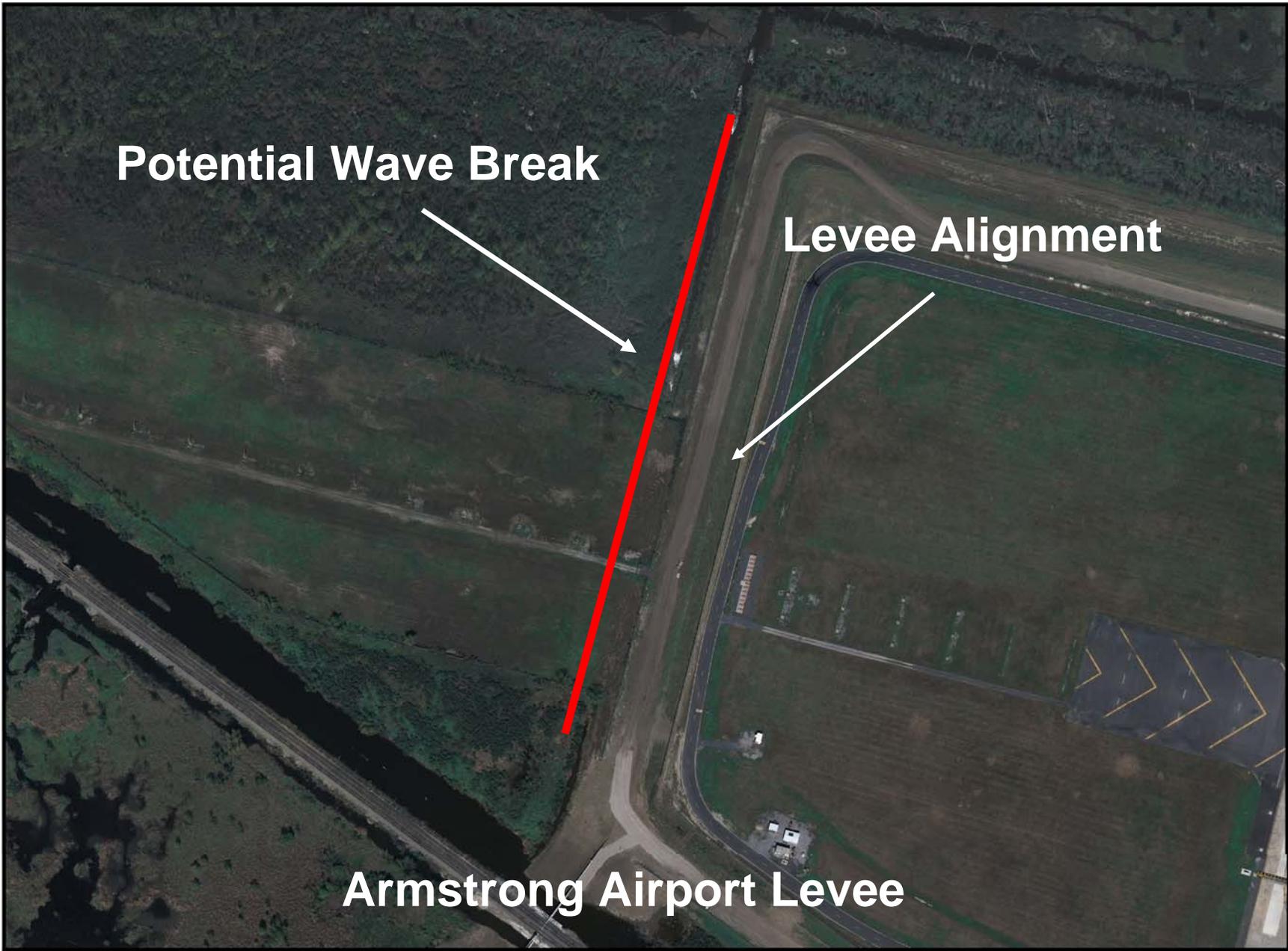




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# Floodside Elevation Drainage Structure





Potential Wave Break

Levee Alignment

Armstrong Airport Levee



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# **100-yr Alternatives Jefferson Parish - West Return Wall IER-02**

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***One Team: Relevant, Ready, Responsive, Reliable***

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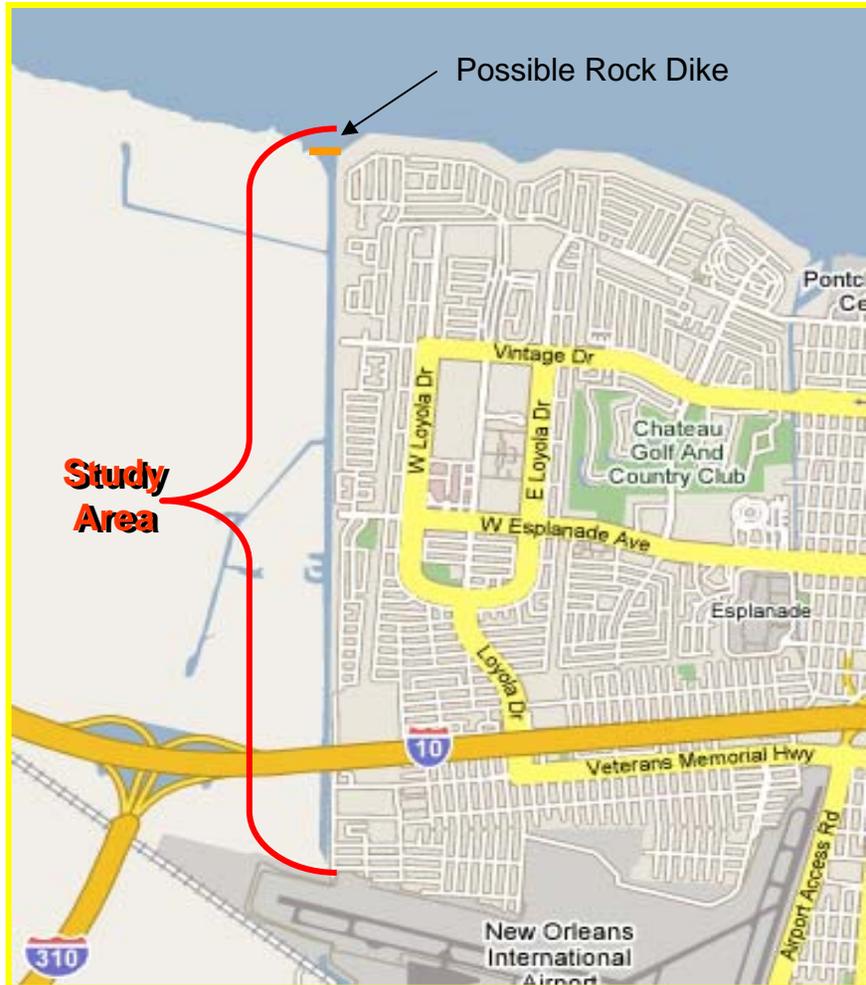
# West Return Floodwall





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# West Return Floodwall Alternatives Evaluation

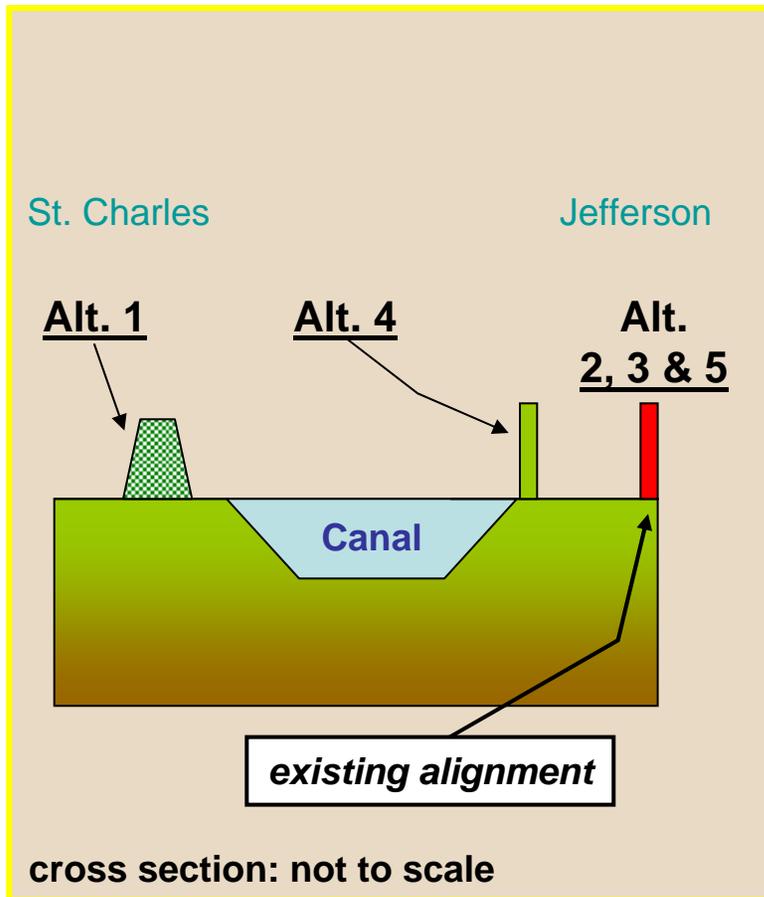


## Study Area:

New Orleans International Airport to the Jefferson Lakefront Levee

- Evaluation of Alternative Designs complete - Nov 07
- Possible Rock Dike considered at head of canal
- Scheduled Start of Construction – Dec 08

# West Return Floodwall Alternatives Evaluation



**Alternative 1:** Earthen levee (St. Charles side of existing alignment)

**Alternative 2:** Modification of existing floodwalls by adding additional wall height (current alignment)

**Alternative 3:** Remove existing wall and replace with new wall (current alignment)

**Alternative 4:** New wall parallel to existing wall (canal side of existing alignment)

**Alternative 5:** Remove existing wall but reuse pile foundation for new wall (current alignment)



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# **100-yr Alternatives Jefferson Parish – Lakefront IER-03**

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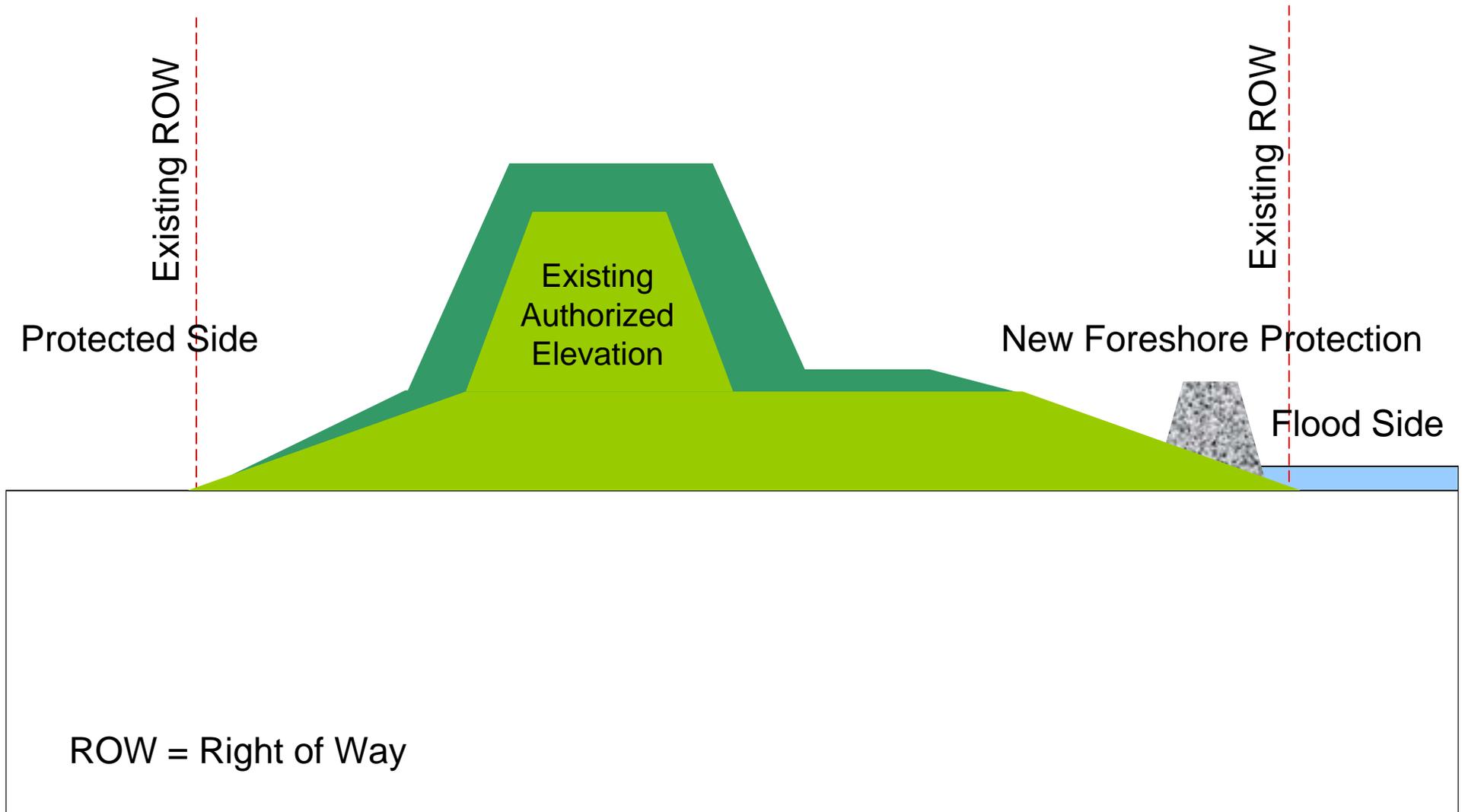
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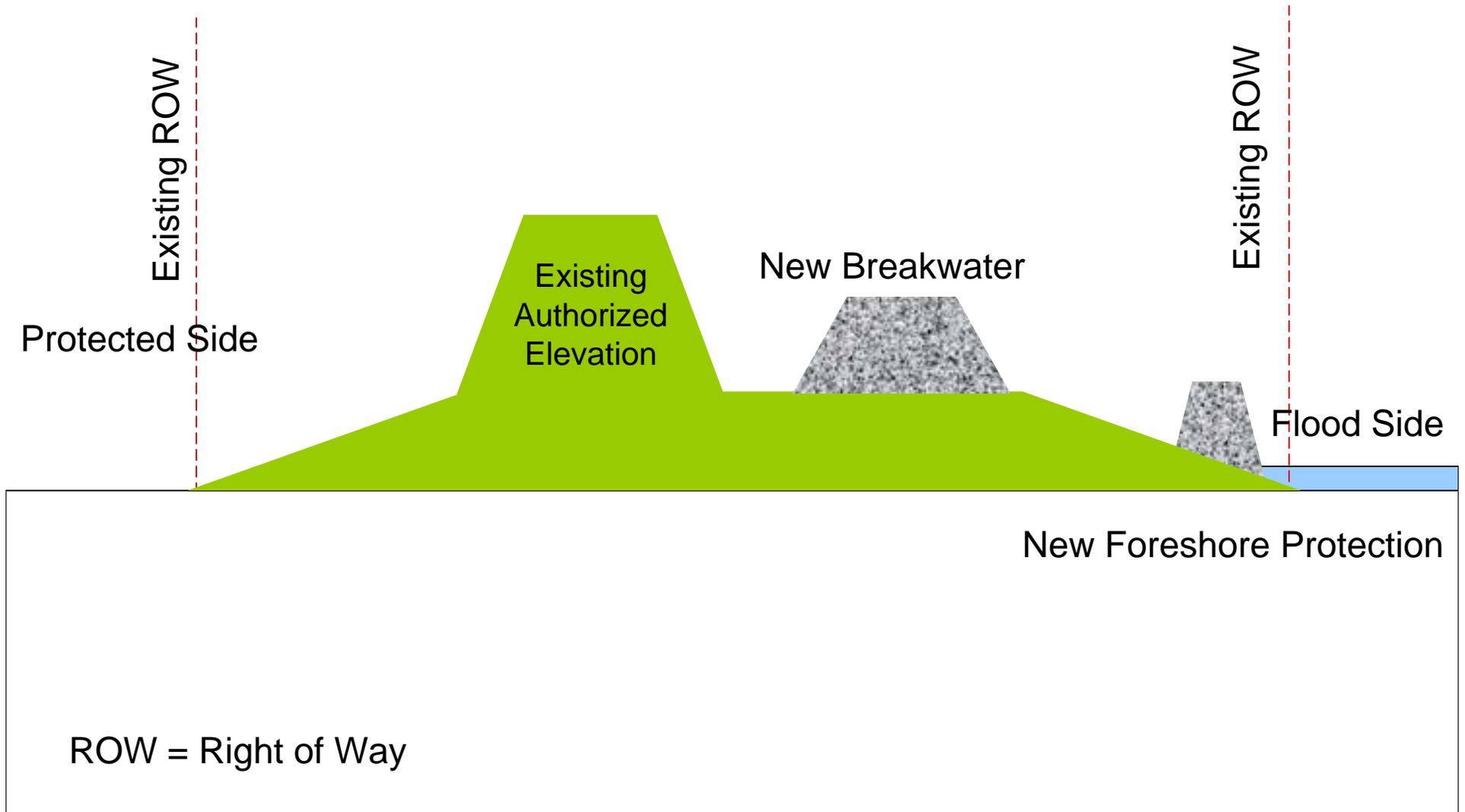
# 100-yr Alternative 1





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# 100-yr Alternative 2





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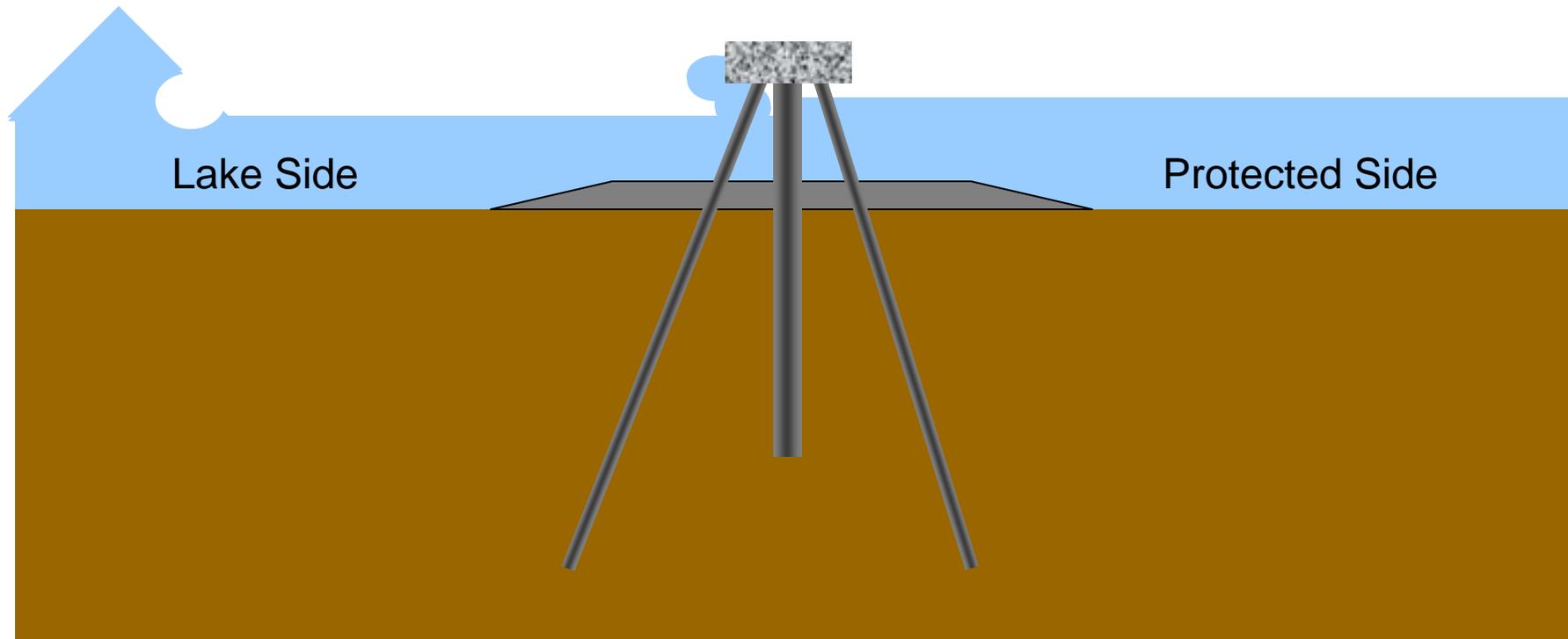
# Breakwater Suburban PS #2





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# Typical Section of Breakwater



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# Fronting Protection Elmwood PS #3

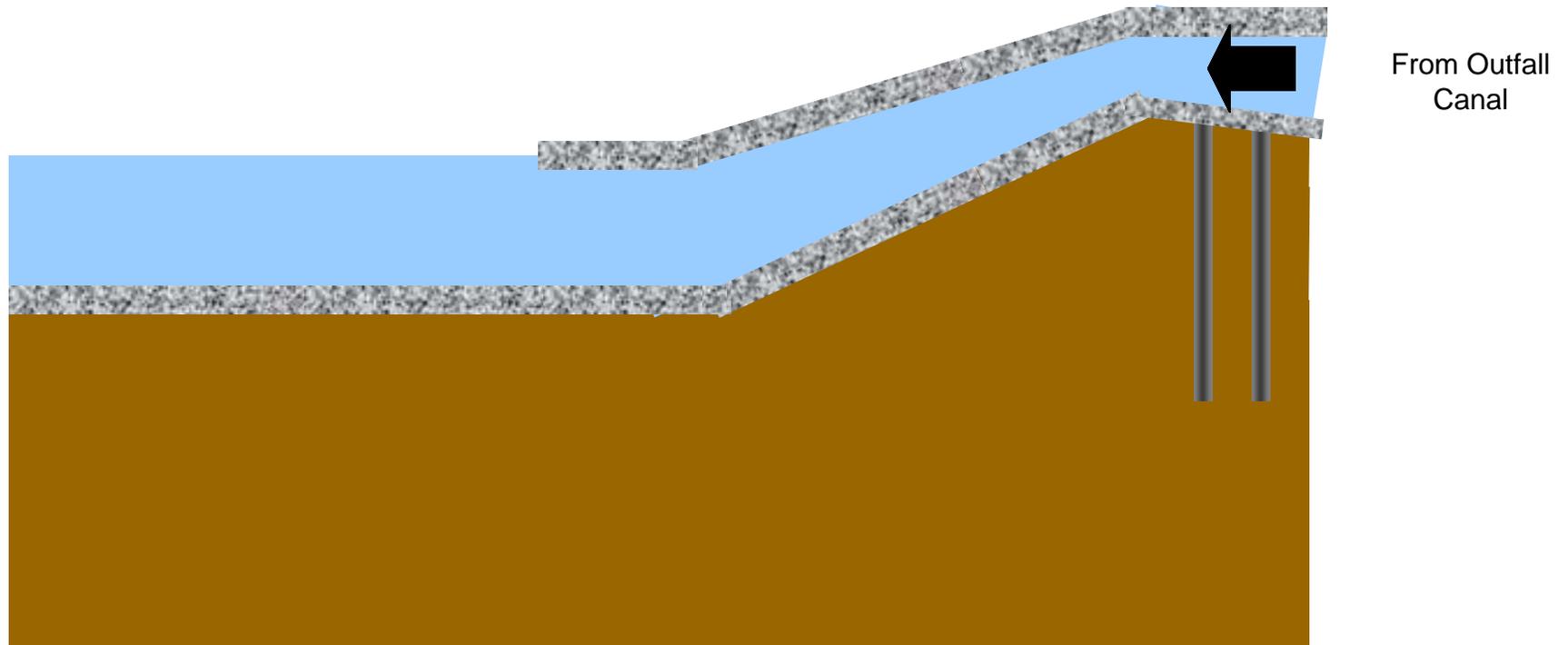




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# Typical Fronting Protection Jefferson Parish Horizontal Pumps

Current Configuration

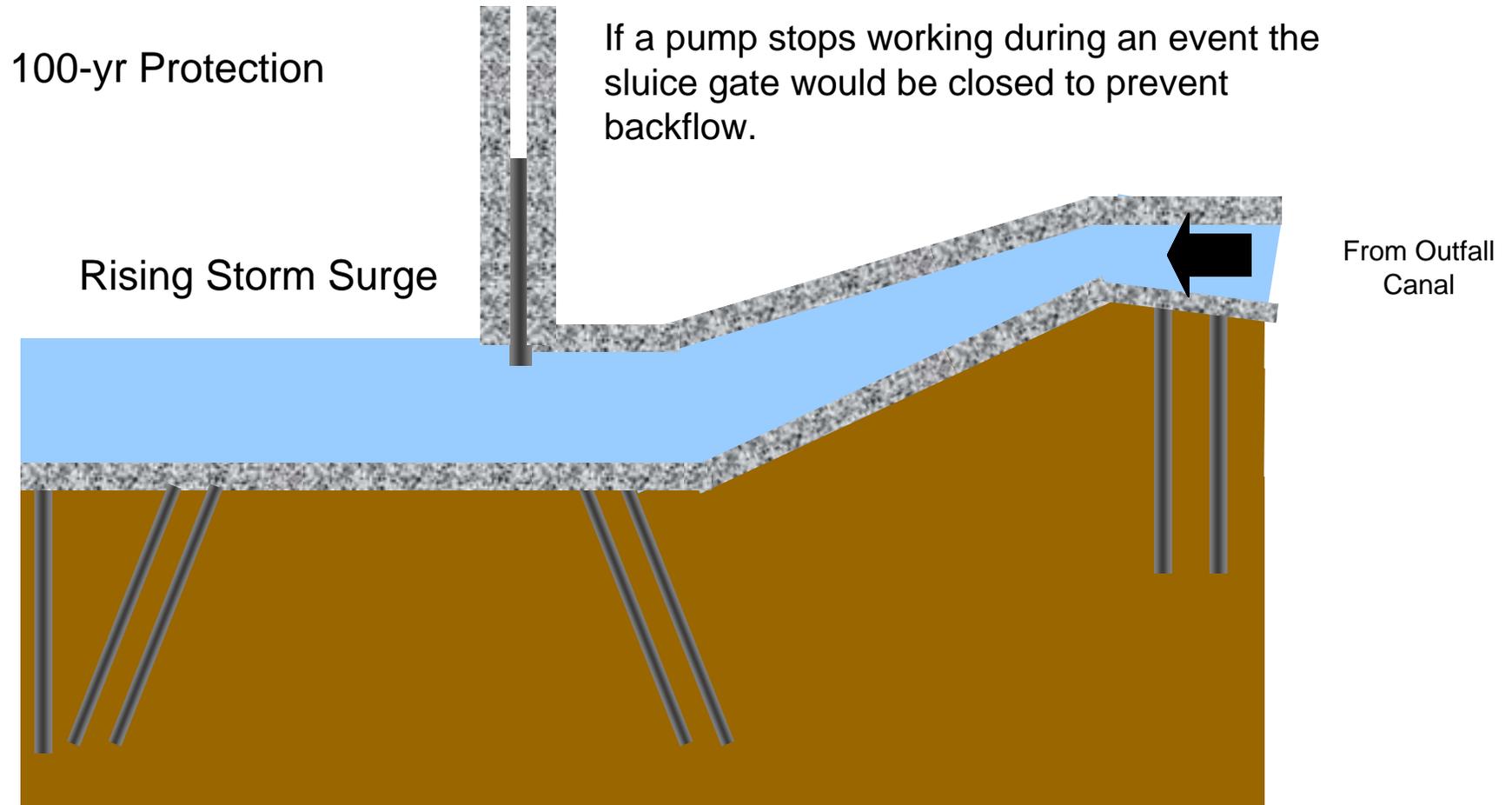


==== *One Team: Relevant, Ready, Responsive, Reliable* ====



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# Typical Fronting Protection Jefferson Parish Horizontal Pumps



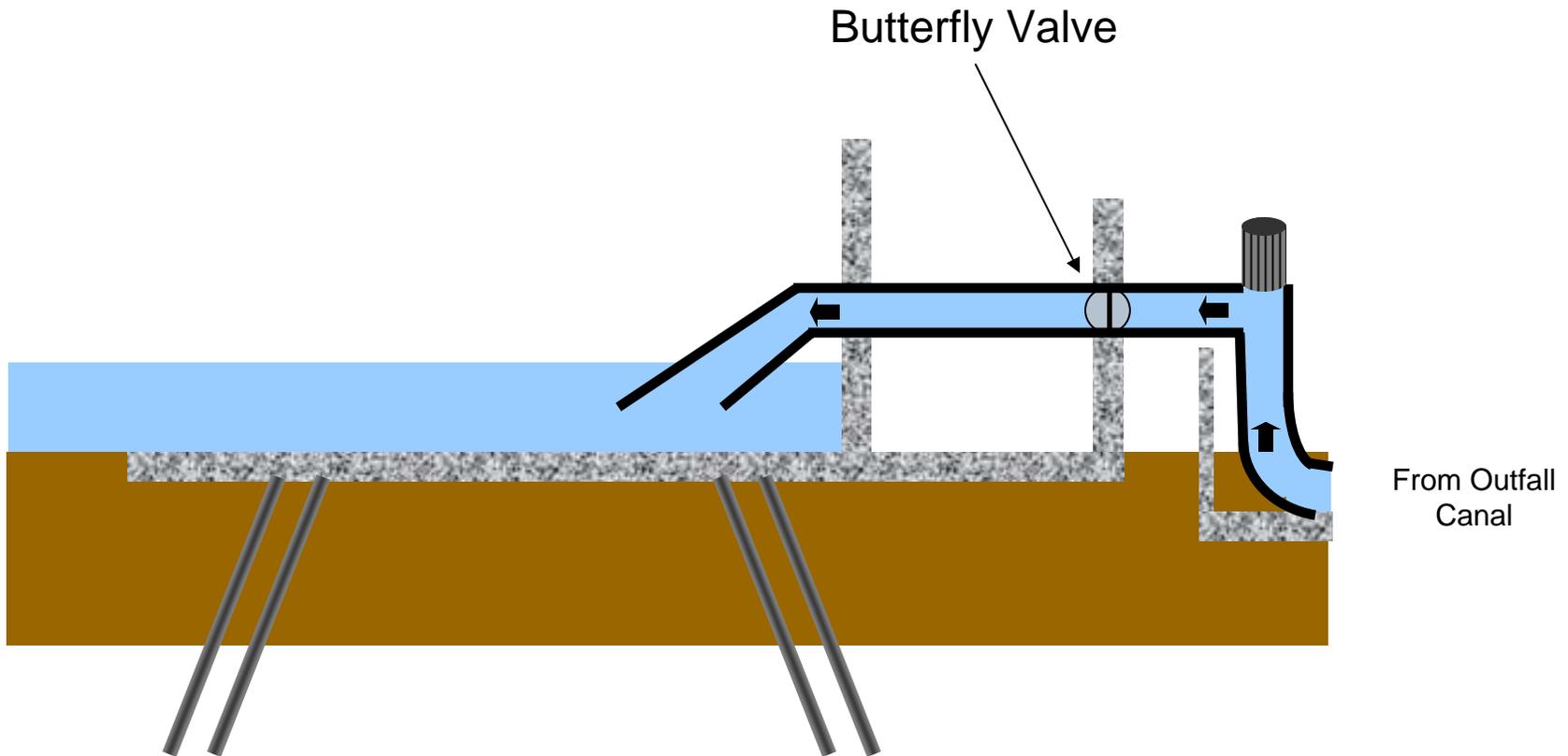
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# Typical Fronting Protection Vertical Pumps

If a pump stops working during an event the butterfly valve would be closed to prevent backflow.





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# Opportunities for Public Input

- Monthly Public Meetings throughout New Orleans Metro Area
  - Make sure to sign in tonight to get on our meeting notification mailing list
- Comments can be submitted at any time at [www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)
- Individual Environmental Reports (IER) 30-day Public Review

Questions and comments regarding Hurricane Protection Projects

should be addressed to:

**Gib Owen**

**PM-RS**

**P.O. Box 60267**

**New Orleans, LA 70160-0267**

**Phone: 504-862-1337**

**E-mail: [mvnenvironmental@usace.army.mil](mailto:mvnenvironmental@usace.army.mil)**

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NEW ORLEANS, LOUISIANA  
Environmental Compliance Data Bank  
[www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)

PROJECTS   MEETINGS   LIBRARY   DATA VIEWER   GET INVOLVED   RELATED LINKS

### Environmental Processes and NEPA Compliance

[What is NEPA?](#)

#### FEATURED PROJECT



USACE-MVN Emergency Alternative Arrangements  
West Bank & Vicinity & Lake Pontchartrain & Vicinity  
Hurricane Protection Projects

[USACE NEPA Questions & Answers](#)  
[USACE Alternative Arrangements NEPA Process](#)  
[USACE Alternative Arrangements NEPA Process Appendix](#)

Welcome to NOLA Environmental! This site has been set up to share with the public the efforts being made by the U.S. Army Corps of Engineers and other Federal and state agencies in south Louisiana regarding the environmental compliance for proposed Federal and state Hurricane Protection Projects. Additional information pertaining to other Federal and state agencies' hurricane recovery efforts in southeast Louisiana will also be posted on the site as it becomes available.

The U.S. Army Corps of Engineers, Mississippi Valley Division, New Orleans District implemented Alternative Arrangements on March 13, 2007 under the provisions of the Council on Environmental Quality Regulations for Implementing the National Environmental Policy Act [40 CFR § 1506.11]. This process was implemented in order to expeditiously complete environmental analysis for the 100-year level of Hurricane and Storm Damage Reduction effort authorized and funded by the Administration and the Congress. The proposed actions are located in southern Louisiana area and relate to the Federal effort to rebuild the Hurricane and Storm Damage Reduction system in the New Orleans Metropolitan area as a result of Hurricanes Katrina and Rita. [\(Learn More\)](#)

[IER 18 Government Furnished Borrow Draft Report](#) Public [Comment](#) Period: Oct. 28, 2007 - Dec. 04, 2007

[IER 19 Contractor Furnished Borrow Draft Report](#) Public [Comment](#) Period: Nov. 2, 2007 - Dec. 6, 2007

**UPCOMING EVENTS: [Public Meetings](#)**  
[Nov. 29, 2007 7:00 - 9:00 pm \(Open House: 6:00 - 7:00 pm\), Orleans East Bank \(IER 5\)](#)  
[Dec. 06, 2007 7:00 - 9:00 pm \(Open House: 6:00 - 7:00 pm\), St. Charles \(IER 1, 2, 3\)](#)  
[Dec. 11, 2007 7:00 - 9:00 pm \(Open House: 6:00 - 7:00 pm\), Environmental Justice](#)



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