



East 7th Street Peninsula Community Workshop

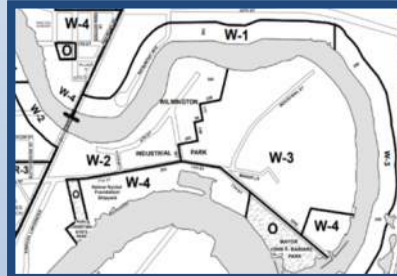
Presented by:

CENTURY ENGINEERING, INC.

February 6, 2019



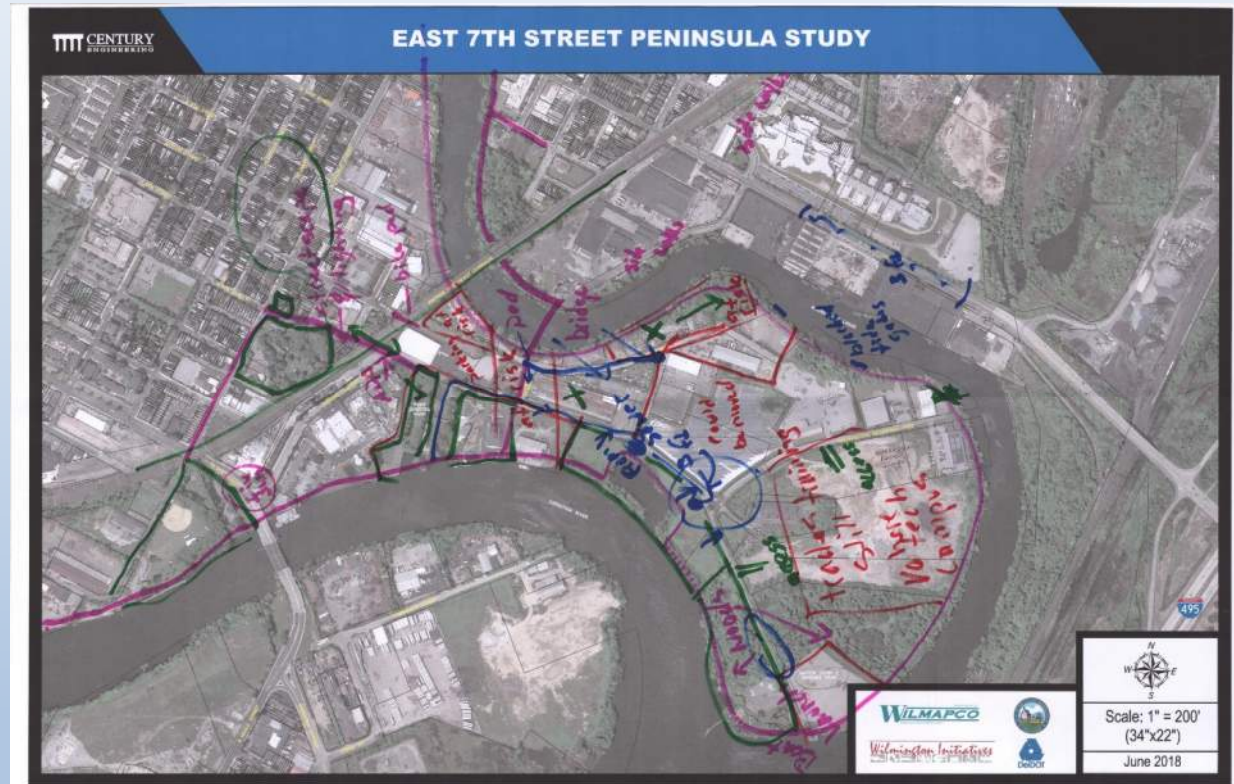
7th Street Analysis



- Flooding
- Environmental Constraints/Resources
- Land Use/Zoning
- Recreational Amenities
- Existing Transportation Network

Public Concerns

- Nuisance Flooding
- Business Access
- Severe Storm Flooding
- Resiliency
- Contamination Locations
- Tree Health
- Trash Dumping
- Impacts of Development
- River Pollution/Smell
- Unmitigated Brownfields
- Mitigated Brownfields with cap issues

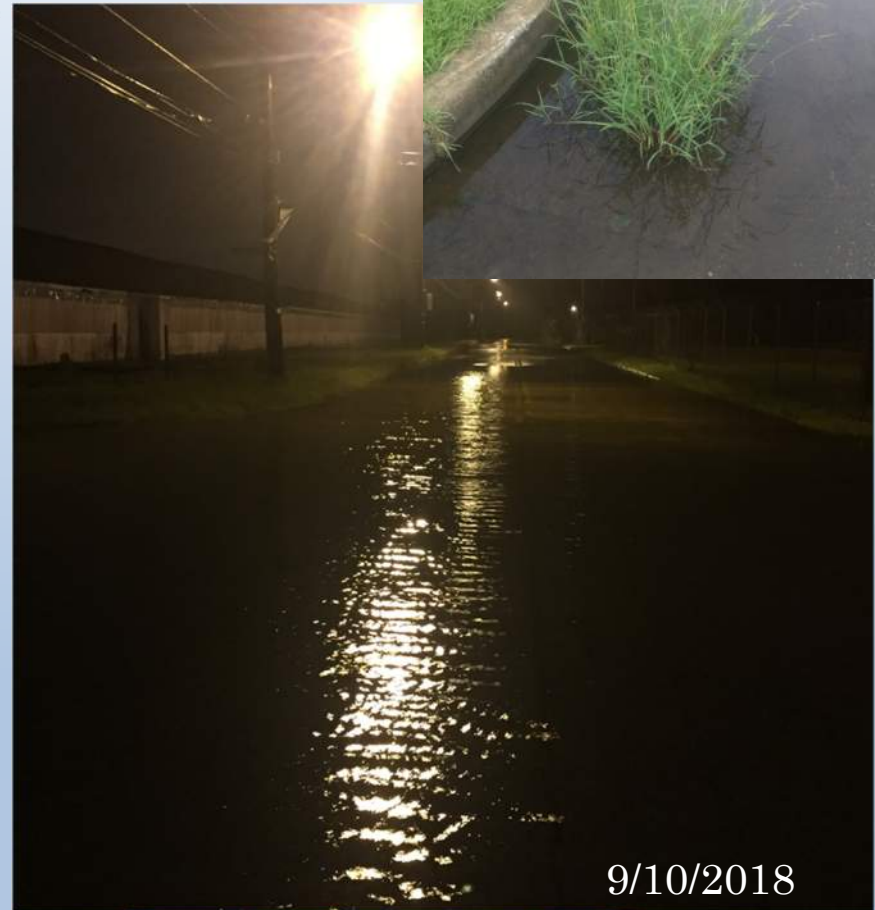


Field Observations

- Potential Causes
 - Unmaintained Drainage Infrastructure
 - Poor Grading – 7th Street Low Points
 - Raised Development
 - Tidal Flooding
 - Subsidence
 - Sea Level Rise



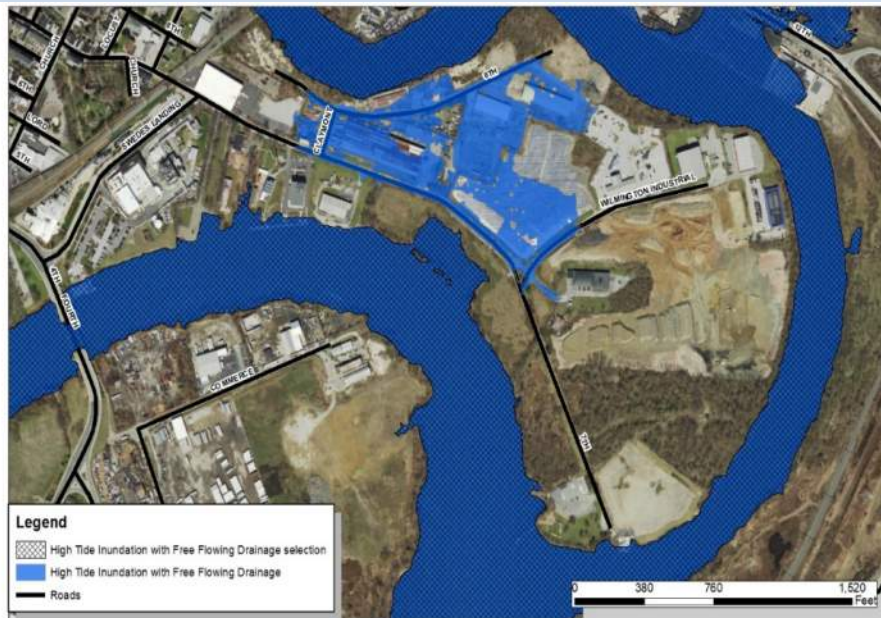
9/11/2018



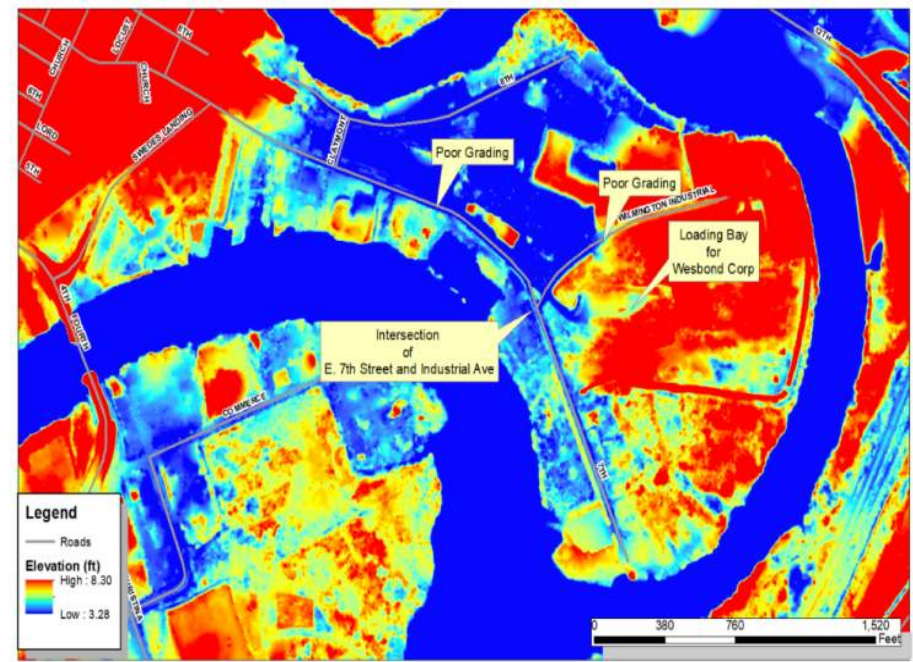
9/10/2018

Flood Modeling

- Compiled Flood Data
 - Field Visits
 - Public Information
 - Infrastructure Information
 - Tide Information



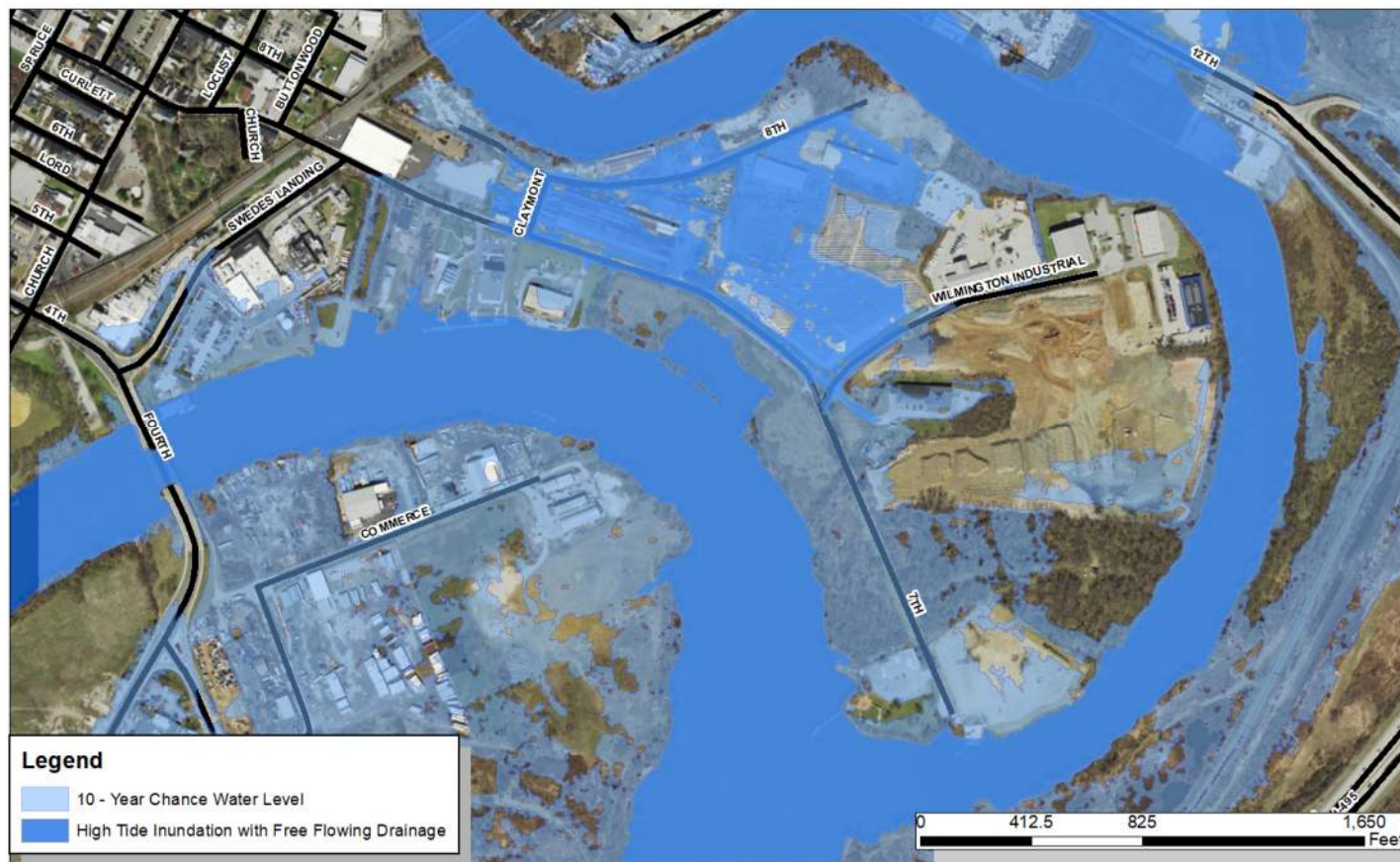
Monthly Tidal Flooding Limits
(based on gauge data)



Elevations on the Peninsula

Flood Modeling

10 - Year Water Level Inundation



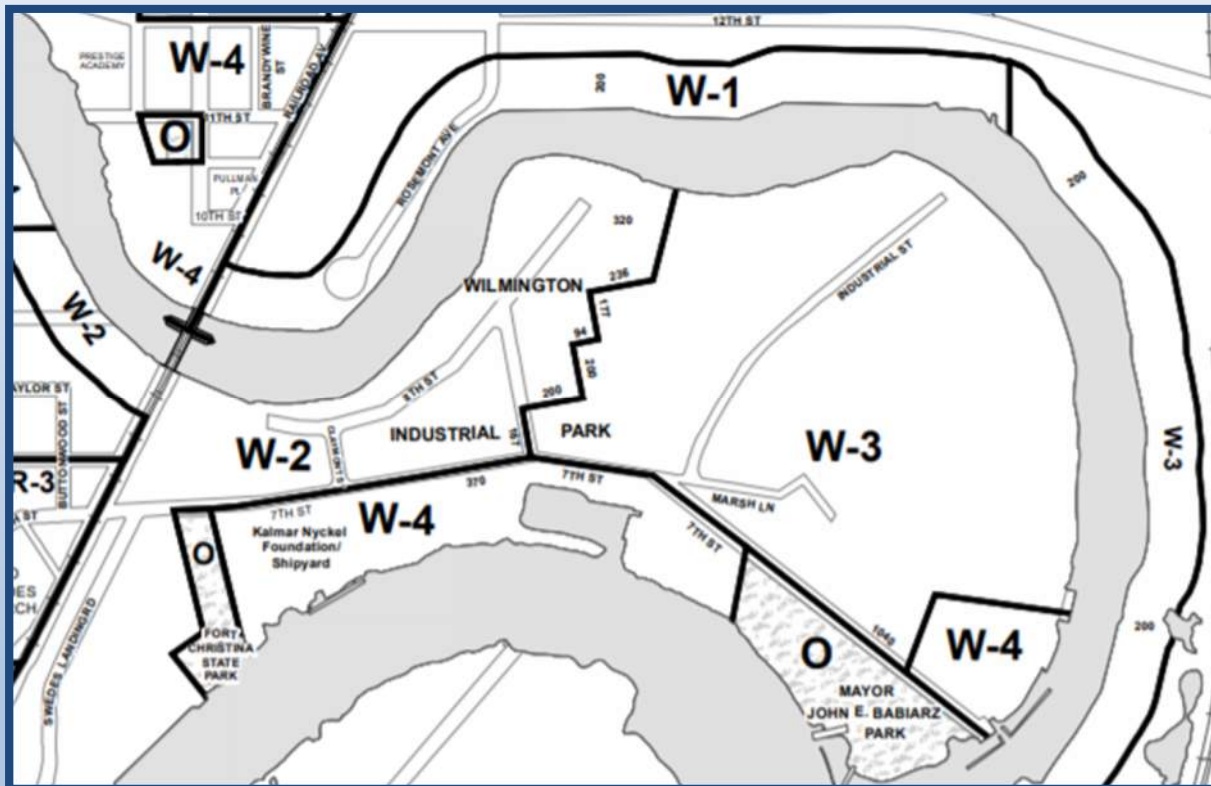
Flood Mitigation Measures Concept

- Propose Resilient Development Plan
 - First Floor Elevation >18" Above Base Flood Elevation
 - Compatible Development Uses in Flood Prone Areas - Hiking, Biking, Recreation Fields, Gardens, Boating
 - Preserve Riparian Buffer
 - Implement Living Shoreline/Shoreline Stabilization in High Energy Areas
 - Stormwater Management Area
- Comprehensive Development & Drainage Plan
 - Elevate Remaining Parcels
 - Elevate Roadways
 - Stormwater Storage (Wet Pond)
- Maintenance of Existing Drainage System
 - Clear Pipes
 - Install Tide Gates
 - Survey Drainage System
 - Improve Capacity

Flood Mitigation Measures



Existing Land Use/Zoning



W-1 – Waterfront
Manufacturing (heavy
industrial)

W-2 – Waterfront Commercial/
Manufacturing

W-3 – Waterfront Low Intensity
Manufacturing/
Commercial
Recreation

W-4 – Waterfront Residential/
Commercial

O – Open Space

Land Use Opportunities

- 50' Waterfront Buffer
- Marina/Restaurant
- Water sports
- Hiking Areas
- Connections to Eastside Community
- River walk extension



Recreational Amenities

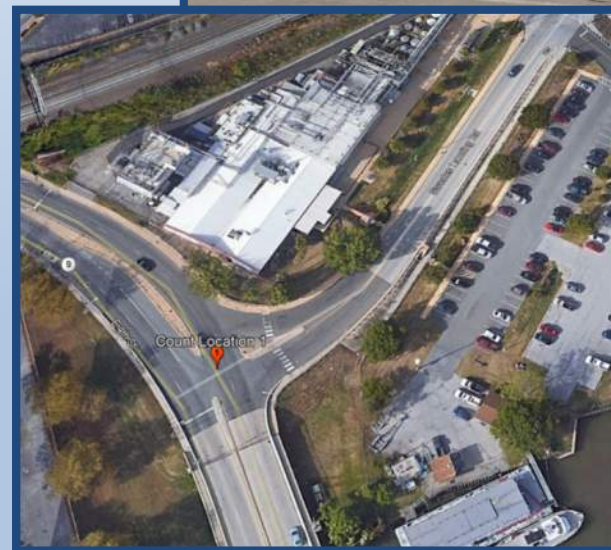
- Benches
- Trash cans
- Lighting
- Restrooms
- Landscaping
- Kiosks
- Historical markers
- Open space
- Picnic facilities
- Boat ramps
- River taxi
- Parks
- Athletic fields
- Riverwalk
- Education stations
- Sidewalks/trails
- Scenic overlooks
- Marina
- Pavilion/bus parking
- Directional, information, and wayfinding signs
- Public green space
- Indoor running track

Conceptual Land Use



Existing Transportation Network

- Improve Pedestrian Accessibility
- Improve Roadway Network
- Old Swedes Landing/4th Street
- Traffic Calming
- 8th Street Underpass
- Pedestrian Lighting





Environmental Constraints and Resources

Preserve

- Fort Christina Park
- Old Swedes
- Kalmar Nyckel
- Skate Park
- Lacey's Restaurant
- St. Mary's Church
- Eastside Community
- Green Areas
- Open Space Near Skate Park
- Harriet Tubman Byway
- Antoni Swart Way
- Archaeological Remains of Fort Christina
- Jackson Sharp/Delaware Car Works



Wayfinding/Historical Markers



EAST 7TH STREET PENINSULA

EAST STREET 7TH PENINSULA

EAST 7TH STREET PENINSULA

EAST STREET 7TH PENINSULA

EAST 7TH STREET PENINSULA

EAST STREET 7TH PENINSULA



THANK YOU



