



# Ferry Landing Feasibility Study Presentation

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# Presentation Outline

- Introduction
- Four Proposed Landing Sites
- Ferry Operators
- Basic Construction
- Site Evaluation Criteria
- Landing Site Review
- Cost
- Review and Questions



# Introduction

Primary Goal: Assess **Optimal** Location for  
a **Ferry Landing** Facility.



# Introduction

- Comprehensive Citywide Ferry Study  
Roosevelt Island was **prioritized 4<sup>th</sup>**.
- This prioritization level is currently higher than all other stops on the East River Ferry System.
- Demand will **increase** with the Cornell University graduate school to be located on the island

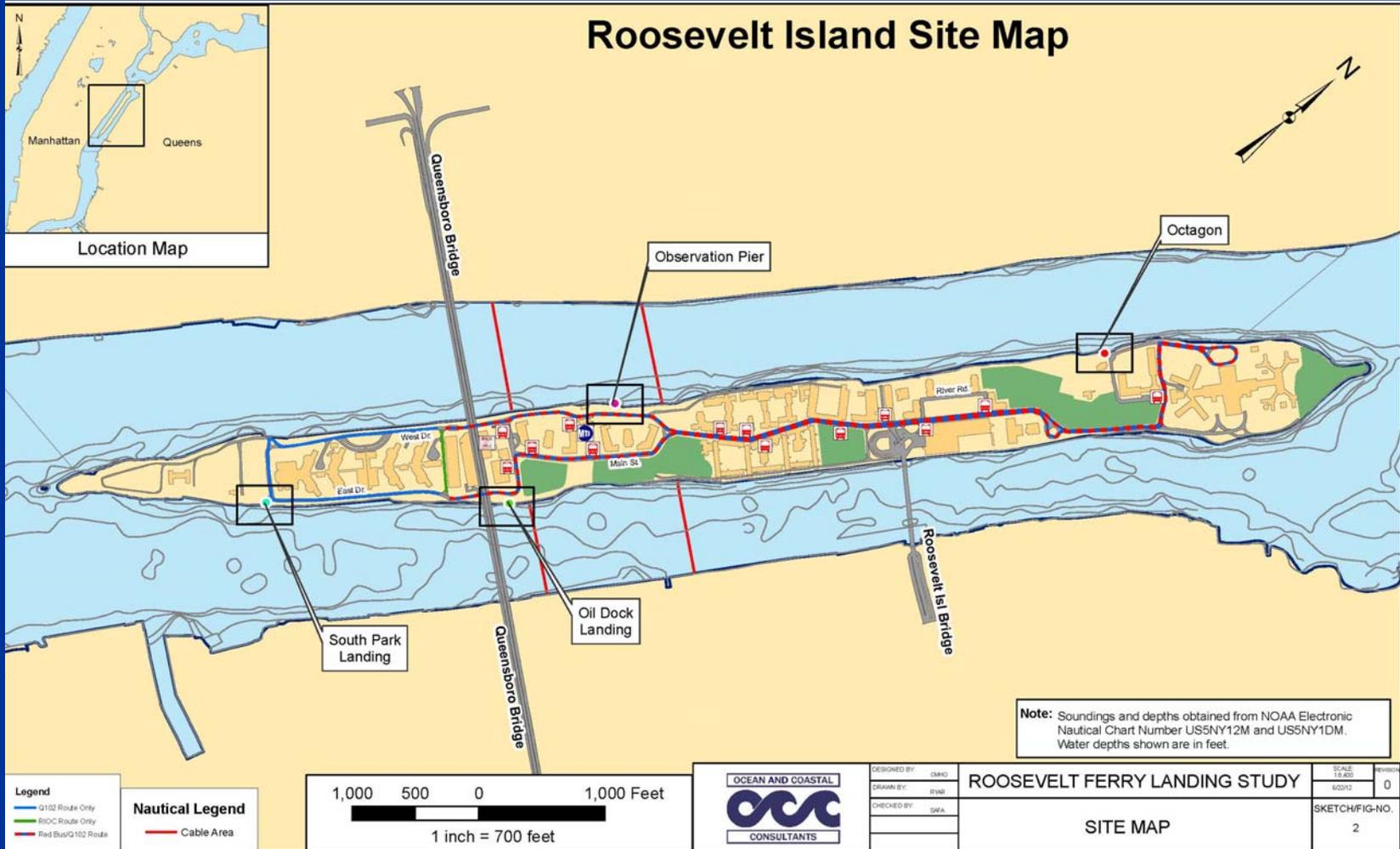


# Primary Tasks

- Island Wide Assessment and Evaluation
- Site Evaluation Criteria
- Site Investigation
- Integrating New Route into Existing Service
- Cost
- Feasibility



# Island Evaluation





# Proposed Landing Sites

- Observation Pier
- Former Oil Dock
- Octagon
- Southpoint Park



# Ferry Operators

## 1. NY Waterway

- Provides **Commuter** ferry service
- In the spring of 2011, the East River Ferry Service began.
  - Annual Ridership was projected to be at 410,000
  - Actual numbers were just under 1 million.



# Ferry Operators

## 2. Water Taxi

- Provides **tourist** and **sightseeing** tours
- Could be utilized for special access events on the island

## 3. SeaStreak

- **Commuter** Service between Manhattan and Monmouth County, New Jersey
- Possible service to New York Yankees and Mets games.



# Ferry Operations

- Primary Route would be Point-to-Point
- Ferry would travel from Roosevelt Island to 34<sup>th</sup> Street and back.
- Riders would need to transfer for additional stops further south.





# Basic Construction

- **Basic Construction**
  - Floating barges moored in place with steel spud piles.
  - Access to the barge is provided by an aluminum gangway
  - Access to the ferry is provided by aluminum ramps that are lowered onto the deck through an electrical and mechanical pulley
  - LL-68 compliant



# Basic Construction

- **Amenities**

- Electrical connections for raising and lowering ramps and lighting
- Queuing areas for passengers, ticket, schedule and route map signage, and shelters for inclement weather



# Green Point Landing





# North Williamsburg Landing





# Site Evaluation Criteria

- **Engineering**

- Construction
- Navigation
- Upland Sitework
- Maintenance
- Permitting

- **Ferry Service**

- Travel Time
- Proximity to Transportation Hubs
- Proximity to Ferry Rides
- Visibility
- Waterfront Recreation Potential



# Site Evaluation Criteria

- Construction
  - Pile Design
  - Utility/Underground Crossings
  - Construction Costs
- Navigation
  - East Channel of the East River “No Wake” speed
  - Fast currents
- Upland Site Work
  - Queuing areas for riders
  - Ticket booths or kiosks
  - Drop-off locations
  - Protection from the weather
  - ADA compliant access.



# Site Evaluation Criteria

- Landing Maintenance
  - Landings must be able to move up and down with tides and boat wakes
  - Ideal location would be in a reasonably calm area with infrequent wake events
- Permitting
  - Ideal locations
    - Provide recreational access for non-riders of the ferry system
    - require minimal disturbance of the existing waterfront structures
    - Smallest area of water affected

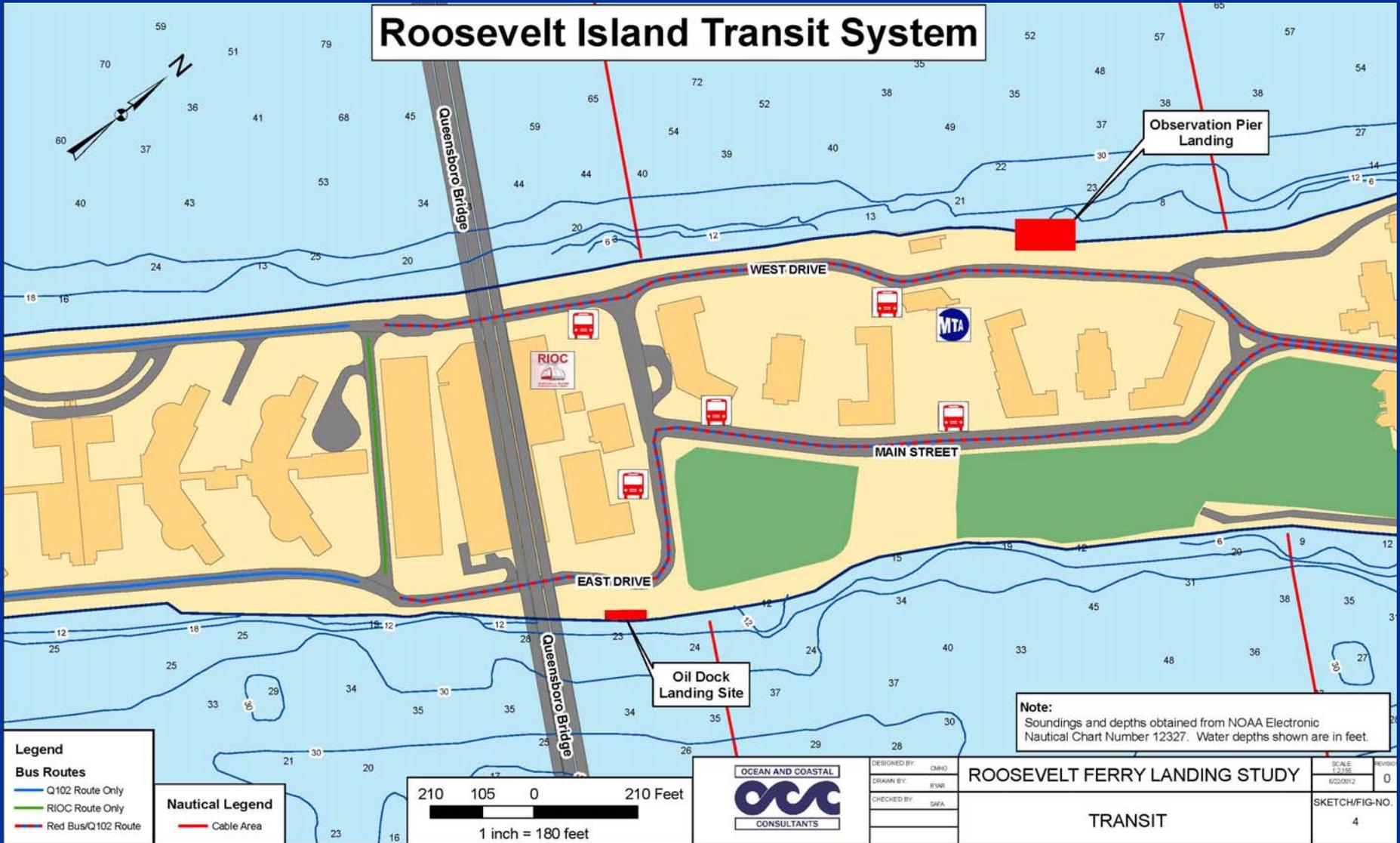


# Proposed Landing Sites

- Observation Pier
- Former Oil Dock
- Octagon
- Southpoint Park



# Roosevelt Island Transit System





# Observation Pier Landing

## Pros

- Shortest travel time to East 34th Street (**approx. 6 minutes**)
- Centrally located to transportation Hub.
- Existing pier, upland area provides adequate space.

## Cons

- Proximity to subsurface electrical crossing and subway Tunnels
- Installation of rock-socketed piles required
- Relative construction cost for the landing will be high
- Maintenance of the dock will be greater as a result of frequent large wake events.



# Oil Dock Landing

## Pros

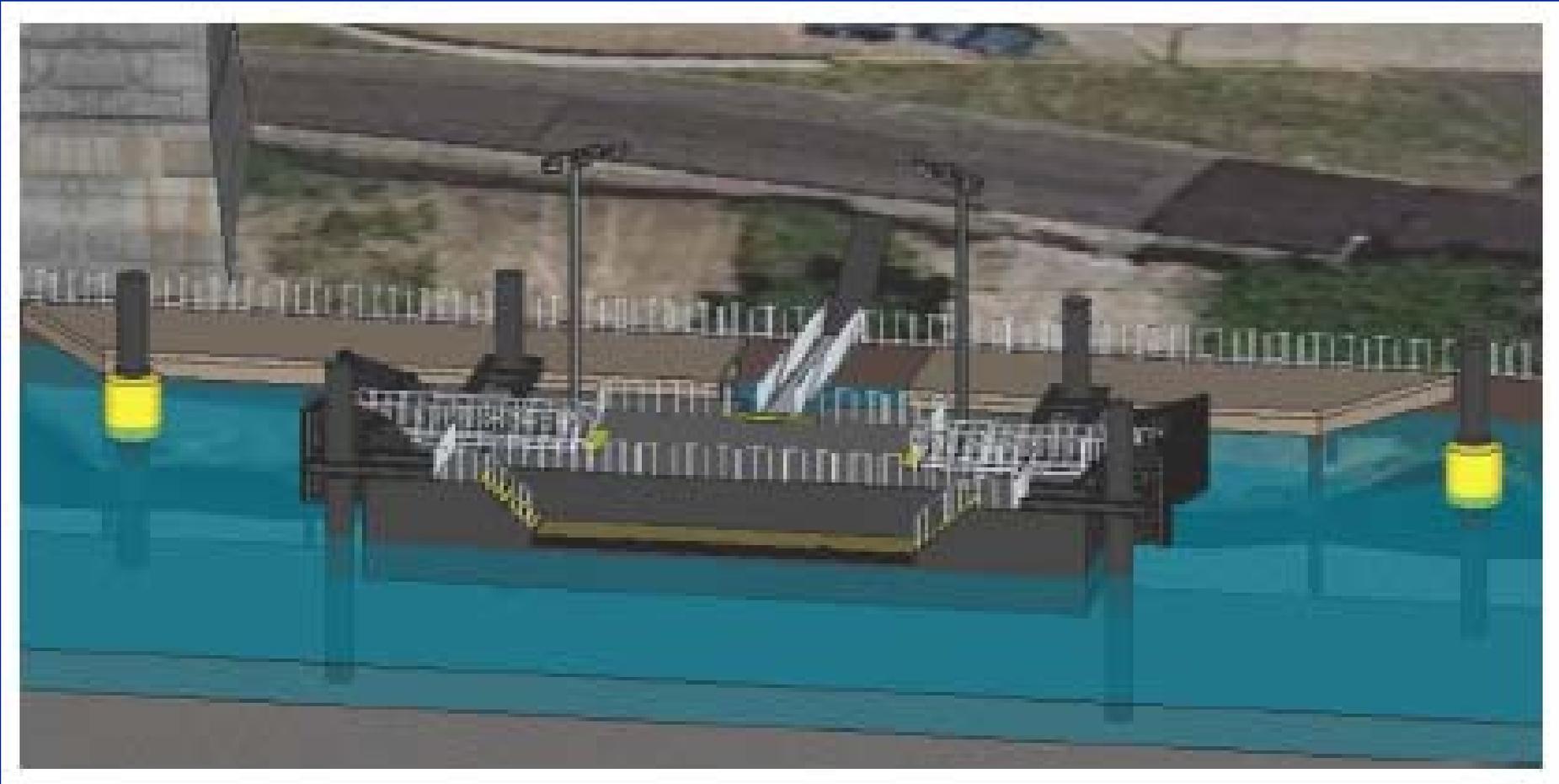
- Upland area provides adequate space.
- Centrally located to transportation Hub.
- Close to north end of future Cornell University.
- Potential waterfront recreational use.
- Located in relatively calmer waters of east channel

## Cons

- **Longest travel time** to East 34th Street (approximately 15 minutes) due to "No-Wake" zone.
- Greatest impact on the overall East River Ferry schedule.
- **Poor visibility** of ferry will reduce knowledge of service.



# Proposed Oil Dock Landing





# Octagon Site

## Pros

- Travel time to East 34th Street (approximately 8 minutes);
- Adequate space to support the necessary service
- Previously received a permitted for a landing.
- Close to residential areas of island.

## Cons

- Not centrally located to transportation Hub.
- Far from future Cornell University site.
- Installation of rock-socketed will be required
- Relative construction cost for the landing will be high
- Maintenance of the dock will be greater as a result of frequent large wake events..



# Southpoint Park

## Pros

- Closest to future Cornell University site.
- Potential for waterfront recreational use.
- Located in relatively calmer waters of east channel which reduces long-term maintenance costs.

## Cons

- Not centrally located transportation hub.
- Far from residential areas of the island.
- Relative construction cost for the landing will be high.
- No upland facility exists.

Table 1 - Comparison of potential landing locations.

Category	Criterion	Potential Landing Location			
		Observation Pier	Former Oil Dock	Octagon	Southpoint Park
Engineering	Construction	Heavy vessel activity in west channel with landing in proximity to subsurface utility crossings/subway.	Calm water with no anticipated subsurface utility crossings/subway.	Heavy vessel activity in west channel with no anticipated subsurface crossings/subway.	Calm water with no anticipated subsurface utility crossings/subway.
	Navigation	High current with high wake activity, but no speed restrictions.	High current with low wave activity and "no wake" zone along most of east channel.	High current with high wake activity, but no speed restrictions.	High current with low wave activity and "no wake" zone along most of east channel.
	Upland Site Work	Existing dock with ADA compliant access and room for passenger queuing, ticket booths, etc.	Existing structures requiring maintenance, but large upland area available for rehabilitation.	Existing dock with ADA compliant access and room for passenger queuing, ticket booths, etc.	No existing upland infrastructure and waterfront structure construction and improvements necessary.
	Landing Maintenance	Generally rougher water as a result of heavy vessel activity in west channel and higher maintenance necessary.	Relatively calm water with minimal maintenance anticipated.	Generally rougher water as a result of heavy vessel activity in west channel and higher maintenance necessary.	Relatively calm water with minimal maintenance anticipated.
	Permitting	Existing waterfront structures but USCG permitting may be issue with regards to vessel traffic.	Existing waterfront structures and deck removal of dock could provide mitigation.	Ferry landing previously received permits for this location.	New shoreline structures necessary and no previous permitted structures.
Ferry Service	Travel Time by Ferry	Anticipated travel time to East 34th Street Landing is ~6 minutes.	Anticipated travel time to East 34th Street Landing is ~15 minutes (Due to no wake zone).	Anticipated travel time to East 34th Street Landing is ~8 minutes.	Anticipated travel time to East 34th Street Landing is ~12 minutes (Due to no wake zone).
	Proximity to Transportation Hubs	On red bus service route and in close proximity to Tram and subway.	On red bus service route and in close proximity to Tram and subway.	On red bus service route, but far from Tram and subway.	On red bus service route, but far from Tram and subway.
	Proximity to Ferry Riders	Central to island and equidistant to Cornell campus and residential area.	Central to island and equidistant to Cornell campus and residential area.	Very close to residential end of island, but far from Cornell and Southpoint Park..	Very close to future Cornell campus and Park, but far from residences.
	Visibility	Clearly visible from FDR, East River Esplanade, Tram, and residences in Manhattan.	Not clearly visible and knowledge of service to the island will be minimal unless through promotion.	Clearly visible from FDR, East River Esplanade, Tram, and residences in Manhattan.	Not clearly visible and knowledge of service to the island will be minimal unless through promotion.
	Waterfront Recreational Potential	Launching and temporary landing not recommended on west channel due to heavy vessel traffic.	Launching and temporary landing is acceptable location on the calmer east channel of the East Rivrr.	Launching and temporary landing not recommended on west channel due to heavy vessel traffic.	Launching and temporary landing is acceptable location on the calmer east channel of the East Rivrr.
Recommendation Rank		1	2	3	4



# Initial Opinion of Cost

- 15% Contingency
- Engineering Design and Construction
- Construction Administration
- Upland Work and Amenities



# Initial Opinion of Cost

- Observation Pier - \$5.4 Mil
- Former Oil Dock - \$6.7 Mil
- Octagon - \$5.3 Mil
- Southpoint Park - \$7.2 Mil

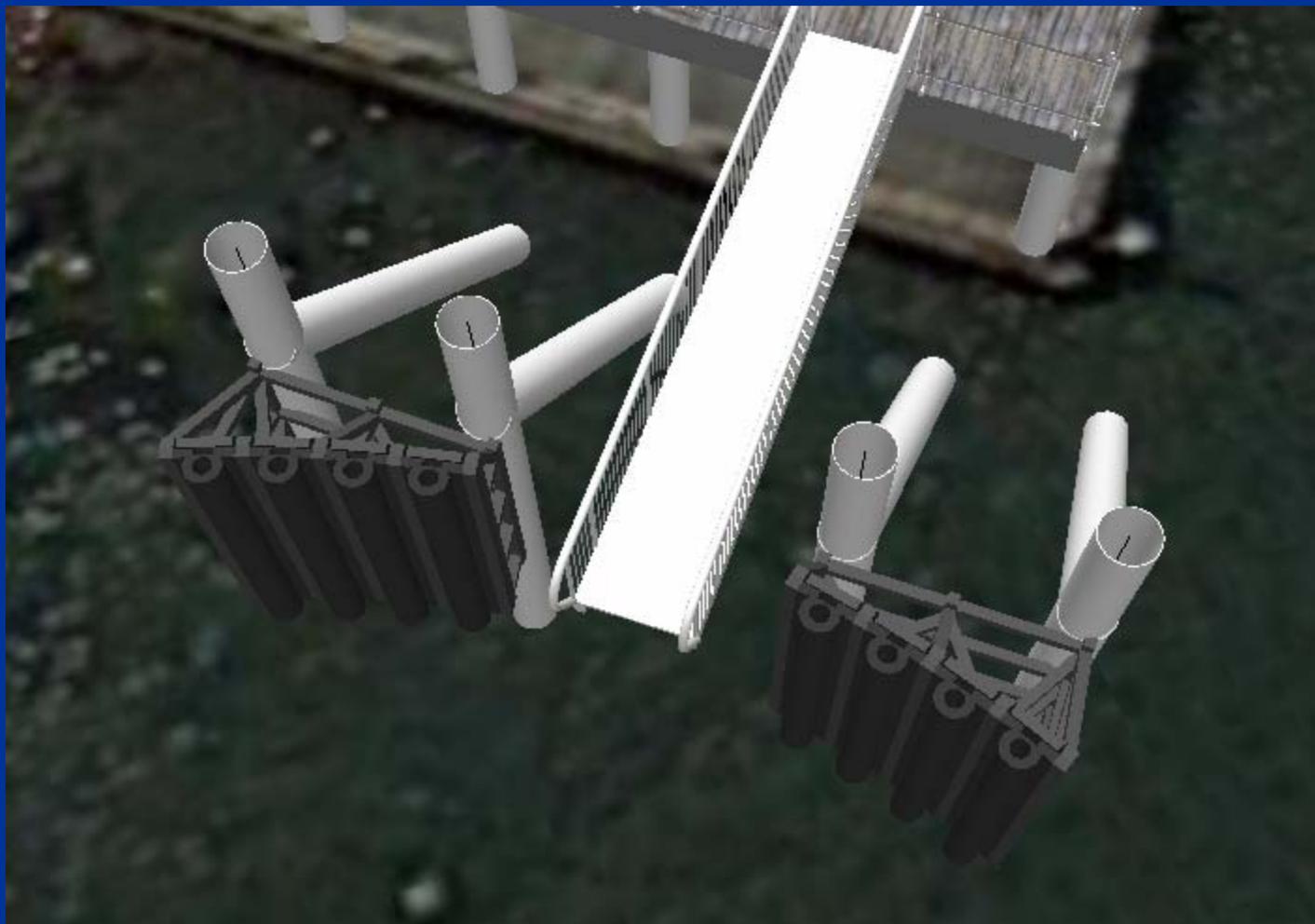


# New Alternative





# New Alternative





# Review and Questions

- Observation pier appears to be most suitable location.
- Alternatives exist for mitigating cost.
- Total project duration from design NTP to opening is 12 to 18 months.