

BROOKVILLE BOULEVARD FLOOD MITIGATION STUDY

Public Information Meeting #2

Presented on November 10, 2026

NEW YORK CITY DOT

NYC Parks

Agenda

- Introductions
- Project Background
- Project Progress Overview
- Alternative Alignment Development and Comparison
- Open House



Introductions

Agency Client Team

Lead Agency

NEW YORK CITY DOT

Partner Agency

NYC Parks

Stakeholder Agencies

NYC Environmental Protection

PORT AUTHORITY NY NJ

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. DEPARTMENT OF HOMELAND SECURITY FEMA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION NEW YORK STATE

NEW YORK STATE Homeland Security and Emergency Services

Introductions

Consultant Team

akrf

H&H

Public Works Partners
DBE

ENOVATE®
DBE

KLD associates
DBE

MATRIXNEWORLD

ARCADIS

Project Background

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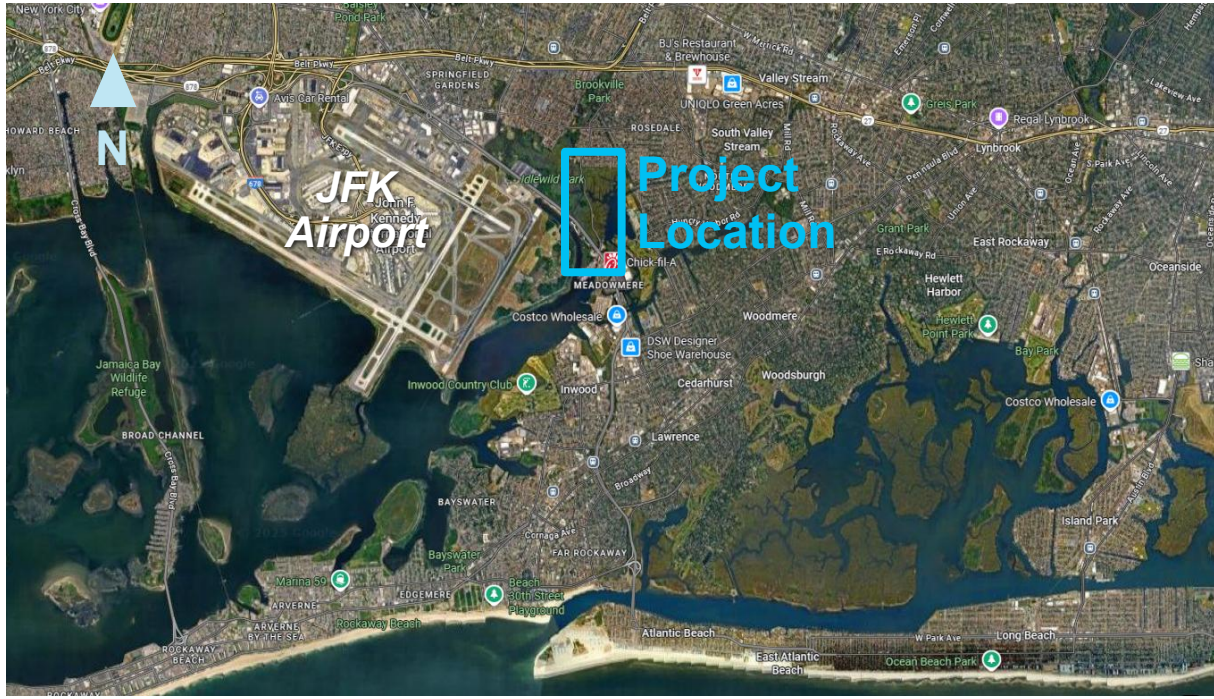
Project Background

Brookville Boulevard – A Key Connection Between SE Queens & SW Nassau

- Connects SE Queens (Rosedale) with Nassau County's Five Towns & the Rockaway Peninsula
- Ongoing Chronic Flooding, Safety Issues, & Illegal Dumping
- No easily accessible alternative routes or detours
- Over 17,000 vehicles use this roadway every day



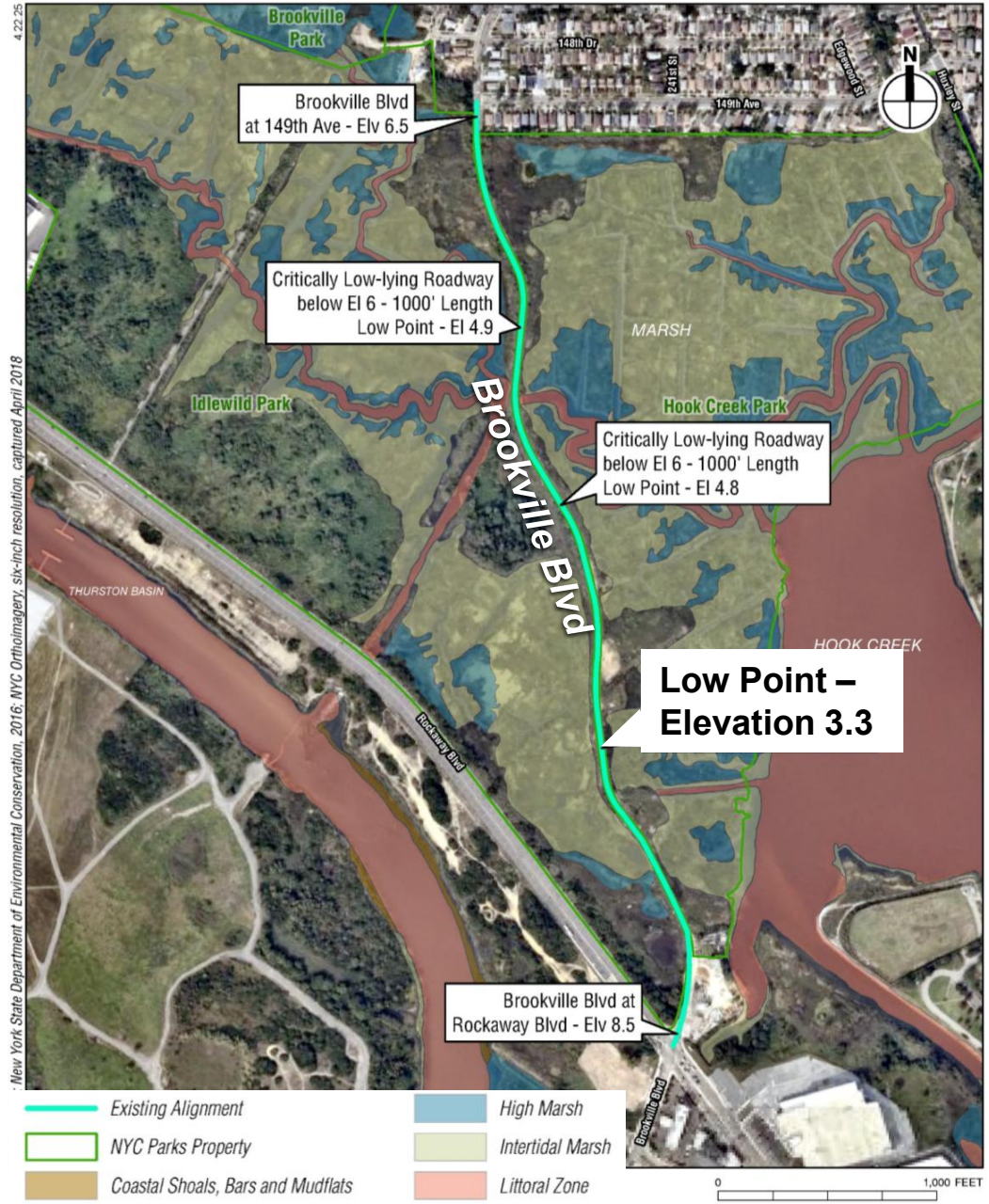


Project Background

Brookville Boulevard – **Chronic Flooding**

- Low-Lying Roadway Surrounded by **Tidal Wetlands**
- Roadway has **no storm sewers**
- Regularly experiences **high tide** and **coastal storm flooding**





Project Background

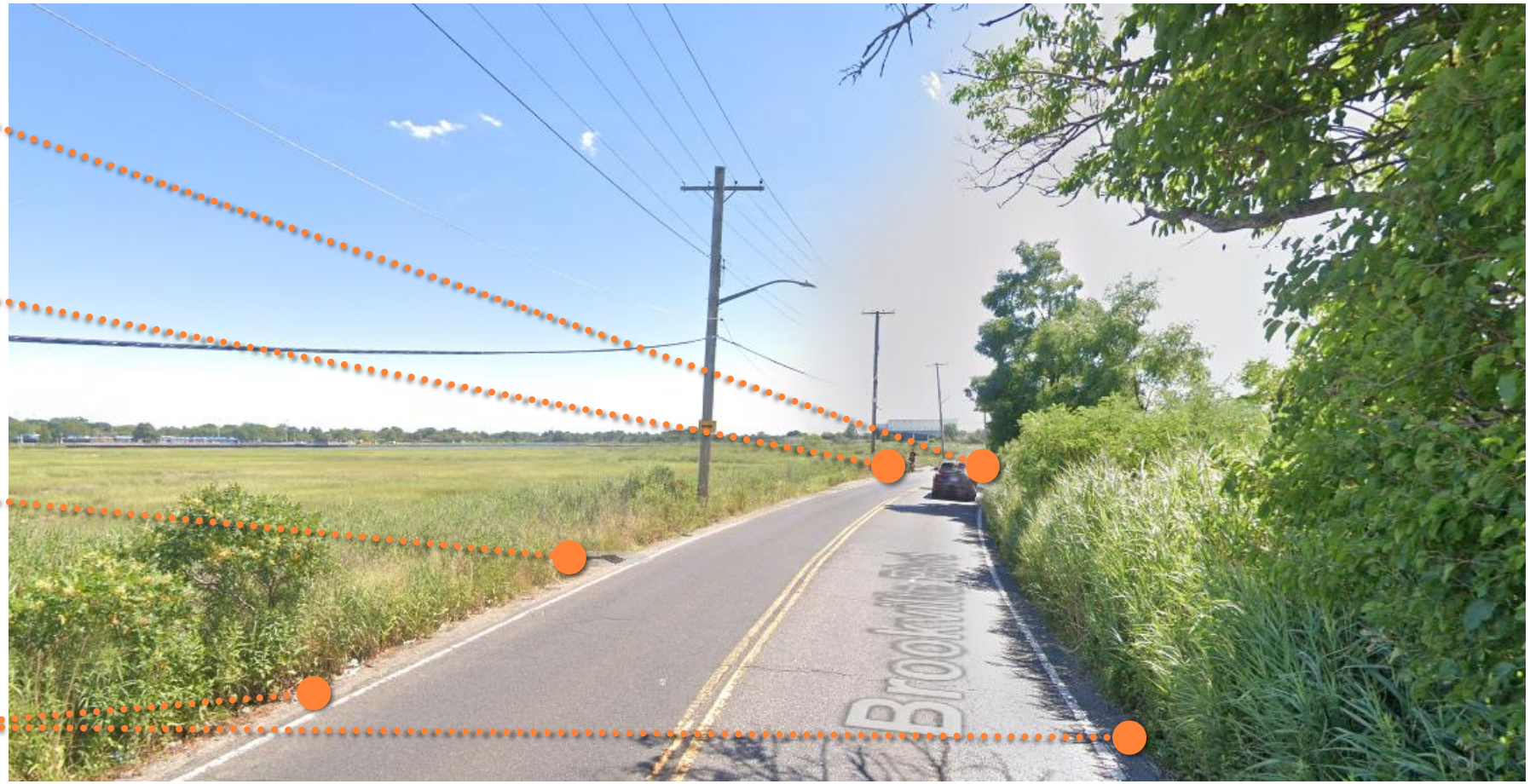
Brookville Boulevard – **Safety Issues**

Poor sight distance around curves

No pedestrian or bicycle facilities

No roadside protection (guiderail/barrier)

Narrow roadway with no shoulders



Project Background

Brookville Boulevard – **Illegal Dumping Issues**



Secluded location

Negatively affects wetlands and habitats

No fencing to discourage dumping

Project Background

Idlewild Park and Hook Creek Park

- Brookville Blvd winds its way through the approximately 300-acre Idlewild Salt Marsh, a tidal wetland that spans two NYC Parks: Idlewild Park and Hook Creek Park.
- The marsh is in NYC Parks Forever Wild Program, which aims to protect and preserve the City's most ecologically valuable lands.
- The Idlewild Salt Marsh:
  - Provides flood protection to coastal communities
  - Provides critical habitat for wildlife, such as Diamond-backed Terrapins and rare nesting Saltmarsh Sparrows.
  - Reduces the impact of urban heat island effect.
  - Provides recreation for New Yorkers



High Tide at Hook Creek Park

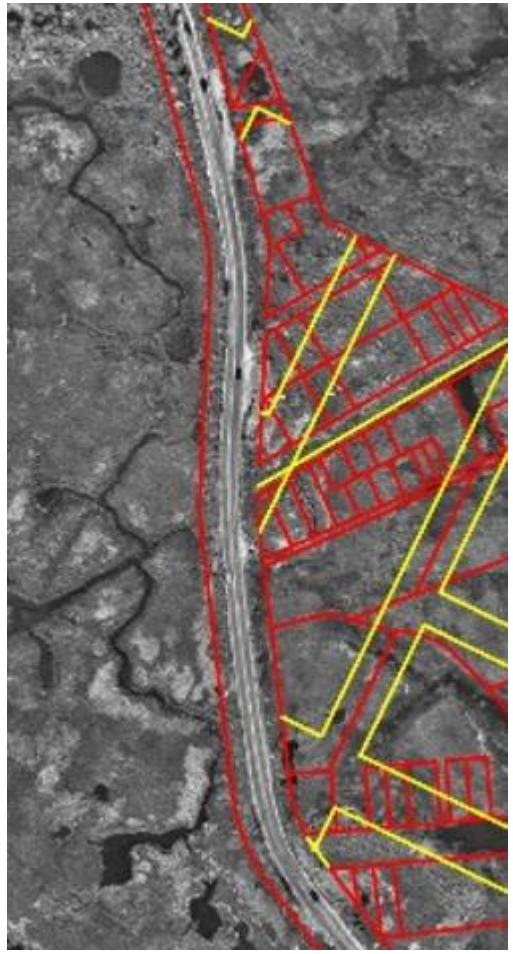


Egret at Idlewild Marsh

Project Background

Property Ownership Along Snake Road

- Roadway is owned by NYCDOT
- Most adjacent land is owned by NYC Parks
- There are several empty privately owned parcels and “mapped streets” located east of Snake Road in the southern portion of the corridor.
- The Mastro Ready Mix Property is located at the NE corner of Brookville and Rockaway Boulevards





Project Background

Brookville Boulevard – **New York Rising** Community Reconstruction Program - Idlewild

- Report Examined Superstorm Sandy and Flood Impacts - Released in December 2014
- Recommended High-Level Concepts for Further Study and Evaluation to develop solutions
- Proposed Multiple Projects including this study dedicated to Brookville Boulevard / Snake Road
- NY Rising work provided foundation for securing the $3.1M for the current study (combination of FEMA Hazard Mitigation Grant Program, NYS and NYC funding)

<u>NY Rising Study Proposed To:</u>

- Identify Causes of Flooding
- Elevate Roadway
- Geometric Improvements
- Reconnect Wetlands
- Improve Pedestrian & Bicycle Travel

Idlewild Watershed Communities

D2: Study to Elevate Brookville Boulevard (Snake Road) between 149th Boulevard and Rockaway Boulevard [Featured Project]

Project Description

Brookville Boulevard between 149th Ave and Rockaway Boulevard—known locally as Snake Road—is a key transportation corridor for the Idlewild Watershed Communities. The roadway services 17,500 cars daily, the Q114 bus route, and provides direct access from Brookville to Rockaway Boulevard, one of the area's main east-west thoroughfares. However, Brookville Boulevard is a dangerous road due to its location, layout, and elevation. The road is only 24 feet wide in most locations and is situated at

- Determine necessary improvements to roadway geometry to improve safety;
- Assess the use of infrastructure upgrades to elevate the roadway on a trestle to encourage the passage of intertidal waters through the surrounding wetlands. The passage of these waters is important for the protection and nourishment of the wetlands and the function of the wetlands as a water retaining body; and
- Evaluate constructing a wetlands



Source: NY Rising Community Reconstruction Program, Idlewild

Project Progress Overview

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Overall Program Schedule

Typical Project Process

We are here!



Study & Alternatives Development

Current phase of project; aimed at identifying concepts to advance into Environmental Review and Design

Environmental Review

NYC DOT undertakes an Environmental Review to examine potential impacts of feasible alternatives and choose a Preferred Alternative to advance to Final Design

Final Design & Permitting

NYC DOT selects a team to refine and finalize the design of the Preferred Alternative, selected as the Flood Mitigation solution, and to secure the necessary regulatory permits for the Project.

Construction

NYC DOT uses the finalized design and selects a construction team to build the selected Flood Mitigation Solution

Current Phase

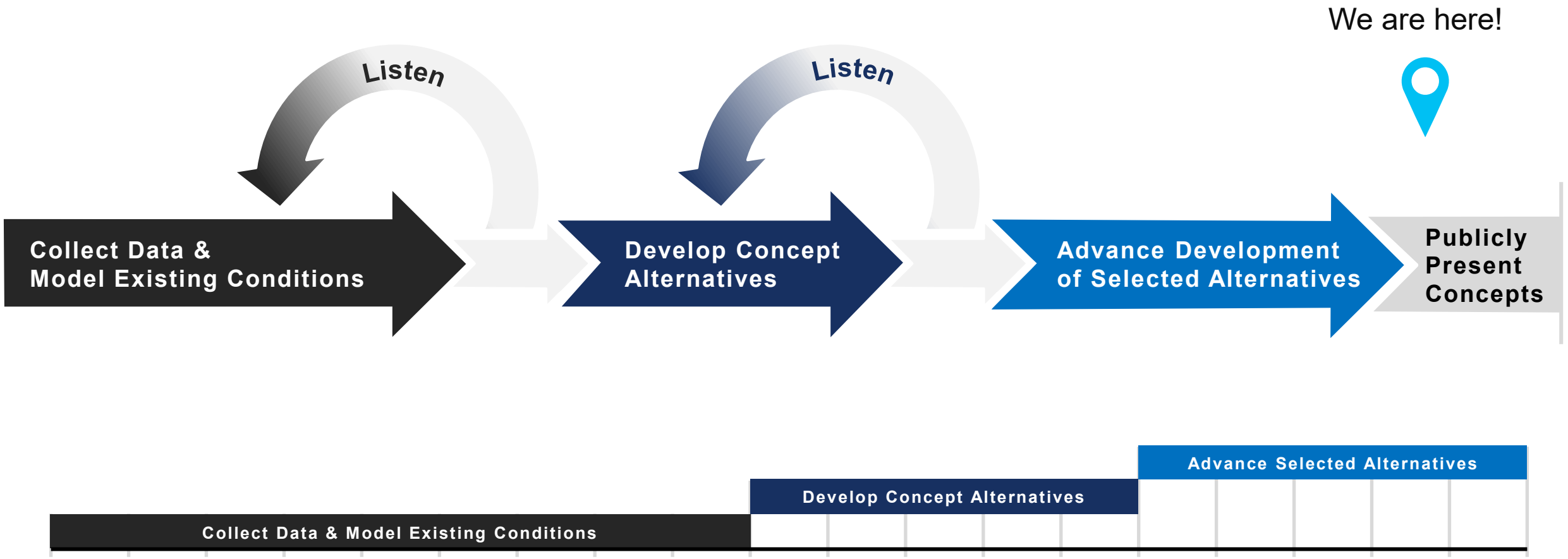
Funded

Future Phases

Additional Funding Required

Project Schedule & Scope

Project Development Process – Brookville Boulevard Flood Mitigation Study



Project Schedule & Scope

Project Timeline

We are here!

		Q4 2024		Q1 2025			Q2 2025			Q3 2025			Q4 2025			Q1 2026			Q2 2026			Q3 2026			Q4 2026			Q1 2027
TASK	DESCRIPTION	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	Data Collection																											
1.1	Project Identification/Feasibility															◆	◆											◆
1.2	New Surveys															◆	◆											◆
1.3	Traffic Study													◆					◆									
2	Climate Change Resiliency Assessment																											
2.1	Hydraulic and Hydrologic Modeling															◆	◆			◆								
2.2	Climate Scenario Modeling															◆	◆			◆								
3	Flood Mitigation Alternatives																											
3.1	Concepts Along Snake Road's Alignment																			◆								
3.2	Concepts to Shorten Snake Road																			◆								
3.3	Schematic Geometric Design																									◆		
4	Final Report																										◆	
5	Community Engagement						◆		◆						◆						◆		◆	◆		◆		
6	Project Management																											

◆ *Technical Memo Deliverable*

◆ *Community Engagement Touchpoint*

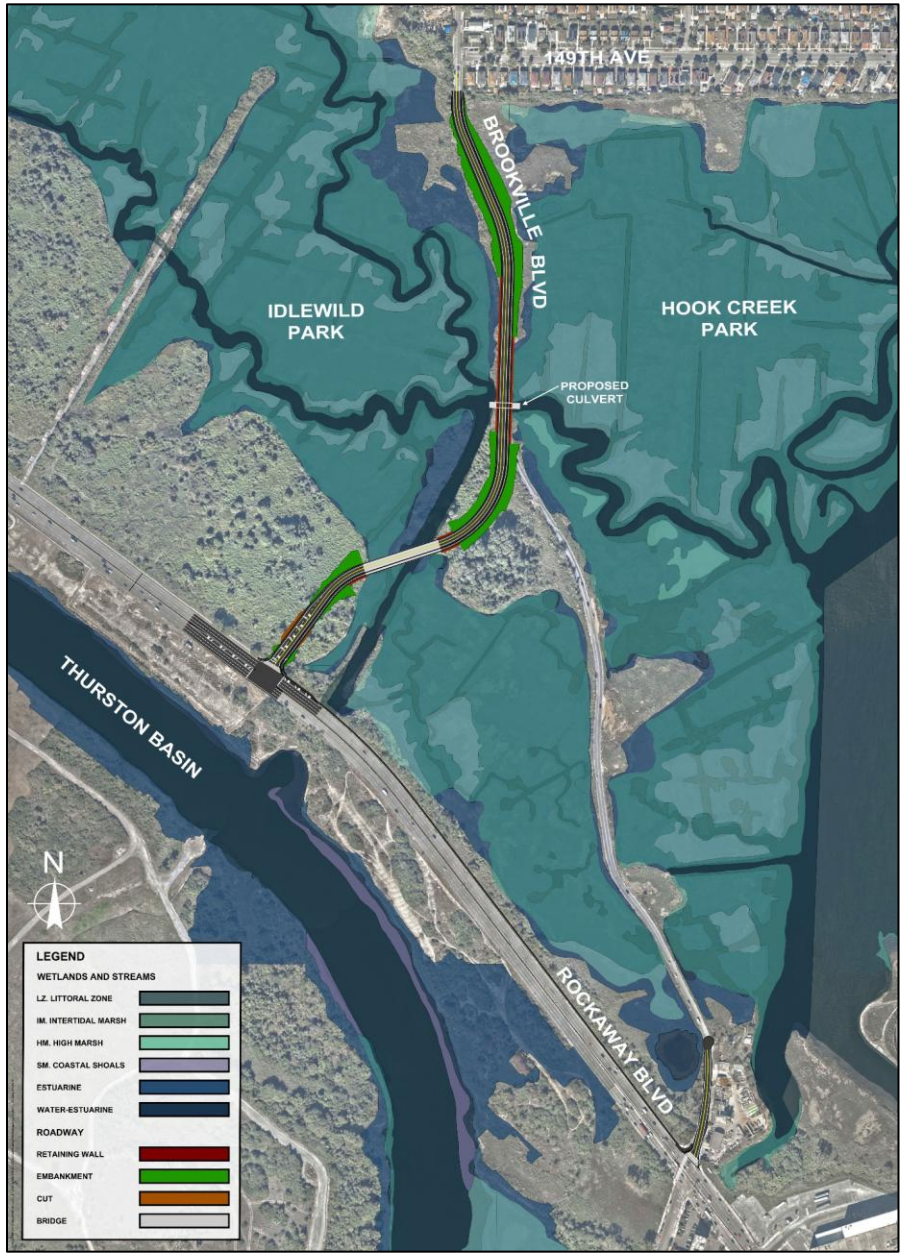
Project Schedule & Scope

Completed Activities

- Topographic Survey, Bathymetric Survey & Tidal Monitoring
- Wetland Characterization and Connectivity Analysis
- Hydraulic & Hydrologic Modeling
- Traffic Study
- Roadway, Structural, & Drainage System Conceptual Design

Upcoming Activities

- Advancement of 3 Design Alternatives
    - Benefit Cost Analysis & Schematic Geometric Design
- Geotechnical Investigations
- Final Study Report



Project Input

Where we've gathered input

- Historical issues & news articles
- Superstorm Sandy & NY Rising Study
- Senator Sanders coordination & community events
- Elected Officials Briefings (April 2025 & June 2026)
- Community Engagement Events
- Ongoing coordination with public agencies

Notorious Snake Road to be subject of flood study

December 19, 2023



BROOKVILLE BOULEVARD, BETTER KNOWN TO LOCALS AS SNAKE ROAD, IS SCHEDULED TO UNDERGO A FLOOD MITIGATION STUDY. PHOTO VIA GOOGLE MAPS

Source: Queens Daily Eagle

Community Engagement Events

- Community Board 13 Transportation Committee Meetings – June 2025 & September 2026
- Public Information Meeting #1 – December 2025
- Pop Up Events held throughout Summer 2026
- Public Information Meeting #2 – Today



Community Engagement

December 2025 Public Information Meeting

- Held on December 10, 2025 at MS 355 Collaborative Arts Middle School
- Over 40+ community members attended, received 70 written comments
- Received feedback on conceptual design components









Community Engagement

Pop Up Events

- Attend existing community events to educate the public and stakeholders on study progress
- Over 200 comments received
    - Held 3 pop-up events during Summer 2026
        - Back to School Giveaway at Kings Manor Museum on August 15
        - Queens Carnival on August 29
        - Harvest Festival on September 19
- Gather additional community input and feedback
    - Share Materials with the Public related to:
        - Design Considerations
        - Proposed Alternatives
        - Current Status of Study



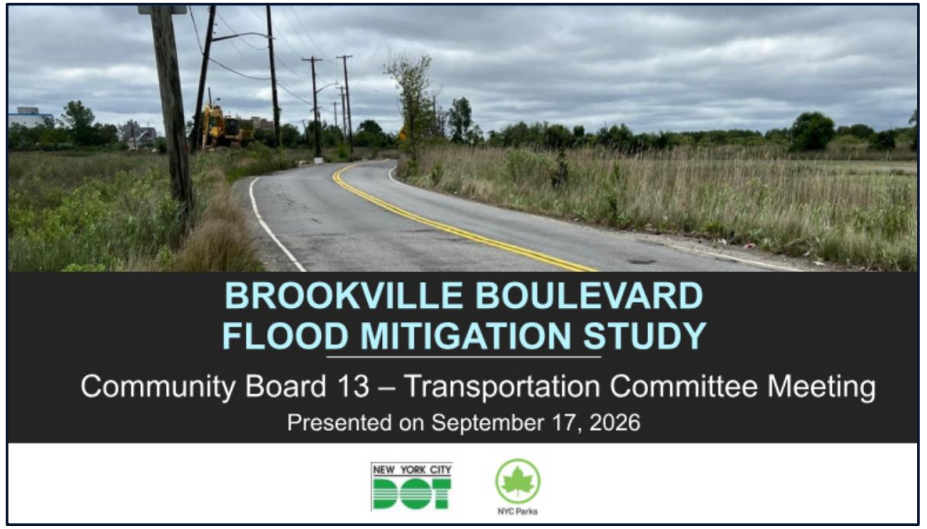


Community Engagement

Community Board Meetings

- Presented project status and updates to the Community Board 13 Transportation Committee on June 12, 2025, and September 17, 2026.
- Opportunity to discuss project details with community members.
- Received feedback on:
    - Alignment alternatives
    - Design features
    - Funding clarifications



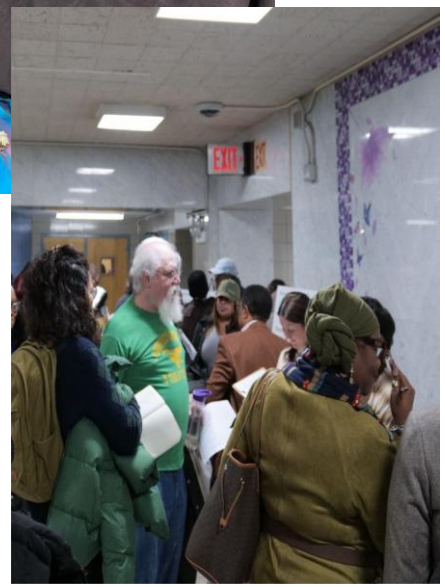


Community Engagement

Community Outreach Feedback/Insights

- Must **achieve long-term flood protection**
  - Residents expressed decades-long frustration, **wanting to understand** why change has not happened sooner.
- Need to **improve roadway safety**
- Need a separate/dedicated **bike and pedestrian lane**
- Important to **protect the surrounding wetlands**
  - Many noted the importance of **ecological restoration**, highlighting that they no longer see the same diversity or amount of wildlife as they did when growing up in the area
- Develop a design that can **secure funding** for next steps
  - Participants wanted to better understand the f**unding and construction timelines** and costs for each option.





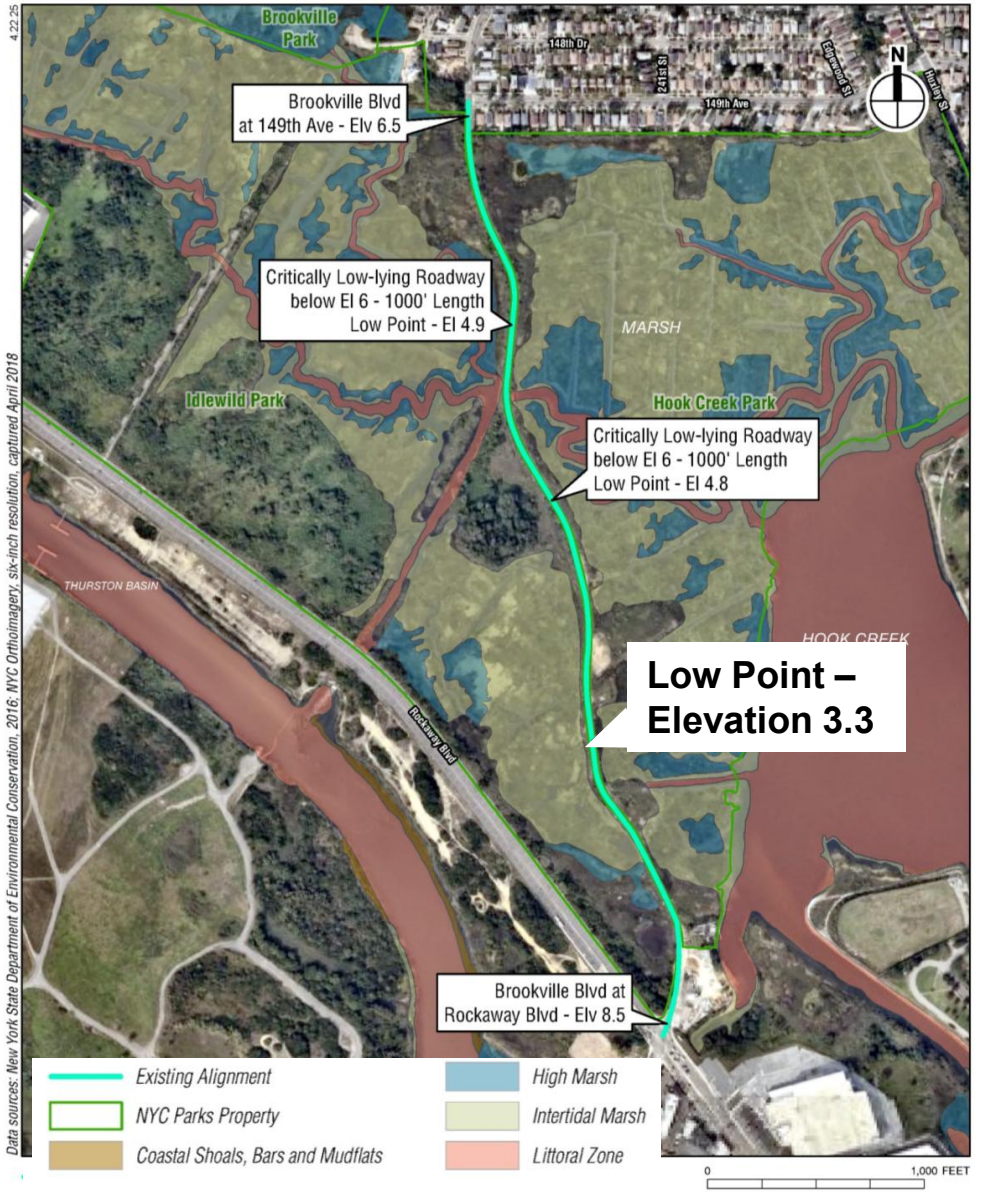
Current Project Objectives

- To investigate how to mitigate frequency & severity of flooding on Snake Road
- To propose geometric and safety improvements along Snake Road
- Protect the valuable wetlands of Idlewild and Hook Creek Park
- Provide pedestrian and bicycle accommodations along Brookville Boulevard

Project Alternatives

Alternatives to Improve Brookville Boulevard include:

- Horizontal Alignments / Roadway Location
- Roadway Elevations & Flooding Relief
- New Roadway Cross Section
- Other Potential Design Opportunities
- Environmental Benefits / Impacts / Mitigation



Current Study Results

Formulated and proposed feasible alternatives that satisfy the stated Project Goals, which perform strongly in a Benefit Cost Analysis, and include robust and successful community engagement. These results can ultimately demonstrate a compelling basis to obtain funding for environmental review (where a Preferred Alternative would be chosen), final design, and Project construction.

Alternative Alignment Development and Comparison

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No Build Alternative

- Flooding issues to continue and worsen
  - With sea level rise, tidal flooding events likely to become more frequent and extreme over time
  - Existing Roadway Elevation: **3’ – 6’ above sea level**.
- Safety issues remain
- No pedestrian or bicycle facilities
- May need to permanently close Snake Road due to frequent flooding and unreliability and safety issues
- No Build (or “Do Nothing”) Alternative represents the baseline for determining impacts during environmental review





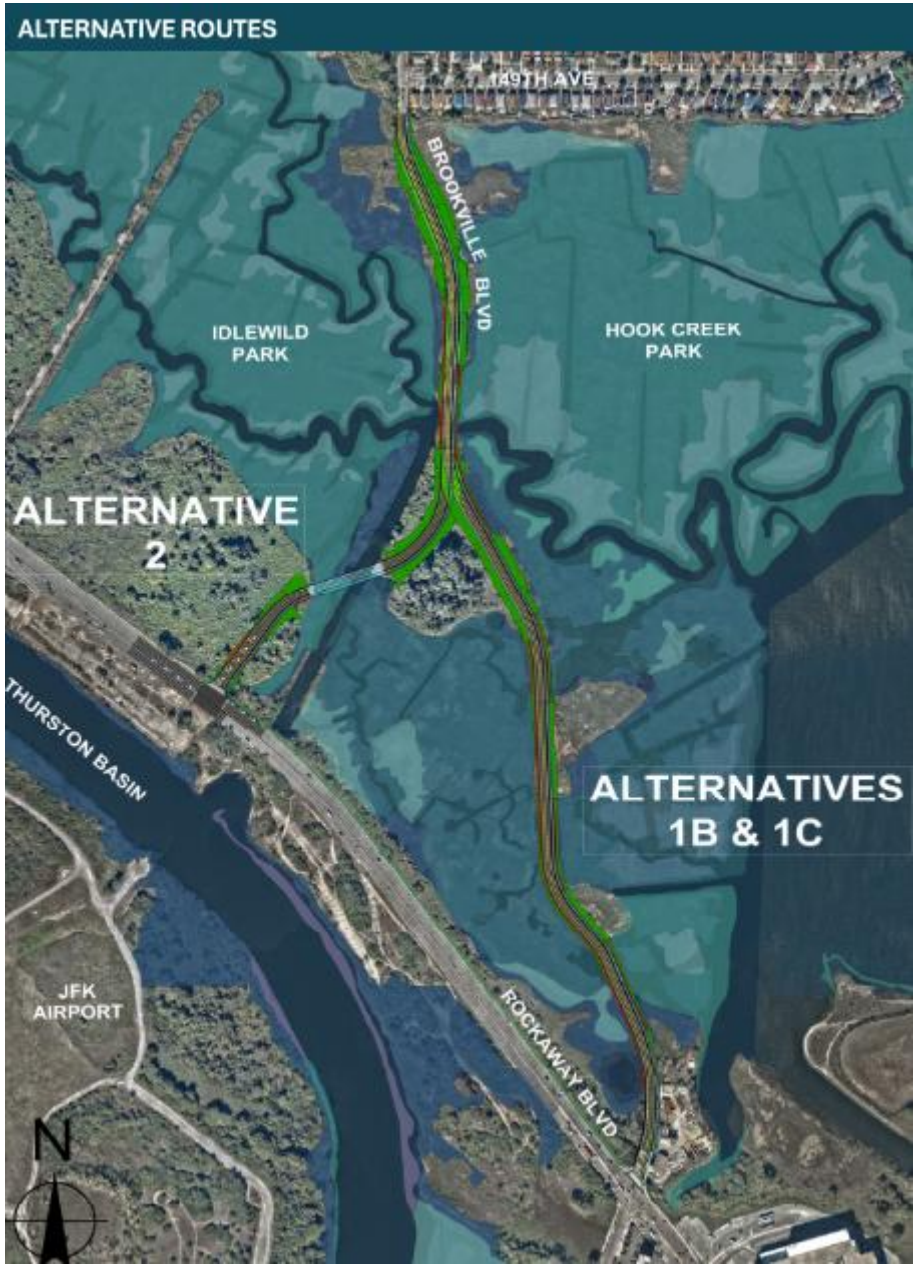
Concepts Considered But Eliminated From Further Consideration

- Keep Existing Roadway, Use Passive/Deployable Elements to Prevent Flooding
  - *Would not sufficiently mitigate flooding, no safety improvements*
- Widen Roadway to 2 Travel Lanes
  - *Does not improve traffic operations, higher wetland impacts*
- Bridge/Causeway Along Entire Existing Alignment
  - *Very high wetland and environmental impacts, complex construction with likely long term-diversions, and very high costs*
- Permanently Close Snake Road, Detour Traffic to Alternative Routes
  - *Significantly worsens traffic operations on detour routes*



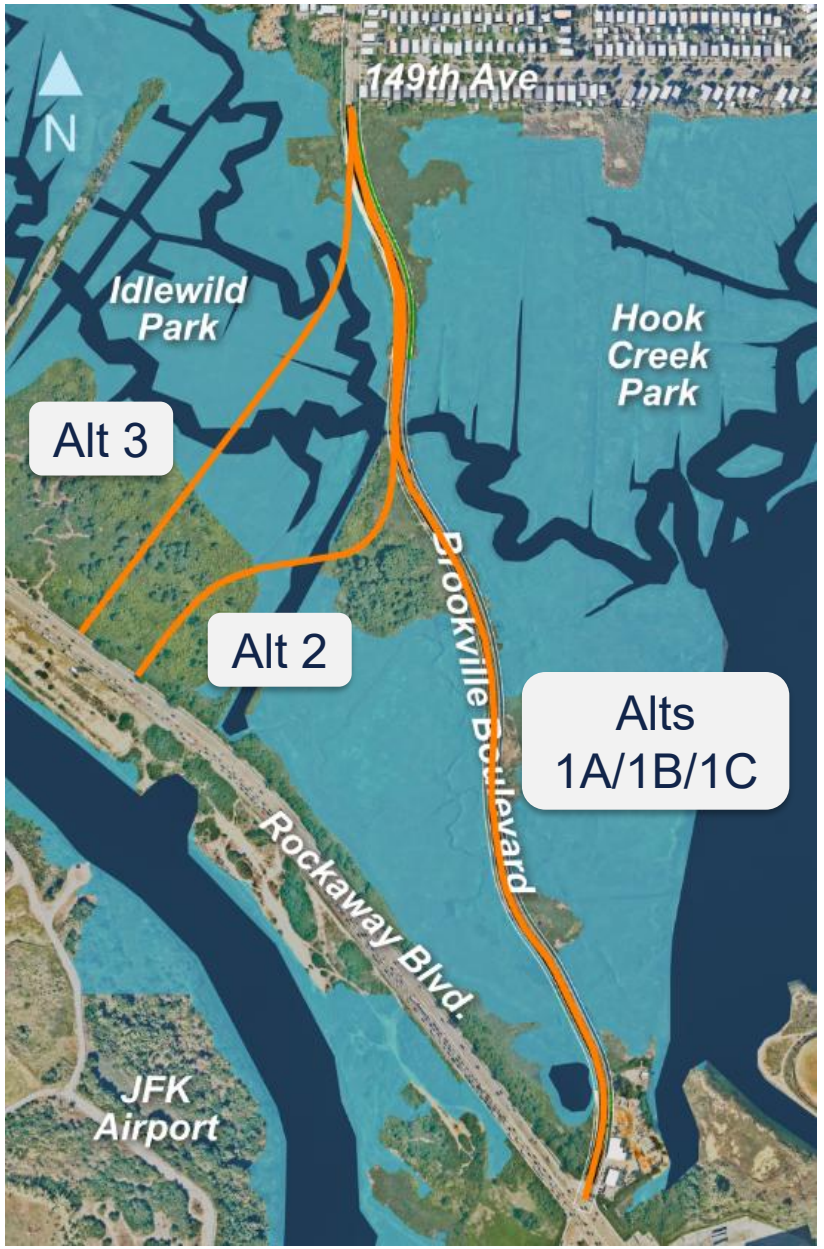
Design Elements Common to All Proposed Alternatives

- New guiderail and fencing to improve safety and discourage illegal dumping
- New Shared Use Path for Pedestrians and Bicyclists with Urban Design Elements
- Upgraded lighting and alignment tweaks to improve sight distance
- New Culvert under Brookville Blvd to connect wetlands and provide wildlife passage
- Minimization of wetland impacts and providing wetland mitigation
- Closed Drainage System



Comparison of Baseline Alternatives

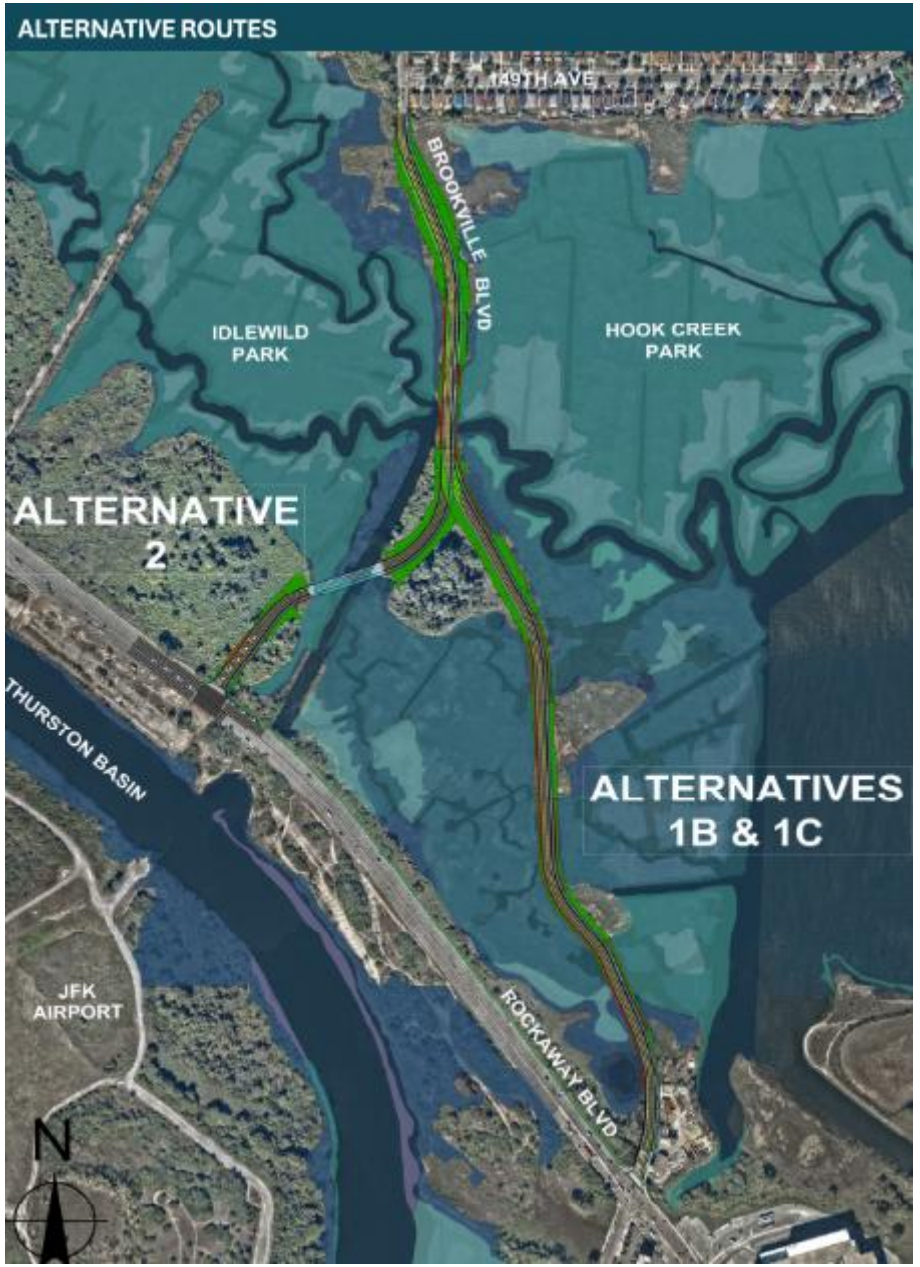
	Alt 1A	Alt 1B	Alt 1C	Alt 2	Alt 3
Roadway Length	~4350’	~4350’	~4350’	~2650’	~2400’
Roadway Elevation	6.3’ Min (10-Year Storm)	8.5’ Min (50-Year Storm)	12’ Min (Future 100-Year Storm)	12’ Min (Future 100-Year Storm)	12’ Min (Future 100-Year Storm)
Ped/Bike Facilities	None	Shared Use Path	Shared Use Path	Shared Use Path	Shared Use Path
Estimated Wetland Impacts	Lowest	Moderate	High	Moderate	Highest
Cost	Lowest	Moderate	High	High	Highest



Alternatives: Reducing from 5 to 3

Process included:

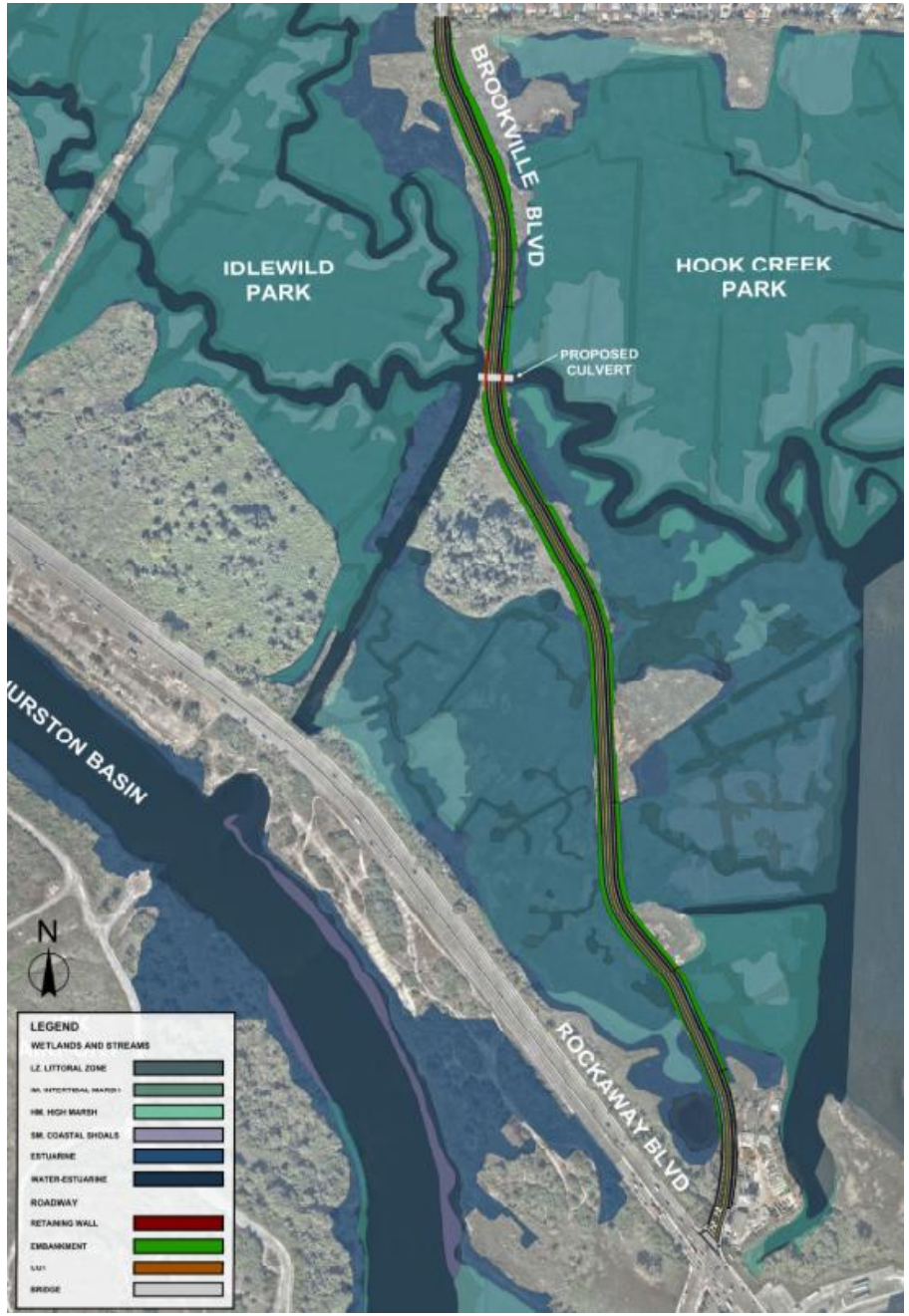
- Incorporating Public feedback and comments (PIM/CB/Pop Ups)
- Evaluating if alternatives achieve the Project Goals
- Evaluating Environmental Impacts
- Reviewing Cost vs Benefit



Alternatives Along Current Roadway Alignment

Alternative 1B

- Rebuilds roadway in-kind with Shared Use Path and raising of grade
- Roadway raised to minimum +8.5 ft elevation, to current 50-year coastal storm elevation (does not account for sea level rise)
- 2-11 ft wide travel lanes, 12-14 ft wide Shared Use Path, & 6 ft wide shoulders.
- Moderate wetland impacts, moderate flood protection, moderate cost.



Alternatives Along Current Roadway Alignment

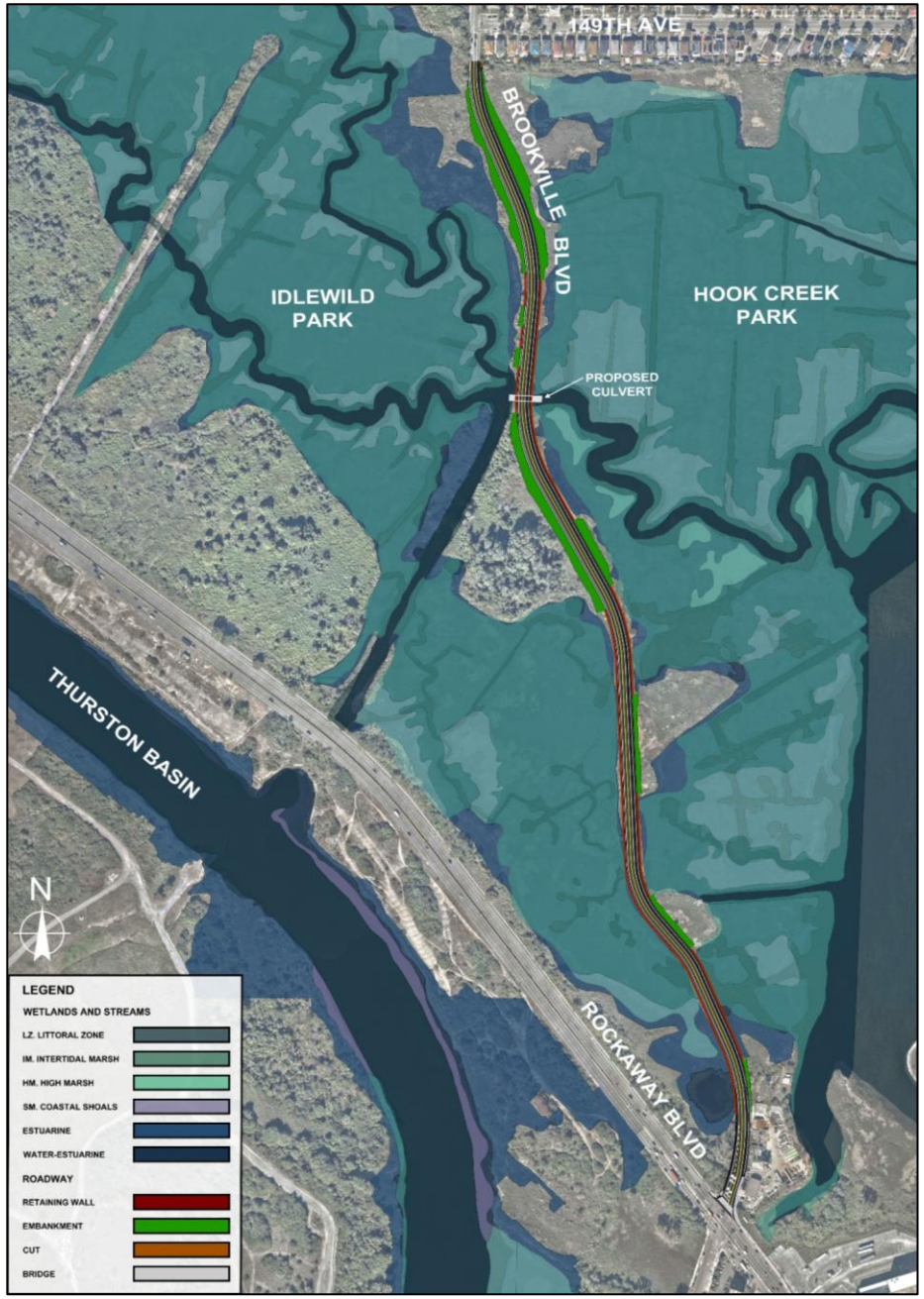


Alternative 1B Rendered Cross Section View

Alternatives Along Current Roadway Alignment

Alternative 1C

- Rebuilds roadway in-kind with Shared Use Path and significant raising of grade.
- Roadway raised to minimum +12 ft elevation, to future 2100s (SLR) 100-year coastal storm elevation.
- 2-11 ft wide travel lanes, 12-14 ft wide Shared Use Path, & 6 ft wide shoulders.
- Higher wetland impacts, significant flood protection, higher cost.



Alternatives Along Current Roadway Alignment

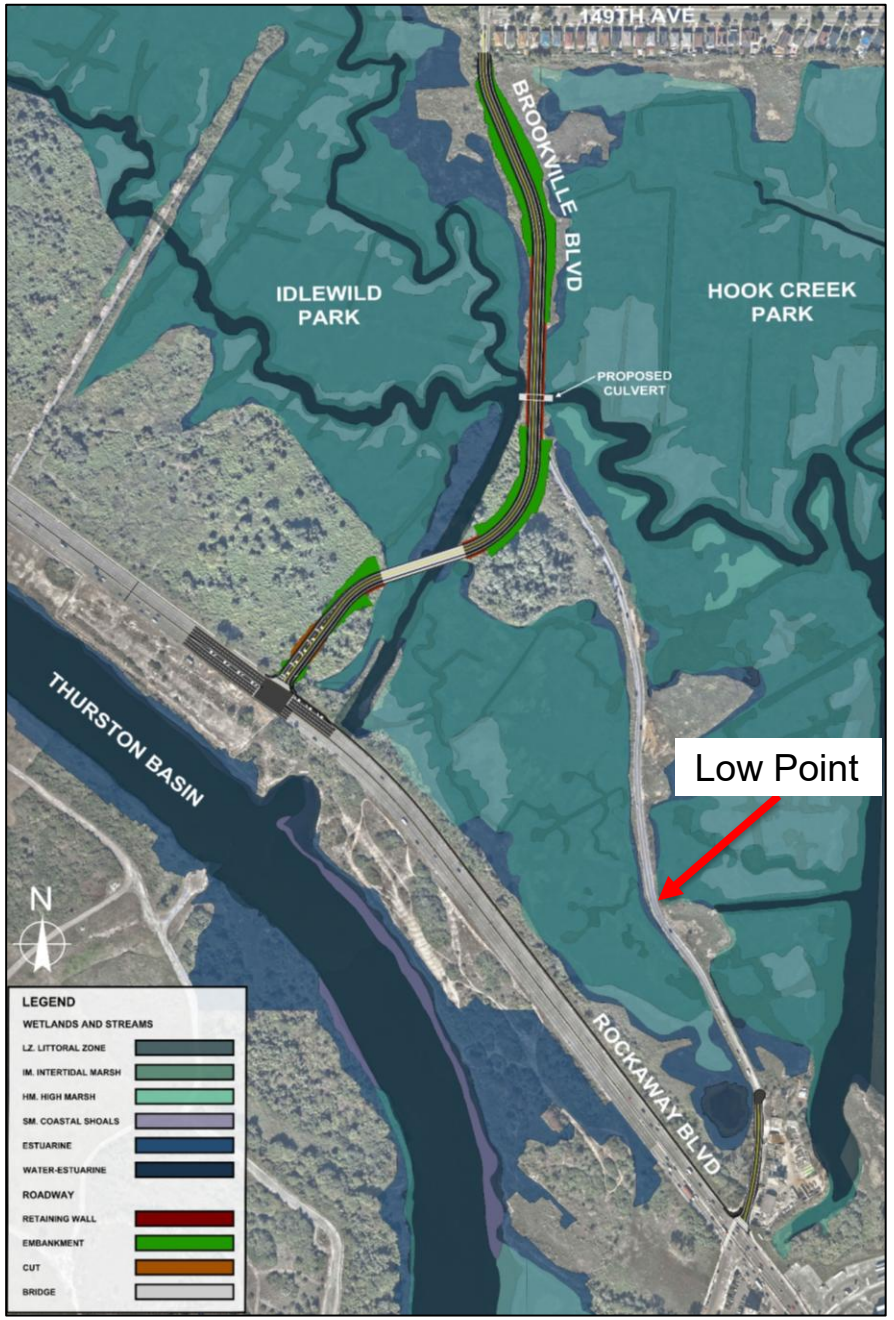


Alternative 1C Rendered Cross Section View

Alternatives To Shorten Roadway Alignment

Alternative 2

- Roadway raised to minimum +12 ft elevation, to future 2100s (SLR) 100-year coastal storm elevation
- Partial horizontal roadway realignment
  - **Designed to minimize wetland impacts & avoid low point**
- 2-11 ft wide travel lanes, 12-14 ft wide Shared Use Path, & 6 ft wide shoulders
- New 300’ long bridge over Wetland Channel
- New Signalized Intersection with Rockaway Blvd including operational improvements
- Moderate wetland impacts, significant flood protection, higher cost.

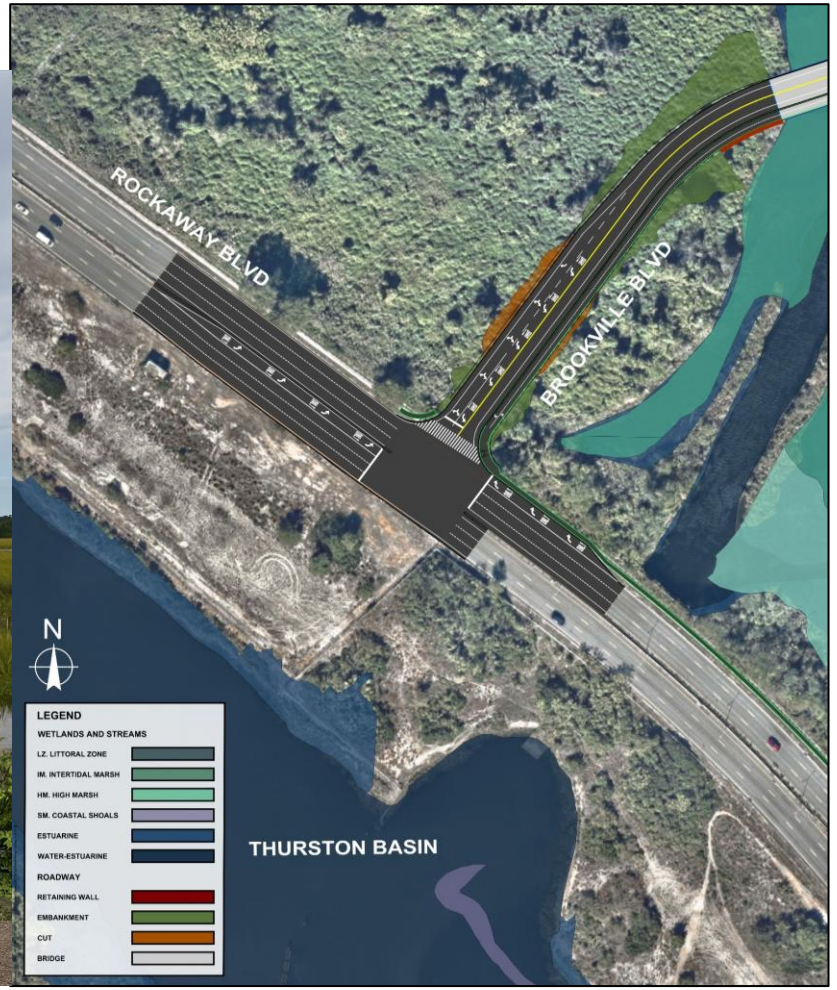


Alternatives To Shorten Roadway Alignment

Alternative 2



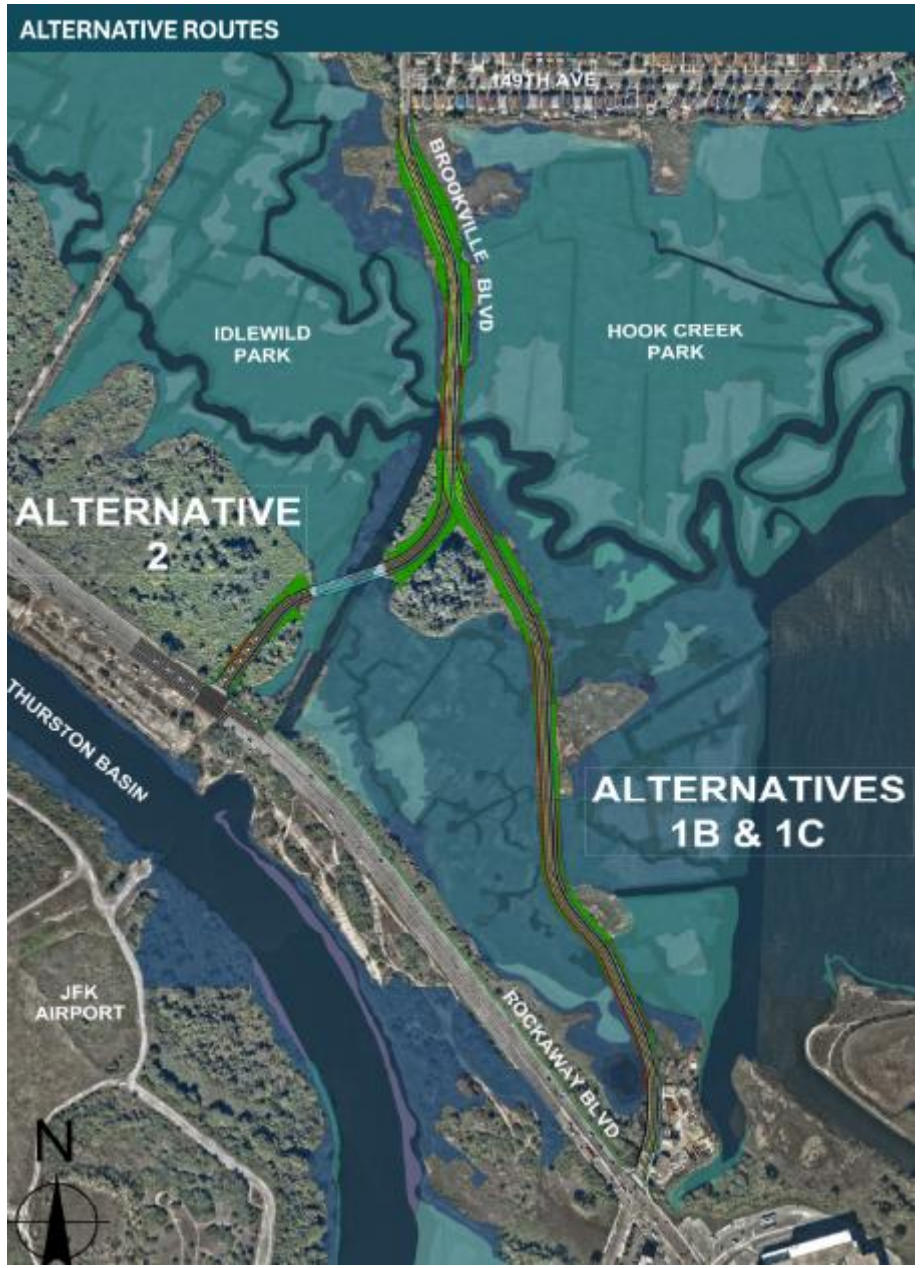
Alternative 2 Rendered Cross Section View



New Intersection with Rockaway Blvd

Comparison of Alternatives

	Alt 1B	Alt 1C	Alt 2
Roadway Length	~4350’	~4350’	~2650’
Roadway Elevation	8.5’ Min (50-Year Storm)	12’ Min (Future 100-Year Storm)	12’ Min (Future 100-Year Storm)
Ped/Bike Facilities	12’-14’ Wide Shared Use Path	12’-14’ Wide Shared Use Path	12’-14’ Wide Shared Use Path
Estimated Wetland Impacts	Moderate (0.8 acres)	High (1.1 acres)	Moderate (0.6 acres)
Cost	Moderate $65-105M	High $110-135M	High $100-130M



Next Steps and Open House

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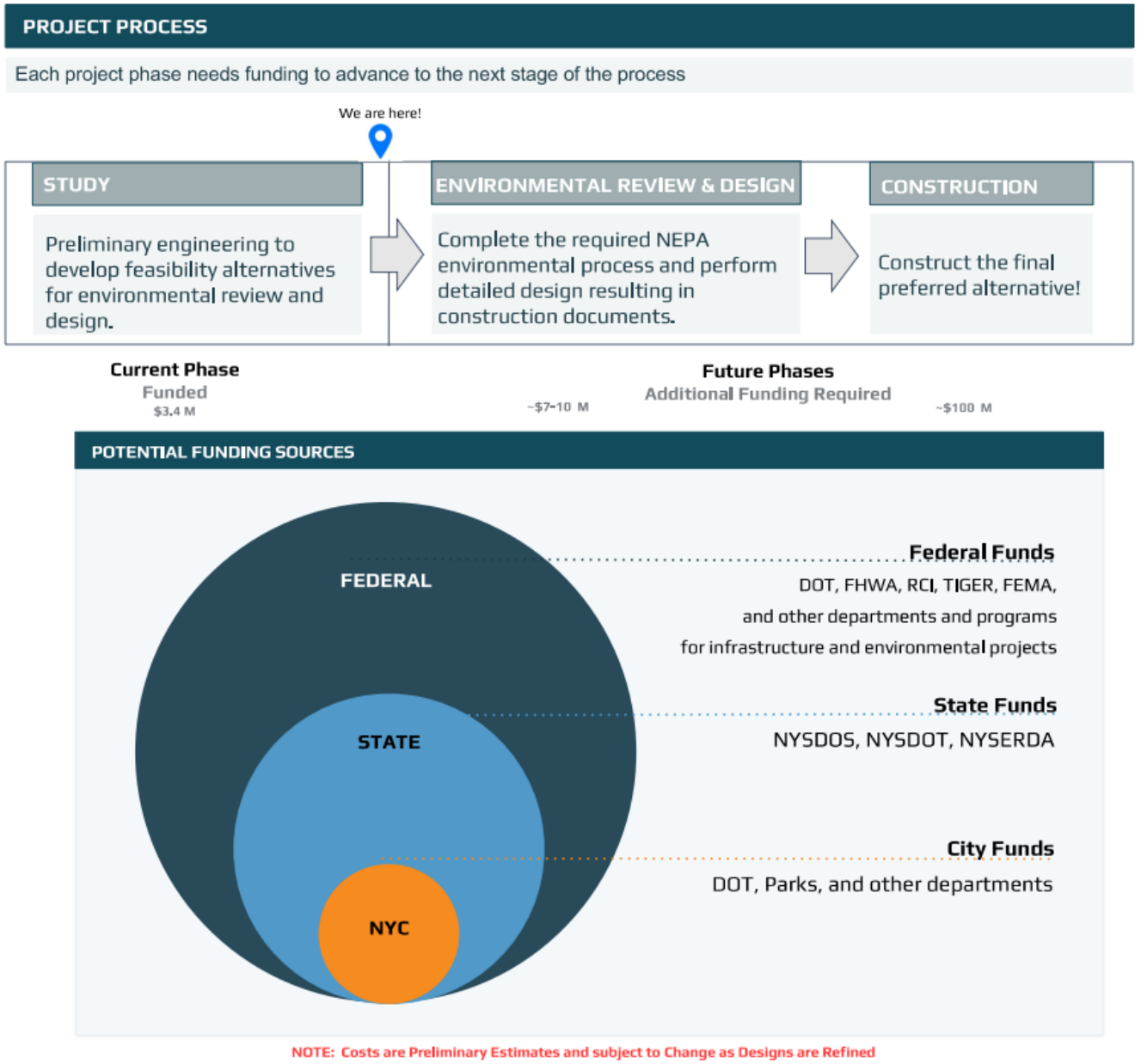
Next Steps

- Culmination of the Study is the Final Report, which documents the study activities, analysis processes, and public engagement feedback, and summarizes the alternatives
- Procurement of additional funding for Environmental Review, Mitigation, Design, and Construction
- Continued coordination with Community and Elected Officials throughout this process



Open House

We Want Your Input!

DOT Project Contact
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aarcese@dot.nyc.gov
212-839-2510

Project Website:
https://nycdotprojects.info/project/brookville-boulevard-flood-mitigation-study

