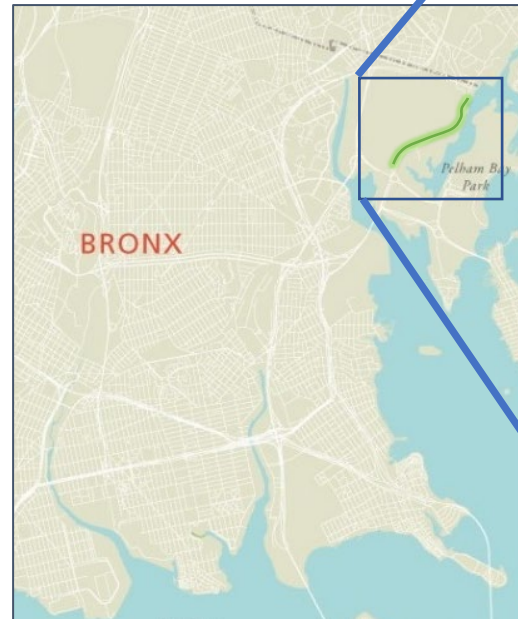

SHORE ROAD CPSD STUDY

BOROUGH OF THE BRONX

COMMUNITY BOARD BRIEFING

Agenda

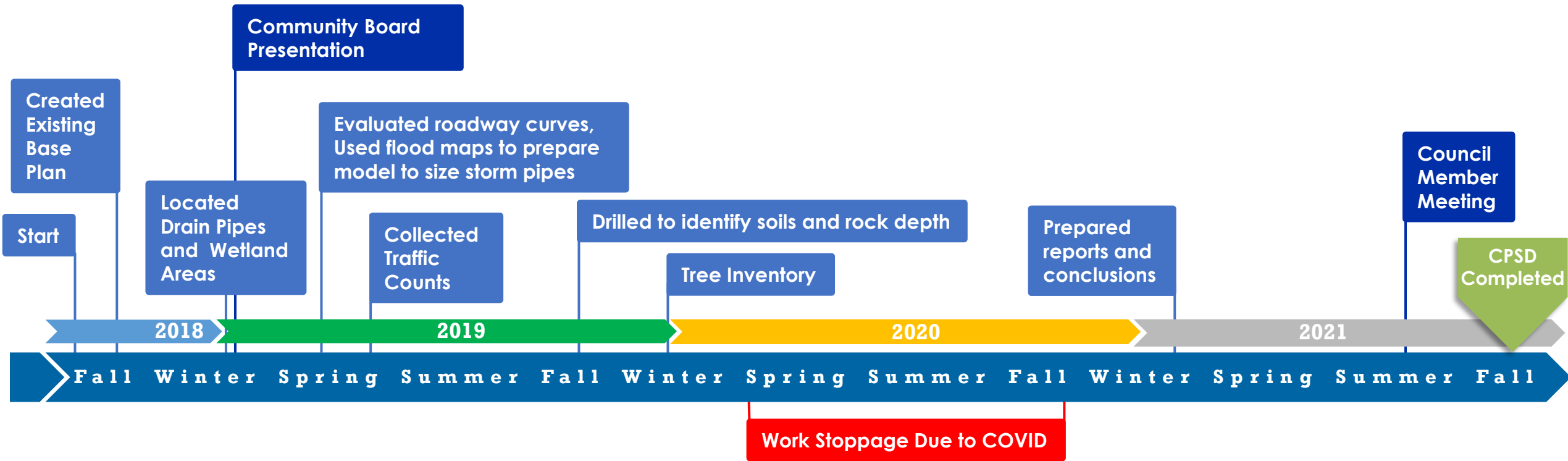
1. Purpose of CPSD Study
2. Study Timeline
3. Overview of Work Performed
4. Key Findings
5. Next Steps



Purpose of CPSD Study

- A Capital Project Scoping Development (CPSD) Study is not a funded capital project
- CPSD study is intended to provide a detailed evaluation of:
 - Full extent of **existing conditions**
 - **Potential solutions** to address the issues. For this study, the roadway issues include:
 - Flooding
 - Impacts to adjacent landscape (wetland/marsh land) /Erosion
 - Safety/Lighting/Guiderails
 - **Anticipate project costs** through engineering analysis of current and projected conditions to guide evaluation
- CPSD Study was completed in November 2021. Funding is being assessed for capital need request. If and when capital funding is made available, a project is advanced to a next design phase as a capital project.

Study Timeline



Overview of Work Performed

- Collected **traffic counts** (pedestrian, cyclists and vehicles) and evaluated roadway curves
- Identified location and condition of **existing drainage pipes**
- Identified where **surface water** was coming from
- Identified fresh water and saltwater **wetland areas**
- Evaluated **soil conditions**, depth of groundwater and rock
- Measured **existing trees** and proximity to future construction work area
- Evaluated **flood maps and future storm conditions** to size storm pipes and raising roadway

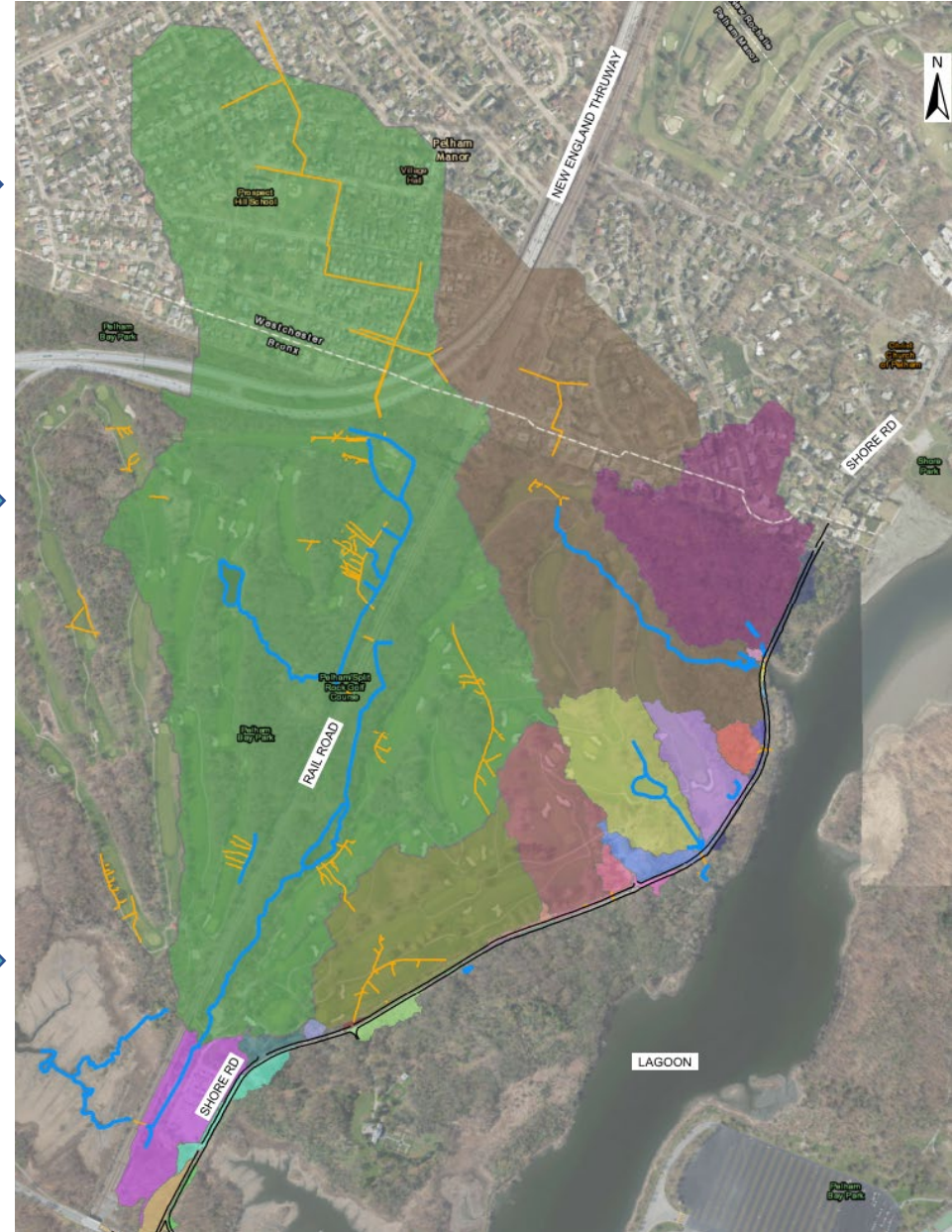
Key Findings: Roadway Flooding



Flooding has been publicly documented to cause dangerous traffic conditions throughout roadway.

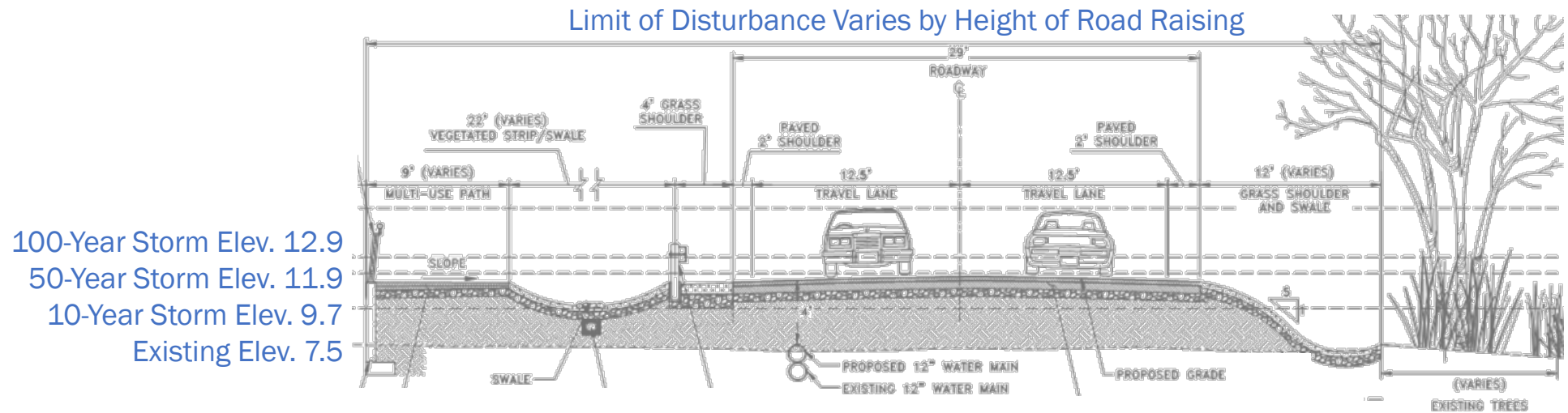


- Adjacent watershed contributes to roadway flooding.
- Natural grades allow water flow from Pelham Manor, railroad swales and golf course area to outlet into Shore Road.
- Through Hydraulic and Hydrologic (H&H) modeling, we have determined the flow paths of runoff crosses travel lanes at numerous locations along Shore Road.



Key Findings: Roadway Raising

- Raising the roadway would help address different levels of street flooding:
 - 4-ft road raising protects to 10-year storm event
 - 6-ft road raising protects to 50-year storm event
 - 7-ft road raising protects to 100-year storm event
- Higher elevation would protect to stronger storm event, however, would also lead to increased:
 - Construction costs
 - Number of trees to be removed
 - Disturbance to wetland area



Key Findings: Construction near Wetlands and Bartow-Pell Mansion

- Disturbance to freshwater and saltwater wetlands, plants and habitats:
 - 4-ft road raising disturbs approx. 2 acres of wetlands, removes 80 trees
 - 6-ft road raising disturbs approx. 2.1 acres of wetlands, removes 85 trees
 - 7-ft road raising disturbs approx. 2.5 acres of wetlands, removes 90 trees
- Greater disturbed area, requires finding additional wetland locations to mitigate/improve
- Maintain or restore views and local character (includes planting of new trees)
- Provide maintenance access to new ponds
- Requires local, state and federal permits



Key Findings: Multi-Use Path

- If included in the project, the multi-use path width of 9-ft will require to be increased to 15-ft, where feasible, to comply with ADA accessibility
 - Note a new path is an optional addition to the project, as the existing bike path runs further to the west
- Northern multi-use path (adjacent to roadway) would result in:
 - Removal of 32 trees, a significant impact to the natural forest area of Pelham Bay Park
 - Disturbance to 0.2 acres of wetlands
 - Significant coordination with Westchester County due to the lack of a connecting bike path along Shore Road north of the city limits
 - Increased construction cost approx. \$2.1 million

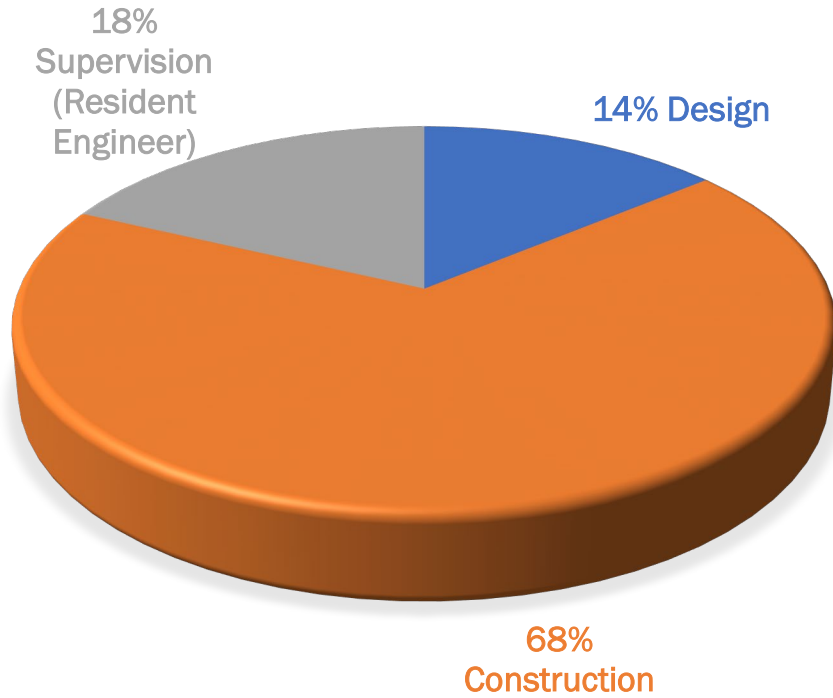


Summary of Findings

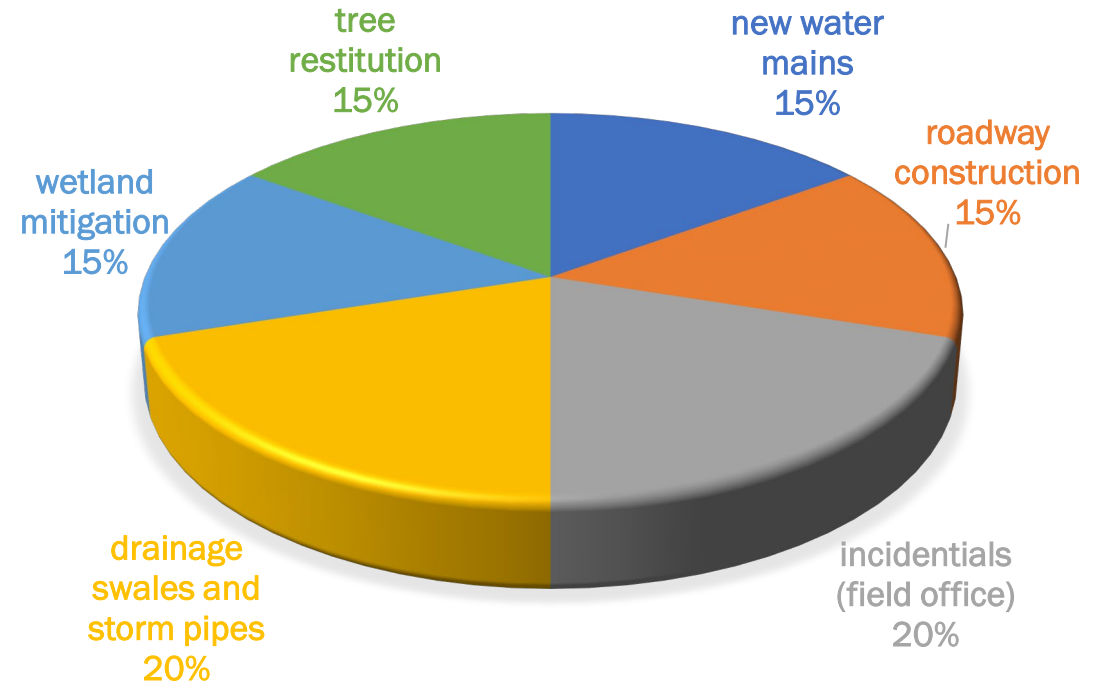
- Raising the roadway to address flooding
- Impacts to adjacent wetlands, plants and habitats increase with higher elevation
- Projected costs for future design and construction project: **\$52-\$60 million** (in 2021 dollars)
 - *Costs vary based on level of road raising and whether multi-use path is improved*

Approximate breakdown of costs

**\$52 TO \$60 MILLION
CAPITAL COSTS**
(IN 2021 DOLLARS)



**\$41 TO \$46 MILLION
CONSTRUCTION COST**
(IN 2021 DOLLARS)



Next Steps

- CPSD Study has concluded. Close CPSD task order contract.
- City and local community leaders to assess available funding for design and construction of a capital project
- Evaluate potential mapping actions to facilitate project and long-term maintenance of roadway.
- Once funding is secured, the City can commence procurement for consultant to design and prepare construction documents

THANK YOU.