Ellicott City Safe and Sound Update

August 2, 2021

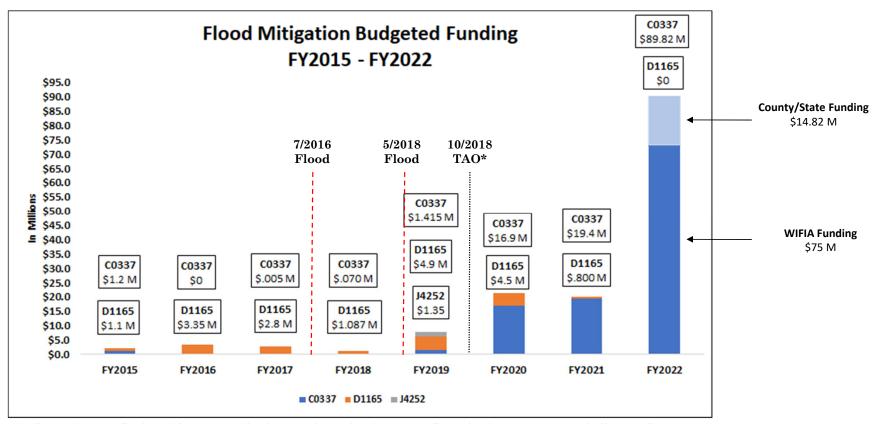


Meeting Logistics

- 1. Meeting Structure
- 2. Overview of EC Safe & Sound
- 3. Update of EC Safe & Sound Projects
- 4. Update on Associated Projects
- 5. Stations with Q+A

County Consultants & Staff will be available until 7:30 PM

Flood Mitigation Funding Overview



^{*}Following the 2018 flood, a TAO was passed by the council providing \$15.98M to C0337 for the reconstruction of Ellicott Mills Drive, acquisition and demolition of Main Street properties, and to design Lower Main Street open space and Hudson Bend Stream Channel Expansion.

WIFIA

A \$75m loan from the Water Infrastructure Finance and Innovation Act of the Environmental Protection Agency

Recently Completed:

- Council authorization
- O Review and analysis of financials

Current Status:

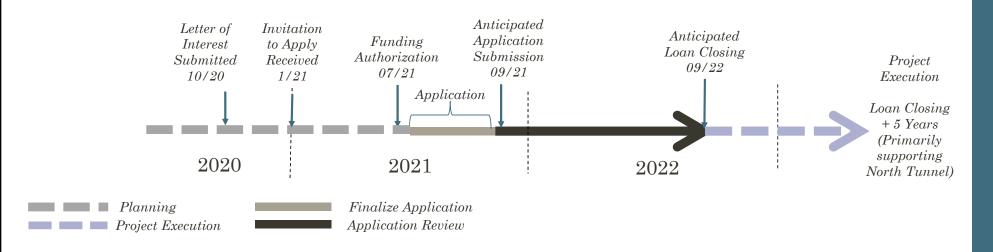
Finalizing application

Next Steps:

- O Submission of and review of application
- Approval of Loan

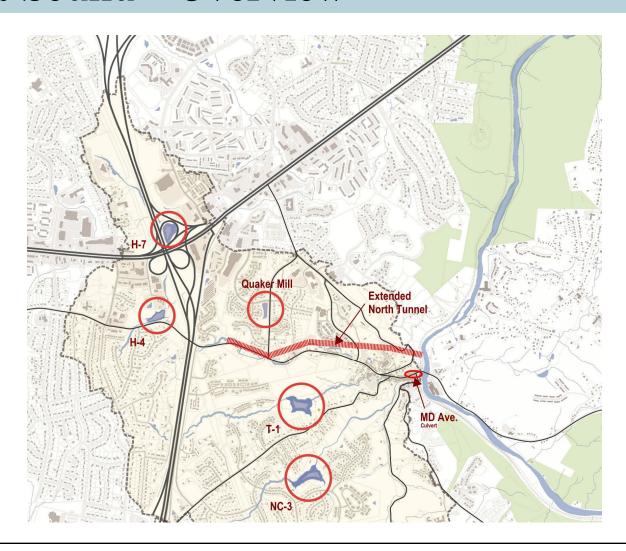






Ellicott City Safe and Sound Projects

EC Safe & Sound – Overview



EC Safe & Sound – Extended North Tunnel

A 15-foot diameter tunnel extending from the West End to the Patapsco River

Estimated Design

Recently Completed:

- O Feasibility of extension of original North Tunnel
- O Selected designer for Final Design phase

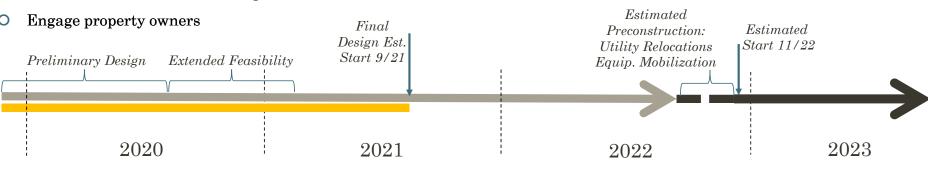
Current Status:

- Finalizing Final Design Scope & Fee
- O Solicitation for Owner's Representative
- Ongoing CSX Engagement

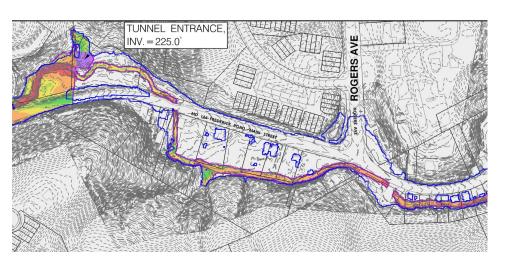
Section 106

Next Steps:

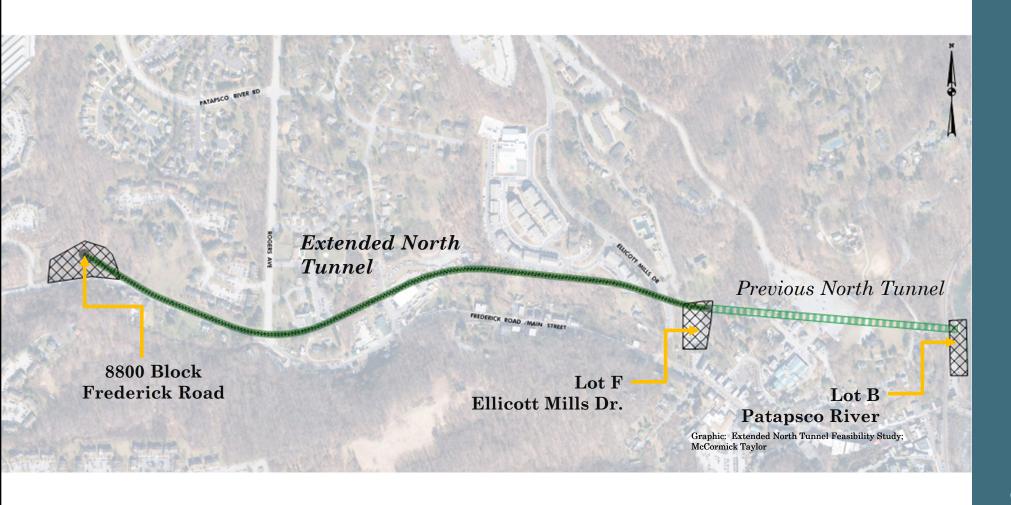
- Solicit for Construction Manager at Risk (CMAR)
- O Finalize selection of Owner's Representative



Estimated Construction (contingent upon CSX Approval)



EC Safe & Sound – Extended North Tunnel



EC Safe & Sound – H-7

A 13-acre-foot dry flood mitigation pond located in the US 40/US 29 interchange

December 2018 Status:

O 65% Design

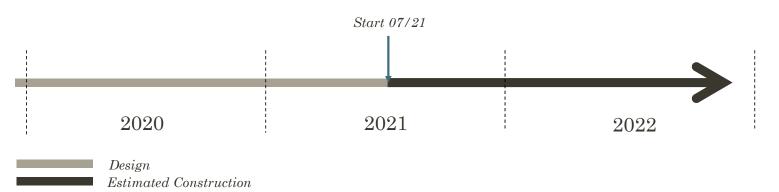
Recently Completed:

- Secured total funding
- O Final Design
- O Permitting
- O Bid project for construction
- O Issued *Notice to Proceed* for construction

Current Status:

O Project Under Construction





EC Safe & Sound – Quaker Mill

A 10-acre-foot dry flood mitigation pond located off Rogers Avenue

December 2018 Status:

O 35% Design

Recently Completed:

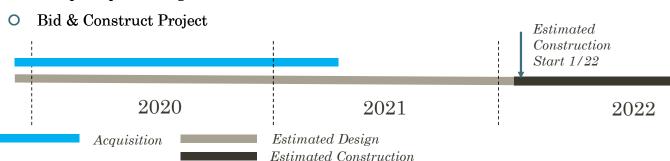
- O Final Design
- O Acquisition
- O Preparing to bid project for construction

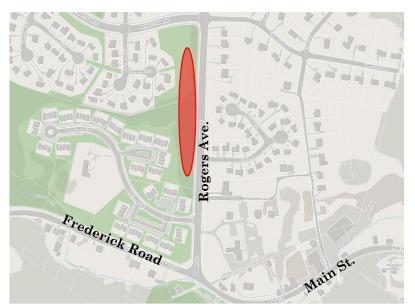
Current Status:

- O Regulatory Approval
- O Permitting
- O Final Review of Solicitation Documents

Next Steps:

Complete permitting





2023

EC Safe & Sound – Maryland Avenue Culvert

A culvert installed under Maryland Avenue connecting the Tiber-Hudson to the Patapsco

Estimated Construction

(contingent upon CSX Approval)

December 2018 Status: Preliminary Design Recently Completed: Historic Preservation Commission conditional approval Funding secured Current Status:

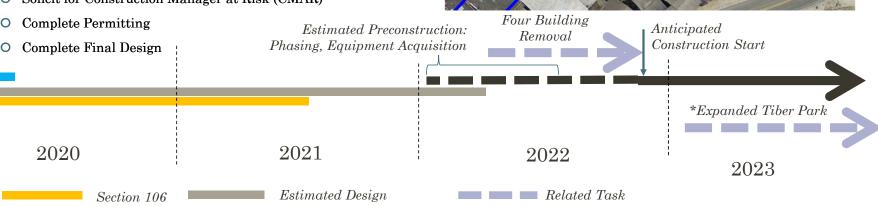
Current Status:

- O 90% Design Review
- Ongoing CSX Engagement
- Permitting

Next Steps:

Solicit for Construction Manager at Risk (CMAR)

Acquisition



EX. STREAM

NEW STREAM CHANNEL / CURRNET BASEMENT WALL

*upon completion of subterranean construction

EC Safe & Sound – NC-3

A 63-acre-foot dry flood mitigation pond located the Autumn Branch in the New Cut watershed

Estimated Design

Estimated Construction

Recently Completed:

O Concept Design

Current Status:

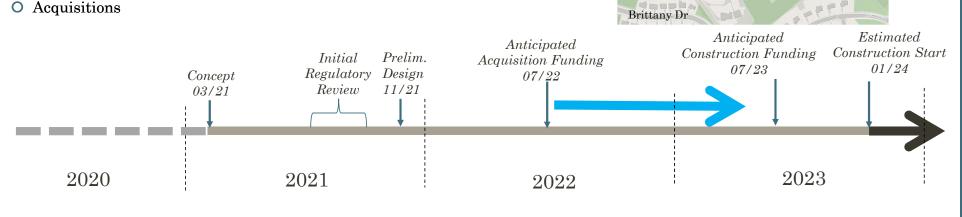
- O Regulatory review
- O Engage property owners
- O Design scope and fee development

Planning

Acquisition

Next Steps:

- O Preliminary Design
- Acquisitions



EC Safe & Sound – H-4

A 15.6-acre-foot dry flood mitigation pond

${\bf Recently\ Completed:}$

- O Concept Design
- Secured Funding

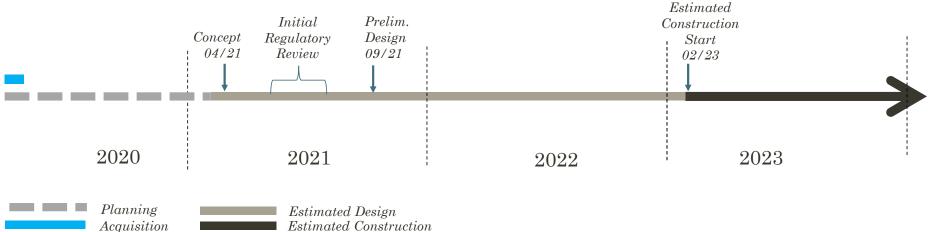
Current Status:

- Regulatory review
- O Design scope and fee development

Next Steps:

O Preliminary Design





EC Safe & Sound – T-1

A 70-acre-foot dry flood mitigation pond located on the Tiber tributary

December 2018 Status:

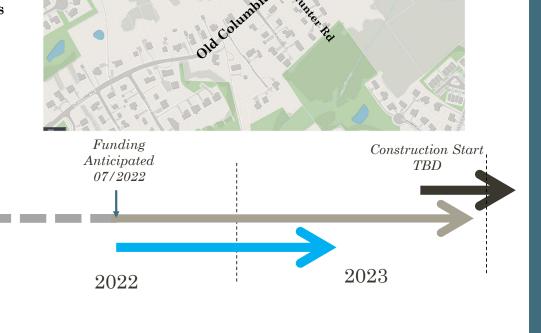
O Concept Only

Current Status:

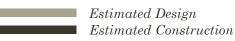
O Continuing to analyze potential project delivery methods

Next Steps:

O Select project delivery method



2020



2021



Six Building Partial Removal

Removal of the rear section of 8085, 8095, 8111-8113 and 8125 Main Street to alleviate constrictions above channel

Recently Completed:

O Removal of rear of 8125 Caplan's

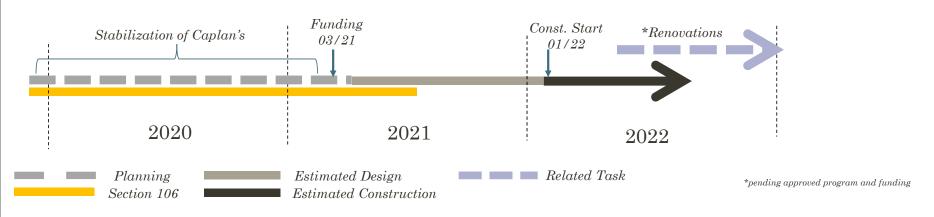
Current Status:

- O Finalizing Code & Use Study
- O Commencing Schematic Design for rear removals
- O Section 106

Next Steps:

- O Regulatory Approval (HPC, MHT)
- O Complete Schematic Design





Four Building Removal

Removal of 8049, 8055, 8059 & 8069 Main Street to facilitate Maryland Avenue Culvert

Estimated Construction

Section 106

Recently Completed:

- HPC Conditional Approval
- O Final Design
- O Hazardous Material Assessment

Current Status:

- O Preconstruction Review
- Construction pricing
- O Section 106

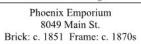
Next Steps:

Design

Acquisition

Commence construction





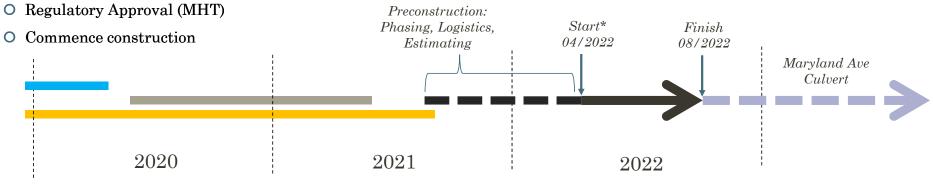


Bean Hollow 8059 Main St. Stone & Frame: c. 1930s



*Start contingent upon terms of

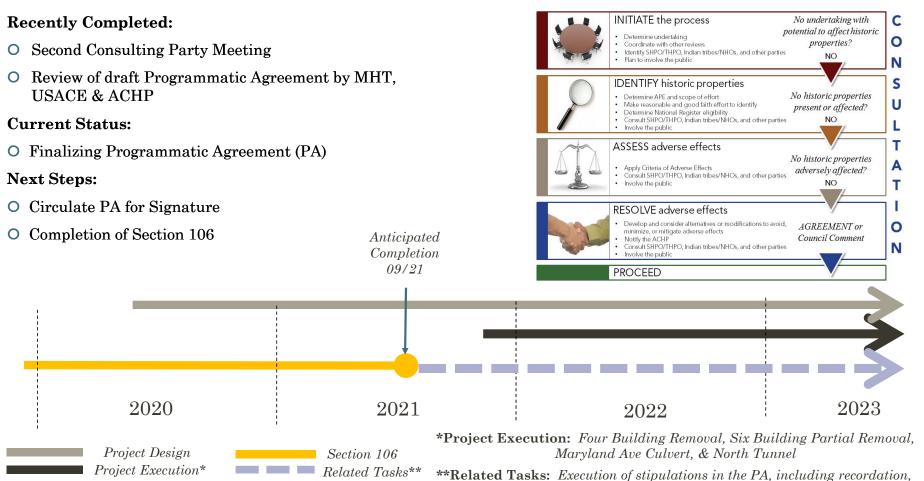
HPC Conditional Approval



Related Task

Section 106 Process

Federally led review of the effects of the EC Safe and Sound Plan on historic properties



interpretation, & education

Tiber Park Expansion

Activated pedestrian square at the intersection of Maryland Avenue & Main Street

Estimated Construction

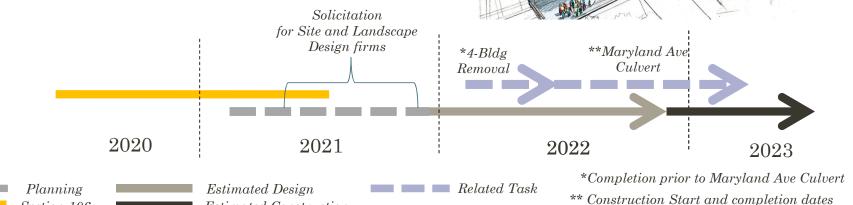
Current Status:

O Issued Expression of Interest (EOI) to solicit Site and Landscape Design firms

Next Steps:

- O Evaluate EOI respondents
- O Design Scope and Fee Development

Section 106



dependent on start of Maryland Ave. Culvert

Sediment Study

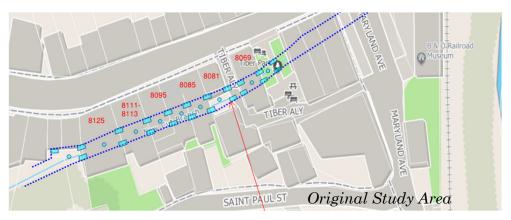
A study to ascertain the potential accumulation of sediment within the Tiber-Hudson stream channel network

Background:

- O Undertaken to determine the overall accumulation of sediment, or bedload, within the channel
- O Whether removal of that material would be both feasible and hydraulically beneficial.
- O Analysis of four study areas

Process:

- Field work to determine depth of rock below sediment
- O Review of bearing condition of channel walls
- O Analysis of findings, including modeling of data (H&H Model)
- Summary of Findings







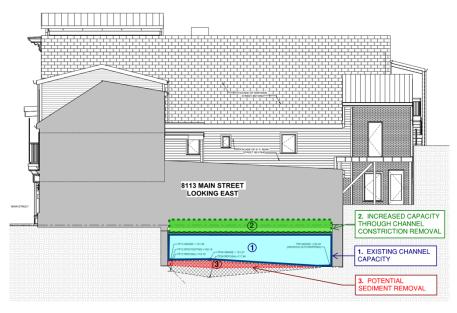
Sediment Study

A study to ascertain the potential accumulation of sediment within the Tiber-Hudson stream channel network

Summary of Findings:

While there is sediment present within the channel in certain areas, removal of sediment alone will not result in a meaningful increase in flow capacity of the conveyance network.

- O While removal of material would have a localized hydraulic benefit, this benefit is extremely minimal due to channel constrictions further downstream.
- O Removal of sediment is not likely to provide a long-term benefit as additional sediment would accumulate
- O During storm events, high flow velocities will move the existing sediment and will redeposit sediment from elsewhere in the stream channel as the storm subsides, thereby replacing prestorm material with new sediment.



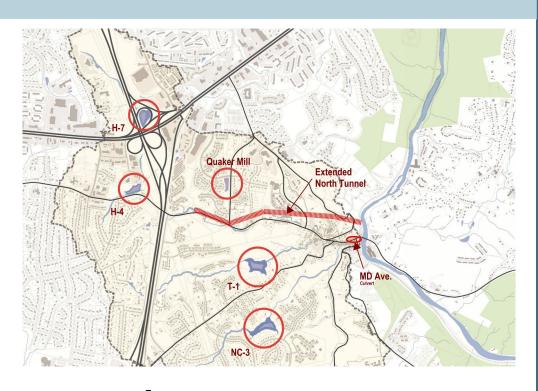
Profile of Stream Channel @ 8111-8113 Main Street

Station Breakouts

- O North Tunnel:
 - O Dave Corkum (McMillen Jacobs) & Mark DeLuca (DPW Environmental Services)
- O Maryland Avenue Culvert & Sediment Study:
 - O Andy McLean (McCormick Taylor), Brian Cleary & Zach Hollenbeck (DPW Environmental Services)
- O Buildings and Tiber Park:
 - O Chelci Dell (SGH), Sharon Walsh (DPW Facilities) & Bob Linz (Rec & Parks)
- O Quaker Mill:
 - O Mark Richmond (DPW Environmental Services)
- O H-7 & NC-3:
 - O Greg Adolph (McCormick Taylor) & Avinash Dewani (DPW Environmental Services)
- O WIFIA:
 - O Zack Karson (REBEL), Rafiu Ighile & John Vu (Finance)
- O H-4 & T-1:
 - O Ryan Thomas (Century) & Michele Monde (DPW Environmental Services)

Meeting Logistics

County Consultants & Staff are available for questions and answers at project stations until 7:30 PM.



Additional questions or comments may be sent to ecsafeandsound@howardcountymd.gov

Thank you for attending!

THANK YOU!

