



# Mt. Washington Landslide Mitigation

William Street Project: Public Information Meeting #1  
March 21, 2022



FEMA

# Agenda



- ① Introduction
- ② General Project Overview
- ③ Potential Mitigation Measures
- ④ Public Engagement Process
- ⑤ Next Steps
- ⑥ Questions & Answer



# Housekeeping



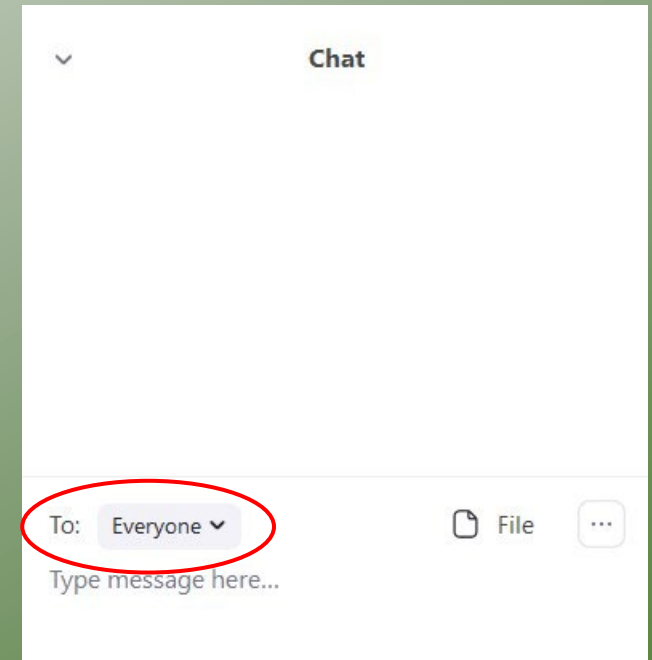
- Session is being recorded and will be posted to EngagePGH website
- Using the Chat Feature to ask questions
- Dedicated Q&A Segments after presentation
- Special Accommodations



Technical Difficulties? – Chat Chad Williams



Joining by phone ? – \*6 – Toggle mute/unmute  
\*9 – Raise hand



# Project Team



City of Pittsburgh,  
Department of Mobility  
and Infrastructure  
(DOMI)



Pennsylvania Emergency  
Management Agency  
(PEMA)



**FEMA**

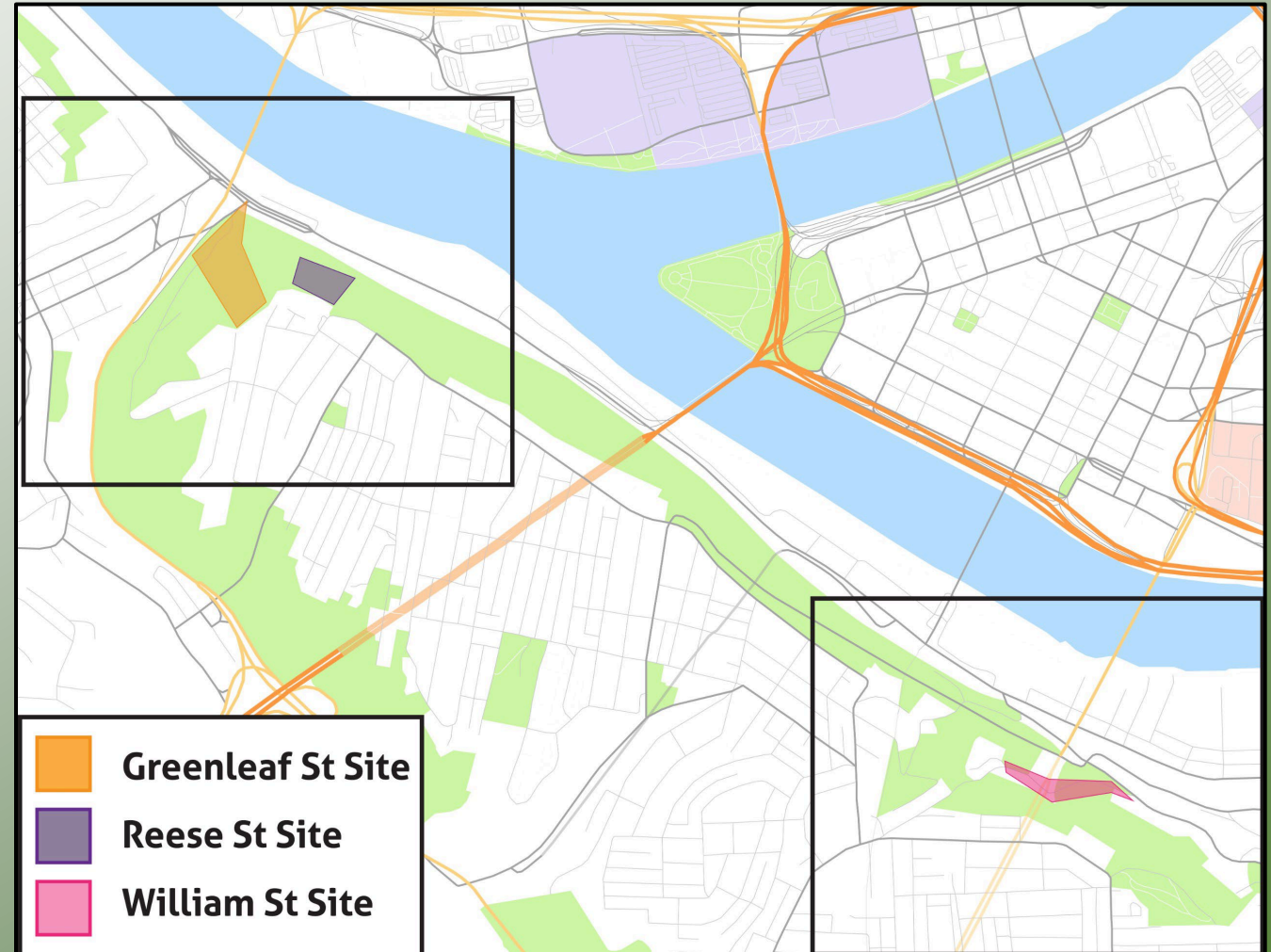
Federal Emergency  
Management Agency  
(FEMA)



# General Overview



- Three Areas on Mt Washington
  - William St
  - Greenleaf St
  - Reese St (CBS Tower)
- Design and construct mitigation solutions

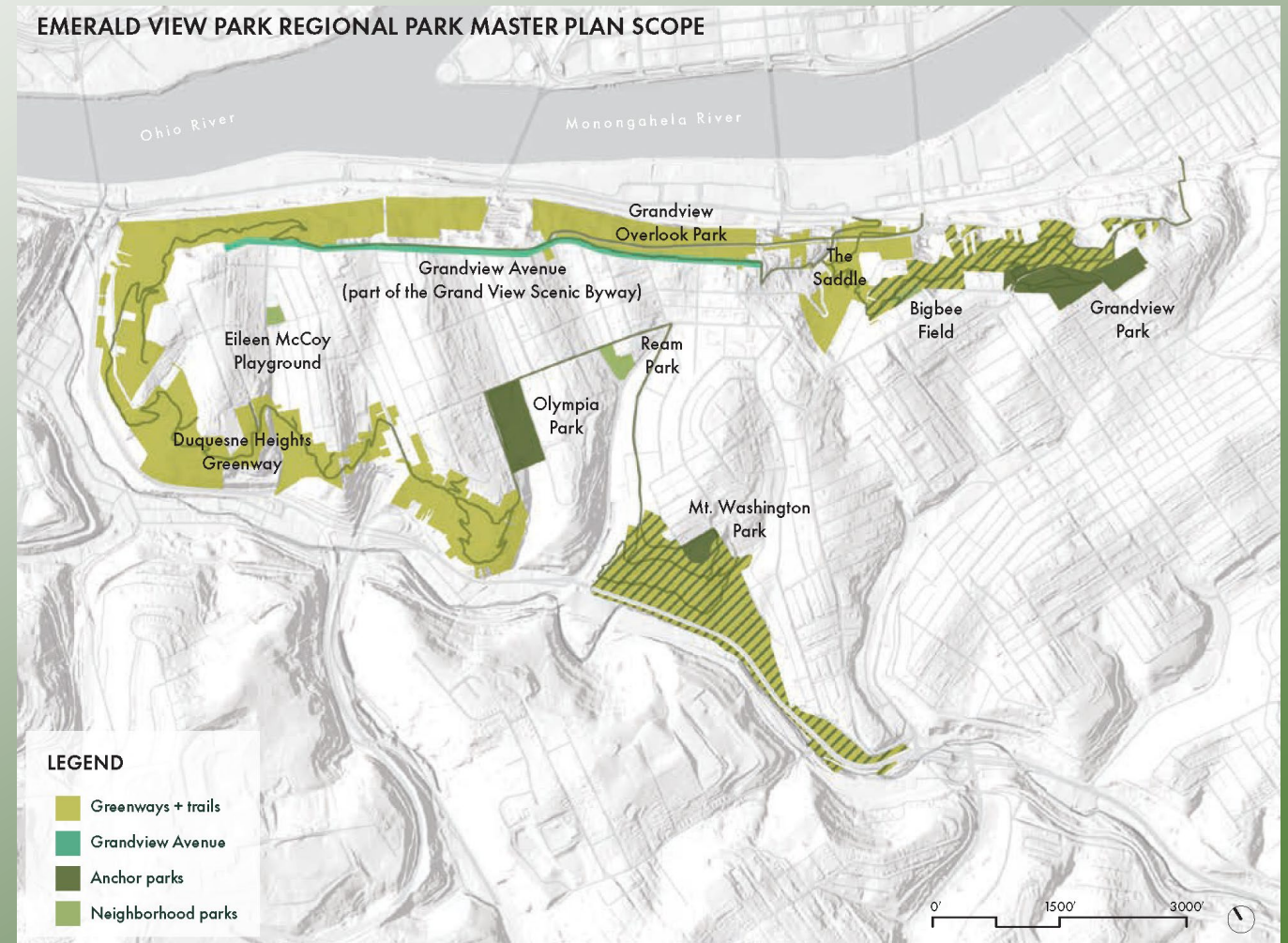




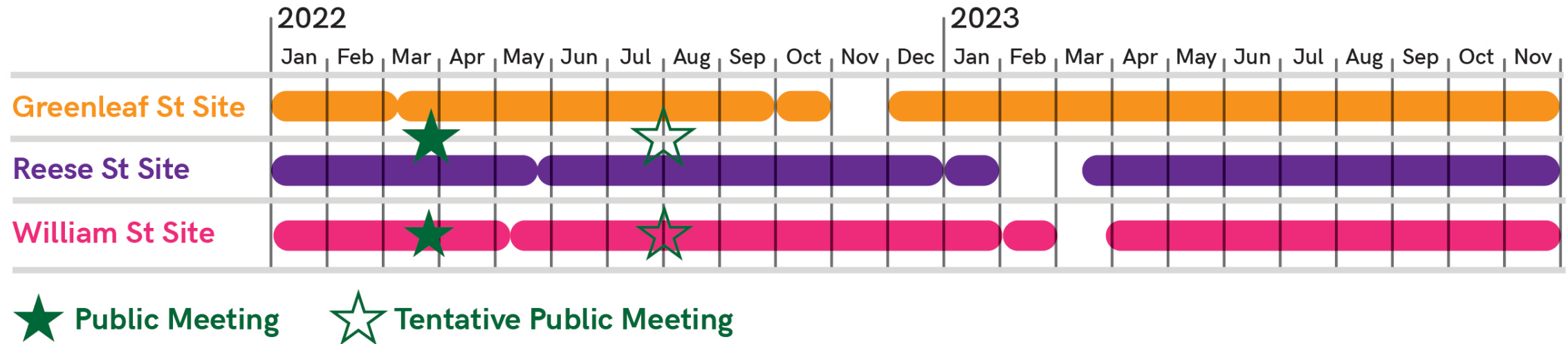
# Goals



- Stabilize selected slopes to protect
  - Roadways
  - Properties
- Stabilize selected roadways
- Enhance the intersection Cola St & William St
- Consider Emerald Park Master Plan (EPMP)



# General Project Timeline



**Three Project Phases:** Preliminary Design; Final Design; Bid/Construction

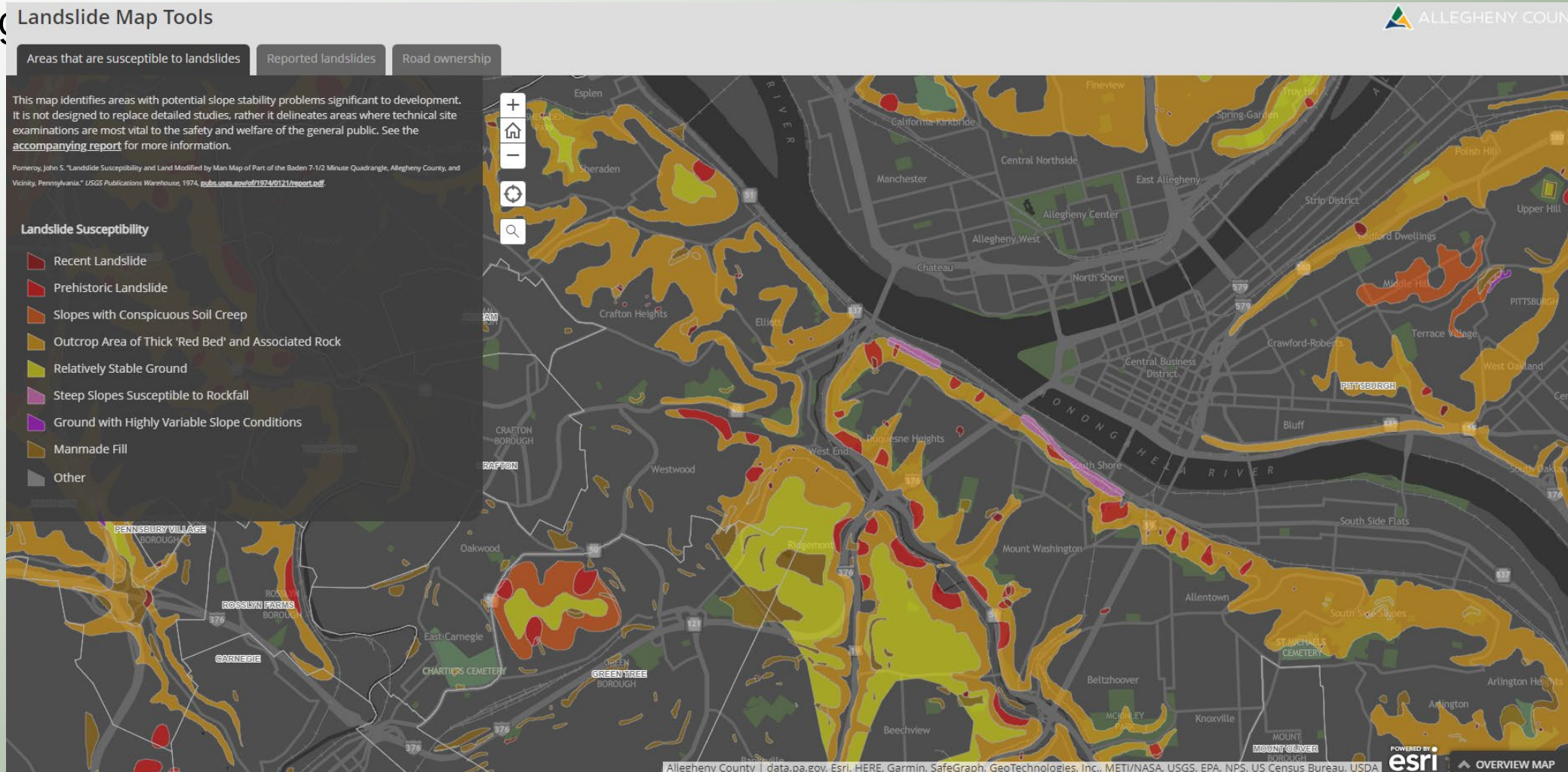
**Duration:** January 2022 through November 2023



# Landslide Potential



Allegheny County Landslide Portal: <https://landslide-portal-alco.org/>





# Site History

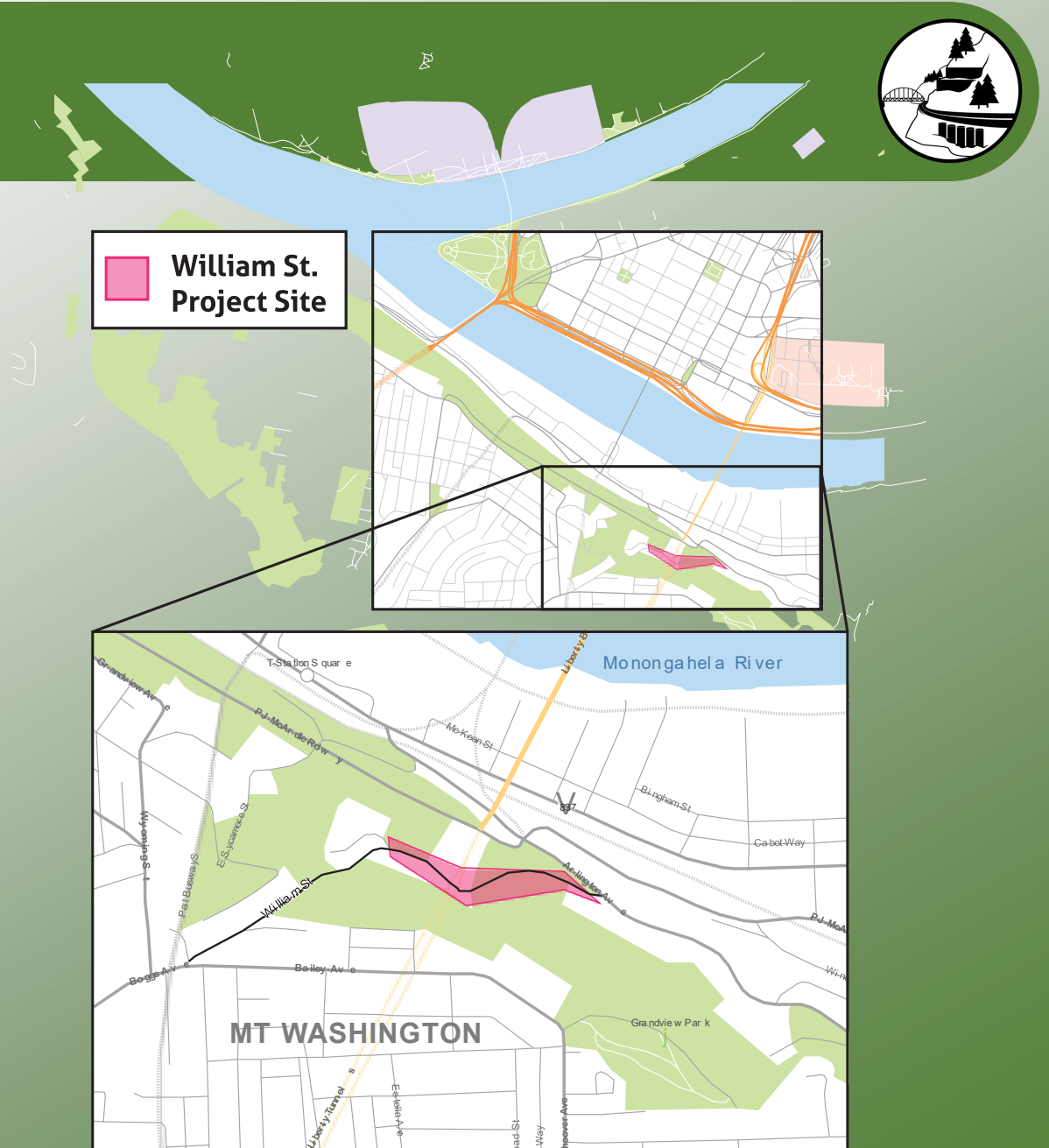


- Mt. Washington slopes – very steep terrain
- Development occurs along the face of the slope supporting steel and tourism industry
- Significant landslides occur periodically



# William Street

- Traverses Mt. Washington from Arlington Ave to Bailey Ave.
- Crosses over Liberty Tunnel
- Parallels PJ McArdle Roadway





# William Street





# William Street – Site Plan



Several slides

Remediation Areas

- Cola St Turn
- Central Portion
- 137 Driveway
- Lower Portion – Repairs
- Lower Portion – Additional Work
- PJ McArdle





# William Street – Current Slides



Cola St Turn



Lower William Repairs



Central Area Over Liberty Tunnel



PJ McArdle Roadway



# Remediation Concepts



## **Single Concept Areas**

- Cola St Turn – Install retaining wall
- 137 Driveway Adjustment
- Lower William – Retaining wall above Arlington
- McArdle Roadway – Rock catchment zone on slope

## **Central Portion over Liberty Tunnel Options**

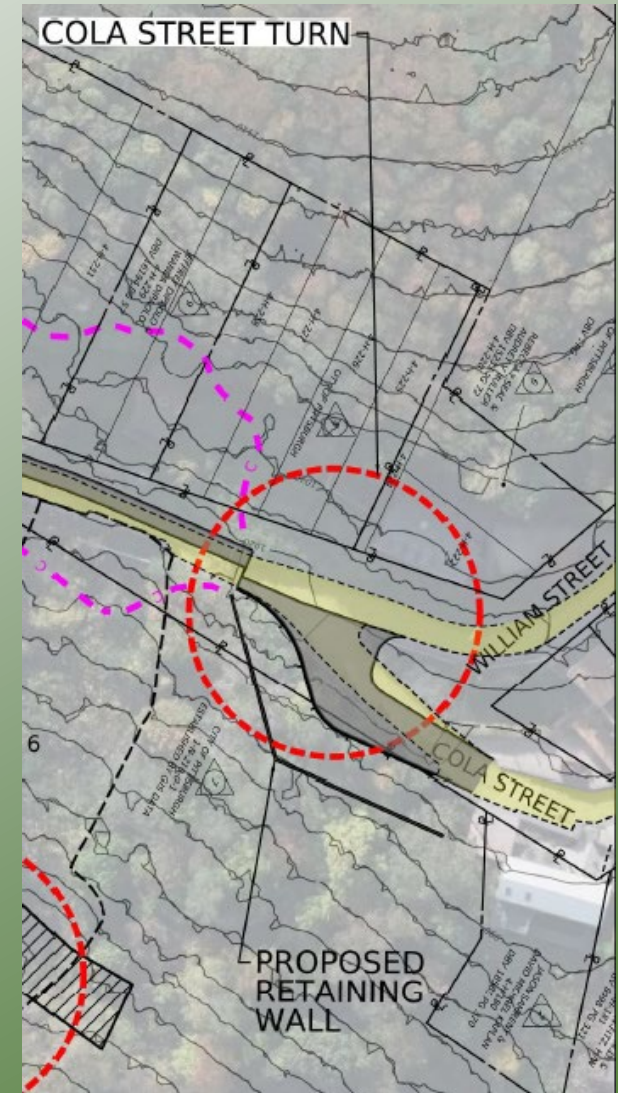
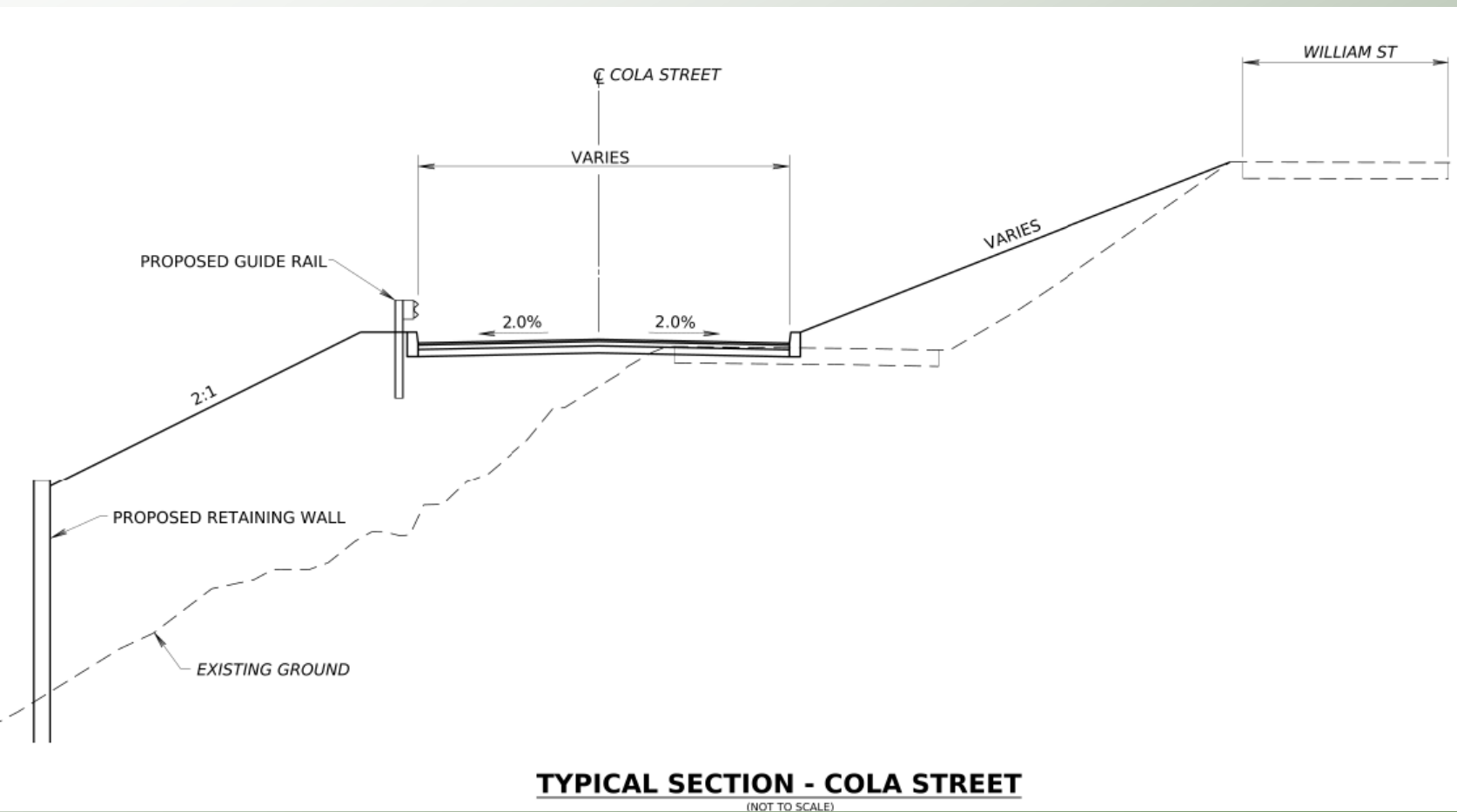
- Single Lane Roadway
- Mixed Use Trail



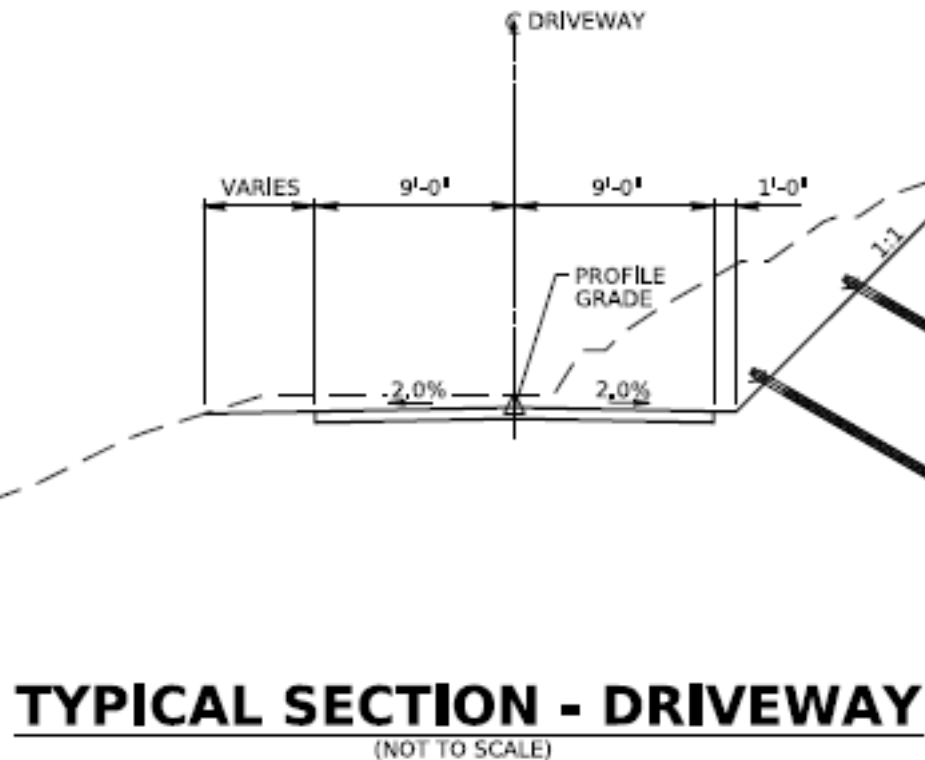
# Cola Street Turn - Proposed



- Install retaining wall to remediate slide
- Improve turning radius for emergency vehicles



- 
- DRIVEWAY ADJUSTMENT**
- AREA 4**
- COUNTY OF ALLEGANY  
ESTABLISHED BY GIS DATA  
4-1-21
- CITY OF PITTSBURGH  
ESTABLISHED BY GIS DATA  
3-1-21
- THOMAS M. CONRAD  
DBV 16670 PG 448  
3-1-21
- CITY OF PITTSBURGH  
DBV 4324 PG 645  
3-1-21
- BACK DBV 4324 PG 645  
3-1-21
- MICHAEL DENE ELDEN  
DBV 17489 PG 345  
3-1-21
- CITY OF PITTSBURGH  
DBV 1828  
3-1-21
- AN PHILIPPE  
AKA GINNY  
DBV 1828  
3-1-21
- Y

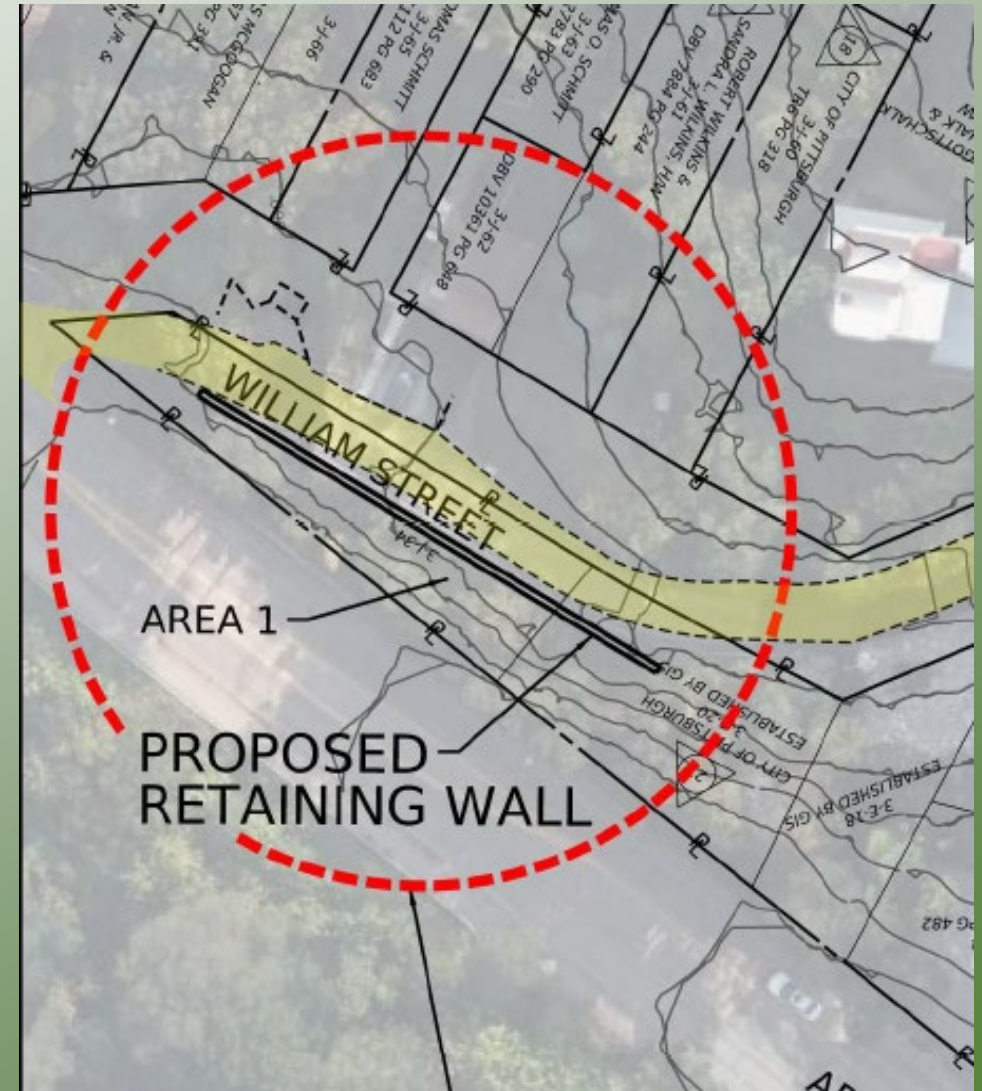
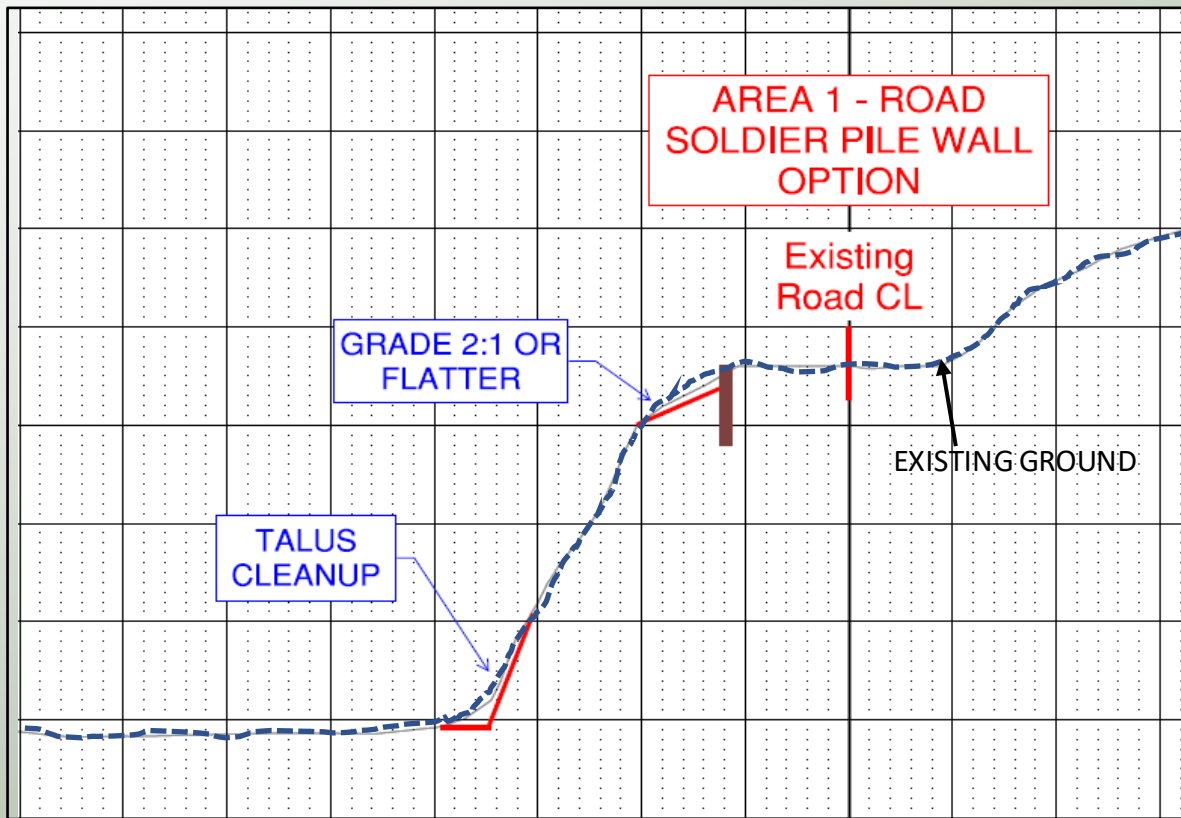




# Lower Portion of William Street

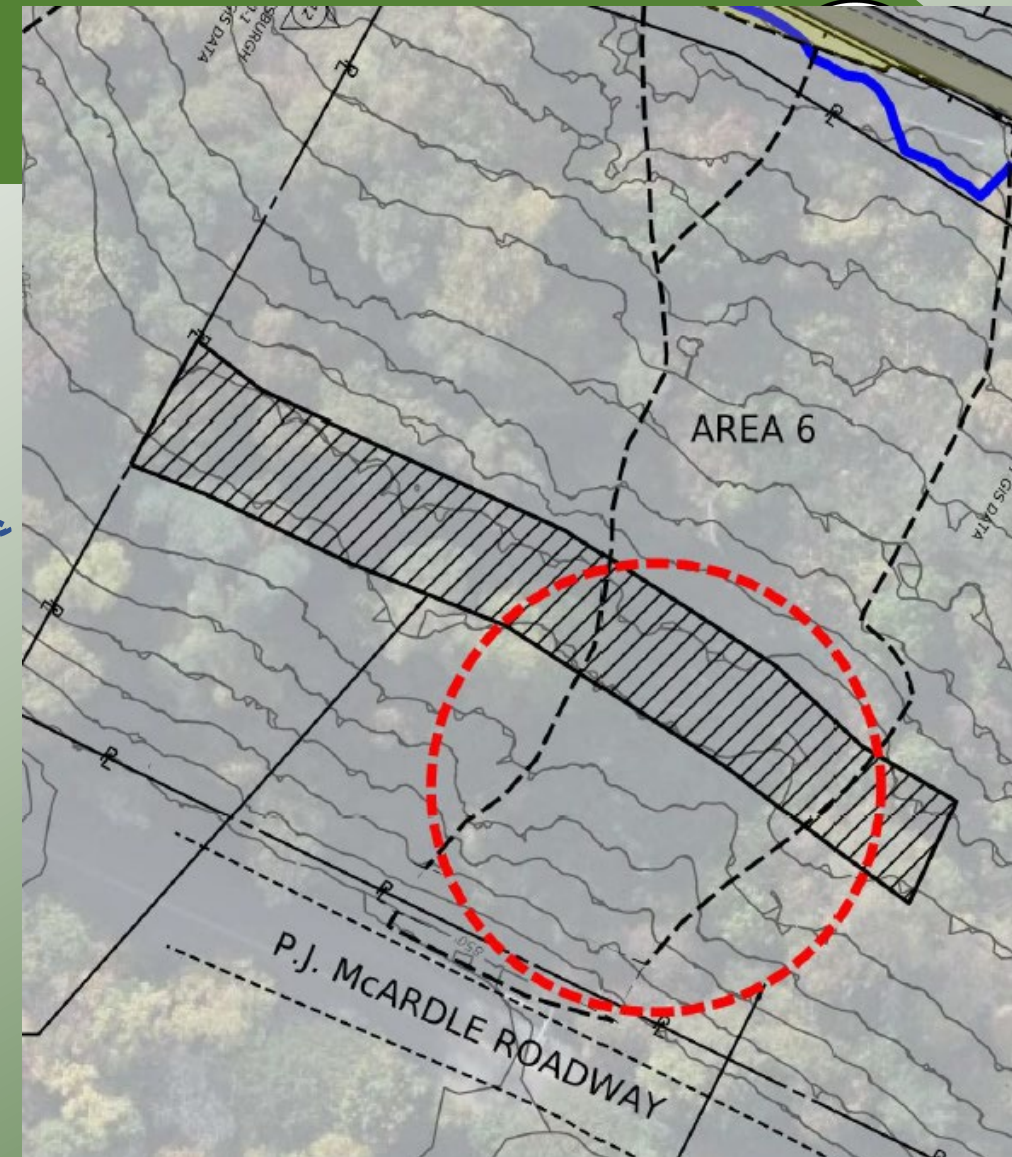
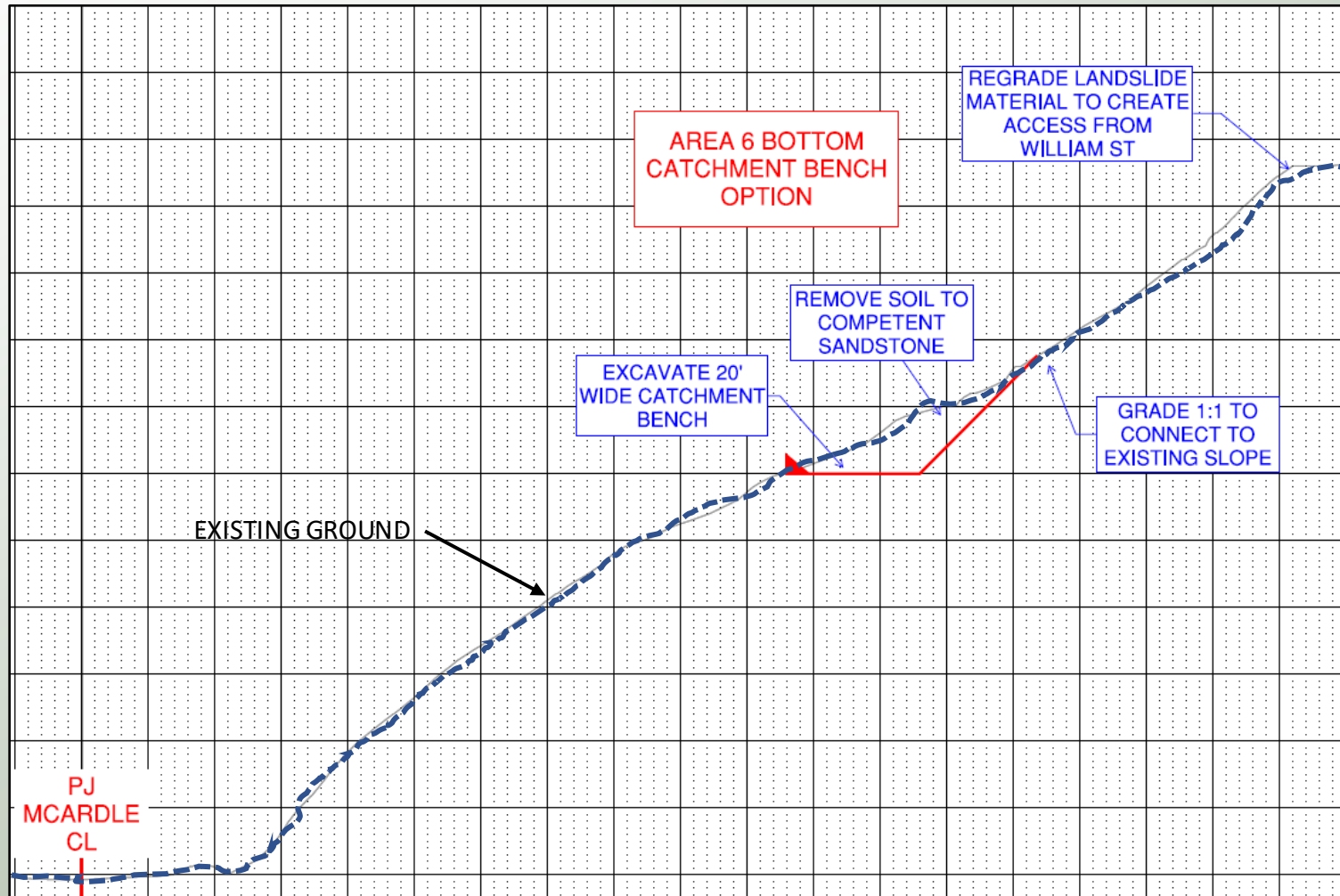


- Retaining wall to maintain existing roadway
- Other options would require utility relocations
- Remove debris along Arlington Sidewalk



# PJ McArdle Roadway

- Excavate slide debris to establish a catchment bench

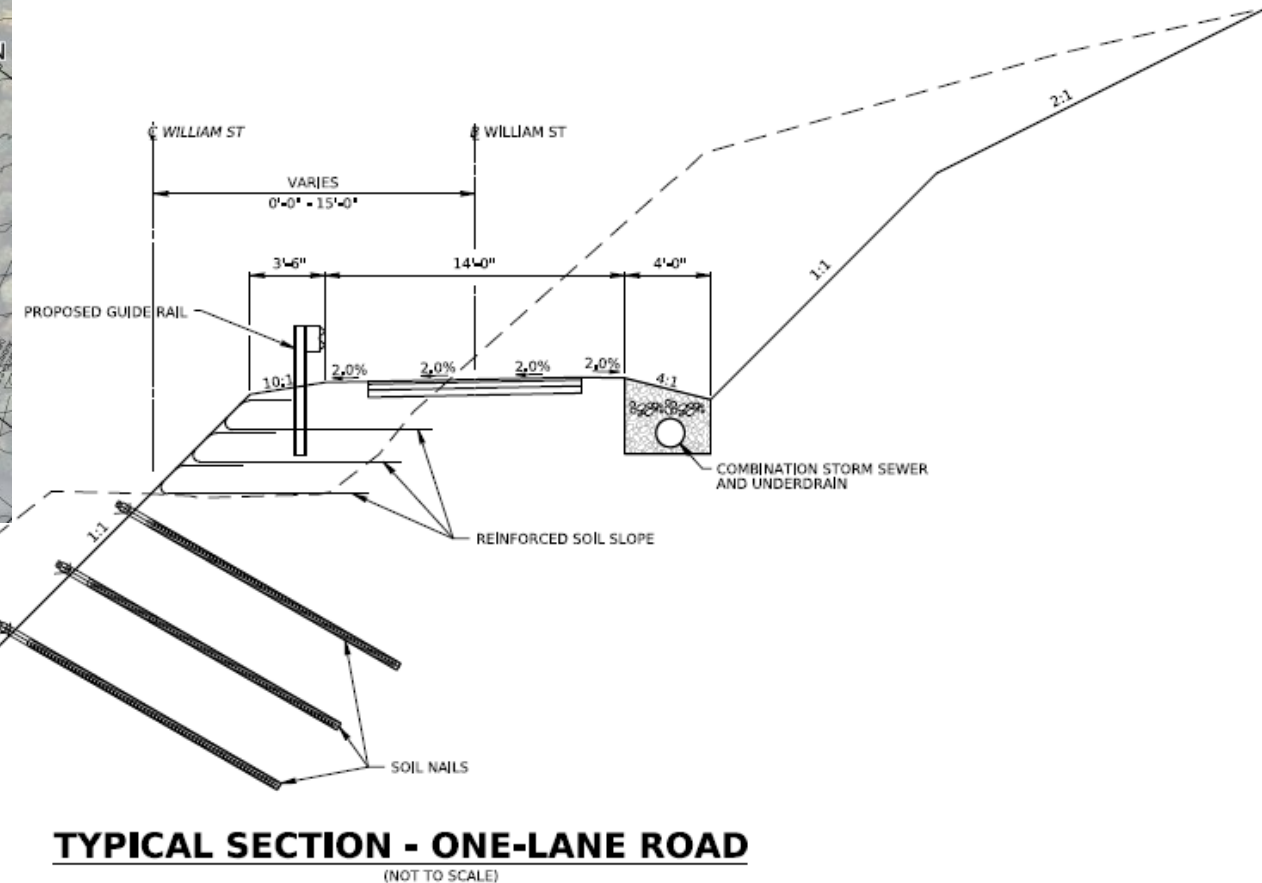
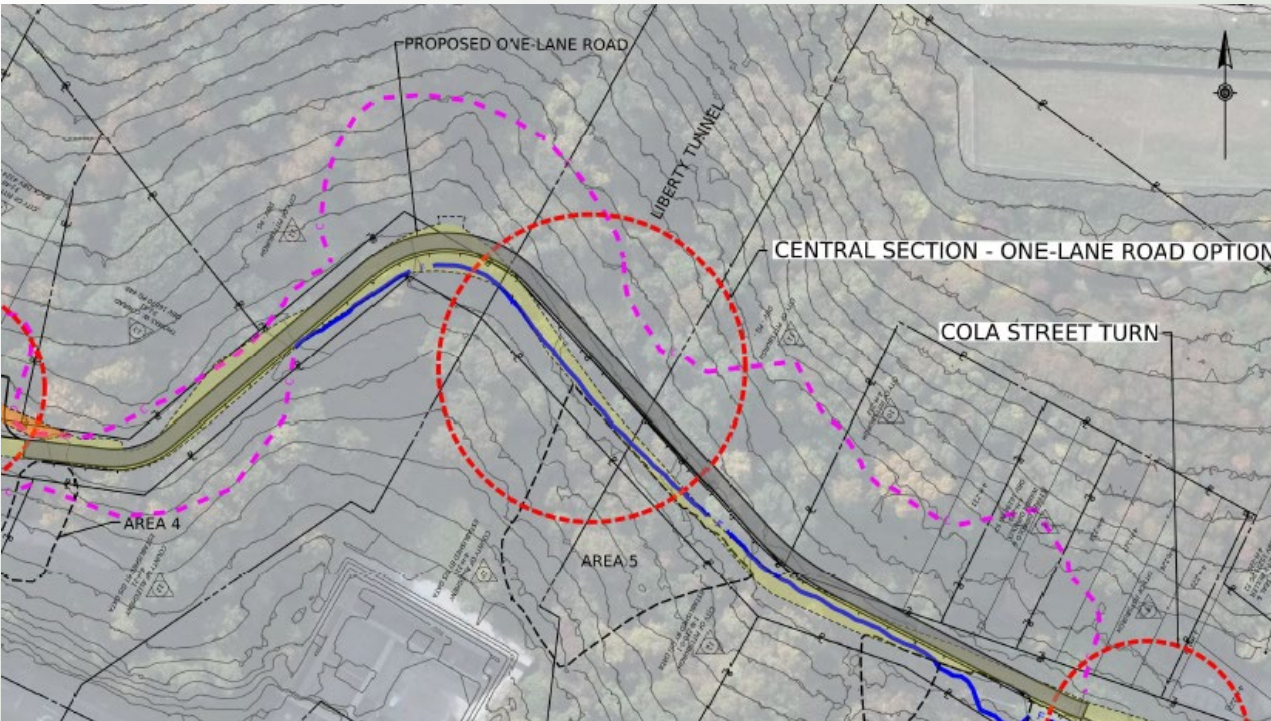




# Central Portion over Liberty Tunnel



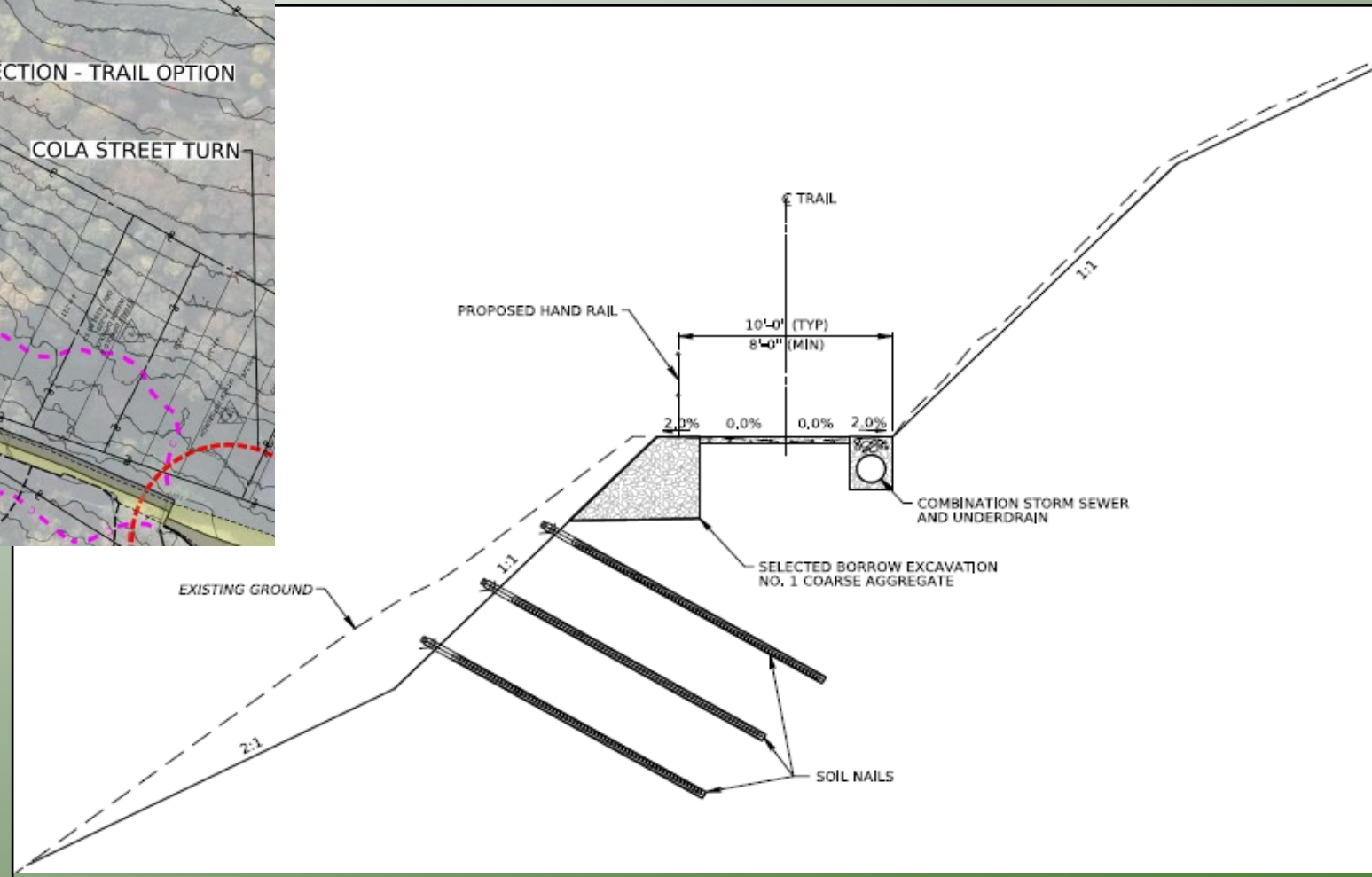
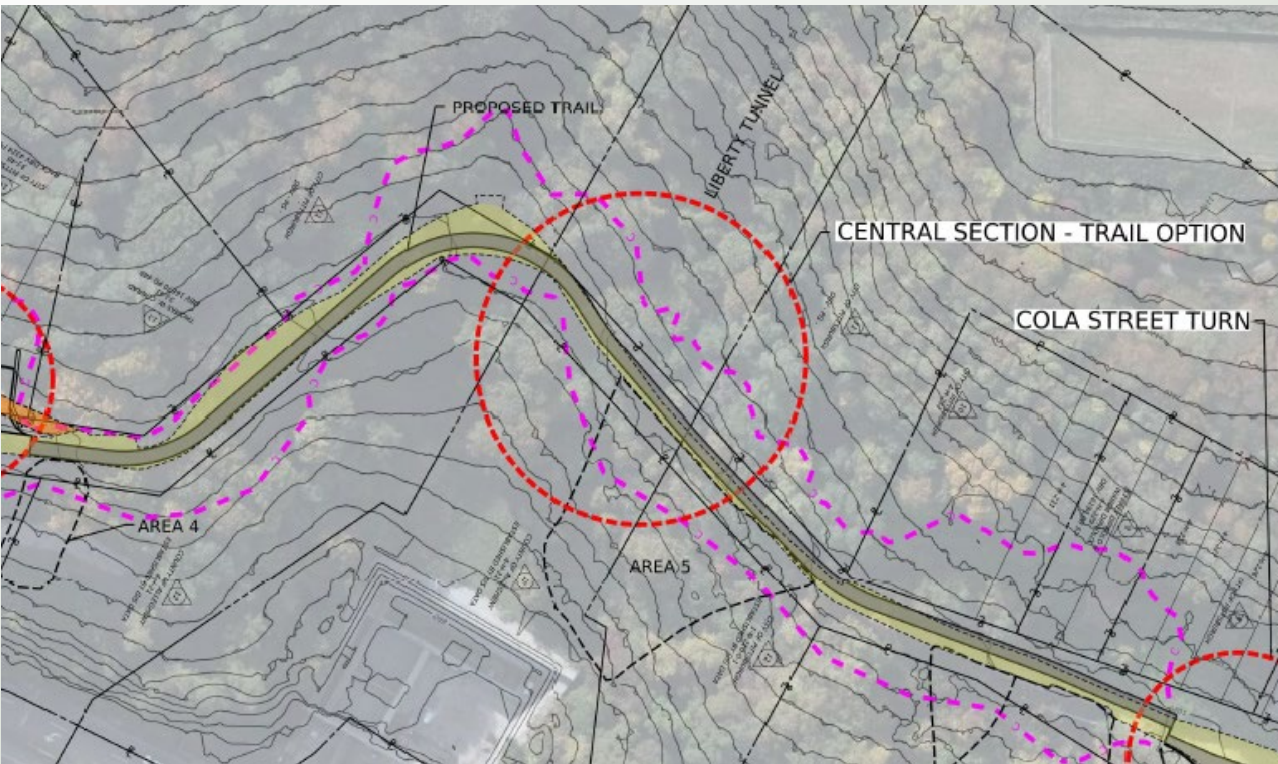
## Single Lane Roadway Option



# Central Portion over Liberty Tunnel



## Mixed Use Trail Option





# Central Portion Comparisons



## Single Lane Roadway Option

- Re-establish single through lane traffic
- Requires significant soil excavation in slide prone area – risk
- Requires complex geotechnical and roadway designs to re-establish roadway in the very narrow, steep corridor.
- Additional geotechnical stabilization cost \$1.25M vs. Trail

## Mixed Use Trail Option

- Improves safety of narrow corridor for vehicles vs. pedestrians/cyclists
- Less negative impact from vehicle traffic
- Reduced earth disturbance for remediation of slides
- Design geometry more flexible
- Potential connection to Emerald View Park Trail system
- Convenient alternate vehicle route via Sycamore and Wyoming St. nearby

# Next Steps



- Field Surveying
- Soil Drilling
- Further develop design concepts
- Briefing with City Council and officials
- Finalize Mitigation Plan Design
- Public Meeting to preview mitigation approach/designs

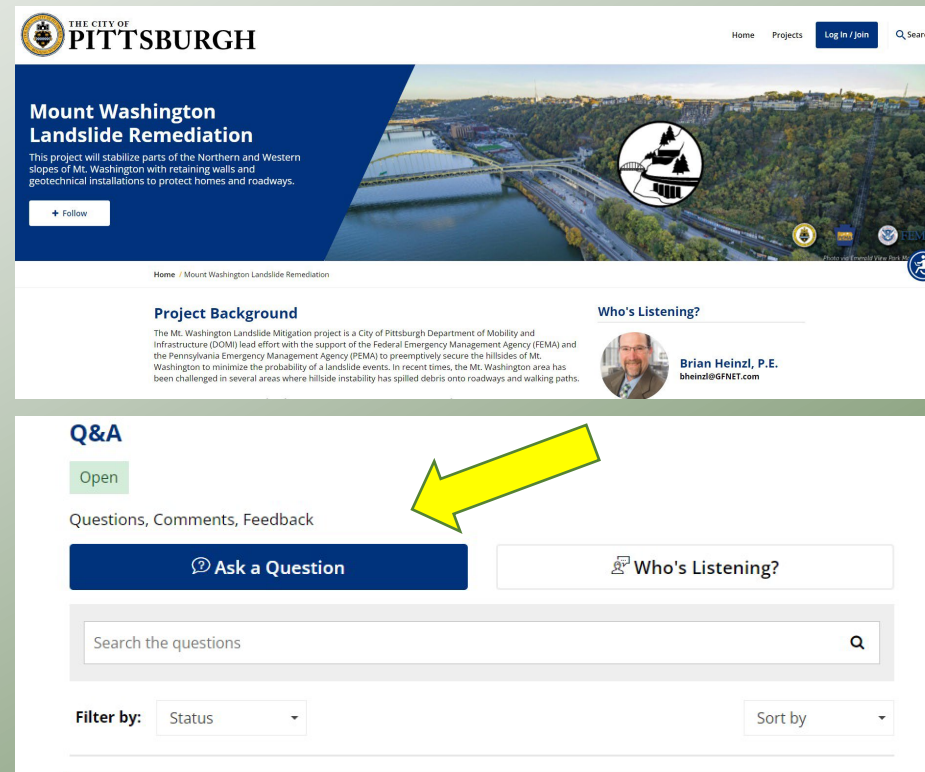


# Public Engagement; *How You Can Stay Informed*



**Meeting #2  
tentatively  
scheduled for  
August 2022**

**EngagePgh Website –  
[engage.pittsburghpa.gov/  
mount-washington-landslide-  
remediation](https://engage.pittsburghpa.gov/mount-washington-landslide-remediation)**



## **Project Contacts:**

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# Questions and Answers