# City of Baltimore Department of Transportation

Rehabilitation of Bridge No. 3456 on Remington Avenue over Stony Run - TR14309

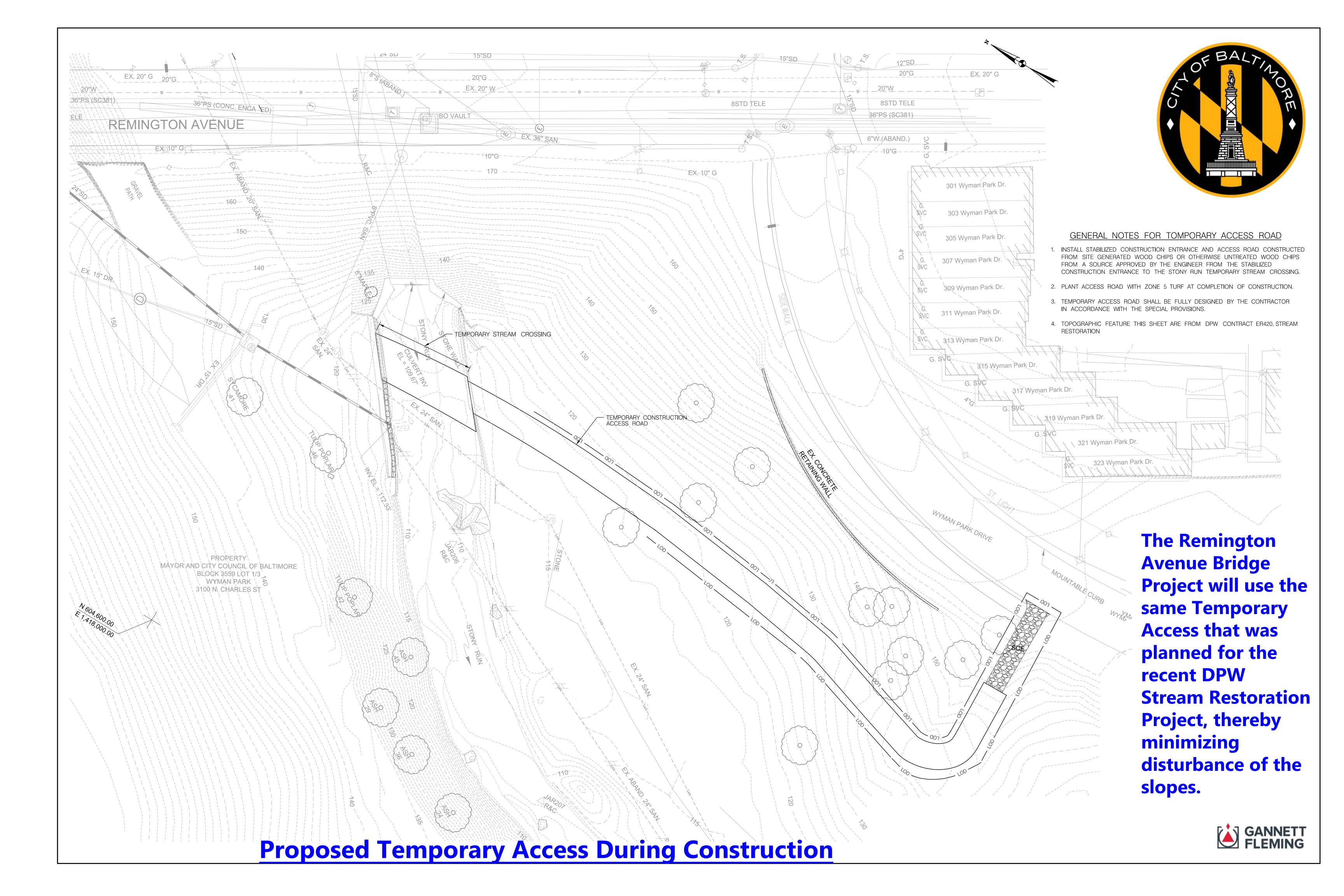


80% Design Display









# The Existing Bridge is in need of rehabilitation

### Hydraulics, Walls and Arch

- Cracks and Deterioration
- Settlement and Displacement
- Stream Channel Improvements











### Remington Avenue Bridge Rehabilitation steps

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- New Bridge Arch Liner
- High Water Overflow Tunnel to be adjacent
- Match Stone Style with new Stone Look Finish
- Mulched Temporary Access Road to Stony Run
- Construct Temporary Crossing of Stony Run
- Construct adjacent tunnel for high water overflow, also to be used for temporary stream diversion during arch repair
- No impact to vehicular or pedestrian traffic
- •Structural liner placed inside arch to fully carry loads

## Design done in 2023

**Construction** to Start Fall of 2023 with no impact to Remington Avenue traffic and all work complete in 2025. Again, all work zones are off of public roads.



#### <u>Hand Tunneling – Ancient Methods Utilizing Modern Technology</u>

While most tunneling projects utilize one of the many types of boring equipment, some tunnels are done the classical way – by hand tunneling.

Hand tunneling, also called conventional tunneling or hand mining, is typically done using shovels and pneumatic hand tools to excavate the soil. Supports made of wood or metal are then installed to keep the tunnel from collapsing.

Hand tunneling is used in combination with other trenchless tunneling methods when rock or other obstructions are encountered. Drilling and blasting is sometimes required to remove rock from the excavation path which the boring equipment cannot handle.

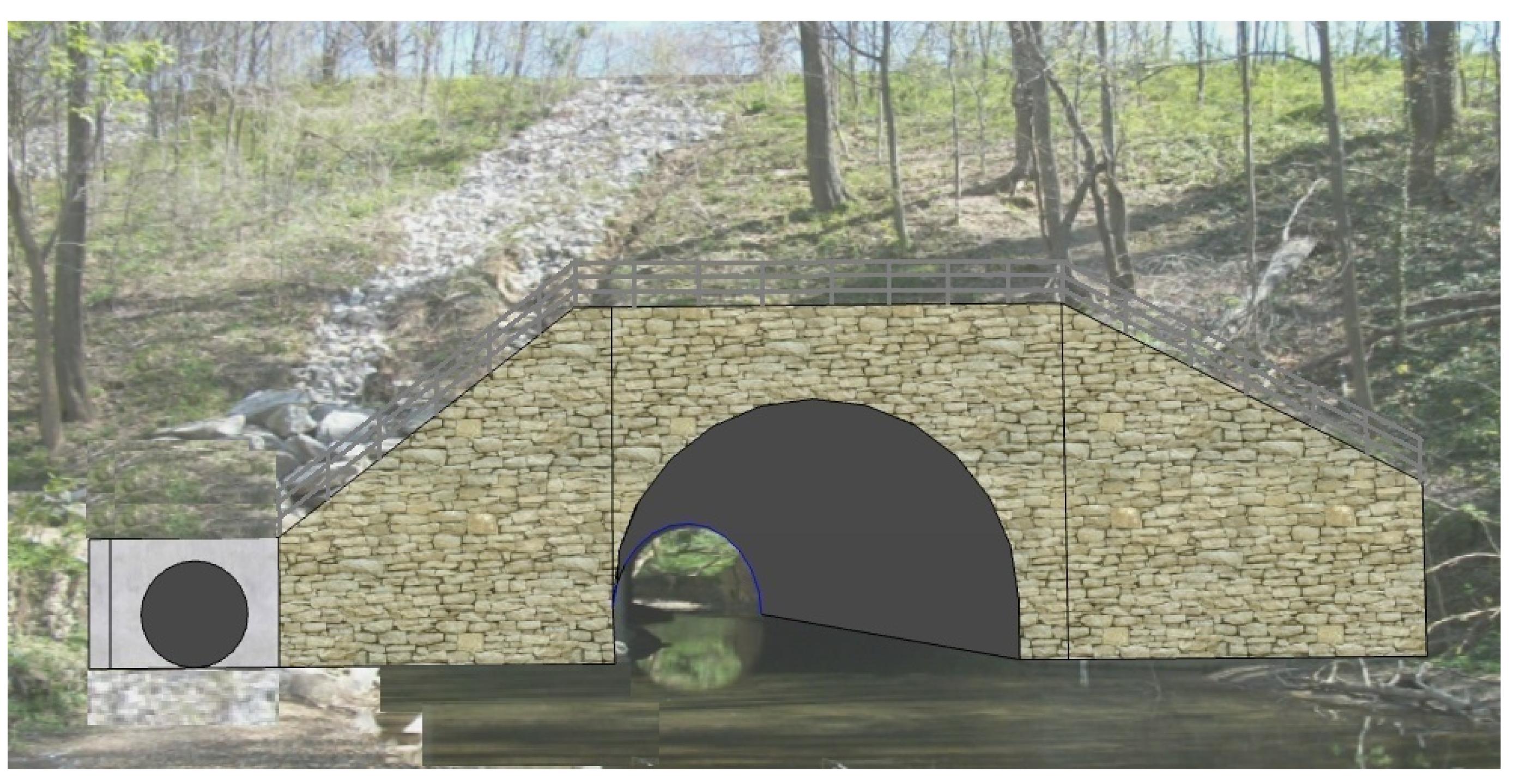
Hand tunneling is used for utility tunnels, road crossing tunnels, starter tunnels and tunnels connecting structures. They can be round, square, elliptical or horseshoe shaped.

Hand tunneling is used for installing a range of different pipe materials such as reinforced concrete pipe.

With hand tunneling, the workers require enough space in which to excavate the soil, so the pipe needs to big enough to walk through. A tunneling shield is often used to support the tunnel as it is excavated, help steer the direction of the dig, and to provide safety for the workers.

# Proposed Overflow Tunnel & Lined Arch Bridge





#### Any Questions?

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