



Maryland
Transportation
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Bay Bridge Automated Lane Closure System (ALCS)

Bay Bridge Reconstruction Advisory Group

April 6, 2022



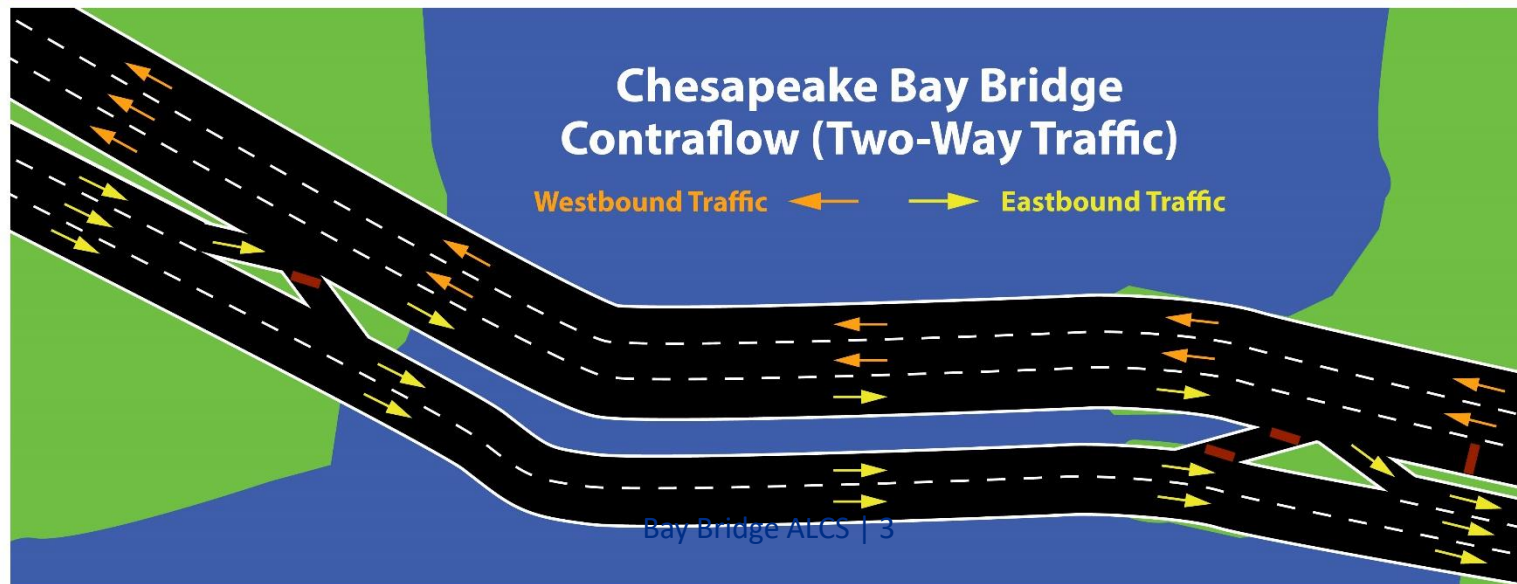
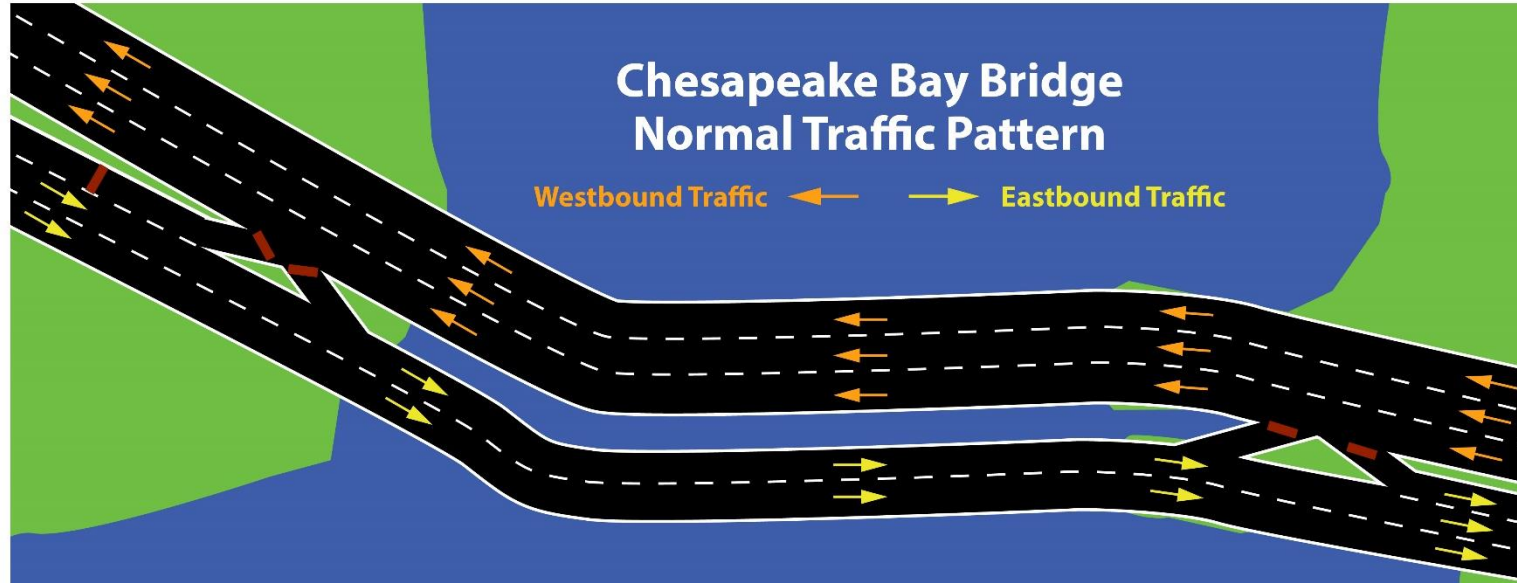
Bay Bridge (US 50/301)

- The original span opened in July 1952 and provides a two-lane roadway for eastbound traffic
- The parallel structure opened in June 1973 and has three lanes for westbound traffic
- Roadway approaches are three lanes in each direction with only five lanes on the bridge spans
- During periods of heavy traffic, incidents, or construction contraflow (two-way) traffic is implemented

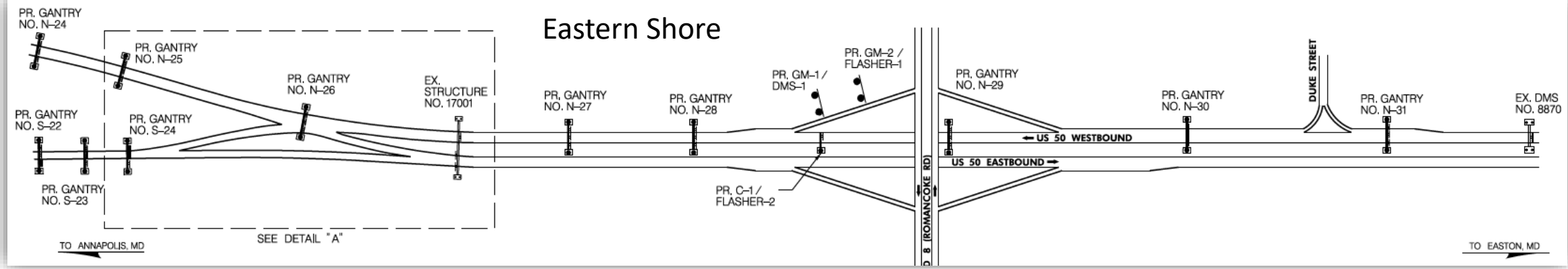




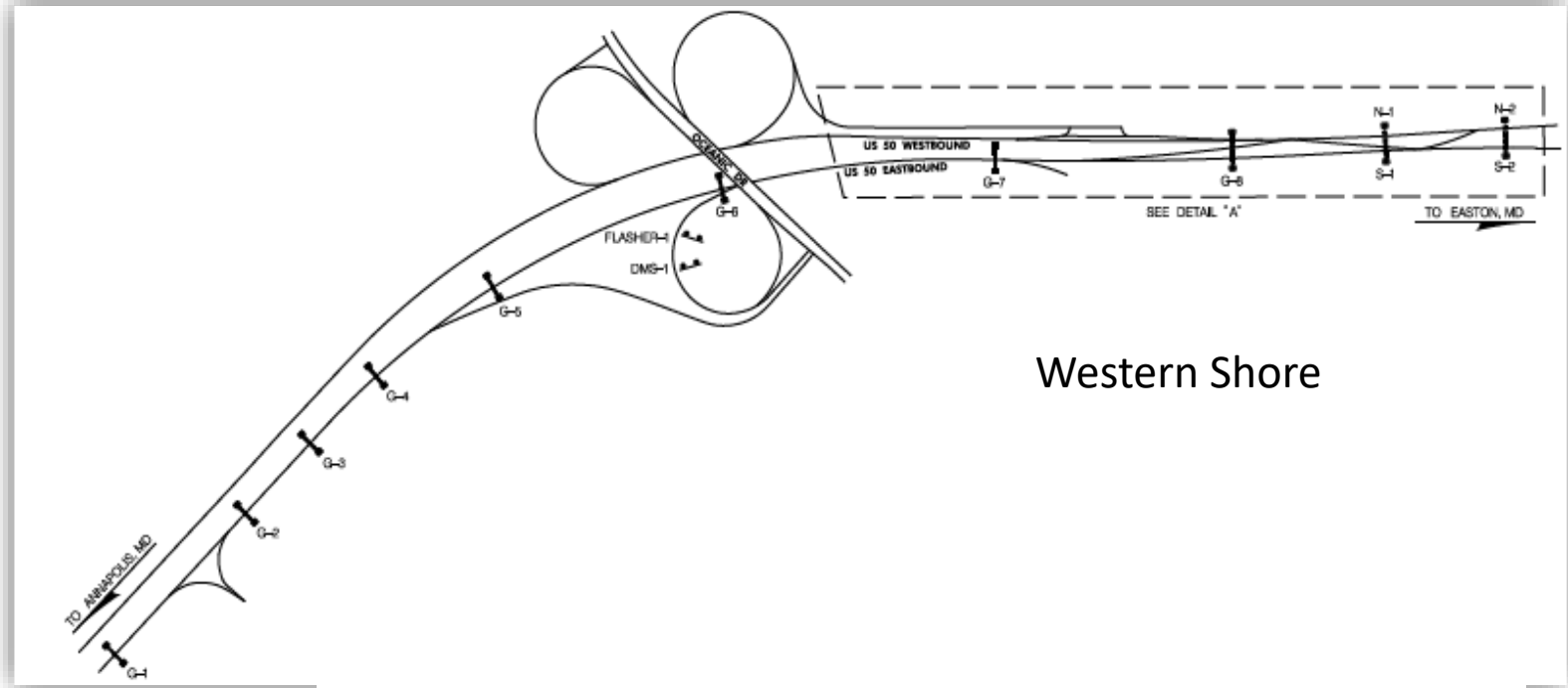
Bay Bridge Lane Balance



ALCS Project Scope



- Safer environment for workers, reduce set-up and breakdown time for two-way operations
- Replace existing lane use control gantries and static sign structures, add additional gantries to increase advance notification of lane use control
- Signing and marking, MOT, electrical modifications, SWM/E&SC, and landscaping
- Testing, commissioning, and integration into existing Bay Bridge Traffic Control System



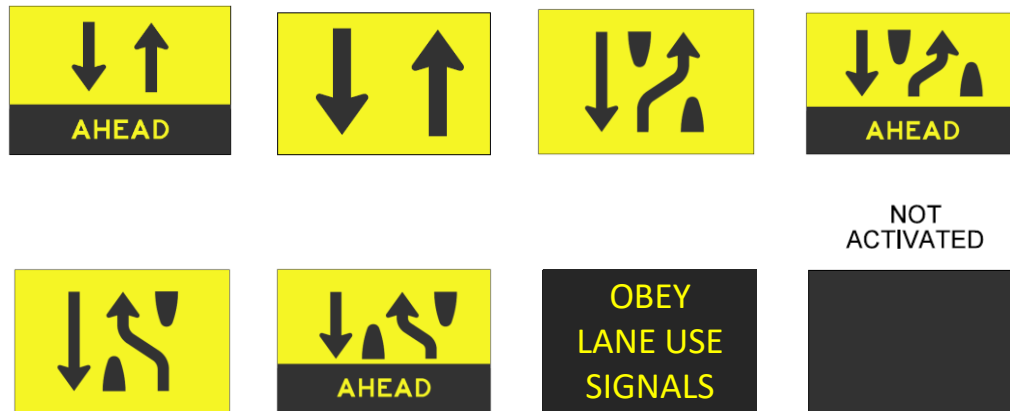
ALCS Project Elements

- Lane Use Control Signals
 - 100 Signals on approach roads
- Dynamic Message Signs
 - 12 Signs on approach roads

Lane Use Control Signals – Displays



Dynamic Message Sign - Warning Messages

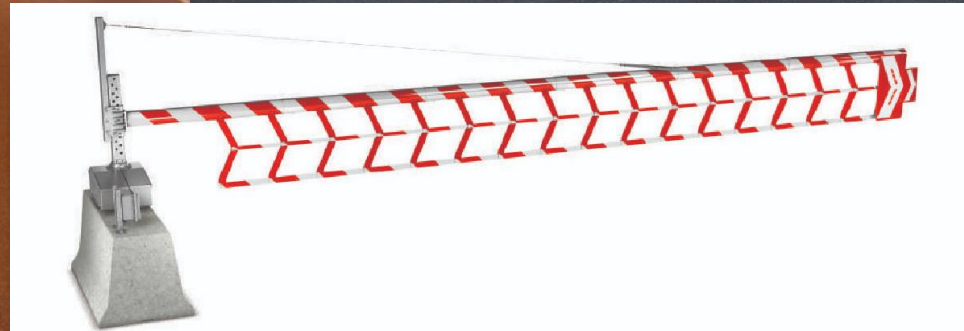


ALCS Project Elements

Illuminated Pavement Markers



Horizontal Swing Gates



ALCS Project Elements

Eastbound Normal Operations

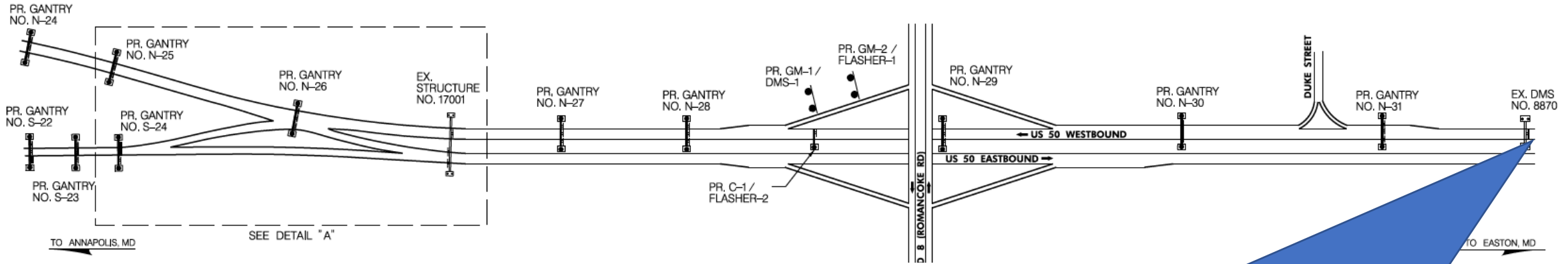


ALCS Project Elements

Eastbound Two-way Operations



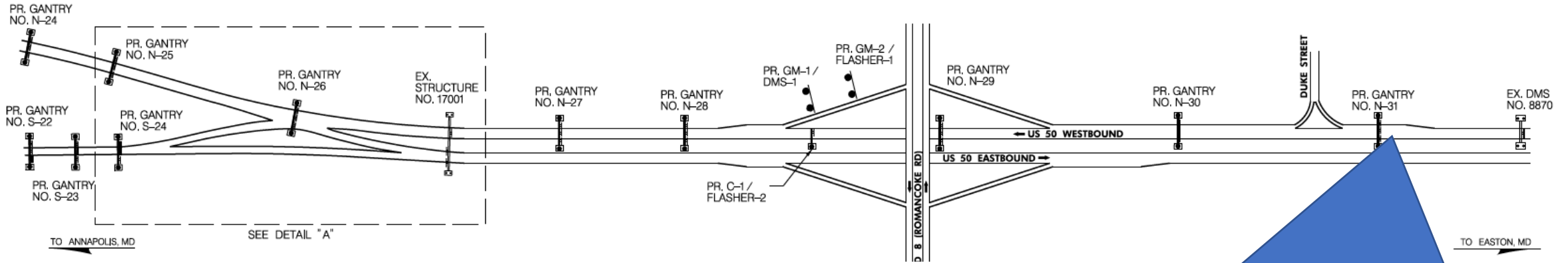
ALCS Eastern Shore Walk-Through



Two-way Traffic on Westbound Bridge with Normal Traffic on Eastbound Bridge



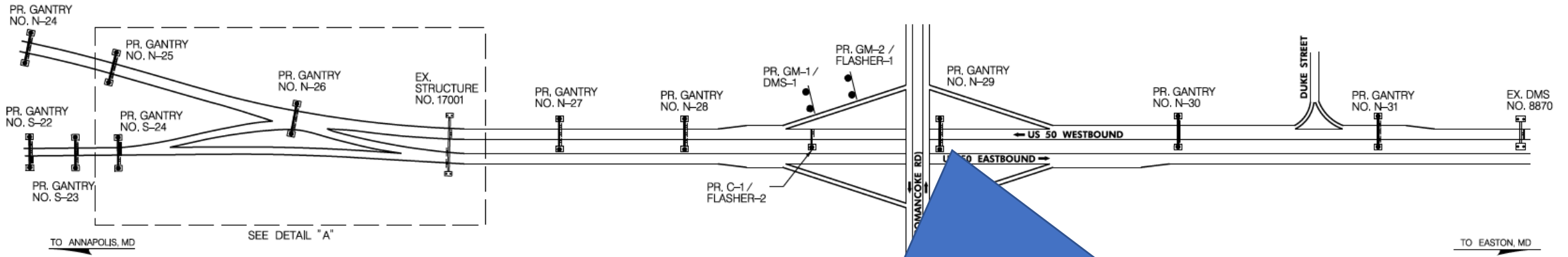
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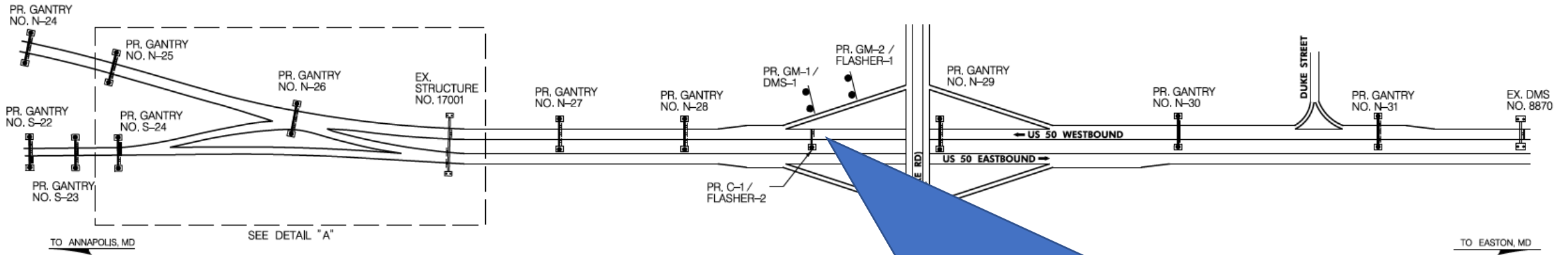
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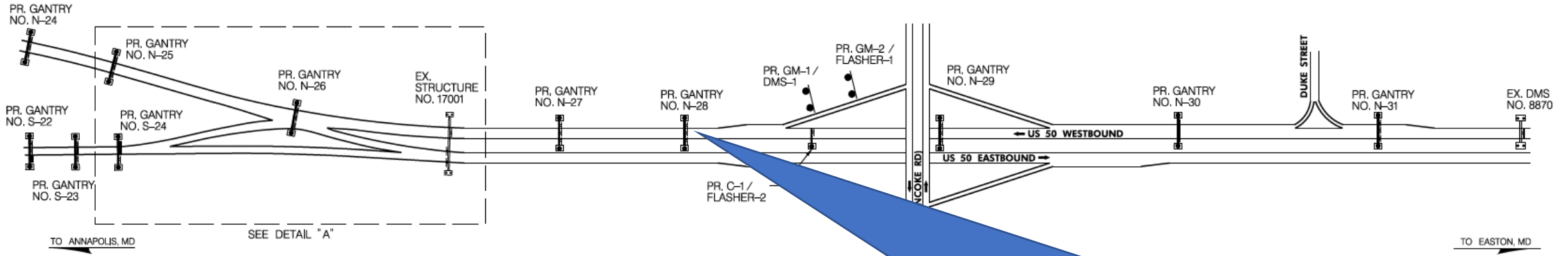
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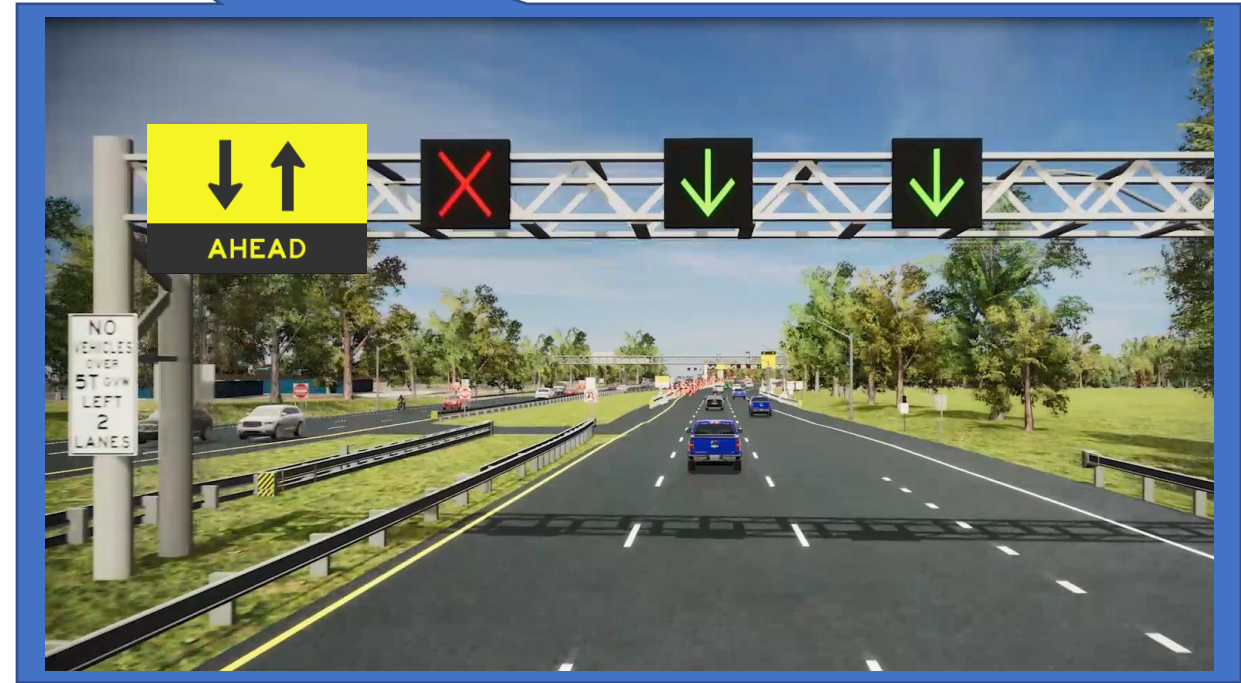
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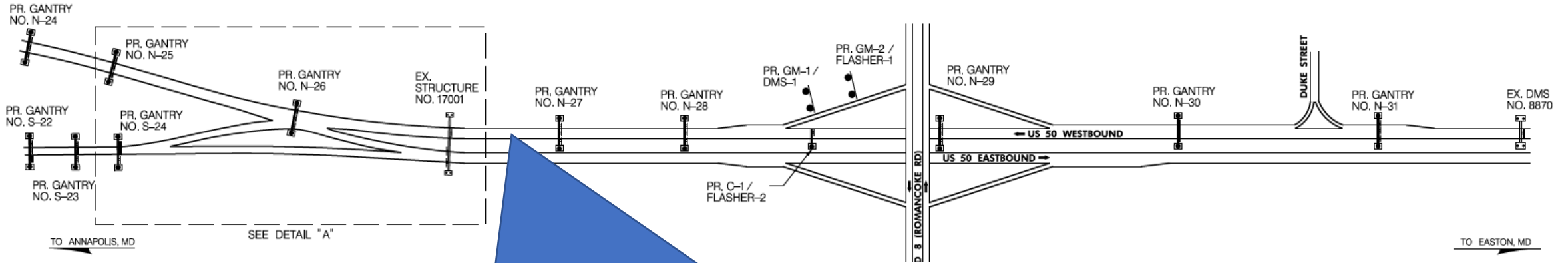
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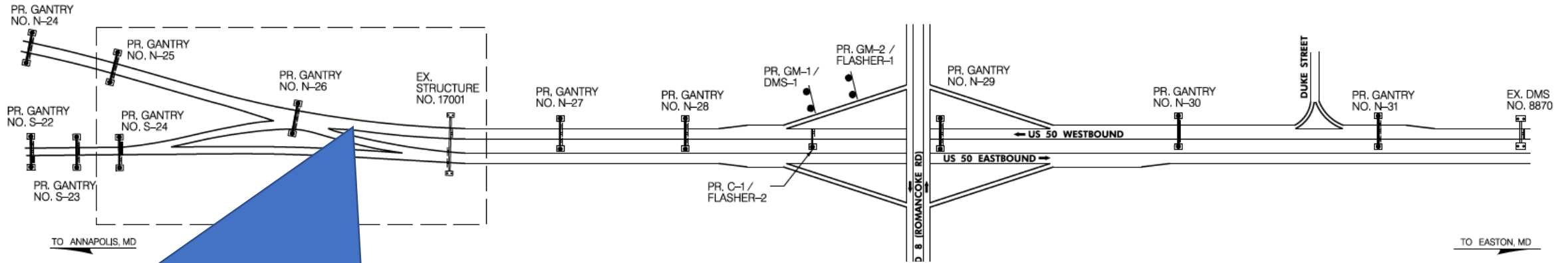


ALCS Eastern Shore Walk-Through



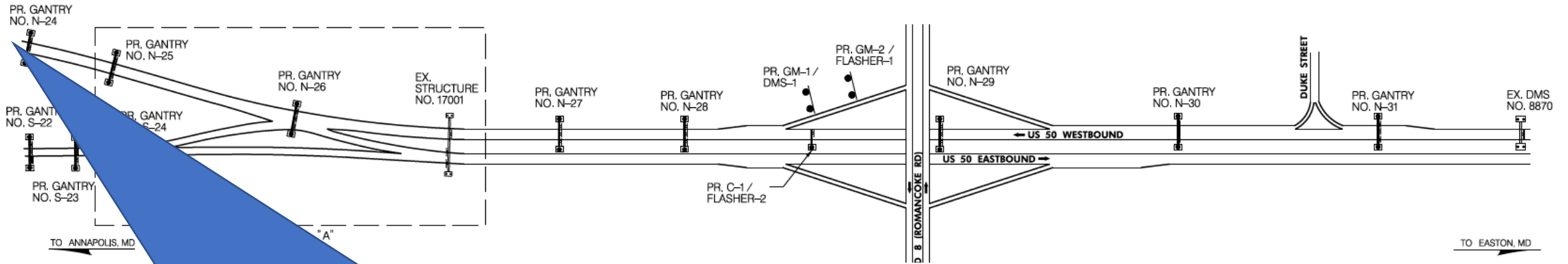
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ALCS Eastern Shore Walk-Through



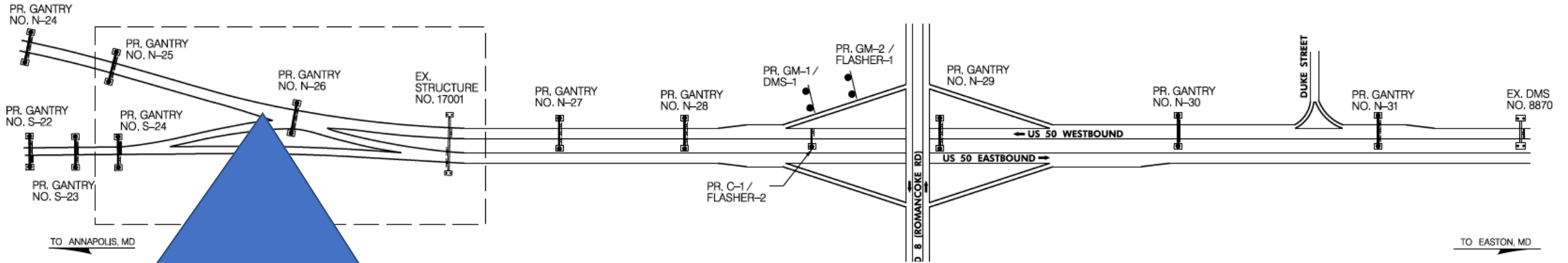
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ALCS Eastern Shore Walk-Through



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Two-way Traffic on Westbound Bridge with Normal Traffic on Eastbound Bridge



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