4 PREFERRED ALTERNATIVE

Substantive changes that have been made to this Final EIS since the publication of the Draft EIS are indicated with underlined text. Substantive changes that have been made in response to public or agency comments are indicated with double underlined text. Public comments and responses are in **Appendix G,** and agency comments and responses are in **Appendix H**.

The Bay Bridge is a critical link in the Maryland transportation network, being the only crossing of the Chesapeake Bay in the state. The existing Bay Bridge does not provide adequate capacity or reliable travel times, hinders mobility in the region, has existing roadway deficiencies, and does not accommodate the USCG required navigational clearance. The MDTA is committed to delivering a financially responsible solution to the challenges in the study area while minimizing environmental impacts.

Each of the six build alternatives meet the study's purpose and need. Although the build alternatives would have a higher initial cost than Alternative A (No-Build), they would require less maintenance and rehabilitation over the next several decades. The cost of a new Bay Bridge would be an important investment for the future of Maryland that would allow the MDTA to build new infrastructure that would provide an improvement to the challenges in the study area.

The traffic analysis described in **Section 3.5** showed that the 8-8-8 and 8-10-8 alternatives (Alternatives D, E, F, and G) would provide relatively modest improvements to queuing and travel time compared to the 6-8-6 alternatives (Alternatives B and C). However, Alternatives B and C would have fewer environmental impacts and a lower cost than Alternatives D, E, F, and G. Furthermore, the southern alignment alternatives (Alternative C, E, and G) would have less environmental impact than the northern alignment alternatives (Alternative B, D, and F).

The complexity and scale of the alternatives, coupled with the key sensitive resources in the area, demands a careful comparison of the potential impacts of the build alternatives in consideration of the study's environmental responsibility objective. Of the build alternatives, Alternative C would have the least impact to cultural, socioeconomic, and most natural resources. Analyses of the environmental impacts and comparison between alternatives is described in **Chapter 5** of this Final EIS.

In the Draft EIS, the MDTA identified Alternative C as the MDTA Recommended Preferred Alternative (RPA). Agencies and the public were given the opportunity to review the MDTA RPA and provide comments during the Draft EIS comment period that lasted from January 23, 2026, through March 9, 2026.

Based on analysis of a wide range of engineering, environmental, and cost considerations, as well as agency and public input, **Alternative C has been identified as the Preferred Alternative** for the Tier 2 Study. Alternative C offers several advantages over the other build alternatives as described below.

The build alternatives differ in the degree of transportation benefit they would provide as well as the likely environmental impacts and cost, as described in the following sections. However, Alternative C would allow the MDTA to deliver a more financially responsible solution because it would maximize the amount of transportation benefit provided for the cost. Alternatives D, E, F, and G would cost at least $2.6 billion more than Alternative C, but the additional benefit they would provide would not outweigh the additional cost.

The MDTA prepared a *Preferred Alternative and Conceptual Mitigation Concurrence Package* to present rationale for the Preferred Alternative and the MDTA's proposed conceptual mitigation measures for resources affected by the Preferred Alternative. Cooperating agencies concurred with the Preferred Alternative and Conceptual Mitigation in May 2026.

4.1 Alternative C: Preferred Alternative

Alternative C (6-8-6 South) meets the study's purpose and need, which is described in **Chapter 2**, by replacing the two existing Bay Bridge spans that have five total travel lanes with two new bridge spans that would have eight total travel lanes (four lanes in each direction).

Alternative C is an 8.3-mile-long improvement that extends along U.S. 50/301 from west of Oceanic Drive to east of Cox Creek to allow sufficient room to transition from six lanes on the approach and departure roadways to eight lanes on the new bridge crossing. The existing roadway alignment and number of lanes beyond these end points on the Western Shore and Eastern Shore would not change. The travel lanes and the median shoulders would be 12 feet wide on the Bay Bridge and approach roadways. The outside shoulders would be 12 feet wide on the approach roadways and 14 feet wide on the Bay Bridge.

Replacing both spans eliminates the need for extensive maintenance and rehabilitation of the existing spans. Alternative C would limit the use of two-way operations; therefore, the number of lanes would remain constant on a regular day and would not be affected by inclement weather, thus improving the reliability of crossing the Bay. The vertical navigational clearance would be increased to meet the height established by the USCG, which is 230 feet to the underside of the main span.

Alternative C could include an optional SUP that would provide connectivity for bicyclists and pedestrians across the Bay Bridge where it currently does not exist. After approval of the Final EIS/ROD, the MDTA will perform financial analysis and determine whether the implementation of an SUP will be financially feasible. If the SUP is included, additional coordination would occur among local, state, and Federal agencies regarding connections, parking, maintenance, and other features, as well as consistency with local pedestrian and bicycle plans, the 2025 Maryland State Transportation Trails Strategic Plan, and MDOT's Complete Streets Policy.

Alternative C includes transit-related improvements that would be made through a financial commitment from the MDTA by providing a one-time investment for local transit agencies near the Bay Bridge. The MDTA would coordinate with MTA, local governments, and local transit agencies to help them determine the potential improvements. Some examples of the potential improvements are listed in **Section 3.3.3**; the MDTA would provide up to approximately $40 million for transit-related improvements. However, these transit agencies would determine the transit-related improvements most beneficial for them at that time, and they would be separate and distinct projects from the Preferred Alternative.

Alternative C costs $14.8 to $16.4 billion **without** the SUP, which is the lowest cost of the build alternatives. The SUP would cost an additional $1.2 billion for a total cost of $16.1 to $17.6 billion **with** the optional SUP, which would still be the lowest cost of the build alternatives. **Table 4-1** provides a breakdown of the design, right-of-way, and construction costs for the Preferred Alternative.

Table 4-1: Preferred Alternative Cost Breakdown

	Total Cost without SUP (Billion $)	Total Cost with SUP (Billion $)
Design	$0.60 to $0.65	$0.65 to $0.70
Right-of-way	$0.02	$0.02
Construction	$14.18 to $15.73	$15.43 to $16.88
Total Cost	**$14.9 to $16.4**	**$16.1 to $17.6**

Additional information and considerations for Alternative C (e.g., tolling, SWM, utilities, truck weigh and inspection stations) are located in **Chapter 3**.

The LOD for Alternative C is displayed on the environmental mapping in **Appendix A-1**, along with the LOD for the other build alternatives.

4.1.1 Environmental Impacts

Alternative C would have the least impact to cultural, socioeconomic, and most natural resources compared to the other build alternatives, as follows:

- Least impact to historic properties.
- Lowest acreage of impact to residential, industrial, open urban land, and institutional properties.
- Least impact to Section 4(f) properties, including park properties.
- Least impact to wetlands and non-tidal surface waters.
- Least impact to historic oyster bottom and submerged aquatic vegetation (SAV).
- Least impact to forested areas, Critical Areas and Critical Area Buffers.

Alternative C would result in an adverse effect to the fewest number of historic properties (two: the Chesapeake Bay Bridge and Skidmore) and would have the smallest area of impact to historic properties (0.9 acre) compared to the other build alternatives (1.3 to 1.9 acres).

Alternative C would result in the least impact to residential, industrial, open urban land, and institutional properties compared to the other build alternatives. Alternative C would have a slightly larger area of impact to commercial properties, and as a result, 0.3 acre more overall right-of-way would be required for Alternative C (20.8 acres) compared to Alternative B (20.5 acres). However, Alternative C would require 60 to 70 acres less than Alternatives D, E, F, and G. See **Chapter 5** for additional environmental impact information.

After approval of the Final EIS/ROD, the MDTA will perform financial analysis and determine whether the implementation of an SUP will be financially feasible. If the SUP is included, there would be additional impacts to resources as shown in **Table 5-66**. If the SUP is implemented, Alternative C would still have the least impact cultural, socioeconomic, and most natural resources compared to other build alternatives.

Section 4(f) of the US Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Fund Act

Alternative C would result in the least overall harm to Section 4(f) properties. It would require the use[17] of the fewest number of Section 4(f) properties, with a potential *de minimis*[18] impact to Sandy Point State Park (public park and historic site), Holly Beach Farm, Broadneck Peninsula Trail, Kent Island Water Trails, Terrapin Nature Park, Eisinger Property, and Stevensville Middle School. Alternative C (and the other build alternatives) would also require permanent Section 4(f) use of the Chesapeake Bay Bridge due to the removal of the historic bridge spans. Alternatives B and C would avoid Section 4(f) use of the Cross Island Trail, Piney Creek Nature Area, Kent Narrows Landing, and Dutch Mill Farm Restaurant, and the other build alternatives would require use of these properties.

Alternative C would have a minor (likely *de minimis*) impact to Sandy Point State Park, whereas Alternative B would require permanent (likely individual) Section 4(f) use of the park due to the encroachment into park property required for the northern bridge alignment. The new bridge piers proposed with Alternative B would impact the southern part of the park's beach area that Alternative C would avoid. Additionally, Alternative B would result in traffic noise increases that extend further into the park, whereas Alternative C would only result in a traffic noise increase along the beach immediately adjacent to the bridge.

Alternatives C, E, and G would convert less park lands protected by Section 6(f) to non-recreational land than Alternatives B, D, and F.

Section 404 of the Clean Water Act

The MDTA and FHWA have considered the Section 404(b)(1) Guidelines (23 CFR 230) when identifying the Preferred Alternative. The guidelines require that activities requiring discharge of dredged or fill material into waters of the U.S. (WOTUS) be the "least environmentally damaging practicable alternative" (LEDPA) to the proposed action. The LEDPA is also referred to as a "no practicable alternative" requirement,[19] and the following questions have been considered:

1. *Is the alternative **practicable**?*
   All build alternatives would address the project purposes and are practicable. Alternative A (No-Build) would not address the project purposes and is therefore not practicable.

2. *If it is practicable, does it cause **less adverse impact to the aquatic ecosystem** than other practicable alternatives?*
   Alternatives B and C would cause less adverse impact to the aquatic ecosystem (WOTUS, including wetlands) than Alternatives D, E, F, and G. Alternative B would have comparable aquatic ecosystem impacts to Alternative C, resulting in 0.3 acre more impacts to wetlands and 30 additional linear feet of impact to non-tidal surface waters. Alternatives B and C

[17] A Section 4(f) use is defined by 23 CFR 774.17 as a permanent incorporation of land into a transportation facility; a temporary occupancy of land that is adverse in terms of the Section 4(f) preservation purpose; or a constructive use as determined by the criteria in 23 CFR 774.15.
[18] Per FHWA Section 4(f) regulations (23 CFR 774), for historic sites, a *de minimis* impact means no historic property is affected or there will be "no adverse effect"; for parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the features, attributes, or activities qualifying the property for Section 4(f) protection.
[19] AASHTO, "Applying the Section 404(b)(1) Guidelines in Transportation Project Decision-Making" (2016).

would both impact 290 linear feet of tidal surface waters, but Alternative C would impact slightly more area of tidal surface waters than Alternative B – 132.9 acres compared to 131.8 acres – because Alternative C would require a slightly longer bridge given the Chesapeake Bay shoreline location. Overall, Alternative B would have 0.8 acres less impact to the aquatic ecosystem than Alternative C.

3. *If it is practicable and causes less adverse impact to the aquatic ecosystem, does it have **other significant adverse environmental consequences**?*
   Although Alternative B would have slightly less impact to the aquatic ecosystem compared to Alternative C, it is not the Preferred Alternative because it would cause other significant adverse environmental consequences that Alternative C avoids. Alternative B would require bridge piers within the historic Sandy Point State Park, resulting in permanent acquisition of a portion of the public beach and introducing a new vertical clearance restriction to waterway access to Mezick Pond. These improvements would result in 1.0 acre of impact within the park, a Section 4(f) permanent use (i.e., permanent incorporation of land into a transportation facility), as well as conversion of land protected under Section 6(f). Alternative C would have less impact to park land compared to Alternative B. Alternative B would also directly impact 0.7 acre of historic and existing SAV beds, whereas Alternative C avoids direct impacts to SAV. Alternative B would also result in greater impacts to horseshoe crab habitat and historic oyster bottom than Alternative C.

Therefore, based on the review completed to date, the MDTA and FHWA suggest that the Section 404 LEDPA for the Tier 2 Study is Alternative C. The USACE stated on May 13, 2026, that they concurred with MDTA's initial determination that Alternative C appears to be the LEDPA. The USACE and USEPA would make the final LEDPA determination following their further review during final design.

4.1.2 Traffic Analysis for Alternative C

All build alternatives would limit the need for two-way operations, thus improving reliability for crossing the Bay. All build alternatives would also avoid the bottlenecks projected under Alternative A (No-Build) at the Bay Bridge under NSWD. Under all build alternatives in NSWD, there would be a bottleneck downstream of the Bay Bridge heading westbound, but no bottlenecks eastbound. In SWED, there would be bottlenecks downstream of the Bay Bridge in both directions for all build alternatives; however, Alternative A (No-Build) would have the bottleneck starting at the Bay Bridge. With the build alternatives, removing the bottleneck caused by the existing Bay Bridge would reveal bottlenecks at/near the study area end points. If these other bottlenecks on U.S. 50/301 were addressed, but no changes were made to the Bay Bridge, the Bay Bridge would still be a bottleneck.

Alternative C (Preferred Alternative) eliminates bridge bottlenecks on NSWD for both directions of travel and for SWED in the eastbound direction. A traffic analysis comparison between Alternative C (Preferred Alternative) and Alternative A (No-Build) shows that Alternative C substantially improves conditions during NSWD by eliminating projected queues and improving overall travel time, reliability, and system resiliency. Under NSWD conditions, Alternative C would eliminate the traffic queues forecasted by the traffic analysis modeling for Alternative A.

The MDTA commits to coordinating with SHA and local agencies to help them evaluate roadway needs and traffic operations along U.S. 50/301 approaching the Bay Bridge, outside of this study. This includes SHA's U.S. 50 from the Bay Bridge to Ocean City Project and other potential future

projects that would address traffic queues during SWED, which impact the U.S. 50/301 corridor-wide network.

Alternative C would generally perform better than Alternative A (No-Build) and better than or similar to Alternatives B, D, E, F, and G. Based on an analysis of the **queues** for all alternatives, Alternative C would provide the following operational benefits:

- **Eastbound NSWD:** There would be no bottlenecks approaching or downstream of the Bay Bridge.
- **Westbound NSWD:** Queues would be shorter beyond the Bay Bridge (2.8 miles) compared to Alternative A (No-Build) (3.9 miles). There would be no bottlenecks approaching the Bay Bridge compared to Alternative A (No-Build), which would have a 2.4-mile queue.
- **Eastbound SWED:** The queues beyond the Bay Bridge (4.4 miles) would be the shortest compared to the other build alternatives (4.4 to 11.1 miles). There would be no queues approaching the Bay Bridge compared to Alternative A (No-Build), which would have a queue longer than 7.1 miles.
- **Westbound SWED:** Under Alternatives A, B, C, D, and E the queues would extend beyond the study limits. The queue beyond the Bay Bridge (8.7 miles) would be slightly shorter compared to the other build alternatives (8.7 to 9.3 miles).

Based on an analysis of the **travel times** for all alternatives, Alternative C would provide the following operational benefits within the study area:

- **Eastbound NSWD:** Overall travel time through the entire study limits from MD 2/450 to the U.S. 50/301 split (25 minutes) and travel time approaching the Bay Bridge from MD 2/450 to the Bay Bridge (8 minutes) would be shorter than Alternative A (No-Build) (33 minutes total, 17 minutes approaching the Bay Bridge) and approximately the same as the other build alternatives (23 to 25 minutes total, 6 to 8 minutes approaching the Bay Bridge).
- **Westbound NSWD**: Overall travel time through the study area (36 minutes) would be shorter than Alternative A (No-Build) (53 minutes). Travel time approaching the Bay Bridge from the U.S. 50/301 split to the Bay Bridge (9 minutes) would be shorter than Alternative A (No-Build) (20 minutes) and approximately the same as the other build alternatives (9 to 10 minutes).
- **Eastbound SWED:** Overall travel time through the study area (40 minutes) and travel time approaching the Bay Bridge (9 minutes) would be shorter than Alternative A (70 minutes total, 54 minutes approaching the Bay Bridge) and shorter than or approximately the same as the other build alternatives (40 to 85 minutes total, 6 to 10 minutes approaching the Bay Bridge).
- **Westbound SWED:** Overall travel time through the study area (126 minutes) would be shorter than the other build alternatives (126 to 154 minutes); however, like all the build alternatives, the overall westbound SWED travel times would be longer than Alternative A (92 minutes). Travel time approaching the Bay Bridge (75 minutes) would be approximately the same as Alternative A (No-Build) (79 minutes). All alternatives, including the No-Build, would have average travel speeds below 10 mph approaching the

bridge, predominantly caused by the bottleneck at/near the west end of the study limits and the resulting queues could extend back across the Bay Bridge. The longer westbound SWED travel times associated with Alternative C are a result of the additional lanes allowing more traffic to cross the Bay and approach the bottleneck at/near the west end of the study limits.

Throughput is the amount of traffic that can get across the Bridge and is expressed as a percentage of the traffic that wants to cross the Bay Bridge. Based on an analysis of throughput for all alternatives, Alternative C would provide the following operational benefits:

- **Eastbound and Westbound NSWD:** Throughput (90 to 100 percent) would be higher than Alternative A (No-Build) (80 to 90 percent) and within the same range as the other build alternatives.
- **Eastbound SWED:** Throughput (80 to 90 percent) would be higher than Alternative A (No-Build) (60 to 70 percent).
- **Westbound SWED:** Throughput (80 to 90 percent) would be higher than Alternative A (No-Build) (70 to 80 percent) and within the same range as the other build alternatives.

4.2 Alternatives Not Preferred

Alternative A (No-Build) serves as the baseline condition for alternatives comparison. As discussed previously, Alternative A would have a shorter westbound SWED travel time. However, it is not the Preferred Alternative because it would not meet the overall Tier 2 Study purpose and need. The Bay Bridge is and would remain the major bottleneck in the study area, under Alternative A (No-Build), even with two-way operations. Currently, with two-way traffic operations, the Bay Bridge is not a bottleneck under NSWD, but it is a bottleneck under SWED. If Alternative A (No-Build) were selected, the Bay Bridge would become a bottleneck under NSWD, and a larger bottleneck than it is today under SWED, even with two-way operations.

Alternative A (No-Build) would not increase roadway capacity or mobility, correct roadway deficiencies, or provide the vertical navigational clearance established by the USCG. Alternative A (No-Build) would also require substantial maintenance and related lane closures that would further increase congestion over time and compound existing traffic congestion, mobility, and roadway deficiency issues. It would require the MDTA to continue to frequently operate two-way traffic during peak periods, resulting in continued concerns with operations due to the limitations of two-way traffic. Alternative A (No-Build) would have the lowest environmental impact, but it would not meet the Tier 2 Study purpose and need and therefore, would not be reasonable.

Alternatives B, D, E, F, and G are not preferred but would meet the Tier 2 Study purpose and need by replacing the two existing Bay Bridge spans with two new spans. They could also include an optional SUP that would provide connectivity for bicyclists and pedestrians across the Bay Bridge where it does not currently exist. Alternatives D, E, F, and G would offer some advantages over Alternative C; however, the larger footprint and limited additional transportation benefit would not be enough to justify the additional cost of at least $2.6 billion.

The following points provide a brief overview of why the other build alternatives are not preferred due to the traffic operations, followed by a discussion of the environmental impacts.

- Alternative B would provide the same operational benefits as Alternative C.

- Eastbound on a non-summer weekday, Alternatives D, E, F, and G would not provide any improvement in bottlenecks over Alternative C and travel times would be approximately the same.
- Westbound on a non-summer weekday, Alternatives D, E, F, and G would not provide any improvement in bottlenecks over Alternative C approaching the Bay Bridge. While there would be additional queuing downstream of the Bay Bridge in Alternative C compared to Alternatives D, E, F, and G, the congestion would not be caused by the Bay Bridge but rather a downstream bottleneck. The travel times for Alternatives D, E, F, and G would be about 11 minutes shorter between the Bay Bridge and MD 2/MD 450.
- Eastbound on a summer weekend day, Alternatives D, E, F, and G would not provide any improvement in queuing over Alternative C and would have additional queuing both approaching the Bay Bridge (Alternatives D and E) and downstream of the Bay Bridge (Alternatives D, E, F, and G). Total travel times through the corridor would be about 37 to 45 minutes longer for Alternatives D, E, F, and G than for Alternative C.
- Westbound on a summer weekend day, Alternatives D and E would not provide any improvement in queuing over Alternative C. While Alternatives F and G would provide an improvement in queuing over Alternative C, the primary cause of congestion in this area would not be caused by the Bay Bridge, but rather a bottleneck downstream of the Bay Bridge. The total travel times through the corridor would be about 10 to 28 minutes longer for Alternatives D, E, F, and G than for Alternative C.

Alternative B would have the same typical section as Alternative C, but it would follow a northern bridge alignment (one bridge span north of the existing spans and one bridge span in between the existing spans). Alternative B would have similar impacts to Alternative C, and in some cases slightly lower impacts; however, Alternative B would result in greater impacts to wetlands, Critical Areas and buffers, SAV (including coverage recorded in the last 5 years and historic SAV beds), horseshoe crab habitat, and historic oyster bottom. Additionally, Alternative B would result in greater impacts to historic and park properties, including Sandy Point State Park, due to the bridge alignment crossing over the southern part of the park's beach area. Additional details on the impacts for Alternative B are located in **Table 5-65** and **Table 5-66** in **Chapter 5**.

Alternative D would follow a northern bridge alignment and increase the number of lanes across the Bay Bridge from five to eight (four in each direction) and the number of lanes on the approach and departure roadways from six to eight (four in each direction). **Alternative E** would have the same typical section as Alternative D, but it would follow a southern bridge alignment. The increased number of lanes on the approach roadways would require a longer transition area, necessitating a 20.4-mile-long project that would require design modifications, reconfigurations, and major reconstruction at several interchanges and bridges. Alternatives D and E would cost substantially more than Alternatives B and C.

Alternative F would follow a northern bridge alignment and increase the number of lanes across the Bay Bridge from five to ten (five in each direction) and the number of lanes on the approach and departure roadways from six to eight (four in each direction). **Alternative G** would have the same typical section as Alternative F, but it would follow a southern bridge alignment. Similar to Alternatives D and E, the number of lanes on the approach roadways would require a longer transition area, necessitating a 20.4-mile-long project that would require design modifications,

reconfigurations, and major reconstruction at several interchanges and bridges. Alternatives F and G would cost substantially more than Alternatives B and C.

Alternatives D, E, F, and G would have the highest impacts to aquatic and on-land natural, cultural, and socioeconomic resources due to the widening required to accommodate the additional lanes on the approach and departure roadways. Compared to Alternative C, these alternatives would result in greater impacts to waters and wetlands, floodplains, forested areas, FIDS habitat, SAV (including coverage recorded in the last 5 years and historic SAV beds), the Habitat Connectivity Network (HCN), oyster sanctuaries and historic oyster bottom, public shellfishery areas, farmland soils, and local protected lands and environmental trust easements. Alternatives D, E, F, and G would impact approximately 235 more acres of Critical Areas than Alternative C. Compared to Alternative C, these alternatives would also have an adverse effect to more historic properties (3 or 4 properties compared to 2 for Alternative C), more community facilities (26 properties compared to 8 properties for Alternative C), more business displacements (7 business displacements compared to 2 business displacements for the Alternative C), and more residential displacements (1 residential displacement for Alternatives F and G compared to 0 for Alternative C). The greater impacts for Alternatives D, E, F, and G would result in more right-of-way acquisition compared to Alternative C, requiring more than 80 acres of right-of-way and partial acquisition from 211 to 215 properties, versus approximately 21 acres of right-of-way from 48 properties for Alternative C. Additional details on the impacts for Alternatives D, E, F, and G are located in **Table 5-65** and **Table 5-66** in **Chapter 5**.

4.3 Refinements to the Preferred Alternative

The Draft EIS identified Alternative C as the MDTA RPA. After release of the Draft EIS and consideration of input from the public and agencies, Alternative C was identified as the Preferred Alternative. Additional engineering refinements were then made to the Preferred Alternative to further avoid and minimize impacts to environmental resources. The refined Alternative C is herein referred to as the "Preferred Alternative."

The following refinements were made to Alternative C:

- On the Western Shore, the eastbound lane transition from three to four lanes was shifted approximately 600 feet to the east. This change avoided one business displacement (automotive retail center) adjacent to Whitehall Road, avoided one partial commercial property acquisition in Jemal's Bay 50 Shopping Center, reduced Critical Area impacts, and reduced HCN impacts.
- On the Western Shore, a potential SWM pond in the southwest corner of Sandy Point State Park was removed. This change avoided the roadway-related impact to Sandy Point State Park, which is a historic site and Section 4(f) and Section 6(f) property, and reduced impacts to Critical Areas, Forest Interior Dwelling Species (FIDS) habitat, and HCN impacts.
- On the Western Shore, the business displacement (tree/lawn care) adjacent to Log Inn Road that was identified in the Draft EIS has been reclassified as a partial acquisition because the existing building will not be impacted.

- On the Western Shore, the proposed Skidmore Drive alignment was shifted to the north and a retaining wall was added to avoid impacts to Holly Beach Farm, which is a historic site and Section 4(f) and Section 6(f) property, and to reduce impacts to Critical Areas and FIDS habitat.
- On the Eastern Shore, along westbound U.S. 50/301, the linear SWM facility adjacent to Island Plaza, west of Duke Street, was removed. This change reduced impacts to the primary parking lot for this business plaza and mapped Sensitive Species Project Review Areas (SSPRA).

In summary, the above refinements to Alternative C avoid impacts to Sandy Point State Park and Holly Beach Farm; avoid two business displacements; minimize impacts to historic properties; and reduce impacts to Critical Areas, FIDS habitat, the HCN, and mapped SSPRA. The Preferred Alternative (Refined Alternative C) would not convert any park lands protected by Section 6(f) to non-recreational land.

The LOD for the Preferred Alternative is displayed on the environmental mapping in **Appendix A-2**. The environmental mapping for the Preferred Alternative is also in the map series in **Figure 4-1**, located at the end of **Chapter 4**.

Table 4-2 provides a comparison of the impacts from Alternative C to impacts from the Preferred Alternative. Impact numbers that are reduced for the Preferred Alternative (Refined Alternative C) from what was presented in the Draft EIS for the MDTA RPA (Alternative C) are highlighted in green.

Table 4-2: Comparison of Potential Impacts between Alternative C and the Preferred Alternative (Refined Alternative C)

Resource Type	Resource	Unit	Alternative C	Preferred Alternative (Refined Alt. C)
Community Resources	Commercial Displacements	#	2	0
	Total Property Impact	#	48	45
		acres	20.8	18.2
	Community Facilities	#	8	7
		acres	9.5	7.8
	Number of Parks	#	4	2
	Park Property Area	acres	2.4	0.8
Noise	Noise Sensitive Areas	#	28	28
Historic Resources	Number of Historic Properties[1]	#	3	2
	Historic Property Area	acres	0.9	0.4
Other Resources/ Preservation Areas	Number of Section 4(f) Properties	#	9	6
	Section 4(f) Properties	acres	2.7	0.9
	Number of Section 6(f) Properties	#	2	0
	Conservation Easements	acres	1.7	0
	Habitat Connectivity Network (HCN)	acres	0.4	0.2
	Local Protected Land	acres	0.7	0.7

[1] Historic properties also include the Chesapeake Bay Bridge. This historic bridge is not included in the impact area calculations.

Resource Type	Resource	Unit	Alternative C	Preferred Alternative (Refined Alt. C)
Natural Resources	100-Year Floodplain Area	acres	35.6	35.6
	Wetlands (Field Delineated)	acres	5.6	5.6
	Surface Waters: Non-tidal	acres	0.1	0.1
		linear feet	670	670
	Surface Waters: Tidal[2]	acres	1.0	1.0
		linear feet	290	290
	Chesapeake Bay Tidal Water Impacts[3]	acres	131.9	131.9
	Critical Areas	acres	164.1	162.5
	Critical Area (100-ft) Buffer	acres	17.7	17.7
	Public Shellfishery Areas	acres	6.1	6.1
	Oyster Sanctuaries	acres	0.6	0.6
	Natural Oyster Bars	acres	10.2	10.2
	Essential Fish Habitat	acres	136.0	136.0
	FIDS Habitat	Acres	12.1	11.4
	Mapped SSPRA	#	7	7
		acres	109.4	109.1
	Forest Areas[4]	acres	59.5	57.7
	Impervious Surface	acres	95.7	99.6[5]

[2] Impacts do not include the Chesapeake Bay proper.

[3] Includes impacts from new bridge construction and old bridge pier removal.

[4] See Section 5.9 for an explanation of the updated forest impacts.

[5] Proposed new impervious surface increased due to the shift of Skidmore Drive.

4.3.1 Traffic Analysis for the Preferred Alternative

The MDTA conducted additional VISSIM analyses for the Preferred Alternative (Refined Alternative C) to incorporate the change in the location of the eastbound transition from three lanes to four lanes on the Western Shore. The results of these additional analyses for the Preferred Alternative are summarized in **Table 4-3** to document changes to the results since publication of the Draft EIS.

Table 4-3: Summary of Revised 2045 Traffic Results for the Preferred Alternative*

	NSWD	SWED
Queuing	EB, queuing would not develop at the western end of the Bay Bridge during the PM peak and operational deficiencies would not be expected. Traffic would be metered by the bottleneck west of the study area, resulting in less traffic reaching the Bay Bridge. WB, a max queue of approx. 3.8 mi. would occur during the AM peak starting from the Bay Dale Drive interchange due to the amount of traffic entering U.S. 50/301 on the Broadneck Peninsula. This queue would be >1.0 mi. for approx. 5 hours. There would be no queue approaching the Bay Bridge.	EB, queuing would not develop at the western approach to the Bay Bridge during a summer Friday. However, there would be a bottleneck at the MD 2/MD 450 interchange where the entrance ramp joins U.S. 50/301. This bottleneck would meter traffic into the study area and toward the Bay Bridge, resulting in less traffic at the Bay Bridge. EB at the U.S. 50/301 split near the eastern limit of the study area, a queue would form from the U.S. 50 merge, backing up a maximum of 3.5 mi. into the study area. This would be similar to the queues exhibited in Alternatives D/E (8-8-8) and F/G (8-10-8) that would extend from the U.S. 50 merge. Queues would be > 1 mi. for 7 hours. WB during summer Sundays, a bottleneck would form at the Bay Dale Drive interchange that would cause slow speeds and result in queuing. This queuing would continue to grow throughout the day and would extend across the Bay Bridge and onto the Eastern Shore, a max. length > 19.7 mi within the study area. A queue longer than 1.0 mile would last 12 hours. Additionally, WB, there would be a bottleneck east of the study area that would meter traffic approaching the Bay Bridge, resulting in less traffic reaching the Bay Bridge and the Western Shore.
Travel time	The maximum total travel time would be 24 min. EB and 44 min. WB. Travel time would be less than Alternative A (No-Build) by approximately 9 min. EB and 9 min. WB. The travel times approaching the Bay Bridge would be less than half of Alternative A (8 min. compared to 17 min. EB, and 9 min. compared to 20 min. WB). The speeds approaching the Bay Bridge EB would be lower than downstream (37.5 vs. 55.1 mph). WB, the speeds would be higher approaching the Bay Bridge than on the downstream side (57.3 vs. 32.8 mph)	The maximum total travel time would be 39 min. EB and 126 min. WB. EB, this travel time would be a little more than half of Alternative A (No-Build). The travel time approaching the Bay Bridge on both shores would be less or about equal to Alternative A (No-Build). The EB speeds would average approx. 33 mph through the study area. However, WB, the travel time would be approximately 34 min. longer than Alternative A (No-Build). The additional lane on the Bay Bridge would allow more traffic to cross the Bay and approach the bottleneck at/near the west end of the study limits. The speeds would average approx. 10 mph traveling WB.

	NSWD	SWED
Throughput	The throughput for both EB and WB would range from 90% to 100%.	The throughput for both EB and WB would range from 80% to 90%. This means that 10% to 20% of the traffic that wants to cross the Bay Bridge in the peak volume hour would not be able to cross it.

**Maximum queue lengths and travel times were updated for the Preferred Alternative, based on small refinements to several of the VISSIM model's inputs (such as routings for vehicles leaving U.S. 50/301).*

As noted in **Section 3.5.2.3**, each lane on the Bay Bridge has a lower capacity, by a factor of approximately 30 percent, than the approach roadways. Factors that reduce capacity on the Bay Bridge include the uphill grade, lack of shoulders, horizontal curve, speed limit, and lane restrictions for heavy vehicles. The physical environment, including the view from the Bay Bridge, also contributes to the reduction in capacity. While some of these factors are expected to be improved by the Preferred Alternative, including a reduction in the uphill grade and the provision of shoulders, some of them are expected to remain. In particular, the physical environment will be unchanged. As a result, a lane on the new Bay Bridge in the Preferred Alternative is still expected to have a lower capacity than a lane on the approach roadways. The Preferred Alternative will address this by providing four lanes in each direction on the Bay Bridge, while tying into the existing three lanes in each direction on U.S. 50/301. It is anticipated that, if traffic moves smoothly in three lanes approaching the Bay Bridge, it will move smoothly in the four lanes on the Bay Bridge and also move smoothly in the three lanes beyond the Bay Bridge. This condition is expected on non-summer weekdays in 2045 traveling in both directions, and on summer Fridays traveling eastbound. Congestion is expected in the westbound direction on summer Sundays due to a bottleneck beyond the Bay Bridge at Bay Dale Drive, which would be expected to back up through the westbound lane drop, and across the Bay Bridge.

For the reasons described above, congestion is not expected in 2045 at the new westbound merge proposed just west of Oceanic Drive and the new eastbound merge proposed just east of Cox Creek. Thus, diversions to local roads due to the proposed merges are not expected.

4.3.2 Stormwater Management (SWM)

SWM treatment requirements for the Preferred Alternative (Refined Alternative C) are slightly greater than for Alternative C due to the shift of Skidmore Drive. The proposed new impervious area and reconstructed impervious area for the Preferred Alternative results in an Impervious Area Requiring Treatment (IART) of 180 acres, more than the 175 acres in Alternative C. The proposed Environmental Site Design volume (ESDv) also increased from 1,061,000 cf to 1,159,000 cf for the Preferred Alternative.

4.3.3 Summary of Environmental Impacts

The environmental consequences of the Preferred Alternative and proposed mitigation measures, where applicable, are summarized in **Table 4-4**. As discussed in **Section 4.3**, additional refinements were made to Alternative C to avoid and minimize impacts to resources. **Table 4-4** includes impacts from the Preferred Alternative, including those resulting from the refinements to Alternative C. The potential environmental consequences for the optional SUP are summarized independently from the Preferred Alternative. Further minimization of environmental impacts and refinements to mitigation measures will be developed during the final design phase, in coordination with agencies and the public.

Table 4-4: Potential Environmental Consequences of the Preferred Alternative and Mitigation Measures

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Population and Demographics *Final EIS Section 5.1.1*	The Preferred Alternative avoids residential displacements. The Preferred Alternative accommodates increased traffic from projected regional population growth through 2040.	The optional SUP would not impact the existing population or demographic makeup of the region.	No impact, no mitigation is proposed.	Not applicable	Not applicable
Housing *Final EIS Section 5.1.2*	The Preferred Alternative requires right-of-way acquisition of residential areas to accommodate proposed roadway widening. There are no residential displacements or demolitions. The Preferred Alternative will not bisect any residential areas or create impediments to travel through residential communities. The Preferred Alternative will not affect the overall distribution of age, type, or tenure of housing stock.	The optional SUP would not impact existing housing in the area.	All residential property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and state requirements.	MDTA	Final Design
Business, Economics, and Employment *Final EIS Section 5.1.3*	The Preferred Alternative avoids business displacements but requires partial right-of-way acquisition of business properties. Construction and operations and maintenance spending represents substantial capital investment in the local economy. The economic capital costs impact includes $15.6 billion in	The optional SUP would generate additional foot traffic to nearby businesses and parks and could attract additional tourism spending to the area.	All business property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and state requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	net capital expenditure, 61,337 in employment, $4.2 billion in earnings, $12.8 billion in value added, and $23 billion in output. The economic O&M costs impact includes $390 million in net capital expenditure, 1,533 in employment, $106 million in earnings, $322 million in value added, and $577 million in output. Construction and demolition of the Bay Bridge would produce localized but economically meaningful impacts on fishing, crabbing, and oystering activities in the immediate area. While these impacts are expected to be localized, their significance would be heightened due to the multi-year construction timeline, resulting in temporary revenue losses or increased uncertainty for seafood businesses reliant on these activities near the Bay Bridge.		Notification protocols will be followed throughout the construction duration to inform recreational and commercial fisheries of restriction periods.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Community Facilities *Final EIS Section 5.1.4*	The Preferred Alternative impacts seven community facilities totaling 7.8 acres: one educational facility partial acquisition, one place of worship partial acquisition, one park/recreational area partial acquisition, one recreational trail partial acquisition and one recreational trail temporary impact, two transportation facility partial acquisitions, and one public utility facility partial acquisition. Generally, the Preferred Alternative requires acquisition of undeveloped strips of land from properties along U.S. 50/301. While some driveways and parking may be impacted, these impacts are not expected to restrict access to facilities.	The optional SUP would facilitate connections to community facilities, particularly existing and proposed trails and recreational facilities. The optional SUP would impact 1.2 acres of additional community facility land at two community facilities (Sandy Point State Park and Terrapin Nature Park).	All property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and state requirements. As detailed in the *Final Section 4(f) Evaluation*, mitigation for impacts to recreational sites is not required for the Preferred Alternative because the Preferred Alternative will not adversely affect the activities, features, or attributes that qualify the properties for Section 4(f) protection.	MDTA	Final Design
Land Use *Final EIS Section 5.2.1*	The Preferred Alternative will convert 17.4 acres of land from low-density residential, medium-density residential, high-density residential, commercial, institutional, open urban land, and other land uses to transportation land use. This includes 0.7 acres of protected land that would be converted to transportation right-of-way. The Preferred Alternative primarily converts strips of land from undeveloped areas or areas of landscaping and trees, and paved areas associated with commercial and other	The optional SUP would convert 1.2 acres of land from institutional, urban land, and other land uses. The optional SUP is consistent with Walk & Roll Anne Arundel! (2023), Queen Anne's County Pedestrian and Bicycle Master Plan (2024), and other local plans.	All property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and state requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	transportation developments along U.S. 50/301 to transportation land use. Improvements are compatible with planned and future development in Anne Arundel and Queen Anne's counties.				
Right-of-Way, Property, and Communities *Final EIS Section 5.2.2, 5.2.3*	The Preferred Alternative requires temporary or permanent right-of-way from 45 properties. These properties are located in Cape St. Claire and Broadneck on the Western Shore, and Kent Island on the Eastern Shore. The Preferred Alternative will improve transportation capacity, reliability, and mobility at the Bay Bridge and its approaches. The Preferred Alternative primarily converts strips of land from undeveloped areas or areas of landscaping and trees, and paved areas associated with commercial and other transportation developments along U.S. 50/301 to transportation land use. While some driveways and parking may be impacted, these impacts are not expected to restrict access to facilities.	Two properties would be impacted by the optional SUP; these properties will already be impacted by the Preferred Alternative. The optional SUP would enhance safe pedestrian and bicycle access and would connect the Western and Eastern Shores.	All property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and state requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Visual Resources *Final EIS Section 5.3*	The Preferred Alternative has visual impacts due to clearing vegetation which will make the road more visible from surrounding land uses and the increased height and lighting of a new bridge across the Chesapeake Bay, which will have visual or aesthetic impacts. Construction will temporarily disrupt the landscape with cranes, scaffolding, and other equipment altering the view. The Severn River is outside the study limits just west of MD 2/MD 450 and is designated as a State Scenic River. While outside the study limits, the increased height of a new bridge may be visible from the Severn River, particularly at the mouth of the river.	The optional SUP would have minimal additional visual impact since it would be constructed on the new bridge structure. The optional SUP would provide new views of the Chesapeake Bay and nearby shorelines from the new bridge.	The design of the highway elements and new Bay Bridge could incorporate aesthetic architectural elements that enhance visual appeal. This may include landscaping enhancements on the approach roadways and aesthetic architectural elements on a new bridge, as well as the lighting design.	MDTA	Final Design
			The MDTA will coordinate with MDNR and the Severn River Commission as design progresses regarding potential effects to the scenic river.	MDTA	Final Design
			The MDTA will develop a bridge lighting plan during the design phase. Mitigation measures will focus on minimizing light pollution and ecological impacts, in consideration of DarkSky International guidelines. Warm-toned, low-intensity, and programmable lighting can help protect nocturnal species, migratory birds, and sensitive habitats while maintaining scenic views.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Cultural Resources (Historic Architecture and Archaeology) *Final EIS Section 5.4*	17 architectural historic properties were identified in the APE. The Preferred Alternative will adversely affect the Chesapeake Bay Bridge (William Preston Lane, Jr. Memorial Bridge) and Skidmore. The Preferred Alternative avoids impacts to identified archaeological historic properties; through the Section 106 consultation process, the MDTA will continue to identify and evaluate archaeological resources.	The optional SUP would not result in additional adverse effects to identified historic properties.	FHWA and the MDTA executed a Section 106 Programmatic Agreement (PA) to resolve adverse effects to historic properties from the Preferred Alternative in accordance with Section 106 of the NHPA. The PA identified mitigation commitments for the Chesapeake Bay Bridge and Skidmore. Mitigation for the Chesapeake Bay Bridge includes photographic and digital documentation, interpretive panels, online interpretive content, and a playground/outdoor interactive interpretive area. Skidmore mitigation includes drafting a Multiple Property Documentation form for Broadneck Peninsula descendant communities, interpretive panels, and a booklet with information about the history of Skidmore and Broadneck Peninsula descendant communities.	MDTA, FHWA, and other PA Signatories as applicable	Final Design through Post-Construction
			As stated in the PA, the MDTA will identify and evaluate archaeological resources with an underwater archaeological survey and additional terrestrial survey if needed.	MDTA, FHWA, and other PA Signatories as applicable	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Section 4(f) and Section 6(f) Resources *Final EIS Section 6 and Final Section 4(f) Evaluation (Appendix E)*	The Preferred Alternative impacts a portion of five recreational properties and one historic site. The Preferred Alternative will not adversely affect the activities, features, or attributes that qualify the recreational properties for protection under Section 4(f). The officials with jurisdiction (OWJs) over the recreational properties concurred with this determination (see Appendix B of the *Final Section 4(f) Evaluation*). On June 22, 2026, FHWA subsequently signed the OWJ *de minimis* impact letters for the five recreational properties. The Preferred Alternative includes demolition/removal of the historic Chesapeake Bay Bridge, which is considered a 'use', and is documented in an individual Section 4(f) evaluation. Although there would be an adverse effect per Section 106 to the Skidmore	The optional SUP would impact 0.6 acre of Sandy Point State Park and 0.6 acre of Terrapin Nature Park. A Section 6(f) conversion is not anticipated for Sandy Point State Park because the SUP would be expected to enhance and support public outdoor recreational use.	Mitigation measures for the historic Chesapeake Bay Bridge are noted in the Cultural Resources commitments in this table, and described in the Section 106 PA (Refer to Final EIS **Appendix D**). Minimization and mitigation measures for the historic property were identified in coordination with MHT and other Section 106 consulting parties.	MDTA	Final Design through Post-Construction
			As detailed in the *Final Section 4(f) Evaluation*, mitigation for impacts to recreational sites is not required for the Preferred Alternative because the Preferred Alternative will not adversely affect the activities, features, or attributes that qualify the properties for Section 4(f) protection.	Not applicable	Not applicable

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	Historic District, the Selected Alternative would not require a Section 4(f) use of the District. There would be no physical impact to properties which contribute to the District and no constructive use. The Preferred Alternative avoids land acquisition from Section 6(f) properties. The Preferred Alternative avoids physical impacts to Sandy Point State Park; however, during in-river construction directly adjacent to the Chesapeake Bay western shoreline, the Preferred Alternative will temporarily restrict navigation at the entrance to Mezick Pond.		The MDTA will coordinate with MDNR, USCG, marina operators, and emergency services to determine timing, duration, and extent of any access restrictions to Mezick Pond. The MDTA will develop and coordinate a Maintenance of Access Plan with MDNR during design that includes: a schedule of anticipated activities that could result in temporary closures of Mezick Pond, procedures for communication of closures, and processes for coordinating modifications to the plan.	MDTA	Final Design & Construction
			If the optional SUP is advanced, potential impacts to Section 4(f) and Section 6(f) properties would be determined and coordinated with MDNR, Queen Anne's County, and NPS.		
Soils and Groundwater *Final EIS Sections 5.5.1 and 5.5.2*	The Preferred Alternative will impact 19.6 acres of prime farmland and soils of statewide importance outside the limits of census-designated urban areas and existing transportation right-of-way. Construction of the Preferred Alternative will result in soil displacement. Soil may also be	The optional SUP would impact 0.9 acre of additional prime farmland and soils of statewide importance. Construction may result in additional soil displacement.	The MDTA will implement BMPs and an MDE-approved ESC plan during construction to minimize impacts to soils.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	compacted in some areas due to heavy equipment operations. The Preferred Alternative avoids impacts to private wells and wellhead protection areas. The Preferred Alternative would impact five inactive groundwater wells. The Preferred Alternative could impact groundwater recharge that enters the Magothy and Aquia aquifers due to an increase in impervious surfaces.	Increases in impervious surface could impact groundwater recharge that enters the Magothy and Aquia aquifers.	The MDTA will evaluate measures to reduce impacts to groundwater resources through SWM measures that mimic natural infiltration to meet (and exceed where feasible) water quality protection requirements during final design.	MDTA	Final Design
			The MDTA will coordinate with USGS and the MDE Water Supply Program during final design and construction to determine potential impacts to active and inactive groundwater wells; determine if any groundwater wells require abandonment and if so, coordinate the abandonment procedures; and determine if mitigation, such as well relocation, is required for these impacts.	MDTA	Final Design & Construction
Floodplains *Final EIS Section 5.5.3*	The Preferred Alternative includes fill to support road widening, culvert extensions and a new bridge. These improvements will temporarily and permanently impact 35.6 acres of floodplains.	The optional SUP would result in 1.3 acres of temporary and permanent impacts to floodplains.	The MDTA has avoided or reduced floodplain encroachments where practicable, using steeper slopes, retaining walls, and other measures to reduce the LOD. Avoidance and minimization efforts will continue in final design.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			H&H studies will be performed, changes to floodplain elevations will be mitigated as appropriate, and floodplain permits will be obtained in accordance with 23 CFR 650 Subpart A, and MDE and FEMA regulations.	MDTA	Final Design
			The MDTA will mitigate any unavoidable increases during final design and construction through the purchase of easements or additional right-of-way to contain increased floodwaters as required.	MDTA	Final Design & Construction
Surface Water Resources *Final EIS Section 5.5.4*	The Preferred Alternative footprint is located in four watersheds. During construction of the Preferred Alternative, turbidity can increase due to erosion and sediment disturbance, which can lead to channel disturbance, aquatic habitat damage, and increased flood risk. The Preferred Alternative will impact 348.5 acres within MD 12-digit watersheds, which includes an increase of 98.4 acres of impervious surfaces. Increased impervious surfaces can increase runoff levels, flow levels, and contaminants to surface waters.	The optional SUP would result in 5.5 acres of additional impact to MD 12-digit watersheds and an additional 12.3 acres of new impervious surfaces.	The MDTA will provide SWM systems to help control runoff and reduce peak flows in accordance with COMAR 26.17.2. Approved ESC measures will be implemented during construction in accordance with COMAR 26.17.01 to minimize erosion and prevent sedimentation downstream.	MDTA	Final Design & Construction
			The MDTA will obtain a Section 401 Water Quality Certification (WQC) from MDE to ensure discharges comply with Federal and state laws, regulations, and requirements.	MDTA	Final Design
			The MDTA will develop a Stormwater Pollution Prevention Plan.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Regulated Wetlands and Waterways *Final EIS Section 5.5.5.1*	The Preferred Alternative will impact 0.1 acre (670 linear feet) of nontidal waterways and 1 acre (290 linear feet) of tidal waterways. These impacts do not include the Chesapeake Bay (Refer to Chesapeake Bay Tidal Waters). The Preferred Alternative will also impact 4.2 acres of nontidal wetlands, 9.8 acres of nontidal wetland buffer, and 1.5 acres of tidal wetlands.	The optional SUP would impact less than 0.1 acre (30 linear feet) of nontidal waterways. It would impact less than 0.1 acre (0.0 linear feet) of tidal waterways. The optional SUP would have no impact to nontidal wetlands and nontidal wetland buffers. There would be a 0.7-acre impact to tidal wetlands.	The MDTA developed conceptual mitigation for unavoidable adverse impacts to all regulated wetlands and waterways in coordination with regulatory agencies and supporting resource agencies (Refer to Final EIS **Section 5.5.5.1** Minimization and Mitigation). The MDTA will coordinate with USACE and MDE during final design to obtain all Federal and state required permits for impacts to regulated wetlands and waterways. The MDTA will develop a final compensatory mitigation plan during final design for approval by MDE and USACE and will adhere to the USACE mitigation hierarchy, as described in the 2008 mitigation rule (33 CFR 332.4(c)), and the *NOAA Mitigation Policy for Trust Resources*. The approved final mitigation plan will meet all Federal and state mitigation requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			BMPs will be developed based on guidance including MDE's *Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains* and the *NOAA Fisheries/FHWA Best Management Practices Manual for Transportation Activities in the Greater Atlantic Region*.	MDTA	Final Design
Chesapeake Bay Tidal Waters *Final EIS Section 5.5.5.2*	Construction of the new bridge structure and removal of existing bridge piers for the Preferred Alternative will impact 131.9 acres of Chesapeake Bay tidal open waters. Dredging required for the Preferred Alternative will also impact 50.2 acres (308,800 cubic yards) of Chesapeake Bay substrate. Dredging directly impacts benthic organisms. Additionally, new work dredging (i.e., dredging an area that hasn't been previously dredged) in shallow water areas can alter bottom substrate and depth characteristics, potentially	The optional SUP would require slightly larger bridge piers and would impact an additional 1.9 acres of Chesapeake Bay substrate. There would be no additional impacts from dredging.	The MDTA will coordinate with USACE and MDE during final design to obtain all Federal and state required permits for impacts to Chesapeake Bay tidal waters.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	displacing species that utilize shallow areas, and impact sandy bottom habitat. Dredging also increases turbidity in the water column.		The MDTA will observe the time-of-year restrictions (TOYRs) listed in **Section 5.5.5.2** of the Final EIS to the greatest extent practicable and work with the resource agencies to develop a construction plan the provides protection for sensitive resources.	MDTA	Final Design & Construction
			The MDTA will only use mechanical dredging rather than hydraulic dredging. The MDTA will prepare a Dredge Material Management Plan and evaluate dredge material to determine the appropriate disposal method and location. The MDTA will return bottom elevations approximately to existing. During final design, the MDTA will consider potential for beneficial reuse of appropriate dredge material.	MDTA	Final Design & Construction
			As discussed in **Section 5.5.5.2**, the MDTA developed a conceptual mitigation plan for unavoidable adverse impacts to tidal waters in coordination with regulatory agencies and supporting resource agencies. The MDTA will develop a final compensatory mitigation plan during final design for approval by MDE and USACE and will adhere to the USACE mitigation hierarchy, as described in the 2008 mitigation rule (33 CFR 332.4(c)), and the	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			NOAA Mitigation Policy for Trust Resources. The approved final mitigation plan will meet all Federal and state mitigation requirements.		
			More detailed hydraulic modeling will be conducted in final design when pier locations, pier sizes, and pier protection designs are available to determine flow dynamics and the need for any additional scour protection for the new bridge structures. If future modeling results in substantially different flow dynamics, those effects will be coordinated with regulatory agencies as necessary.	MDTA	Final Design
Maintained Navigational Channels *Final EIS Section 5.5.5.3*	Four navigation channels, including the Chesapeake Bay Bridge Channel, Chesapeake Bay Auxiliary Channel, Bay Bridge Marina, and Mezick Pond access channel will be temporarily impacted during construction. The Chesapeake Bay Bridge Channel is a Federally maintained channel under the USACE Section 408 program. The Chesapeake Bay Auxiliary Channel is not maintained or marked except at the existing bridge.	No additional maintained navigational channels would be affected by the optional SUP.	The MDTA will coordinate with USCG to obtain a Bridge Permit and USACE to obtain Section 408 approval during final design for construction of a new bridge in or near the Federal navigation channel. Permit conditions will ensure that any temporary impacts and closures of the navigation channel and state-maintained access channels, such as the Bay Bridge Marina channel and Mezick Pond are minimized and mitigated in coordination with the USCG, MDNR, marina operators, and emergency services.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	The Bay Bridge Marina and Mezick Pond access channels are state maintained.		For Mezick Pond specifically, the MDTA will develop and coordinate a Maintenance of Access Plan with MDNR during design that includes: a schedule of anticipated activities that could result in temporary closures of Mezick Pond, procedures for communication of closures, and processes for coordinating modifications to the plan.	MDTA	Final Design & Construction
Chesapeake Bay Critical Areas *Final EIS Section 5.5.6*	The Preferred Alternative will impact 162.5 acres of Critical Area on the Eastern and Western Shores. The Preferred Alternative will also impact 17.7 acres of Critical Area 100-ft Buffer and 29.1 acres of Critical Area Expanded Buffer. The Preferred Alternative will impact 9.8 acres of FIDS habitat and 45.8 acres of mapped SSPRA within the Critical Area.	The optional SUP would impact an additional 2.5 acres of Critical Area. It would impact 1.0 acres of Critical Area 100-ft Buffer and 1.5 acres of Critical Area Expanded Buffer. The optional SUP would not impact any FIDS habitat. The optional SUP would impact an additional 2.1 acres of mapped SSPRA.	The MDTA will obtain approval from the Chesapeake Bay Critical Area Commission and adhere to the authorization requirements established under COMAR 27.01.	MDTA	Final Design & Construction
			Where practicable, the MDTA will reduce the roadway footprint in Critical Area habitats and natural shorelines through the use of 2:1 slopes and other ESD measures during final design. Mitigation will be provided for impacts to forest within the Critical Area at a ratio dependent upon the percent of forest acreage cleared, designated land use classification, and whether impacts fall within the identified Critical Area Buffer.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			The MDTA developed conceptual mitigation for unavoidable adverse impacts to the Chesapeake Bay Critical Area in coordination with regulatory agencies and supporting resource agencies. Where practicable, the MDTA will prioritize reforestation within the LOD. Offsite reforestation mitigation within the Critical Area will fulfill any remaining Critical Area reforestation requirements. (Refer to **Section 5.5.6.3** for details).	MDTA	Final Design & Construction
Aquatic Habitat and Biota *Final EIS Section 5.5.7*	The Preferred Alternative will impact aquatic habitat and biota by removing or altering aquatic habitat during construction and could degrade habitat and affect biota long-term. Impacts include increased flow volumes, sedimentation or siltation, water temperature, turbidity, underwater noise, and shading, decreased base flows, changes in substrate composition, and water quality degradation. These impacts can affect animal behavior, such as feeding, migration, nesting, and spawning, or potentially cause injury or mortality. The Preferred Alternative impacts 5.6	The optional SUP would include an additional impact to 0.7 acres of nontidal and tidal wetlands, less than 0.1 acres of nontidal and tidal waterways (excluding the Chesapeake Bay), 0.6 acres of NOBs, 0.6 acres of historic oyster bottom, 0.4 acres of public shellfisheries, and 2.4 acres of EFH. There would be no additional impact to oyster sanctuaries,	The MDTA will observe the TOYRs listed in **Section 5.5.7.3** for aquatic biota to the greatest extent practicable and work with the resource agencies to develop a construction plan that provides protection for sensitive resources.	MDTA	Final Design & Construction
			The MDTA will coordinate with NOAA Permits and Conservation Division during final design to secure an Incidental Harassment Authorization (IHA) for impacts to marine mammals, which would include appropriate BMPs to minimize harassment to the extent practicable.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	acres of nontidal and tidal wetlands, 1.1 acres of nontidal and tidal waterways (excluding the Chesapeake Bay), 10.2 acres of natural oyster bars (NOBs), 24.1 acres of historic oyster bottom, 0.6 acres of oyster sanctuaries, 6.1 acres of public shellfisheries, 136.0 acres of Essential Fish Habitat (EFH), 290 linear feet of horseshoe crab habitat, and 2.5 acres of waterfowl staging and concentration areas. The Preferred Alternative will also impact Mezick Pond and the Bay Bridge Pier Islands, which are used by colonial waterbirds as nesting sites. Impacts to habitat within the Chesapeake Bay from the Preferred Alternative will impact local marine mammals that inhabit the Chesapeake Bay.	horseshoe crab habitat, or waterfowl staging and concentration areas.	The MDTA developed conceptual mitigation for unavoidable adverse impacts to aquatic resources (Refer to **Section 5.5.7.3** for details) in coordination with regulatory agencies and supporting resource agencies. A final compensatory mitigation plan will be developed during final design.	MDTA	Final Design
			The MDTA has coordinated specific avoidance and minimization measures related to marine mammals, Federally-listed aquatic species, EFH, and HAPCs, as noted in **Section 5.5.7.3** of the Final EIS and below. The MDTA will adhere to the following Conservation Recommendations (CR) provided by NOAA Fisheries through EFH consultation: • **CR-1**: The MDTA will design the bridge to meet structural integrity, engineering efficiency, and up-to-date engineering practices. Once these design criteria have been met, the MDTA will develop an alternatives analysis evaluating measures to minimize underwater noise generated	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			during construction activities where practicable.		
			• **CR-2**: The MDTA will develop a project schedule that avoids driving piles from January 15 through May 15, unless underwater noise monitoring results demonstrate those piles can be driven while ensuring the Zone of Safe Fish Passage (ZSFP) and all applicable performance standards committed to in coordination with NOAA Fisheries are maintained. The ZSFP is defined as a minimum contiguous 7,000-foot-wide area, including at least one channel edge, while ensuring noise levels do not exceed 150 dB root mean square (RMS).	MDTA	Final Design & Construction
			• **CR-3**: The MDTA will avoid explosive demolition to the maximum extent practicable. When explosive demolition is required, the MDTA will develop a Demolition Plan in coordination with resource agencies and will conduct required blasting during times of lower biological activity (generally October 1 – December 15); specific dates will be determined during the	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			development of the Demolition Plan and will incorporate the best available data including any updated telemetry data. The MDTA will coordinate with resource agencies to define how fish kills will be documented and offset, including any potential adaptive management approaches, during final design.		
			• **CR-4**: The MDTA will Develop an Underwater Noise Monitoring Plan (UNMP) that defines proposed measures to minimize, monitor, and adaptively manage hydroacoustic energy resulting from project pile installation and mechanical demolition activities, including the following elements: o From January 15 through May 15 (the anadromous fish migratory period), ensure a minimum contiguous ZSFP equivalent to approximately one-third the waterway width - approximately 7,000 linear feet. The ZSFP will allow Federally managed fish species, including	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			migratory fish, to safely navigate to their spawning grounds around undesirable noise (i.e., above the 150 dB RMS behavioral threshold) and turbidity levels. The ZSFP will encompass the channel edges. o An adaptive management framework for construction activities and accompanying mitigation measures to minimize fish kills and maintain compliance with the 150 dB RMS threshold across the entire width of the ZSFP. o Monitoring measures to describe the occurrence of fish that are stunned, injured, or killed. The MDTA will coordinate with the regulatory agencies during final design to determine fish kill thresholds that would trigger construction hold points and be described in the UNMP. The MDTA will coordinate with the regulatory agencies to		

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			define an optimization plan prior to resuming the triggering construction activities, which will be included in the UNMP.		
			• **CR-5**: The MDTA will fund additional telemetry deployments prior to production pile driving when information more relevant to construction of the project is available and the project is fully funded for final design. The MDTA will collect at least two years (2 springs & 2 summers) of pre-construction data to monitor migratory behavior and validate ZSFP efficacy. The MDTA will coordinate with the agencies on the details of the initial deployment and two-year data collection and will consider the potential for long-term management of the arrays by resource agencies during final design.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• **CR-6**: Rubble will be removed to the maximum extent practicable, and to the extent that removal would not result in greater harm to benthic environments compared to leaving the rubble in place. The decision to remove, re-use, or leave rubble in place, or use rubble to fill scour, will be determined prior to the start of demolition, using the best available data at the time and in coordination with NOAA Fisheries.	MDTA	Construction
			• **CR-7**: The MDTA will return bottom elevations approximately to existing and will provide documentation of the post-demolition conditions to the agencies.	MDTA	Construction
			• **CR-8**: The MDTA will develop a pre-construction and post-construction monitoring plan during final design to describe benthic recovery in dredged areas and identify and define measures to restore or otherwise offset documented losses of function, relative to a reference site, after three years in coordination with regulatory and resource agencies.	MDTA	Final Design through Post Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• **CR-9**: The MDTA will only use mechanical dredging and will consider operational BMPs to further reduce impact to the Chesapeake Bay bottom during final design. The MDTA will observe the TOYRs for Natural Oyster Bars to the extent practicable as noted in **Section 5.5.7.3** of the Final EIS. The MDTA will coordinate a working meeting with relevant regulatory agencies to discuss in-water TOYRs as related to construction schedules and costs.	MDTA	Final Design & Construction
			• **CR-10**: The MDTA will observe the TOYRs for aquatic biota to the greatest extent practicable as noted in **Section 5.5.7.3** of the Final EIS. The MDTA will work with resource and regulatory agencies during final design to develop a construction plan and BMPs that provide protection for sensitive resources in compliance with all statutory requirements. The MDTA will coordinate a working meeting with relevant regulatory agencies to discuss in-water TOYRs as related to	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			construction schedules and costs.		
			• **CR-11**: The MDTA will continue to evaluate opportunities to treat stormwater from the proposed bridge spans and roadway surfaces to the extent practicable during final design.	MDTA	Final Design
			• **CR-12**: During final design, the MDTA will develop a compensatory mitigation plan (CMP) for regulatory agency approval. The CMP will include the following: (1) replacement of biogenic impacts in-kind to the greatest extent practicable; (2) replacement of permanently impacted open water habitat through out-of-kind mitigation activities to be determined in coordination with regulatory and resource agencies; (3) compensation for the temporal loss of tidal open water habitat function; (4) prioritization of compensatory mitigation projects based on the USACE mitigation hierarchy, as described in the 2008 mitigation rule (33 CFR 332.4(c)), MDE Tidal Mitigation Plan Guide, and the NOAA Mitigation Policy for Trust Resources; (5) implementation of a site	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			protection instrument at mitigation sites for the project as necessary; (6) oyster mitigation will comply with MDE's requirement that oyster mitigation activities will occur at an oyster sanctuary; and (7) final mitigation ratios to be determined in coordination with regulatory agencies during final design.		
			The MDTA will adhere to the following additional commitments: • The MDTA will use noise attenuation and minimization measures during pile driving, including: o Use of a bubble curtain system that achieves 10 dB or greater attenuation for bridge piles and 5 dB or greater attenuation for dolphin pier protection piles. The effectiveness of the bubble curtain attenuation will be demonstrated with a test pile and underwater noise program prior to initiating production pile driving activities. o Use of a "soft start" or "ramping up" pile driving (e.g., driving does not	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			begin at 100% energy). Soft start parameters will be determined and coordinated with NOAA Fisheries in final design. o Where softer sandy soils are at the surface, use a vibratory hammer for initial pile driving through the softer soils prior to using an impact hammer through stiffer material as practicable and as appropriate. o Use of cushion blocks to drive concrete piles with an impact hammer, as practicable and as appropriate.		
			• The MDTA will implement an effective quiet time of no pile driving for 12 consecutive hours per 24-hour period.	MDTA	Construction
			• The MDTA will develop a detailed Demolition Plan in coordination with NOAA Fisheries and submit to NOAA Fisheries for review and approval, in advance of any detonation activity. The Demolition Plan will address the following measures:	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			o Detonation bore hole stemming, capping, or filling; o Firing all charges in a single firing circuit with a delayed detonation between each charge; o Focusing blast energy towards a solid substrate rather than towards the water column; o Evaluating the feasibility of employing noise attenuating devices; o Conducting the blasting during periods of low water or low tide; o Using rubber blasting mats to reduce debris and acoustic signature; o Employing scare charges; o Installing hydrophones to confirm the impact distance to adaptively manage the Demolition Plan; o Using explosive weights that result in injury/mortality thresholds remaining within 100 feet of the blasting source; and o Using adaptive management actions		

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			between blast events to minimize fish mortality.		
			• The MDTA will employ scare charges and fish deterrent boats ahead of blasting activities. Use low weight/energy repellent charges that startle fish from the area prior to blasting, and minimize the time between repellent activities and blasting, such that fish are not allowed a recovery period to re-enter the blasting exclusion zone.	MDTA	Construction
			• The MDTA will employ species spotters and monitoring boats to scan the work area for marine mammals and sea turtles prior to blasting. Blasting will not occur when marine mammals or turtles are present.	MDTA	Construction
			• The MDTA will only use mechanical dredging.	MDTA	Construction
			• To prevent sediment and debris from entering the water, the MDTA will use geo-textile fabric, hay bales, or other methods, and will use nets, tarps, and pans when demolishing bridge superstructures.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• The MDTA will limit the amount and extent of turbidity and sedimentation by using appropriate sedimentation and turbidity controls such as turbidity curtains, silt curtains, settling basins, bridge netting and cofferdams. The MDTA will specify the measures to be used in the construction plans, including: o Install erosion control measures prior to ground disturbance; o Inspect daily and maintain continuously in an effective operating condition all ESC measures until such time as they are removed with prior permission from the MDE inspector; o Upon project completion, remove and stabilize all temporary construction materials with sediment and erosion control measures to prevent reentry into waterways.	MDTA	Final Design through Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• The MDTA will minimize the suspension of sediments and disturbance of the substrate when removing piles by implementing the following applicable techniques: o Remove piles with a vibratory hammer, rather than by direct pull, jetting, or clamshell; o Remove piles slowly to reduce sediment sloughing off in the water column; o Strike or vibrate the pile to break the bond between the sediment and pile to minimize the pile breakage, and reduce the amount of sediment sloughing off the pile during removal; o Place piles on a barge equipped with a basin to contain all attached sediment and runoff water after removal.	MDTA	Construction
			• The MDTA will only use clean fill in the water.	MDTA	Construction
			• The MDTA will evaluate dredge material to determine the appropriate disposal method and location.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• The MDTA will remove cofferdams, turbidity curtains, silt curtains, or other diversion structures only after water quality is consistent with ambient levels outside the structure.	MDTA	Construction
			• The MDTA will avoid, to the greatest extent practicable, the use of creosote piles or other in-water structures, and coordinate with NOAA Fisheries if there is an essential use identified by the contractor.	MDTA	Final Design & Construction
			• The MDTA will minimize raw concrete or grout contact with the water to the maximum extent practicable.	MDTA	Construction
			• The MDTA will remove contaminants and sediments from water prior to discharging it to aquatic habitats from construction activities such as excavations, cofferdams, settling basins, and sediment ponds.	MDTA	Construction
			• The MDTA will manage concrete wash water and cooling water effluent from concrete saw operations to ensure they do not enter surface waters untreated.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• The MDTA will employ an Independent Environmental Monitor (IEM) to monitor compliance with environmental and conservation commitments and report to the regulatory agencies and MDTA concurrently.	MDTA	Construction
			• The MDTA will coordinate with NOAA Fisheries and MDNR during Final Design to determine if SAV surveys would be informative of permit conditions. If so, the MDTA will conduct SAV surveys during the growing season, prior to construction, within nearshore areas of the Action Area to determine the presence and extent of SAV beds.	MDTA	Final Design
			• The MDTA will incorporate necessary measures to avoid, minimize, or otherwise offset impacts to SAV, as appropriate. Impacts to SAV will be mitigated at a ratio of at least 3:1, depending upon the nature/scale of the impacts.	MDTA	Final Design & Construction
			• The MDTA will not operate or moor vessels in, or immediately adjacent to, SAV in such a way that could shade or otherwise impact SAV.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			The MDTA will coordinate additional avoidance and minimization measures for aquatic habitat and biota with the agencies during final design.	MDTA	Final Design
Terrestrial Habitat and Biota *Final EIS Section 5.5.8*	The Preferred Alternative could cause habitat fragmentation and the introduction and spread of invasive species. The Preferred Alternative will impact 57.7 acres of forested areas. The majority of impacts will occur within habitat edges along existing roadways. Wetlands will also be impacted by the Preferred Alternative (Refer to Regulated Wetlands and Waterways). Beyond habitat loss, construction can result in increased risk of mortality for less mobile wildlife due to construction disturbance or vehicle strikes. Construction activities also generate noise, vibration, and light pollution, which can disturb wildlife behavior and stress sensitive species.	The optional SUP would impact 1.4 acres of additional forested areas. It would also impact tidal wetlands (Refer to Regulated Wetlands and Waterways).	The MDTA will adhere to Critical Area authorization requirements for impacts to forests and trees within the Critical Area and Maryland Reforestation Law for forest and tree impacts outside the Critical Area.	MDTA	Final Design & Construction
			The MDTA developed conceptual mitigation for offsite reforestation for any remaining mitigation required after onsite reforestation is maximized (Refer to Final EIS **Section 5.5.8.1** for details). Reforestation (mitigation) plans will be developed and coordinated with the Critical Area Commission and MDNR during final design.	MDTA	Final Design
			The MDTA will coordinate with MDNR to ensure compliance with all applicable environmental regulations associated with terrestrial biota, as noted in **Section 5.5.8.2**.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			Tree clearing will be prohibited during the active season for bat species (April 1 to September 30) to avoid and minimize potential direct effects to NLEB and TCB in the action area, which will also reduce impacts to many migratory and breeding birds and other species. The MDTA will incorporate other TOYRs to the greatest extent practicable to limit work during breeding or migration seasons for sensitive species.	MDTA	Construction
Rare, Threatened, and Endangered (RTE) Species *Final EIS Section 5.5.9*	The Preferred Alternative will require demolition, construction, and operational activities that could remove or degrade habitat, cause physical injury to, or alter behavior of RTE species. The Preferred Alternative is not likely to adversely affect listed and proposed species under USFWS jurisdiction, including the northern long-eared bat and tricolored bat. The Preferred Alternative is likely to adversely affect but is not likely to jeopardize the continued existence of the following listed species under NOAA Fisheries jurisdiction: the New York Bight, Chesapeake Bay, Gulf of Maine, Carolina, and South Atlantic Distinct Population Segment (DPS) of Atlantic	No additional species would be affected from the optional SUP.	During final design, the MDTA will develop ESC and SWM plans to minimize impacts to species.	MDTA	Final Design
			The MDTA will follow OSHA, MDOT, and SHA requirements and will consider DarkSky principles for changes to permanent and temporary lighting where practicable.	MDTA	Final Design & Construction
			The MDTA will replace trees and forests, where practicable, within the LOD according to Chesapeake Bay Critical Area regulations and Maryland Reforestation Law, requiring an impact to replacement ratio ranging from 1:1 to 3:1.	MDTA	Final Design & Construction
			Tree clearing will be prohibited during the active season for bat species (April 1 to September 30) to avoid and minimize potential direct effects to NLEB and TCB in the	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	sturgeon or shortnose sturgeon. The Preferred Alternative is not likely to adversely affect the following listed species under NOAA Fisheries jurisdiction: loggerhead sea turtle, Kemp's ridley sea turtle, green sea turtle, and leatherback sea turtle. The Preferred Alternative will impact habitat for several state RTE shorebirds, including Least Tern and Sora Rail. The removal of the existing bridge structure and piers would make the structure and islands unavailable for nesting, which is currently used by Peregrine Falcons and waterbirds, including Great Egret, Snowy Egret, Cattle Egret, and Black-Crowned Night Heron. The Delmarva fox squirrel, a Species in Need of Conservation, may also be affected due to impacts to forested areas in Queen Anne's County.		action area. The MDTA will adhere to TOYRs coordinated with USFWS, MDNR, and NOAA Fisheries to the greatest extent practicable.		
			Where practicable, the MDTA will use specific construction techniques and equipment to reduce aquatic impacts. These techniques will be coordinated with NOAA Fisheries during final design. The MDTA will employ the measures listed below in addition to those listed in the Aquatic Habitat and Biota section of this table to avoid, minimize, and monitor potential effects of the proposed work on Atlantic and shortnose sturgeon and sea turtles, as noted in **Section 5.5.7** of the Final EIS and below.	MDTA	Final Design & Construction
			• Remove temporary structures and fills including monitoring devices placed for underwater noise monitoring during pile driving and blasting, in their entirety. Return aquatic habitats impacted by temporary activities, fills, or structures to pre-construction or better condition, including contours, elevations, substrate, and vegetation.	MDTA	Construction
			• Stage construction activities to reduce intensity of disturbance	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			where appropriate and practicable. Staging of construction activities will be coordinated with the agencies during design.		
			• Avoid areas where protected species congregate for spawning/foraging or overwintering, if identified prior to or during construction. Currently, no specific spawning, foraging, or overwintering areas are known.	MDTA	Construction
			• Use pile driving underwater noise monitoring results to determine an acceptable pile driving sequence of construction that ensures the ZSFP is achieved from January 15 through May 15.	MDTA	Final Design & Construction
			• Operate construction vessels at reduced speeds (e.g., below 10 knots). Safety exemptions would be in place if needed.	MDTA	Construction
			• Employ species spotters to reduce species/vessel collisions; and keep appropriate distance from protected species if spotted.	MDTA	Construction
			• Use construction equipment that reduces potential for impingement and entrainment such as environmental buckets on mechanical dredges.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• Employ a NOAA Fisheries approved observer during mechanical dredging and removal of demolition debris in case of accidental capture.	MDTA	Construction
			• When explosive demolition is required, employ scare charges and fish deterrent sonar from boats, and monitor for the presence of tagged sturgeon, ahead of blasting activities.	MDTA	Construction
			The MDTA will adhere to the following Reasonable and Prudent Measures (RPMs) included in the Incidental Take Statement (ITS) (Terms & Conditions of each RPM are included in the *Biological Opinion* (**Appendix C**)): • **RPM-1**: All sturgeon captures, injuries, or mortalities in the immediate activity area will be reported to NOAA Fisheries within 24 hours.	MDTA	Construction
			• **RPM-2**: Any dead sturgeon will be held until proper disposal procedures can be discussed with NOAA Fisheries. The fish will be held in cold storage.	MDTA	Construction
			• **RPM-3**: All sturgeon over 75 centimeters total length that are captured will have a fin clip taken for genetic analysis. This sample will be transferred to a NOAA Fisheries-approved	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			laboratory capable of performing the genetic analysis.		
			• **RPM-4**: During blasting, acoustic measurement of the first three detonations will be conducted to confirm the estimated underwater pressure levels. If pressure levels exceed those estimates, the MDTA will contact NOAA Fisheries within 24 hours of the recorded measurement.	MDTA	Construction
			• **RPM-5**: The MDTA will submit a final blasting plan prior to demolition that contains final parameters for blasting, outline the final mitigation measures, details of the deterrent system, the noise and fish monitoring plan and require NOAA Fisheries approval of the plan before it is executed and ensure that any sturgeon killed during blasting are recorded.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Unique and Sensitive Areas *Final EIS Section 5.5.10*	The Preferred Alternative will impact 7.2 acres of Habitat Connectivity Network (HCN) hubs and corridors and 109.1 acres of mapped SSPRA.	The optional SUP would result in 3.5 acres of additional impact to mapped SSPRA and no additional impacts to HCN hubs and corridors.	The MDTA will consider designs that avoid or minimize impact to HCN hubs and corridors and mapped SSPRA to the maximum extent practicable during final design. Where practicable, the MDTA will follow TOYRs to limit work during breeding or migration seasons for sensitive species and restore habitat by replanting disturbed areas with native vegetation.	MDTA	Final Design & Construction
Hazardous Materials *Final EIS Section 5.6*	The Preferred Alternative will potentially impact 46 identified sites of concern, including 25 sites with a high potential for impact (rank 1), eight sites with a medium/high potential for impact (rank 3), three sites with a medium potential for impact (rank 4), and 10 sites with a low potential for impact (rank 5). The majority of impacts occur at greater depth due to releases associated with USTs, gasoline stations, and various commercial properties.	No additional sites of concern would be impacted by the optional SUP.	The MDTA will complete a full ASTM-compliant Phase I Environmental Site Assessment prior to any property acquisition. Additional environmental investigations will be required to determine the extent of potential impacts based on ground disturbance activities.	MDTA	Final Design
			A project-specific materials management plan will be developed during the final design phase and implemented during the construction phase to establish procedures for identifying, handling, transporting, and disposing of contaminated materials, soils, or groundwater discovered, or construction materials generated during construction.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Air Quality *Final EIS Section 5.7*	MSAT emissions for the Preferred Alternative are expected to remain the same or increase slightly when compared to 2045 No-Build conditions. Construction-related temporary air quality impacts will be localized to the site and surrounding area.	The optional SUP could slightly increase temporary air quality impacts during construction.	The MDTA will obtain all construction-related permits from MDE prior to construction.	MDTA	Final Design
			The MDTA will coordinate with the contractor to implement measures to minimize and mitigate temporary construction impacts to air quality, such as those listed in **Section 5.7.3**.	MDTA	Construction
Noise *Final EIS Section 5.8*	The Preferred Alternative will increase traffic noise in 28 NSAs. Per the noise analysis, consideration of noise abatement was completed for 11 of the impacted NSAs. Construction activities could result in temporary noise disturbance.	Construction of the optional SUP would have minimal to no additional noise impact due to the proximity of the existing highway and the construction noise generated from the Preferred Alternative.	Three barriers were identified as feasible and reasonable based on the preliminary noise analysis for the Preferred Alternative. The barriers provide noise abatement for seven of the 11 impacted NSAs. The MDTA will complete further study to determine the design details of any feasible and reasonable barriers as design of the Preferred Alternative progresses.	MDTA	Final Design
			Additional mitigation procedures to minimize public exposure to temporary construction noise will be considered during final design, such as limiting the time of day that pile driving operations can occur, equipment adjustments, construction of noise barriers first where possible, and alteration of construction activity areas and temporary noise barriers.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Preferred Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Transit	Not Applicable	Not Applicable	The MDTA commits to providing up to approximately $40 million for transit-related improvements for local transit agencies near the Bay Bridge. The MDTA would coordinate with MTA, local governments, and local transit agencies to help them determine the potential improvements that would be most beneficial for them at that time.	MDTA	Final Design & Construction
General	Not Applicable	Not Applicable	The MDTA commits to coordinating with the SHA and local agencies to help them evaluate roadway needs and traffic operations along U.S. 50/301 approaching the Bay Bridge, outside of this study. This includes SHA's U.S. 50 from the Bay Bridge to Ocean City Project and other potential future projects that would address traffic queues during SWED, which impact the U.S. 50/301 corridor-wide network.	MDTA	Following ROD

Figure 4-1: Preferred Alternative Impacts Mapping

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AA-2511 Asbury M.E. Church and Cemetery (Broad Neck)

BROADNECK RD

50

301

BUSCHS FRONTAGE RD

CAPE SAINT CLAIRE RD

COLLEGE PKWY

Broadneck Trail

Broadneck Trail

Four Seasons at St. Margarets

SAINT MARGARETS RD

MARYLAND 179

HOLLY DR N

Whitehall Creek

WHITEHALL RD

E COLLEGE PKWY

Broadneck Trail

7-Eleven

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
- Field-Delineated Surface Waters
- Field-Delineated Wetlands
- FEMA Floodplain
- Historic Properties
- Public Parks
- Water Trails
- Culverts
- Submerged Aquatic Vegetation
- Property Parcels

* The final determination for noise barrier need, location, size, and material will be made during final design



1" = 200 Feet

0 100 200 400 Feet

MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

E COLLEGE PKWY

7-Eleven

STACEY LN

Broadneck Trail

REVELL DOWNS DR

CANANARO RD

E COLLEGE PKWY

50 301

WHITEHALL RD

McDonald's

Wendy's

WHITEHALL RD

Preferred Alternative - Limits of Disturbance

Preferred Alternative - Limits of Disturbance - Optional SUP

Existing Pavement

Widened Pavement

New/Realigned Pavement

New Bridge

Optional SUP

Stormwater Management Ponds

Potential Noise Barriers *

Public Trails

Field-Delineated Surface Waters

Field-Delineated Wetlands

FEMA Floodplain

Historic Properties

Public Parks

Water Trails

Culverts

Submerged Aquatic Vegetation

Property Parcels

* The final determination for noise barrier need, location, size, and material will be made during final design



N

1" = 200 Feet

0 100 200 400 Feet

MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

Bay Head Park

BAY HEAD RD

Broadneck Trail

YORKTOWN RD

Broadneck Trail

E COLLEGE PKWY

Broadneck Trail

50 301

WHITEHALL RD

RIDOUT LN

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
- Field-Delineated Surface Waters
- Field-Delineated Wetlands
- FEMA Floodplain
- Historic Properties
- Public Parks
- Water Trails
- Culverts
- Submerged Aquatic Vegetation
- Property Parcels

* The final determination for noise barrier need, location, size, and material will be made during final design



N

1" = 200 Feet

0 100 200 400 Feet

MDTA
Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026

Location of transition from 3 lanes per direction to 4 lanes per direction.

E COLLEGE PKWY

50 301

WHITEHALL RD

Whitehall Shopping Center

WHITEHALL RD

COLBERT RD

LOG INN RD

SKIDMORE DR

Broadneck Trail

AA-2594 Skidmore

AA-2305 Sandy Point State Park

AA-338 Woodlyn Farm

AA-2594 Skidmore

Meredith Creek

Preferred Alternative - Limits of Disturbance

Preferred Alternative - Limits of Disturbance - Optional SUP

Existing Pavement

Widened Pavement

New/Realigned Pavement

New Bridge

Optional SUP

Stormwater Management Ponds

Potential Noise Barriers *

Public Trails

Field-Delineated Surface Waters

Field-Delineated Wetlands

FEMA Floodplain

Historic Properties

Public Parks

Water Trails

Culverts

Submerged Aquatic Vegetation

Property Parcels

* The final determination for noise barrier need, location, size, and material will be made during final design



1" = 200 Feet

0 100 200 400 Feet

MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

MDNR Office &
Police Station

E COLLEGE PKWY

Sandy Point State Park

Sandy Point State Park

AA-2305
Sandy Point
State Park

OCEANIC DR

50

301

SKIDMORE DR

AA-2594
Skidmore

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
- Field-Delineated Surface Waters
- Field-Delineated Wetlands
- FEMA Floodplain
- Historic Properties
- Public Parks
- Water Trails
- Culverts
- Submerged Aquatic Vegetation
- Property Parcels

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MDTA
Maryland
Transportation
Authority

Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026

AA-2305
Sandy Point
State Park

Mezick
Pond

E-Z Pass Stop-In
Center

OCEANIC DR

50 301

AA-47, AA-48 Chesapeake
Bay Bridge (William Preston
Lane Jr. Memorial Bridge)

OLD FERRY SLIP RD

MDNR
Police Station

Proposed site for
eastbound truck weigh
& inspection station.

OCEANIC DR

SKIDMORE DR

AA-0074 Holly
Beach Farm

Holly Beach Farm

AA-2594
Skidmore

Westinghouse
Bay

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
- Field-Delineated Surface Waters
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MDTA
Maryland
Transportation
Authority

Chesapeake
BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026

Chesapeake Bay

Mezick Pond

Sandy Point State Park

AA-2305 Sandy Point State Park

WESTBOUND

AA-47, AA-48 Chesapeake Bay Bridge (William Preston Lane Jr. Memorial Bridge)

WILLIAM PRESTON LANE JR. MEMORIAL (BAY) BRIDGE

EASTBOUND

50 301

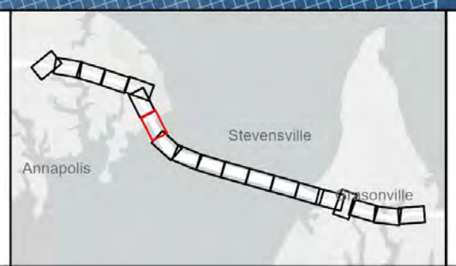
OLD FERRY SLIP RD

MDTA Maintenance Facility

Westinghouse Bay

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
- Field-Delineated Surface Waters
- Field-Delineated Wetlands
- FEMA Floodplain
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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

Chesapeake Bay

50

301

WILLIAM PRESTON LANE JR. MEMORIAL (BAY) BRIDGE

WESTBOUND

EASTBOUND

AA-47, AA-48 Chesapeake Bay Bridge (William Preston Lane Jr. Memorial Bridge)

Preferred Alternative - Limits of Disturbance

Preferred Alternative - Limits of Disturbance - Optional SUP

Existing Pavement

Widened Pavement

New/Realigned Pavement

New Bridge

Optional SUP

Stormwater Management Ponds

Potential Noise Barriers *

Public Trails

Field-Delineated Surface Waters

Field-Delineated Wetlands

FEMA Floodplain

Historic Properties

Public Parks

Water Trails

Culverts

Submerged Aquatic Vegetation

Property Parcels

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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

WESTBOUND

AA-47, AA-48 Chesapeake Bay Bridge (William Preston Lane Jr. Memorial Bridge)

WILLIAM PRESTON LANE JR. MEMORIAL (BAY) BRIDGE

50 301

EASTBOUND

Chesapeake Bay

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
- Field-Delineated Surface Waters
- Field-Delineated Wetlands
- FEMA Floodplain
- Historic Properties
- Public Parks
- Water Trails
- Culverts
- Submerged Aquatic Vegetation
- Property Parcels

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MDTA
Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026

WESTBOUND

50 301 WILLIAM PRESTON LANE JR. MEMORIAL (BAY) BRIDGE

AA-47, AA-48 Chesapeake Bay Bridge (William Preston Lane Jr. Memorial Bridge)

EASTBOUND

Chesapeake Bay

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
- Field-Delineated Surface Waters
- Field-Delineated Wetlands
- FEMA Floodplain
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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

WESTBOUND

50 301 WILLIAM PRESTON LANE JR. MEMORIAL (BAY) BRIDGE

AA-47, AA-48 Chesapeake Bay Bridge (William Preston Lane Jr. Memorial Bridge)

EASTBOUND

Chesapeake Bay

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
- New Bridge
- Optional SUP
- Stormwater Management Ponds
- Potential Noise Barriers *
- Public Trails
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- Field-Delineated Wetlands
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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

WESTBOUND

50 301 WILLIAM PRESTON LANE JR. MEMORIAL (BAY) BRIDGE

AA-47, AA-48 Chesapeake Bay Bridge (William Preston Lane Jr. Memorial Bridge)

EASTBOUND

Chesapeake Bay

Preferred Alternative - Limits of Disturbance
Preferred Alternative - Limits of Disturbance - Optional SUP
Existing Pavement
Widened Pavement
New/Realigned Pavement
New Bridge
Optional SUP
Stormwater Management Ponds
Potential Noise Barriers *
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Field-Delineated Wetlands
FEMA Floodplain
Historic Properties
Public Parks
Water Trails
Culverts
Submerged Aquatic Vegetation
Property Parcels

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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

WESTBOUND

50 301 WILLIAM PRESTON LANE JR. MEMORIAL (BAY) BRIDGE

AA-47, AA-48 Chesapeake Bay Bridge (William Preston Lane Jr. Memorial Bridge)

EASTBOUND

Chesapeake Bay

Preferred Alternative - Limits of Disturbance
Preferred Alternative - Limits of Disturbance - Optional SUP
Existing Pavement
Widened Pavement
New/Realigned Pavement
New Bridge

Optional SUP
Stormwater Management Ponds
Potential Noise Barriers *
Public Trails
Field-Delineated Surface Waters
Field-Delineated Wetlands

FEMA Floodplain
Historic Properties
Public Parks
Water Trails
Culverts
Submerged Aquatic Vegetation
Property Parcels

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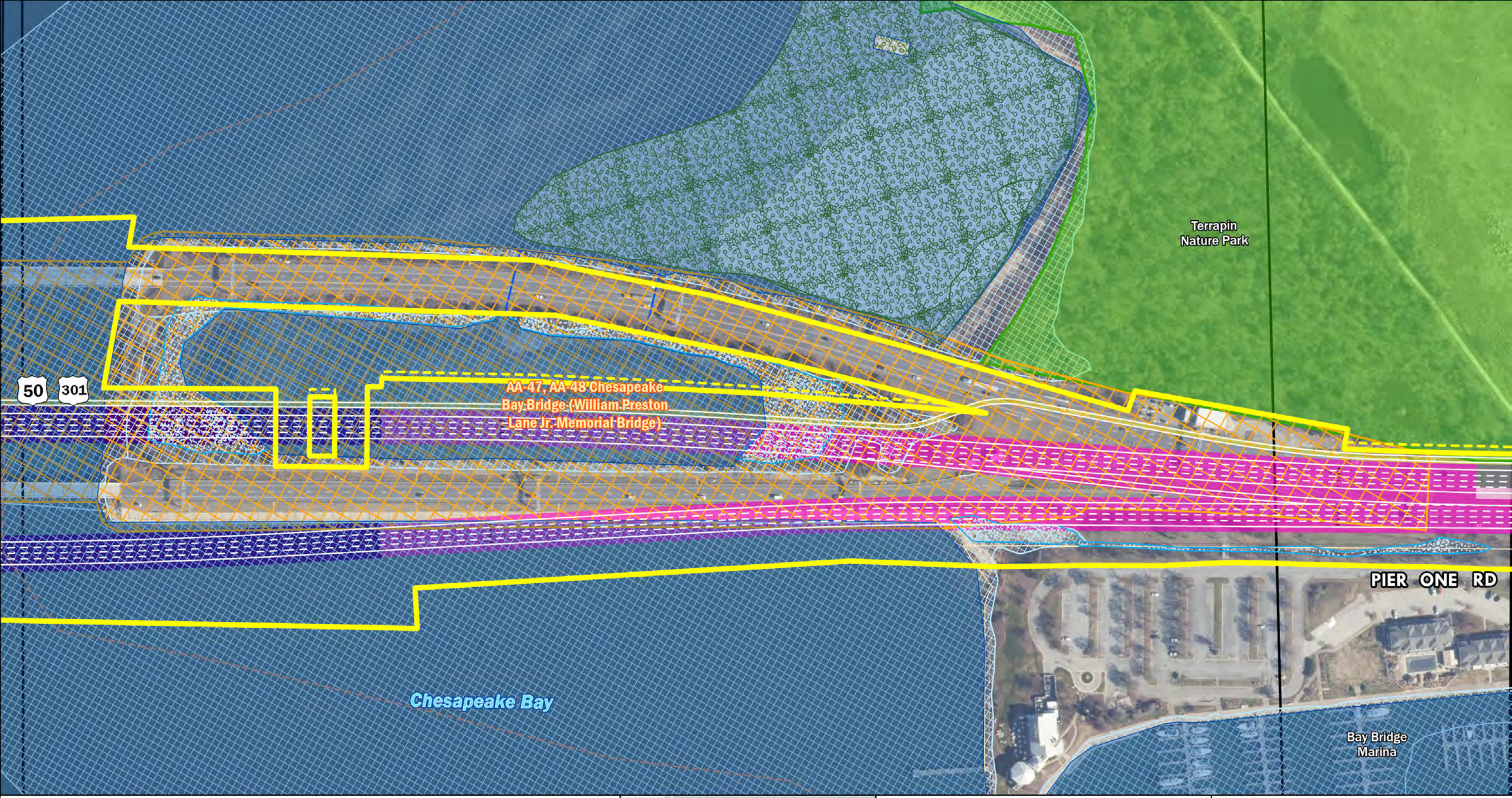
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MDTA
Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026



- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
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MDTA
Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026

Terrapin Nature Park

AA-47, AA-48
Chesapeake Bay Bridge
(William Preston Lane
Jr. Memorial Bridge)

50 301

PIER ONE RD

ROMANCOKE RD 8

Bay Manor Shops
& Apartments

The Inn at the Chesapeake
Bay Beach Club & Spa

QA-125 Eareckson House
(Nathan Morris House)

Bay Bridge
Marina

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
- Existing Pavement
- Widened Pavement
- New/Realigned Pavement
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MDTA
Maryland
Transportation
Authority

Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026



Preferred Alternative - Limits of Disturbance

Preferred Alternative - Limits of Disturbance - Optional SUP

Existing Pavement

Widened Pavement

New/Realigned Pavement

New Bridge

Optional SUP

Stormwater Management Ponds

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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

QA-467 Gillis House

MAIN ST

QA-263 John Benton House

QA-463 Stevensville Historic District

MAIN ST

MARYLAND 18

DUKE ST

ISLAND DR

Stevensville Middle School

Eisinger Property

Island Plaza

Last Stop

50

301

THOMPSON CREEK RD

Thompson Creek

Thompson Creek Shopping Center

Sunoco

Dash In

Cracker Barrel

Shore United Bank

The Shoppe's at Chesapeake

THOMPSON CREEK RD

THOMPSON CREEK MALL

Preferred Alternative - Limits of Disturbance

Preferred Alternative - Limits of Disturbance - Optional SUP

Existing Pavement

Widened Pavement

New/Realigned Pavement

New Bridge

Optional SUP

Stormwater Management Ponds

Potential Noise Barriers *

Public Trails

Field-Delineated Surface Waters

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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Preferred Alternative

October 2026

MAIN ST

MARYLAND 18

Stevensville Cemetery

50 301

Cox Creek

Bank of America

Dunkin'

Hardee's

Cult Classic Brewing

Chester Place

SHERMAN DR

Location of transition from 3 lanes per direction to 4 lanes per direction.

- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
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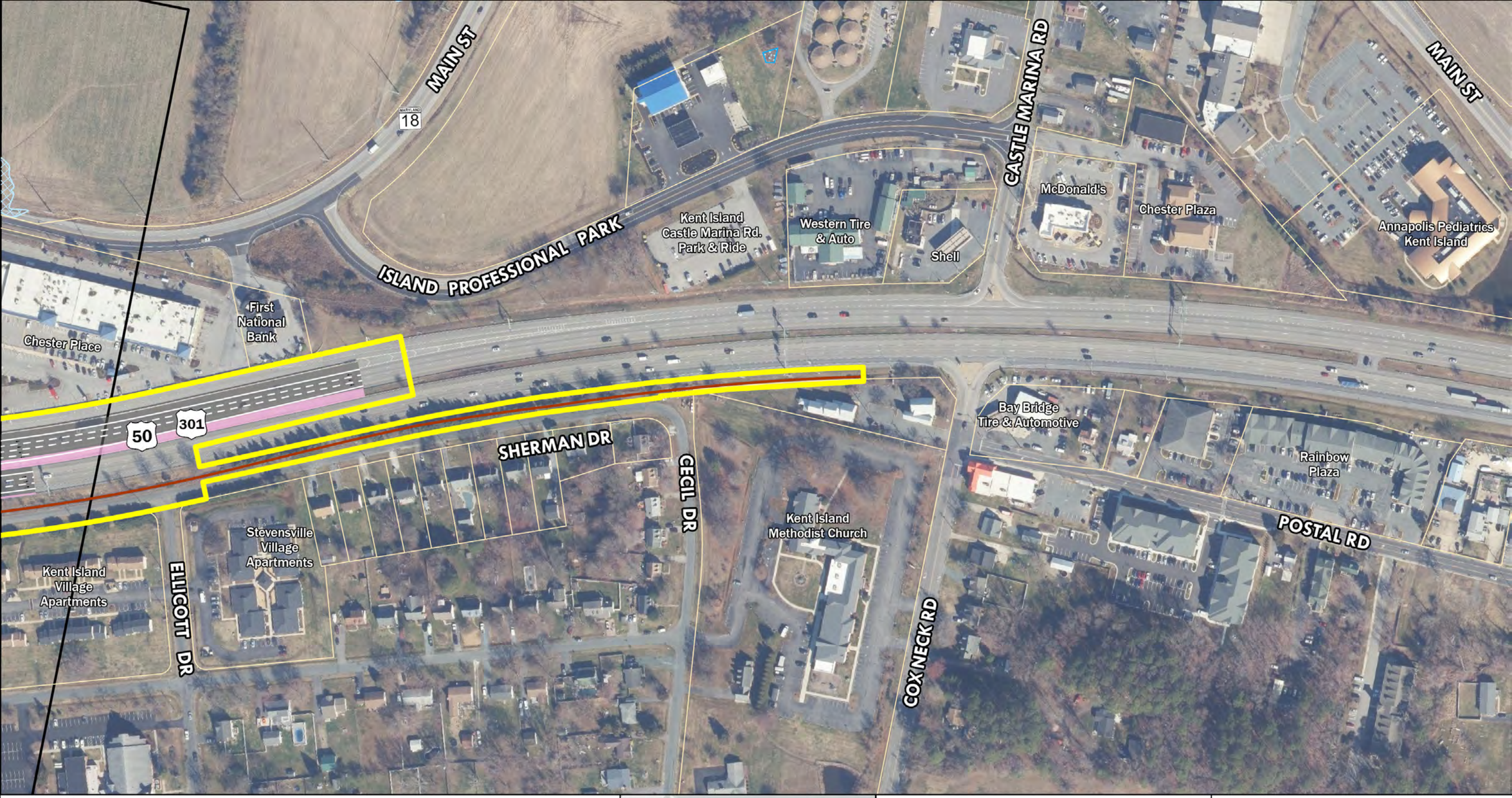
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MDTA Maryland Transportation Authority

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

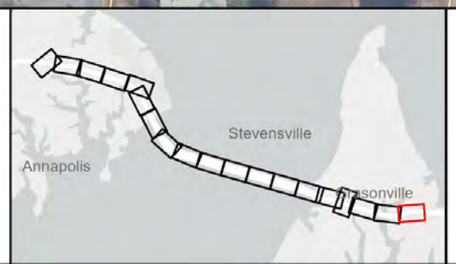
Preferred Alternative

October 2026



- Preferred Alternative - Limits of Disturbance
- Preferred Alternative - Limits of Disturbance - Optional SUP
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Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

Preferred Alternative

October 2026