



Traffic Impact Analysis – Executive Summary
Millersville Park
Anne Arundel County Department of Public Works

Anne Arundel County Department of Public Works (AACO DPW) tasked Whitney, Bailey, Cox & Magnani, LLC (WBCM) with conducting a Traffic Impact Analysis (TIA) for the proposed Millersville Park Site Development to ensure a safe and efficient transportation network is maintained. The traffic analysis was conducted in accordance with the Anne Arundel County Guidelines for Traffic Impact Studies. The proposed Millersville Park will include four athletic fields located off Millersville Road, 500 feet west of Waterbury Road. The study area for the project to the east and west extends along Millersville Road, from MD 175 (Annapolis Road)/MD 3 Southbound to MD 178 (Generals Highway). The study intersections include:

1. MD 175 at MD 3 Southbound
2. MD 175/Millersville Road at MD 3 Northbound
3. Millersville Road at Cecil Avenue
4. Millersville Road at Site Access (Proposed)
5. Millersville Road at Waterbury Road
6. Millersville Road/Indian Landing Road at MD 178

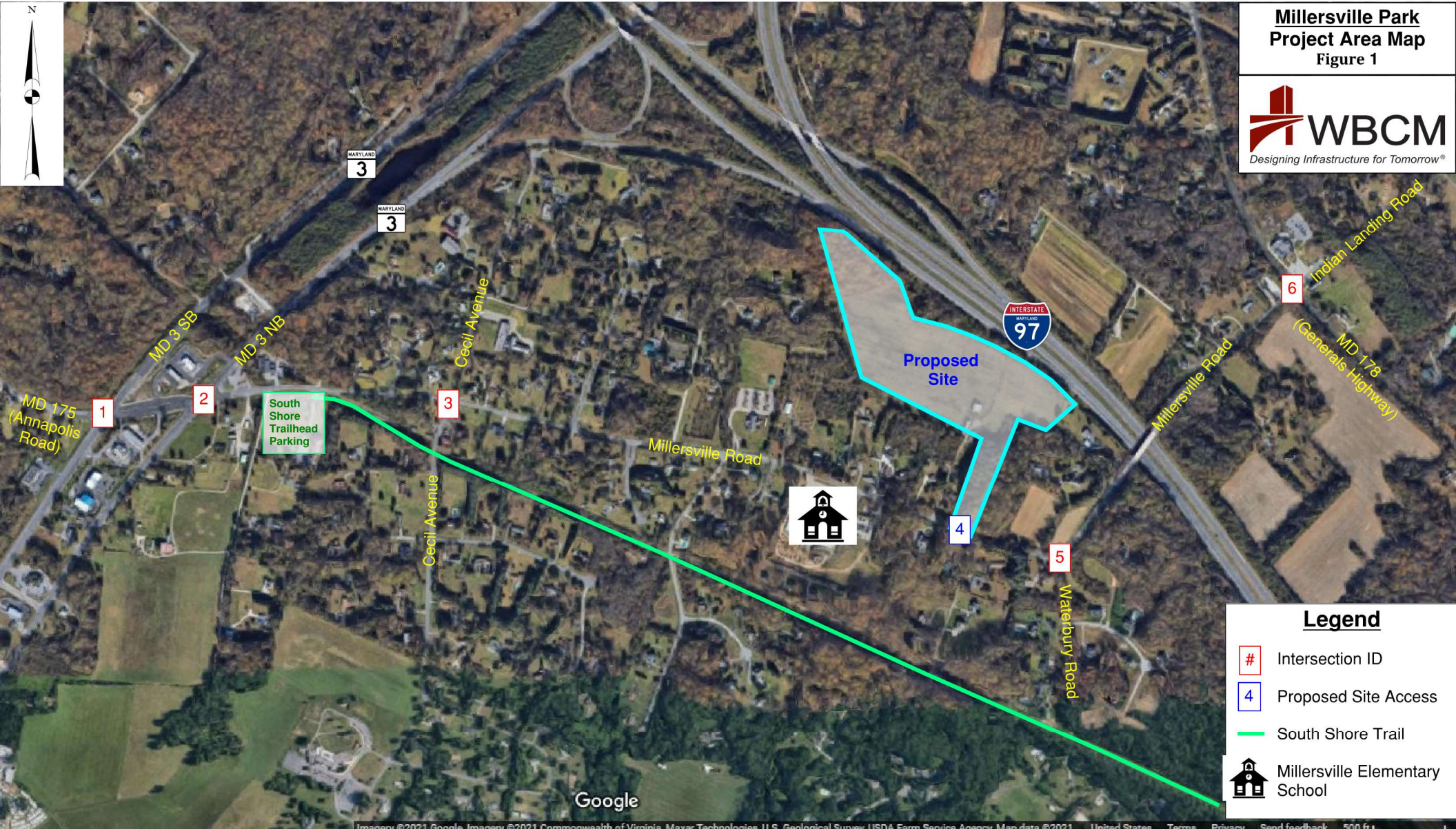
The study area is provided in Figure 1. Traffic data collection was conducted in 2021 to develop existing AM, PM, Saturday and Sunday peak hour volumes for traffic analyses. The traffic analyses indicate that operational issues are currently experienced along the west end of the existing roadway network. The two MD 3 study intersections at MD 175/Millersville Road operate with unacceptable side street delays providing little to no reserve capacity to accommodate additional traffic.

Background traffic volume increases intensify the existing deficiencies at the intersections. The trips generated by the background development will cause additional delays to the roadway network and push the borderline failing intersections into unacceptable operations. MDOT SHA noted no pipeline projects within the study area, particularly to improve existing unacceptable operations at the two MD 3 intersections. Additional trips from the Millersville Park development will further increase delay at intersections that are over capacity; however, several mitigation measures are recommended to ensure the Millersville Park development does not reduce operations beyond projected levels under background development conditions:

- MD 3 Southbound at MD 175: Provide a narrow pavement marking median from the tip of the southwest quadrant channelization island (theoretical gore) that will extend 200 FT south along MD 3 southbound. Install a rumble strip between the pavement markings to provide a physical deterrent for MD 3 southbound vehicles to enter the auxiliary lane early. The rumble strip would also improve the MD 175 eastbound right turn yield condition and help promote free-flow operations for the movement. Optimize signal timing and increase eastbound right turn traffic flow to reduce intersection delay.
- MD 3 Northbound at MD 175/Millersville Road: Provide concurrent side street phasing to improve operations (existing side street phasing is split). The eastbound double left turn would operate under a protected left turn phase. Optimize signal timing to reduce intersection delay.
- Tree pruning and shrub clearing along the north side of the Millersville Road/Waterbury Road intersection to increase the sight distance along the horizontal curve in order to improve the road rating.

The mitigation measures are provided on an aerial image included as Figure 2. The proposed site is not expected to have a significant impact on the remaining study intersections east of MD 3 as all intersections function at an acceptable level of service. Discussions with MDOT SHA should be initiated to determine future mitigation measures at the two MD 3 intersections to correct existing deficiencies.

Millersville Park Project Area Map Figure 1



Legend

- # Intersection ID
- 4 Proposed Site Access
- South Shore Trail
- Millersville Elementary School

