

SCHOOL-RELATED CRASH REVIEW

Location: Rippling Brook Drive at Bel Pre Elementary School

Crash Date: May 23, 2024

Crash Time: 5:45 PM

Local Case No.: 240024489

Review Date: January 14, 2025

Description of Incident

On Thursday, May 23, 2024, at approximately 5:45 PM, a motorist was exiting the school driveway and was stopped in the crosswalk when a bicyclist traveling southbound along the sidewalk adjacent to Rippling Brook Drive collided with the vehicle. According to the crash report, the bicyclist suffered minor injuries. Daytime weather conditions were clear, and the roadway surface was dry.

Figure 2 illustrates the crash location and direction of cyclist and vehicle travel.

Location and Site Description

The subject location is along Rippling Brook Drive, at the northern driveway of Bel Pre Elementary School (ES), approximately 75 feet north of Blair Stone Lane. Bel Pre ES is located at 13801 Rippling Brook Drive. The northern driveway provides two-way access to the school's main entrance, with a "bus only" restriction from 8:15 AM to 9:15 AM and 2:45 PM to 3:45 PM on school days. The southern driveway leads to a loop parking lot for student drop-off. Bel Pre ES has a current enrollment of 526 students in grades pre-Kindergarten through 2nd.

Bel Pre Elementary School (ES)

The majority of student arrivals are between 8:30 AM and 9:00 AM and dismissal occurs between 3:25 PM and 3:45 PM.

Rippling Brook Drive

Rippling Brook Drive is classified as a neighborhood connector, is approximately 30 feet wide, and is oriented in the north-south direction. Rippling Brook Drive is approximately a $\frac{3}{4}$ -mile long corridor starting at Bel Pre Road to the north and terminating at Baywood Court to the south. At the crash location, Rippling Brook Drive has buffered sidewalks on both sides of the street, on-street parking, and speed humps.

The posted speed limit along Rippling Brook Drive is 25 mph. A Montgomery County RideOn bus stop exists in the southbound direction at Hewitt Avenue. There is also a bus stop along Hewitt Ave eastbound at the intersection with Rippling Brook Drive. Multiple school-related signs exist along the corridor, including school zone signing and "Fines Double" plaques.

Refer to **Figure 1** in the attachments for additional details on the Rippling Brook Drive segment.

Rippling Brook Drive at Main Entrance Driveway

The intersection of Rippling Brook Drive at the school's main entrance driveway is a three-legged intersection, with the Bel Pre ES. The driveway spans approximately 22 feet, with pedestrian ramps and standard crosswalk markings.

The Rippling Brook Drive corridor was evaluated to identify potential infrastructure, maintenance activities, and road user behaviors that contribute to increased safety risk at and in the vicinity of the school-related crash location. The Rippling Brook Drive corridor was reviewed between the school driveway just north of Blair Stone Lane to the north and Baywood Court to the south. Please refer to **Figure 1** for additional information.

Crash History

Crash data obtained from dataMontgomery indicates that five (5) incidents occurred within the vicinity of the crash site between January 2021 and December 2023. Three (3) crashes occurred along Hewitt Avenue within 3,100 feet of Rippling Brook Drive. Two (2) crashes occurred along Rippling Brook Drive within 750 feet of the crash site. The five (5) crashes reported near the Rippling Brook Drive and ES driveway intersection included two (2) injury crashes, three (3) property damage crashes, and the crash type consisted of three (3) rear end collisions, one (1) sideswipe collision, and one (1) angle collision. There were no pedestrian or bicycle-related crashes. All crashes occurred along a dry surface, and two (2) crashes occurred in the dark. The incidents are illustrated on **Figure 3**.

Field Observations and Findings

Field observations were performed on Thursday, January 9, 2025, at 12:30 PM. Weather conditions were clear, and the roadway surface was dry. Snow was observed covering portions of the on-street parking aisles on both sides of the road along Hewitt Avenue and Rippling Brook Drive. On-street parking was consistent along both roads. There was minimal pedestrian and vehicular activity due to the time of day. Rippling Brook Drive slopes downhill in the southbound direction, and a large retaining wall next to the driveway at the incident location restricts sight distance for both pedestrians and cyclists attempting to cross the driveway.

Aerial images from 2019 show faded pavement markings at the driveway and within the parking lot that indicate that the bus loop was intended to be one way, but these markings have since deteriorated and are no longer visible. Furthermore, there is no signing at the driveway or within the parking lot to indicate that the bus loop is intended to be one way.

Recommendations

The following measures were identified as a result of this review:

1. Upgrade crosswalk markings to continental style for all crossings in the vicinity.
2. Coordinate with MCPS to install signing and pavement markings that direct motorists to travel one way through the school site.

Site Photograph



Photo 1. Looking west from driveway towards Rippling Brook Drive. Approximate crash location.



Photo 2. Limited sightline due to crest vertical curve looking north along Rippling Brook Drive towards Blair Stone Lane.



Figure 1 - Rippling Brook Drive Corridor Observations



Figure 2 - Crash Diagram



Figure 3 – Crash History (2021-2023)