

# SCHOOL-RELATED CRASH REVIEW

**Location:** Bel Pre Road at the Entrance to Plaza del Mercado Shopping Center (west of Layhill Road)

**Crash Date:** April 29, 2024

**Crash Time:** 7:44 AM

**Local Case No.:** 240019891

**Review Date:** January 16, 2025

## **Description of Incident**

On Monday, April 29, 2024, at approximately 7:44 AM, a motorist was making a left turn from the Plaza del Mercado Shopping Center to eastbound Bel Pre Road and struck a pedestrian crossing the east leg of Bel Pre Road from south to north. The pedestrian was in the crosswalk when the motorist collided with the pedestrian. According to the police report, the pedestrian 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 Bel Pre Road at the signalized intersection of the Plaza del Mercado Shopping Center and Parker Farm Way. The crash location is also approximately 150 feet east of the eastern driveway for Argyle Middle School. Argyle Middle School (MS) is located at 2400 Bel Pre Road; the eastern driveway is approximately 1,000 feet to the west of Layhill Road, and the western driveway is approximately 375 feet west of the eastern driveway. Argyle MS has a current enrollment of 918 students in grades 6<sup>th</sup> through 8<sup>th</sup>.

### **Argyle Middle School (MS)**

The majority of student arrivals occur between 7:20 AM and 7:50 AM and dismissal occurs between 3:00 PM and 3:20 PM.

### **Bel Pre Road**

Bel Pre Road is classified as a town center boulevard, is approximately 60 feet wide, and is oriented in the east-west direction. There are no shoulders along the roadway. Bel Pre Road is approximately three miles long between MD 28 (Norbeck Road) to the west and MD 182 (Layhill Road) to the east. At the crash location, Bel Pre Road has buffered sidewalks on both sides of the street with the exception of the northwest quadrant where sidewalks are not buffered. There are no shoulders along the roadway. Throughout this segment of the corridor, there is a two-way center-turn lane that transitions to left-turn lanes at the signalized intersection.

The posted speed limit along Bel Pre Road is 35 mph with a school flasher/hazard identification beacon (HIB) and reduced speed limit of 25 mph during school hours. The HIB is located in the westbound direction approximately 300 feet west of MD 182 (Layhill Road) and in the eastbound direction just east of Rippling Brook Drive. A marked, two-stage pedestrian crossing exists across Bel Pre Road approximately 925 feet west of the Argyle Middle School driveway. A pedestrian hybrid beacon (PHB) is installed approximately 325 feet west of the Argyle Middle School driveway. A RideOn bus stop exists in both directions on the west leg of the Bel Pre Road/Plaza del Mercado intersection. Multiple school-

related signs are located along the corridor, including “State Law - Stop For School Bus When Red Lights Flash”, school signs, and “Fines Doubled” plaques.

Refer to **Figure 1** in the attachments for additional details on the Bel Pre Road segment.

#### Bel Pre Road at Plaza del Mercado/Parker Farm Way

The intersection of Bel Pre Road at Parker Farm Way is a signalized, four-legged intersection, with the entrance to the shopping center comprising the north leg, and Parker Farm Way comprising the south leg of the intersection. The shopping center entrance is an unmarked roadway that opens to a parking lot approximately 150 feet north of Bel Pre Road. Parker Farm Way is an unmarked roadway approximately 18 feet wide with direct residential frontage and buffered sidewalks on both sides. Pedestrian ramps are provided at the corners of the intersection with diagonal hatched crosswalk markings for all legs. The Bel Pre Road approaches consist of protected-permissive left-turn phasing.

The Bel Pre Road corridor was evaluated between Atrodome Drive to the west and Layhill Road to the east, 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. Please refer to **Figure 1** for additional information.

#### Crash History

Crash data obtained from dataMontgomery indicates that 23 incidents occurred within the vicinity of the crash site between January 2020 and December 2024. Of these 23 incidents, 20 crashes occurred within 150 feet of the signalized intersection of Bel Pre Road and Plaza del Mercado/Parker Farm Way, the subject crash incident. The three (3) other crashes occurred approximately 500 feet from the intersection with Plaza del Mercado/Parker Farm Way. The 23 crashes reported included nine (9) injury crashes, 10 property damage crashes, and the crash type consisted of nine (9) angle collisions, two (2) sideswipe collisions, three (3) rear end collisions, three (3) head on collisions, two (2) left-turn collisions, one (1) fixed object collision, and four (4) classified as “other”. There were four (4) pedestrian or bicycle-related crashes. Five (5) of the incidents occurred during wet pavement conditions, and four (4) 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 1 pm. Weather conditions were clear, and the roadway surface was dry. Conditions were cold, and snow cover remained from the previous weekend storm. Pedestrian activity was moderate, while vehicular activity was high at the intersection during the observation period. Pavement markings across the intersection are in poor condition.

Bel Pre Road left-turns operate in exclusive-permissive phasing while the minor approach left-turns operate in permissive phasing. Pedestrian phases for the minor street crossings are on pedestrian recall while the mainline crossings are pedestrian actuated. Right turn on red is permitted on all approaches. Several motorists were observed existing the shopping center and making right turns onto Bel Pre Road westbound.

#### Recommendations

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

1. Upgrade existing crosswalk markings to continental style and refresh stop lines for all four legs of the intersection.

2. Upgrade all leased lighting on utility poles adjacent to the intersection to LED.
3. Upgrade pedestrian pushbuttons on all four corners.

## Site Photograph



**Photo 1. Taken from the northwest corner looking east along Bel Pre Road. Approximate crash location.**



**Photo 2. Taken from the northeast corner looking north. Approximate crash location.**





**Figure 1 - Bel Pre Road Corridor Observations**





**Figure 2 - Crash Diagram**



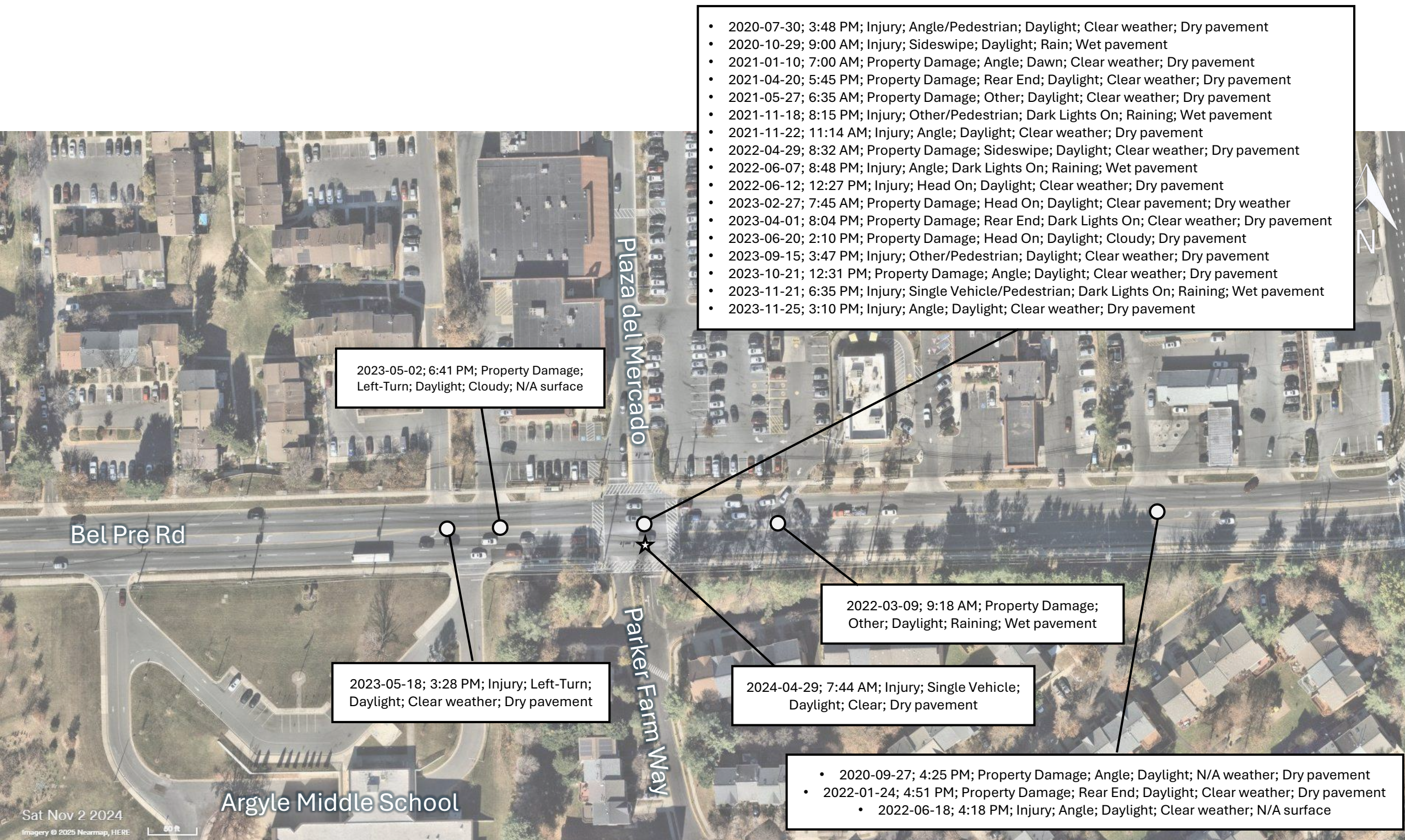


Figure 3 – Crash History (2021-2023)