

SCHOOL-RELATED CRASH-INFRASTRUCTURE REVIEW

Location: Royal Crown Dr at Observation Dr

Crash Date: October 16, 2024

Crash Time: 3:46 PM

Local Case No.: 240049487

Review Date: July 10, 2025

Description of Incident

On Wednesday, October 16, 2024, at approximately 3:46 PM, a pedestrian was in the crosswalk on the east leg of Observation Drive when a motorist making a left turn from Royal Crown Drive onto Observation Drive struck the pedestrian. The crash report indicated the subject location occurred within a marked crosswalk. The pedestrian suffered a suspected minor injury. The driver was found at fault for failing to yield right-of-way. Daytime weather conditions were clear, and the roadway surface was dry.

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

Location and Site Description

The subject location occurred at the signalized intersection of Royal Crown Dr at Observation Dr. William B. Gibbs, Jr. Elementary School (ES) is located to the north at 12615 Royal Crown Drive and has a current enrollment of 599 students in Pre-K through 5th grade.

William B. Gibbs, Jr. Elementary School (ES)

The majority of student arrivals are between 8:55 AM and 9:25 AM and dismissal occurs between 3:50 PM and 4:10 PM.

Observation Drive

Observation Drive is classified as a town center boulevard, consisting of two (2) 12-foot lanes in each direction divided by a raised grassy buffer, oriented in the east-west direction. Observation Drive is approximately 3 miles long, beginning at Woodcutter Drive/Waters Discovery Lane to the west and terminating at Middlebrook Road to the east. Observation Drive serves access to residential properties, commercial businesses, and cuts through the Montgomery College Germantown Campus.

At the crash location, Observation Drive has buffered sidewalks and no shoulders on both sides of the street. There is a left-turn lane present in both the eastbound direction and the westbound direction. Parking is restricted throughout the corridor.

The posted speed limit along Observation Road is 35 mph. A Montgomery County RideOn bus stop is located along the westbound Observation Road approach approximately 25 feet east of the crash location, and along the northbound Royal Crown Drive approach approximately 25 feet south of the crash location.

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

Royal Crown Drive at Observation Drive

The intersection of Royal Crown Drive at Observation Drive is a signalized, four-legged intersection, with Observation Drive extending easternly and westerly from Royal Crown Drive. Royal Crown Drive is

a divided roadway with access to William B. Gibbs, Jr Elementary School to the north, and access to a residential community to the south.

Pedestrian facilities at the corners of the intersection are signalized with pushbuttons at every corner. Each leg contains a marked continental crosswalk with no pedestrian refuge. There are two (2) detectable warning surfaces at each quadrant.

The Observation 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 Observation Drive corridor was reviewed between Found Stone Road to the west and Ridge Road to the east. Please refer to **Figure 1** for additional information.

Crash History

Crash data obtained from dataMontgomery indicates that 12 incidents occurred within the vicinity of the crash site between January 2020 and December 2024. Of these 12 incidents, four (4) occurred at the signalized intersection of Royal Crown Drive and Observation Drive, the subject crash incident.

The four (4) crashes that occurred at the crash location include three (3) injury crashes and one (1) property damage crash. The injury crashes include a bicyclist crash, a single vehicle collision, and an unknown pedestrian-related collision. The property damage crash included a head on collision. Only the single vehicle collision occurred in the dark. All crashes occurred along a dry surface in clear or cloudy weather conditions.

The remaining eight (8) crashes occurred at the following locations: one (1) rear end collision along eastbound Observation Drive approaching Royal Crown Drive, one (1) single vehicle collision along eastbound Observation Drive departing Royal Crown Drive, two (2) collisions within the Guest Park Circle parking lot, three (3) single vehicle collisions at Autumn Rose Way, and one (1) single vehicle collision to the east of Autumn Rose Way. These eight (8) crashes included two (2) injury crashes and six (6) property damage crashes.

All incidents are illustrated on Figure 3a and Figure 3b. Figure 3a shows crashes at the subject location and west, whereas Figure 3b shows crashes at the subject location and east.

Field Observations

Field observations were performed on Tuesday, June 10, 2025, at approximately 12:30 PM. Weather conditions were clear, and the roadway surface was dry. Pedestrian and vehicular activity was light during the observation period. The Observation Road approach consists of protected/permissive left-turn phasing, while the Royal Crown Drive approaches are permissive-only phasing. Pedestrian phases crossing Royal Crown Drive are on recall, while pedestrian phases crossing Observation Drive are actuated with a 20-second crossing time. Pedestrians were observed to press the push button and wait to cross Observation Drive for the WALK phase. Pedestrians crossing Observation Drive conflict with permissive left-turning motorists from Royal Crown Drive in both directions.

Findings

Site observations did not find any deficiencies that contributed to this crash.

Recommendations

While not related to the crash incident, the following were identified as maintenance recommendations to enhance the safety of the location:

1. Recommend refreshing the continental crosswalk pavement markings for all legs.
2. Recommend realigning ramps to guide pedestrians perpendicular to the roadway instead of into the center of the intersection.

Sign Enhancements

The following measures were identified as sign enhancement recommendations:

1. Consider installing R10-15L “Turning Vehicle Yield to Pedestrians” signs for both approaches of Royal Crown Drive.

Site Photographs



Photo 1. Taken from northwest corner looking eastbound along Observation Dr at the north leg crossing. Poor pavement marking condition.



Photo 2. Taken from northwest corner looking at the east leg crossing at the approximate crash location. No pedestrian refuge crossing Observation Drive.



Photo 3: All pedestrian ramps consist of two detectable warning surfaces that do not guide motorists perpendicular to the roadway.



Figure 1 – Observation Drive at Royal Crown Drive Intersection Observations

★ Approximate Crash Location

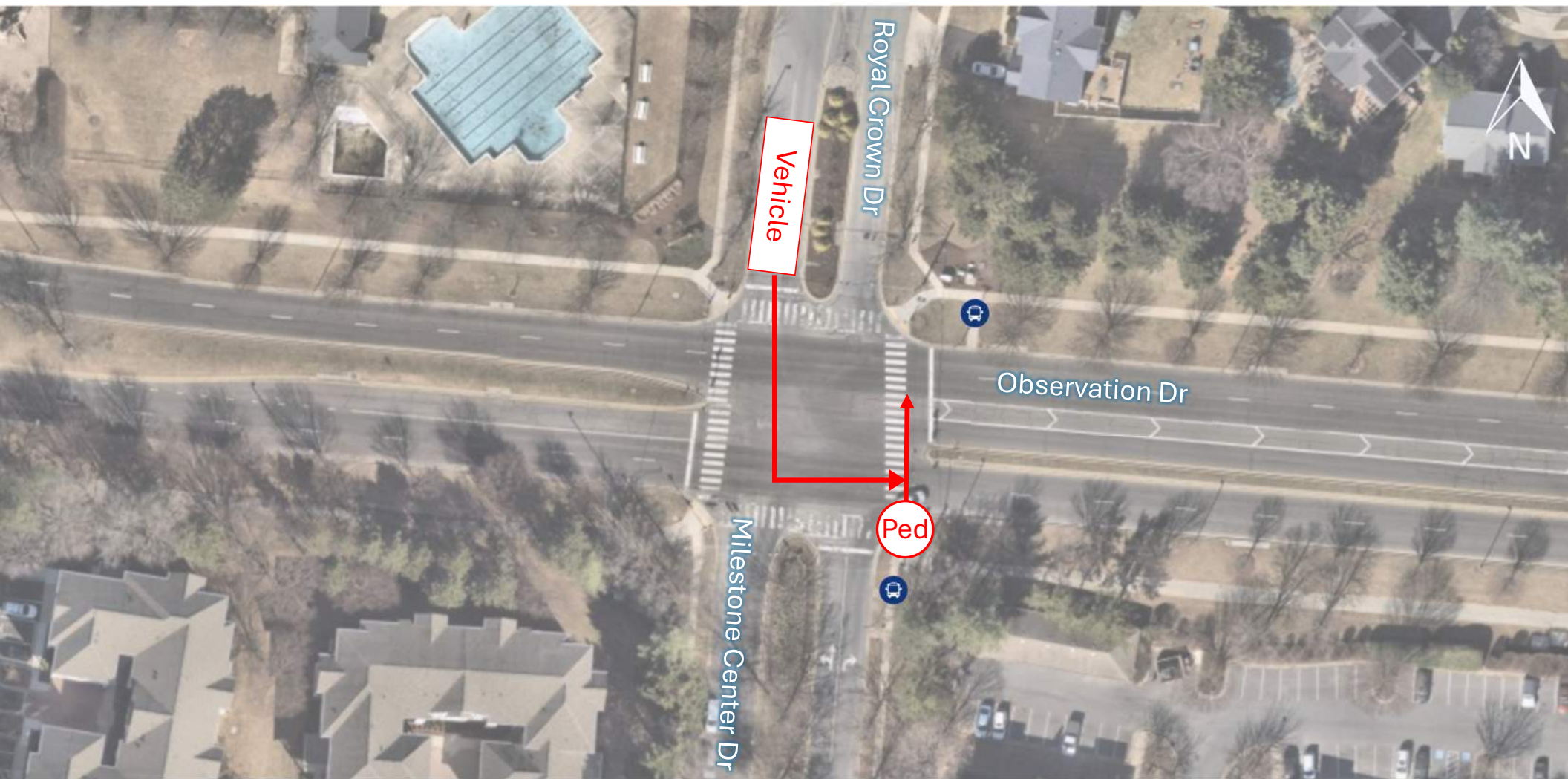


Figure 2 – Crash Diagram



Figure 3a – Crash History west (2020-2024)

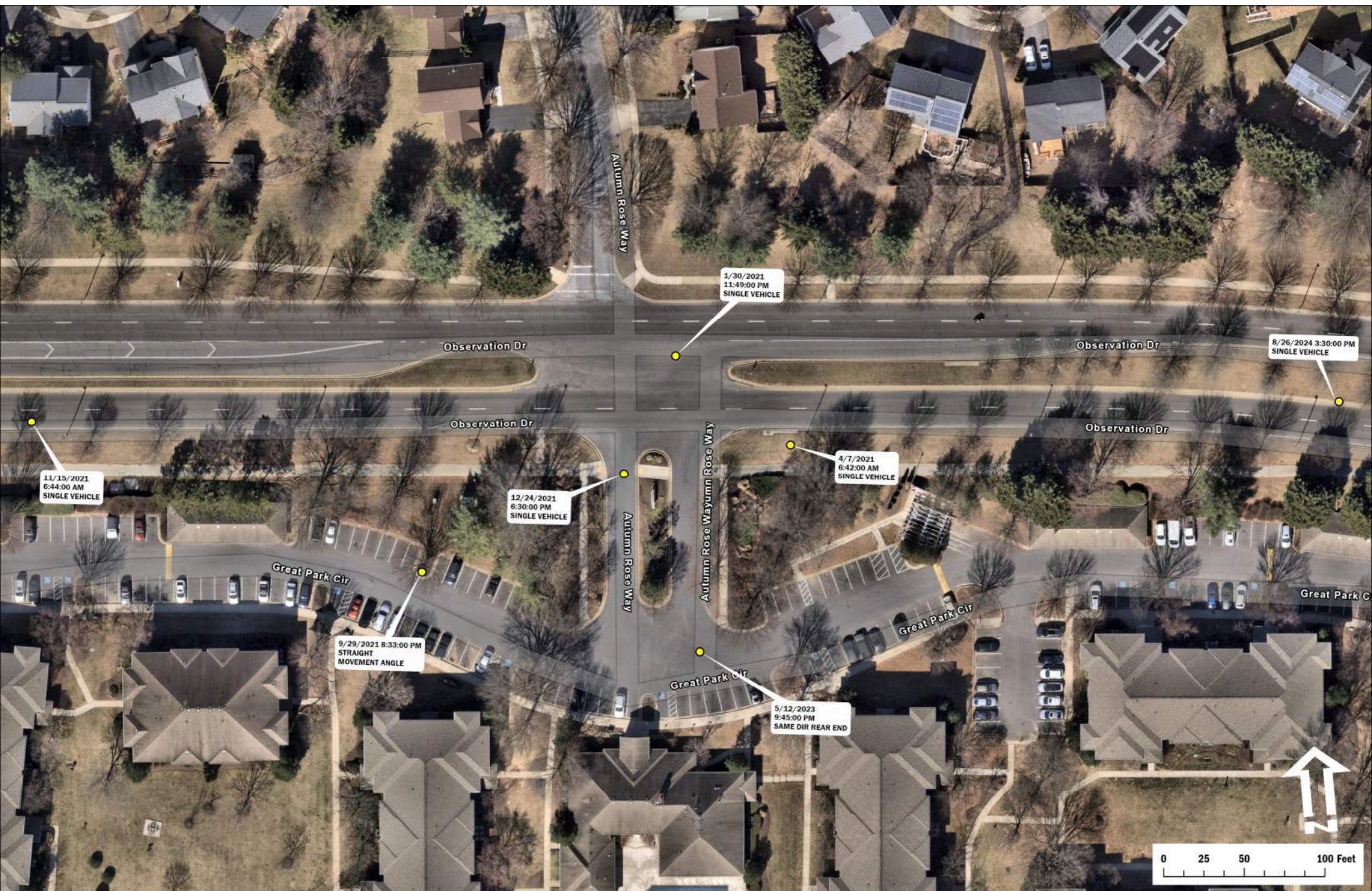


Figure 3b – Crash History east (2020-2024)