80. Finally, family members found a necklace that belonged to Birchmore lying on the floor of her bedroom. This necklace consisted of a thin gold chain with a pink flamingo charm. <sup>16</sup> The family members observed that the necklace's chain was broken, but not at the clasp. There was also a large clump of hair on the chain. From my review of the crime scene photos, I observed that, while the strap was still around Birchmore's neck, the necklace was broken and hanging from the left side of her neck. The necklace's charm was on the right side of her abdomen.

## H. Autopsy and Medical Evidence

- 81. An OCME pathologist (hereinafter, the "Medical Examiner") performed an autopsy on Birchmore's body. The Medical Examiner determined that Birchmore's cause of death was asphyxia by hanging. The Medical Examiner ruled Birchmore's manner of death a suicide. The Medical Examiner's written autopsy report noted that Birchmore's hyoid bone (a U-shaped bone at the front of the neck) was fractured on the right side and that she suffered from petechial hemorrhages of the bulbar and palpebral conjunctivae. Additionally, the Medical Examiner concluded that Birchmore had a hemorrhage of her left sternothyroid muscle.
- 82. The Medical Examiner's autopsy report further confirmed that Birchmore was approximately 8 to 10 weeks pregnant at the time of her death. The autopsy included toxicology testing. The results of the toxicology tests were negative for all substances except for sertraline, which was likely explained by the antidepressants Birchmore had been prescribed.
- 83. As part of this investigation, the government retained Dr. William Smock as an expert to independently review the crime scene photos, autopsy photos, and the Medical Examiner's autopsy report. Dr. Smock is an emergency medicine residency and forensic

<sup>&</sup>lt;sup>16</sup> In my review of Birchmore's phone data, I noticed several photos of Birchmore in which she is wearing this necklace.

fellowship trained physician with more than 40-years of experience in the forensic evaluation of injuries, crime scenes, the forensic evaluation and reconstruction of wounds, including asphyxia-related deaths. His training, experience and position as a Police Surgeon, Instructor at the Louisville Metro Police Academy, Instructor for the U.S. Department of Justice, a Professor of Emergency Medicine, Medical Director of an EMS service, Physician and Medical Advisor to the FBI and U.S. Marshals Service, and an Assistant Medical Examiner with the Kentucky Medical Examiner's includes the emergency treatment, investigation, and reconstruction of asphyxia-related deaths and the analysis of crime scene for evidence of alteration. He has treated and evaluated thousands of patients, both fatally and non-fatally injured, who have experienced the physiological consequences of asphyxia, including strangulation. Dr. Smock has written, lectured extensively and trained thousands of law enforcement officers, physicians, nurses, judges and attorneys on evidence collection, crime scene investigation, the analysis and reconstruction of wounds, injury mechanisms, and the medical risks and consequences of asphyxia.

- 84. Based on his review of the evidence, Dr. Smock has made several observations and conclusions that call into question the prior finding that Birchmore's cause of death was suicide and instead further confirm that Birchmore's cause of death was homicide.
- 85. First, Dr. Smock concluded that the fracture of the right superior horn of Birchmore's hyoid bone is not consistent with the position in which first responders found her: sitting. A sitting hanging is called "an incomplete hanging," meaning only partial body weight is applied to the neck ligature. Dr. Smock's review of hundreds of cases of hangings in the forensic medical literature found no reported cases of hyoid bone fractures in seated women. Fractures of the hyoid bone are more commonly seen in strangulation assaults and in hangings with full body weight applied to the ligature, but not seated hangings.

- 86. Second, Dr. Smock noted that, during the autopsy, a pattern imprint was documented on Birchmore's right upper chest. The pattern imprint was the consequence of a buckle or buckles from the ligature strap being forced downward into Ms. Birchmore's chest. The presence of this pattern imprint is not consistent with a ligature hanging. Rather, the presence of the pattern is consistent with blunt force trauma from an assault. When first responders found Birchmore's body, the buckle responsible for this imprint was observed just below her right ear. However, the location of the imprint on her chest is not consistent with an incomplete ligature hanging.
- 87. Third, Dr. Smock reviewed the autopsy photos that depict Birchmore with areas of skin missing from the inferior and lateral aspects of her nose consistent with abrasions. These types of injuries are commonly seen in cases of suffocation when the victim moves their nose back and forth in an effort to breathe.
- 88. Fourth, Dr. Smock noted that Birchmore was in the habit of always wearing a chain necklace with a flamingo pendant. The chain was found broken around Birchmore's neck. The breaking of Birchmore's chain necklace is consistent with a struggle.
- 89. Dr. Smock, based on his education, experience, training and his review of the materials in this case opined, with a reasonable degree of medical and scientific certainty, that the cause of Ms. Birchmore's death is asphyxia and that the manner of her death is homicide.

## I. Massachusetts State Police Interview of Matthew Farwell

90. On February 6, 2021, two days after police found Birchmore's body in her apartment, Massachusetts State Police detectives interviewed FARWELL. The interview occurred in the parking lot of a Stoughton elementary school. During this interview, FARWELL made several false statements about his relationship with Birchmore.