In recent years, ground-penetrating radar (GPR) has become more widely used by archaeologists to map subsurface features at archaeological sites. The radar allows for quick survey of a landscape without disturbing subsurface features and helps preserve the archaeological record. The signal can be blocked or distributed based upon the soil composition, such as glacial till and soil saturation. There are very few reference texts to assist those learning how to identify GPR features at a variety of sites. To help fill in this gap in the Midwest, this thesis project proposes to create a catalog of GPR features from a variety of historic sites, which can be used as a reference guide for beginners studying GPR methods and GPR anomaly identification. As this research developed, this thesis project shifted from creating a catalog into creating a reference guide for future use.