

UNDERSTANDING ENGINEERING, ENVIRONMENTAL AND CULTURAL RESOURCE SURVEYS

When planning new facilities, Chickahominy Pipeline, LLC takes steps to make sure they are designed, constructed and operated safely and in a way that protects natural and cultural resources for future generations. Many of these procedures are dictated by U.S. Department of Transportation (DOT) standards or in laws such as the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Clean Water Act (CWA) and the National Historic Preservation Act (NHPA).

One of the first steps Chickahominy Pipeline takes during a project is to contact landowners to inform them of the project and to request permission to begin any necessary surveys. During the design phase of a project, Chickahominy Pipeline or its contractors may conduct a variety of preconstruction surveys in areas where a facility may be located. Typically, these surveys involve small crews of technical surveyors, engineers, biologists or archaeologists who evaluate potential routing options and study areas that may be disturbed during construction. Here are some typical activities that take place during these surveys:

Engineering surveys are designed to evaluate potential facility locations and construction work areas. These surveys may take into account factors such as physical terrain and slope, operational requirements, access to work areas or roads and proximity to other facilities.

Biological surveys document vegetation types, determine the likelihood of encountering endangered or threatened species, and identify the location of streams and wetlands. Biological surveys typically involve a “walkover” by the survey team. Sometimes, to determine the presence or absence of wetlands, our biologists may use a small diameter soil probe to evaluate soil conditions. Soil probes are generally small and are used to extract small diameter columns of soil from potential wetland locations. Once removed, the soil is examined on-site and promptly returned.

Archaeological surveys are designed to identify cultural or historic resources, and can be more involved than biological assessments. Prehistoric artifacts are often found buried beneath the ground surface. Therefore, small excavations are required in order to conduct an adequate survey. Archaeological surveys are performed to satisfy the requirements of the NHPA and, if necessary, are coordinated in Virginia with the Virginia Department of Historic Resources (SHPO). Generally, “shovel tests” are required to be performed at pre-established intervals (such as every 50 feet). Shovel tests can measure up to about 20 square inches and are excavated to varying depths depending on soil structure. In lawns or other landscaped areas, our teams take special care to remove and separate sod and topsoil so it can be replaced once the excavation is completed. Shovel tests are promptly filled and restored upon completion. Recovered artifacts are considered property of the landowner and are returned after they are studied and catalogued.

We are sensitive to the intrusions these activities pose to landowners and we strive to minimize the number and duration of visits made by our survey crews. In circumstances where follow-up visits are required, we will consult with landowners about proposed survey activities that were not originally anticipated or described.