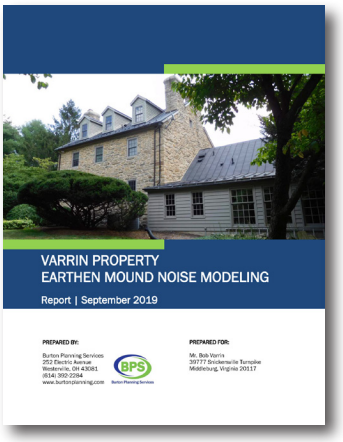
Earthen Mound Noise Modeling
Varrin Property

PROJECT DESCRIPTION

The Varrin property was experiencing traffic noise from the adjacent Snickersville Turnpike roadway. Burton Planning Services was contracted to perform field readings, model existing conditions, and perform noise barrier analyses in order to determine the existing noise impacts and the noise mitigation effectiveness from an earthen berm.



As part of the noise analysis, BPS developed noise contours at 25-foot intervals to model existing conditions throughout the site. For the noise barrier analyses, three scenarios were designed, modeling, and evaluated for variations based on contours, landscaping, and installation of driveway gates.

The final results showed that a six- to eight-foot tall barrier (earthen mound or earthen mound with short wall) with driveway gates was the most effective option.

LOCATION

Middleburg, Virginia

HIGHLIGHTS

- Conducted field readings at various locations around the property
- Developed noise contours to model existing conditions throughout the site
- Performed noise barrier analyses and earthen mound effectiveness assessment

MAJOR TASKS

- Noise field readings
- Existing conditions modeling
- Noise barrier analysis
- Earthen mound assessment