



February 4, 2026

RE: Traffic Noise Analysis Proposal for Collin County Outer Loop Road near County Road 281

Scope

Traffic Noise Analysis: Collin County has asked BGE to conduct an analysis of the Collin County Outer Loop Road near County Road 281 to determine appropriate noise abatement measures, such as noise wall length and heights. BGE will prepare a Noise Analysis Technical Report following the TxDOT (FHWA-approved) Guidelines for Analysis and Abatement of Roadway Traffic Noise (2011). The FHWA traffic noise modeling (TNM) software (version 2.5) will be used to estimate existing and future traffic noise levels. The model mainly considers the number, type, and speed of vehicles; highway alignment and grade; noise barriers; surrounding terrain features; and the locations of activity areas likely affected by traffic noise. BGE will deliver a Traffic Noise Analysis Technical Report outlining the methodology and findings. The noise analysis generally includes the following components:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures (noise walls modeled at different heights) to reduce noise impacts.

Data Collection: BGE will conduct a 24-hour bi-directional tube count along Collin County Outer loop near the study site. The data will classify existing vehicles into light, medium, and heavy truck categories separated into 15-minute increments. A K-factor and design hourly volume (DHV) will be calculated from the provided data for use in the traffic noise analysis.

Deliverables

- Traffic Noise Analysis Technical Report
- Traffic Noise Alternate Barrier Cost Assessment Worksheet, if applicable.

Fee

- Environmental: \$22,906.42
- Traffic Noise Analysis & Data Collection and Traffic Calculation: \$5,240
- Total: \$28,146.42

Schedule

- BGE will provide the deliverables within four weeks of notice-to-proceed.

Assumptions

The client will provide the following:

- Any available existing and projected traffic counts for this location of the Collin County Outer Loop