



CANTSINK
SUPPORTING INNOVATION

Case Study

CUMMING TEMPORARY WALL SHORING

SITUATION

During construction of a detention pond near a Cumming, GA, Park-and-Ride lot, Cantsink of Atlanta was engaged to install a temporary shoring wall that would protect the road to the parking lot.

This allowed for the construction of 18' tall poured in place walls as viewed in the above photo. Sheer cutting adjacent to the above road would certainly compromise the roadway.

More importantly, the earth retention work was vital to the safety of the crew constructing the permanent pond walls.

SCOPE OF WORK

The job was accomplished in three stages, each stage requiring two - three days' work. In all, 81 helical anchors were installed for the shored area measuring roughly 140 linear feet.

This temporary shoring allowed for construction of an 18' tall retaining wall as close as 10 feet from the roadway above, while preventing sinking or damage to the roadway during the construction. No utilities were encountered during the installation, which allowed work to be completed without interruption.

The foundation wall crew was permitted to begin construction of the wall footing immediately following completion of the lower-tier shoring.

Cantsink anchors were part of the earth retention system, along with the fabric, heavy gauge wire, and reinforcing bars. The design load was 15 kips, achieved with Eskridge 5,500 # drive head.

ANCHOR SYSTEM

81 anchors with 8" helices were used, installed 20 degrees from horizontal. 12" X 12" x 1/2" tension plates were used to lock the reinforcing members against the slope to restrict lateral movement.

DESIGN LOAD

15 with Eskridge 5,500 # head
kips

SOIL TYPE

Clay

RESULT

Road stabilized without delay so construction could proceed on schedule. The temporary shoring permitted a safe work environment for the foundation crew to complete the wall structure.



BEFORE AFTER