

PROJECT PROPOSAL
FOR
CULVERT REPLACEMENTS ON Sina Branch ROAD, #67

Existing condition:

The existing round culverts are a barrier to the passage of aquatic organisms.

Proposal:

Replace up to ten existing culverts with drainage structures that would accommodate aquatic organism passage. The new structures would have spans ranging from 14 ft. to 50 ft. and heights of approximately 5 ft. to 10 ft.

The streambed would be excavated to provide for the footings for each structure. The excavation would be so that the structure footings can be placed on solid rock. The excavation for the footings would be approximately 4 ft. deep x 3 ft. wide x 30 ft. long.

Pumps would be used to divert the stream away from the excavation, and sediment traps, straw wattles, and coarse aggregate would be used to control sedimentation while the existing culverts are removed and while the new culverts are installed.

All disturbed areas would be seeded and mulched. Areas where flowing water makes seeding impractical, would be covered with 3" to 6" limestone rocks and rocks from the site.

In-stream work extending approximately 250 ft. upstream and downstream of each culvert may occur and could include but not limited to:

- Clearing debris from the channel to restore a more natural flow pattern;
- Dropping trees into and across stream channels to add large woody debris;
- Stabilizing banks with log cribbing, rootwads, and/or boulders;
- Creating pools with channel constrictors, wing deflectors, log wedge dams, and rock cross veins; and
- Re-shaping stream channels, restoring floodplains, and planting riparian vegetation.

Native materials such as logs and boulders would be used whenever possible. Heavy equipment (backhoe, track hoe, and bulldozer) may be used for some structures. Ground disturbance would generally be confined to stream channel and a corridor of 50 feet back from stream bank (when building large structures with equipment).

