

3234 Trails End Lane Culvert Rehabilitation

Existing Conditions

Description:

The culvert is located approximately 21' northwest of the featured address, 3234 Trails End Lane. The culvert consists of a 32' long 24" CMP. The corrugated metal pipe shows moderate to heavy corrosion at the seams and areas of section loss starting 6' from the outlet measuring 6" wide along the invert. There appears to be a large hole in the southeast side of the pipe under the centerline of the road causing deep erosion, while sag has formed at the edge of the road over the inlet due to embankment destabilization. The pipe also has moderate sediment and rock buildup.

Spans: 1

Length: 32'

Width: 24"

Rise: 24"

Reasons for Rehabilitation:

- ✓ Roadway Settlement
- ✓ Embankment Destabilization



Roadway Settlement & Embankment Destabilization



Moderate Corrosion & Sediment Buildup



Culvert Outlet on Shear Embankment

3234 Trails End Lane Culvert Rehabilitation

Proposed Conditions

Description:

The proposed culvert rehabilitation will include extending the 24" CMP at the inlet and outlet by approximately 4'. Isolate the upstream and downstream channels. Install a PVC lining through all 40' of the 24" CMP. Install an 8' long reinforced concrete headwall at the inlet in accordance with TDOT Detail D-PE-4 and a 38' long x 10' tall reinforced concrete retaining wall at the outlet in accordance with TDOT Detail STD-17-15. Cut and remove all vegetation overgrowth from the inlet and outlet channel as well as regrade the area and reconstruct the roadway, as necessary.

Spans: 1

Length: 40'

Width: 24"

Rise: 24"

Opinion of Probable Cost: \$185,000

Anticipated Construction Duration: 6 Weeks

Anticipated Schedule for Construction:

October 3rd through November 11th

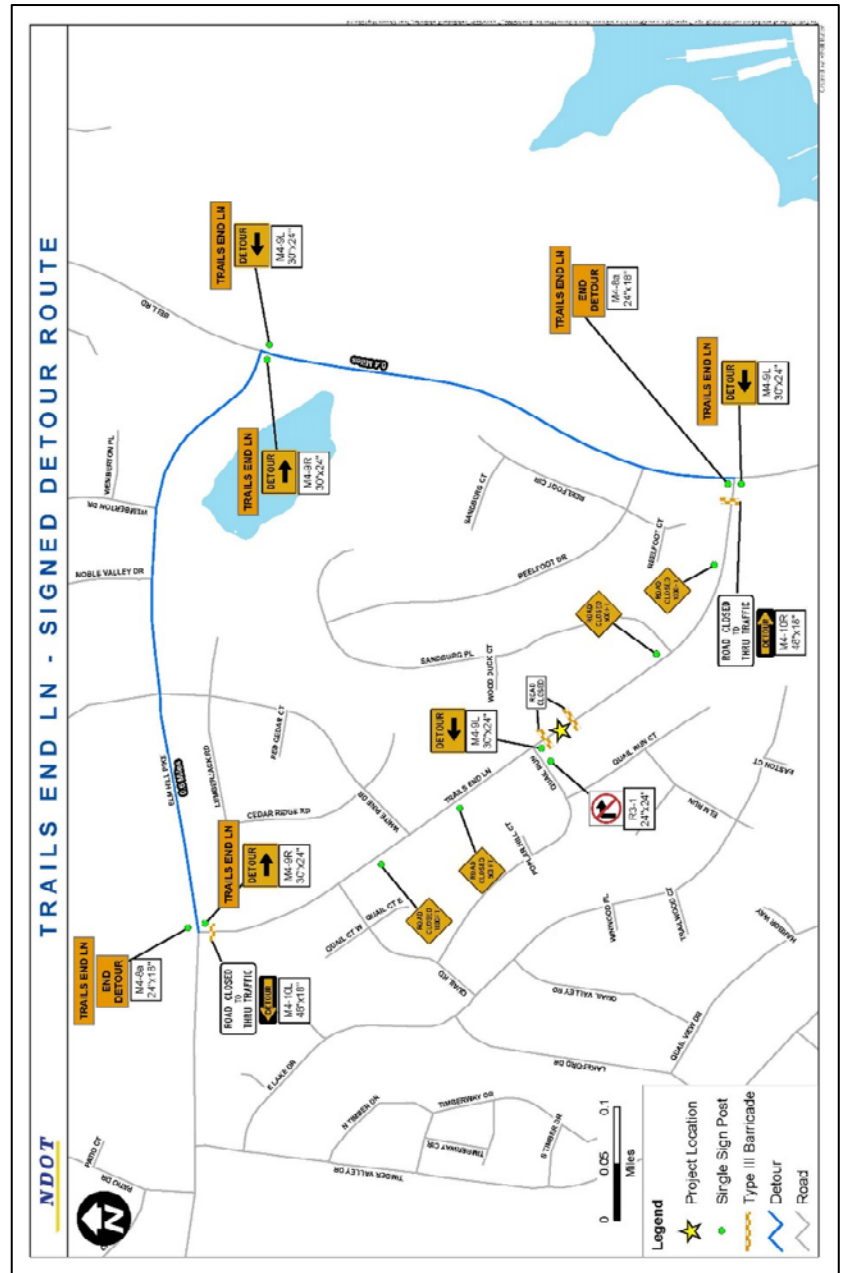
Anticipated Road Closures:

October 3rd through November 11th

Project Status: Ready for construction

Construction Challenges:

- ✓ Utility Bracing
- ✓ Depth of Excavation
- ✓ Site Maintenance
- ✓ Stormwater Management



Detour Map