

Stream Restoration Plan
Unnamed Tributary to Mountain Creek
SR 1542 (Ridge Street)
Stanly County

TIP U-3300B
Federal Aid Project No. STP-1542 (2)
State Project No. 8.2681301
WBS No. 34908.1.1
August 2008

The North Carolina Department of Transportation (NCDOT) will perform on-site mitigation for stream impacts associated with the extension of SR 1542 (Ridge Street) from existing Ridge Street west of SR 1545 (Mountain View Church Road) to SR 1549 (Airport Road). The roadway project is approximately 1.4 miles long and will permanently impact 0.08 acres of wetlands, 190 linear feet of stream channel, and temporarily impact 178 linear feet of stream channel. NCDOT will restore 46 linear feet of jurisdictional stream as onsite mitigation for the impacts associated with this project. This mitigation site occurs at Sta. 12 + 30.00 – Sta. 14 + 45.00 within Transportation Improvement Program (TIP) U-3300B.

EXISTING CONDITIONS

The project is located in Stanly County, southwest of the Stanly County Airport, approximately 2 miles west of Badin. Land use within the project study area is primarily comprised of agricultural and forested land with some residential areas interspersed throughout.

An unnamed tributary to Mountain Creek flows under Ridge Street through a 30" RCP, approximately 300 feet north of Mountain View Church Road. The stream channel varies from 3 – 4 feet wide with average bank heights of 2 feet and a substrate comprised primarily of gravel and cobble. Up and downstream of the crossing, the tributary has a well developed canopy and wooded buffer providing for a stable channel. Buffer canopy is dominated by cherrybark oak (*Quercus pagoda*), scarlet oak (*Quercus coccinea*), and hickory species (*Carya* spp.) The sub-canopy consists of shrubs including flowering dogwood (*Cornus florida*), willow oak (*Quercus phellos*), blackgum (*Nyssa sylvatica*), winged elm (*Ulmus alata*), and red maple (*Acer rubrum*).

The Finding of No Significant Impact (FONSI) for TIP U-3300B, dated June 2006, provides further details concerning existing roadway and project study area conditions.

PROPOSED CONDITIONS

The proposed stream mitigation will consist of restoring 46 linear feet of jurisdictional stream. Restoration will involve removing pavement, roadway fill, and the associated

30”RCP. Cul-de-sacs will be constructed at the terminal ends of Ridge Street. The stream channel and banks will be reestablished to match both upstream and downstream geomorphology. The stream banks will be stabilized using coir fiber matting and planted in accordance to the reforestation plan.

The Natural Environment Unit shall be contacted to provide construction assistance, if necessary, to ensure that the stream mitigation area is constructed appropriately.

MONITORING

No specific monitoring is proposed for this restoration site. The Natural Environment Unit will verify the channel dimensions and site stability after construction has been completed. Agency representatives will be invited to a post-construction site inspection.