

Monitoring Data Record

Project Title: R-2248D – Charlotte Outer Loop COE Action ID: 200131321  
 Stream Name: Trib. to Dixon Branch (Site 19) DWQ Number: 011231  
 City, County and other Location Information: Mecklenburg County, Charlotte Outer Loop, R-2248D Left of Project Station 10+00 Y-7  
 Date Construction Completed: May 2008 Monitoring Year: ( 6 ) of 5  
 Ecoregion: \_\_\_\_\_ 8 digit HUC unit 03050103  
 USGS Quad Name and Coordinates: \_\_\_\_\_  
**Rosgen Classification:** Proposed C4 stream type classification  
 Length of Project: 400 ft. Urban or Rural: Urban Watershed Size: \_\_\_\_\_  
 Monitoring DATA collected by: M. Green and J. Young Date: 3/11/14  
 Applicant Information:  
 Name: NCDOT – Roadside Environmental Unit  
 Address: 1425 Rock Quarry Rd, Raleigh, NC 27610  
 Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov  
 Consultant Information:  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Telephone Number: \_\_\_\_\_ Email address: \_\_\_\_\_  
**Project Status:** \_\_\_\_\_

**Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.):** Level 1

The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period or through two documented bankfull flow events: Reference photos; plant survival (i.e. identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action); visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the USACE, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the USACE, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

Section 1. PHOTO REFERENCE SITES

*(Monitoring at all levels must complete this section)*

**Total number of reference photo locations at this site:** 8 photos were taken from 4 photo point locations

**Dates reference photos have been taken at this site:** 2/23/09, 9/1/09, 3/16/10, 9/28/10, 3/2/11, 9/12/11, 1/25/12, 9/20/12, 1/23/13, 9/17/13, 3/11/14

**Individual from whom additional photos can be obtained (name, address, phone):** \_\_\_\_\_

Other Information relative to site photo reference: A site map with photo point locations is attached to this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

**Section 2. PLANT SURVIVAL**

**Attach plan sheet indicating reference photos.**

Identify specific problem areas (missing, stressed, damaged or dead plantings): The left buffer is lacking planted vegetation due to dense areas of lespedeza noted in 2012.

Estimated causes, and proposed/required remedial action: An onsite meeting was held on June 5, 2012, between regulatory agencies and NCDOT. Regulatory agencies stated that additional planted species were needed within the buffer. NCDOT completed two herbicide applications on the lespedeza. The left buffer and left streambank was replanted on 3/11/14 with silky dogwood and black willow live stakes and willow oak, sycamore, river birch, and green ash bareroot seedlings. The left streambank was live staked only where missing or dead stakes were noted.

ADDITIONAL COMMENTS: \_\_\_\_\_

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

**Section 3. CHANNEL STABILITY**

**Visual Inspection:** The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

UT to Dixon Branch (Site 19) stream relocation is stable for the Year 6 Winter evaluation. Some areas of bank scouring still exist upstream of the pipe crossing at Sta. 10+80 Y-7 and Sta. 10+40 Y-7. The areas of bank scouring behind the two j-hooks have filled in with sediment deposition due to bankfull events since the last monitoring visit. NCDOT live staked these areas on 3/11/14 to help promote woody plant growth. The area downstream of the pipe that had extensive erosion was repaired during May 2010 and is highly stable. A bankfull event had occurred since the last monitoring evaluation. NCDOT will continue to monitor channel stability at Site 19.

Date 3/11/14	Station 10+80 Y-7 (additional photo)	Station 10+40 Y-7 (additional photo)	Station	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?	Bank scouring on left bank behind J-hook	Bank scouring on left bank behind J-hook			
Other problems noted?					

**Section 4. DEBIT LEDGER**

The entire UT to Dixon Branch (Site 19) stream mitigation site was used for the R-2248D project to compensate for unavoidable stream impacts.

# UT to Dixon Branch

## Site 19



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)  
Year 6 Winter – March 2014



Photo Point #3 (Downstream)

# UT to Dixon Branch

## Site 19



Photo Point #4 (Upstream)



Photo Point #4 (Downstream)



Left bank scouring at end of J-Hook @ Sta. 10+80 Y-7



Left bank scouring at end of J-Hook @ Sta. 10+40 Y-7



Overview Photo of Site 19  
Year 6 Winter – March 2014

# R-2248D TRIB TO DIXON CREEK SITE 19

