

Monitoring Data Record

Project Title: Phase 1 – Middlesex Corporate Center COE Action ID: 200900640
Stream Name: UT Turkey Creek (UT-1 & UT-2) DWQ Number: 07-0228v4
City, County and other Location Information: The project is located in the southern region of Nash County where Highway 264 and Highway 231 intersect, about 2 miles east of Middlesex, NC.

Date Construction Completed: February 2011 Monitoring Year: (3) of 3
Ecoregion: _____ 8 digit HUC unit 03020203
USGS Quad Name and Coordinates: N 35 47' 50", W 78 11' 36"

Rosgen Classification: _____

Length of Project: UT-1 (Crossing 3): 120 feet & UT-2 (Crossing 1): 40 feet
Urban or Rural: Rural Watershed Size: _____
Monitoring DATA collected by: M. Green & J. Young Date: 6/27/13

Applicant Information:

Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Road Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

Consultant Information:

Name: _____
Address: _____
Telephone Number: _____ Email address: _____

Project Status: Complete

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

Mitigation Plan states: The restored and relocated sections will be visually monitored and documented with photo points for channel stability and vegetation survival. The conservation easement will be held in perpetuity and recorded on the NHCS deed. The mitigation site and conservation easement boundary will also be placed on the Natural Environment Unit's Mitigation Geodatabase for long time stewardship.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: A total of 3 photos were taken for UT-1 site. and a total of 6 photos were taken for UT-2 site.

Dates reference photos have been taken at this site: 7/19/11, 6/27/12, 6/27/13

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: _____

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 of UT-1 has not been completely excavated due to a power pole that was left inside the buffer limits at the time of construction. The power pole has since been removed but the buffer still needs to be completely excavated (See the overview photo for UT-1).

Estimated causes, and proposed/required remedial action: The Division has been contacted to complete the excavation of the buffer.

ADDITIONAL COMMENTS: NCDOT completed planting this site with silky dogwood and buttonbush live stakes along the streambank in February 2011. Sycamore, green ash, swamp chestnut oak, and willow oak bareroot seedlings were planted in the buffer. Planted vegetation was surviving at UT-1 and UT-2 streams. Other vegetation noted onsite included poplar, fennel, baccharis, goldenrod, sedge, water oak, black willow, sweetgum, lespedeza, pine, wax myrtle, jewelweed, and various grasses. NCDOT proposes to discontinue plant survival monitoring at the UT-1 and UT-2 streams.

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.

Both UT-1 and UT-2 streams were stable for the Year 3 monitoring evaluation. A bankfull event has occurred since the last monitoring evaluation. NCDOT proposes to discontinue channel stability monitoring at the UT-1 and UT-2 streams.

Date Inspected	Station Number				
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

Section 4. Debit Ledger. UT to Turkey Creek Middlesex Corporate Center Mitigation Site Debit Ledger

Jeffreys Warehouse	Wetland and Stream Debit Types			
TIP DEBITS	Action ID #	Buffer Preservation	Stream Preservation	Stream Restoration
WBS # 46794 Division 4	2009-00640	41,894	2,440 LF (244 @ 10:1 Ratio)	20 LF @ 1:1 Ratio
WBS # 46794 Division 4 Storm Water Devices	2009-00640	65,340		
BD-5104M Division 4 WBS 45350.1.14	2013-00346	105		
As-Built Quantity (ft² or LF)		146,000 ft²	3,900 LF	20 LF
Debit Summary		107,339 ft²	2,440 LF	20 LF
Assets Remaining		38,661 ft²	1,460 LF	0 LF

Note: Debit ledger information up to date as of April 8th, 2014.

UT to Turkey Creek (UT-1)



PP #1 Looking Upstream



PP #1 Looking Downstream



Overview photo looking downstream from road project

June 2013

UT to Turkey Creek (UT-2)



PP #1 (Upstream)



PP #1 (Downstream)



PP #2 (Upstream)



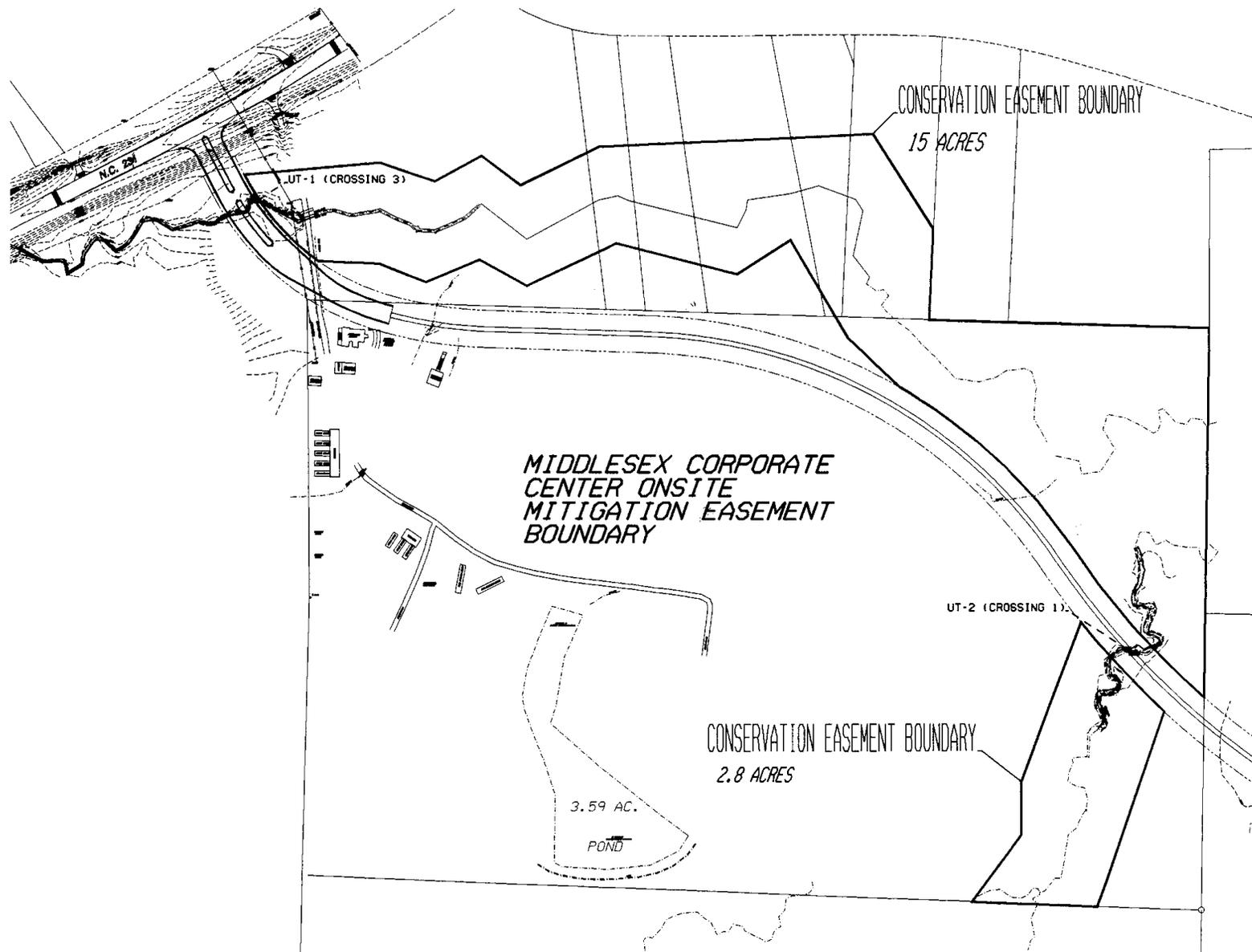
PP #2 (Downstream)



Overview photo looking upstream from road project



Overview photo looking downstream from road project



N.C. 259

UT-1 (CROSSING 3)

CONSERVATION EASEMENT BOUNDARY

15 ACRES

MIDDLESEX CORPORATE
CENTER ONSITE
MITIGATION EASEMENT
BOUNDARY

UT-2 (CROSSING 1)

CONSERVATION EASEMENT BOUNDARY

2.8 ACRES

3.59 AC.

POND