Monitoring Data Record

Project Title: U-2524AC Site 1 COE Action ID: 200321137
Stream Name: UT No. 9 to Bull Run DWQ Number: 030909
City, County and other Location Information: Greensboro Western Loop, Guilford Co.
Sta. 57+80 Lt. to 58+57 Rt. -L-
Date Construction Completed: Water was turned into the stream on June 2005 and planted in March 2005. Monitoring Year: (4) of 5
Ecoregion: 8 digit HUC unit 03030002
USGS Quad Name and Coordinates:
Rosgen Classification: Proposed reach is a E5 stream type
Length of Project: 198' Urban or Rural: Urban Watershed Size:
Monitoring DATA collected by: M. Green & J. Young Date: 2/9/09
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Road Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level **1** ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: NCDOT shall perform the following components of Level I monitoring twice each year for the 5 year monitoring period (summer and winter): Reference photos, plant survival, and visual inspection of channel stability. If less than two bankfull events occur during the first 5 years, NCDOT 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 5 year monitoring period, the USACE, in consultation with resource agencies, may determine that further monitoring is not required.

Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 3 reference points, 2 photos at each
Dates reference photos have been taken at this site: 7/26/06, 2/15/07, 7/19/07, 1/16/08, 7/15/08, 2/9/09

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

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

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):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Planted vegetation noted onsite includes: green ash, tulip poplar, river birch, black willow, silky dogwood, and sycamore. Other vegetation onsite included: *Juncus* sp., fennel, lespedeza, goldenrod, sedge, pine, sweetgum, ragweed, and various grasses.

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.

This is the Year 4 Winter evaluation of this stream relocation. The stream is stabilized at this time, except for some minor bank erosion that still exist below a crossvane (Photo Point #3 Downstream). It was also noted during this monitoring evaluation that the last rock on the left arm of this crossvane has dropped off into the channel. A bankfull event occurred at this stream relocation in August 2008. NCDOT will continue to monitor this stream relocation.

2/9/09	Station Number 58+20-L-	Station Number	Station Number	Station Number	Station Number
Structure Type	Crossvane				
Is water piping through or around structure?	Last rock on left arm of crossvane has fell into channel				
Head cut or down cut present?					
Bank or scour erosion present?	Minor erosion present				

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

UT No. 9 to Bull Run

Site 1

Photo Point #1 (Upstream)

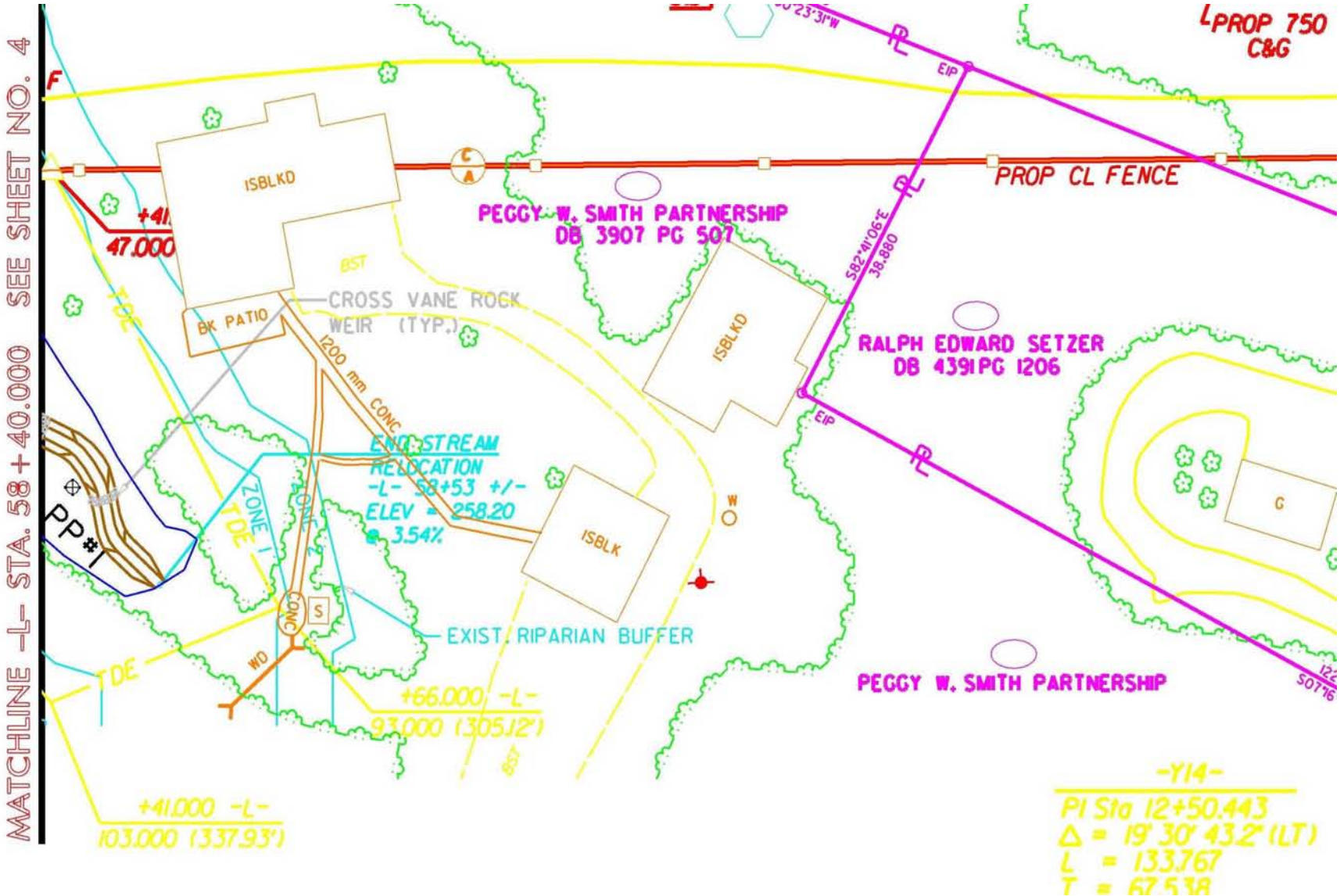
Photo Point #1 (Downstream)

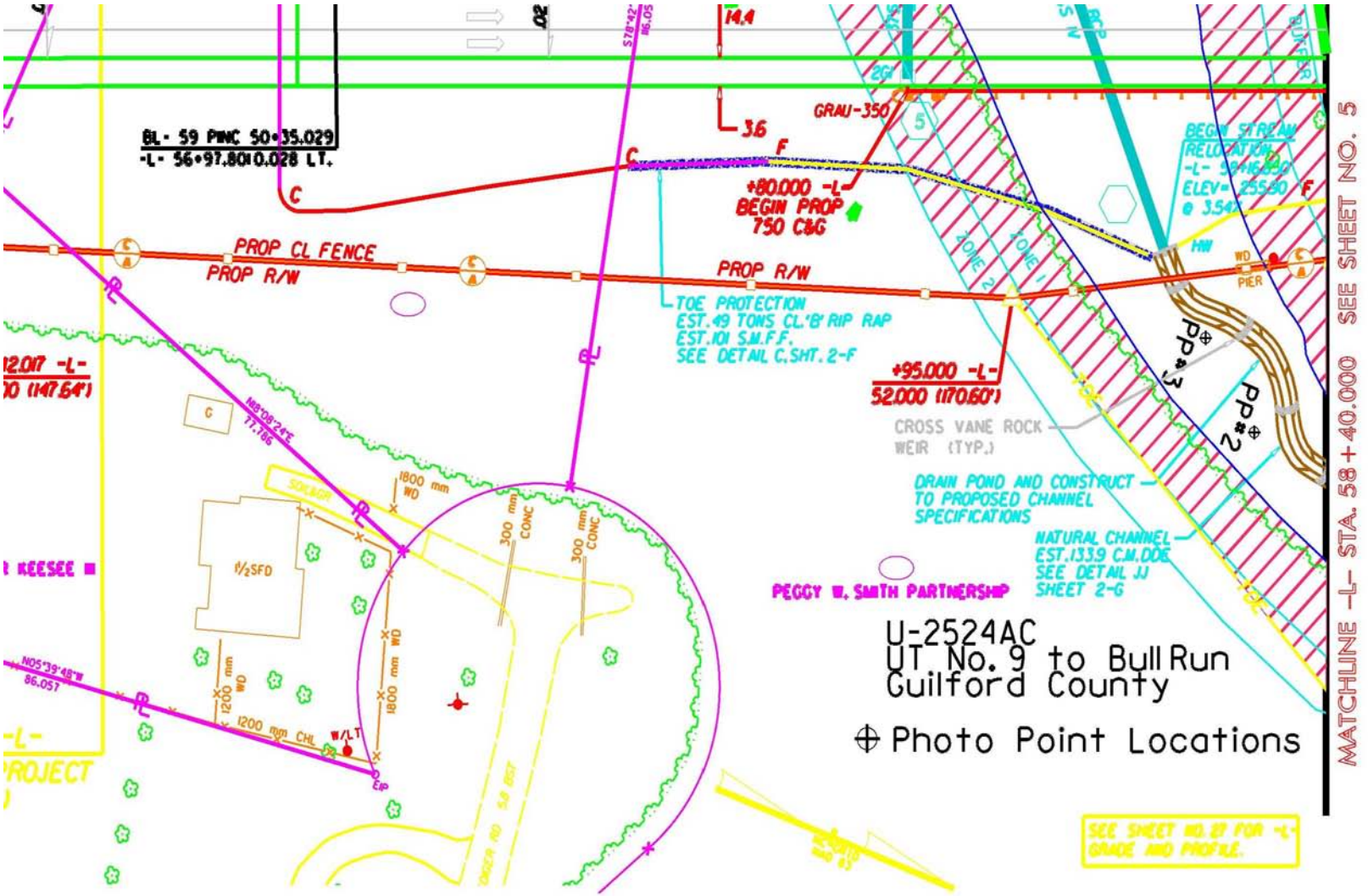
Photo Point #2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)


MATCHLINE -L- STA. 58+40.000 SEE SHEET NO. 4
PROP 750 C&G
PROP CL FENCE
PEGGY W. SMITH PARTNERSHIP
DB 3907 PG 507
ISBLKD
BK PATIO
CROSS VANE ROCK WEIR (TYP.)
1200 mm CONC.
ENDSTREAM RELOCATION
-L- 58+53 +/-
ELEV = 258.20
@ 3.54%
PP#1
ZONE 1
ZONE 2
TDE
CONC
S
WD
EXIST. RIPARIAN BUFFER
+66.000 -L-
93.000 (305.12')
+41.000 -L-
103.000 (337.93')
RALPH EDWARD SETZER
DB 4391 PG 1206
EIP
S82°41'06"E
38.880
PEGGY W. SMITH PARTNERSHIP
-Y14-
PI Sta 12+50.443
Δ = 19° 30' 43.2" (LT)
L = 133.767
T = 67.538


PROP CL FENCE
PROP R/W
PROP R/W
TOE PROTECTION
EST. 49 TONS CL. 'B' RIP RAP
EST. 101 S.M.F.F.
SEE DETAIL C, SHT. 2-F
+80.000 -L-
BEGIN PROP
750 C&G
+95.000 -L-
52.000 (170.60')
GRAU-350
CROSS VANE ROCK
WEIR (TYP.)
DRAIN POND AND CONSTRUCT
TO PROPOSED CHANNEL
SPECIFICATIONS
NATURAL CHANNEL
EST. 1339 C.M. DOE
SEE DETAIL JJ
SHEET 2-G
PEGGY W. SMITH PARTNERSHIP
1½SFD
1800 mm WD
300 mm CONC
1200 mm WD
1200 mm CHL
W/LT
EXP
U-2524AC
UT No. 9 to Bull Run
Guilford County
⊕ Photo Point Locations
SEE SHEET NO. 2F FOR -L- GRADE AND PROFILE.
MATCHLINE -L- STA. 58+40.000 SEE SHEET NO. 5