PROJECT REFERENCE NO.	SHEET NO.
R-2915D	8
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
12/29/2014 NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
Barry C. Smith

HYDRAULICS ENGINEER
12/29/2014 NORTH CAROLINA PROFESSIONAL SEAL 9334 ENGINEER W. HENRY WELLS JR.
W. Henry Wells Jr.

KCI TECHNOLOGIES
Engineers • Planners • Scientists • Construction Managers
4601 Six Forks Road, Landmark Center II, Suite 220
Raleigh, NC 27609-5210
Phone (919) 783-9214 • Fax (919) 783-9266

SUNGATE DESIGN GROUP, P.A.
915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-890

DETAIL 23
STANDARD BASE DITCH
(Not to Scale)

Natural Ground, 2:1, d, D, B, Geotextile
Min. D = 3 Ft.
Max. d = 4 Ft.
B = Varies 9-17 Ft.
Type of Liner = Class I Rip-Rap to Top of Bank

FROM STA. 505+29 TO STA. 505+82 -L- LT
DDE = 65 CY

DETAIL 9
LATERAL 'V' DITCH
(Not to Scale)

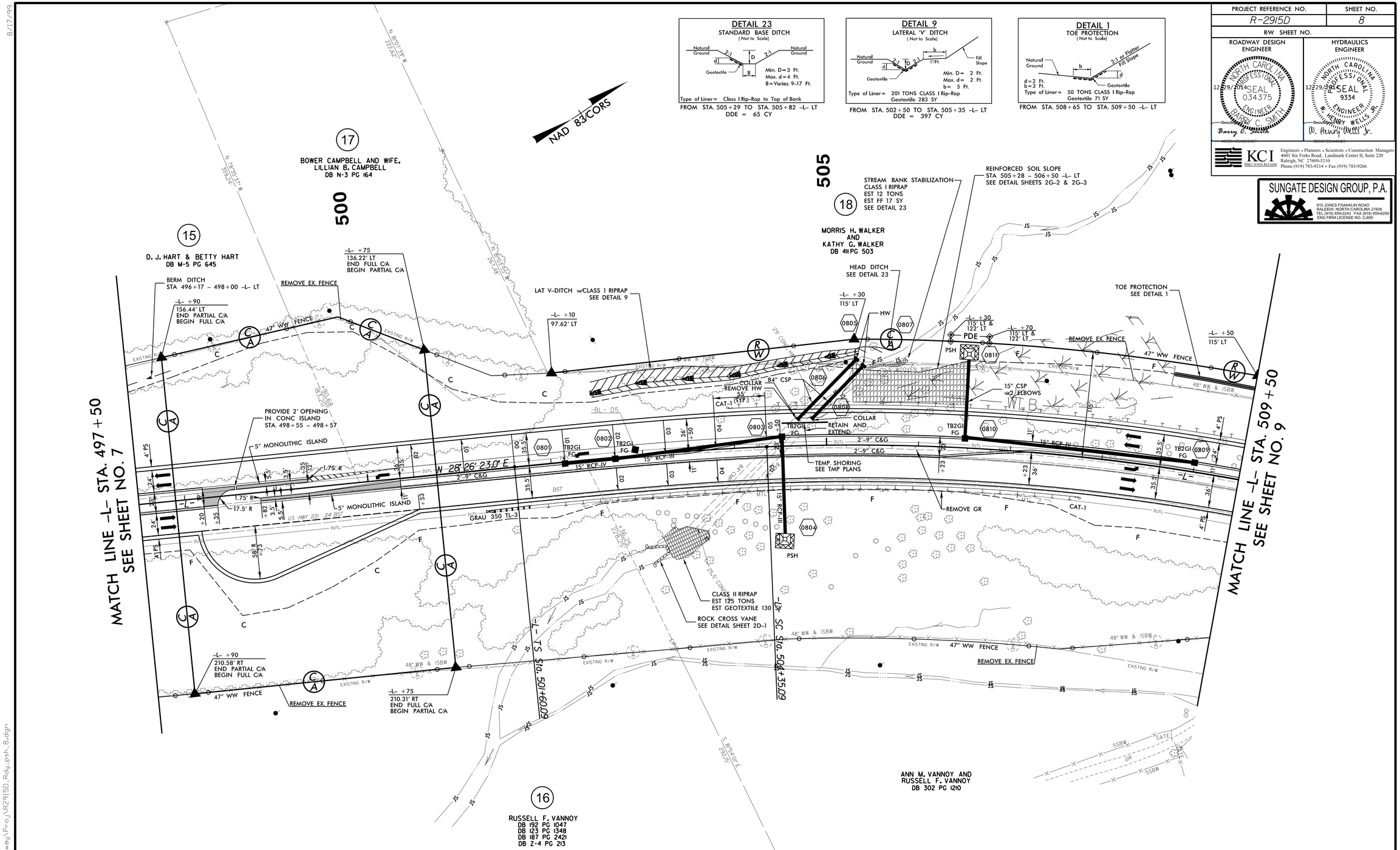
Natural Ground, 2:1, d, D, 2:1, b, 1'-Ft., Fill Slope, Geotextile
Min. D = 2 Ft.
Max. d = 2 Ft.
b = 5 Ft.
Type of Liner = 201 TONS CLASS I Rip-Rap
Geotextile 283 SY

FROM STA. 502+50 TO STA. 505+35 -L- LT
DDE = 397 CY

DETAIL 1
TOE PROTECTION
(Not to Scale)

Natural Ground, b, 2:1 or Flatter Fill Slope, d, Geotextile
d = 2 Ft.
b = 3 Ft.
Type of Liner = 50 TONS CLASS I Rip-Rap
Geotextile 71 SY

FROM STA. 508+65 TO STA. 509+50 -L- LT



-L-

PIs Sta 503+43.45	PI Sta 509+76.31
Θs = 3° 22' 52.3"	Δ = 26° 09' 14.0" (RT)
Ls = 275.00'	D = 2° 27' 32.6"
LT = 183.37'	L = 1,063.58'
ST = 91.70'	T = 541.22'
	R = 2,330.00'
	SE = .05
	RUNOFF = 275'

NOTE: ALL EXISTING CONTROL OF ACCESS FENCE TO BE REMOVED UNLESS OTHERWISE NOTED.

FOR -L- PROFILE, SEE SHEET 26

8/17/99

28-DEC-2014 09:15
63-2011-241.0015-R2915D\Roadway\Proj\R2915D_Rdy_psh_8.dgn
USER NAME = sbrown