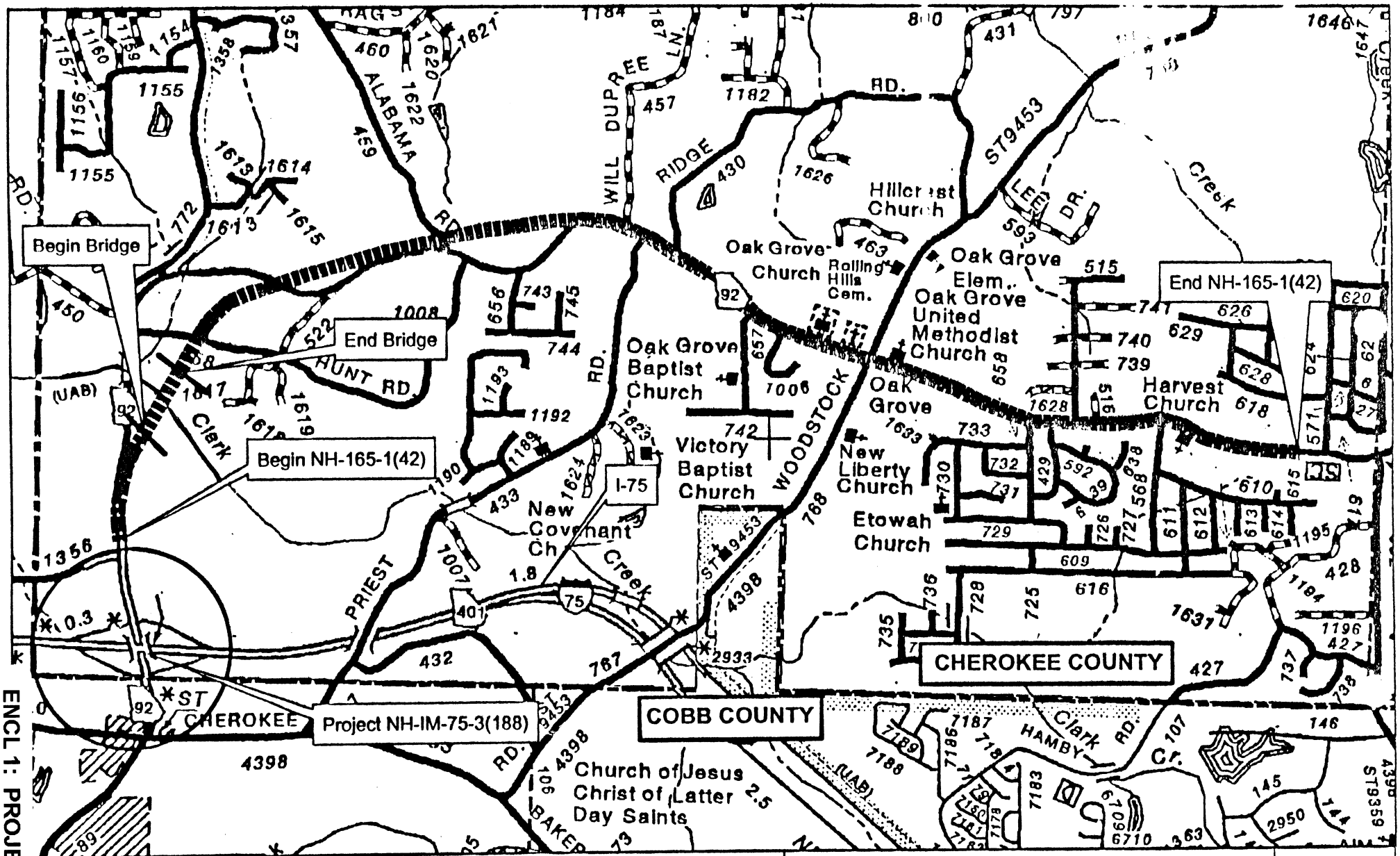


Project Location Map

Figure 1. (Sheet 1 of 2)

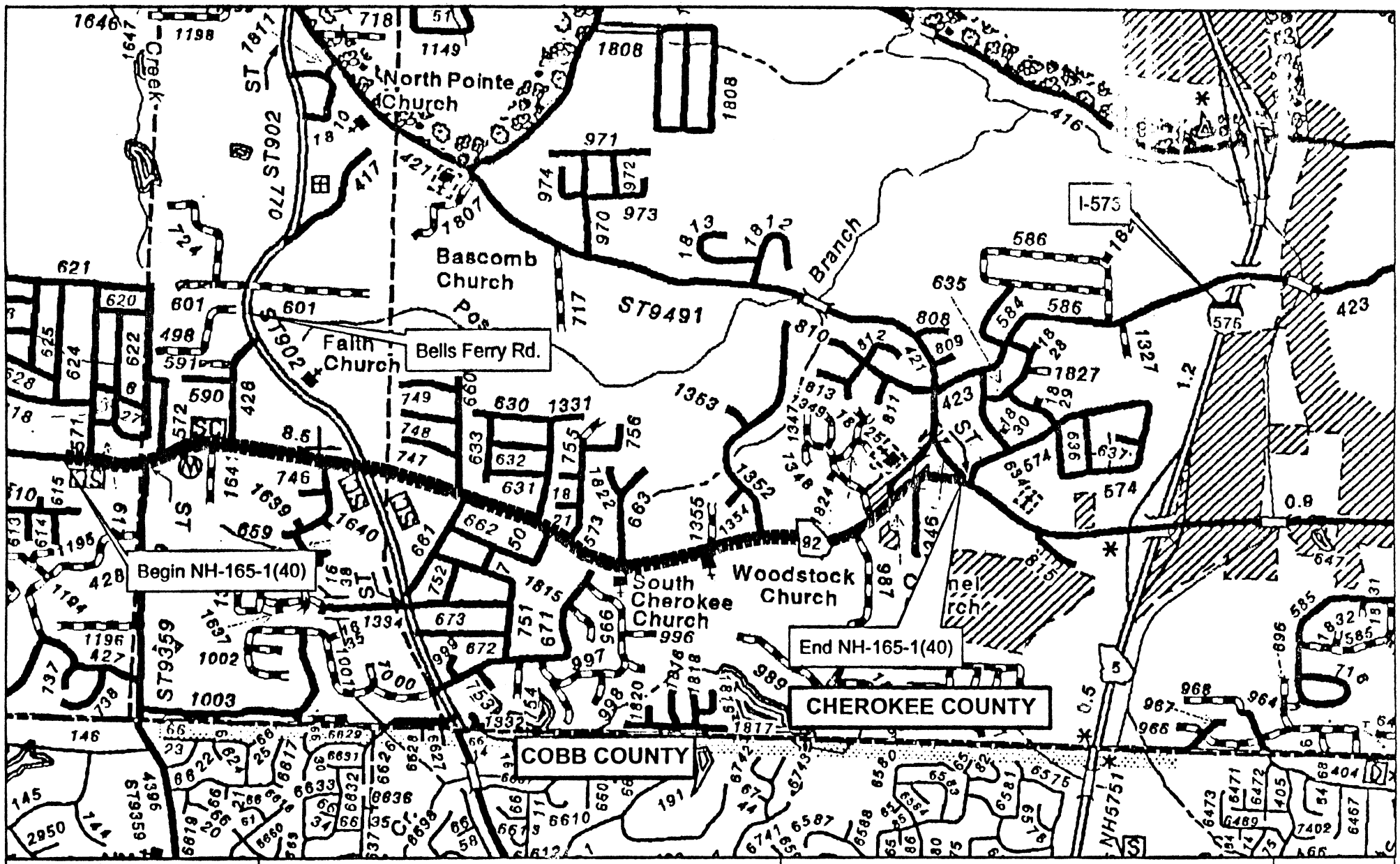
Scale

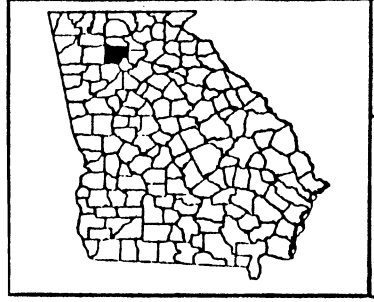
0 0.15 0.3 0.6 0.9 1.2 Miles

Projects NH-165-1(42)/NH-IM-75-3(188)
P.I. Nos. 620940/610740
Cherokee County

Proposed widening and reconstruction of State Route 92 with interchange improvements at I-75

ENCL 1: PROJECT LOCATION MAP





Project Location Map

Figure 1. (Sheet 2 of 2)

Scale

0 0.15 0.3 0.6 0.9 1.2 Miles

Project NH-165-1(40)
P.I. No 620920
Cherokee County

Proposed widening and reconstruction of State Route 92

ENCL 1

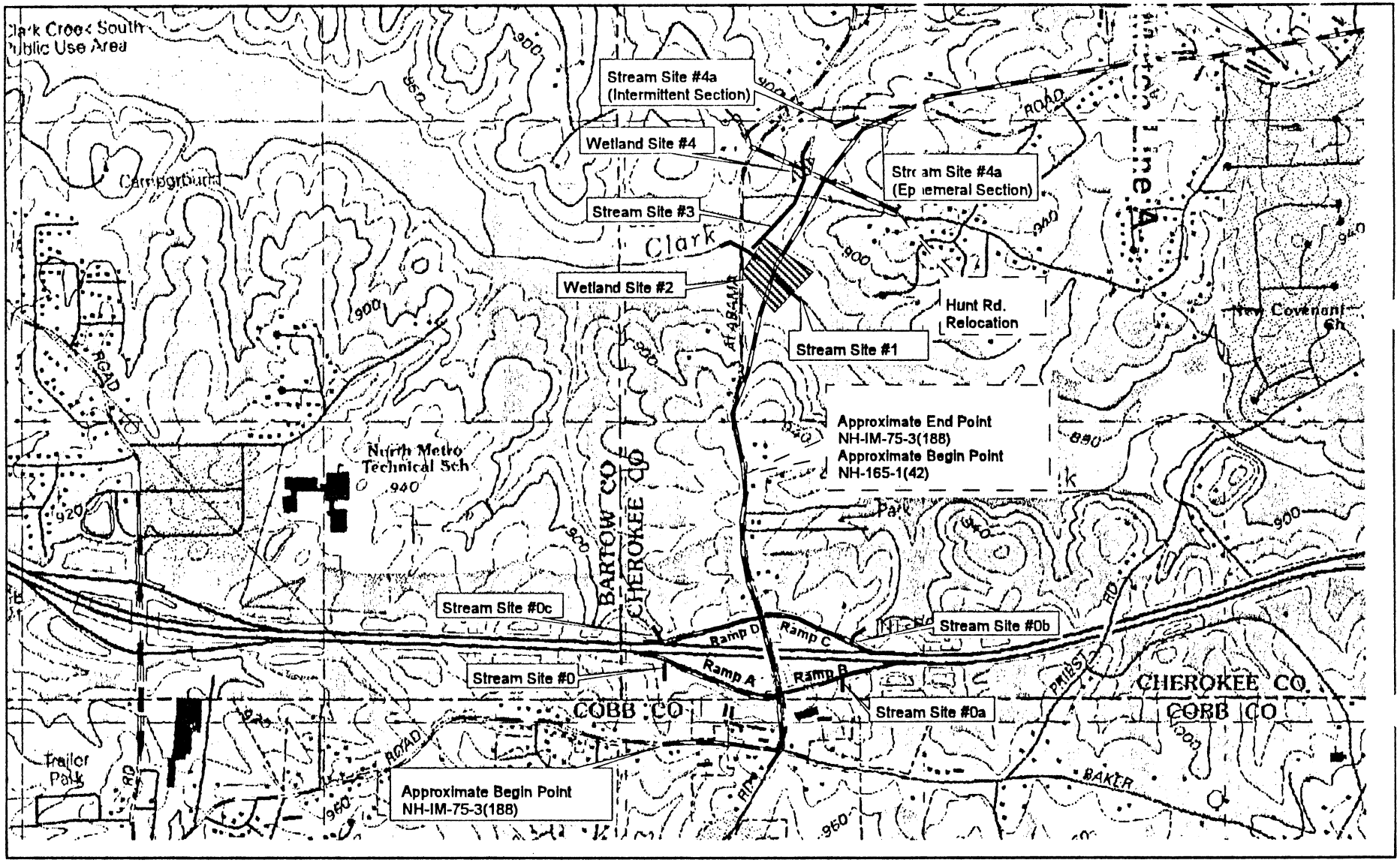
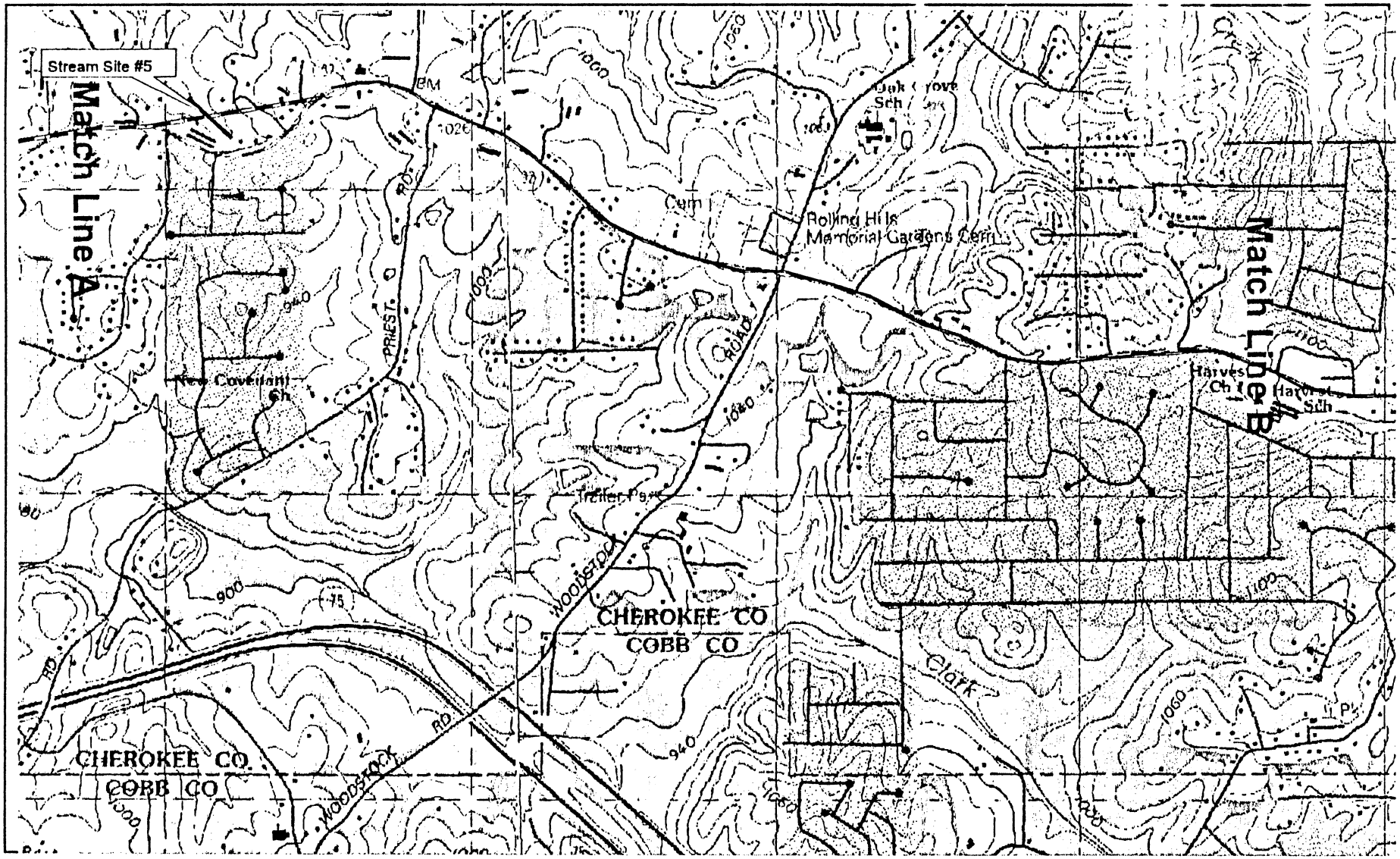


Figure 2. (Sheet 1 of 4)
Wetland and Stream Location Map

Scale
1000 0 1000 2000 Feet

NH-IM-75-3(188) & NH-165-1(42)(40)
PI# 610740, 620940, & 620920
SR 92 Widening
October 2002

N



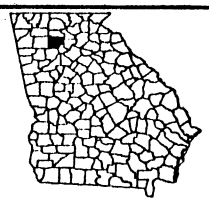


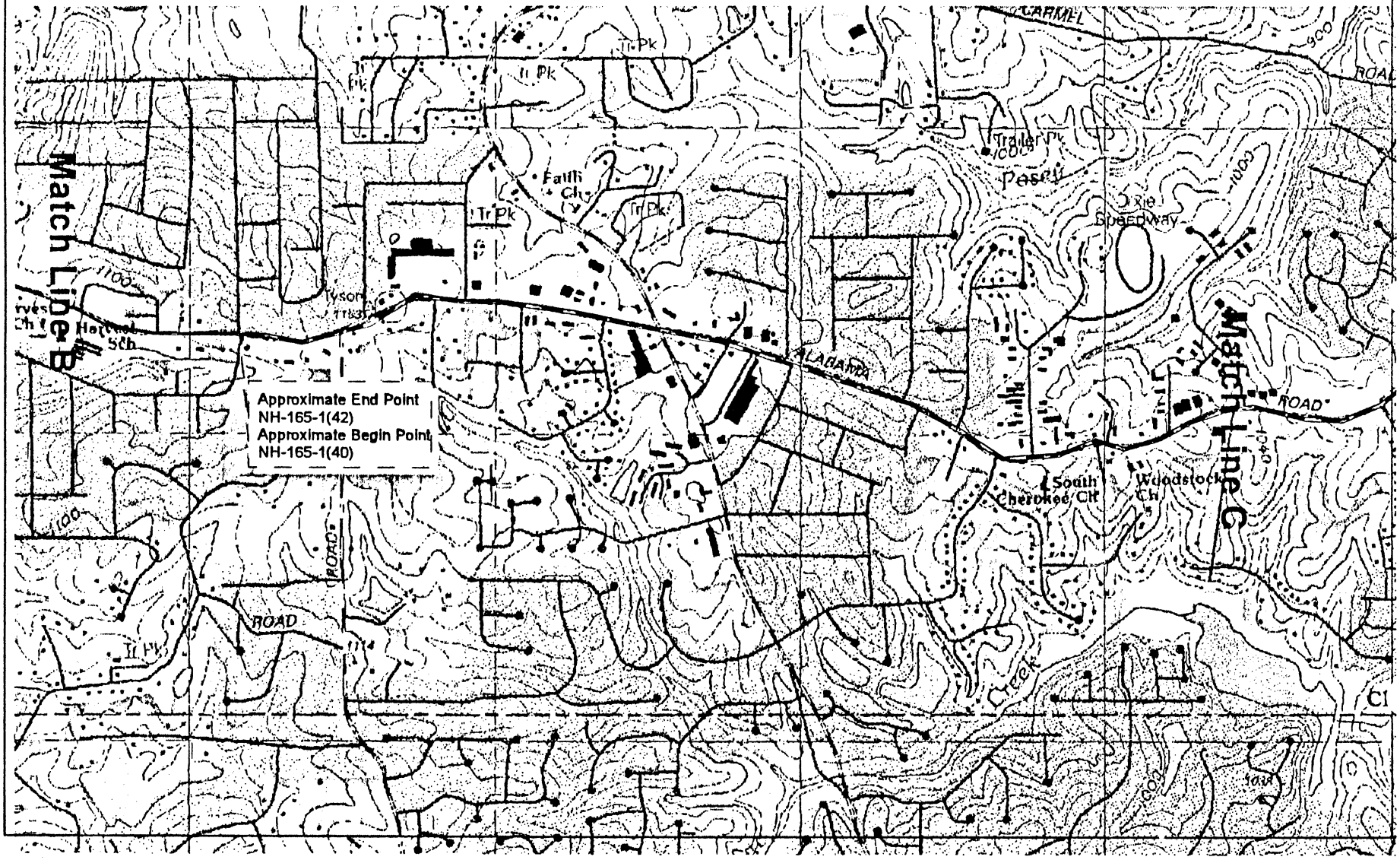
Figure 2. (Sheet 2 of 4)
Streams and Wetland Location Map

Scale
1000 0 1000 2000 Feet

NH-IM-75-3(188) & NH-165-1(42)(40)
PI# 610740, 620940, & 620920
SR 92 Widening
October 2002

N

ENCL 2



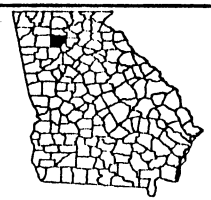


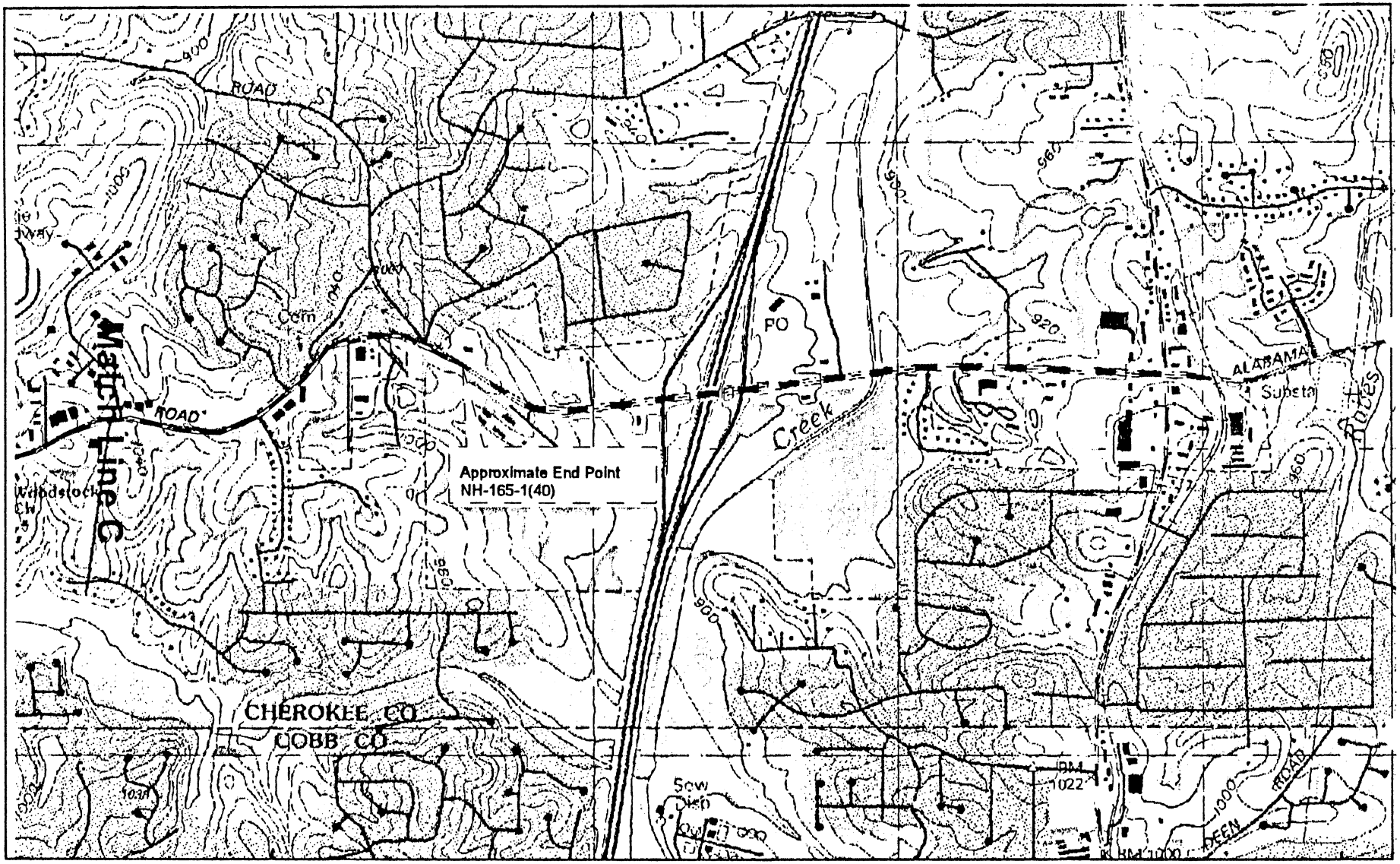
Figure 2. (Sheet 3 of 4)
Streams and Wetland Location Map

Scale
1000 0 1000 2000 Feet

NH-IM-75-3(188) & NH-165-1(42)(40)
PI# 610740, 620940, & 620920
SR 92 Widening
October 2002

N

ENCL 2



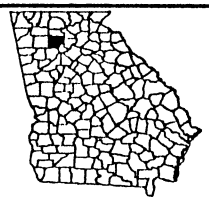


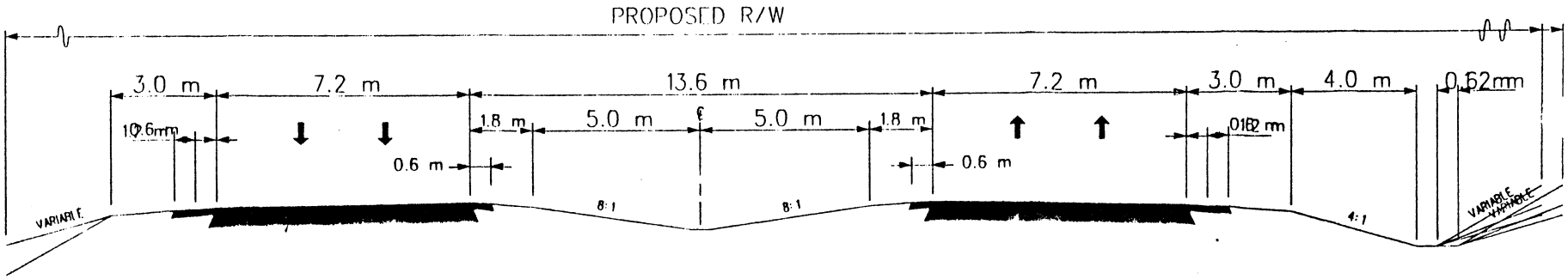
Figure 2. (Sheet 4 of 4)
Streams and Wetland Location Map

Scale
1000 0 1000 2000 Feet

NH-IM-75-3(188) & NH-165-1(42)(40)
PI# 610740, 620940, & 620920
SR 92 Widening
October 2002

N

ENCL 2



TYPICAL CROSS SECTION

FIGURE 1A

NH–165–1(42), CHEROKEE COUNTY

P.I. # 620940

NOT TO SCALE

ENCL 3: TYPICAL CROSS SECTION

WETLANDS AND OPEN WATERS
MITIGATION WORKSHEETS

ADVERSE IMPACT FACTORS

Factor	Options						
Dominant Effect	Fill 2.0	Dredge 1.8	Impound 1.6	Drain 1.4	Flood 1.2	Clear 1.0	Shade 0.5
Duration of Effects	7+ years 2.0	5-7 years 1.5	3-5 years 1.0	1-3 years 0.5	< 1 year 0.1		
Existing Condition	Class 1 2.0	Class 2 1.5	Class 3 1.0	Class 4 0.5	Class 5 0.1		
Lost Kind	Kind A 2.0	Kind B 1.5	Kind C 1.0	Kind D 0.5	Kind E 0.1		
Preventability	High 2.0	Moderate 1.0	Low 0.5	None 0			
Rarity Ranking	Rare 2.0	Uncommon 0.5	Common 0.1				

† These factors are determined on a case-by-case basis.

REQUIRED MITIGATION CREDITS WORKSHEET

Factor	Wetland 4					
Dominant Effect	2.0					
Duration of Effect	2.0					
Existing Condition	0.5					
Lost Kind	2.0					
Preventability	0.5					
Rarity Ranking	0.1					
Sum of r Factors	$R_1 = 7.1$	$R_2 =$	$R_3 =$	$R_4 =$	$R_5 =$	$R_6 =$
Impacted Area	$AA_1 = 0.14$	$AA_2 =$	$AA_3 =$	$AA_4 =$	$AA_5 =$	$AA_6 =$
R × AA =	0.994					

Total Required Credits = $\sum$ (R × AA) = 0.994

ENCL 4: MITIGATION WORKSHEET

WORKSHEET 1: ADVERSE IMPACT FACTORS FOR RIVERINE SYSTEMS WORKSHEET

Stream Type Impacted	Intermittent 0.1			Perennial Stream > 15' in width 0.4			Perennial Stream ≤ 15' in width 0.8		
Priority Area	Tertiary 0.5			Secondary 0.8			Primary 1.5		
Existing Condition	Fully Impaired 0.25			Somewhat Impaired 0.5			Fully Functional 1.0		
Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.2		
Dominant Impact	Shade/ Clear 0.05	Utility X-ing 0.4	Bank Armor 0.7	Deten-tion 1.5	Stream Crossing (≤ 100') 1.7	Impound 2.7	Morpho-logic Change 2.7	Pipe >100' 3.0	Fill 3.0
Scaling Factor (Based on # linear feet impacted)	< 100' impact 0	100-200' impact 0.05	201-500' impact 0.1	501-1000' impact 0.2	> 1000' impact 0.4 for each 1000' feet of impact (round impacts to the nearest 1000') (example: 2,200' of impact – scaling factor = 0.8; 2,800' of impact – scaling factor – 1.2)				

Reaches to Be Impacted	**Stream 3**	**Stream 5**		
	Complete the Following for Each Reach to Be Impacted			
Simon Channel Evolution Stage				
Rosgen Stream Type/D50				
Criteria for Selecting Existing Condition for Each Reach				
Bankfull Width and Depth	Width: 3 ft. Depth: 2.5 ft.	Width: 6.0 ft. Depth: 6.0 ft.	Width: Depth:	Width: Depth:
Bankfull Indicators (attach photograph showing bankfull for each reach)				
Factors	**Stream 3**	**Stream 5**		
Stream Type Impacted	0.8	0.8		
Priority Area	0.8	0.8		
Existing Condition	0.5	0.25		
Duration	0.2	0.2		
Dominant Impact	3.0	3.0		
Scaling Factor	0.05	0.1		
Sum of Factors M =	5.35	5.15		
Feet Stream in Reach Impacted LF =	193.5	364.1		
M X LF =	1035.23	1875.12		

Total Mitigation Credits Required = (M X LF) = 2910.35

ENCL 5: RIVERINE WORKSHEET