

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE **GOVERNOR**

October 23, 2012

EUGENE A. CONTI, JR. SECRETARY

U. S. Army Corps of Engineers Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, NC 28801

ATTN:

Ms. Lori Beckwith

NCDOT Coordinator

Subject:

Revised Application for Section 404 Nationwide Permit 14 and 401 Water Quality Certification for

the proposed widening of SR 1184 (Howell Mill Rd) from US 276 to US 23 Bus. in Haywood County, Federal Aid Project No. STP-1184(1); Division 14; TIP No. U-4412; Debit \$570.00 WBS 35022.1.1

Reference:

Permit Application dated August 23, 2012

Dear Madam:

Since the submittal of the August 23, 2012 permit application, it was noted that the removal of the bridge along existing Howell Mill Road over Richland Creek could not be accommodated without the use of a temporary work pad. This temporary work pad will result in an additional 0.01 acre of temporary impact to surface waters. This increases the total amount of temporary impact for the project from 0.02 acre to 0.03 acre.

This site has been designated as site IV on the attached revised permit drawings. A revised impact summary table and PCN are included in this application.

Site III has also been revised to further reduce impacts to the UT to Raccoon Creek. This change eliminates the temporary stream impact beyond the current right of way. Revised permit drawings (sheets 11 & 12) are included in this revision. As this reduction is <0.01, the new value still rounds to 0.01 so no change appears on the impact summary table or PCN.

A copy of this revised permit application and its distribution list will be posted on the NCDOT Website at: http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html. If you have any questions or need additional information, please contact Michael Turchy at maturchy@ncdot.gov.

Gregory J. Thorpe, Ph.D., Manager

Project Development and Environmental Analysis Unit

NCDOT Permit Application Standard Distribution List cc:

TELEPHONE: 919-707-6100 FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

LOCATION:

1020 BIRCH RIDGE DRIVE RALEIGH NC 27610-4328





Office Use Only:	
Corps action ID no	
DWQ project no	
Form Version 1.3 Dec 10 2008	

	Pre-Construction Notification (PCN) Form							
A.	A. Applicant Information							
1.	Processing							
1a.	Type(s) of approval sought from Corps:	the	⊠ Section 404 Permit ☐ Section	on 10 Permit				
1b.	Specify Nationwide Permit (NWP) number: 1	or General Permit (GF	P) number:				
1c.	Has the NWP or GP number bee	en verified b	by the Corps?	Yes	⊠ No			
1d.	Type(s) of approval sought from	the DWQ (check all that apply):					
		n – Regula	r Non-404 Jurisdictiona	l General Permi	t			
	☐ 401 Water Quality Certification	n – Expres	Riparian Buffer Autho	rization				
1e.	Is this notification solely for the rebecause written approval is not r		For the record only for DWQ 401 Certification:	For the record	only for Corps Permit:			
	booddoo waxaa approvario nocci	oquii ou i	☐ Yes ☐ No	☐ Yes	⊠ No			
1f.		ment into a mitigation bank or in-lieu fee program proposed for mitigation pacts? If so, attach the acceptance letter from mitigation bank or in-lieu ogram.						
1g.	Is the project located in any of Nebelow.	NC's twenty coastal counties. If yes, answer 1h ☐ Yes ☐ No						
1h.	Is the project located within a NC	DCM Area	a of Environmental Concern (AEC)?	Yes	⊠ No			
2.	Project Information							
2a.	Name of project:	Widening	of Howell Mill Road (SR 1184) from U	JS-276 to US-23	3 Business.			
2b.	County:	Haywood						
2c.	Nearest municipality / town:	Waynesv	ille					
	Subdivision name:	not applic	cable					
2e.	NCDOT only, T.I.P. or state project no:	U-4412						
3.	Owner Information							
За.	Name(s) on Recorded Deed:	North Car	rolina Department of Transportation					
	Deed Book and Page No.	not applicable						
3c.	Responsible Party (for LLC if applicable):	not applicable						
3d.	Street address:	1598 Mai	I Service Center					
3e.	City, state, zip:	Raleigh, NC 27699-1598						
3f.	Telephone no.:	(919) 707	7-6124					
3g.	Fax no.:	(919) 212	2-5785					
3h.	Email address:	jwharrod@	@ncdot.gov					

4.	Applicant Information (if different from owner)				
4a.	Applicant is:	Agent Other, specify:			
4b.	Name:	not applicable			
4c.	Business name (if applicable):				
4d.	Street address:				
4e.	City, state, zip:				
4f.	Telephone no.:				
4g.	Fax no.:				
4h.	Email address:				
5.	Agent/Consultant Information	ı (if applicable)			
5a.	Name:	not applicable			
5b.	Business name (if applicable):				
5c.	Street address:				
5d.	City, state, zip:				
5e.	Telephone no.:				
5 f.	Fax no.:				
5 g.	Email address:				

В.	Project Information and Prior Project History					
1.	Property Identification					
1a.	Property identification no. (tax PIN or parcel ID):	not applicable				
1b.	Site coordinates (in decimal degrees):	Latitude: 35.506483				
1c.	Property size:	15.80 acres acres				
2.	Surface Waters					
2a.	Name of nearest body of water (stream, river, etc.) to proposed project:	Richland Creek and Raccoon Creek				
2b.	Water Quality Classification of nearest receiving water:	В				
2c.	River basin:	French Broad				
3.	Project Description					
За.	Describe the existing conditions on the site and the gene application: Residential and commercial development along roads; s	eral land use in the vicinity of the project at the time of this				
2h	<u> </u>					
SD.	List the total estimated acreage of all existing wetlands of 0.6	in the property.				
3c.	3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 2,679 linear feet					
3d.	Explain the purpose of the proposed project: To correct roadway deficiencies by upgrading the roadway grade separation with an improved alignment to eliminate	ay to meet current design standards and to construct a railroad e train-car conflicts (2008 FONSI).				
3e.		of equipment to be used: wo-lane roadway and constructiong a railroad grade-seperation Will Road) from US 276 (Russ Avenue) to US 23 Business				
4.	Jurisdictional Determinations					
4a.	Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments:	☑ Yes ☐ No ☐ Unknown				
4b.	If the Corps made the jurisdictional determination, what type of determination was made?	☐ Preliminary ⊠ Final				
4c.	If yes, who delineated the jurisdictional areas? Name (if known): Kris Dramby	Agency/Consultant Company: NCDOT Other:				
4d.	If yes, list the dates of the Corps jurisdictional determinate February 6, 2009	tions or State determinations and attach documentation.				
5.	Project History					
5a.	Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	☐ Yes ☐ Unknown				
5b.	If yes, explain in detail according to "help file" instruction	S.				

6.	Future Project Plans		
6a.	Is this a phased project?	Yes	⊠ No
6b.	If yes, explain.		

C. Proposed Im	pacts Invento	ry						
1. Impacts Sumi	1. Impacts Summary							
1a. Which sections	1a. Which sections were completed below for your project (check all that apply):							
			☐ Buf	fers				
☐ Open Wate	ers	☐ Pond Construction						
2. Wetland Impa	cts							
		sed on the site, then con			area impacte			
2a. Wetland impact	2b.	2c.	2d.	2e. Type of juris	diction	2f.		
number –	Type of	Type of wetland	Forested	(Corps - 40	4, 10	Area of impact		
Permanent (P) or Temporary (T)	impact	(if known)		DWQ – non-40	04, other)	(acres)		
Site 1 \(\sime \text{P} \subseteq T	Fill	PSS1A	☐ Yes	□ Corps		0.01		
Site I M F L I	ГШ	POSTA	⊠ No	DWQ		0.01		
Site 2 ⊠ P □ T	Fill	PSS1A	│	☐ Corps☐ DWQ		0.02		
Site 3 ⊠ P □ T	Fill	PEM1A	Yes	⊠ Corps		0.04		
Site 3 M F L 1	1 111	FLIVITA	⊠ No	DWQ				
				2g. Total wetla	and impacts	0.07 Permanent		
		1 acre of hand clearing in						
		Temporary Fill in Wetlar	nds in the Hand C	Clearing areas for Er	osion Control	measures.		
3. Stream Impac		et etroom impoete (includ	ing tomporory im	unacta) proposed on	the cite then	complete this		
question for all stre		nt stream impacts (includ ted.	ing temporary im	ipacis) proposed on	trie Site, trieri	complete this		
3a.	3b.	3c.	3d.	3e.	3f.	3g.		
Stream impact	Type of	Stream name	Perennial	Type of	Average	Impact length (linear feet)		
number - Permanent (P) or	impact		(PER) or intermittent	jurisdiction (Corps - 404, 10	stream width	(iiileai ieet)		
Temporary (T)			(INT)?	DWQ – non-	(feet)			
		HT 44 Dill I	Mari	404, other)				
Site 1 ⊠ P □ T	RCBC	UT-1 to Richland Creek	⊠ PER □ INT	│	4.5	130 ft		
Site 1 ☐ P ⊠ T	RCBC	UT-1 to Richland	□ ☑ PER	☐ Corps	4.5	0.01 ac		
Sile I L F A I	ROBO	Creek	☐ INT	DWQ	4.5	0.01 ac		
Site 2 ⊠ P □ T	RCBC	UT-2 to Richland Creek	⊠ PER □ INT	☐ Corps☐ DWQ	2.0	90 ft		
Site 2 ☐ P ⊠ T	DCDC	UT-2 to Richland	⊠ PER	☐ Corps	2.0	-0.01.00		
Site 2 L P X I	RCBC	Creek	□INT	☐ DWQ	2.0	<0.01 ac		
Site 2 ⊠ P □ T	Bank Stabilization	UT-2 to Richland	⊠ PER	⊠ Corps	2.0	17 ft		
Site 2 2 1 1 1	(rip rap)	Creek		☐ DWQ	2.0	17 10		
Site 3 ⊠ P □ T	RCBC	Raccoon Creek	⊠ PER	⊠ Corps	17.0	19 ft		
	Bank		☐ INT	☐ DWQ				
Site 3 ⊠ P □ T	Stabilization	Raccoon Creek	⊠ PER □ INT	☐ Corps☐ DWQ	17.0	7 ft		
	(rip rap)							
Site 3 ☐ P ⊠ T	RCBC	Raccoon Creek	⊠ PER □ INT	☐ Corps☐ DWQ	17.0	0.10 ac		
	1		_ 	· · ~				
Site / D D D T	Workpad	Richland Crook	□ PER	□ Corps	35 O	0.01.50		
Site 4 ☐ P ⊠ T	Workpad	Richland Creek	⊠ PER □ INT	⊠ Corps □ DWQ	35.0	0.01 ac 263 ft Perm		

3i. Comm	ents:							
4. Open	4. Open Water Impacts							
	If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.							
4a.	4b.	4c.	<u> </u>		4d.		4e.	
Open waimpact nu - Perma - (P) o	mber waterbody nent (if applicable) r		Type of im	npact	Waterboo	dy type	Area of	impact (acres)
Temporal	* ` '							
04 🗌 P	04 🗆 P 🗆 T							
	4f. Total open water impacts X Permanent X Temporary							
4g. Comm	nents:							
5. Pond	or Lake Construction							
If pond or	lake construction propos	ed, then co	omplete the o	chart below.				
5a.	5b.	5c.	etland Impac	ts (acres)	5d.	m Impar	cts (feet)	5e. Upland (acres)
Pond ID	Proposed use or						lis (leet)	Opiana (acres)
number	purpose of pond	Flooded	Filled	Excavated	Flooded	Filled	Excavated	Flooded
P1								
P2								
	5f. Total							
5g. Comm	nents:							
5h. Is a da required?	5h. Is a dam high hazard permit required? ☐ Yes ☐ No If yes, permit ID no:							
5i. Exped	cted pond surface area (a	acres):						
5j. Size	of pond watershed (acres	s):						
5k. Metho	od of construction:							

6. Buffer Impacts (for DWQ)								
	If project will impact a protected riparian buffer, then complete the chart below. If yes, then individually list all buffer impacts below. If any impacts require mitigation, then you MUST fill out Section D of this form.							
6a.			☐ Neuse	☐ Tar-Pamlico	Other:			
Project is in which	protected basin?		☐ Catawba	Randleman				
6b.	6c.	6d.	6e.	6f.	6g.			
Buffer impact number –	Reason for impact		Buffer	Zone 1 impact	Zone 2 impact			
Permanent (P) or Temporary (T)		Stream name	mitigation required?	(square feet)	(square feet)			
B1 □ P□ T			Yes					
			☐ No					
B2 □ P □ T			Yes					
			∐ No					
ВЗ□Р□Т			Yes					
			☐ No					
	6h. Total buffer impacts							
6i. Comments:								

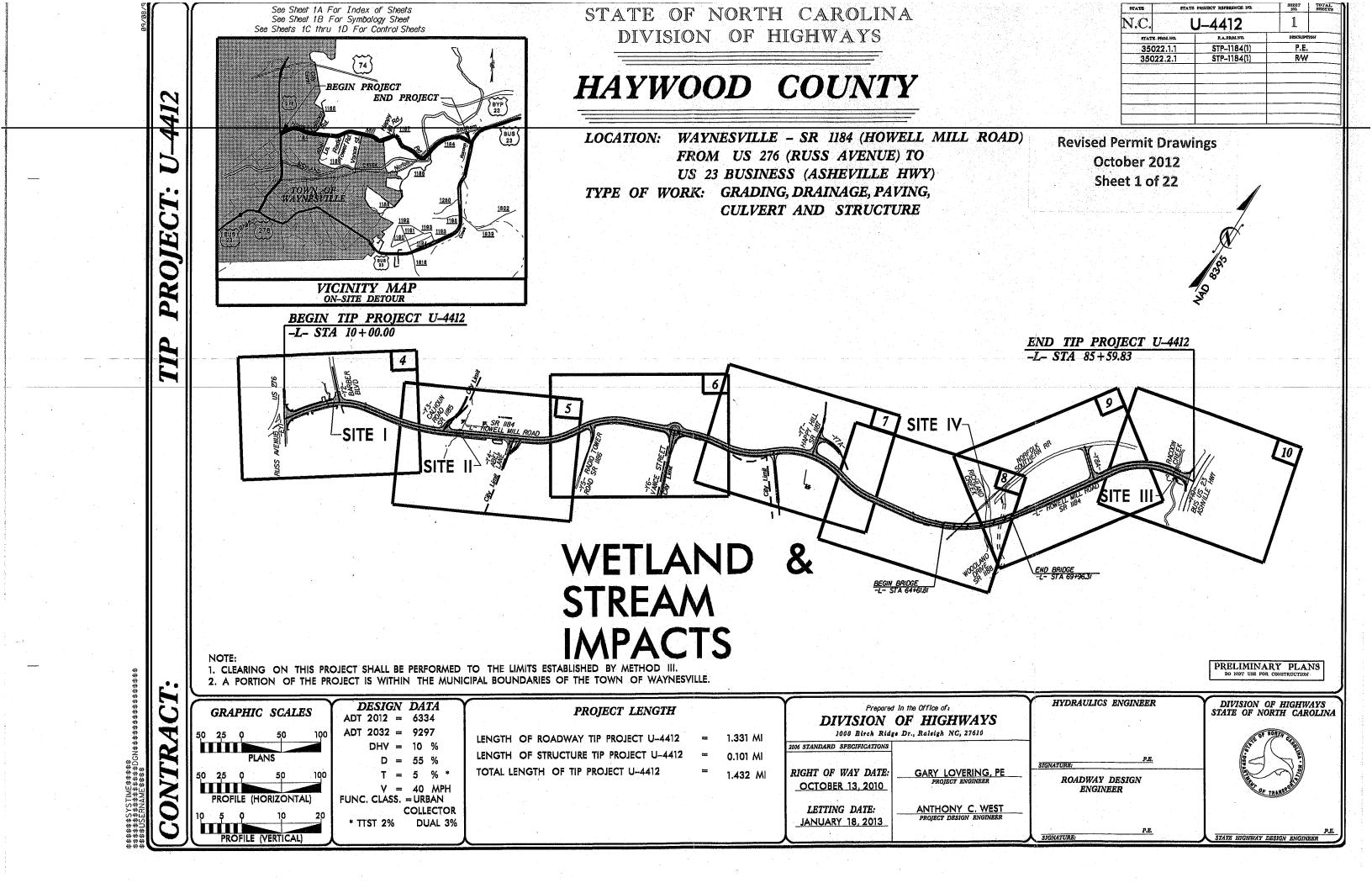
D.	Impact Justification and Mitigation						
1.	Avoidance and Minimization						
1a.	Specifically describe measures taken to avoid or minimize t	he proposed impacts	in designing project.				
	The proposed bridge over Richland Creek will have a deck drain system, eliminating direct discharge into the stream, and the storm drainage is being discharged as far away from the stream as practicable. The bridge replacement at Richland Creek will span the feature. The inverts of the new box culverts will be buried one foot below the stream bed and will maintain normal stream flow and channel characteristics. Storm drainage is being discharged as far away from the streams and conveyed as much through grass lined ditches as practicable. Erosion Control measures will adhere to Design Standards in Sensitive Watersheds.						
1b.	Specifically describe measures taken to avoid or minimize t	he proposed impacts	through construction techniques.				
	NCDOT Best Management Practices will be implemented din Sensitive Watersheds. Rip rap for bank stabilization was trout moratorium will prohibit in-stream work and land disturt 15.	kept to a minimum ar	nd only used to protect the culverts. A				
2.	Compensatory Mitigation for Impacts to Waters of the U	J.S. or Waters of the	State				
2a.	Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?						
2b.	If yes, mitigation is required by (check all that apply):	☐ DWQ ☐ Co	rps				
2c.	If yes, which mitigation option will be used for this project? ☐ Mitigation bank ☐ Payment to in-lieu fee program ☐ Permittee Responsible Mitigation						
3.	Complete if Using a Mitigation Bank						
3a.	Name of Mitigation Bank: not applicable						
3b.	Credits Purchased (attach receipt and letter)	Туре	Quantity				
3c.	Comments:						
4.	Complete if Making a Payment to In-lieu Fee Program						
4a.	Approval letter from in-lieu fee program is attached.	⊠ Yes					
4b.	Stream mitigation requested:	239 linear feet					
4c.	If using stream mitigation, stream temperature:	☐ warm ☐ co	ool ⊠cold				
4d.	Buffer mitigation requested (DWQ only):	0 square feet					
4e.	Riparian wetland mitigation requested:	0.07 acre					
4f.	Non-riparian wetland mitigation requested:	0 acres					
4g.	Coastal (tidal) wetland mitigation requested:	0 acres					
	Comments: There are a total of 263 linear feet of permanen s EEP Mitigation Request is for 239 linear feet.	t impacts, 24 linear fee	et of which are due to bank stabilization,				
5.	Complete if Using a Permittee Responsible Mitigation F	lan					
5a.	If using a permittee responsible mitigation plan, provide a d	escription of the propo	esed mitigation plan.				

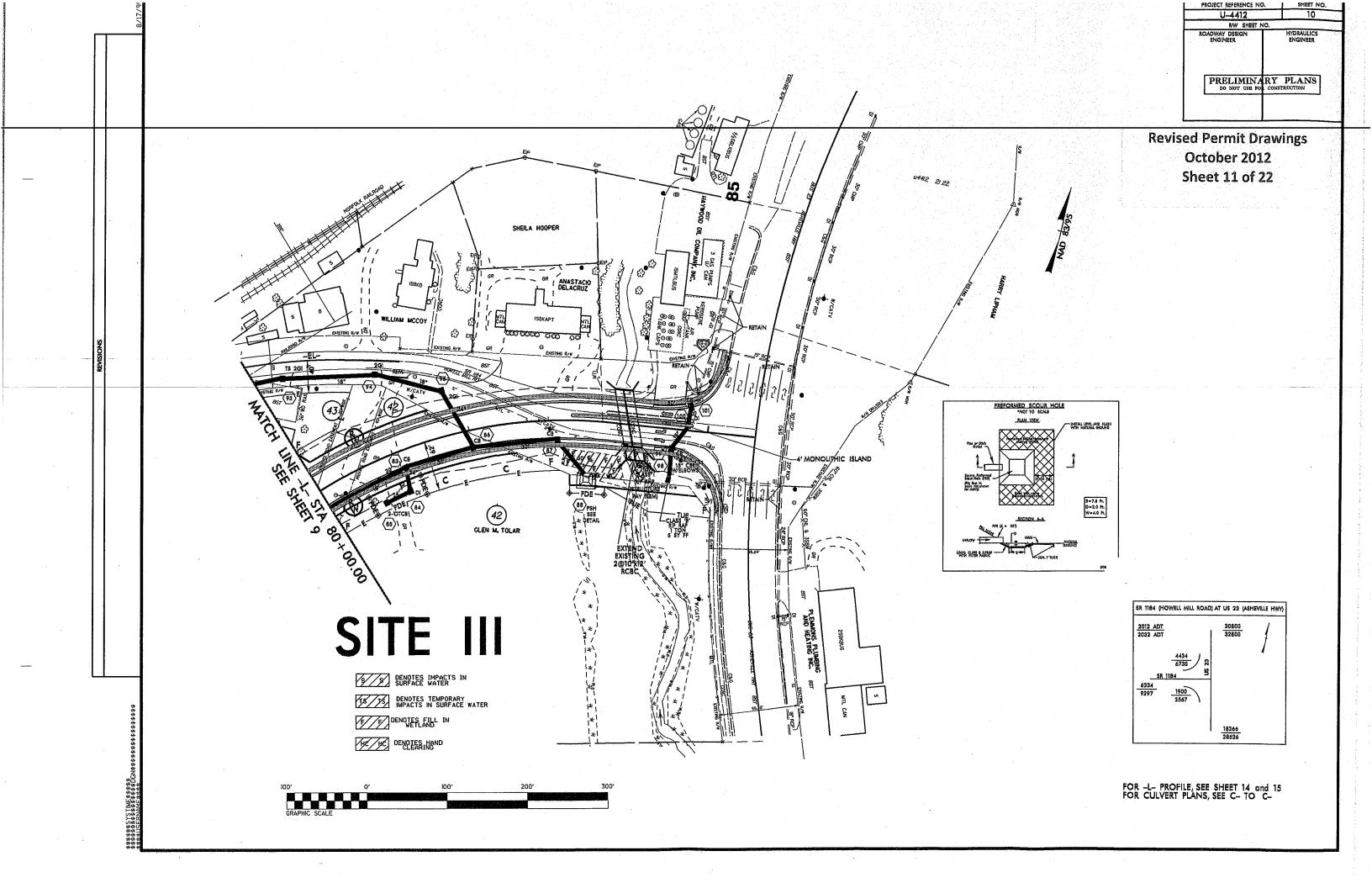
6. Buffer I	Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ						
	project result in an impact with itigation?	n buffer that requires	☐ Yes				
	6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.						
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)			
Zone 1			3 (2 for Catawba)				
Zone 2			1.5				
		6f. Total buffer i	mitigation required:				
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).							
6h. Commer	nts:						

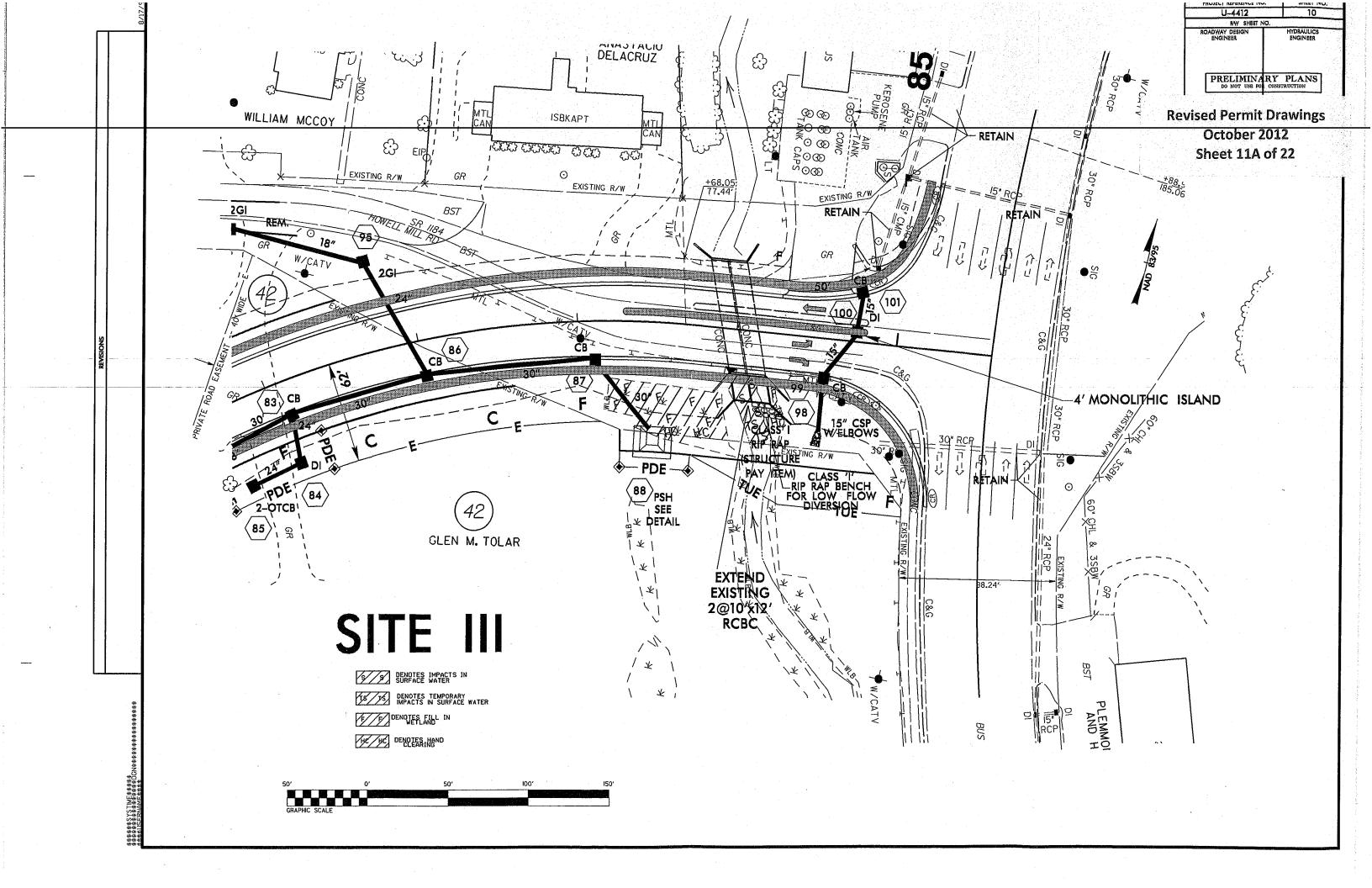
E.	Stormwater Management and Diffuse Flow Plan (required by DWQ)		
1.	Diffuse Flow Plan		
1a.	Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	☐ Yes	⊠ No
1b.	If yes, then is a diffuse flow plan included? If not, explain why. Comments:	☐ Yes	□ No
2.	Stormwater Management Plan		
2a.	What is the overall percent imperviousness of this project?	N/A	
2b.	Does this project require a Stormwater Management Plan?	⊠ Yes	□ No
2c.	If this project DOES NOT require a Stormwater Management Plan, explain why:		
2d.	If this project DOES require a Stormwater Management Plan, then provide a brief, nat See attached permit drawings.	rrative description	n of the plan:
2e.	Who will be responsible for the review of the Stormwater Management Plan?		cal Government water Program nit
3.	Certified Local Government Stormwater Review		
3a.	In which local government's jurisdiction is this project?	not applicable	
3b.	Which of the following locally-implemented stormwater management programs apply (check all that apply):	Phase II NSW USMP Water Supp Other:	y Watershed
3c.	Has the approved Stormwater Management Plan with proof of approval been attached?	☐ Yes	□ No
4.	DWQ Stormwater Program Review		
4a.	Which of the following state-implemented stormwater management programs apply (check all that apply):	Coastal could HQW ORW Session La	unties w 2006-246
4b.	Has the approved Stormwater Management Plan with proof of approval been attached?	☐ Yes	□ No
5.	DWQ 401 Unit Stormwater Review		
5a.	Does the Stormwater Management Plan meet the appropriate requirements?	☐ Yes	□ No N/A
5b.	Have all of the 401 Unit submittal requirements been met?	☐ Yes	□ No N/A

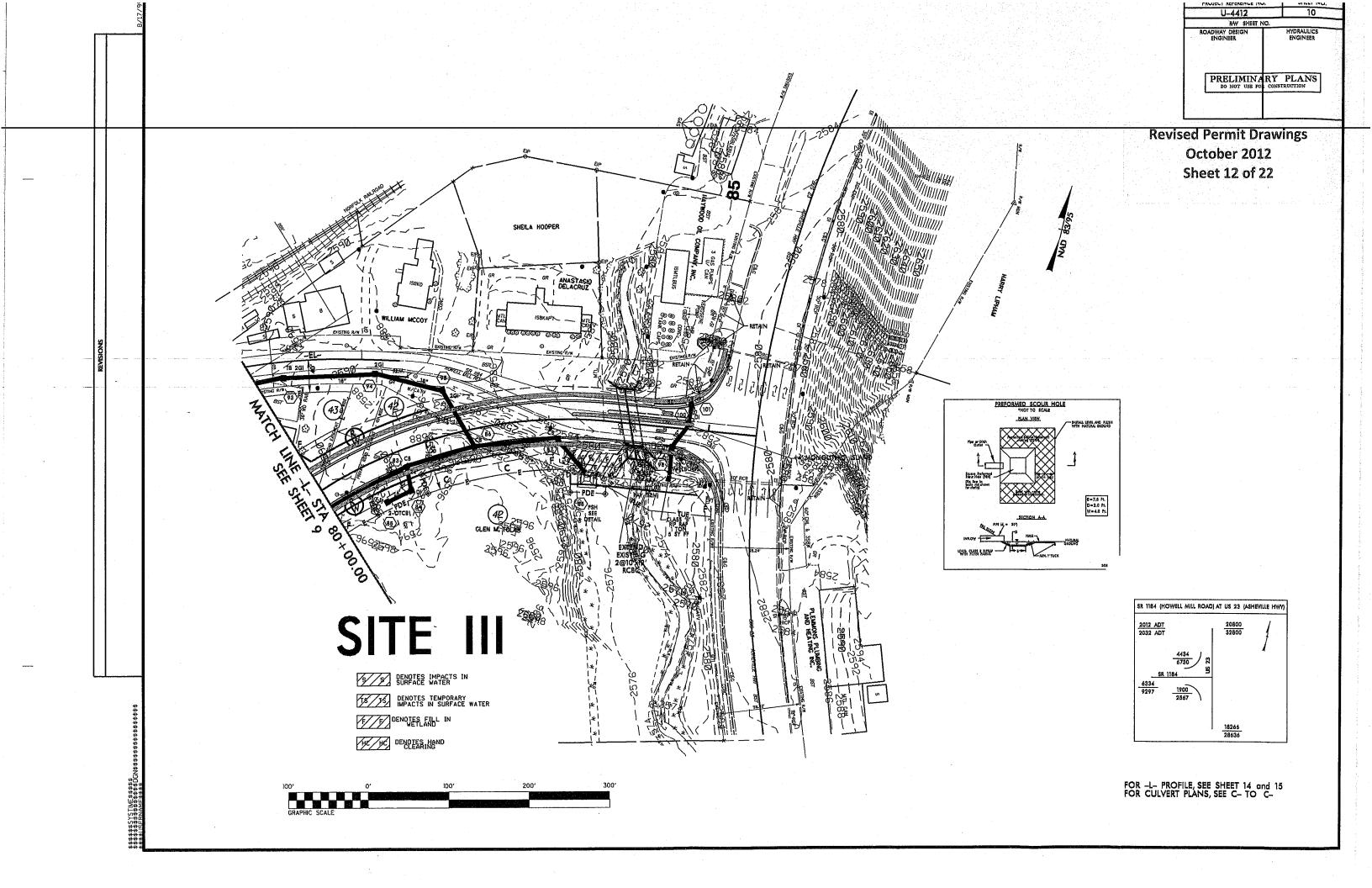
F.	Supplementary Information		
1.	Environmental Documentation (DWQ Requirement)		
1a.	Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	⊠ Yes	□No
1b.	If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	⊠ Yes	□No
1c.	If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.)	⊠ Yes	□No
	Comments:		
2.	Violations (DWQ Requirement)		
2a.	Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	☐ Yes	⊠ No
2b.	Is this an after-the-fact permit application?	☐ Yes	⊠ No
2c.	If you answered "yes" to one or both of the above questions, provide an explanation of	f the violation(s):	
3.	Cumulative Impacts (DWQ Requirement)		
3a.	Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	☐ Yes ☑ No	
3b.	If you answered "yes" to the above, submit a qualitative or quantitative cumulative impost recent DWQ policy. If you answered "no," provide a short narrative description.	pact analysis in ac	ccordance with the
	A qualitative Indirect and Cumulative Effects analysis was completed in January 2007 Environmental Assessment. This analysis concluded that the project will not induce raffect overall water quality. Haywood County has ordinances in place to help protect damage, and preserve farmland. Local officials are committed to maintaining existing development that does take place in the future will most likely involve redevelopment use. These ordinances should adequately protect water resources from land clearing development. For these reasons, a quantitative analysis is not required. Therefore, a effects study will not be necessary.	nuch growth, alter and manage grow land uses in this a and will not include activities associa	r land uses, or wth, prevent flood area. Any de a change in land tted with induced
4.	Sewage Disposal (DWQ Requirement)		
4a.	Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge the proposed project, or available capacity of the subject facility.	erge) of wastewate	er generated from
	not applicable		

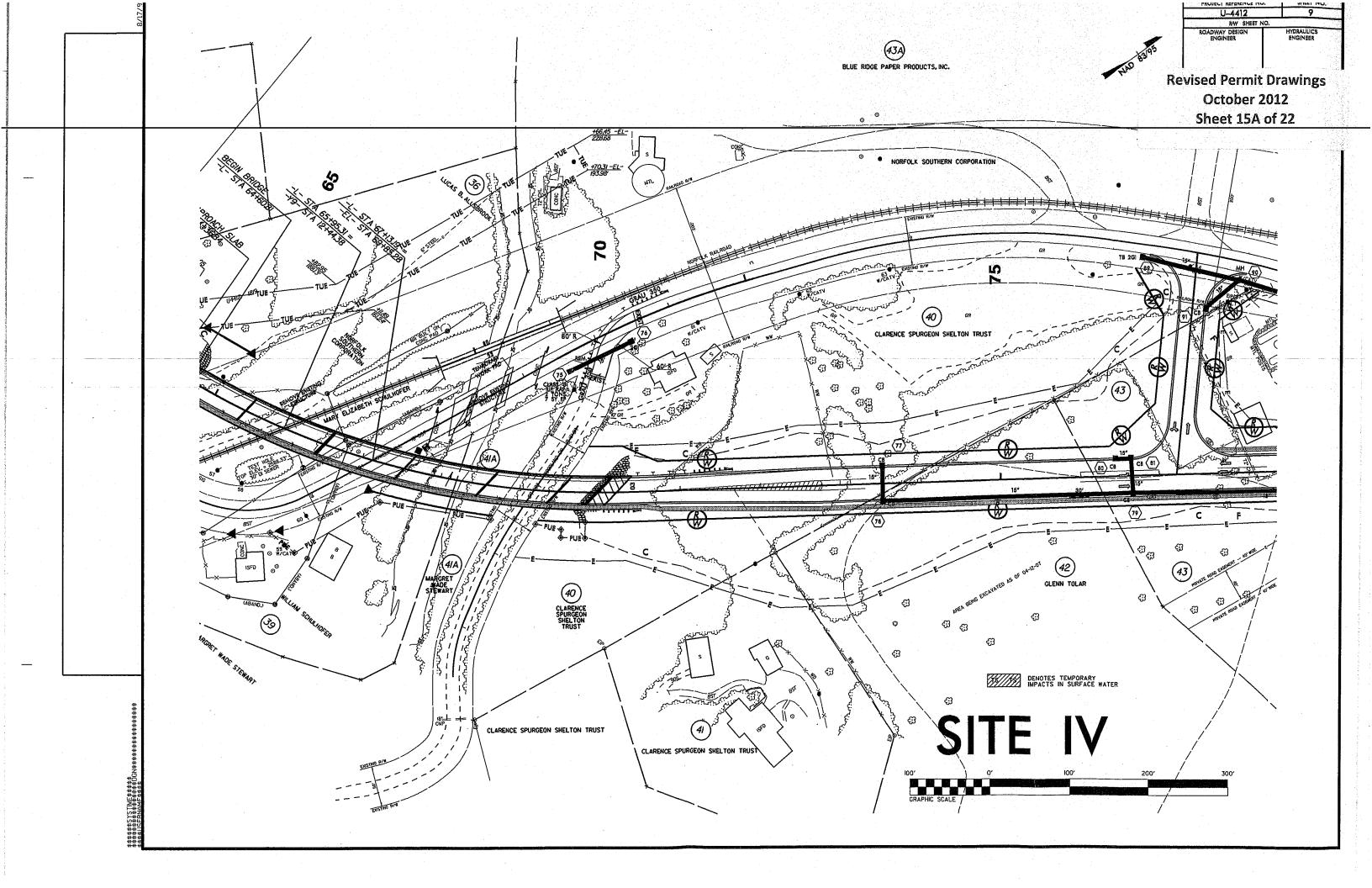
5.	Endangered Species and Designate	and Designated Critical Habitat (Corps Requirement)									
5a.	Will this project occur in or near an are habitat?	ea with federally protected species or	⊠ Yes	□ No							
5b.	Have you checked with the USFWS c impacts?	oncerning Endangered Species Act	Yes	⊠ No							
5c.	If yes, indicate the USFWS Field Office	e you have contacted.	☐ Raleigh ☐ Asheville								
5d.	What data sources did you use to dete Habitat?	/hat data sources did you use to determine whether your site would impact Endangered Species or Designated Critical abitat?									
	Habitat is present within the study are	a for the following species: Appalachian	elktoe and Small who	orled pogonia, these							
6.	Essential Fish Habitat (Corps Requ	irement)	Precies Act Yes No Raleigh Asheville would impact Endangered Species or Designated Critical me species and was last updated on March 21, 2011. Pes: Appalachian elktoe and Small whorled pogonia, these ning species are No Effect (No Habitat); NHP database of all fish habitat? Yes No would impact Essential Fish Habitat? Prement) Or tribal esservation ignificant in Yes would impact historic or archeological resources? If an affect on one property that is eligible for the National right of way along the southern boundary of the Liner-on this property since no landscape features will be taken or width. 2005 for this project. No cultural remains were found during tential effect surrounding the Waynesville Recreation Thydraulics Unit coordination with FEMA. Prof. FEMA Maps No 10 - 23 - 12 Date								
6a.	Will this project occur in or near an are	ea designated as essential fish habitat?	☐ Yes	⊠ No							
6b.	What data sources did you use to dete	ermine whether your site would impact E	ssential Fish Habitat?								
7.	Historic or Prehistoric Cultural Res	r Prehistoric Cultural Resources (Corps Requirement) oject occur in or near an area that the state, federal or tribal nts have designated as having historic or cultural preservation ., National Historic Trust designation or properties significant in									
7a.	What data sources did you use to determine whether your site would impact Essential Fish Habitat? Will this project occur in or near an area that the state, federal or tribal povernments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? What data sources did you use to determine whether your site would impact historic or archeological resources? August 2008 FONSI - as stated in the EA, the project will have an affect on one property that is eligible for the National Register of Historic Places. The preferred alternative requires right of way along the southern boundary of the Liner-eatherwood Farm. However, it will have No Adverse Effect on this property since no landscape features will be taken lamaged by the right of way, construction easements, or road width. An archaeological study was conducted by NCDOT in March 2005 for this project. No cultural remains were found during the study.										
7b.	7b. What data sources did you use to determine whether your site would impact historic or archeological resources? August 2008 FONSI - as stated in the EA, the project will have an affect on one property that is eligible for the National Register of Historic Places. The preferred alternative requires right of way along the southern boundary of the Liner-Leatherwood Farm. However, it will have No Adverse Effect on this property since no landscape features will be taken or damaged by the right of way, construction easements, or road width. An archaeological study was conducted by NCDOT in March 2005 for this project. No cultural remains were found during this study. Archaeological surveys were also completed for an area of potential effect surrounding the Waynesville Recreation Center and no cultural resources were found.										
8. F	Flood Zone Designation (Corps Requ	uirement)									
8b.	If yes, explain how project meets FEM	A requirements: NCDOT Hydraulics Unit	coordination with FEI	MA.							
8c.	What source(s) did you use to make th	e floodplain determination? FEMA Maps	· .								
	Dr. Gregory J. Thorpe, Ph D Applicant/Agent's Printed Name										

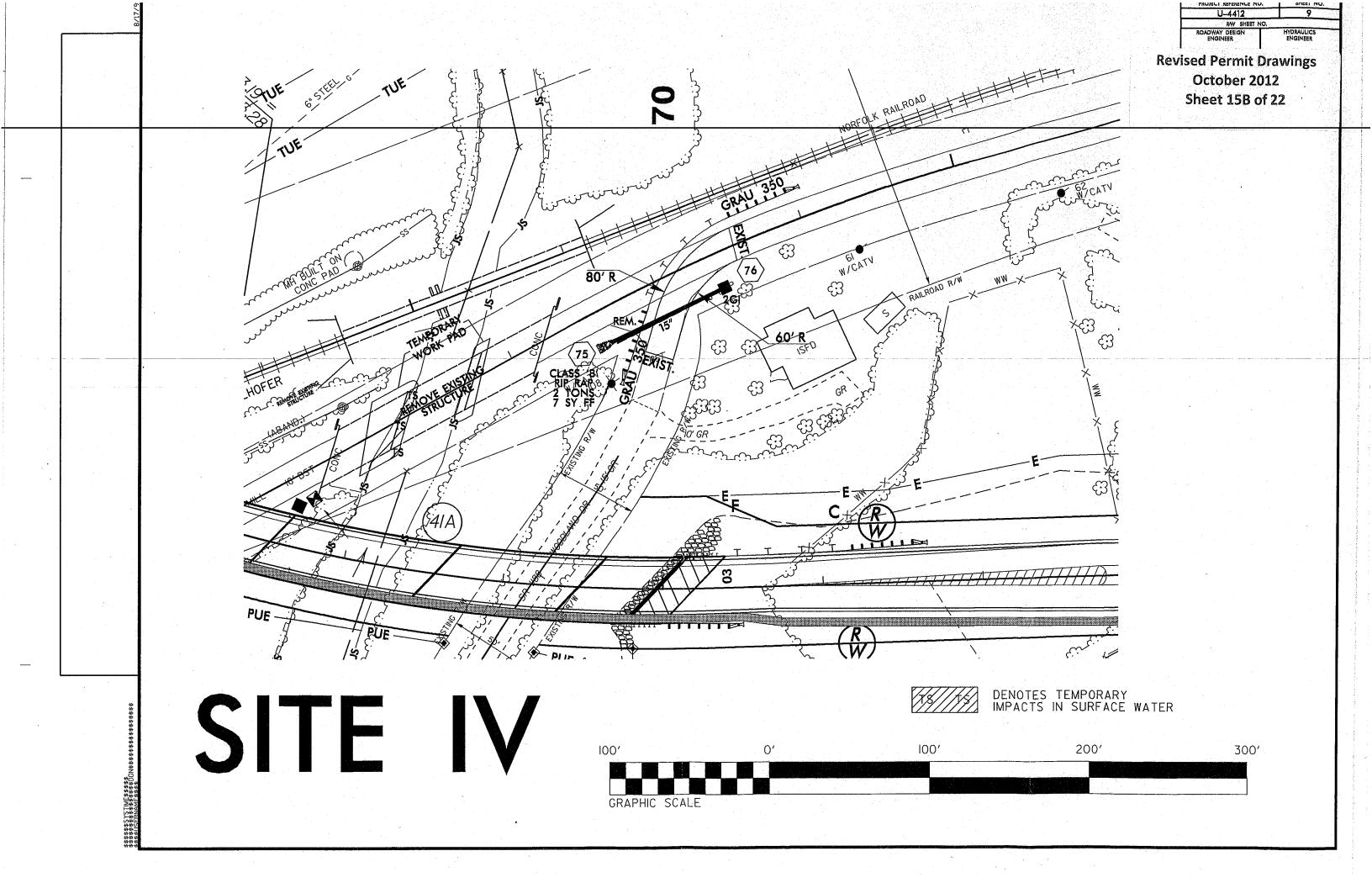


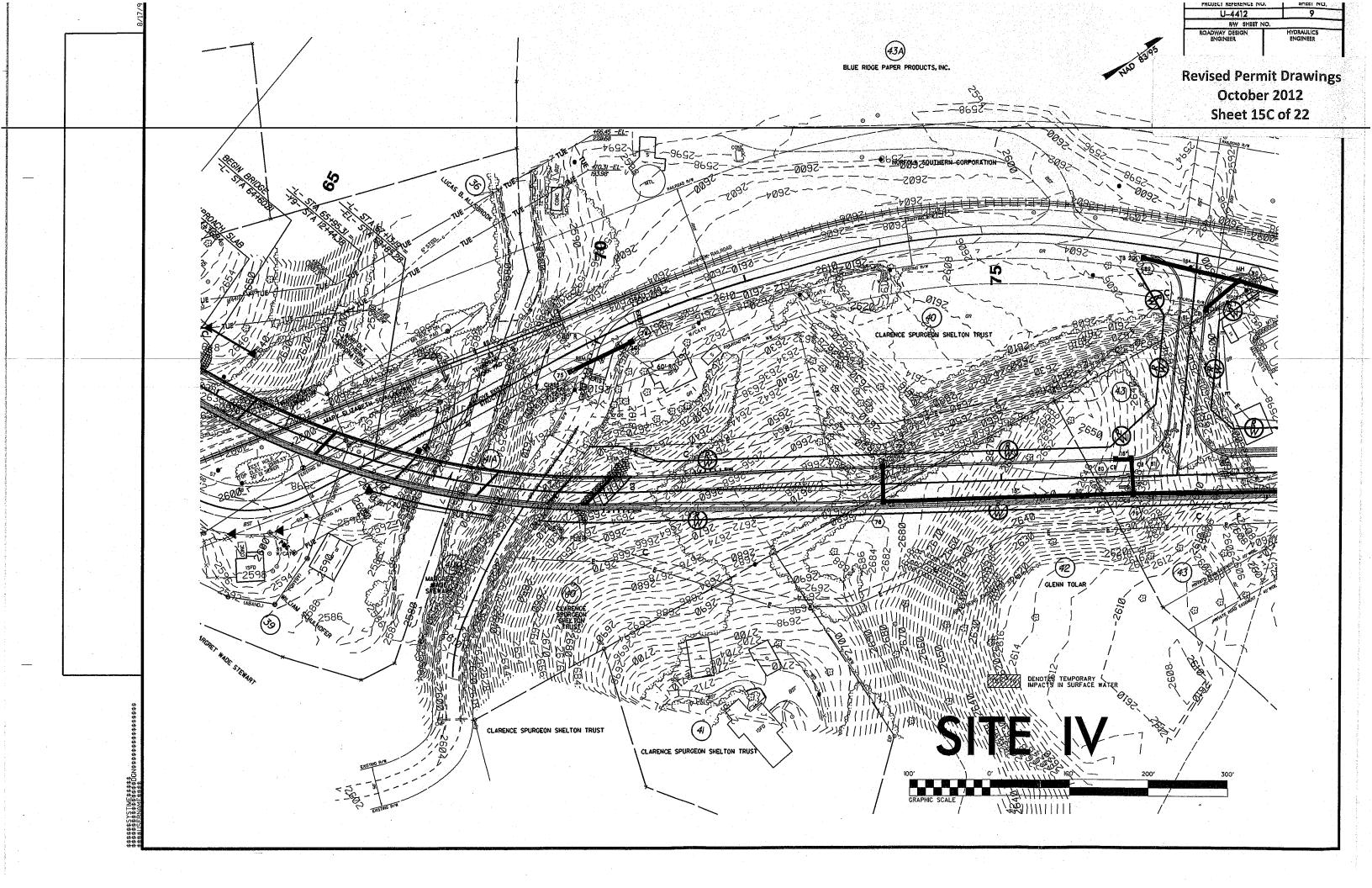












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			WET	LAND IMPA	PACTS		SURFACE WATER IN			IPACTS	
Site Station No. (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	in	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natura Strean Desigr (ft)
			· · · · · · · · · · · · · · · · · · ·							National States	
l 14+25 -L-	Stream Relocation						0.01		100		
	2@ 6' X 6' RCBC	0.01					<0.01	0.01	30	59	
II 24+21.5 -L-	1 @ 6' X 6'	0.02				<0.01	0.01	<0.01	90	19	
	RCBC										
			3								
	Bank Stabilization								17		
III 84+01.6 -L-	EXTEND	0.04			1.5	0.02	0.01	0.01	19	17	
	2 @ 10' X 12'										
	RCBC										
				7-2							
	Bank Stabilization								7		
IV EXISTING BRIDGE	Temporary Work							0.01		64	
REMOVAL	Pads										
		:									
											
TALS:		0.07				0.02	0.03	0.03	263	159	

NOTE: <0.01 ac. Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

HAYWOOD COUNTY
WBS - 35022.1.1 (U-4412)

SHEET

10/10/12

ATN Revised 3/31/05