



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

September 18, 2019

Asheville Regulatory Field Office
US Army Corps of Engineers
151 Patton Avenue, Room 208
Asheville, North Carolina 28801-5006

ATTN: Ms. Nicholle Braspenickx, NCDOT Coordinator

Subject: Request for Modification and Renewal of Section 404 Individual Permit and Section 401 Water Quality Certification for the U-2579B Section of the Winston-Salem Northern Beltway, from US 158 to I-40 Business/US 421, Forsyth County, Division 9, WBS 34839.2.10

Reference: Section 404 Individual Permit – Action ID No. SAW-2009-03183, issued June 17, 2014 and modifications issued July 2, 2014 and February 21, 2019
Section 401 Water Quality Certification – NCDWR Project No. 2014090 issued April 11, 2014 and modifications issued July 18, 2014 and December 17, 2018

Dear Madam:

The North Carolina Department of Transportation (NCDOT) requests an After the Fact (ATF) modification and permit renewal for the Winston -Salem Northern Beltway Eastern Section from US 158 to I-40, B Section of the U-2579 TIP. This project is currently under construction and the permit issued in 2014 will expire this year on December 31, 2019.

The current modification request for this project is due to impacts associated with Martin Mill Creek, near Permit site 8. The modification has already been installed and previously explained in an email (dated January 31, 2019) to the USACE and NCDWR from the Division. The creek migrated significantly since the project construction started and was undermining the fill slope for the bridge. To correct the stream migration that had taken place, a channel was installed past the bridge, through the sand, lining the banks with rip rap and reconnecting with the stream on the other side of the previously migrated channel. Attached you will find the plan sheet with the original location of the stream and the new location with the installed channel and additional photographs of the area.

The new permit site, Martin Mill Creek, is located near site 8 and named site 8A. At this new site, there are 144 linear feet of permanent stream impacts and 40 linear feet of temporary stream impacts. With this modification the project will now have 10,744 linear feet of permanent stream impacts and 1,788 linear feet of temporary stream impacts. The total wetland impacts remain the same at 1.96 acres.

Please see the attached mitigation acceptance letter from the Division of Mitigation Services, permit drawings for the Martin Mill Creek impacts and the corrected permit impact summary sheet. NCDOT is hereby requesting a Permit Renewal and an ATF Modification for this project. We request the expiration date for this permit to be 10 years from the renewed date. If you have any questions, please contact Carla Dagnino at cdagnino@ncdot.gov or (919) 707-6110.

Thank you!

Sincerely,

Carla Dagnino

for

Philip S. Harris III, P.E., C.P.M.
Environmental Analysis Unit Head



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

TIM BAUMGARTNER
Director

September 13, 2019

Mr. Philip S. Harris, III, P.E., CPM
Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Subject: DMS Mitigation Acceptance Letter:

U-2579B, Winston-Salem Northern Beltway (Eastern Section) from US 311 to east of US 52, Forsyth County

References: USACE 404 Individual Permit issued June 17, 2014 (USACE Action ID 2008-03183) and Individual Modification issued February 21, 2019

NCDWR 401 Water Quality Certification issued July 28, 2014 (NCDWR ID 2014-0090) and 401 Water Quality Certification Modification issued December 17, 2018

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the additional compensatory stream mitigation for the subject project. Based on the information supplied by you on September 13, 2019, the impacts are located in CU 03040101 of the Yadkin River basin in the Central Piedmont (CP) Eco-Region, and are as follows:

Table 1 – Additional Impacts (feet / acres)

Yadkin 03040101 CP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	144.0	0	0	0	0	0

*NOTE: Some of the stream impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This additional impact and associated mitigation needs were not projected by the NCDOT in the 2018 impact data. DMS is currently providing stream and riparian wetland mitigation for the impacts associated with this project located in cataloging unit 03040101 of the Yadkin River basin as required by the 404 and 401 permits issued in June and July 2014, as shown in the below table (in mitigation credits)



Table 2 – Current Permitted Impacts and Associated Mitigation Requirements provided by DMS (based on 2014 issued permits) and Revised Anticipated Impacts (based on mitigation request)

Impact Type	Total Permitted Impacts (feet / acre / sq ft)	Mitigation Provided by DMS per Issued Permits (Credits)	Additional Impact (for approval)	Revised Total Impacts*
Stream (warm)	9,693.0	18,161.0	144.0	9,837.0
Riparian Wetland	1.96	3.92	0	1.96

*Some of the additional stream impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details. DMS will provide the amount of mitigation as determined by the regulatory agencies.

This mitigation acceptance letter replaces the mitigation acceptance letter issued on January 17, 2014 and November 20, 2018. DMS commits to implementing additional sufficient compensatory stream mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,



James B. Stanfill
DMS Asset Management Supervisor

cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office
Ms. Amy Chapman, Division of Water Resources, Wetlands/401 Unit
File: U-2579B Additional 2



PROJECT REFERENCE NO. U-2579B	SHEET NO. 1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

U-2579B

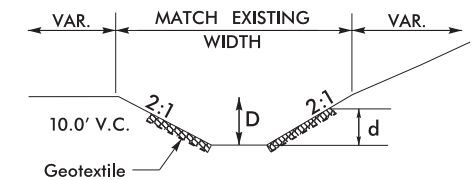
MARTIN MILL CREEK REALIGNMENT

LEGEND

- EDGE OF SOIL ROAD.....
- 2019 RECENT EDGE OF STREAM.....
- ORIGINAL EDGE OF STREAM.....
- ORIGINAL TOP OF BANK.....
- FLOW DIRECTION.....

DETAIL A

CHANNEL
(Not to Scale)

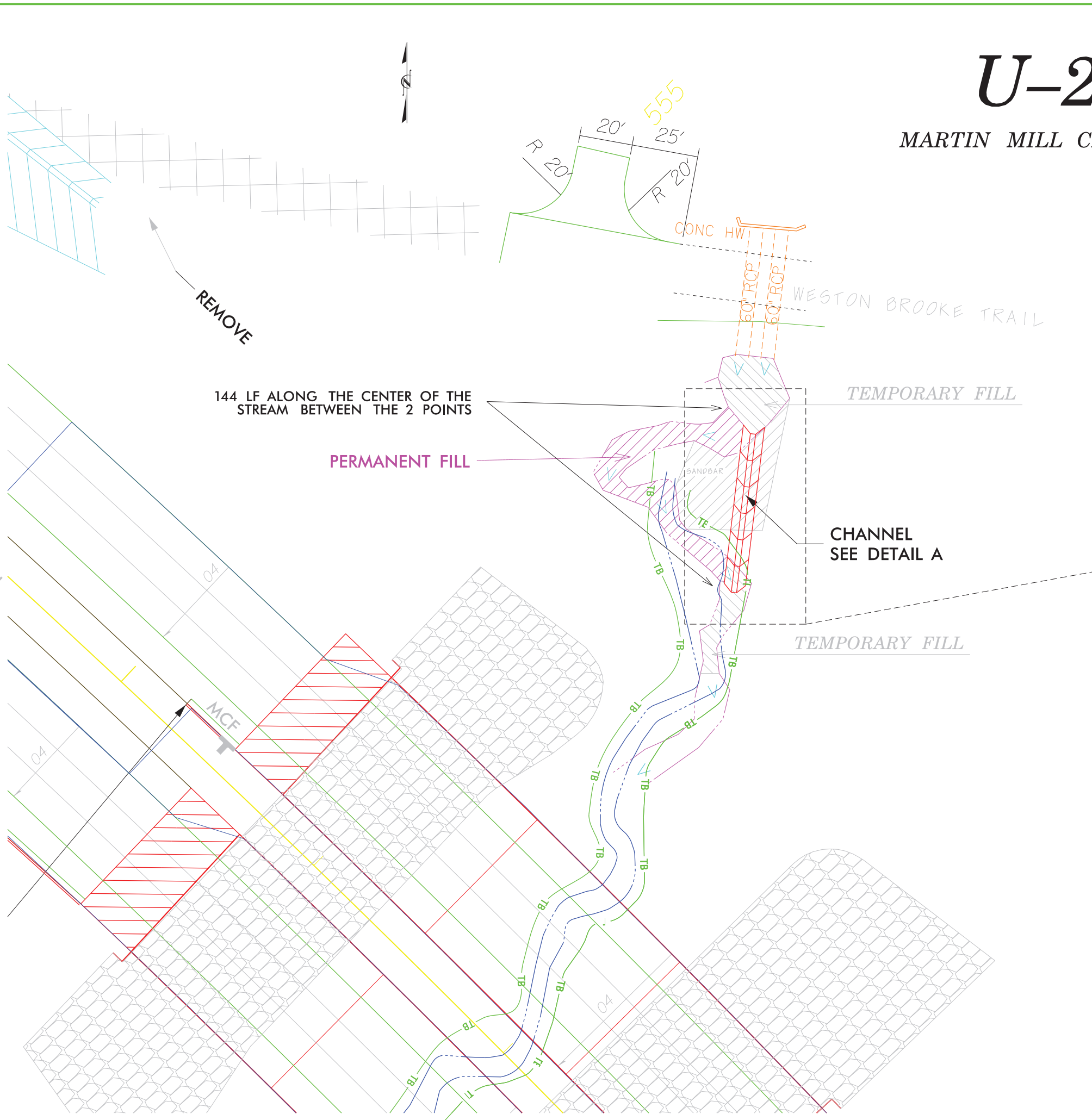


Min. D=2.0 Ft.
Max. d=2.0 Ft.
Type of Liner=CLASS '1' RIPRAP

FROM STA. TO STA.



8/17/99
 REVISIONS
 31-1AN-2019_08-25
 S:\GIS\11R\Survey\CURRENT\Weston Brook Tr. Pipes F.dgn\WESTON_BROOK_CREEK_Rdy.dsn_2_48INCH_PIPES_F.dgn
 counter AT DIV 9-294557



144 LF ALONG THE CENTER OF THE STREAM BETWEEN THE 2 POINTS

CHANNEL
SEE DETAIL A

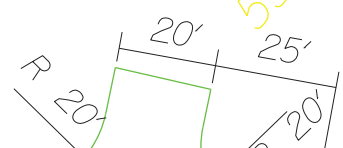
TEMPORARY FILL

TEMPORARY FILL

CONC HW

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From: Euliss, Amy [mailto:aeuliss@ncdot.gov]
Sent: Thursday, January 31, 2019 9:08 AM
To: Lastinger, James C CIV USARMY CESAW (US) <James.C.Lastinger@usace.army.mil>; Wanucha, Dave <dave.wanucha@ncdenr.gov>
Cc: Kiser, Marcus K <mkkiser@ncdot.gov>; Puckett, Lester L <lpuckett@ncdot.gov>; Wyrick, Scott D <sdwyrick@ncdot.gov>; Nifong, Johnny R <jnifong@ncdot.gov>

Subject: [Non-DoD Source] U2579B bank stabilization issues

James and Dave,

As you know, its been a very wet fall and winter. We have had multiple large events (100+ year storms) in the area. We have a few locations where streams are undermining or will undermine our fill slopes and need to be addressed for long term stability. One area is downstream of the culvert on Smith Creek. There are a few locations along Smith Creek that we are going to investigate further to determine the appropriate method. The fill in this area hasn't been installed yet, so we have a little more time to come up with a plan. The other area is permit site 8. Martin Mill Creek has migrated significantly since the project started and is now undermining the fill slope for the bridge. I have included a plan sheet that shows the original location of the stream and the new locations, and a couple pictures. In the first picture you can see the amount of sand that has been deposited forcing the stream to migrate away from it and toward our slope. I outlined the new channel location. In the second picture, you can see rip rap in the distance (circled in red). This is where the stream has migrated to and is undermining the fill slope. The plan here would be to install a channel with the banks lined with rip rap through the sand and connect with the stream on the other side, and fill the old channel.

I would like to know if you are ok with us proceeding with this repair and submitting a permit modification package for all sites at the same time. Let me know your thoughts.

Amy Euliss

Division 9 Environmental Officer

North Carolina Department of Transportation

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in wetlands (ac)	Permanent SW impacts (ac)	Temporary SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	28+00 -Y-	ROAD FILL	0.03		<0.01	0.02		0.02		142		
2	16+00 -Y1 RPD-	ROAD FILL - INTERMITTENT						0.01		109		
		ROAD FILL - PERENNIAL						0.02		208		
		STREAMBANK STABILIZATION						<0.01	<0.01	10	37	
3	21+56-25+22 -Y1-	2 @ 7' x 6' RCBC						0.06	<0.01	438	33	
3A	17+36-21+53 -Y1-	DETOUR - ROAD FILL							0.08		545	
3B	20+55-21+32 -Y1-	DETOUR - ROAD FILL							0.03		194	
4	501+51-503+21 -L-	ROAD FILL						0.03	<0.01	493	18	
		STREAMBANK STABILIZATION						<0.01	<0.01	9	31	
5	503+85-507+80 -L-	ROAD FILL						0.05	<0.01	740	22	
5A	507+39-509+64 -L-	ROAD FILL						0.01		306		
6	523+00 -L-	ROAD FILL	0.03			<0.01		0.02	<0.01	312	42	
7	527+00 -L-	ROAD FILL	0.52			0.01						
		ROAD FILL - POND						0.59				
8	559-75 -L-	2 @ 10' x 6' RCBC						0.06	<0.01	442	53	
		STREAMBANK STABILIZATION						<0.01	<0.01	58	44	
9	560+75 -L-	ROAD FILL	0.03			0.01						
10	560+50-568+74 -L-	ROAD FILL	0.01					0.07	<0.01	783	22	
10A	566+84-572+75 -L-	ROAD FILL						0.05		684		
11	615+00 -L-	3 @ 10' x 9' RCBC						0.43	0.02	808	57	
11A	19+76-21+44 -Y4RPBD-	CHANNEL CHANGE						0.08	0.01	223	41	
12	15+84-18+86 -Y4RPBD-	CHANNEL CHANGE						0.01	0.02	88	205	
TOTALS:			0.62	0.00	< 0.01	0.05		1.53	0.19	5,853	1,344	

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

U-2579 B Forsyth County
Winston Salem Northern Beltway
(Eastern Section) (Future I-74)

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in wetlands (ac)	Permanent SW impacts (ac)	Temporary SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
13	20+00-21+40 -Y4RPBD-	ROAD FILL	0.33									
14	629+95-635+90 -L-	ROAD FILL	0.04					0.05		688		
15	636+32-641+55 -L-	ROAD FILL	0.18					0.04		332		
		ROAD FILL-POND						2.38				
15A	644+00-645+00 -L-	ROAD FILL						<0.01		108		
16	643+56-644+61 -L-	ROAD FILL						<0.01		104		
		ROAD FILL-POND						0.16				
17	663+65-667+00 -L-	ROAD FILL	0.09			<0.01		0.06		928		
18	667+15 -L-	3 @ 12' x 10' RCBC						0.06	0.02	377	67	
		STREAMBANK STABILIZATION						0.02	0.01	80	59	
19	668+50 -L-	ROAD FILL	0.47			0.01						
20	687+80-691+59 -L-	ROAD FILL						0.03		163		
		ROAD FILL-POND						0.85				
21	22+50 -Y1-	ROAD FILL	0.02									
22	40+50 -Y4-	OUTLET PAD	0.01									
23	45+65 -Y4-	CULVERT EXTENSION						0.06	0.01	100	32	
		STREAMBANK STABILIZATION						0.02	0.06	54	89	
23A	44+95-45+18 -Y4-	ROAD FILL						<0.01		57		
23B	45+07-46+34 -Y4-	ROAD FILL						0.01		135		
24	80+73-81+57 -Y4RPBD-	ROAD FILL						0.02		202		
24A	80+50-81+51 -Y4RPBD-	ROAD FILL	0.06									
25	37+31 -Y4RPA-	30" RCP						<0.01		73		
		STREAMBANK STABILIZATION						<0.01	<0.01	21	16	
TOTALS:			1.20			0.02		3.67	0.03	3,268	142	

11/19/2018 Revisions shown in red text.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

U-2579 B Forsyth County
Winston Salem Northern Beltway
(Eastern Section) (Future I-74)

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WETLAND PERMIT IMPACT SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in wetlands (ac)	Permanent SW impacts (ac)	Temporary SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
26	29+16-31+12 -Y4RPC-	ROAD FILL-POND							0.38			
27A	104+63 - 107+53 -Y4-	ROAD FILL							0.02		205	
27B	107+60 -Y4-	42" WELDED STEEL	0.05						0.01	<0.01	130	14
27C	107+58 - 108+44 -Y4-	30" RCP							<0.01		116	
28	50+50 -56+00 -Y4- R1	STREAMBANK STABILIZATION							0.02	0.15	365	188
29	145+62 -Y4-	ROAD FILL				<0.01						
30	64+34 -Y4-	STREAMBANK STABILIZATION							<0.01		28	
31	557+28 -L-	STREAMBANK STABILIZATION							<0.01		21	
2018 Permit Modifications												
23	44+10 to 47+96 -Y4-	3 @ 8' x 9' RCBC Extension							0.06		151	
		STREAMBANK STABILIZATION							0.02	0.05	36	121
28	47+96 to 56+85 -Y4-	2 @ 10' x 10' RCBC and							0.12		598	127
		1 @ 10' x 8' RCBC							0.04	<0.01	194	
		STREAMBANK STABILIZATION										
2019 Permit Modifications												
8A		STREAM RELOCATION									144	40
SUBTOTALS, THIS PAGE:			0.05			<0.01			0.66	0.06	1,623	302
SUBTOTALS, PAGE 1			0.62		<0.01	0.05			1.53	0.19	5,853	1,344
SUBTOTALS, PAGE 2			1.20			0.02			3.67	0.03	3,268	142
TOTALS:			1.87		<0.01	0.08			5.86	0.28	10,744	1,788

11/19/2018 Revisions shown in red text.

09/18/2019 Revisions shown in blue text.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

U-2579 B Forsyth County
 Winston Salem Northern Beltway
 (Eastern Section) (Future I-74)

SHEET 64 of 64