



PAT McCRORY
Governor

NICHOLAS J. TENNYSON
Secretary

December 2, 2016

U.S. Army Corps of Engineers
Asheville Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28805

ATTN: Ms. Crystal Amschler
NCDOT Division 10 Coordinator

SUBJECT: **Modification Request of Section 404 Regional General Permit No. 31 and Section 401 General Water Quality Certification No. 3886** for the proposed Interstate 85 (I-85) Widening and Interchange Improvements from north of NC 73 (Davidson Highway / Exit 55) to north of SR 2180 (Lane Street/Exit 63), Cabarrus & Rowan Counties, Divisions 9 and 10. Federal Aid Project No. FANHIMF-085-2(61)55, TIP Project No. I-3802A.

REFERENCE:1) Section 404 General Permit No. 198200031 (GP 31), Action ID No. SAW-2008-03229, issued July 16, 2015.
2) Section 401 General Water Quality Certification No. 3886, NCDWR Project No. 20150362v.2, issued June 29, 2015; modified March 22, 2016, Project No. 20150362v.3.

Dear Madam:

Since the issuance of the Section 404 permit (dated July 16, 2015) and the original Section 401 Water Quality Certification (dated June 29, 2015), Bridge over Irish Buffalo Creek (Site 2), I-85 Rest Area at Milepost 59 (Site UC-1), and Bridge over Cold Water Creek (Site 18) will require permit modifications. These requirements are based upon an agency request and additional unanticipated impacts. An update to the Special Conditions for the Northern Long-Eared Bat (NLEB) at the Moose Road Bridge site, which were cited in the approved Section 404 General Permit, are also included in this modification request.

Stream Permit Site 18 (Bridge over Cold Water Creek)

On November 17, 2015, representatives from NCDOT met on site with Ms. Donna Hood (N.C. Division of Water Resources [NCDWR]) to conduct a project review. During the site meeting Ms. Hood recommended that additional riprap be placed under the Cold Water Creek Bridge. The contractor also required a temporary crossing at the same



location. A modification request for the addition of 66 linear feet of temporary stream impact due to the placement of the temporary causeway and 30 linear feet of permanent impact due to bank stabilization at Site 18 was initially requested on February 18, 2016. The modification to the Section 401 certification was approved by NCDWR on March 22, 2016. The Section 404 modification request has not yet been approved by the U.S. Army Corps of Engineers (USACE). Since the February submittal, it has been determined that the temporary crossing is no longer needed. Additionally, the riprap bank stabilization was installed at the site by the contractor prior to receiving the USACE permit modification, most likely due to a misunderstanding that both the Section 404 and 401 modifications had been approved. The previously approved 185 linear feet of stabilization, which was permitted by the original permit, and the additional un-permitted 30 linear feet included in the last permit modification request has already been installed at the site.

Stream Permit Site 2 (Bridge over Irish Buffalo Creek)

During the same field review for Site 18 on November 17, 2015, Ms. Hood requested that additional riprap be placed on the banks of Irish Buffalo Creek under the existing bridge to prevent erosion from existing shading and potential vegetation die-off. As a result, Class II riprap is being proposed at this location with geotextile fabric to be installed between the Class II riprap and the stream bed and stream banks.

Previous Site 2 impacts included 30 linear feet of temporary stream impacts and 137 linear feet of bank stabilization impacts. The additional bank stabilization at Site 2 will result in an additional 35 linear feet of permanent bank stabilization impact. Consequently, the proposed overall total for Site 2, including the previously-permitted impacts and currently proposed impacts will be 20 linear feet of temporary impacts and 172 linear feet of bank stabilization impacts. As a result of the currently proposed bank stabilization, temporary impacts at Site 2 will decrease from the permitted total of 30 linear feet to 20 linear feet due to the elimination of two 5 linear foot sections of temporary impact. No other changes to permitted wetland and stream impact are proposed for Site 2.

Stream Permit Site UC-1 (I-85 Rest Area)

On July 19, 2016, representatives from NCDOT met on site with Ms. Donna Hood to conduct a project review. During the site meeting Ms. Hood measured additional unpermitted temporary impacts of approximately 16 feet in length to Site UC-1. During the site prep for the installation of the proposed waterline, additional areas were cleared along the stream banks. The clearing impacts were necessary for the installation of the waterline and to allow for a dry work area. Ms. Hood recommended that these additional impacts be included in the next permit modification. Ms. Hood contacted Ms. Crystal Amschler (USACE) via email on September 21, 2016 to inform her that she had observed the aforementioned impacts and had made recommendations to the contractor regarding a time frame for submission of the modification request.

The temporary surface water impacts associated with the waterline installation overrun resulted in an additional 19 linear feet of temporary stream impact per the contractor's field measurements (this is the same area as the 16 feet referenced above, but a more

accurate measurement). The proposed impact total for Site UC-1, including the previously-permitted impacts and the currently unpermitted impacts are 56 linear feet of temporary stream impacts. No other changes to permitted wetland and stream impacts are proposed for Site UC-1.

The permit drawings for these three sites have been revised to depict the additional bank stabilization at Site 2, temporary impacts at Site UC-1, and the additional bank stabilization at Site 18. They have been included in this modification request along with the revised impact summary tables.

Previously-permitted bank stabilization impacts for the entire project totaled 956 linear feet (for USACE; 986 for NCDWR). The proposed total impacts for bank stabilization will now be 1,021 linear feet. Previously-permitted overall permanent impacts totaled 4,273 linear feet (for USACE; 4,303 for NCDWR) for the project. The proposed permanent impacts now total 4,338 linear feet. Previously-permitted overall temporary impacts totaled 631 linear feet (for USACE; 697 for NCDWR) for the project. The proposed temporary impacts now total 640 linear feet, which includes the 10-foot reduction described above. The impacts reported in this paragraph differ by agency due to the status of the February 18, 2016 permit modification, which was approved by NCDWR but yet to be approved by USACE.

The approved Section 404 permit stated that the USACE required 2:1 mitigation for 1,823 linear feet and 1:1 mitigation for 1,307 linear feet of permanent stream impacts, which totaled 4,953 linear feet of compensatory stream mitigation. The USACE did not require mitigation for impacts resulting from temporary impacts or bank stabilization. The original NCDWR-approved certification only required 1:1 mitigation for 2,565 linear feet of permanent stream impacts, which included 293 linear feet of bank stabilization impacts. The March 22, 2016 certification from NCDWR for Site 18 did not require additional mitigation for the 30 linear feet of added bank stabilization. USACE will also not require mitigation for this additional bank stabilization at Site 18. The proposed addition of 35 linear feet of bank stabilization at Site 2 would also not require additional mitigation from the USACE, but would require 1:1 mitigation from the NCDWR since the site will now exceed the 150 linear foot threshold that triggers mitigation. NCDWR's new mitigation requirement will now total 172 linear feet at Site 2 and 2,737 linear feet (465 linear feet of which is for bank stabilization) for the entire project (this also includes the original 137 linear feet at Site 2, which was not originally mitigated for since it was less than 150 linear feet in the original application). This amount is still less than the 4,953 linear feet of compensatory mitigation credits already required by the USACE. Therefore, NCDOT will continue to use the USACE mitigation requirement for mitigation purposes and is not requesting any additional mitigation from the NC Division of Mitigation Services (DMS).

NLEB Special Permit Conditions Update – Moose Road Bridge Site

The approved USACE permit listed Special Conditions which included clearing limitations, plan callouts for sensitive species, inspections, and a daily work moratorium (April 15th – October 15th) at the Moose Road Bridge Site. The NCDOT Natural Environment Section has coordinated with Ms. Crystal Amschler, Ms. Marella Buncick

of the US Fish and Wildlife Service (USFWS), and NCDOT Division 10 staff regarding this matter. The following actions are proposed to replace/update the Special Conditions in the permit and are based on these coordination efforts. The actions that will occur prior to the removal of the Moose Road Bridge are:

1. In January 2017, representatives from NCDOT Division 10 will investigate the bridge for the presence of bats;
2. During the investigation, Division staff will inspect the expansion joints for bats by utilizing crane equipment that will be lowered over the side of the bridge, and;
3. Upon immediate completion of the January 2017 surveys, when it is determined that the bridge is clear of bats, representatives from NCDOT Division 10 will install foam sealant in the expansion joints to eliminate further roosting of bats.

It is our understanding that the above actions will satisfy the Section 7 requirements for the NLEB at the Moose Road Bridge site.

A request is hereby made to the Department of the Army to modify the Section 404 GP 31 as required for T.I.P I-3082A. We are also hereby requesting a modification to the Section 401 Water Quality Certification from the NCDWR. A copy of this modification request and its distribution list will be posted on the NCDOT website at <https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>, under *Quick Links > Permit Applications*. Thank you for your time and assistance with this project. Please contact James Mason at either jmason@ncdot.gov or at (919) 707-6136 if you have any questions or need additional information.

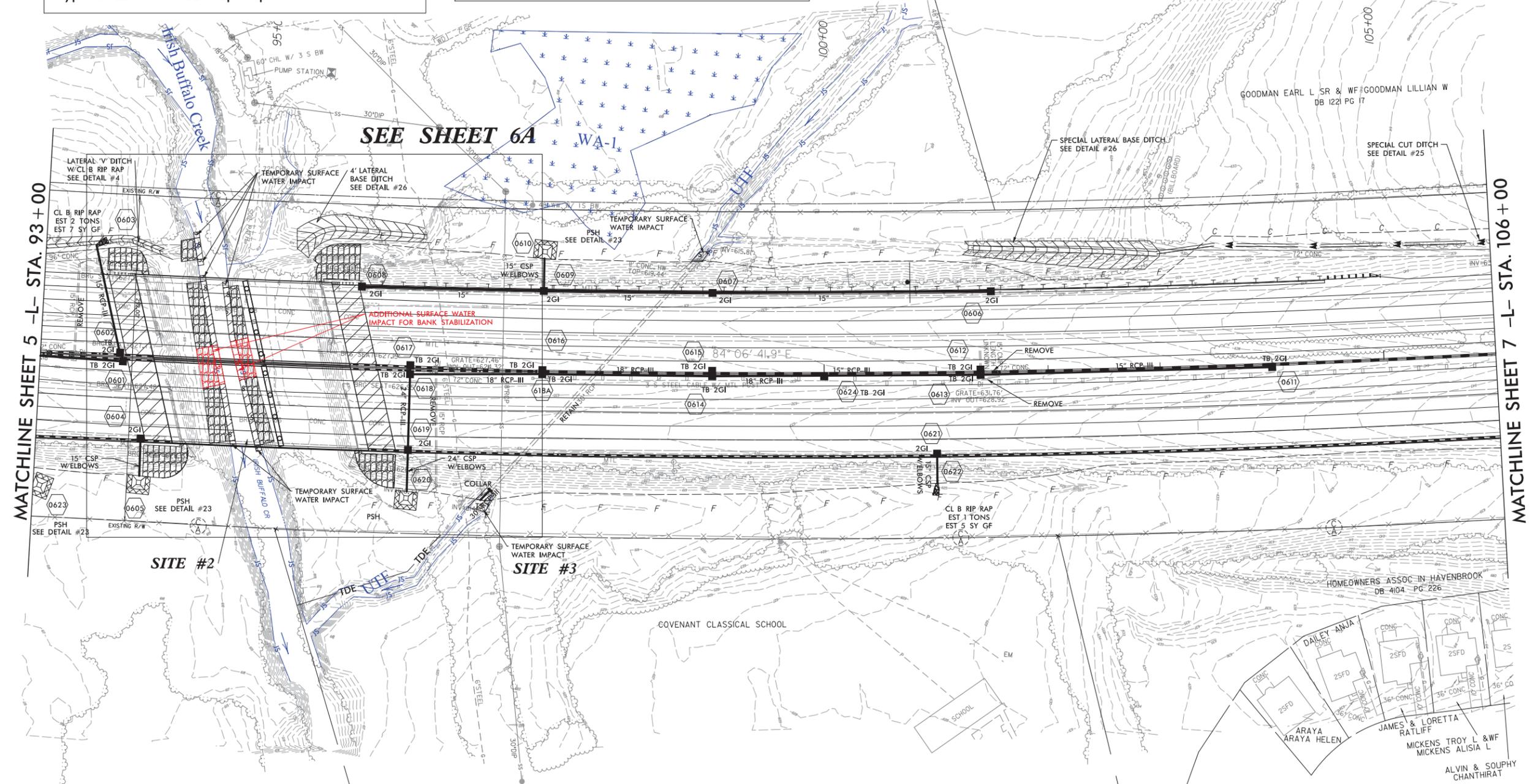
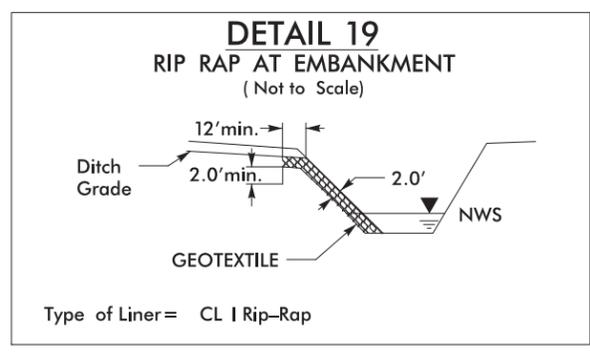
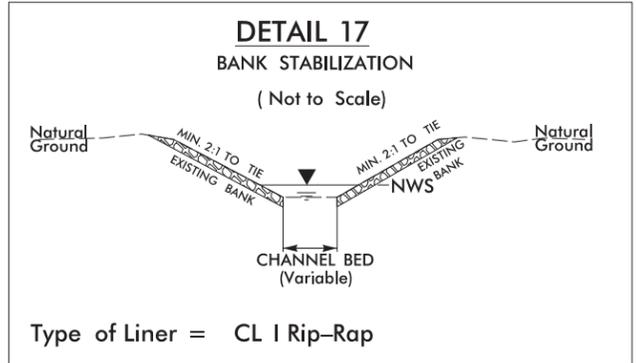
Sincerely,



PHS Philip S. Harris III, P.E., C.P.M.
Natural Environment Section Head

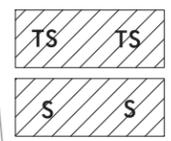
cc: NCDOT Permit Application Standard Distribution List
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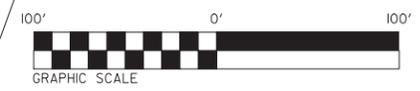
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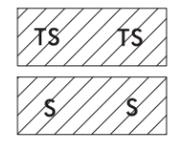
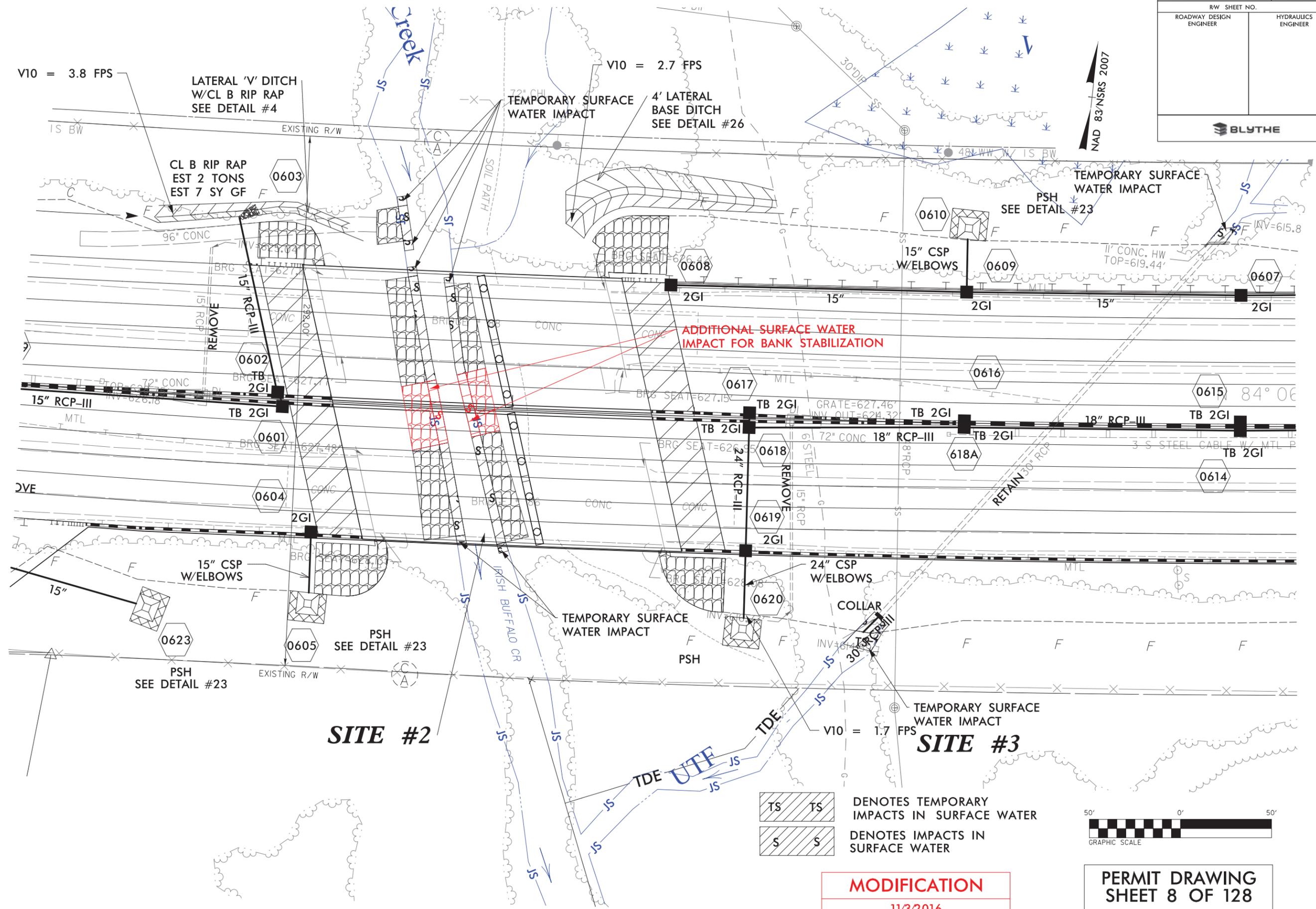
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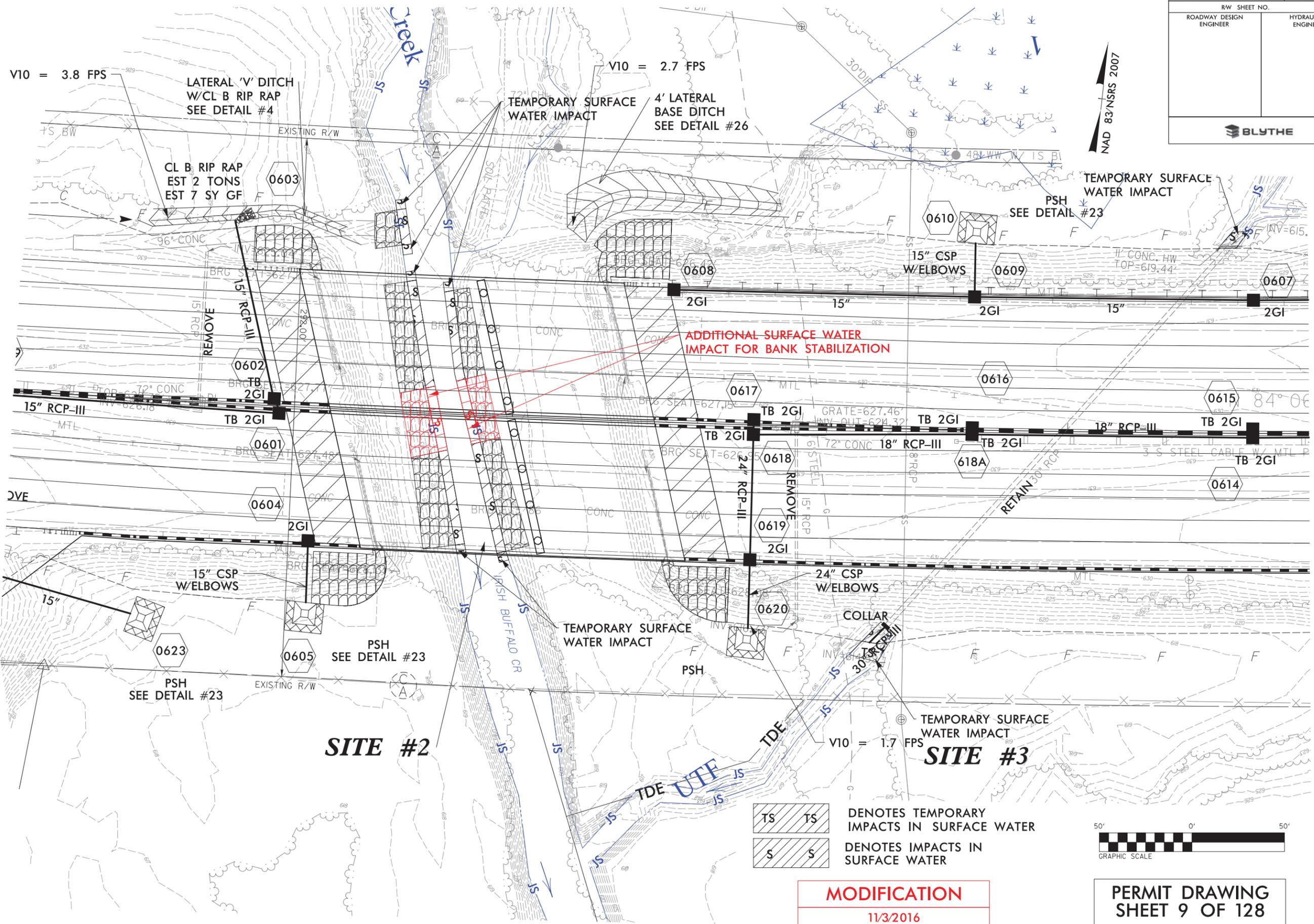


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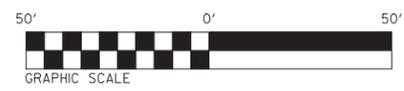
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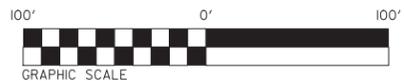
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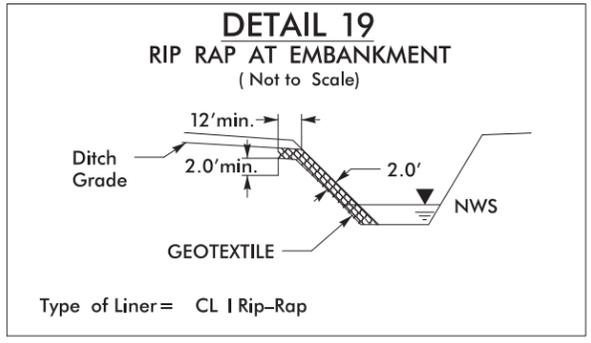
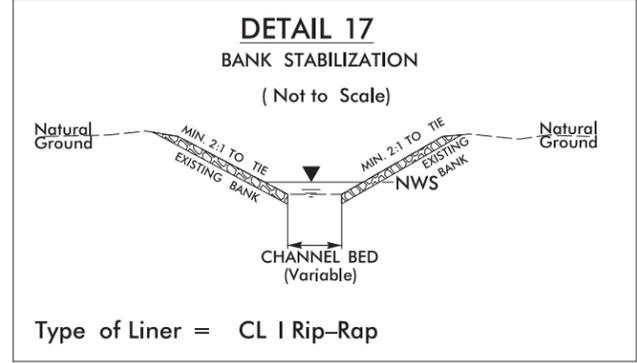
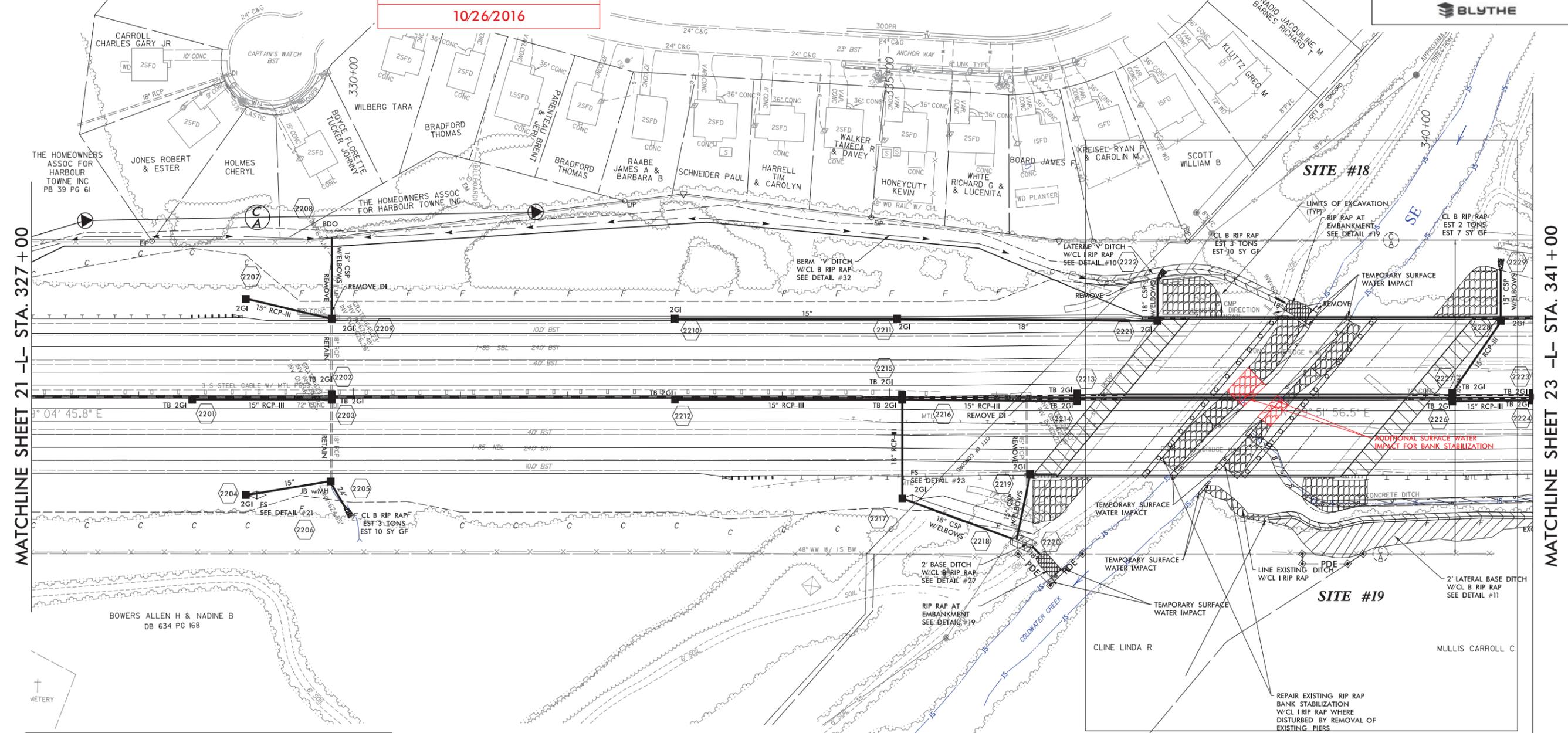
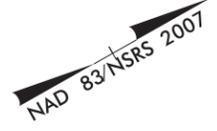
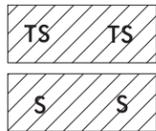
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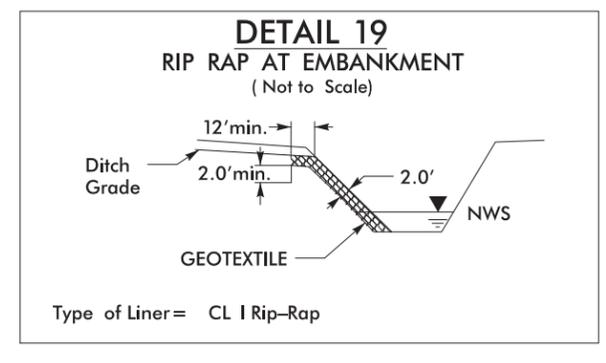
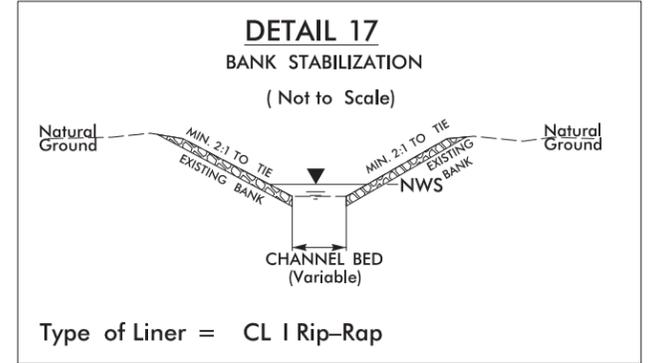
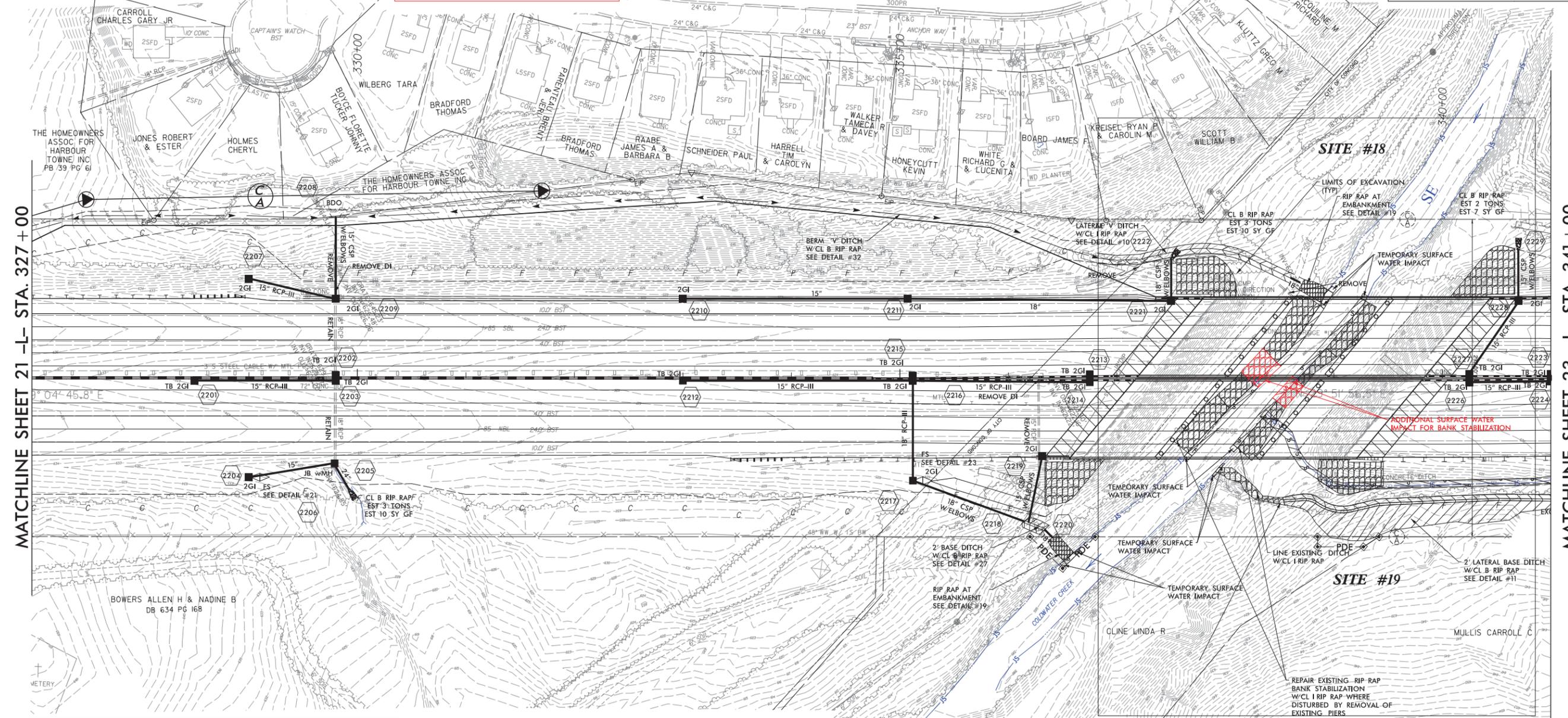
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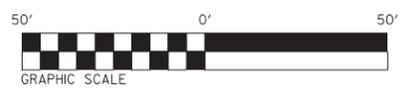
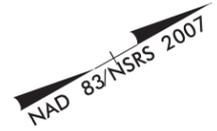
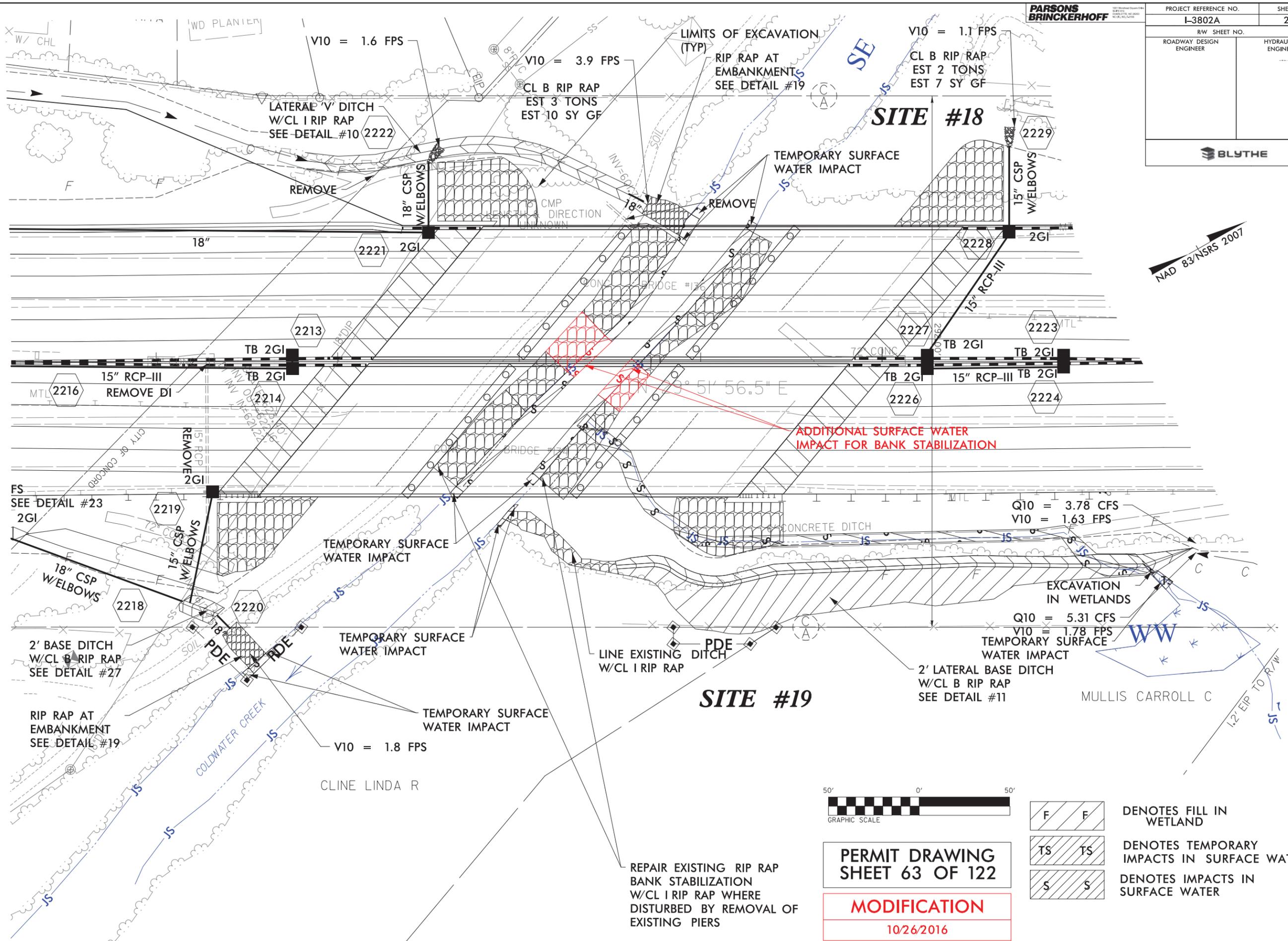
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PERMIT DRAWING SHEET 63 OF 122
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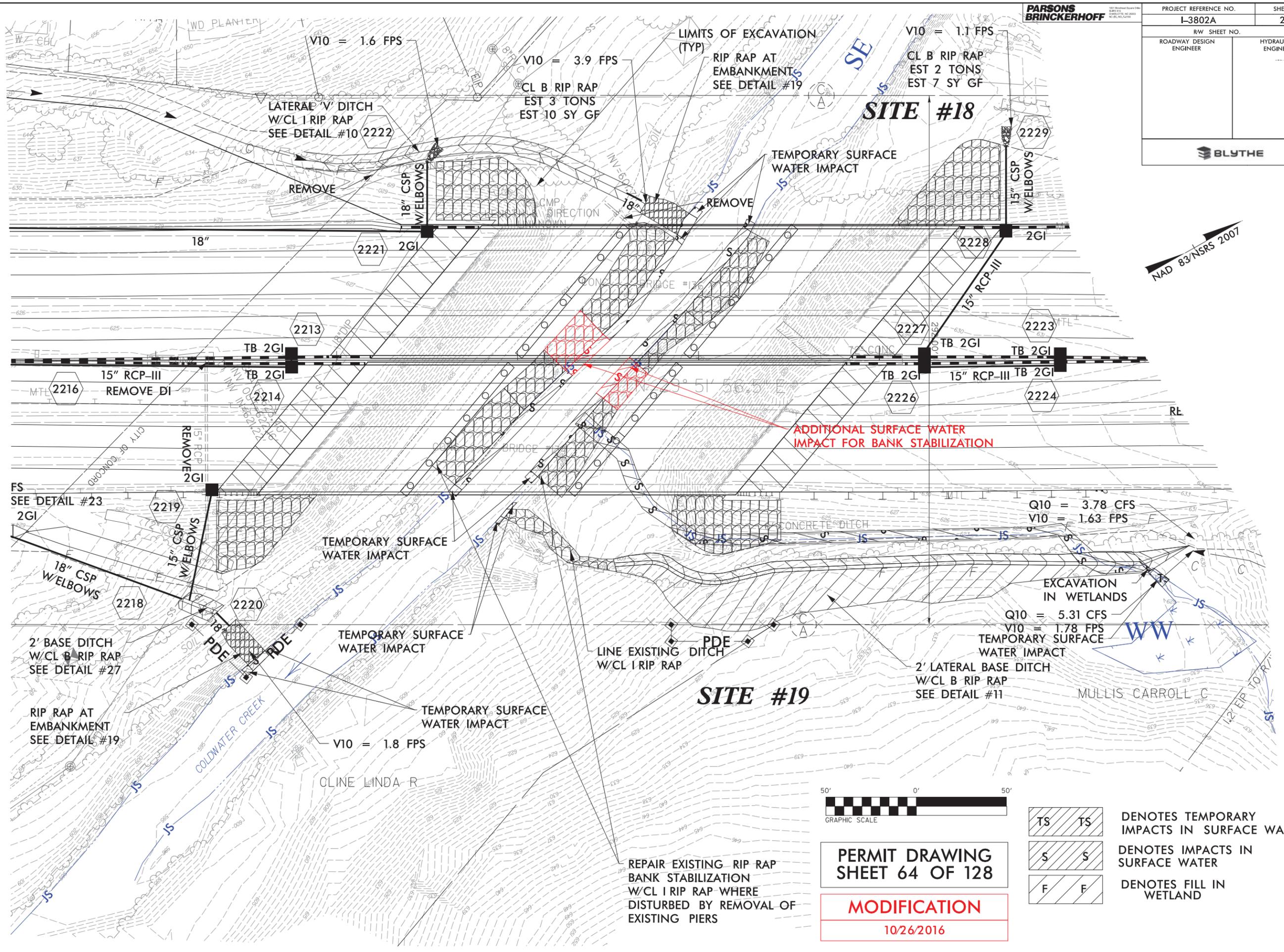
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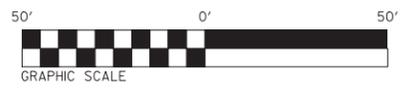
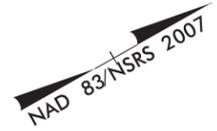
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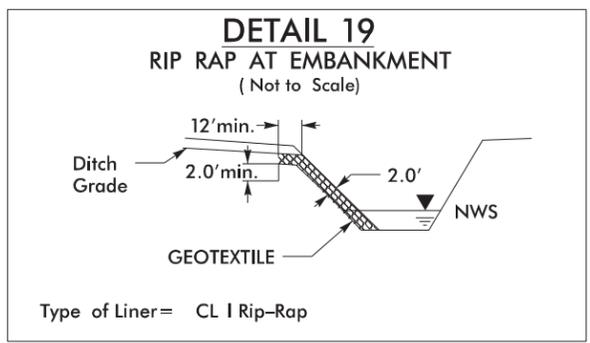
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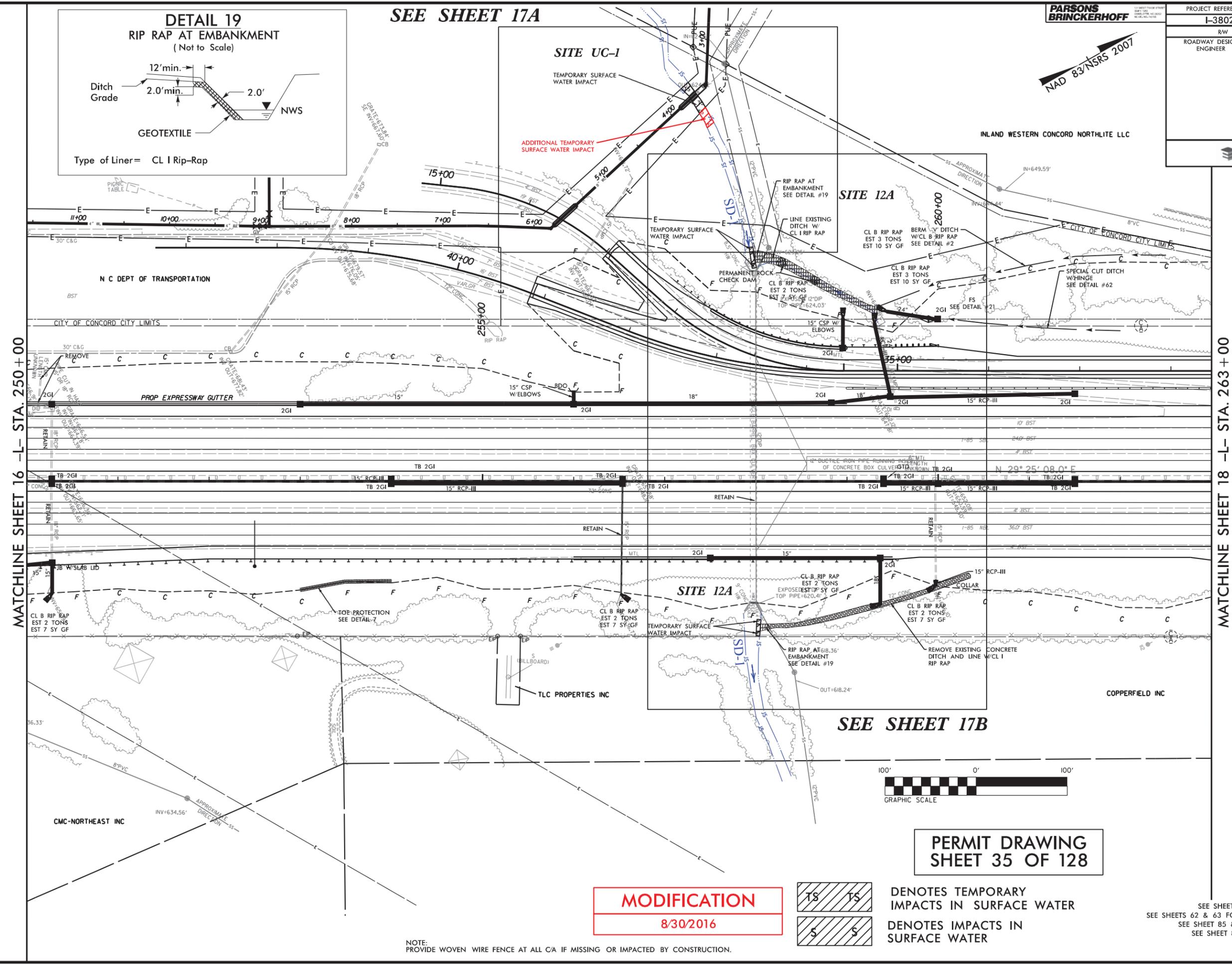


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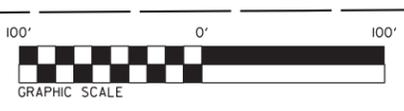
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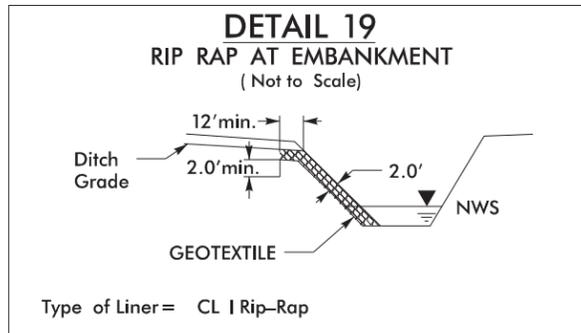
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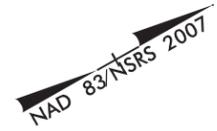
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 SEE SHEETS 62 & 63 FOR -LSB- & -LNB- PROFILES
 SEE SHEET 85 & 86 FOR -Y9RPA- PROFILE
 SEE SHEET 87 FOR -Y9SPURA- PROFILE

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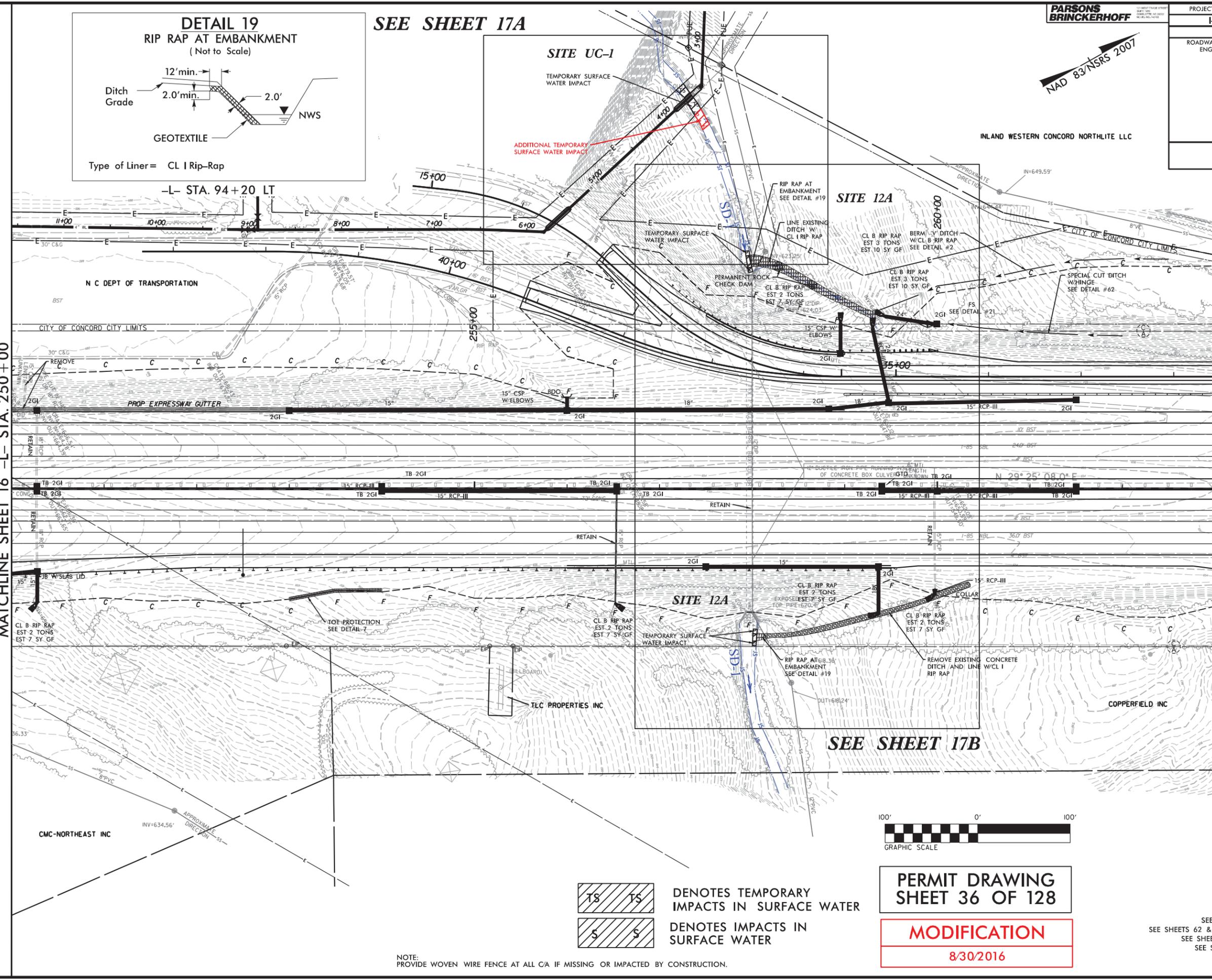
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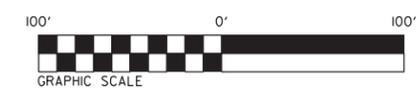
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PERMIT DRAWING
SHEET 36 OF 128

MODIFICATION
8/30/2016

SEE SHEET 2-AV FOR DITCH DETAILS
 SEE SHEETS 62 & 63 FOR -LSB- & -LNB- PROFILES
 SEE SHEETS 85 & 86 FOR -Y9RPA- PROFILE
 SEE SHEET 87 FOR -Y9SPURA- PROFILE

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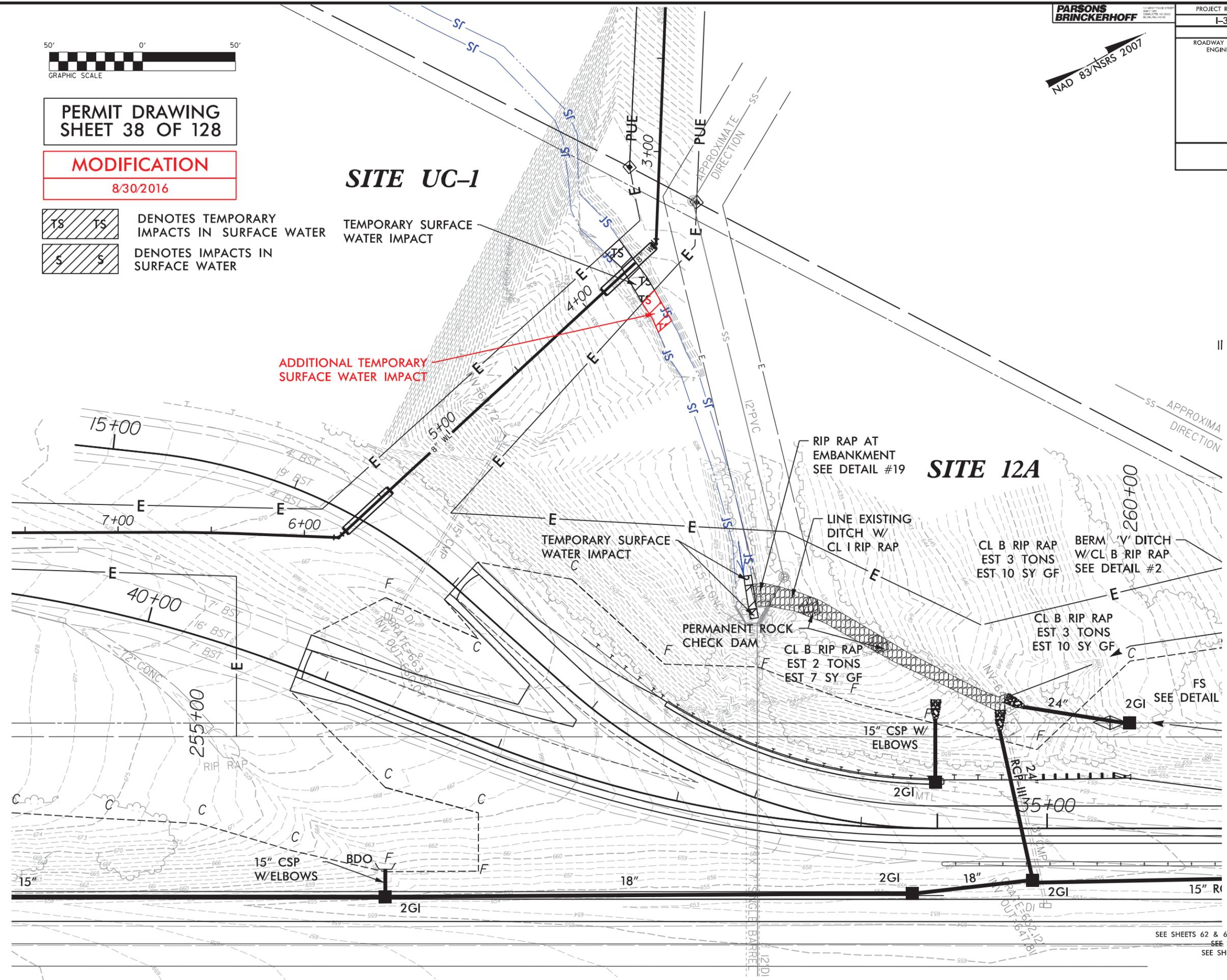


PERMIT DRAWING
SHEET 38 OF 128

MODIFICATION
8/30/2016

- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER

SITE UC-1



SEE SHEETS 62 & 63 FOR -LSB- & -LNB- PROFILES
SEE SHEET 85 FOR -Y9RPA- PROFILE
SEE SHEET 85 FOR -Y9SPURA- PROFILE

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)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	83+00 -L-	BANK STABILIZATION						< 0.01	< 0.01	15	10	
**2	94+68 -L-	BANK STABILIZATION						0.04	< 0.01	172	20	
3	97+00 -L-	EXTEND EX 30" RCP-III						< 0.01	< 0.01	15	20	
4	157+27 -L-	EXTEND EX 42" RCP-III						< 0.01	< 0.01	7	10	
4	157+25 -L-	BANK STABILIZATION						< 0.01	< 0.01	14	10	
6	193+25 -L-	FILL						0.01		95		
7	193+00 -L-	6' LATERAL BASE DITCH						0.03	< 0.01	140	10	
7A	44+87 -Y7-	REPLACE EXIST. 48" CMP						0.02		120		
8	195+25 -L-	4' LATERAL BASE DITCH							< 0.01		15	
9	205+50 -L-	BANK STABILIZATION						< 0.01	< 0.01	9	5	
9A	205+50 -L-	BANK STABILIZATION						< 0.01	< 0.01	5	5	
10	230+75 - 237+60 -L-	CHANNEL CHANGE						0.11	< 0.01	666	30	
10A	229+40 -L-	BANK STABILIZATION						< 0.01	< 0.01	7	12	
12	241+00 / 248+00 -L-	BANK STABILIZATION						0.01	< 0.01	22	20	
12	241+40 -L-	EXTEND EX 48" RCP-III						< 0.01	< 0.01	25	10	
***UC-1	257+45 -L-	6" WATER LINE							0.01		56	
12A	257+45 -L-	BANK STABILIZATION						< 0.01	< 0.01	21	20	
13	267+70 -L-	EXTEND 36" CSP	0.08				0.01					
14	268+45 -L-	18" RCP-III						0.03	< 0.01	106	16	
14	267+00 -L-	EXTEND EX 36" CMP	< 0.01				< 0.01	< 0.01		3		
15	269+50 -L-	EXTEND EX 42" CMP						< 0.01		23		
15	269+50 -L-	BANK STABILIZATION						< 0.01	< 0.01	20	4	
15	271+00 -L-	FILL						0.01		60		
SHEET 126 SUBTOTALS*:			0.08				0.02	0.28	0.05	1545	273	0

*Rounded subtotals are sum of actual impacts

NOTES: Site 5 was eliminated by reconfiguring storm drainage system per 4C meeting comments.
 Site 11 was eliminated by reconfiguring storm drainage system per 4C meeting comments.
 Site 7A was added after the 4C meeting.
 Site UC-1 was added after the 4C meeting.
 ** Permanent channel impacts added to account for additional bank stabilization 8/31/2016
 *** Temporary channel impact added to account for additional clearing 8/31/2016

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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)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
16	279+00 -L-	FILL	< 0.01									
17	305+00 -L-	FILL, OTCB					0.01	< 0.01			10	
17	306+00 -L-	EXTEND 30" RCP-IV						< 0.01		12		
17	306+00 -L-	BANK STABILIZATION						< 0.01	< 0.01	16	6	
17A	317+76 -L-	BANK STABILIZATION						< 0.01	< 0.01	8	10	
17B	322+90 -L-	BANK STABILIZATION						< 0.01	< 0.01	6	5	
18	338+00 -L-	BANK STABILIZATION						0.03	< 0.01	185	35	
18	338+00 -L-	BANK STABILIZATION						0.02		30		
19	340+00 -L-	FILL			< 0.01			0.06	< 0.01	356	15	
20	350+50 -L-	EXTEND 54" RCP-III						< 0.01	< 0.01	12	10	
20	352+00 -L-	BANK STABILIZATION						< 0.01	< 0.01	22	10	
21	48+75 -Y3-	FILL						0.04		210		
21	48+75 -Y3-	BANK STABILIZATION						< 0.01	< 0.01	15	20	
22	50+00 -Y3-	FILL, EXTEND 54" RCP-III						0.02		130		
22	50+00 -Y3-	BANK STABILIZATION						< 0.01	< 0.01	15	10	
23	58+00 -Y3-	FILL	0.10				< 0.01	0.04	0.01	135	65	
23	58+00 -Y3-	BANK STABILIZATION						< 0.01	< 0.01	11	10	
24	16+00 -Y34-	EXTEND 36" RCP-III	< 0.01					0.01	< 0.01	80	10	
SHEET 127 SUBTOTALS*:			0.11		< 0.01		0.02	0.24	0.04	1243	216	0

*Rounded subtotals are sum of actual impacts

NOTES:

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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)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
25	388+34 -L-	CHANNEL CHANGE						0.01	< 0.01	63	10	
25	388+34 -L-	BANK STABILIZATION						< 0.01		35		
26	388+34 -L-	72" WSP WORK AREA					0.02					
27	405+66 -L-	EXTEND 48" RCP						< 0.01		14		
27	405+66 -L-	CHANNEL CHANGE						0.01	< 0.01	56	7	
27	405+66 -L-	BANK STABILIZATION						< 0.01	< 0.01	31	12	
28	412+82 -L-	EXTEND 72" RCP /42" WSP						0.02		76		
28	412+82 -L-	CHANNEL CHANGE						0.01	< 0.01	43	12	
28	412+82 -L-	BANK STABILIZATION						0.02	< 0.01	73	17	
29	20+91 -Y13RPA-	42" RCP						0.01		93		
29	20+91 -Y13RPA-	OUTFALL CHANNEL						< 0.01	< 0.01	35	8	
30	437+82 -L-	48" WSP						< 0.01		34		
30	437+82 -L-	CHANNEL CHANGE						< 0.01	< 0.01	10	11	
30	437+82 -L-	BANK STABILIZATION						0.01	< 0.01	71	10	
31	437+82 -L-	CHANNEL CHANGE						< 0.01	< 0.01	37	11	
32	449+92 -L-	BANK STABILIZATION						0.02	< 0.01	106	23	
33	470+69 / 473+73 -L-	LATERAL BASE DITCH	0.11		0.04		0.02					
34	470+85 / 477+45 -L-	LATERAL BASE DITCH						0.03		427		
34	470+85 / 477+45 -L-	42" ALTERNATE PIPE						0.02		234		
34	470+85 / 477+45 -L-	BANK STABILIZATION						< 0.01		13		
35	478+17 -L-	BANK STABILIZATION						0.02	< 0.01	99	30	
SHEET 126 SUBTOTALS*:			0.08				0.02	0.28	0.05	1545	273	0
SHEET 127 SUBTOTALS*:			0.11		< 0.01		0.02	0.24	0.04	1243	216	0
SHEET 128 SUBTOTALS*:			0.11		0.04		0.04	0.22	0.03	1550	151	0
PROJECT TOTALS*:			0.30	0.00	0.04	0.00	0.08	0.74	0.12	4338	640	0

*Rounded subtotals and totals are sum of actual impacts

NOTES: In addition to the project totals listed above, this permit includes a total of 0.01 acres of Temporary Impacts in Wetlands for Erosion Control Devices per the NCDOT Roadside Environmental Unit.

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