PROJECT REFERENCE NO.	SHEET NO.
I-3802A	26A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

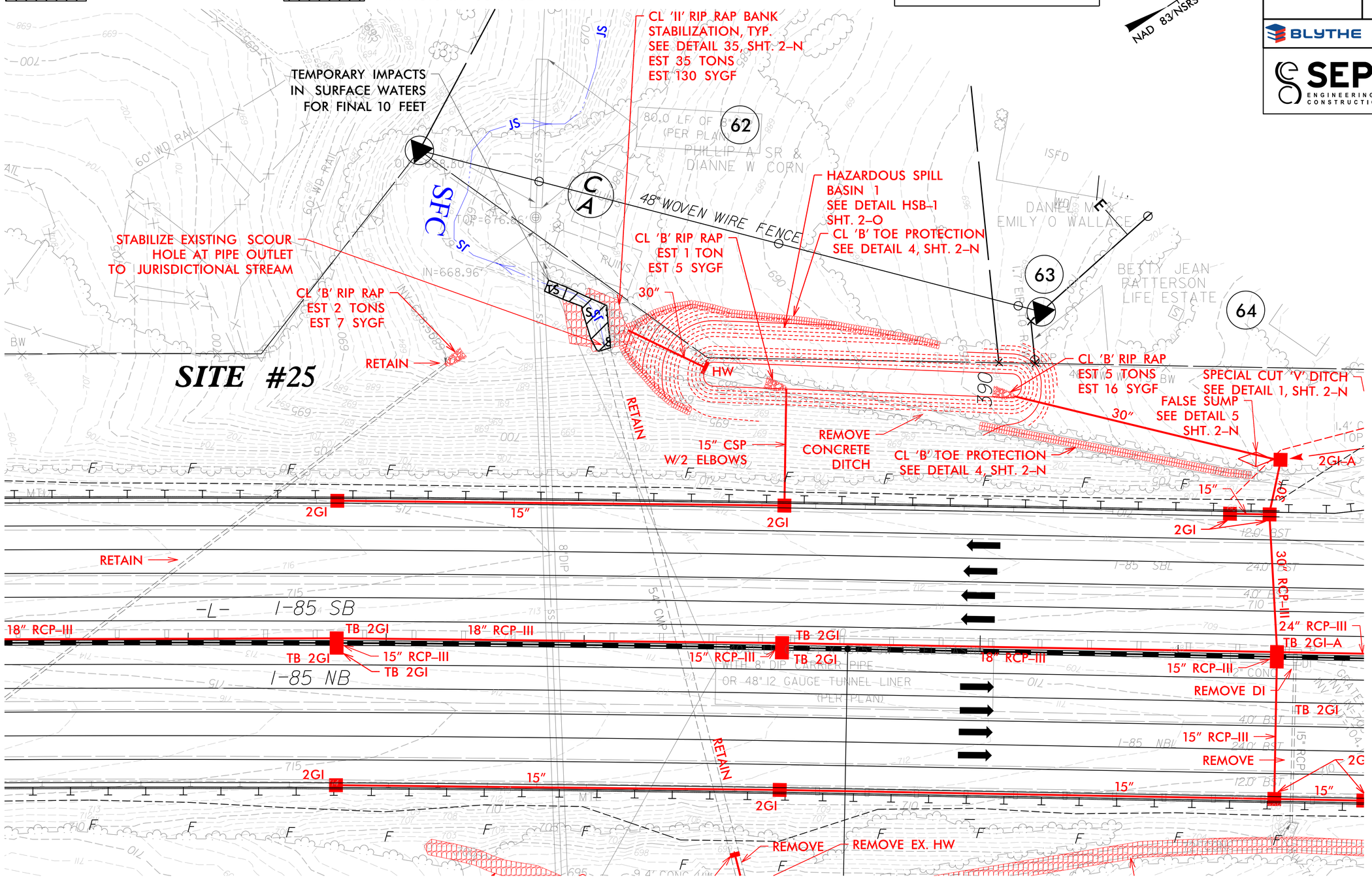
PERMIT DRAWING
SHEET 76 OF 114

GRAPHIC SCALE 50' 0' 50'

NAD 83/NSRS 2007

S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER



8/17/99

1/27/2015
I-3802A hyd_prm_wet_76_psh26A_con.dgn
USER:Rdeloutt

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	26B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
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Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

PERMIT DRAWING
SHEET 77 OF 114

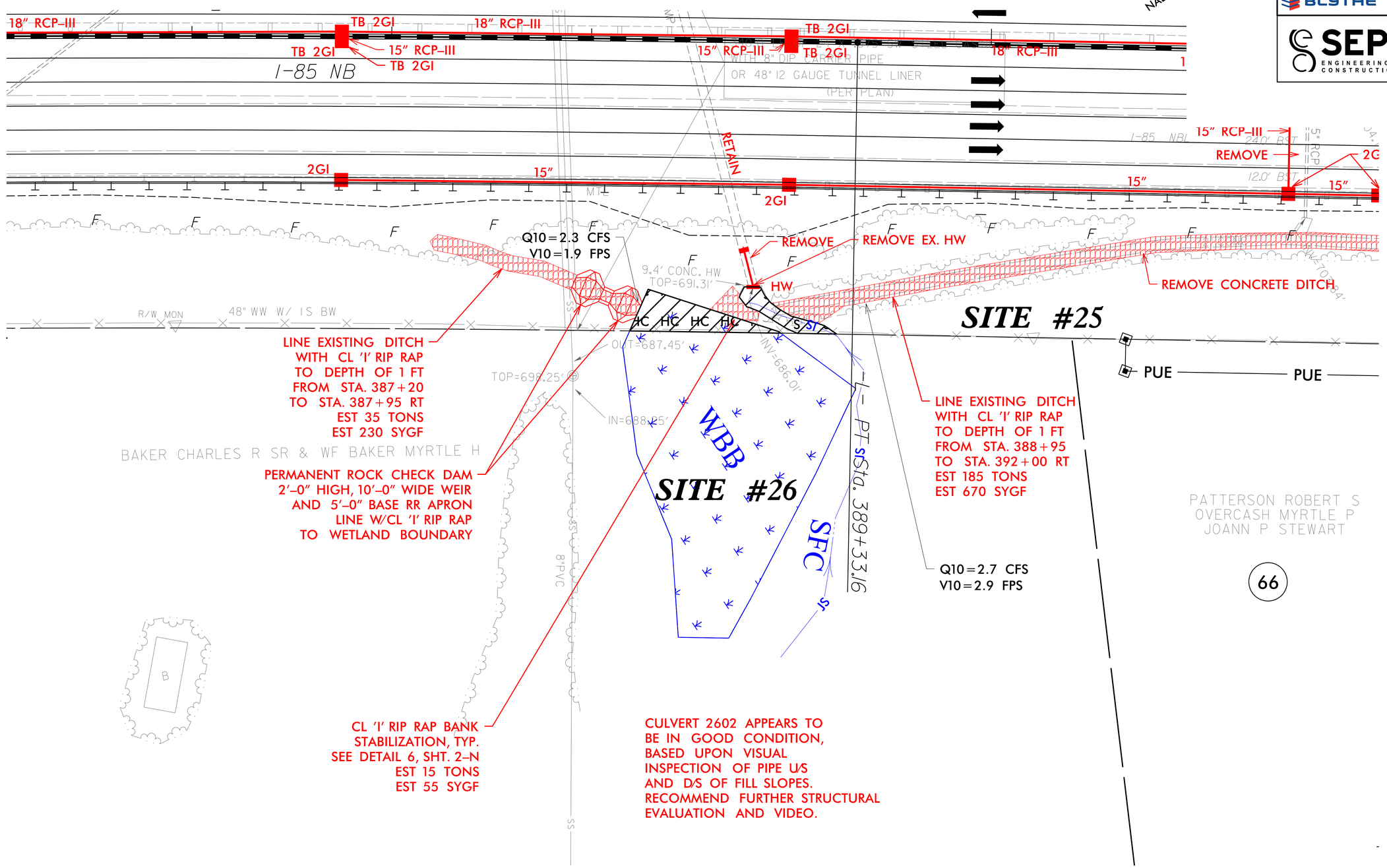
GRAPHIC SCALE 50' 0' 50'

NAD 83/NSRS 2007

HC HC DENOTES HAND CLEARING

S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER



8/17/99

1/27/2015
I-3802A_hyd_prm_wet_77_psh26B.dgn
USER:bdeal

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	26B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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Tel:919-789-9977
Fax:919-789-9591
License: C-2197

GRAPHIC SCALE 50' 0' 50'

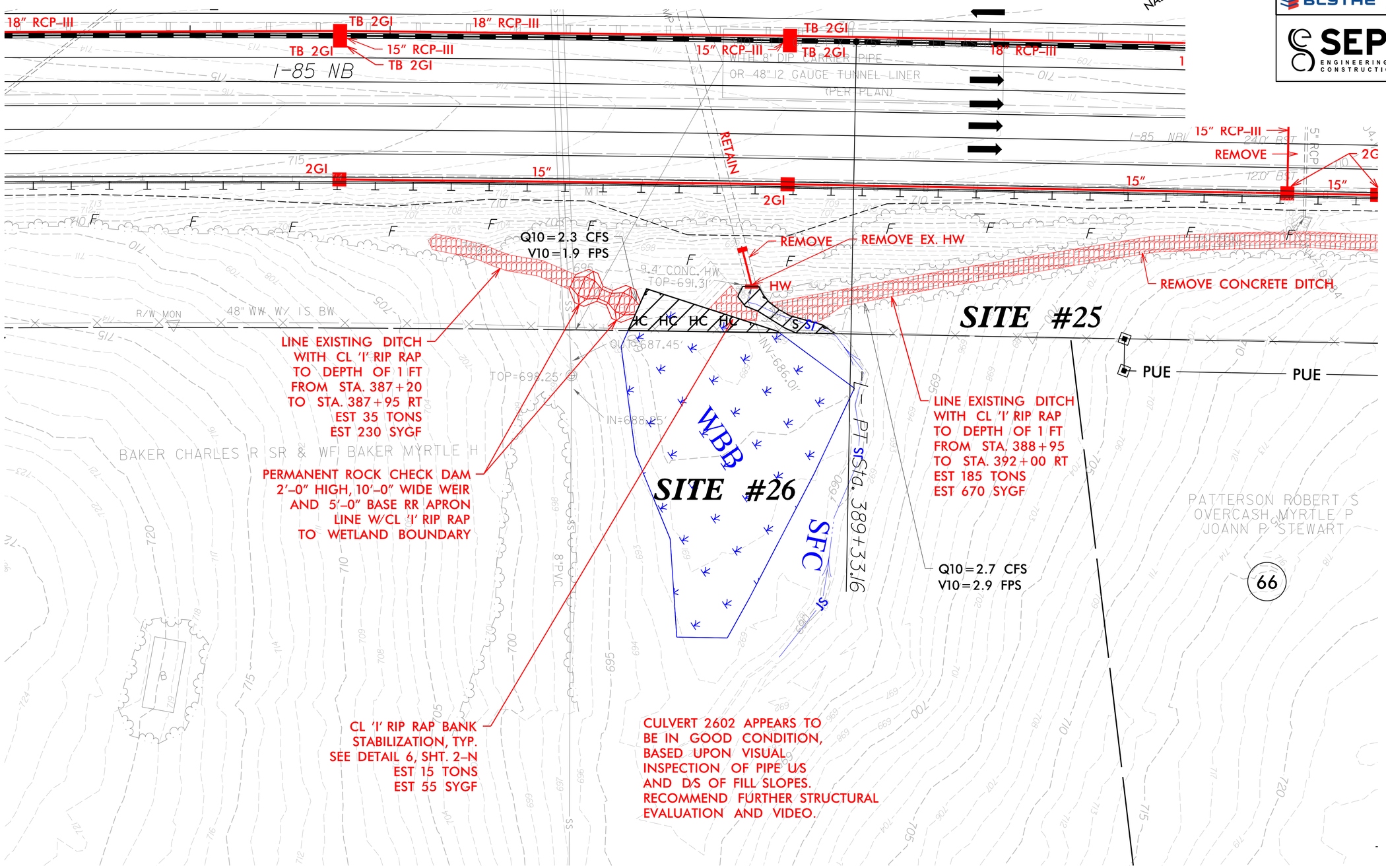
PERMIT DRAWING
SHEET 78 OF 114

NAD 83/NSRS 2007

HC HC DENOTES HAND CLEARING

S S DENOTES IMPACTS IN SURFACE WATER

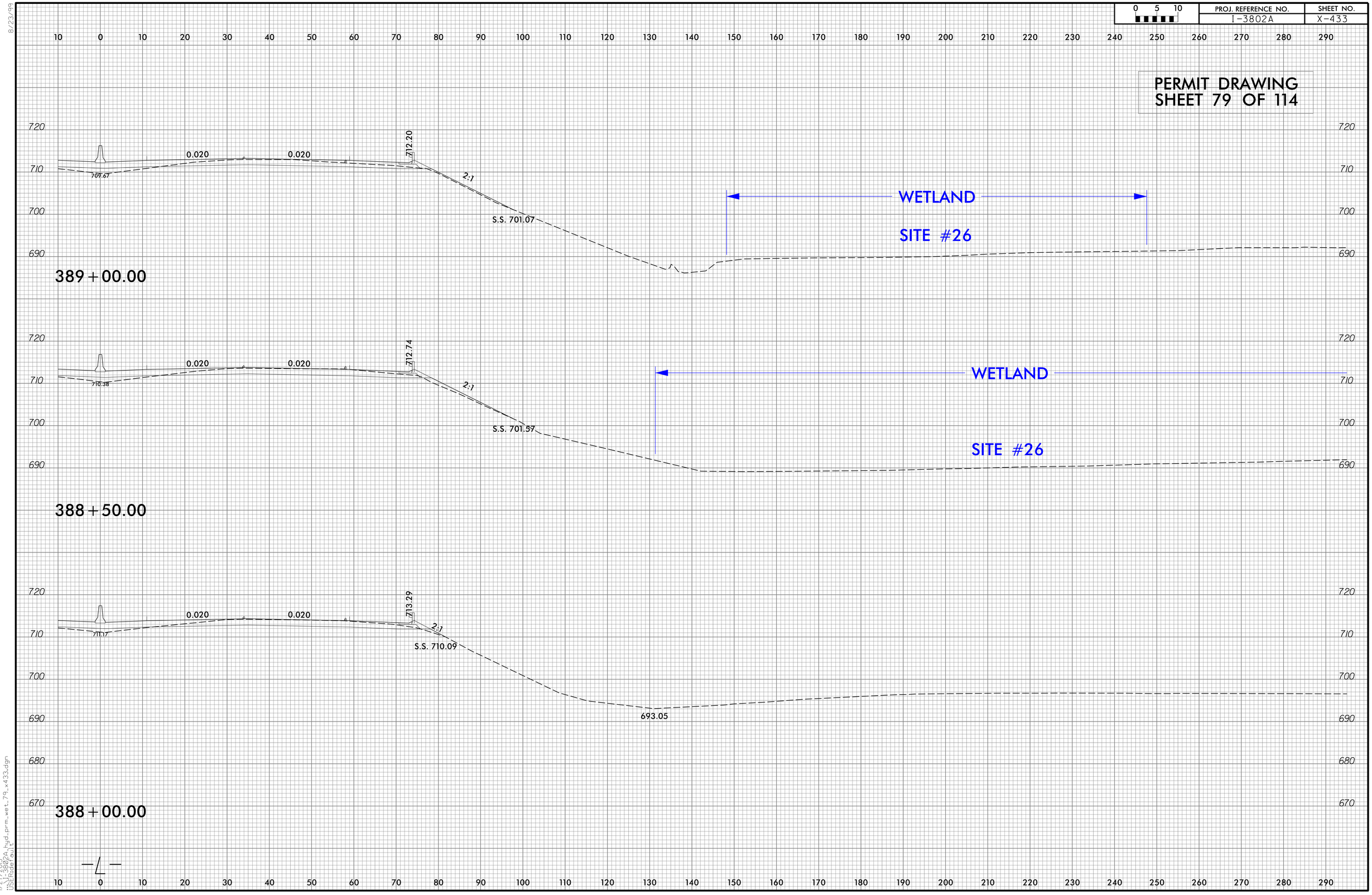
TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER



8/17/99

1/27/2015
I-3802A_hyd_prm_wet_78_psh26B_con.dgn

PERMIT DRAWING
SHEET 79 OF 114



8/23/99
1/27/2015
I-3802A_hwd_prm_wet_79_x433.dgn
USER:default

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

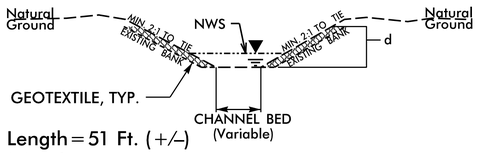
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

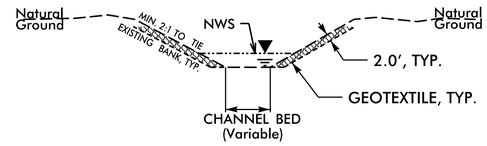
NAD 83/NSRS 2007

DETAIL 17
CHANNEL CHANGE AT PIPE OUTLET
(Not to Scale)



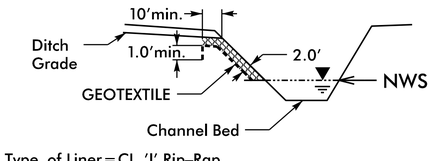
Length = 51 Ft. (+/–)
Min. d = 2.0 Ft.
Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 35
BANK STABILIZATION
(Not to Scale)

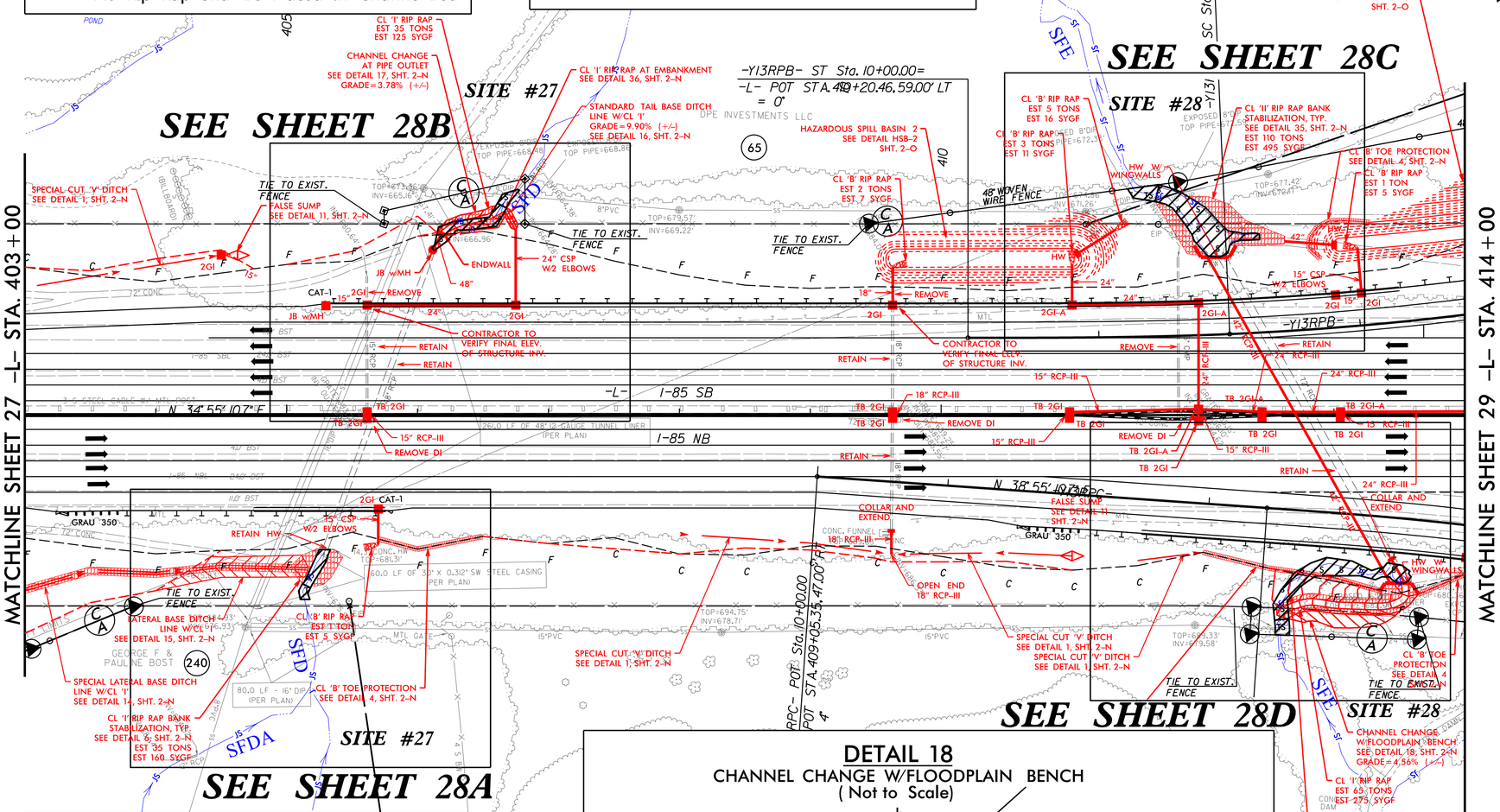


Type of Liner = Cl 'II' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 36
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of Liner = CL 'I' Rip–Rap
No Rip Rap Shall Be Placed Below NWS



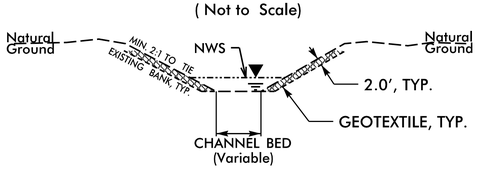
100' 0' 100'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 80 OF 114

S DENOTES IMPACTS IN SURFACE WATER

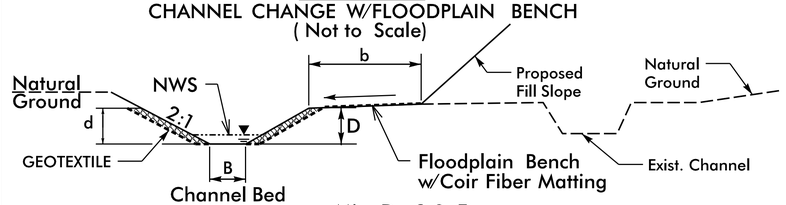
TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER

DETAIL 6
BANK STABILIZATION
(Not to Scale)



Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 18
CHANNEL CHANGE W/FLOODPLAIN BENCH
(Not to Scale)



Min. D = 2.0 Ft.
Max. d = 4.0 Ft.
B = 5.0 Ft.
b = Varies 1 Ft. to 20 Ft.

Type of Liner = Cl 'I' Rip–Rap On Banks, 2'–0" Thick
Coir Fiber Matting on FP Bench
No Rip Rap Shall Be Placed In Channel Bed

NOTES:
1. EXISTING PIPE MAY BE RETAINED FOR TEMPORARY DRAINAGE DURING CONSTRUCTION. ONCE PROPOSED DRAINAGE SYSTEM IS INSTALLED AND FUNCTIONING PIPE IS TO BE REMOVED. THE PORTION OF PIPE REMAINING UNDER NEW PAVEMENT IS TO BE PLUGGED AND THE FILLED WITH FLOWABLE FILL.

SEE SHEETS 73 & 74 FOR –LSB– & –LNB– PROFILES
SEE SHEET 93 FOR –Y13RPB– PROFILE
SEE SHEET 94 FOR –Y13RPC– PROFILE

8/17/99
1/28/2015
I-3802A_hyd_prm_wet_80_psh28.dgn
USERNAME = ...

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

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1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

NAD 83/NSRS 2007

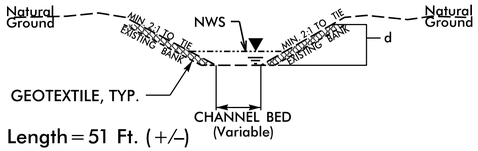
100' 0' 100'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 81 OF 114

DENOTES IMPACTS IN SURFACE WATER

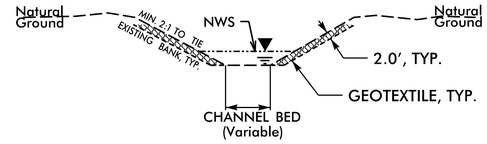
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

DETAIL 17
CHANNEL CHANGE AT PIPE OUTLET
(Not to Scale)



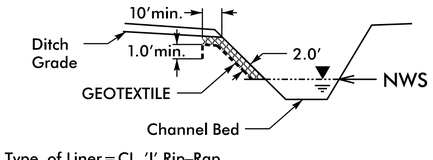
Length = 51 Ft. (+/–)
Min. d = 2.0 Ft.
Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 35
BANK STABILIZATION
(Not to Scale)

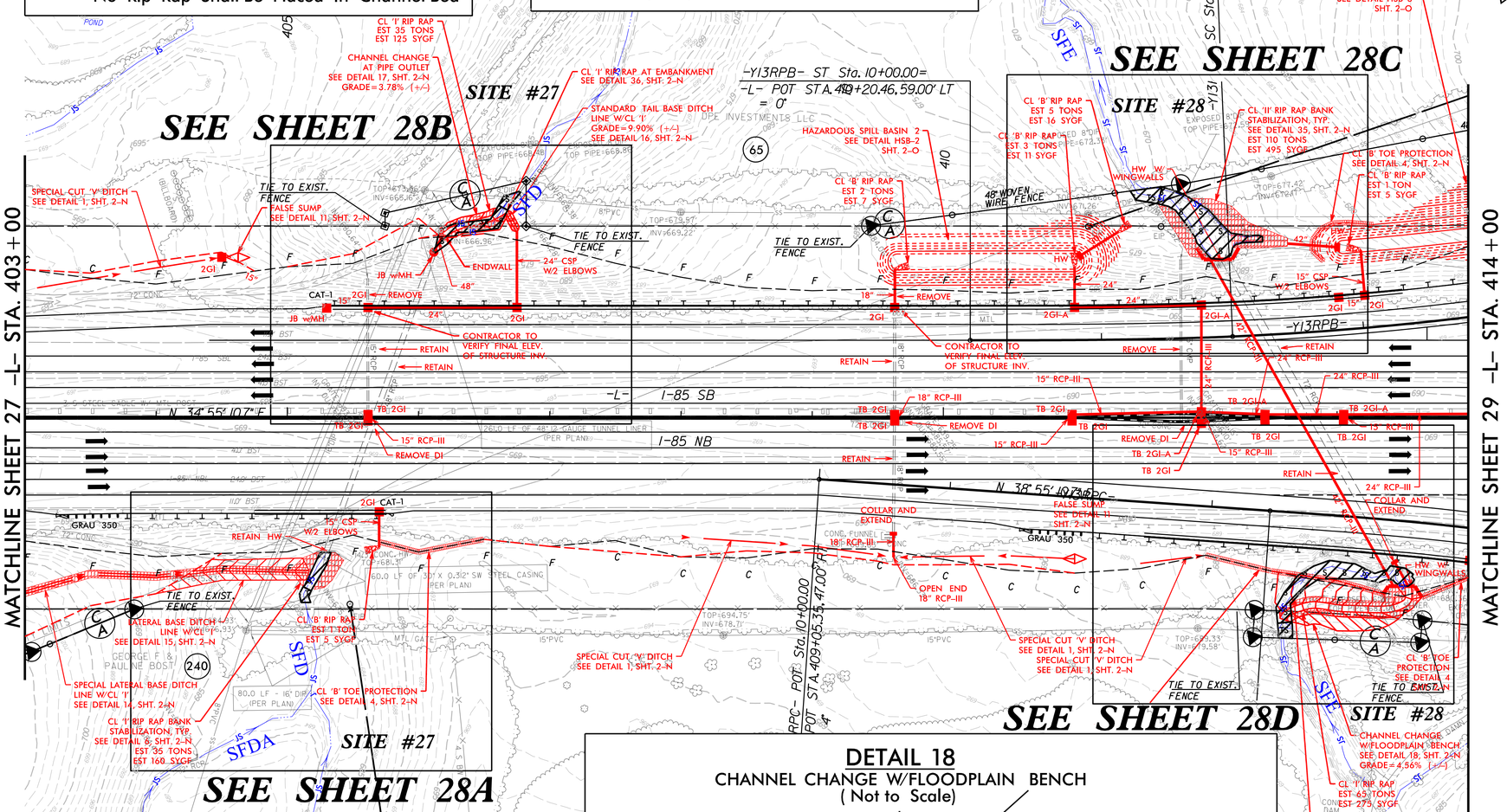


Type of Liner = Cl 'II' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

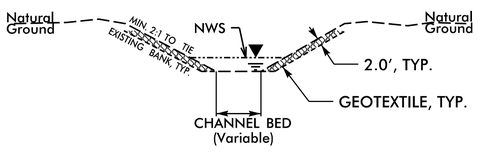
DETAIL 36
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of Liner = CL 'I' Rip–Rap
No Rip Rap Shall Be Placed Below NWS

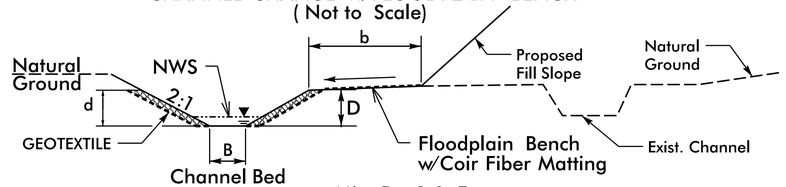


DETAIL 6
BANK STABILIZATION
(Not to Scale)



Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 18
CHANNEL CHANGE W/FLOODPLAIN BENCH
(Not to Scale)



Min. D = 2.0 Ft.
Max. d = 4.0 Ft.
B = 5.0 Ft.
b = Varies 1 Ft. to 20 Ft.

Type of Liner = Cl 'I' Rip–Rap On Banks, 2'–0" Thick
Coir Fiber Matting on FP Bench
No Rip Rap Shall Be Placed In Channel Bed

NOTES:
1. EXISTING PIPE MAY BE RETAINED FOR TEMPORARY DRAINAGE DURING CONSTRUCTION. ONCE PROPOSED DRAINAGE SYSTEM IS INSTALLED AND FUNCTIONING PIPE IS TO BE REMOVED. THE PORTION OF PIPE REMAINING UNDER NEW PAVEMENT IS TO BE PLUGGED AND THE FILLED WITH FLOWABLE FILL.

SEE SHEETS 73 & 74 FOR –LSB– & –LNB– PROFILES
SEE SHEET 93 FOR –Y13RPB– PROFILE
SEE SHEET 94 FOR –Y13RPC– PROFILE

8/17/99
1/28/2015
I-3802a_hyd_prm_wet_81_psh28_con.dgn

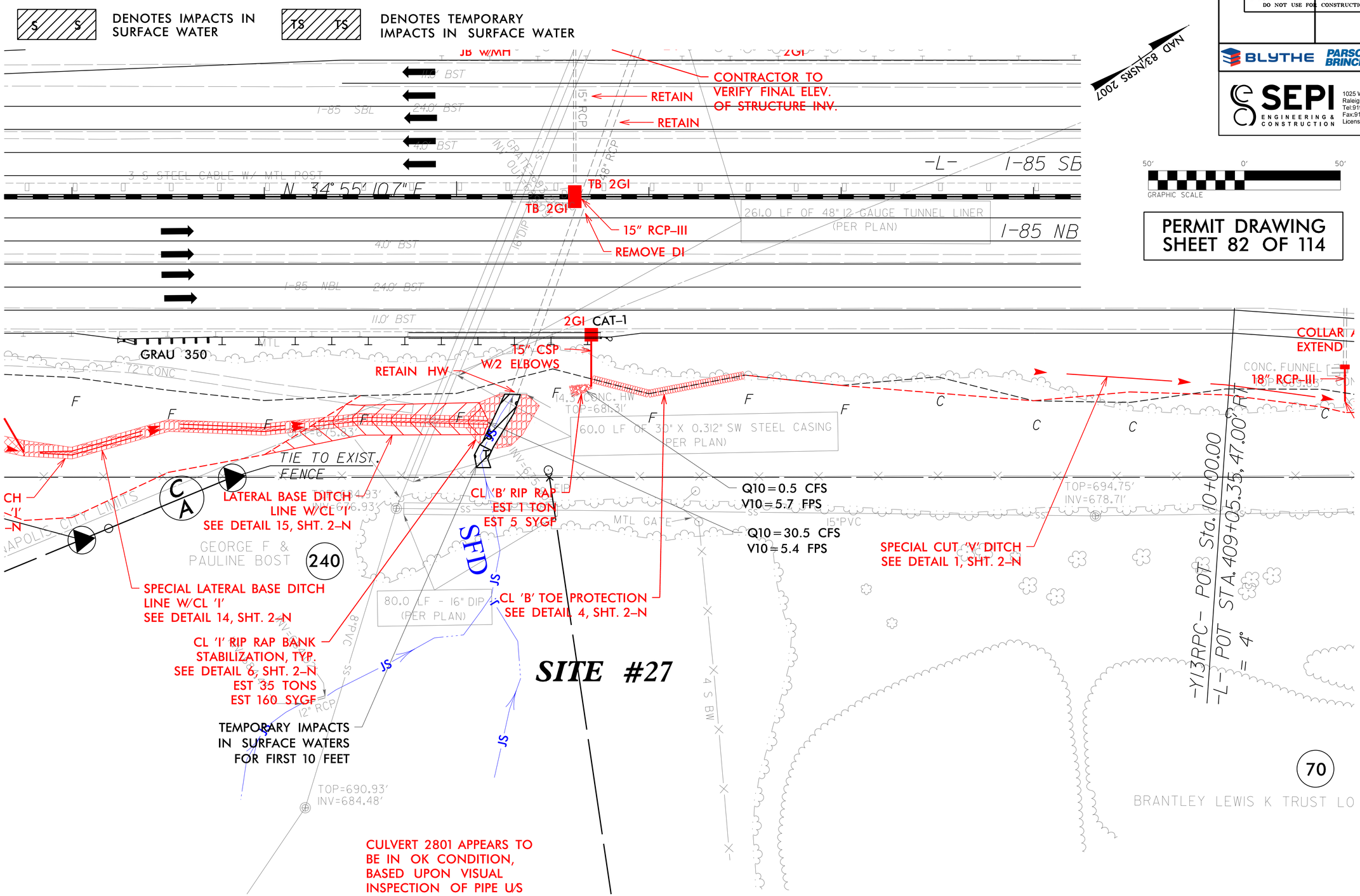
PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

PERMIT DRAWING
SHEET 82 OF 114



8/17/99

1/27/2015
I-3802A_hyd_prm_wet_82_psh28A.dgn

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

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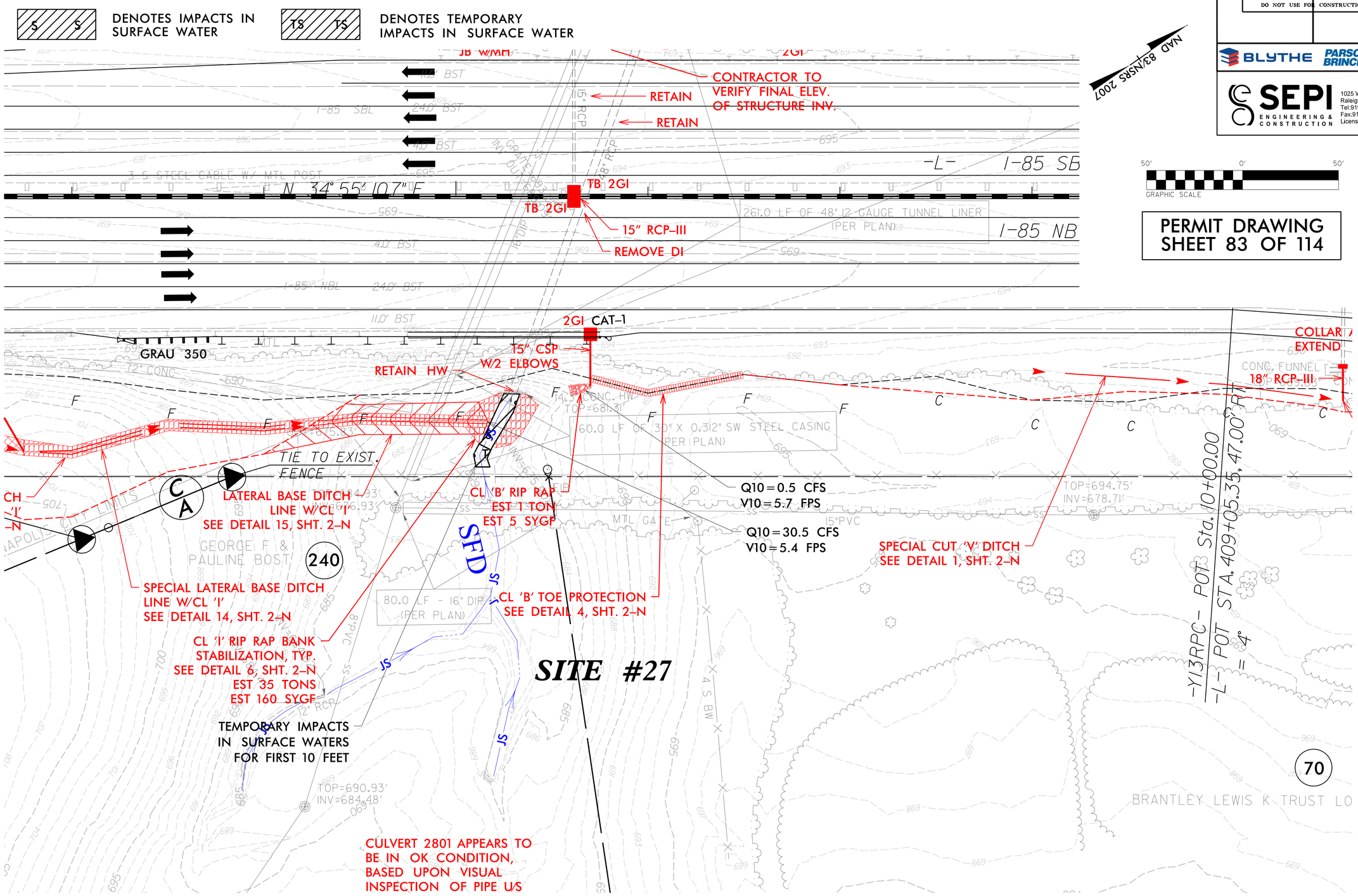
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

PERMIT DRAWING
SHEET 83 OF 114



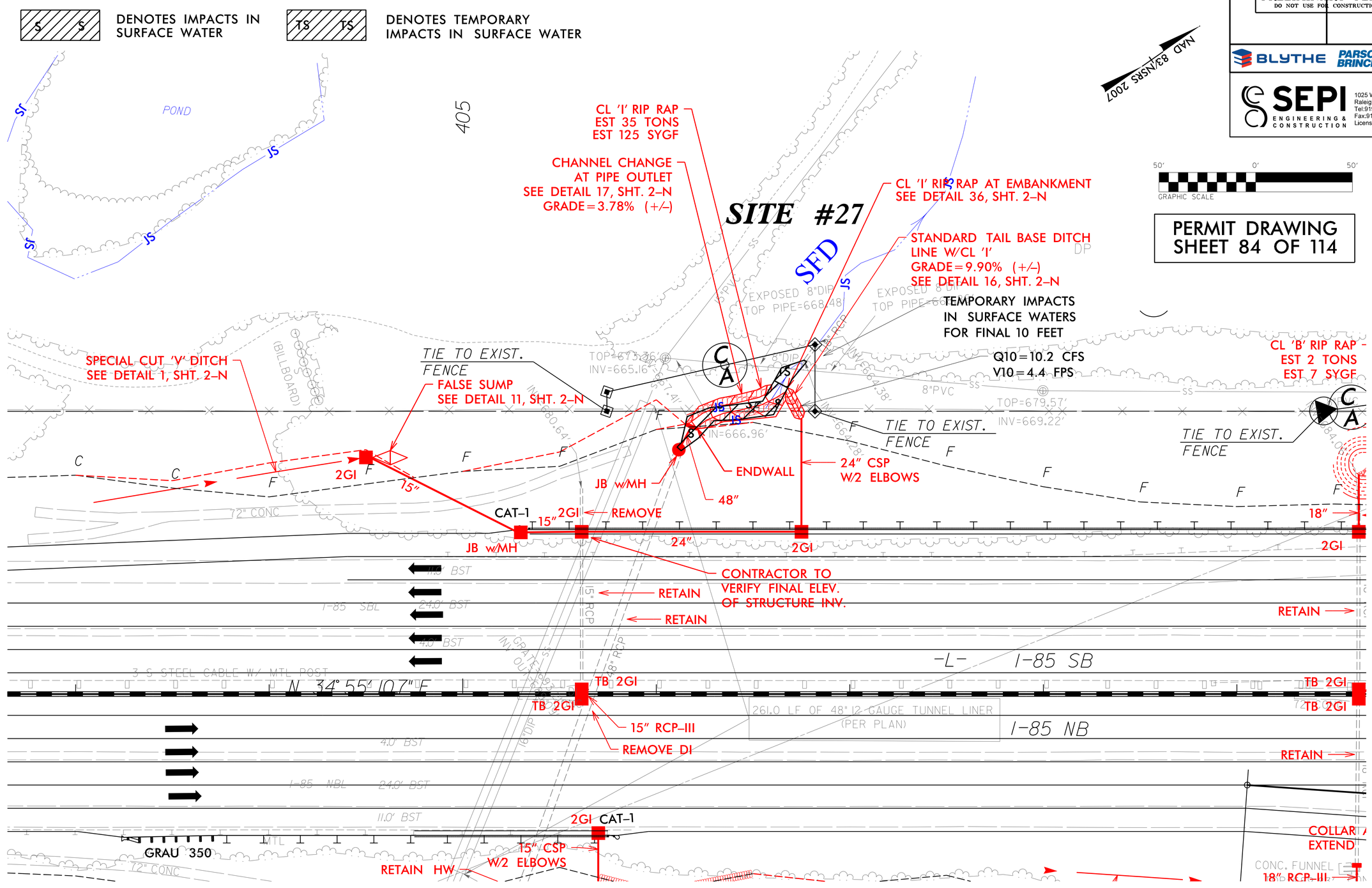
PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

PERMIT DRAWING
SHEET 84 OF 114



PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

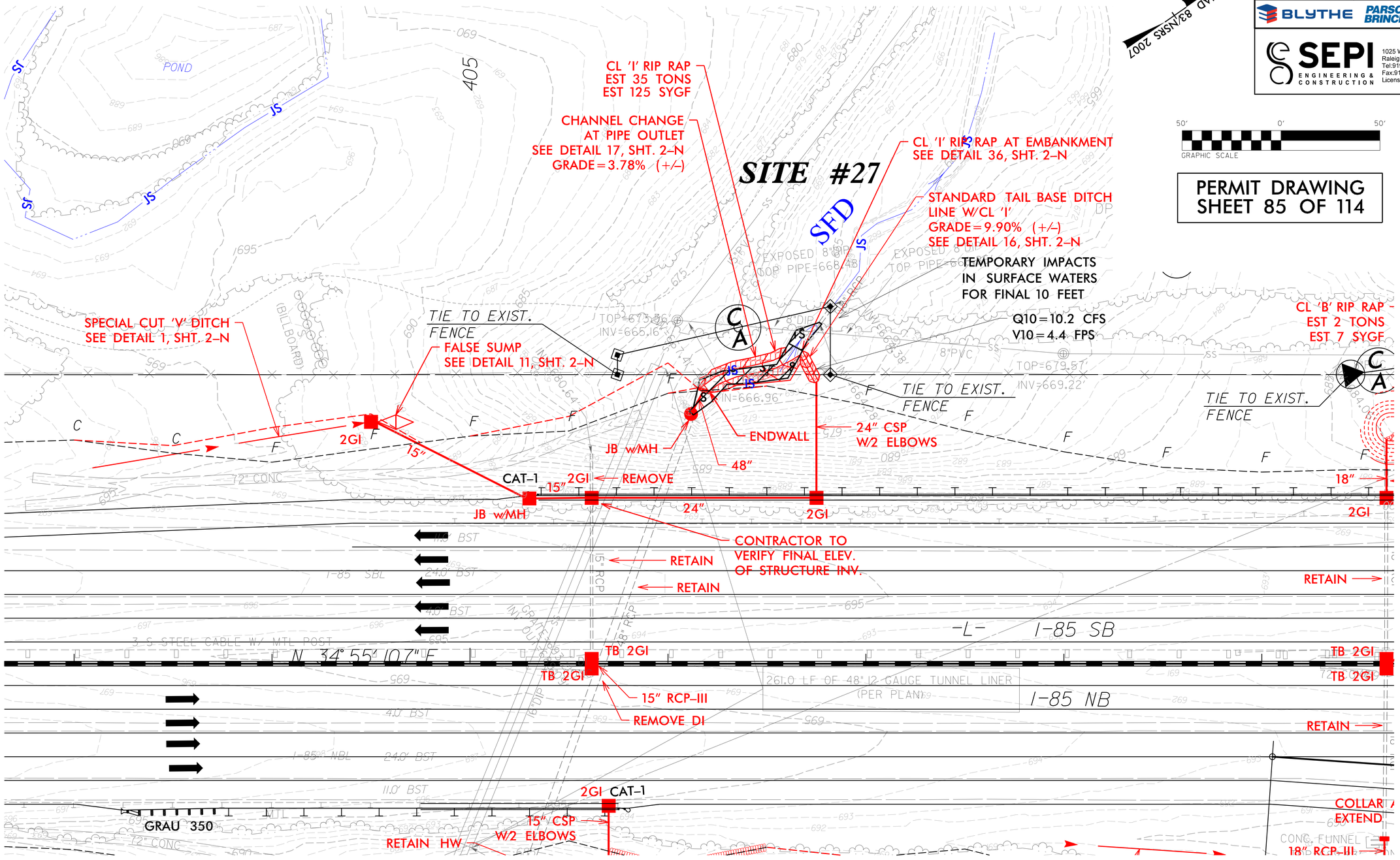
S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER

NAD 83/NSRS 2007

50' 0' 50'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 85 OF 114



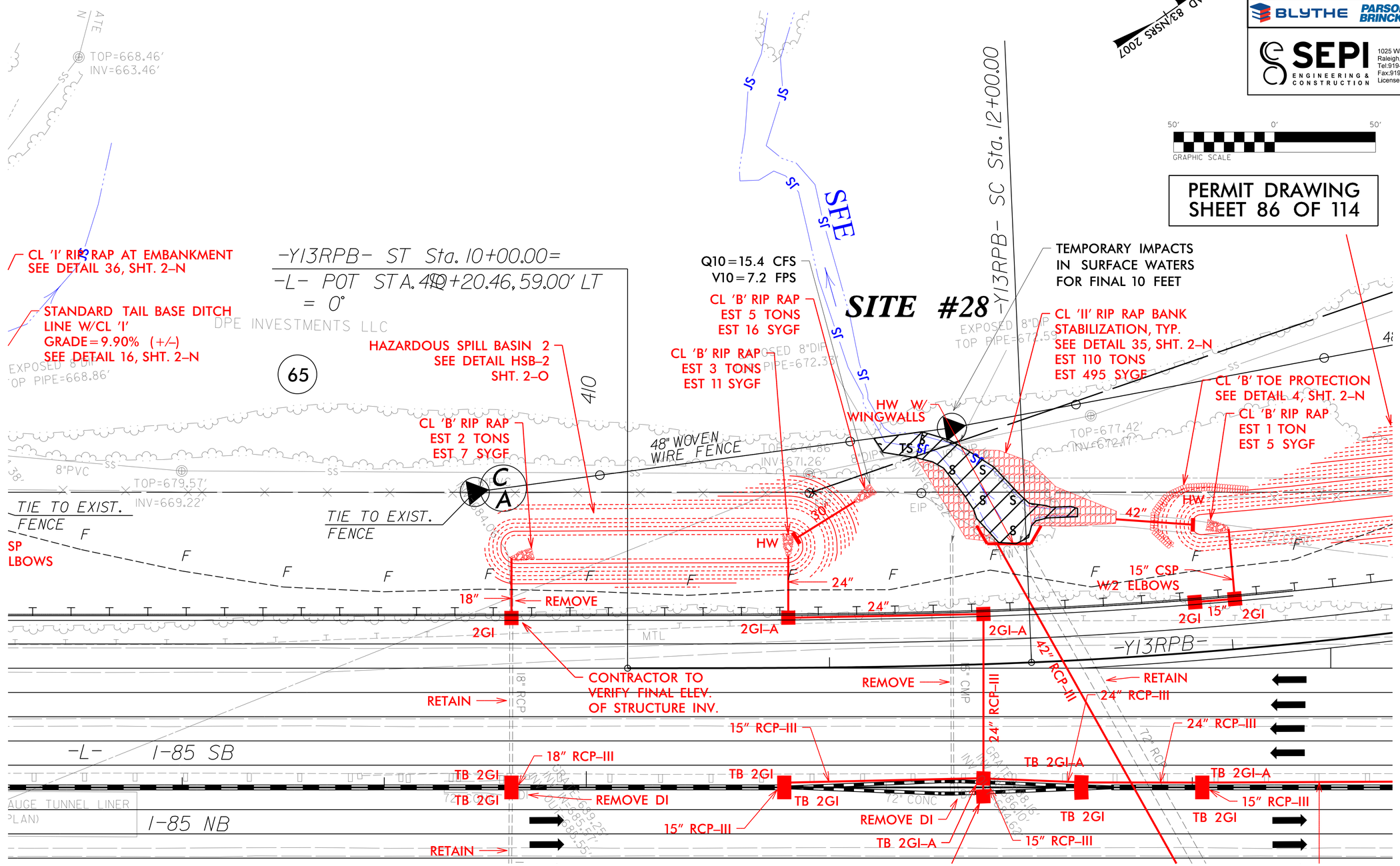
PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

PERMIT DRAWING
SHEET 86 OF 114



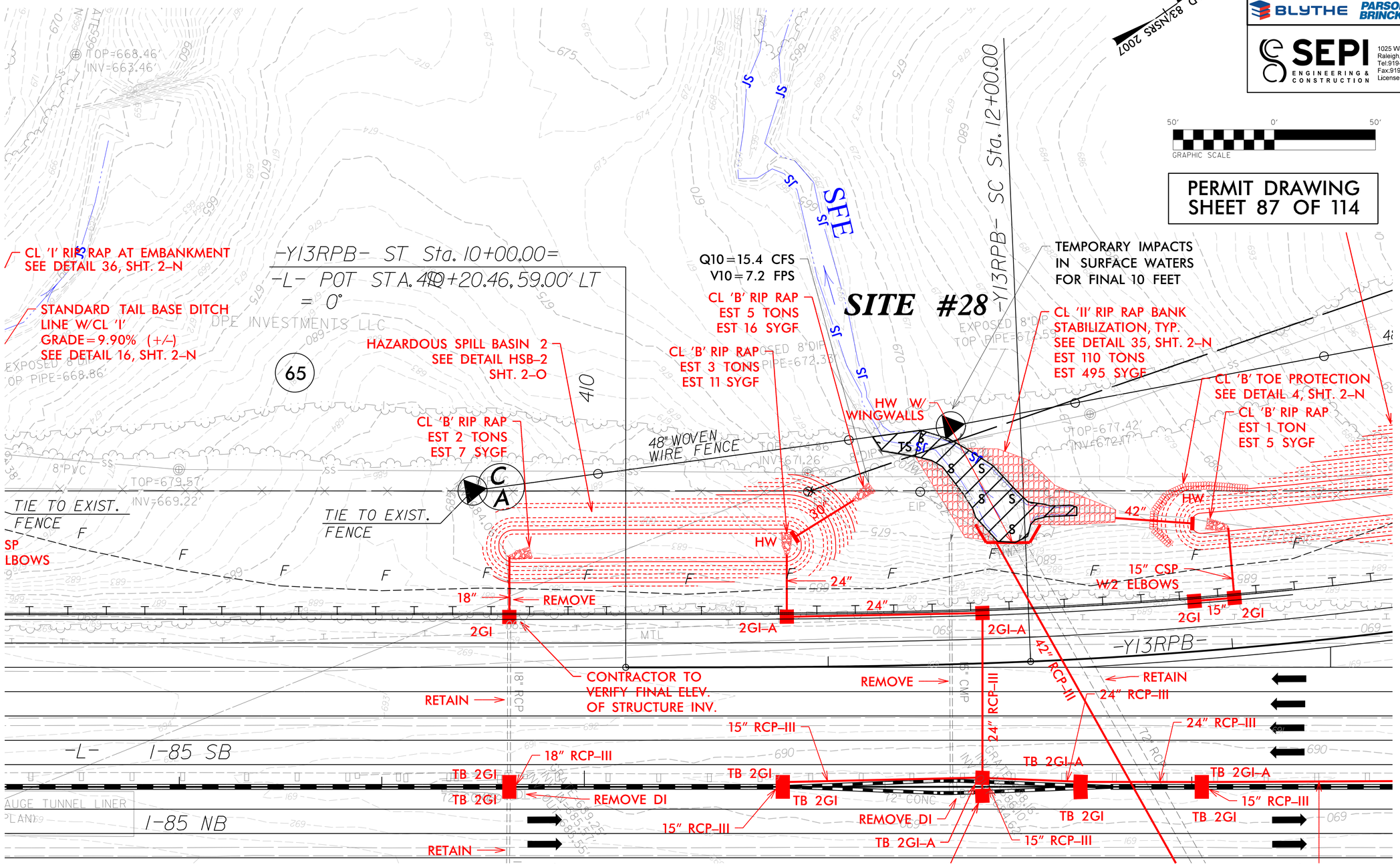
PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

PERMIT DRAWING
SHEET 87 OF 114



8/17/99

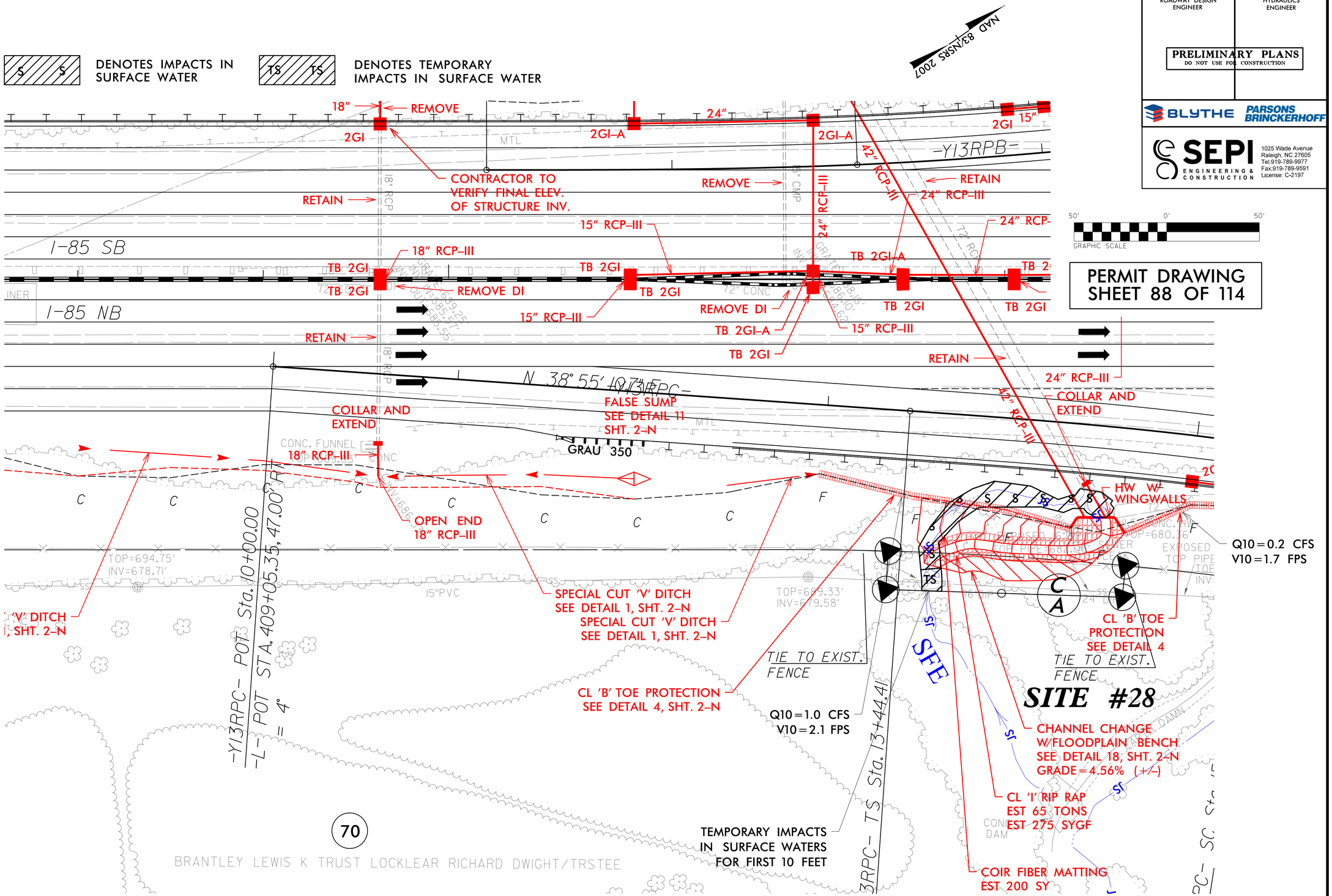
1/27/2015
I-3802A_hyd_prm_wet_87_psh28C_con.dgn
USER:dlee

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

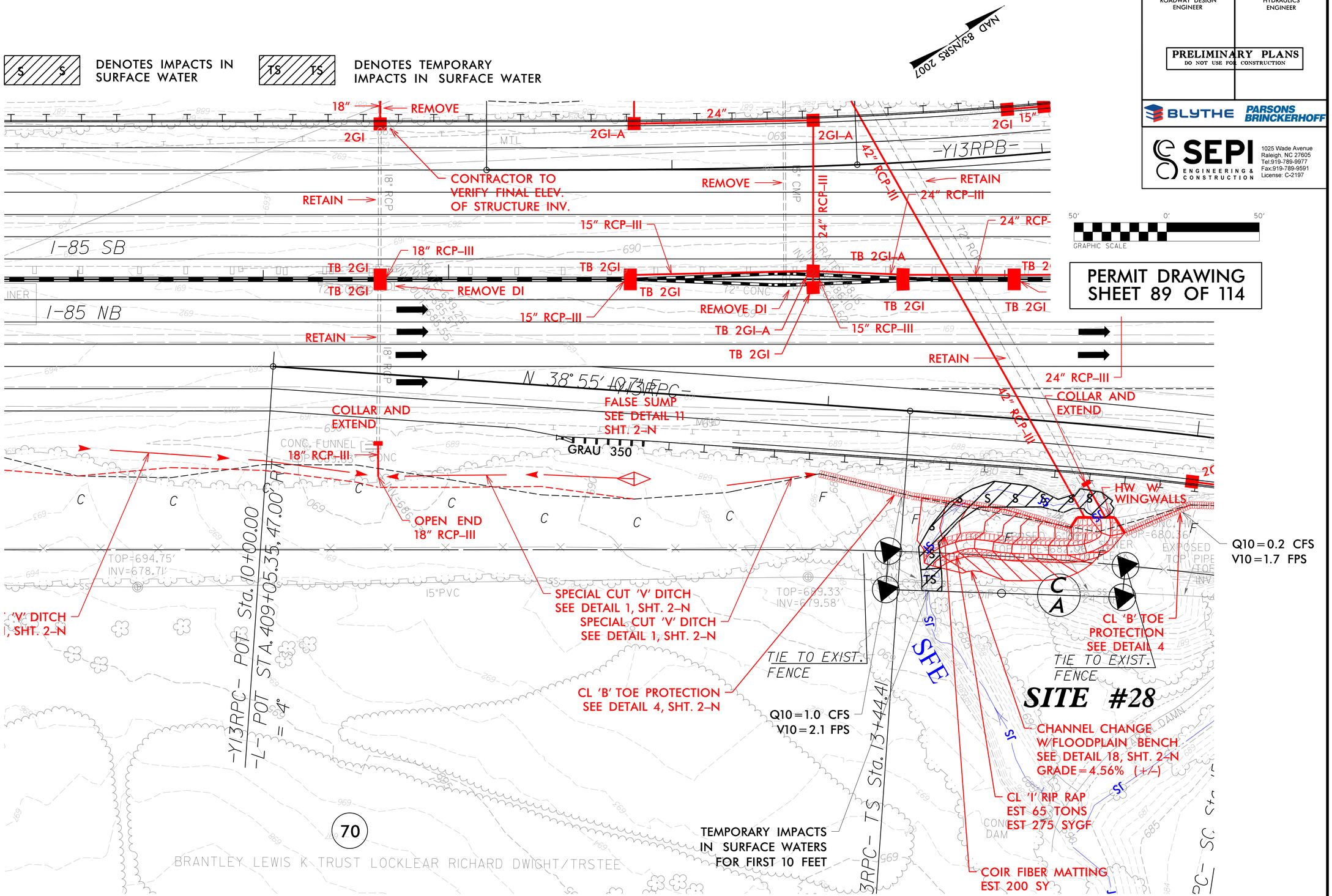


PROJECT REFERENCE NO.	SHEET NO.
I-3802A	28D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197



PERMIT DRAWING
SHEET 89 OF 114

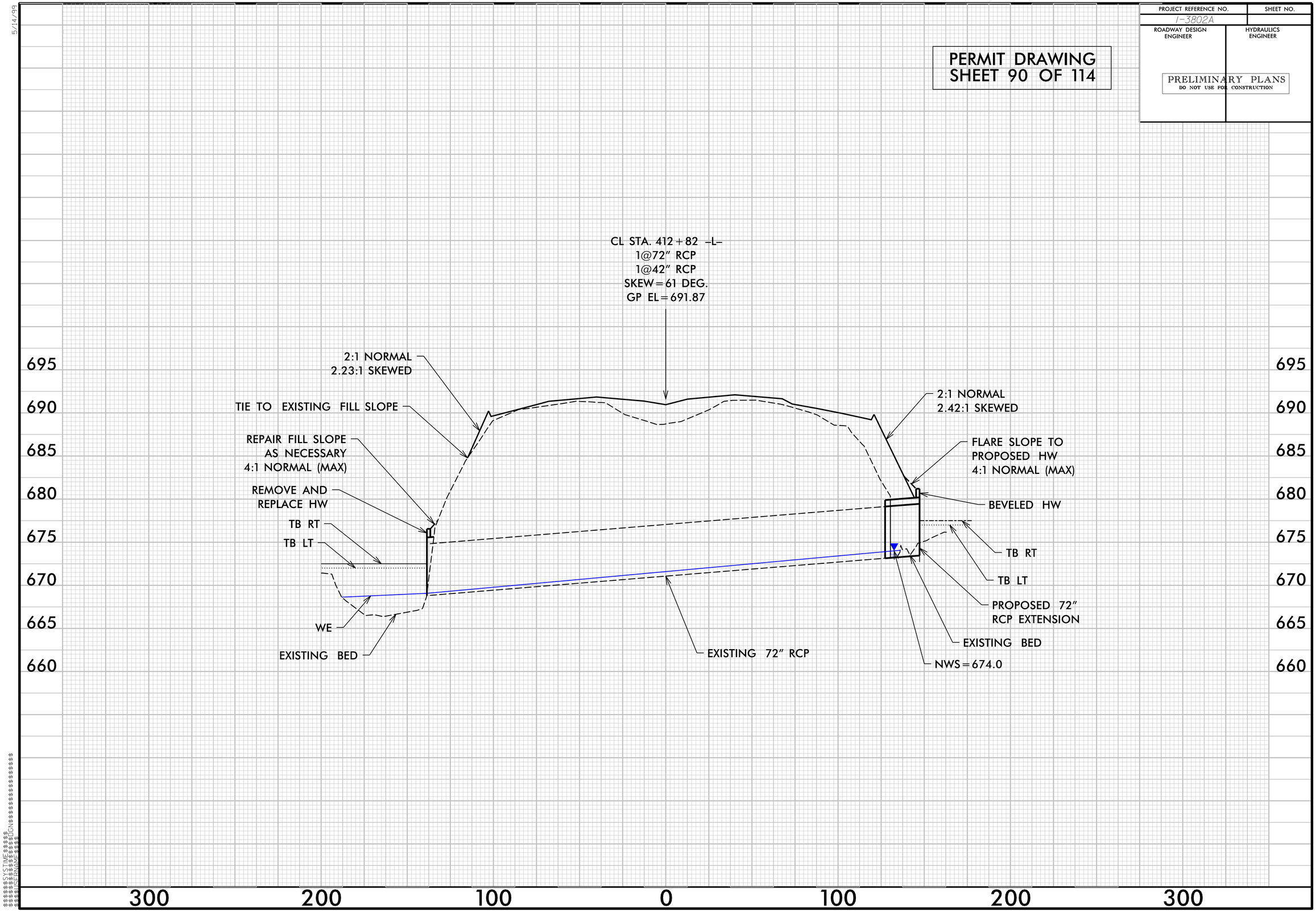
8/17/99

1/28/2015
I-3802A_hyd_prm_wet_89_psh28D_con.dgn

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 90 OF 114



5/14/99

DETAIL 23
PIPE OUTLET CHANNEL

(Not to Scale)

Length = 30 Ft. (+/–)
Min. d = 3.5 Ft.
Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 6
BANK STABILIZATION

(Not to Scale)

Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed

NAD 83/NSRS 2007

200' 0' 200'

GRAPHIC SCALE

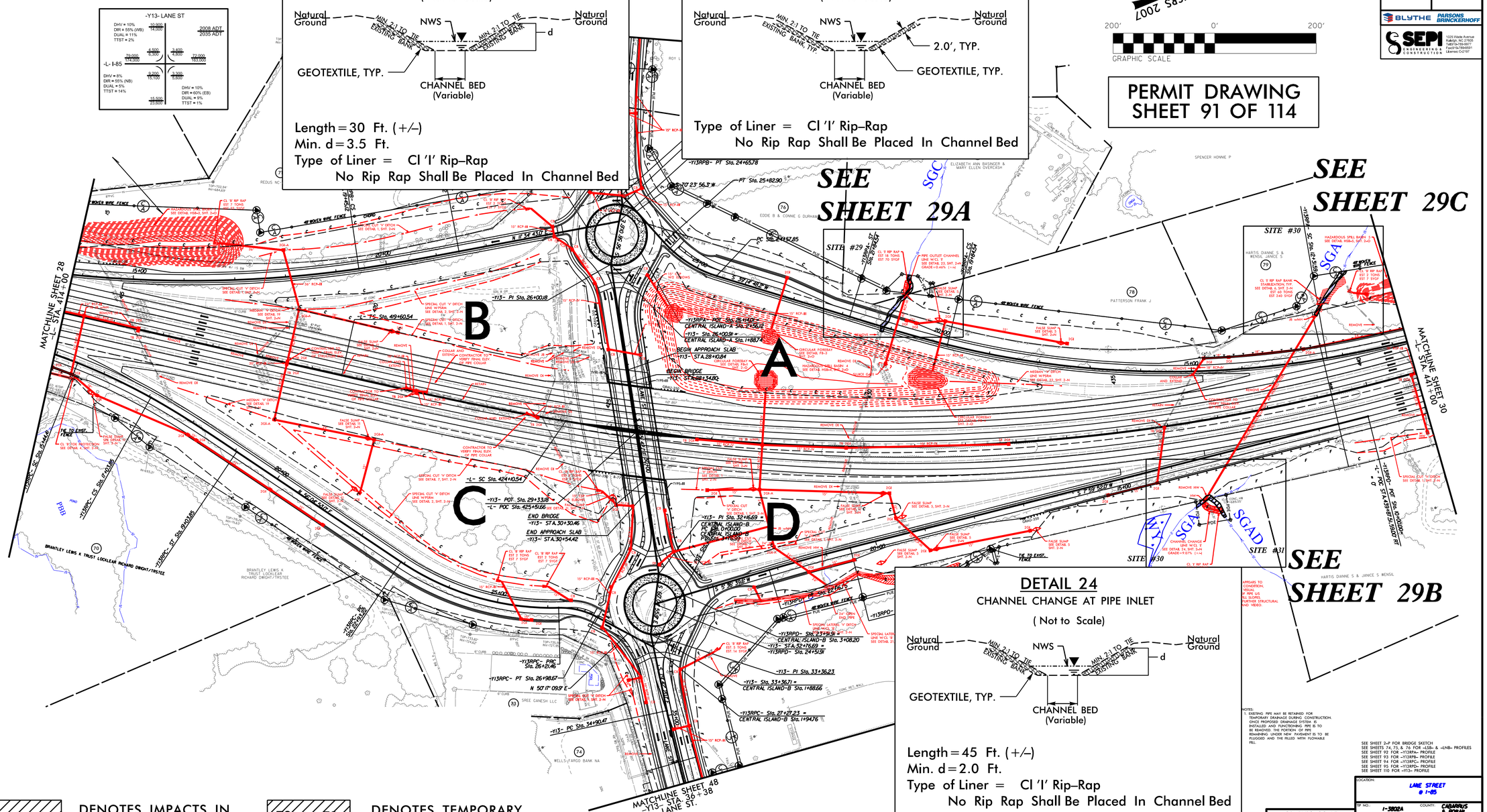
PERMIT DRAWING
SHEET 91 OF 114

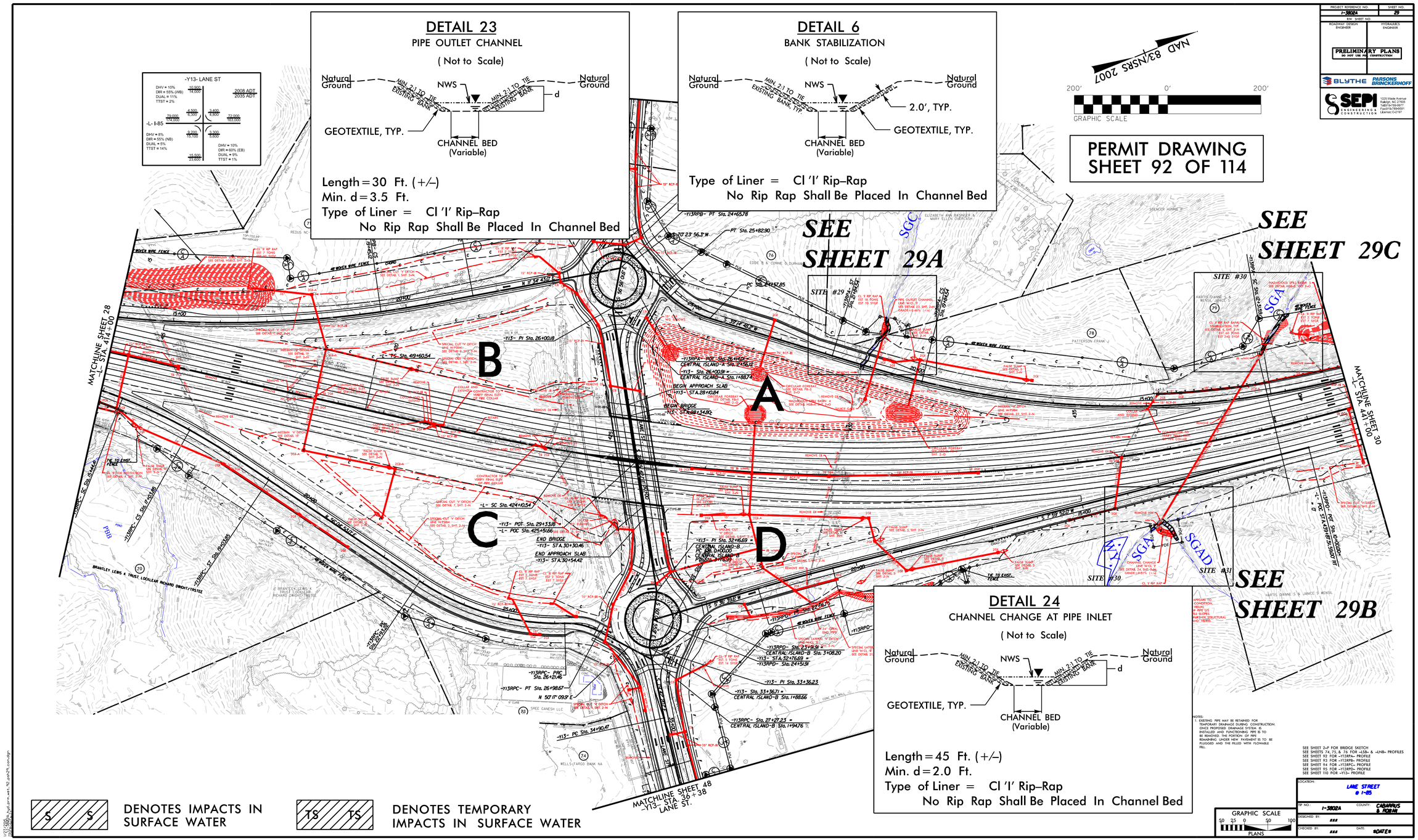
PROJECT REFERENCE NO.	SHEET NO.
I-3802A	29
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE | PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
1035 Wade Avenue
Raleigh, NC 27605
Tel919-779-8977
Fax919-789-9591
License: C-0787


SEE SHEET 29A
SEE SHEET 29C
SEE SHEET 29B
MATCHLINE SHEET 28 -L- STA. 414+00
MATCHLINE SHEET 30 -L- STA. 431+00
MATCHLINE SHEET 48 -Y13- STA. 36+38 LANE ST.
SITE #29
SITE #30
SITE #31
A
B
C
D
SGA
SGAD
SGC
-Y13- LANE ST
-L- I-85
2008 ADT 2035 ADT
BRANTLEY LEWIS K. TRUST LOCKLEAR RICHARD DWIGHT/TRSTEE
ELIZABETH ANN BASINGER & MARY ELLEN OVERCASH
EDDIE B & CONNIE G DURHAM
PATTERSON FRANK J
HARTIS DIANNE S & WENSIL JANICE S
SPENCER HONNIE P
WELLS FARGO BANK NA
SHREE GANESH LLC
-Y13- PI Sta. 26+00.18
-L- PC Sta. 419+60.54
-Y13- POT Sta. 29+33.18
-L- POC Sta. 425+51.56
END BRIDGE
-Y13- STA. 30+30.46
END APPROACH SLAB
-Y13- STA. 30+54.42
-Y13- PI Sta. 32+16.69
CENTRAL ISLAND-B
PC Sta. 0+00.00
CENTRAL ISLAND-B
PT Sta. 1+00.00
-Y13- PC Sta. 34+90.47
-Y13- PI Sta. 33+36.23
-Y13- Sta. 33+36.71
CENTRAL ISLAND-B Sta. 1+88.66
-Y13RPC- Sta. 27+27.23
CENTRAL ISLAND-B Sta. 1+94.76
-Y13RPC- PRC Sta. 26+21.46
-Y13RPC- PT Sta. 26+98.67
N 50° 17' 09.9" E
-Y13RPD- Sta. 23+93.91
CENTRAL ISLAND-B Sta. 3+08.20
-Y13- STA. 32+76.69
-Y13RPD- Sta. 24+15.51
-Y13RPD- PC Sta. 22+16.70
-Y13RPB- PT Sta. 24+65.78
-Y13RPA- POT Sta. 26+14.02
CENTRAL ISLAND-A Sta. 2+26.04
-Y13- Sta. 26+00.18
CENTRAL ISLAND-A Sta. 1+88.72
BEGIN APPROACH SLAB
-Y13- STA. 28+10.84
BEGIN BRIDGE
-Y13- STA. 28+34.82
-Y13RPD- PC Sta. 22+16.70
-Y13RPD- PT Sta. 23+93.91
-Y13RPC- SC Sta. 21+41.46
-Y13RPC- CS Sta. 21+93.85
-Y13RPC- ST Sta. 25+03.85
-Y13RPC- SC Sta. 27+27.23
-Y13RPC- CS Sta. 27+79.62
-Y13RPC- ST Sta. 29+31.62
-Y13RPD- POT Sta. 25+00.00
-Y13RPD- PC Sta. 27+27.23
-Y13RPD- PT Sta. 29+31.62
-Y13RPD- SC Sta. 22+16.70
-Y13RPD- CS Sta. 23+93.91
-Y13RPD- ST Sta. 25+71.19
SPECIAL CUT 'V' DITCH SEE DETAIL 1, SHT. 3-N
SPECIAL CUT 'V' DITCH LINE W/PSM SEE DETAIL 2, SHT. 3-N
MEDIAN 'V' DITCH SEE DETAIL 19
CONTRACTOR TO VERIFY FINAL ELEV. OF PIPE COLLAR
CL 'B' RIP RAP EST 7 TONS
CL 'B' RIP RAP EST 5 TONS EST 7 SYDS
CL 'B' RIP RAP EST 5 TONS EST 14 SYDS
CL 'I' RIP RAP EST 18 TONS EST 70 SYDS
CL 'I' RIP RAP EST 5 TONS EST 20 SYDS
CL 'I' RIP RAP EST 5 TONS EST 20 SYDS
CL 'I' RIP RAP EST 5 TONS EST 20 SYDS
CL 'B


DETAIL 23
PIPE OUTLET CHANNEL
(Not to Scale)
Natural Ground
NWS
MIN. 2:1 TO TIE EXISTING BANK
d
GEOTEXTILE, TYP.
CHANNEL BED (Variable)
Length = 30 Ft. (+/–)
Min. d = 3.5 Ft.
Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed
DETAIL 6
BANK STABILIZATION
(Not to Scale)
2.0', TYP.
MIN. 2:1 TO TIE EXISTING BANK, TYP.
NAD 83/NSRS 2007
GRAPHIC SCALE
PERMIT DRAWING
SHEET 92 OF 114
SEE SHEET 29A
SEE SHEET 29C
SEE SHEET 29B
MATCHLINE SHEET 28 -L- STA. 414+00
MATCHLINE SHEET 30 -L- STA. 431+00
MATCHLINE SHEET 48 -Y13- STA. 36+38 LANE ST.
SITE #29
SITE #30
SITE #31
A
B
C
D
DETAIL 24
CHANNEL CHANGE AT PIPE INLET
(Not to Scale)
Length = 45 Ft. (+/–)
Min. d = 2.0 Ft.
Type of Liner = Cl 'I' Rip–Rap
No Rip Rap Shall Be Placed In Channel Bed
DENOTES IMPACTS IN SURFACE WATER
DENOTES TEMPORARY IMPACTS IN SURFACE WATER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
BLYTHE
PARSONS BRINCKERHOFF
SEPI ENGINEERING & CONSTRUCTION
LANE STREET @ I-85
I-3802A
CABARRUS & ROWAN
GRAPHIC SCALE
PLANS

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	29A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

SEPI ENGINEERING & CONSTRUCTION
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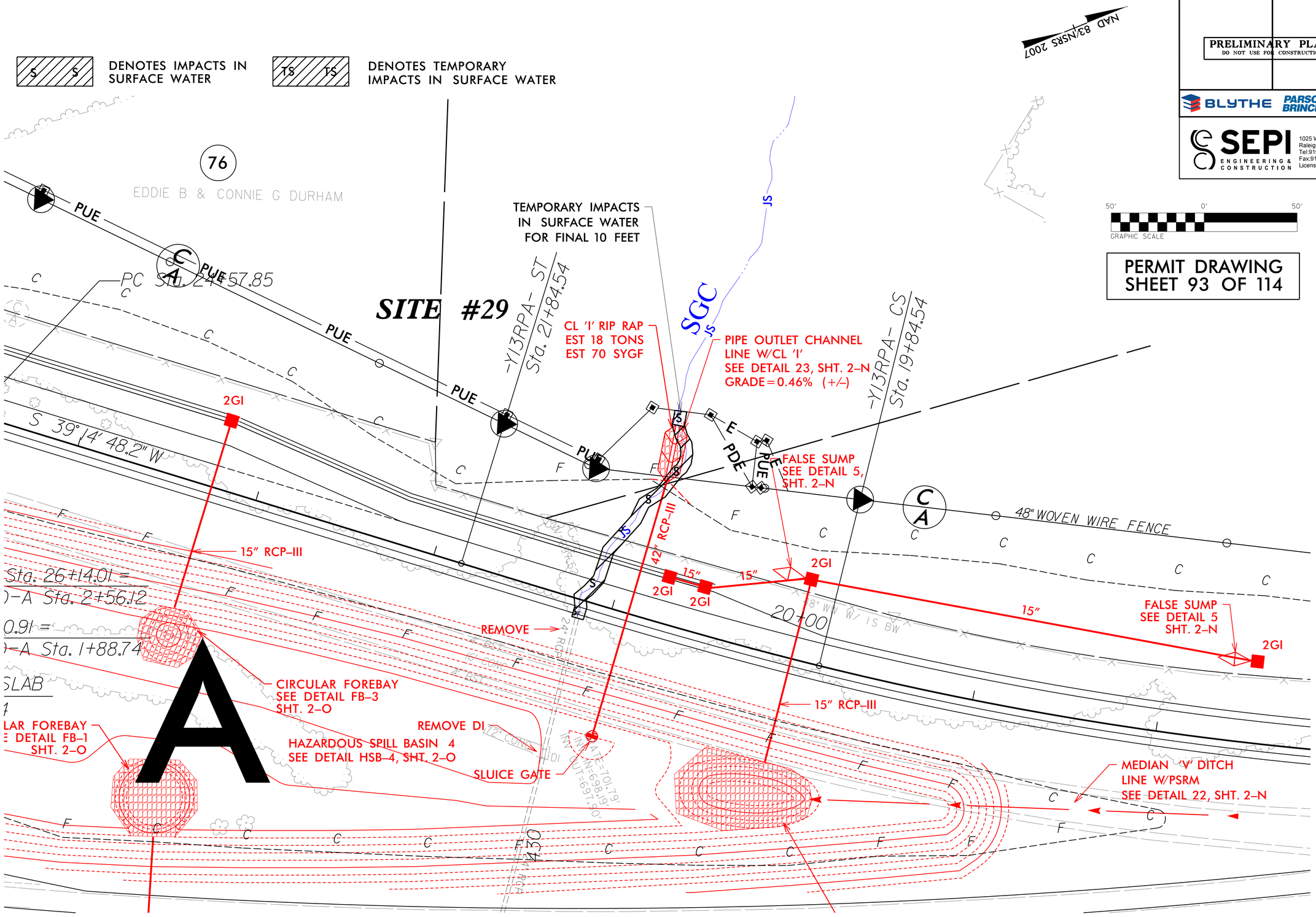
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

PERMIT DRAWING
SHEET 93 OF 114



PROJECT REFERENCE NO.	SHEET NO.
I-3802A	29A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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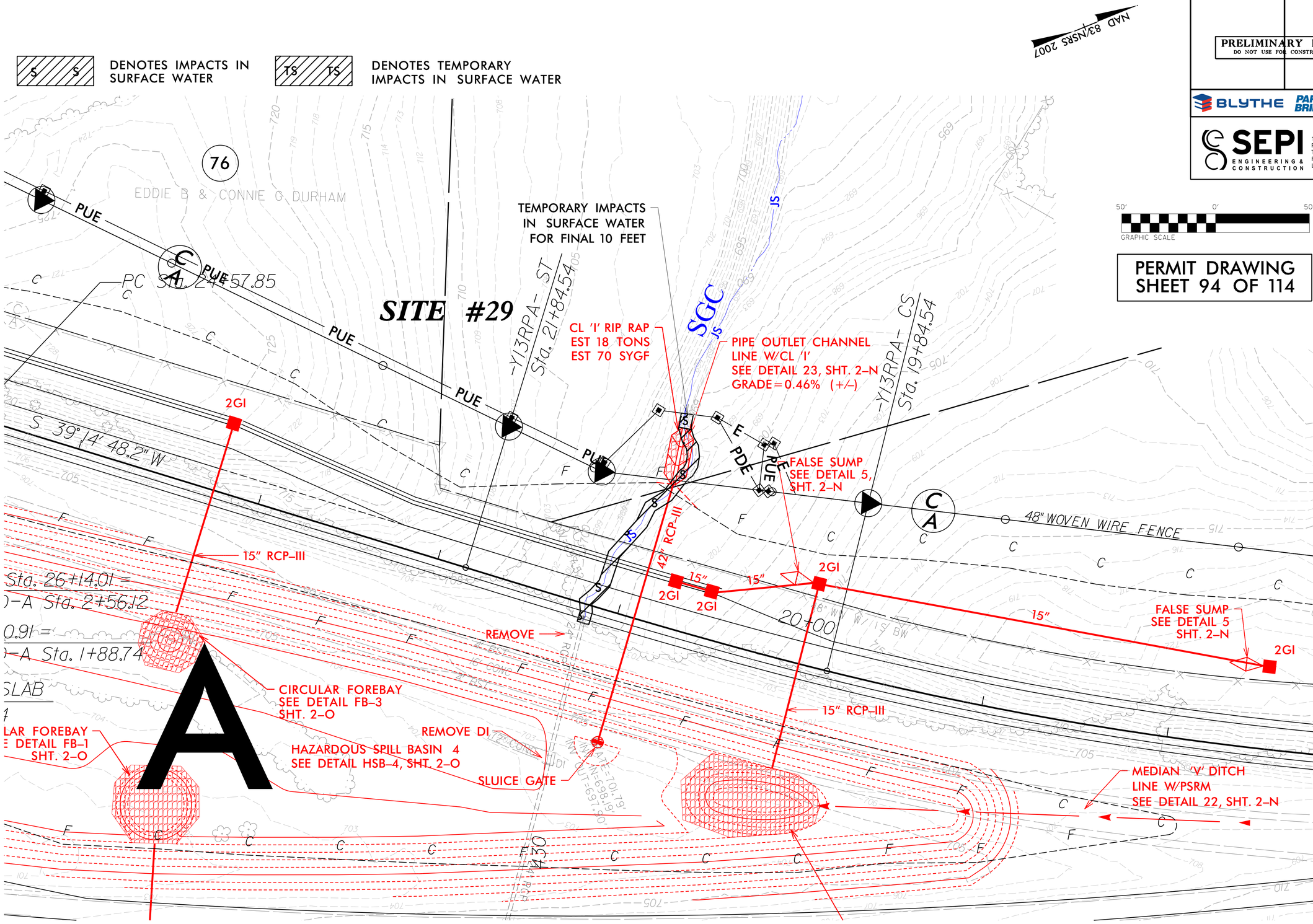
NAD 83/NSRS 2007



50' 0' 50'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 94 OF 114

8/17/99

1/27/2015
I-3802A_hyd_prm_wet_94_psh29A_con.dgn

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	29B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

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1025 Wade Avenue
Raleigh, NC 27605
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Fax:919-789-9591
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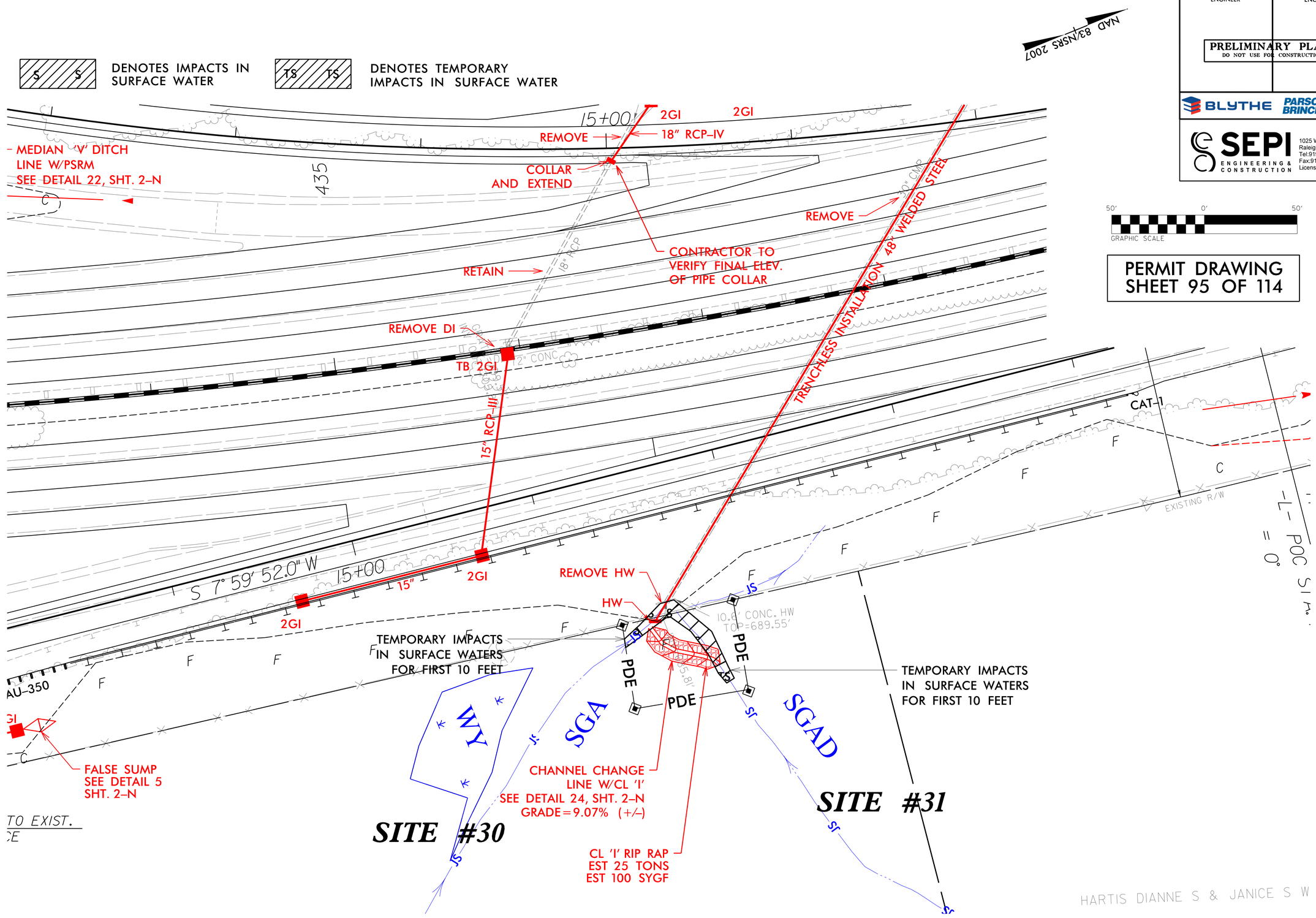
PERMIT DRAWING
SHEET 95 OF 114



8/17/99

11/27/2015
I-3802A hyd_prm_wet_95_psh29B.dgn

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	29B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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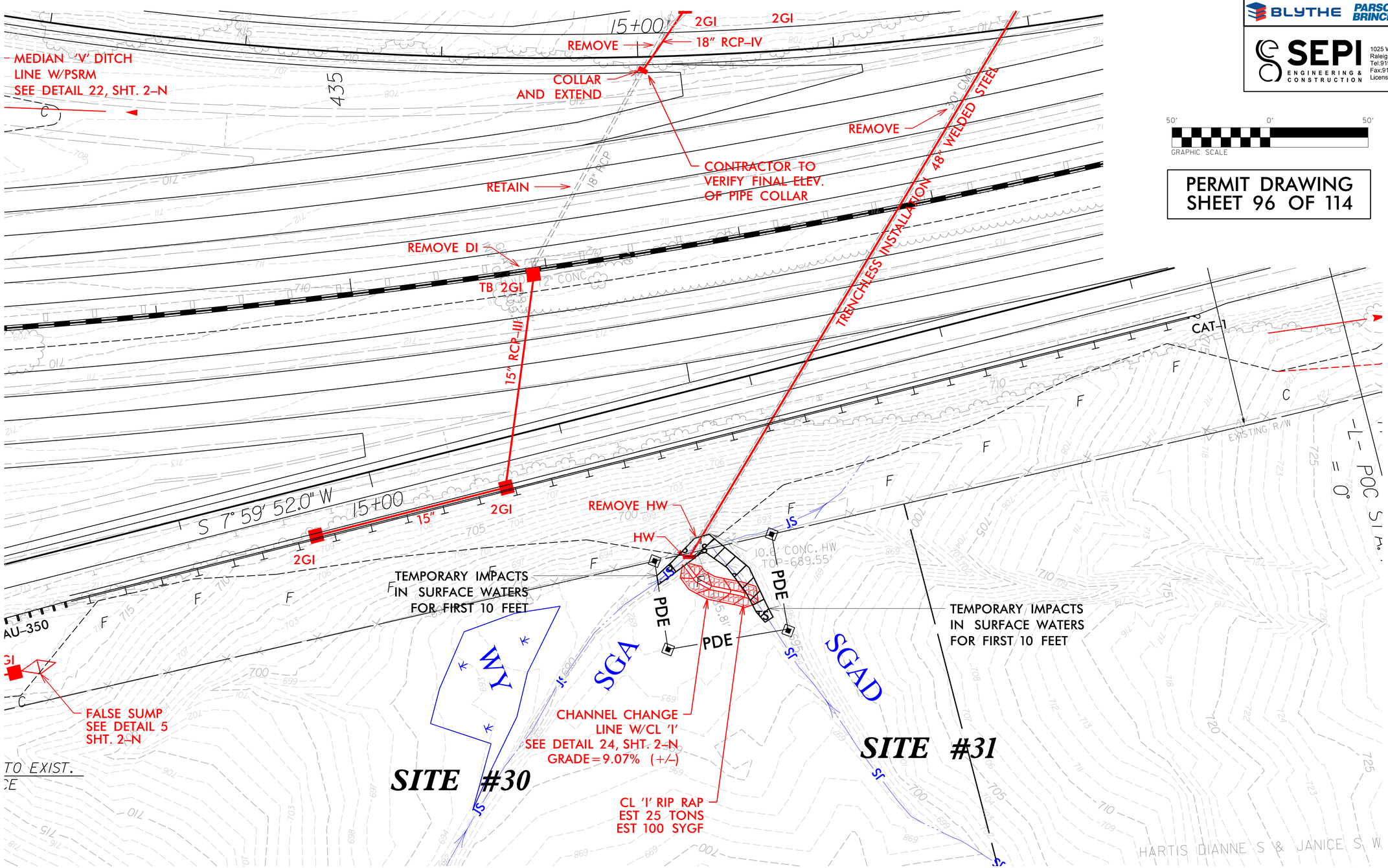
PERMIT DRAWING
SHEET 96 OF 114



8/17/99

11/27/2015
I-3802A_hyd_prm_wet_96_psh29B_con.dgn
USER:jdpilot

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	29C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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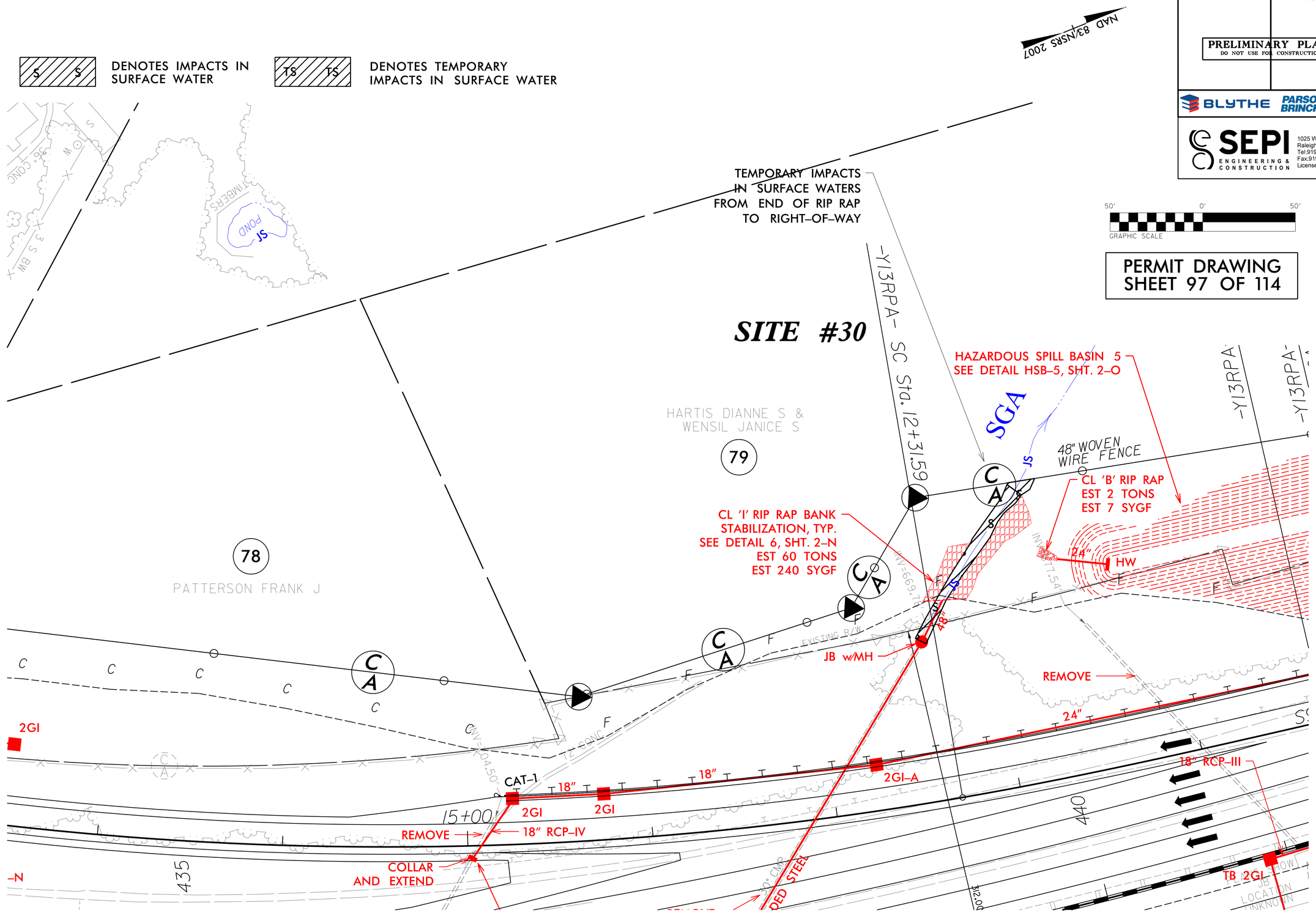
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197



PROJECT REFERENCE NO.	SHEET NO.
I-3802A	29C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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License: C-2197

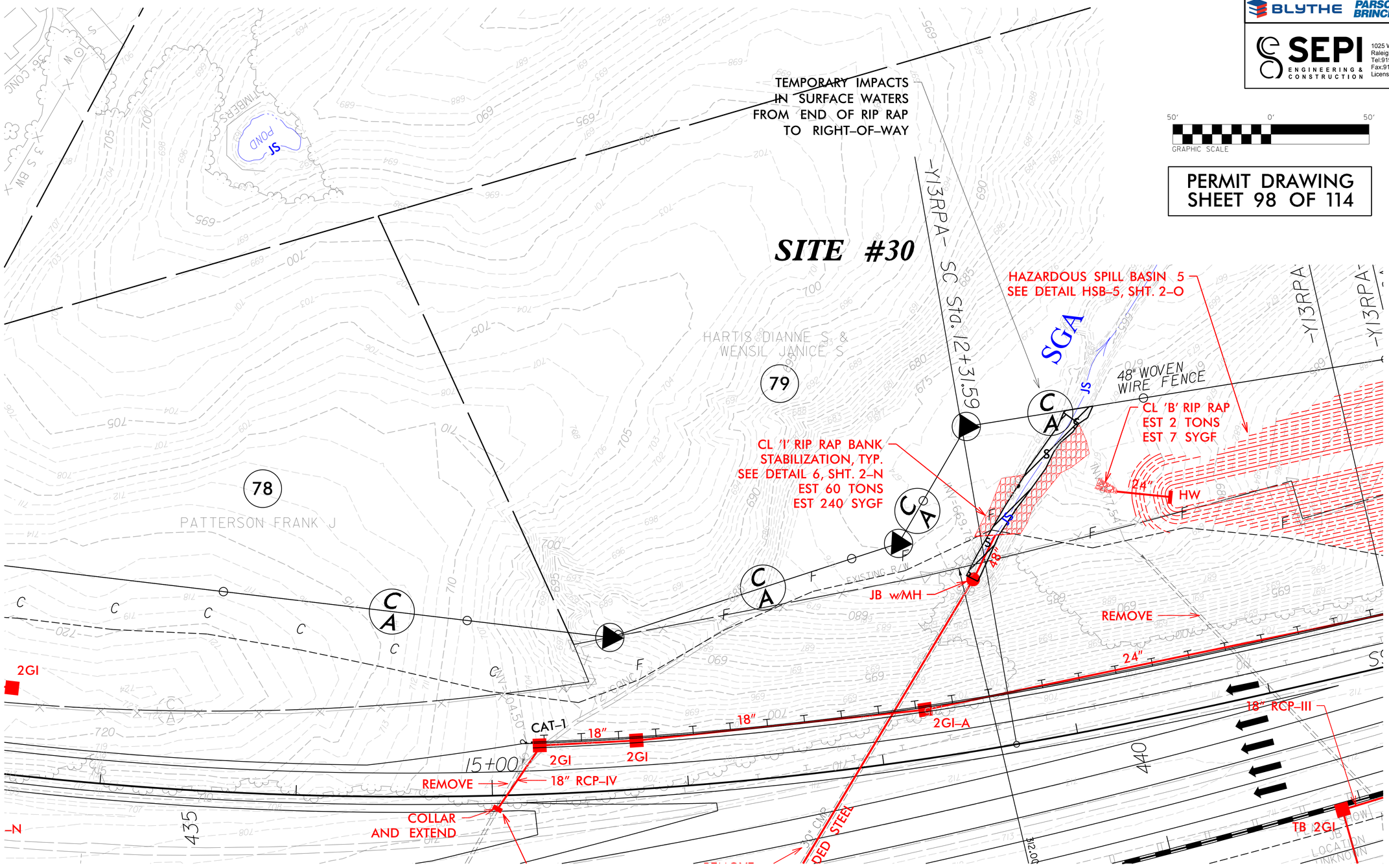
NAD 83/NSRS 2007

S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER

50' 0' 50'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 98 OF 114



PROJECT REFERENCE NO.	SHEET NO.
I-3802A	30
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

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Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

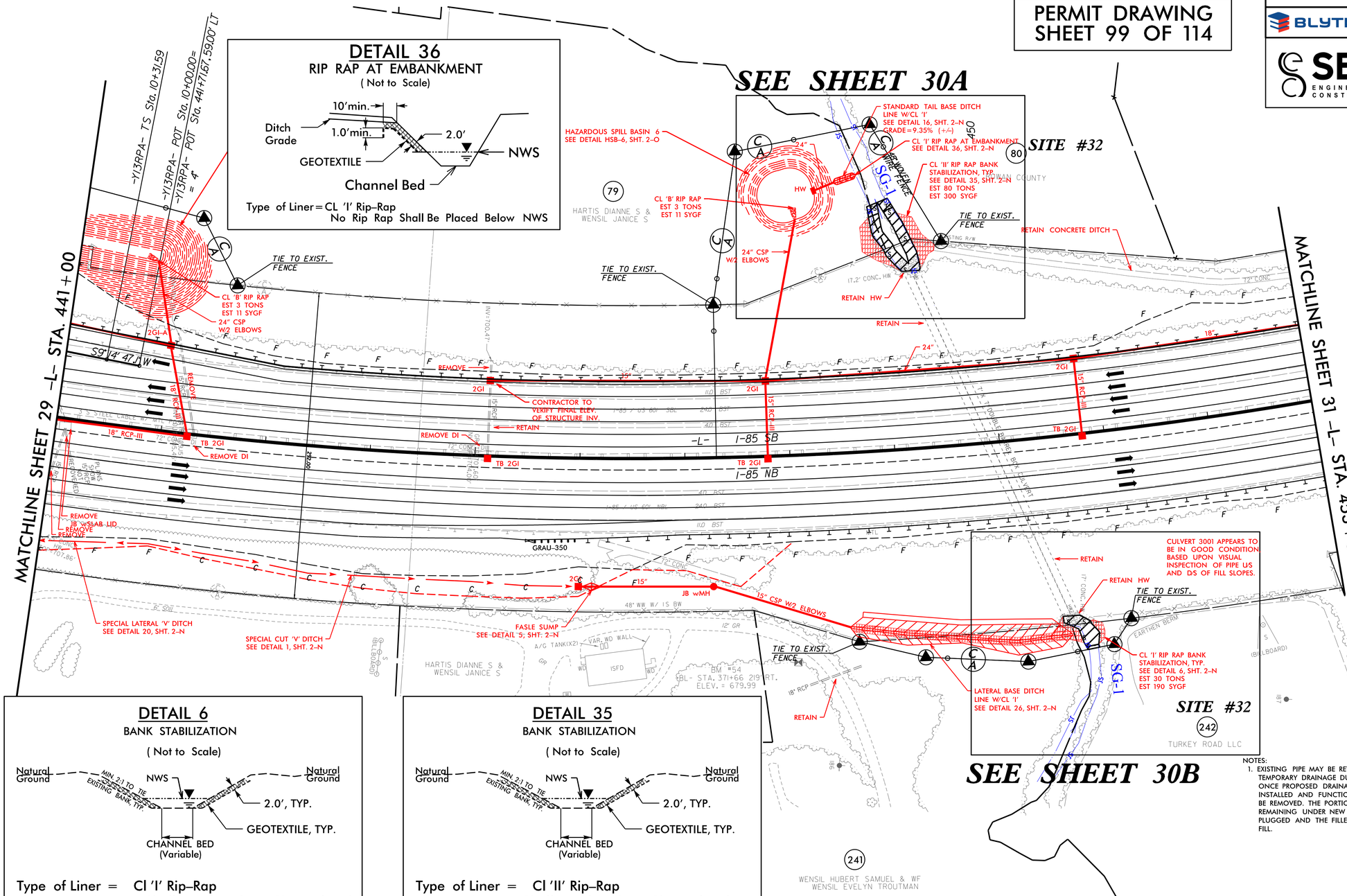
NAD 83/NSRS 2007

100' 0' 100'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 99 OF 114

S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER



DETAIL 36
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner = CL 'I' Rip-Rap
No Rip Rap Shall Be Placed Below NWS

DETAIL 6
BANK STABILIZATION
(Not to Scale)

Type of Liner = Cl 'I' Rip-Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 35
BANK STABILIZATION
(Not to Scale)

Type of Liner = Cl 'II' Rip-Rap
No Rip Rap Shall Be Placed In Channel Bed

NOTES:
1. EXISTING PIPE MAY BE RETAINED FOR TEMPORARY DRAINAGE DURING CONSTRUCTION. ONCE PROPOSED DRAINAGE SYSTEM IS INSTALLED AND FUNCTIONING PIPE IS TO BE REMOVED. THE PORTION OF PIPE REMAINING UNDER NEW PAVEMENT IS TO BE PLUGGED AND THE FILLED WITH FLOWABLE FILL.

SEE SHEETS 76 & 77 FOR -LSB- & -LNB- PROFILES
SEE SHEET 92 FOR -Y13RPA- PROFILE

8/17/99

1/27/2015
I-3802A_hyd_prm_wet_99_psh30.dgn

PROJECT REFERENCE NO.	SHEET NO.
I-3802A	30
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BLYTHE PARSONS BRINCKERHOFF

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License: C-2197

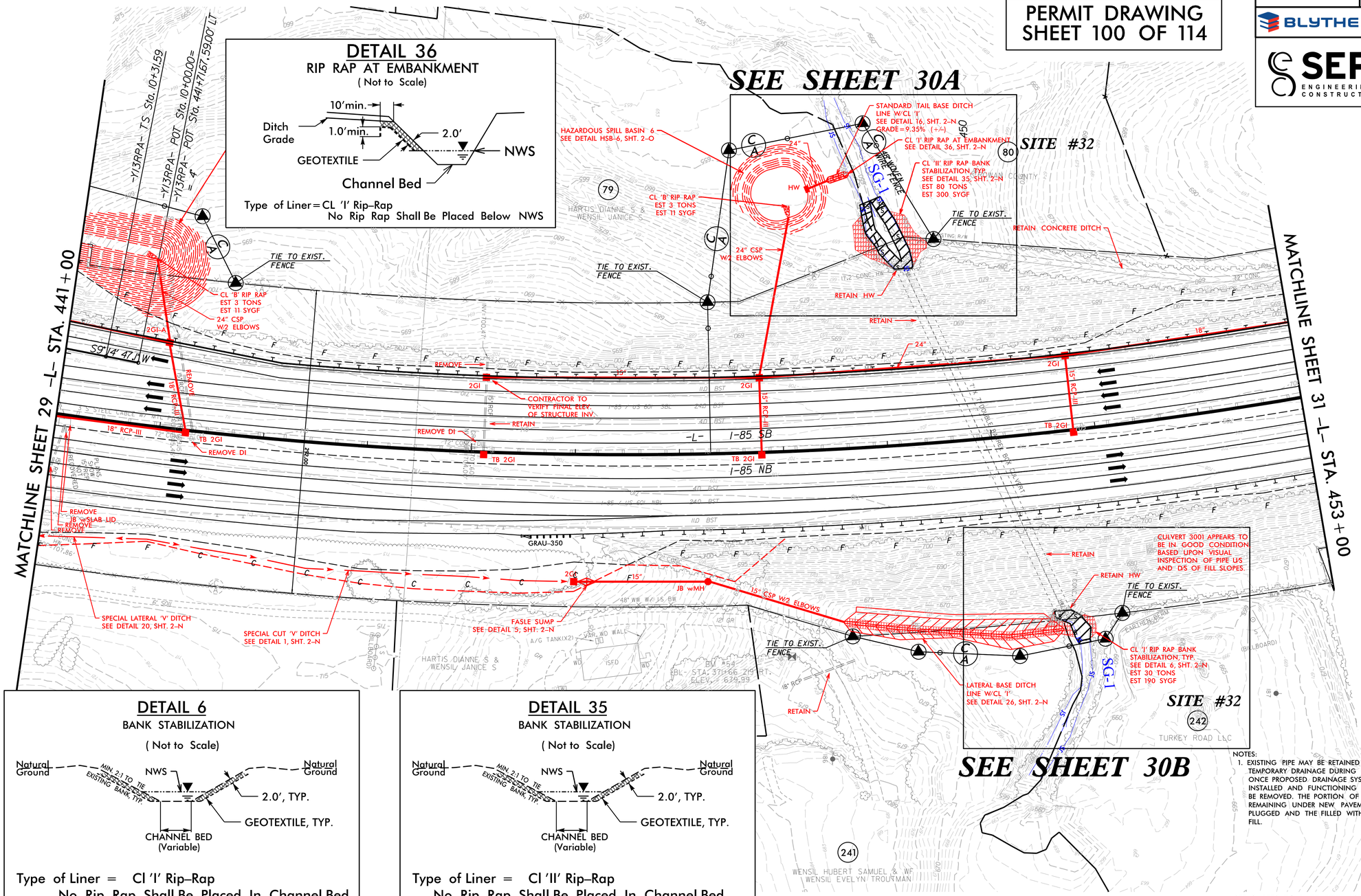
NAD 83/NSRS 2007

100' 0' 100'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 100 OF 114

S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER



DETAIL 36
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner = CL 'I' Rip-Rap
No Rip Rap Shall Be Placed Below NWS

DETAIL 6
BANK STABILIZATION
(Not to Scale)

Type of Liner = Cl 'I' Rip-Rap
No Rip Rap Shall Be Placed In Channel Bed

DETAIL 35
BANK STABILIZATION
(Not to Scale)

Type of Liner = Cl 'II' Rip-Rap
No Rip Rap Shall Be Placed In Channel Bed

NOTES:
1. EXISTING PIPE MAY BE RETAINED FOR TEMPORARY DRAINAGE DURING CONSTRUCTION. ONCE PROPOSED DRAINAGE SYSTEM IS INSTALLED AND FUNCTIONING PIPE IS TO BE REMOVED. THE PORTION OF PIPE REMAINING UNDER NEW PAVEMENT IS TO BE PLUGGED AND THE FILLED WITH FLOWABLE FILL.

SEE SHEETS 76 & 77 FOR -LSB- & -LNB- PROFILES
SEE SHEET 92 FOR -Y13RPA- PROFILE

8/17/99
1/27/2015
I-3802A_hyd_prm_wet_100_psh30_con.dgn