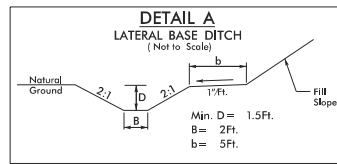
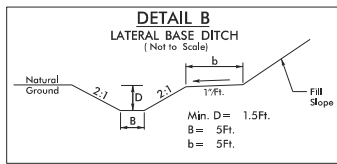


Table with 2 columns: PROJECT REFERENCE NO. (R-2829B), SHEET NO. (20-1), RW SHEET NO., HYDRAULICS ENGINEER, and DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED.

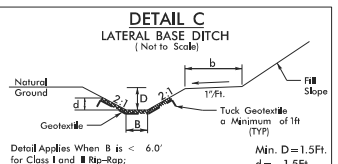
PERMIT DRAWING SHEET 2 OF 32



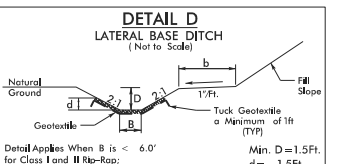
- List of ditch locations and stationing for Detail A, including RT and LT directions.



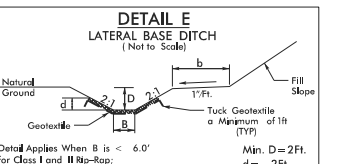
- List of ditch locations and stationing for Detail B, including RT and LT directions.



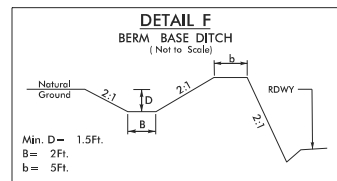
- List of ditch locations and stationing for Detail C, including RT and LT directions.



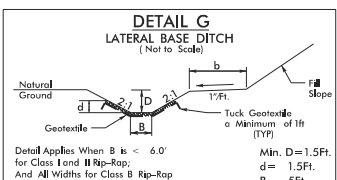
- List of ditch locations and stationing for Detail D, including RT and LT directions.



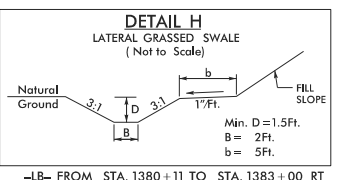
- List of ditch locations and stationing for Detail E, including RT and LT directions.



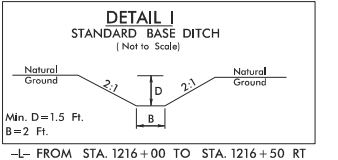
- List of ditch locations and stationing for Detail F, including RT and LT directions.



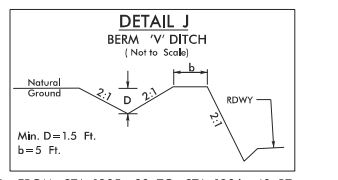
- List of ditch locations and stationing for Detail G, including RT and LT directions.



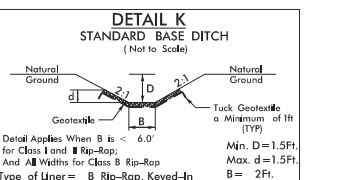
- List of ditch locations and stationing for Detail H, including RT and LT directions.



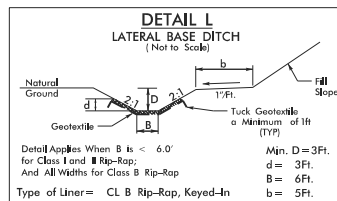
- List of ditch locations and stationing for Detail I, including RT and LT directions.



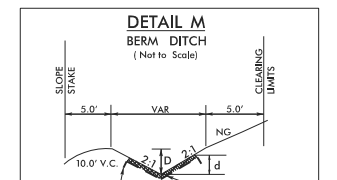
- List of ditch locations and stationing for Detail J, including RT and LT directions.



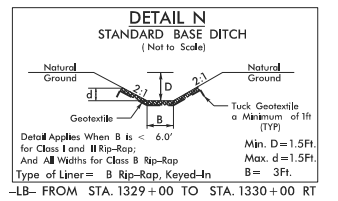
- List of ditch locations and stationing for Detail K, including RT and LT directions.



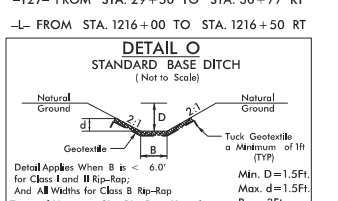
- List of ditch locations and stationing for Detail L, including RT and LT directions.



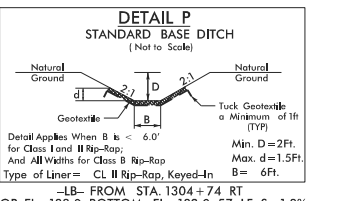
- List of ditch locations and stationing for Detail M, including RT and LT directions.



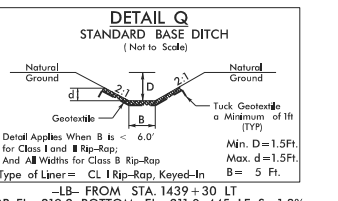
- List of ditch locations and stationing for Detail N, including RT and LT directions.



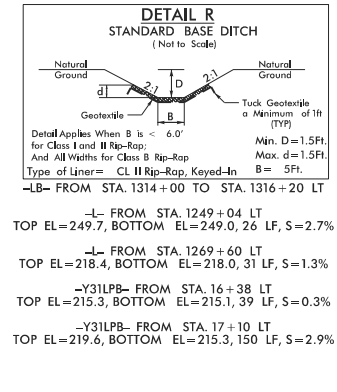
- List of ditch locations and stationing for Detail O, including RT and LT directions.



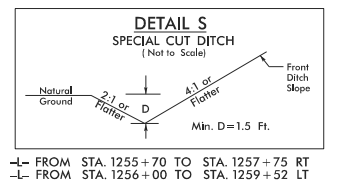
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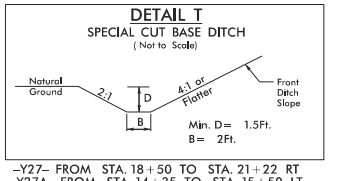
- List of ditch locations and stationing for Detail Q, including RT and LT directions.



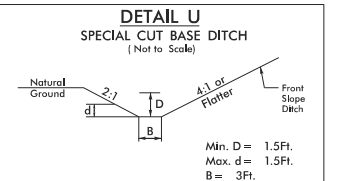
- List of ditch locations and stationing for Detail R, including RT and LT directions.



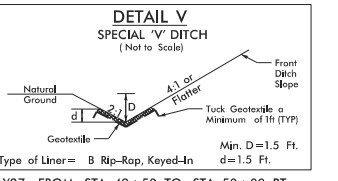
- List of ditch locations and stationing for Detail S, including RT and LT directions.



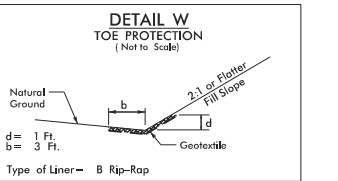
- List of ditch locations and stationing for Detail T, including RT and LT directions.



- List of ditch locations and stationing for Detail U, including RT and LT directions.



- List of ditch locations and stationing for Detail V, including RT and LT directions.

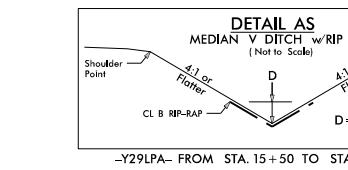
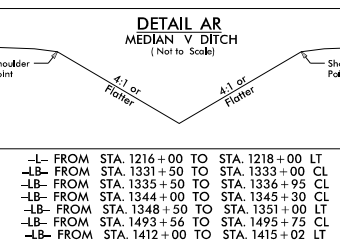
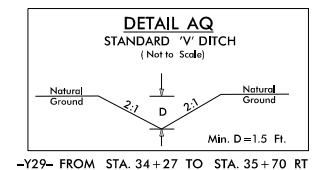
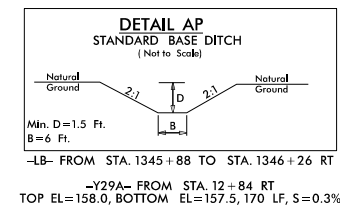
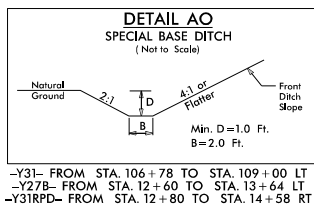
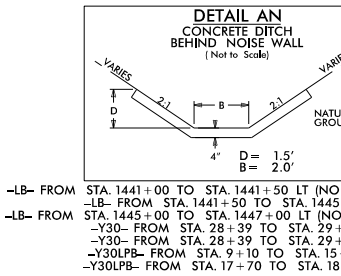
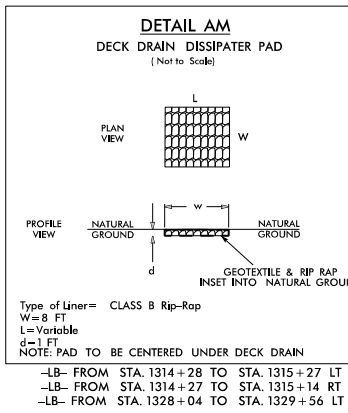
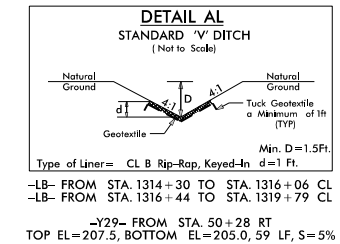
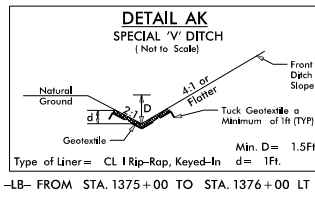
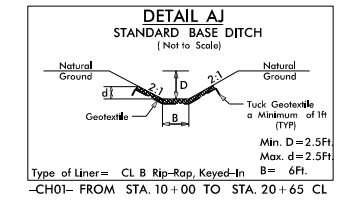
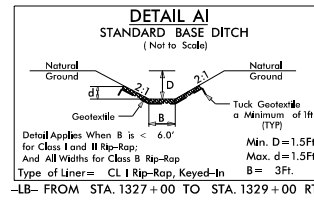
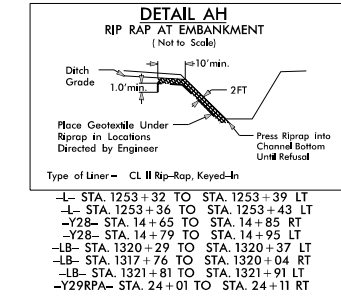
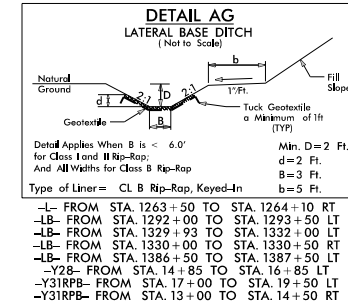
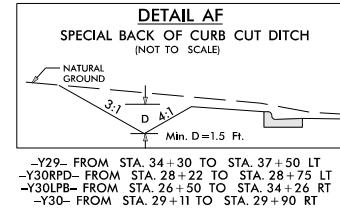
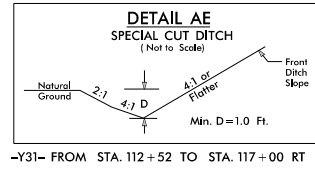
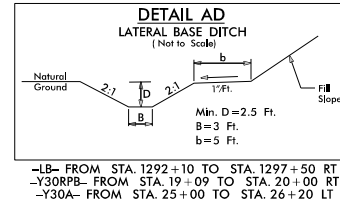
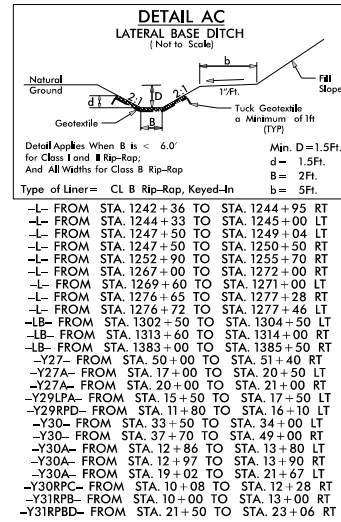
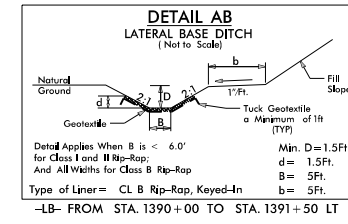
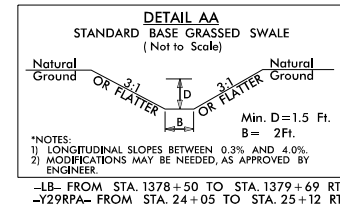
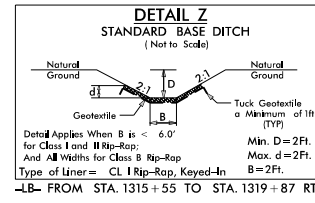
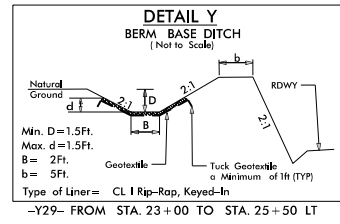
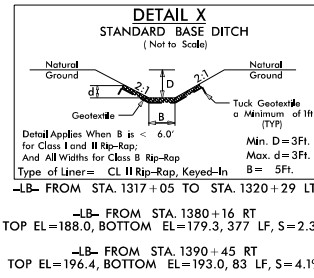


- List of ditch locations and stationing for Detail W, including RT and LT directions.

VERTICAL CURVE DATA

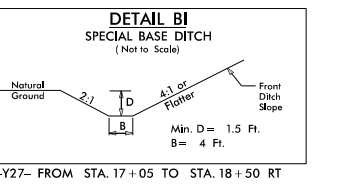
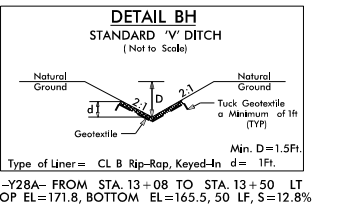
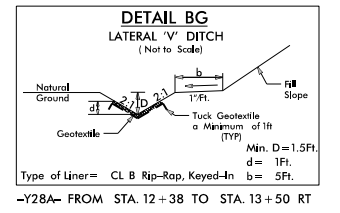
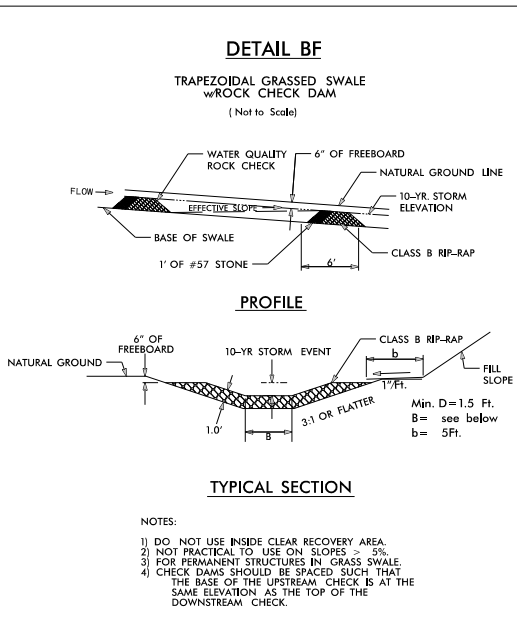
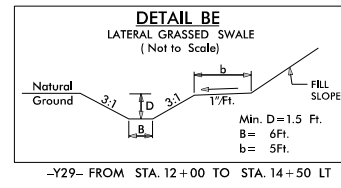
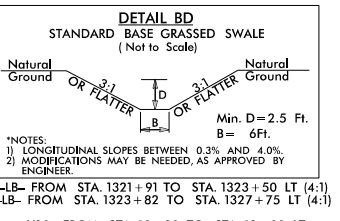
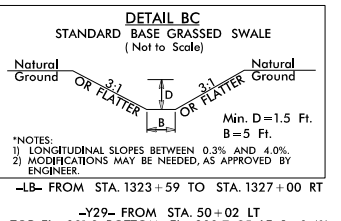
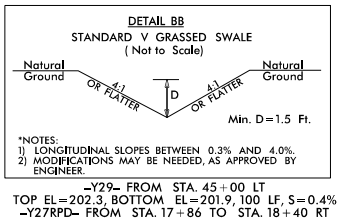
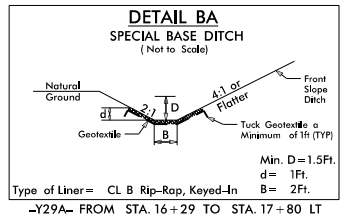
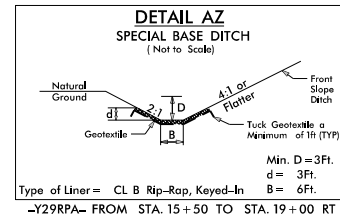
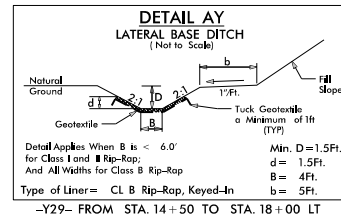
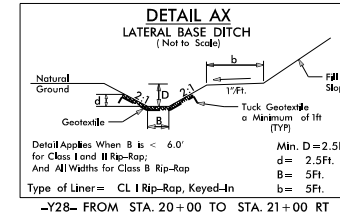
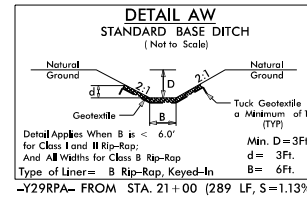
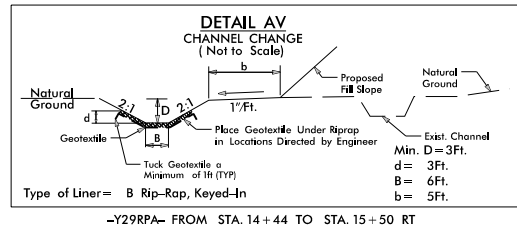
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RW SHEET NO.	
HYDRAULICS ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**PERMIT DRAWING
SHEET 3 OF 32**



PROJECT REFERENCE NO. R-2829B	SHEET NO. 20-3
RW SHEET NO.	
HYDRAULICS ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 4 OF 32



NOTES:
 1) DO NOT USE INSIDE CLEAR RECOVERY AREA.
 2) NOT PRACTICAL TO USE ON SLOPES > 5%.
 3) FOR PERMANENT STRUCTURES IN GRASS SWALE.
 4) CHECK DAMS SHOULD BE SPACED SUCH THAT THE BASE OF THE UPSTREAM CHECK DAM AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM CHECK.

-LB- FROM STA. 1377+50 TO STA. 1380+50 LT (B=2', Q10 FLOW D=0.5')
 -LB- FROM STA. 1383+00 TO STA. 1386+50 LT (B=3', Q10 FLOW D=0.5')
 -LB- FROM STA. 1390+50 TO STA. 1392+50 RT (B=5', Q10 FLOW D=1')

8/17/99



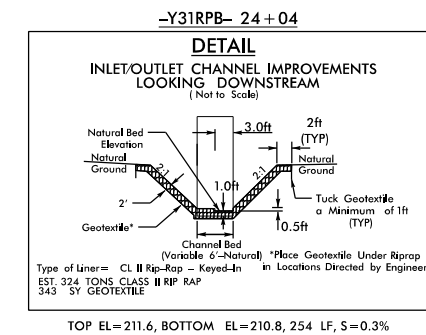
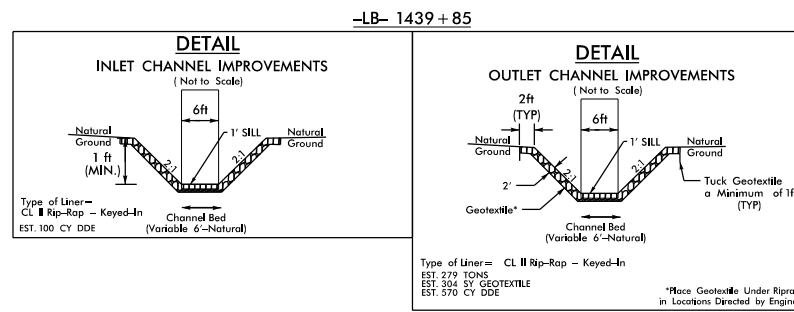
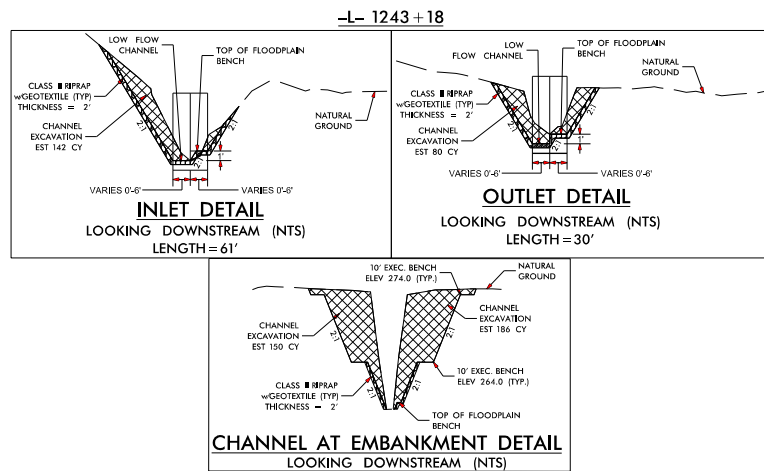
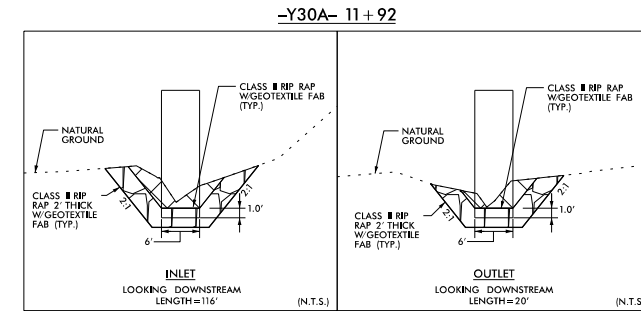
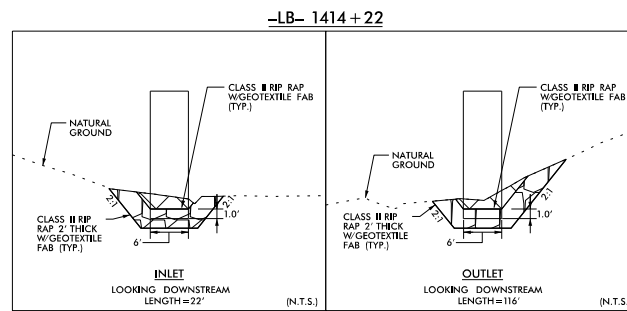
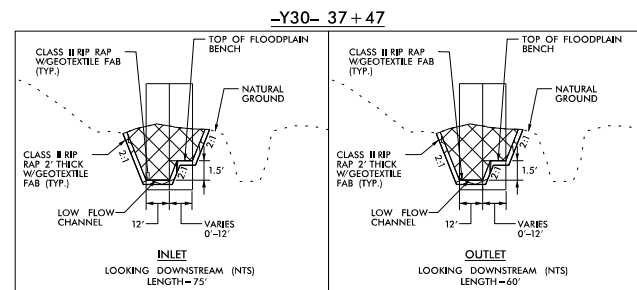
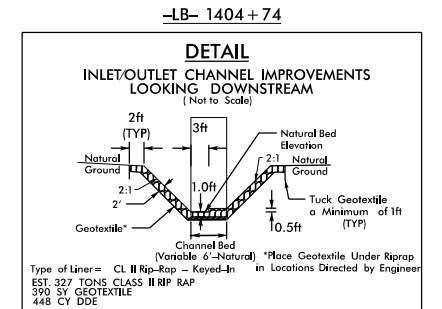
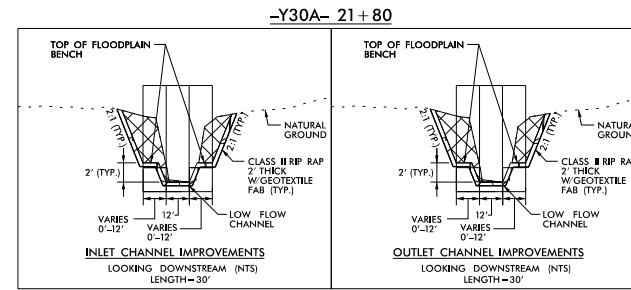
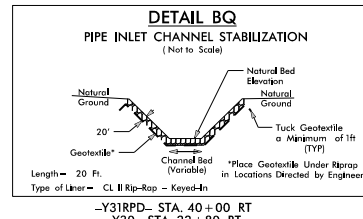
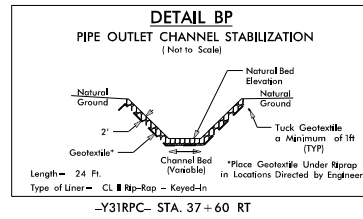
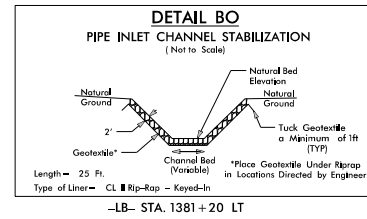
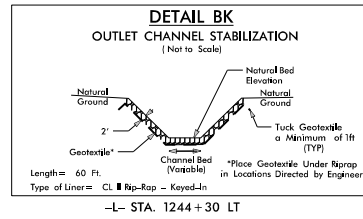
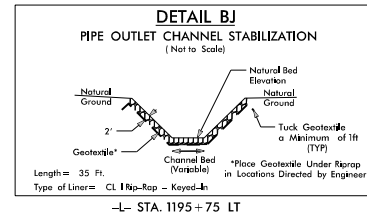
Arcadis CE, Inc.
75 Regency Woods Place, Suite 350
Cary, North Carolina 27518
Phone: 919-854-1282
License #: F-0299



ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-0999

PROJECT REFERENCE NO. R-2829B	SHEET NO. 20-4
RW SHEET NO.	
HYDRAULICS ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**PERMIT DRAWING
SHEET 5 OF 32**



DATE PLOTTED: 8/17/99 10:52 AM

8/17/99

BUFFER DRAWING SHEET 7 OF 32

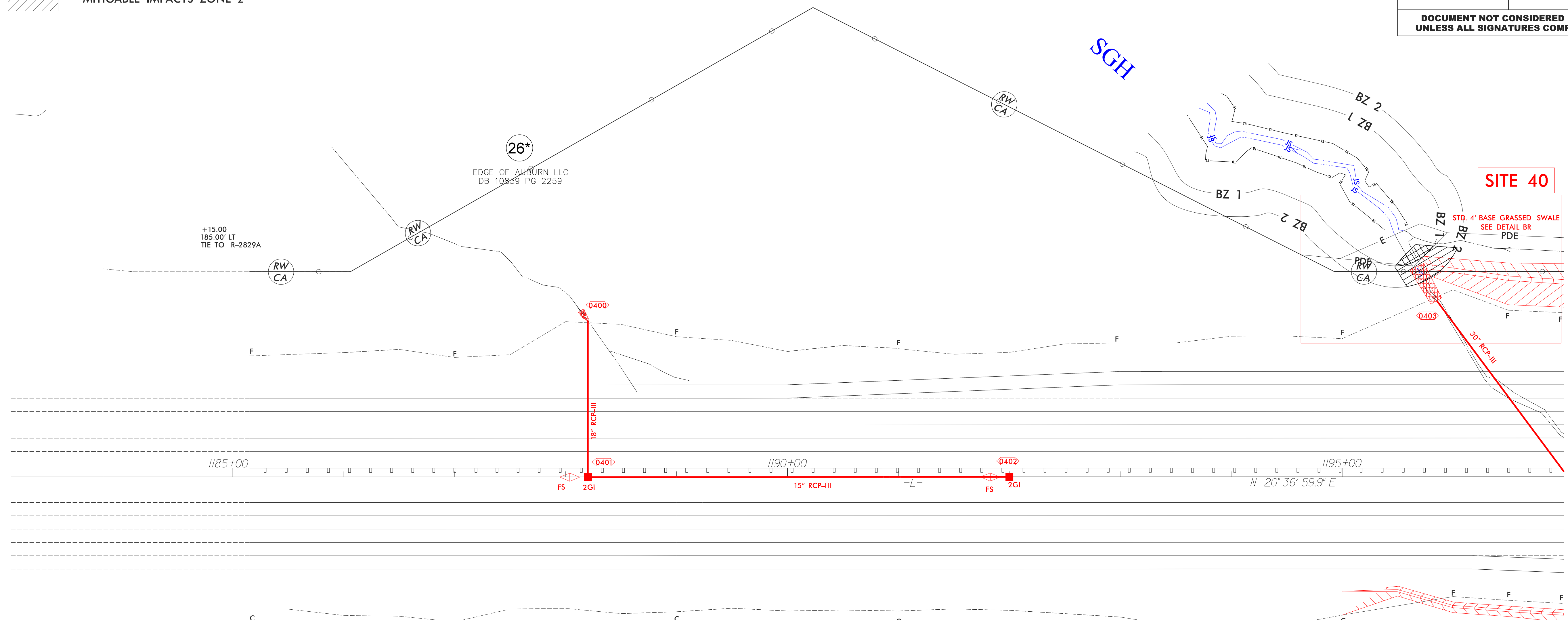


ARCADIS
 Arcadis CE, Inc.
 175 Regency Woods Place, Suite 350
 Cary, North Carolina 27518
 Phone: 919-854-1282
 License #: F-0299

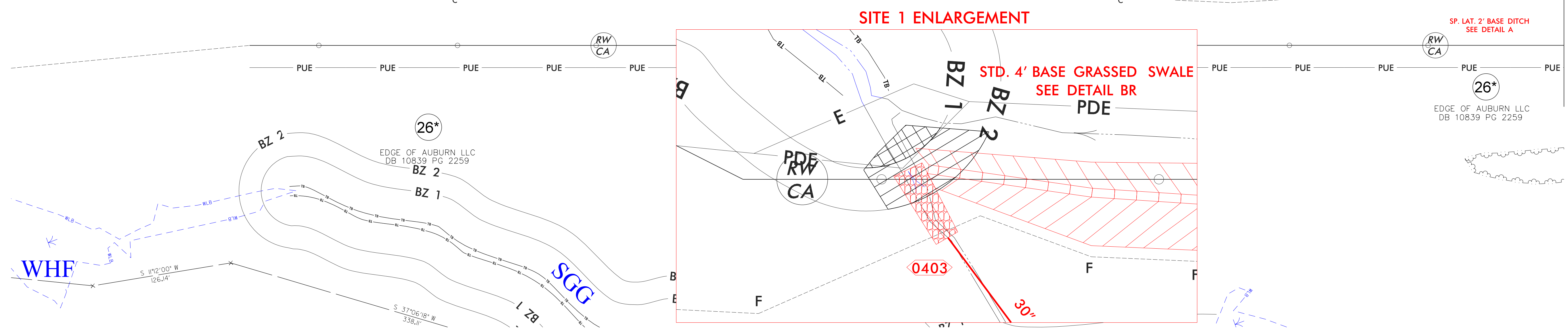
PROJECT REFERENCE NO. <i>R-2829B</i>	SHEET NO. <i>04</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



- MITIGABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2



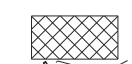

MATCHLINE -L- STA. 1197 + 00.00 SEE SHEET 05

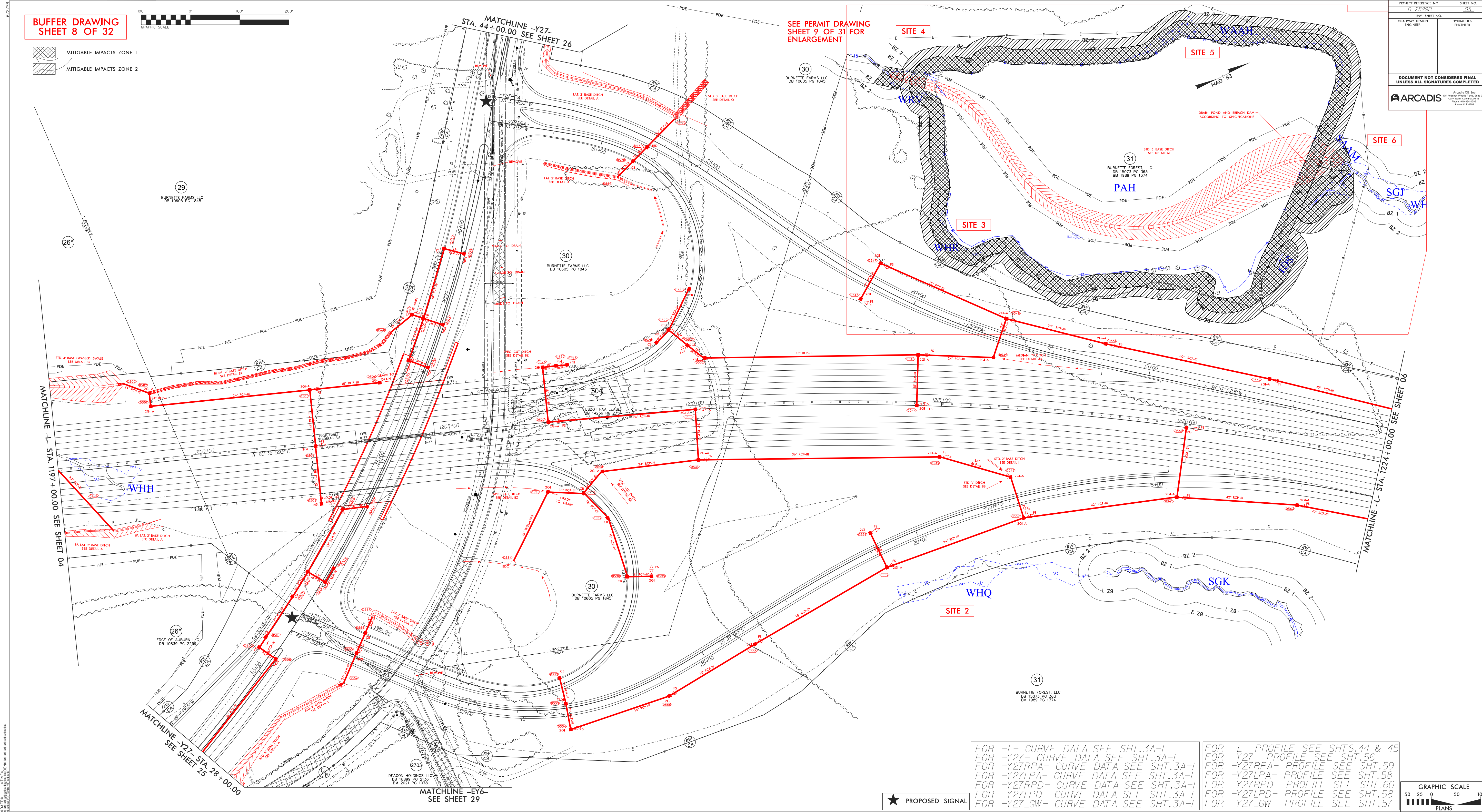



FOR -L- PROFILE SEE SHT. 44

\$D A T E S \$ T I M E S \$ S U N D O N M E N S U R E S \$

**BUFFER DRAWING
SHEET 8 OF 32**

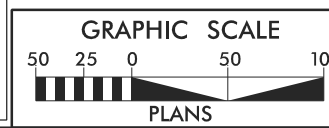
-  MITIGABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 2



PROJECT REFERENCE NO. P-282-209	SHEET NO. 05
RW SHEET NO.	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
	

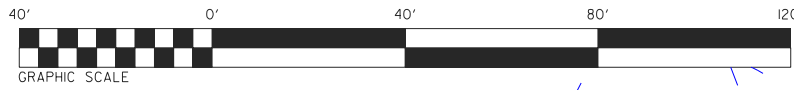
FOR -L- CURVE DATA SEE SHT.3A-1	FOR -L- PROFILE SEE SHTS.44 & 45
FOR -Y27- CURVE DATA SEE SHT.3A-1	FOR -Y27- PROFILE SEE SHT.56
FOR -Y27RPA- CURVE DATA SEE SHT.3A-1	FOR -Y27RPA- PROFILE SEE SHT.59
FOR -Y27LPA- CURVE DATA SEE SHT.3A-1	FOR -Y27LPA- PROFILE SEE SHT.58
FOR -Y27RPD- CURVE DATA SEE SHT.3A-1	FOR -Y27RPD- PROFILE SEE SHT.60
FOR -Y27LPD- CURVE DATA SEE SHT.3A-1	FOR -Y27LPD- PROFILE SEE SHT.58
FOR -Y27_GW- CURVE DATA SEE SHT.3A-1	FOR -Y27_GW- PROFILE SEE SHT.57

★ PROPOSED SIGNAL



8/17/99

**BUFFER DRAWING
SHEET 14 OF 32**



**SITE 14
ENLARGEMENT**

- MITIGABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2

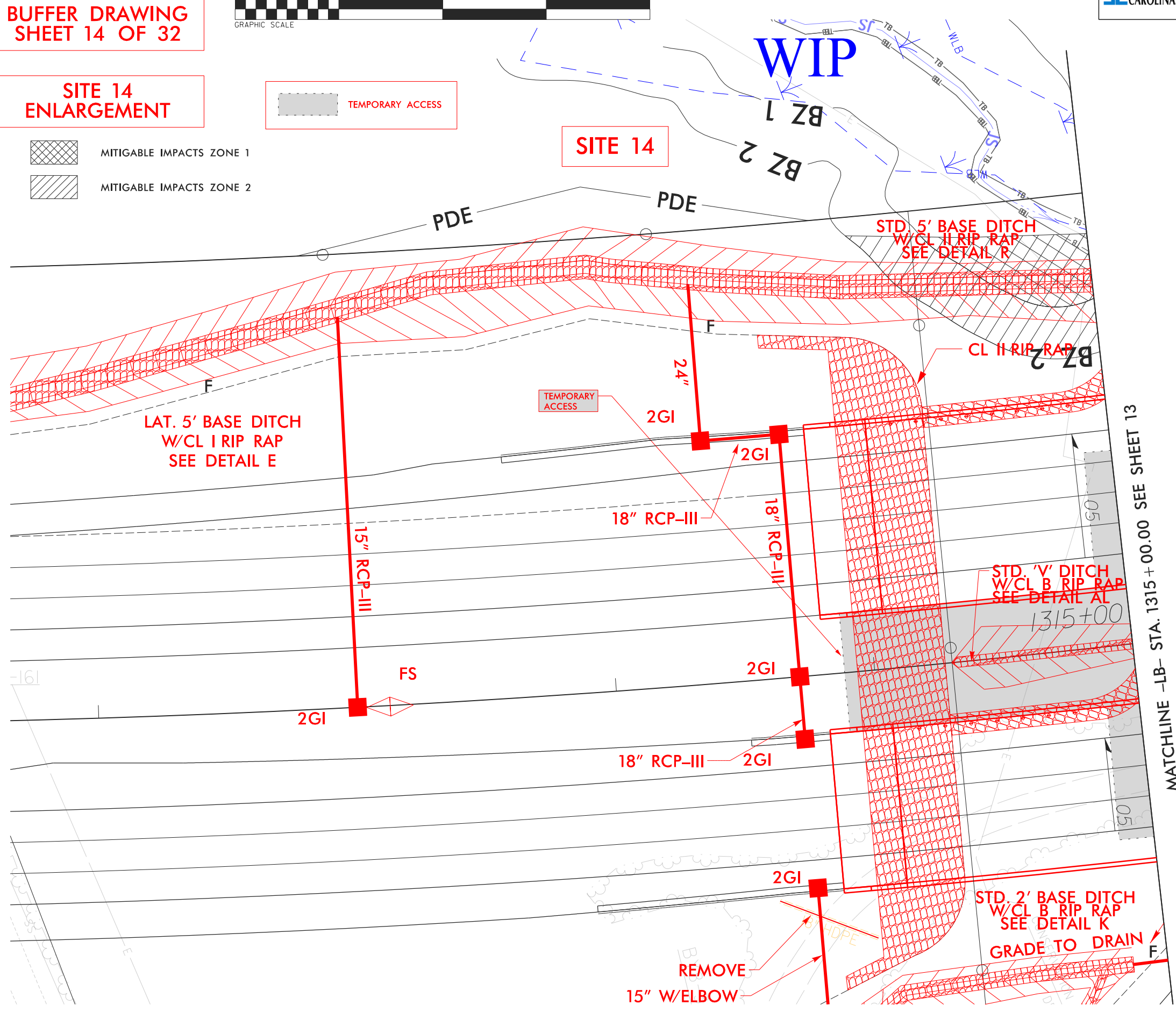
TEMPORARY ACCESS

SITE 14

ICE of CAROLINAS, PLLC

ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-29999

PROJECT REFERENCE NO. <i>R-2829B</i>	SHEET NO. _____
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



MATCHLINE -LB- STA. 1315 + 00.00 SEE SHEET 13

DATE: 8/17/99
DRAWN BY: J. W. WOODSON
CHECKED BY: J. W. WOODSON
DATE: 8/17/99

**BUFFER DRAWING
SHEET 16 OF 32**

-  MITIGABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 2
-  ALLOWABLE IMPACTS ZONE 1
-  ALLOWABLE IMPACTS ZONE 2

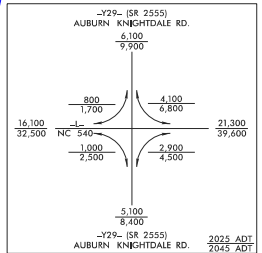
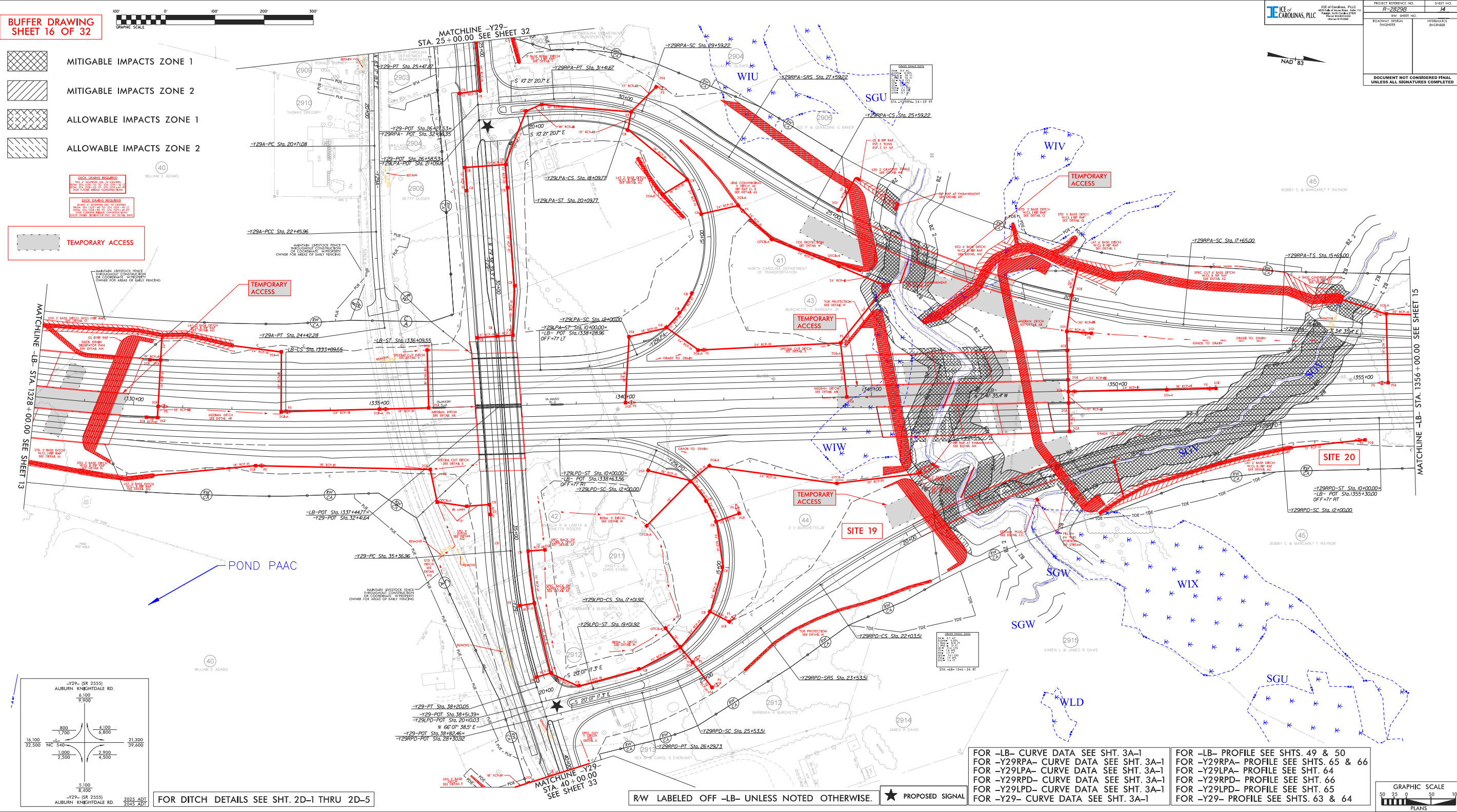
DECK DRAINAGE REQUIREMENTS
 1. ALL DECK SURFACES SHALL BE DESIGNED TO DRAIN TO THE SIDE OF THE ROADWAY.
 2. ALL DECK SURFACES SHALL BE FINISHED TO A MINIMUM SLOPE OF 1/4" PER FOOT.
 3. ALL DECK SURFACES SHALL BE FINISHED TO A MAXIMUM SLOPE OF 2%.

DECK DRAINAGE REQUIREMENTS
 1. ALL DECK SURFACES SHALL BE DESIGNED TO DRAIN TO THE SIDE OF THE ROADWAY.
 2. ALL DECK SURFACES SHALL BE FINISHED TO A MINIMUM SLOPE OF 1/4" PER FOOT.
 3. ALL DECK SURFACES SHALL BE FINISHED TO A MAXIMUM SLOPE OF 2%.

TEMPORARY ACCESS

MANTAIN SPURLOCK FENCE THROUGHOUT CONSTRUCTION OF COORDINATE TO PROPERTY OWNER FOR AREAS OF EARLY FENCING

MATCHLINE -LB- STA. 1328 + 00.00 SEE SHEET 13



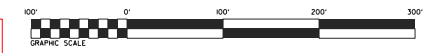
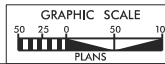
FOR DITCH DETAILS SEE SHT. 2D-1 THRU 2D-5

RW LABELED OFF -LB- UNLESS NOTED OTHERWISE.

★ PROPOSED SIGNAL

FOR -LB- CURVE DATA SEE SHT. 3A-1
 FOR -Y29RPA- CURVE DATA SEE SHT. 3A-1
 FOR -Y29LPA- CURVE DATA SEE SHT. 3A-1
 FOR -Y29RPD- CURVE DATA SEE SHT. 3A-1
 FOR -Y29LPD- CURVE DATA SEE SHT. 3A-1
 FOR -Y29- CURVE DATA SEE SHT. 3A-1

FOR -LB- PROFILE SEE SHTS. 49 & 50
 FOR -Y29RPA- PROFILE SEE SHTS. 65 & 66
 FOR -Y29LPA- PROFILE SEE SHT. 64
 FOR -Y29RPD- PROFILE SEE SHT. 66
 FOR -Y29LPD- PROFILE SEE SHT. 65
 FOR -Y29- PROFILE SEE SHTS. 63 & 64



JICE OF CAROLINAS, PLLC
 1000 W. GARDNER ST. SUITE 110
 RALEIGH, NC 27603
 TEL: 919.876.1100
 FAX: 919.876.1101
 WWW.JICEOFNC.COM

PROJECT REFERENCE NO. **Y29-22-299**
 SHEET NO. **14**

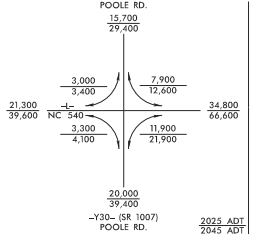
ROADWAY DESIGN ENGINEER
 REGISTERED ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

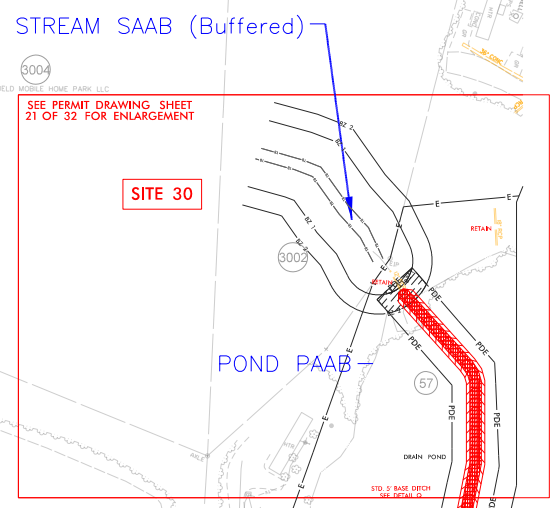
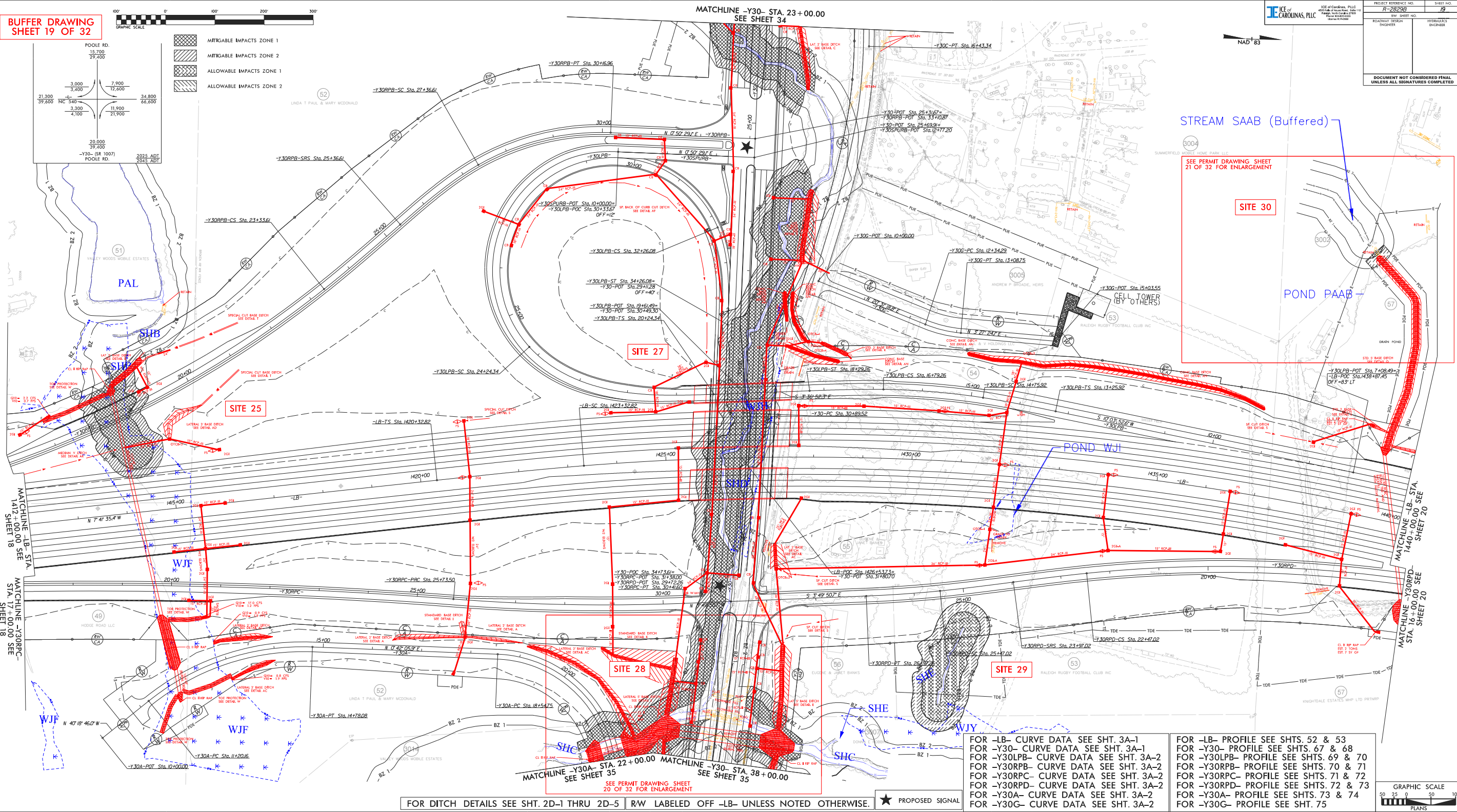


DATE PLOTTED: 11/14/2025 10:45:00 AM

**BUFFER DRAWING
SHEET 19 OF 32**



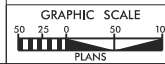
- MITIGABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2
- ALLOWABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2



FOR -LB- CURVE DATA SEE SHT. 3A-1
FOR -Y30- CURVE DATA SEE SHT. 3A-1
FOR -Y30LPB- CURVE DATA SEE SHT. 3A-2
FOR -Y30RPC- CURVE DATA SEE SHT. 3A-2
FOR -Y30RPD- CURVE DATA SEE SHT. 3A-2
FOR -Y30A- CURVE DATA SEE SHT. 3A-2
FOR -Y30G- CURVE DATA SEE SHT. 3A-2

FOR -LB- PROFILE SEE SHTS. 52 & 53
FOR -Y30- PROFILE SEE SHTS. 67 & 68
FOR -Y30LPB- PROFILE SEE SHTS. 69 & 70
FOR -Y30RPC- PROFILE SEE SHTS. 71 & 72
FOR -Y30RPD- PROFILE SEE SHTS. 72 & 73
FOR -Y30A- PROFILE SEE SHTS. 73 & 74
FOR -Y30G- PROFILE SEE SHT. 75

FOR DITCH DETAILS SEE SHT. 2D-1 THRU 2D-5 | R/W LABELED OFF -LB- UNLESS NOTED OTHERWISE. ★ PROPOSED SIGNAL

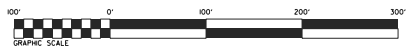


ICE of CAROLINAS, PLLC
1000 W. GARDNER ST. SUITE 110
RANDOLPH, NC 28134
TEL: 704.393.1234
WWW.ICEOFCAROLINAS.COM

PROJECT REFERENCE NO. Y-28299
SHEET NO. 19

ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER

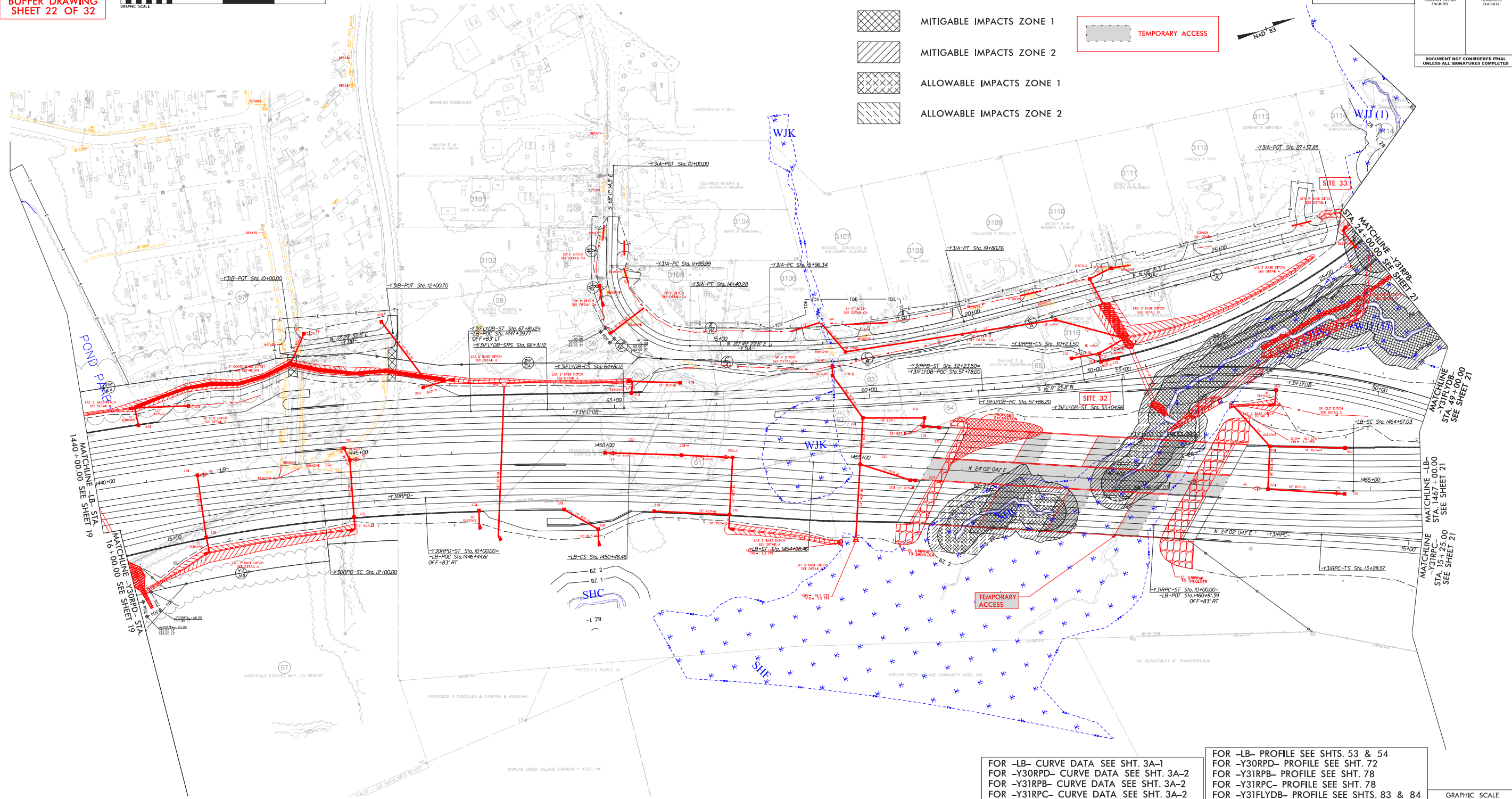
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



PROJECT REFERENCE NO. R-28299	SHEET NO. 20
DATE 11/11/2019	PROJECT ROADWAY DESIGN
ENGINEER ICE of CAROLINAS, PLLC	REGISTERED ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

- MITIGABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2
- ALLOWABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2
- TEMPORARY ACCESS



MATCHLINE -LB- STA. 1440+00.00 SEE SHEET 19

MATCHLINE -Y30RPD- STA. 16+00.00 SEE SHEET 19

MATCHLINE -LB- Y31FLYDB- STA. 49+00.00 SEE SHEET 21

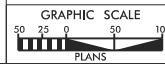
MATCHLINE -LB- Y31RPC- STA. 1467+00.00 SEE SHEET 21

MATCHLINE -LB- Y31RPC- STA. 151+25.00 SEE SHEET 21

FOR DITCH DETAILS SEE SHT. 2D-1 THRU 2D-5 | RW LABELED OFF -LB- UNLESS NOTED OTHERWISE.

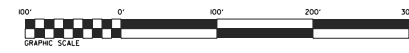
FOR -LB- CURVE DATA SEE SHT. 3A-1
 FOR -Y30RPD- CURVE DATA SEE SHT. 3A-2
 FOR -Y31RPB- CURVE DATA SEE SHT. 3A-2
 FOR -Y31RPC- CURVE DATA SEE SHT. 3A-2
 FOR -Y31FLYDB- CURVE DATA SEE SHT. 3A-2
 FOR -Y31A- CURVE DATA SEE SHT. 3A-2

FOR -LB- PROFILE SEE SHTS. 53 & 54
 FOR -Y30RPD- PROFILE SEE SHT. 72
 FOR -Y31RPB- PROFILE SEE SHT. 78
 FOR -Y31RPC- PROFILE SEE SHT. 78
 FOR -Y31FLYDB- PROFILE SEE SHTS. 83 & 84
 FOR -Y31A- PROFILE SEE SHT. 84
 FOR -Y31B- PROFILE SEE SHT. 84



FOR DITCH DETAILS SEE SHT.

BUFFER DRAWING SHEET 23 OF 32

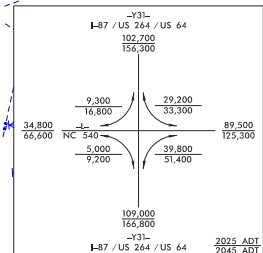
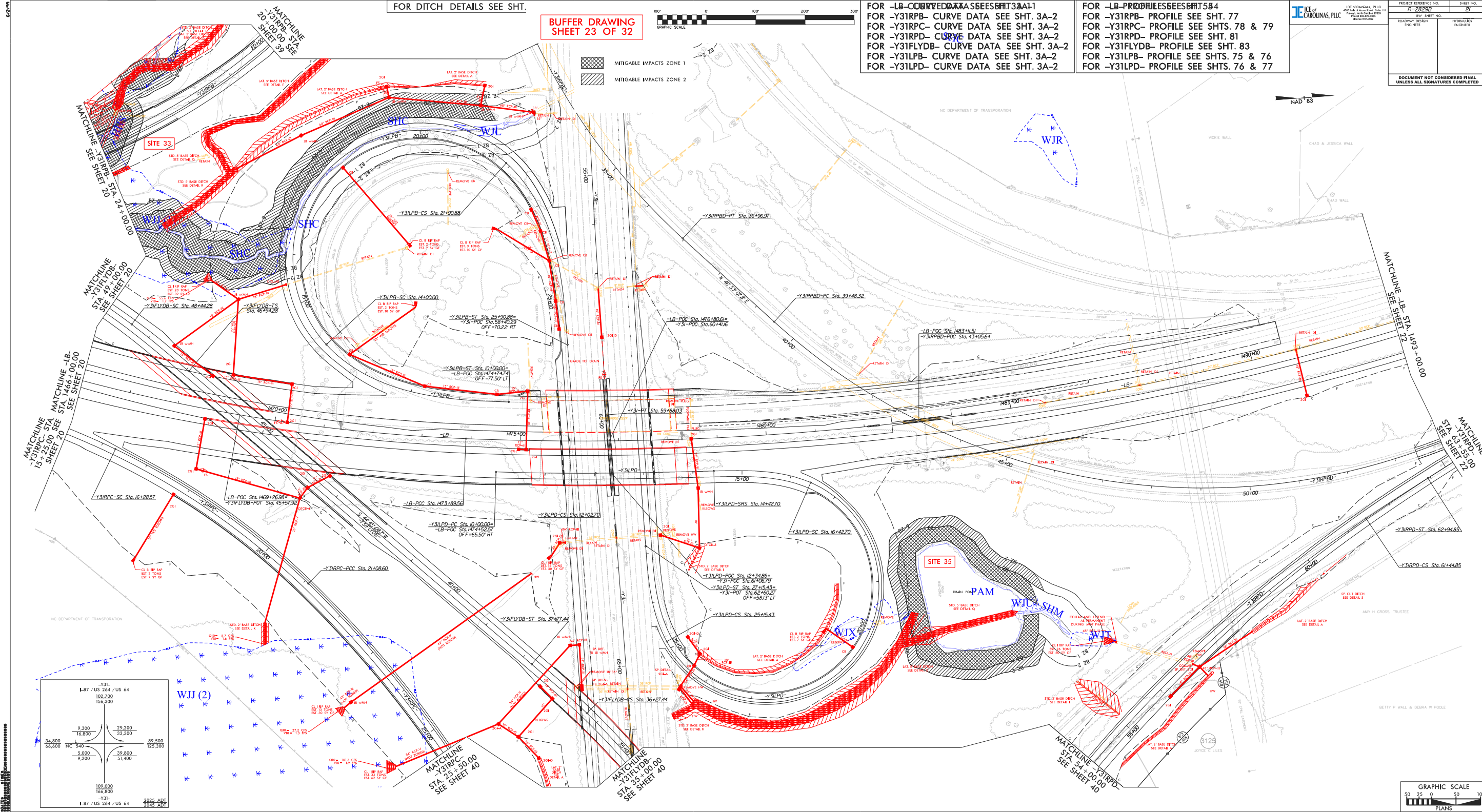


FOR -LB-CORRECTIONS SEE SHT. 3A-1
FOR -Y31RPB- CURVE DATA SEE SHT. 3A-2
FOR -Y31RPC- CURVE DATA SEE SHT. 3A-2
FOR -Y31RPD- CURVE DATA SEE SHT. 3A-2
FOR -Y31FLYDB- CURVE DATA SEE SHT. 3A-2
FOR -Y31LPB- CURVE DATA SEE SHT. 3A-2
FOR -Y31LPD- CURVE DATA SEE SHT. 3A-2

FOR -LB-PROFILES SEE SHT. 5B-4
FOR -Y31RPB- PROFILE SEE SHT. 77
FOR -Y31RPC- PROFILE SEE SHTS. 78 & 79
FOR -Y31RPD- PROFILE SEE SHT. 81
FOR -Y31FLYDB- PROFILE SEE SHT. 83
FOR -Y31LPB- PROFILE SEE SHTS. 75 & 76
FOR -Y31LPD- PROFILE SEE SHTS. 76 & 77

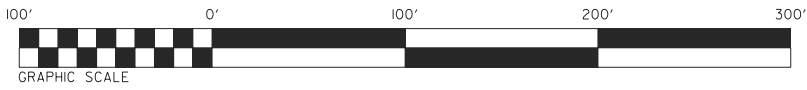
ICE of CAROLINAS, PLLC
10000 W. HUNTERS BLVD. SUITE 110
DURHAM, NC 27704
TEL: 919.487.1000
WWW.ICECAROLINAS.COM

PROJECT REFERENCE NO.	28299
SHEET NO.	21
DATE	08/20/2014
DESIGNER	ROADWAY DESIGN ENGINEER
CHECKER	ROADWAY DESIGN ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



8/17/99

BUFFER DRAWING SHEET 25 OF 32

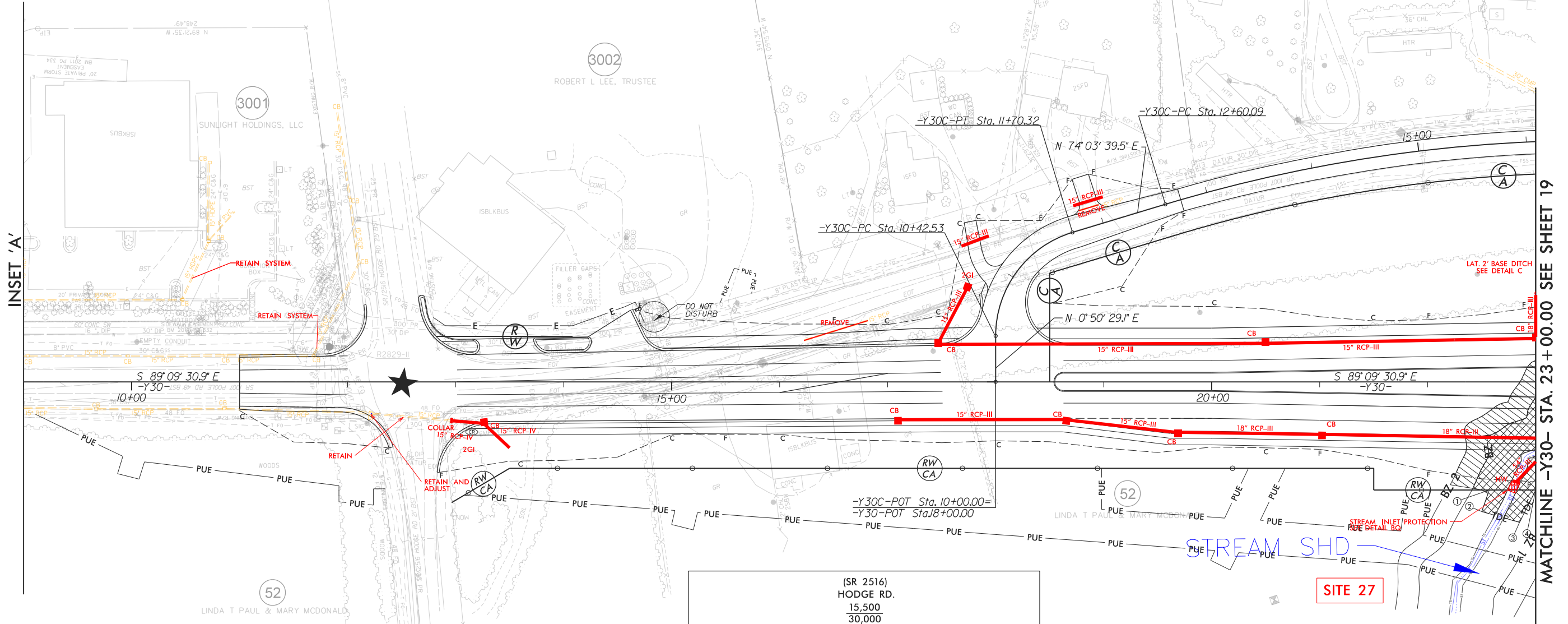


ICE of CAROLINAS, PLLC

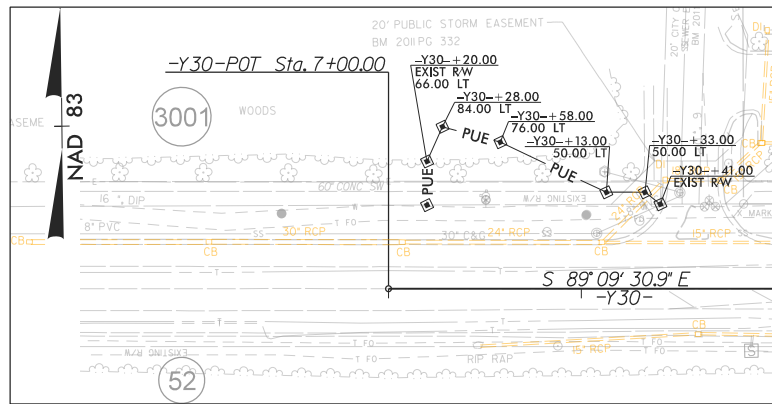
ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-0999

PROJECT REFERENCE NO. R-2829B	SHEET NO. 34
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

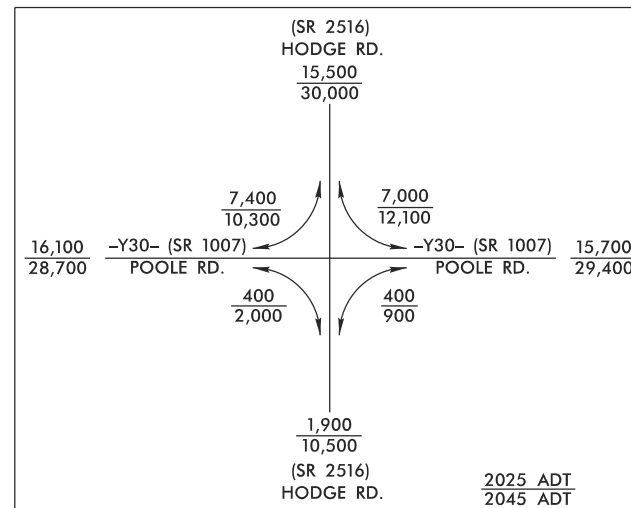
- MITIGABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2



INSET 'A'



INSET 'A'



FOR DITCH DETAILS SEE SHT.2D-1THRU 2D-5

FOR -Y30- CURVE DATA SEE SHT.3A-1 FOR -Y30- PROFILE SEE SHT.67
FOR -Y30C- CURVE DATA SEE SHT.3A-2 FOR -Y30C- PROFILE SEE SHT.74

MATCHLINE -Y30- STA. 23+00.00 SEE SHEET 19

SITE 27

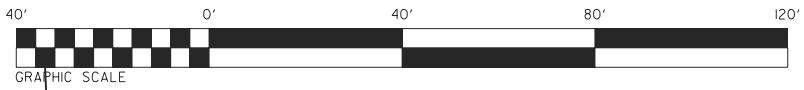
- TDE CALL OUT LEGEND
- ① -Y30- +57.00 100.00 RT
 - ② -Y30- +50.00 120.00 RT
 - ③ -Y30- +85.00 130.00 RT
 - ④ -Y30- +00.00 100.00 RT

DATE: 8/17/99
DRAWN: J. WILSON
CHECKED: J. WILSON
DATE: 8/17/99

8/17/99

**BUFFER DRAWING
SHEET 27 OF 32**

**SITE 26
ENLARGEMENT**



ICE of CAROLINAS, PLLC

ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-2999

PROJECT REFERENCE NO. <i>R-2829B</i>		SHEET NO.	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

MATCHLINE -Y30- STA.
38+00.00 SEE SHEET 19

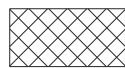
MATCHLINE -Y30A- STA.
22+00.00 SEE SHEET 19

SHC

SITE 26

3014

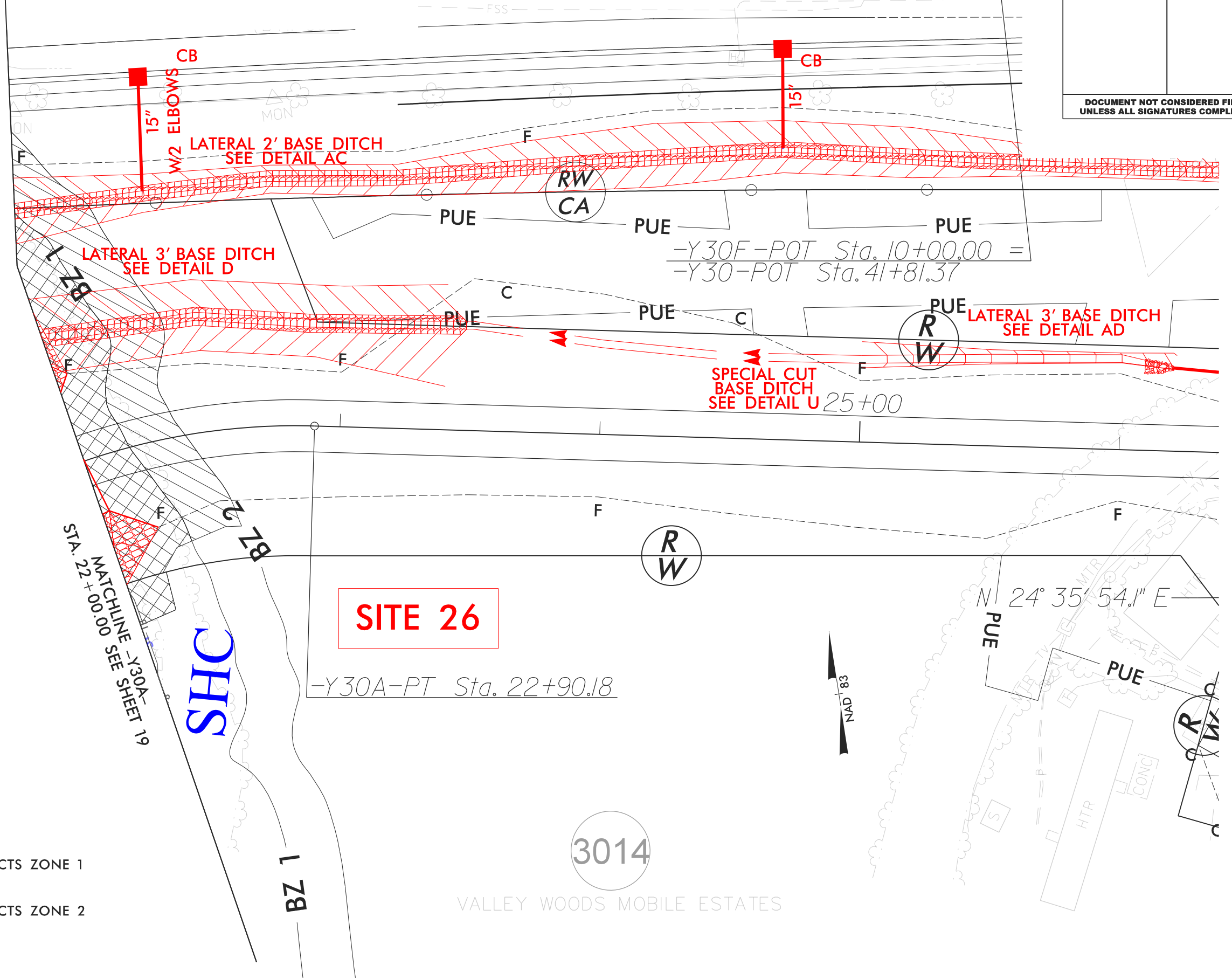
VALLEY WOODS MOBILE ESTATES



MITIGABLE IMPACTS ZONE 1





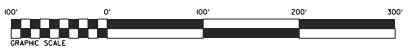
MITIGABLE IMPACTS ZONE 2



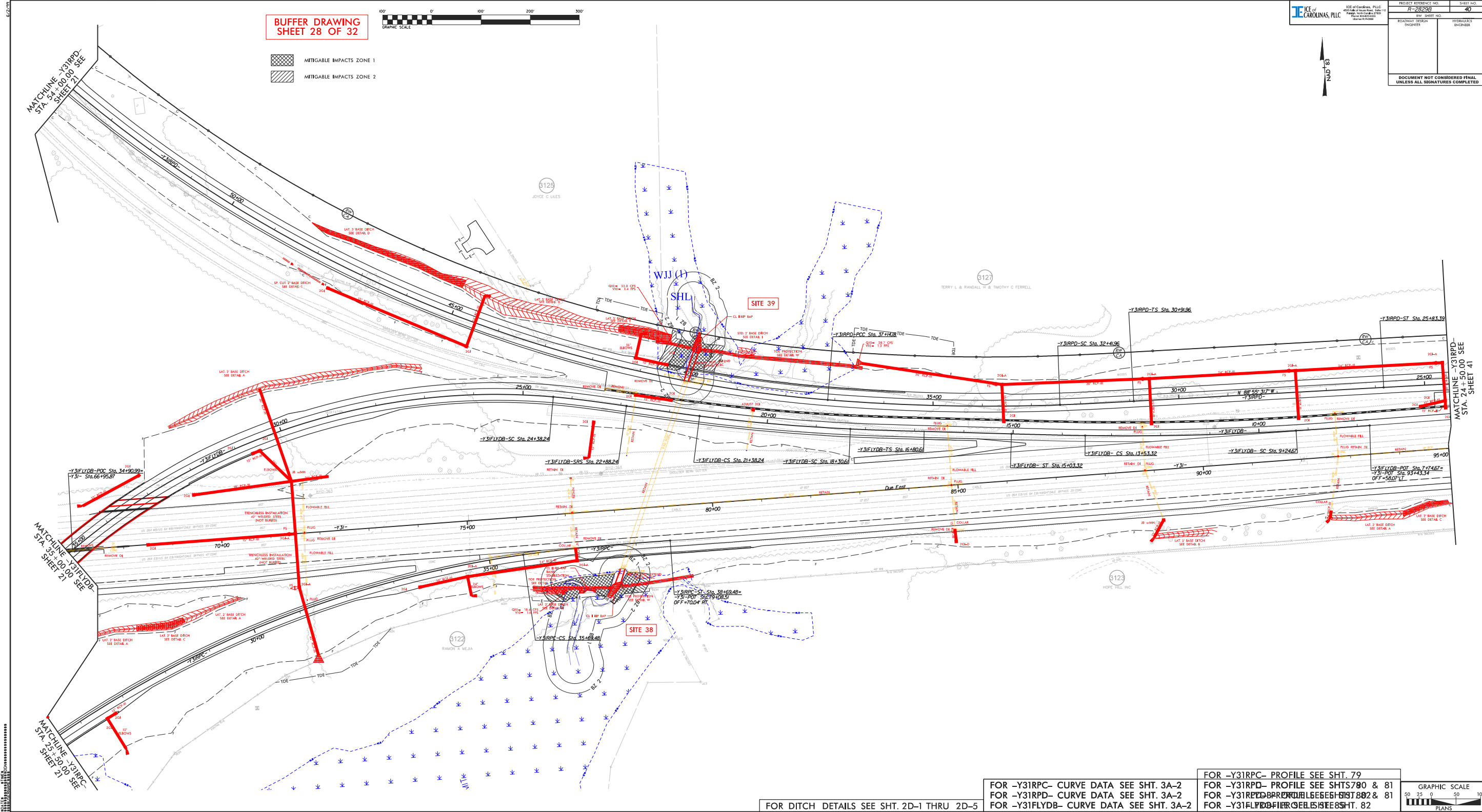
DATE: 8/17/99
DRAWN BY: JMC
CHECKED BY: JMC
DATE: 8/17/99
DRAWN BY: JMC
CHECKED BY: JMC

BUFFER DRAWING SHEET 28 OF 32

-  MITIGABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 2



ICE of CAROLINAS, PLLC 10200 W. GARDEN CITY BLVD. SUITE 110 GARDEN CITY, NC 27529 TEL: 919.688.1234 WWW.ICE-NC.COM		PROJECT REFERENCE NO. Y-28239	SHEET NO. 40
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



FOR -Y31RPC- CURVE DATA SEE SHT. 3A-2
FOR -Y31RPD- CURVE DATA SEE SHT. 3A-2
FOR -Y31FLYDB- CURVE DATA SEE SHT. 3A-2

FOR -Y31RPC- PROFILE SEE SHT. 79
FOR -Y31RPD- PROFILE SEE SHTS 780 & 81
FOR -Y31FLYDB- PROFILE SEE SHTS 802 & 81

