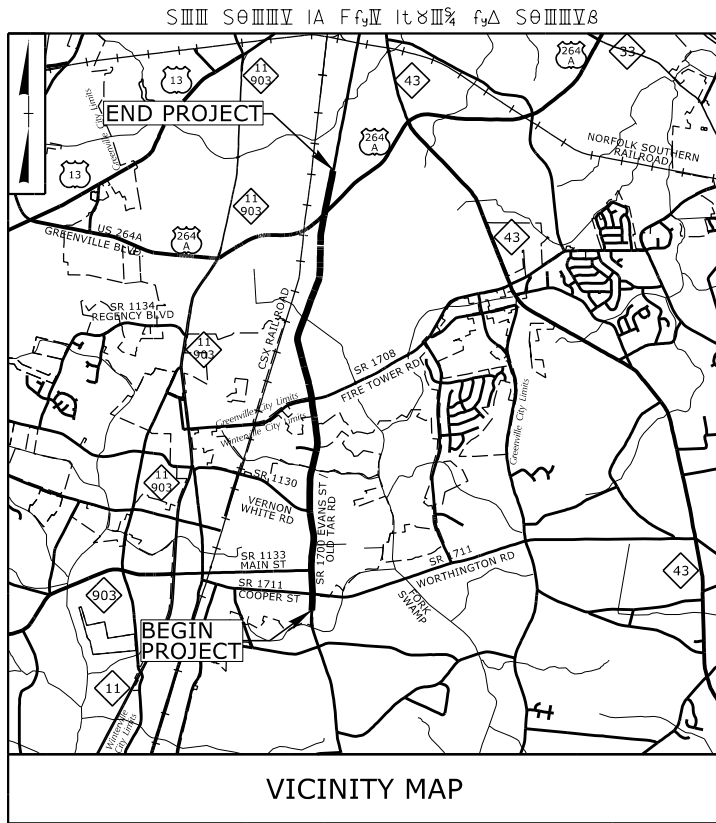


TIP PROJECT: U-2817

CONTRACT:



PROJECT REFERENCE NO.

U-2817

SHEET NO.

6

R/W SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS

DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL

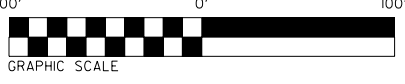
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING

SHEET 2 OF 28

NV15
NVS ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
P 919.485.1912
www.NV15.com
NC License # E-13333

NAD 83/NA 2011



STREAM & WETLAND IMPACTS

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

- 30

CHRIST PRESBYTERIAN CHURCH
- 36

HEATHER MELAINE BAILEY
DB 3431 PG 686
MB 61 PG. 27
- 37

MELISSA MCLAWHORN
DB 1867 PG 547
MB 61 PG. 27
- 38

LEE ANDERSON DUNCAN &
JEANANN WOODARD DUNCAN
DB 4304 PG 477
- 39

JERRY ROBINSON &
TOMICA ROBINSON
DB 4077 PG 471
- 40

GWENDOLYN TYSON
DB 1842 PG 718
- 41

ERIC HAZELTON
DB 1840 PG 386
- 42

QUENTIN BLACK
DB 1913 PG 310
- 43

MAURICE R DAVIS &
ALMETA DAVIS
DB 3479 PG 219
- 47

GEORGE FRANKLIN
CONWAY ET AL
MB 18 PG. 25
DB 3185 PG 837
- 48

EDDIE BROWN
DB 2536 PG 448
- 49

SHERIDIAN CLARK
DB 3163 PG 133
- 50

MARK COOPER
DB 721 PG 124
- 51

L'ASHAUNADA J BROWN
DB 3586 PG 265
- 52

ALLISON SLAYTON
DB 2158 PG 721
MB 44 PG. 79
- 53

DIANE MINSHEW
DB C97 PG 117
- 54

MARY JANE PARRISH
DB 68 PG 720
MB 32 PG. 203
- 54A

DENNIS COMBS

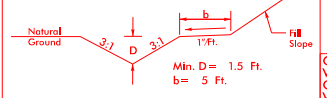
SITE 1

MATCHLINE SHEET 5
-L- STA. 35 + 00.00

SITE 1

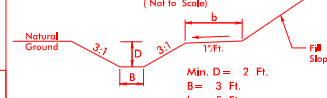
MATCHLINE SHEET 7
-L- STA. 47 + 50.00

DETAIL 5-A
LATERAL 'V' DITCH
(Not to Scale)



FROM -L- STA. 34 + 36
TO 36 + 02 RT, DDE = 288 CY

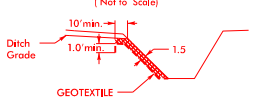
DETAIL 6-A
LATERAL BASE DITCH
(Not to Scale)



Q10=46.1 CFS
V10=2.6 FPS
Q2=26.7 CFS
V2=2.2 FPS

FROM -L- STA. 36 + 07 TO 37 + 00 RT, DDE = 457 CY

DETAIL 6-B
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of liner = CL I Rip-Rap (Embedded)

-L- 36 + 00 RT, 12 Tons CL I, 26 SY Geotextile
-L- 36 + 14 RT, 22 Tons CL I, 46 SY Geotextile

NOTES:

- PROP CONC ISLAND/SIDEWALK
- FOR -L- PROFILE, SEE SHEET NO. 32 & 33
- FOR -Y11- PROFILE, SEE SHEET NO. 41

NOTE: ALL EXISTING STORM DRAINAGE PIPES TO BE REMOVED UNLESS OTHERWISE NOTED.

REVISIONS

RIGHT OF WAY REVISION - 7/17/2023 - REVISED TCE & PUE ON PARCEL 44, REVISED PUE & DUE ON PARCELS 46 & 47, REVISED TCE & PUE ON PARCEL 48, REVISED TCE, PUE & DUE ON PARCEL 53, REVISED TCE, PUE & DUE ON PARCEL 54, ADDED DO NOT DISTURB LABEL ON PARCELS 37, 38, 39 & 46, REVISED PARCEL 48, REVISED TCE, PUE & DUE ON PARCEL 53, REVISED TCE, PUE & DUE ON PARCEL 54, ADDED DO NOT DISTURB LABEL ON PARCELS 34 & 35.

8/17/99

1/31/2025

PROJECT REFERENCE NO.

U-2817

R/W SHEET NO.

6

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS

DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL

UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING

SHEET 2 OF 28

NV5

NV5 ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CHRY, NC 27518
P 919.485.1912
www.NV5.com
NC License # E-13333

NAD 83/NA 2011

GRAPHIC SCALE

RIGHT OF WAY REVISION - 7/17/2023 - REVISED TCE & PUE ON PARCEL 44, REVISED PUE & DUE ON PARCELS 46 & 47, REVISED TCE & PUE ON PARCEL 48, REVISED TCE, PUE & DUE ON PARCEL 53, REVISED TCE, PUE & DUE ON PARCEL 54, ADDED DO NOT DISTURB LABEL ON PARCELS 37, 38, 39 & 46, REVISED PARCEL 48, REVISED TCE, PUE & DUE ON PARCEL 53, REVISED TCE, PUE & DUE ON PARCEL 54, ADDED DO NOT DISTURB LABEL ON PARCELS 34 & 35.

REVISIONS

1/31/2025 R:\Hyd\c\j\p\PERMITS\Environmental\Drawings\2817\6-B\6-B.dwg David Becker

STREAM & WETLAND IMPACTS

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

PROPERTY OWNERS LIST:

- 30 CHRIST PRESBYTERIAN CHURCH
- 36 HEATHER MELAINE BAILEY DB 3431 PG 686 MB 61 PG. 27
- 37 MELISSA MCLAWHORN DB 1867 PG 547 MB 61 PG. 27
- 38 LEE ANDERSON DUNCAN & JEANANN WOODARD DUNCAN DB 4304 PG 477
- 39 JERRY ROBINSON & TOMICA ROBINSON DB 4077 PG 471
- 40 GWENDOLYN TYSON DB 1842 PG 718
- 41 ERIC HAZELTON DB 1840 PG 386
- 42 QUENTIN BLACK DB 1913 PG 310
- 43 MAURICE R DAVIS & ALMETA DAVIS DB 3479 PG 219
- 47 GEORGE FRANKLIN CONWAY ET AL MB 18 PG. 25 DB 3185 PG. 837
- 48 EDDIE BROWN DB 2536 PG 448
- 49 SHERDIA CLARK DB 3163 PG 133
- 50 MARK COOPER DB 721 PG 124
- 51 L'ASHAUNADA J BROWN DB 3586 PG 265
- 52 ALLISON SLAYTON DB 2158 PG 721 MB 44 PG. 79
- 53 DIANE MINSEW DB C97 PG 117
- 54 MARY JANE PARRISH DB 68 PG 720 MB 32 PG. 203
- 54A DENNIS COMBS

DETAIL 5-A: LATERAL 'V' DITCH (Not to Scale)

Q10=8.2 CFS
V10=1.8 FPS
Q2=4.8 CFS
V2=1.6 FPS

Min. D = 1.5 Ft.
b = 5 Ft.

FROM -L- STA. 34+36 TO 36+02 RT, DDE = 288 CY

DETAIL 6-A: LATERAL BASE DITCH (Not to Scale)

Q10=46.1 CFS
V10=2.6 FPS
Q2=26.7 CFS
V2=2.2 FPS

Min. D = 2 Ft.
b = 3 Ft.
b = 5 Ft.

FROM -L- STA. 36+07 TO 37+00 RT, DDE = 457 CY

DETAIL 6-B: RIP RAP AT EMBANKMENT (Not to Scale)

Type of Liner = CL I Rip-Rap (Embedded)

-L- 36+00 RT, 12 Tons CL I, 26 SY Geotextile
-L- 36+14 RT, 22 Tons CL I, 46 SY Geotextile

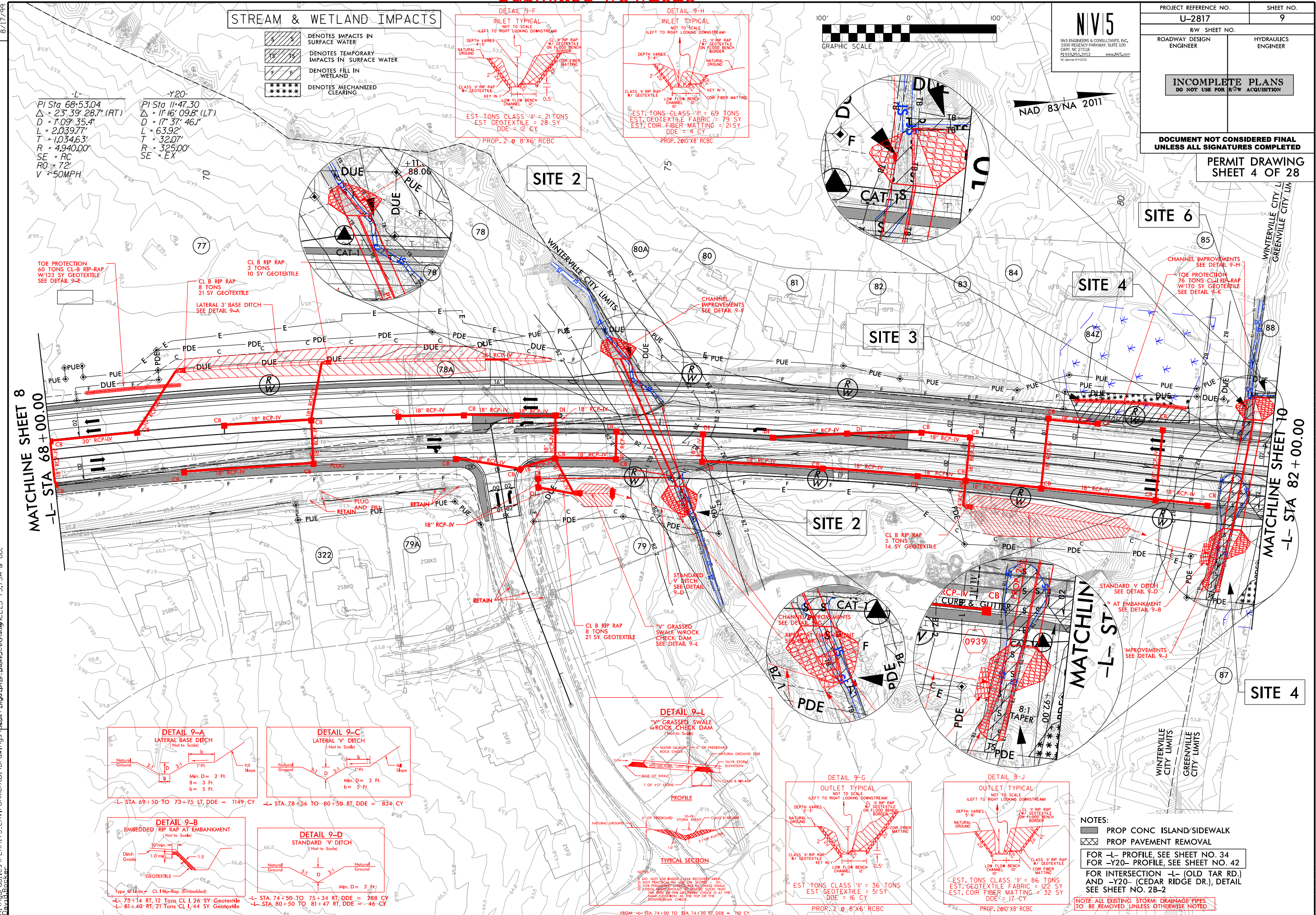
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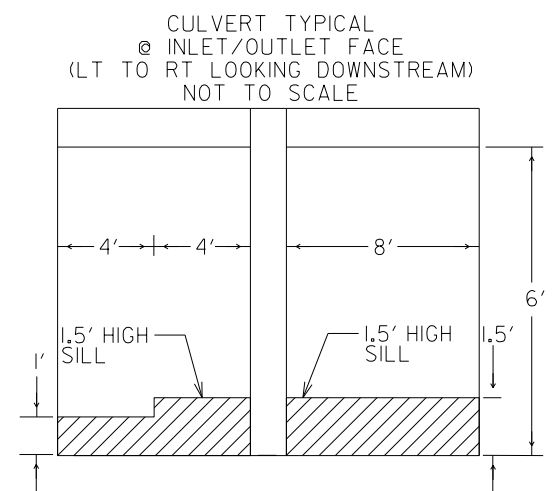
- PROP CONC ISLAND/SIDEWALK
- FOR -L- PROFILE, SEE SHEET NO. 32 & 33
- FOR -Y11- PROFILE, SEE SHEET NO. 41

NOTE: ALL EXISTING STORM DRAINAGE PIPES TO BE REMOVED UNLESS OTHERWISE NOTED.

R: /Hydr au

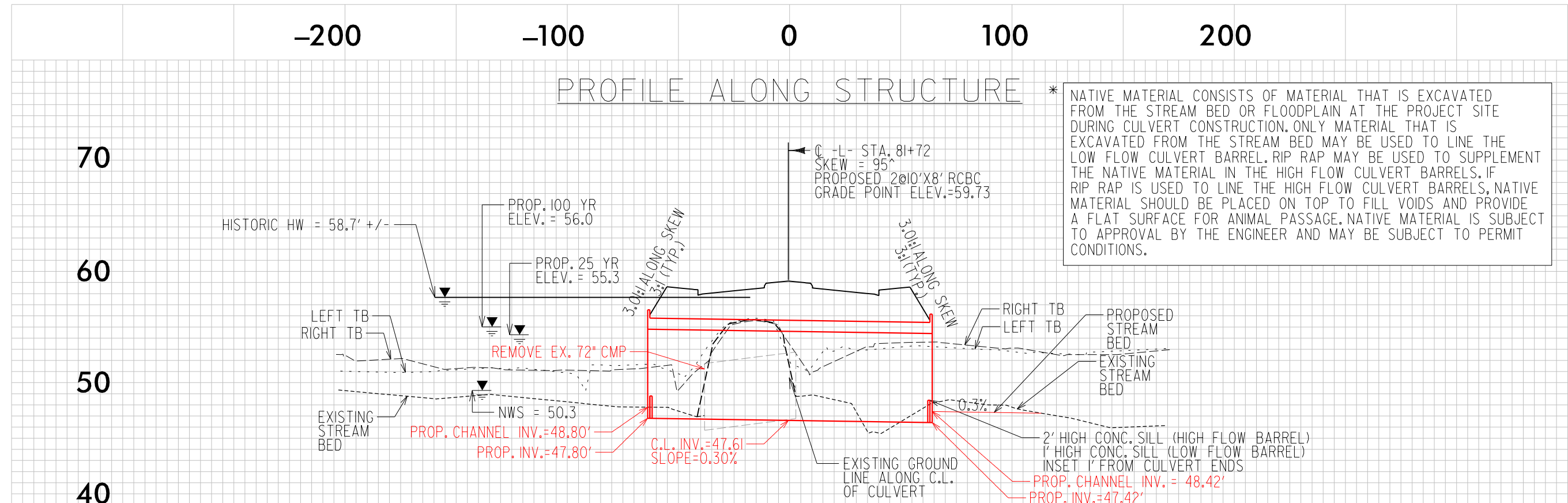
**NOTE: ALL EXISTING STORM DRAINAGE PIPES
TO BE REMOVED UNLESS OTHERWISE NOTED.**





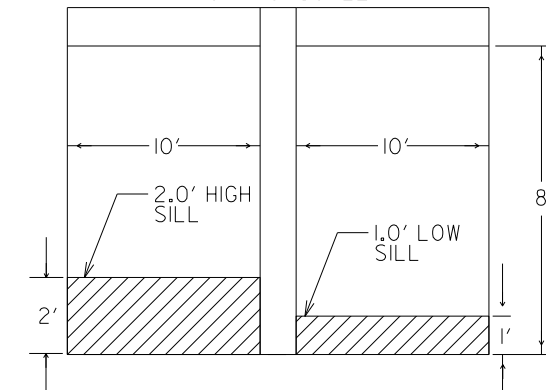
SITE 4

-L-8I+72 -2 @ 10' x8' RCBC



STREAM NOTE:
U/S CHANNEL IS 8' WIDE W/ 2'-3' HIGH
BANKS ABOVE NWS. PIPE INLET HAS A 15' WIDE
BY 10' LONG SCOUR HOLE. PIPE OUTLET HAS
A 21' WIDE BY 60' LONG SCOUR HOLE. CHANNEL
D/S IS 10' WIDE W/ 4' HIGH BANKS ABOVE NWS.
BANKS STABLE. BED MATERIAL IS SILT AND SAND.
FLOODPLAIN U/S IS LAWNS AND WOODS.
FLOODPLAIN D/S IS THICK WOODS.

CULVERT TYPICAL
 @ INLET/OUTLET FACE
 (LT TO RT LOOKING DOWNSTREAM)
 NOT TO SCALE



6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2817	X-27

PERMIT DRAWING
SHEET 8 OF 28

SITE 5

SITE 5

SITE 3

SITE 3

SITE 3

82 + 50.00

82 + 00.00

81 + 00.00

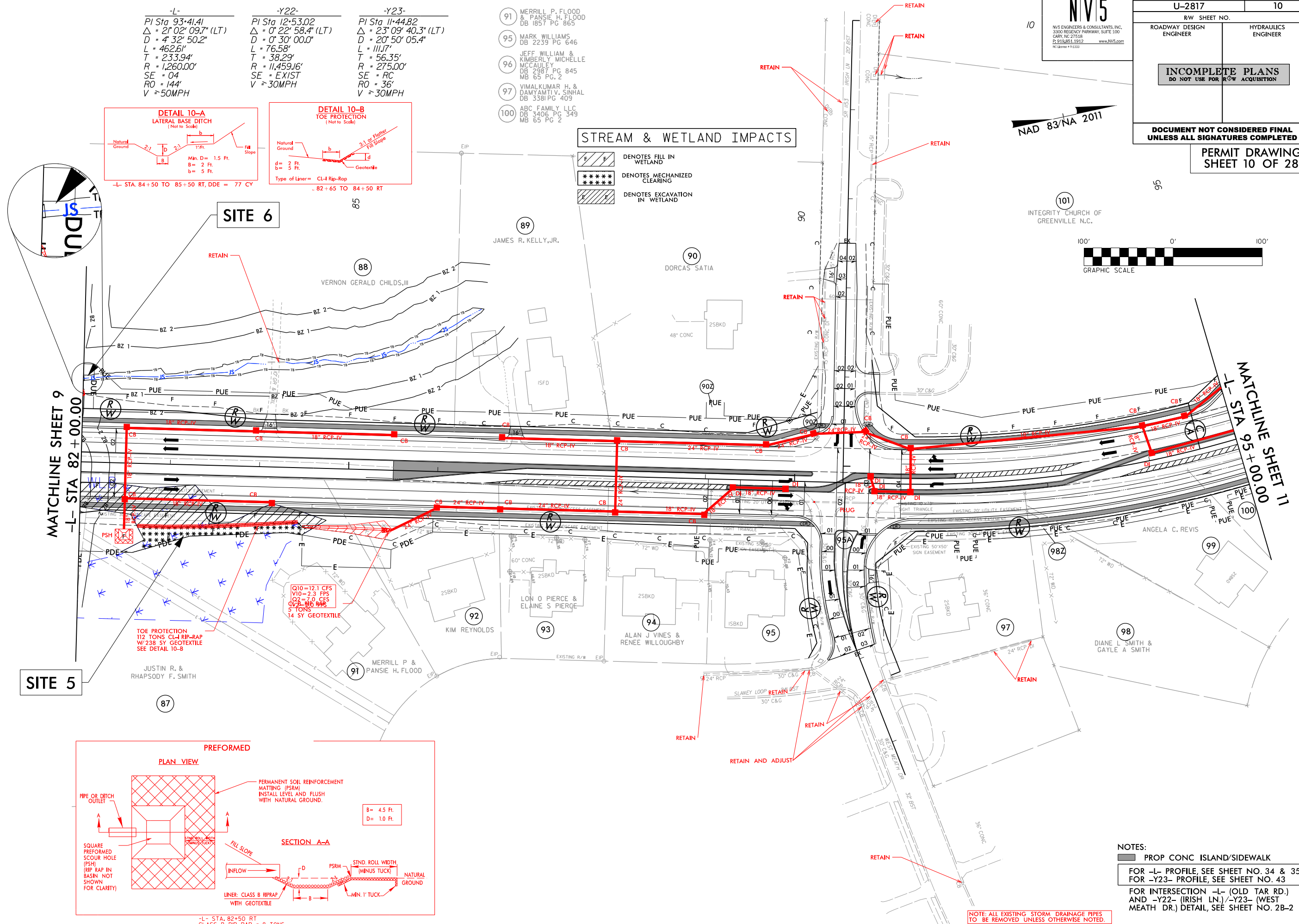
80 + 50.00

80 + 00.00

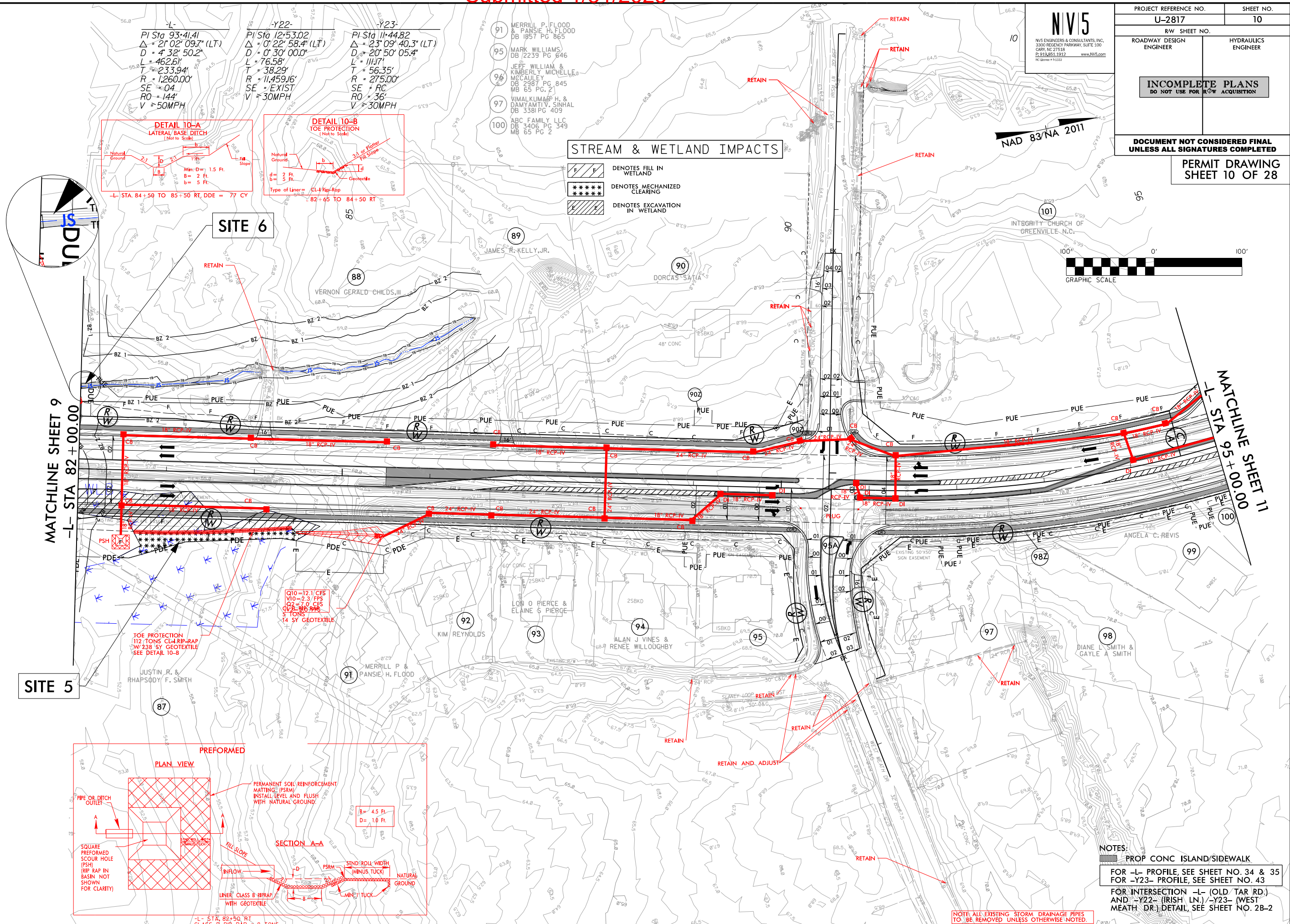
-/-

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RA\H\06\01\01\PERMITS\Environmental\Drawings\U2817_hyd_prm_XPL_L.dgn
David Bocker

FOR -L- PROFILE, SEE SHEET NO. 34 & 35
FOR -Y23- PROFILE, SEE SHEET NO. 43
FOR INTERSECTION -L- (OLD TAR RD.)
AND -Y22- (IRISH LN.) -Y23- (WEST
MEATH DR.) DETAIL, SEE SHEET NO. 2B-2



FOR -L- PROFILE, SEE SHEET NO. 34 & 35
FOR -Y23- PROFILE, SEE SHEET NO. 43
FOR INTERSECTION -L- (OLD TAR RD.)
AND -Y22- (IRISH LN.) -Y23- (WEST
MEATH DR.) DETAIL, SEE SHEET NO. 2B-2



8/17/99

155 WHITE OAK CREEK
TOWNHOMES
HOMEOWNERS ASSOC.

156 KAREN CHARLOTTE MARKS TRUSTEE

150 SHAMROCK CLUSTER DEVELOPMENT
HOME OWNERS ASSOCIATION-COVENANTS

161 KAE ENTERPRISES LLC

165 TAYLOR COMMERCIAL PROP LLC

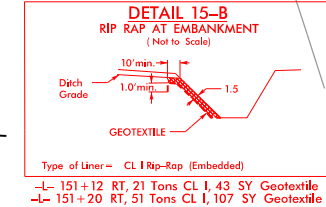
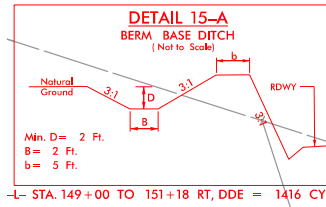
167 EVANS STREET FOUR, LLC

168A COASTAL
AGROBUSINESS INC.

STREAM & WETLAND IMPACTS

100' 0' 100'
GRAPHIC SCALE

MATCHLINE SHEET 15A
-Y48- STA 11+75.00



NAD 83/NA 2011

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3300 REGENCY PARKWAY, SUITE 100
DARY, NC 27518
919.851.1912
www.NV5.com
NC License # 142033

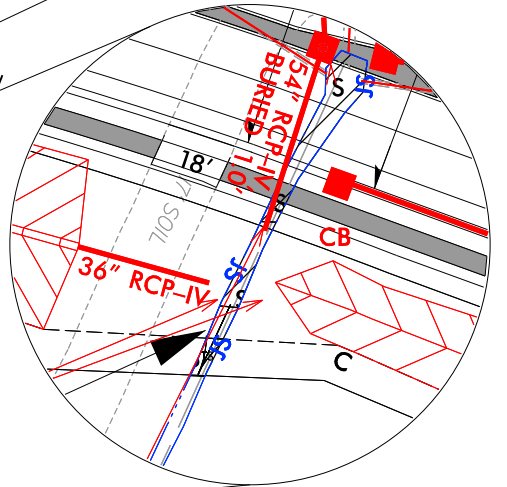
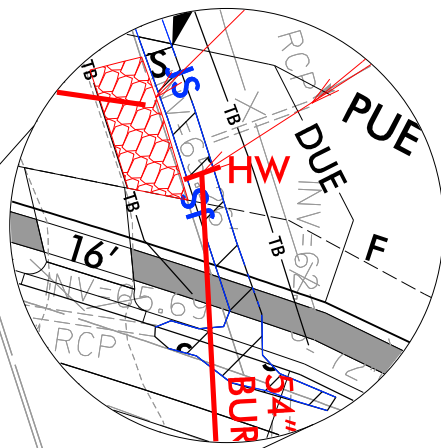
PROJECT REFERENCE NO.		SHEET NO.	
U-2817		15	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR ROW ACQUISITION			

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 12 OF 28

-L-
PI Sta 147+72.72
 $\Delta = 36^{\circ} 07' 12.3''$ (RT)
D = 4' 32" 50.2"
L = 794.32'
T = 410.86'
R = 1,260.00'
SE = 04
RO = 144'
V = 50MPH

-Y48-
PI Sta 15+62.72
 $\Delta = 9^{\circ} 35' 53.4''$ (LT)
D = 11' 01" 06.3"
L = 87.11'
T = 43.66'
R = 520.00'
SE = 03
RO = 116'
V < 40MPH



MATCHLINE SHEET 14
-L- STA 143+50.00

MATCHLINE SHEET 16
-L- STA 153+00.00

Q10=26.8 CFS
V10=2.2 FPS
Q2=15.5 CFS
V2=2.0 FPS

CL B RIP RAP
28 SY GEOTEXTILE
BERM 2' BASE DITCH
SEE DETAIL 15-A

INV. OUT=61.63
RIPRAP AT EMBANKMENT
SEE DETAIL 15-B

Q10=4.5 CFS
V10=1.4 FPS
Q2=2.6 CFS
V2=1.3 FPS

CL B RIP RAP
3 TONS
10 SY GEOTEXTILE

NOTES:

- ★ UPGRADED / PROPOSED SIGNAL
- PROP CONC ISLAND/SIDEWALK
- x HORIZONTAL CURVE RADIUS BELOW DESIGN SPEED
- FOR -L- PROFILE, SEE SHEET NO. 36 & 37
- FOR -Y48- PROFILE, SEE SHEET NO. 45

REVISIONS

RIGHT OF WAY REVISION - 7/17/2023 - REVISED ROW ON PARCELS 155, 156, 166 & 168, REVISED PDE ON PARCELS 155, 156, 166 & 168, REMOVED PDE ON PARCELS 168 & 168A, REVISED PUE ON PARCELS 155, 156, 157, 159, 160, 161, 162, 163, 164, 165, 166, 167 & 168, REVISED DUE ON PARCELS 156, 159, 160, 161, 162, 163, 164, 165, 166, 167 & 168, REVISED PROPERTY OWNER NAME DO NOT DISTURB LABEL ON PARCELS 156, 159, 164 & 162, REMOVED TCE ON PARCELS 150 & 164, COMBINED PARCELS 157 & 158 TO FORM PARCEL 157, REVISED PROPERTY OWNER NAME 157 & 158 TO FORM PARCEL 157, COMBINED PARCELS 168 & 169 TO FORM PARCEL 168, COMBINED PARCELS 167, 171 & 172 TO FORM PARCEL 167

1/31/2025
R:\Hydro\Projects\Permits\Environmental\Drawings\155-168A\155-168A.dwg
David Becker

PROJECT REFERENCE NO.
U-2817

RW SHEET NO.
15

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR ROW ACQUISITION

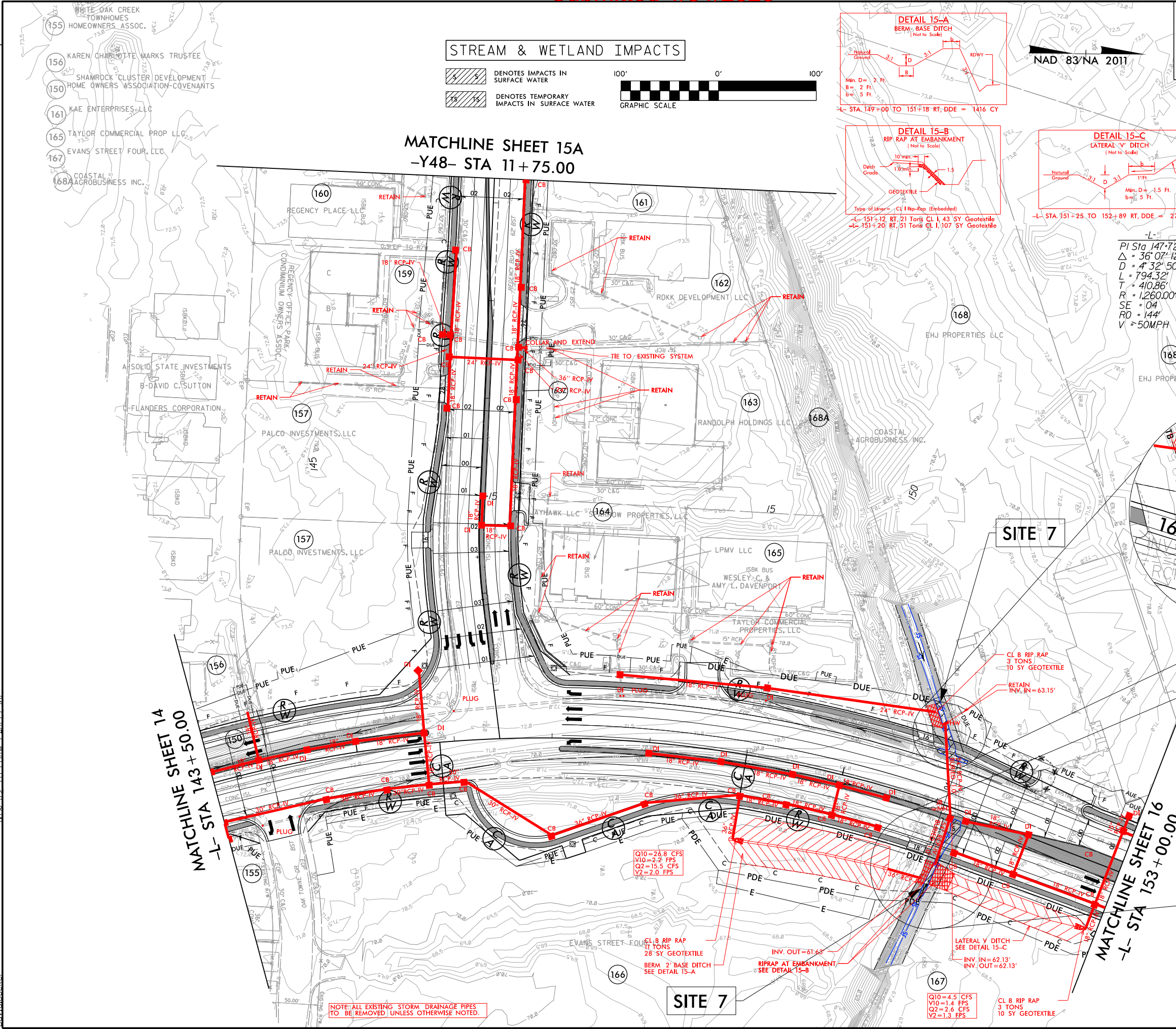
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 12 OF 28

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DARY, NC 27518
919.851.1912
www.NV5.com

NAD 83/NA 2011

RIGHT OF WAY REVISION - 7/17/2023 - REVISED ROW ON PARCELS 167, 157 & 150, REVISED PUE ON PARCELS 155, 165, 166 & 168, REVISED PDE ON PARCELS 167, 156 & 150, REMOVED PUE ON PARCELS 168 & 168A, REVISED PUE ON PARCELS 155, 156, 157, 150, 159, 160, 161, 162, 163, 164, 165, 166, 167 & 168, REVISED DUE ON PARCELS 156, 150, 159, 160, 161, 162, 163, 164, 165, 166, 167 & 168, REVISED PROPERTY OWNER NAME DO NOT DISTURB LABEL ON PARCELS 156, 159, 164 & 162, REMOVED TCE ON PARCELS 150 & 164, COMBINED PARCELS 157 & 158 TO FORM PARCEL 157, REVISED PROPERTY OWNER NAME 11 & 12 TO FORM PARCEL 167.



8/17/99

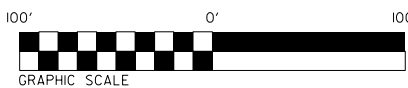
-L-
PI Sta 165+26.35
 $\Delta = 1' 17" 26.3" (RT)$
D = 0' 44' 31.8"
L = 173.90'
T = 86.95'
R = 7,720.00'
SE = NC
V = 50MPH

NV15
NVS ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27513
P: 919.251.1912 www.NV5.com
NC License # E-13333

PROJECT REFERENCE NO.		SHEET NO.	
U-2817		16	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

PERMIT DRAWING
SHEET 14 OF 28

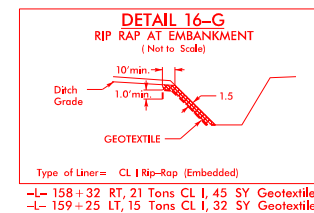
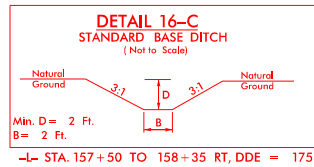
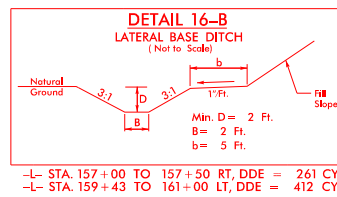
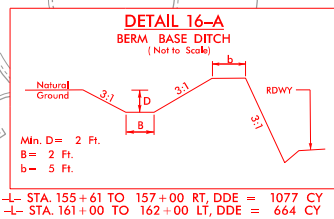
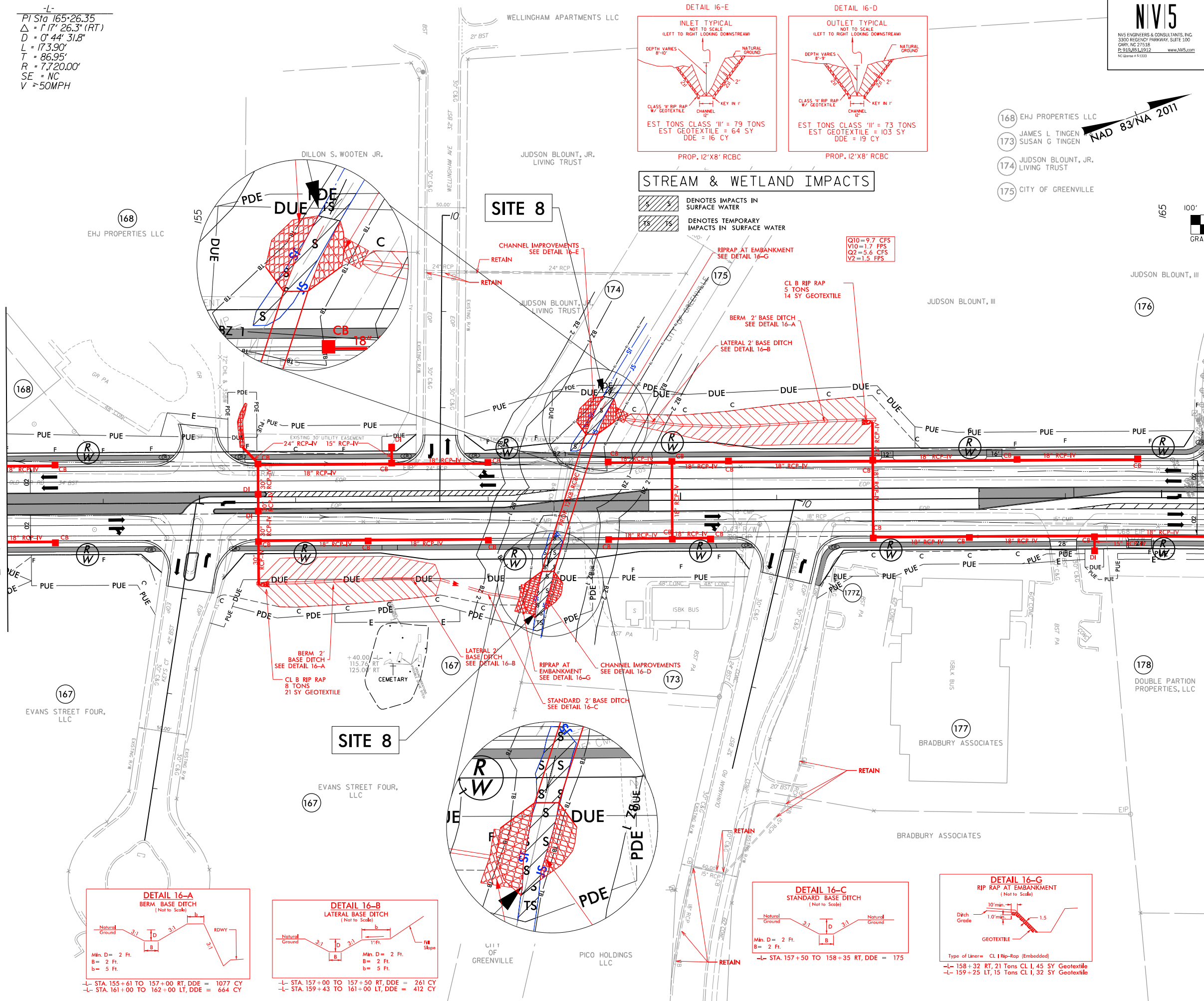
- 168 EHJ PROPERTIES LLC
173 JAMES L TINGEN
SUSAN G TINGEN
174 JUDSON BLOUNT, JR.
LIVING TRUST
175 CITY OF GREENVILLE



NAD 83/NA 2011

MATCHLINE SHEET 15
-L- STA 153+00.00

MATCHLINE SHEET 17
-L- STA 165+50.00



NOTES:
[Symbol] PROP PAVEMENT REMOVAL
[Symbol] PROP CONC ISLAND/SIDEWALK
FOR -L- PROFILE, SEE SHEET NO. 37

REVISIONS

RIGHT OF WAY REVISION - 7/7/2023 - REMOVED PDE ON PARCEL 168, REVISED PUE & DUE ON PARCEL 168, REVISED TCE & PUE ON PARCEL 178, REVISED PUE ON PARCELS 170, 177 & 176, REVISED ROM, PUE & DUE ON PARCEL 167, ADDED PUE ON PARCEL 171, REVISED PROPERTY OWNER NAME ON PARCELS 173 & 178, ADDED DO NOT DISTURB LABEL ON PARCEL 170, CURB CUT SHIFTED ON PARCEL 178, COMBINED PARCELS 168 & 169 TO FORM PARCEL 168, REVISED TCE ON PARCEL 168, REVISED ROM ON PARCEL 176, COMBINED PARCELS 171 & 172 TO FORM PARCEL 167, REVISED DUE ON PARCEL 176.

1/31/2025
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Submitted 1/31/2025

8/17/99

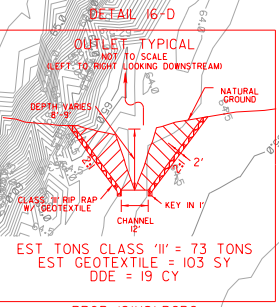
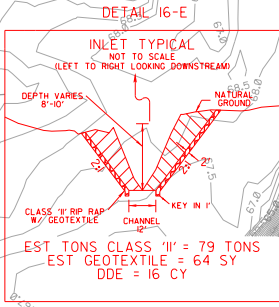
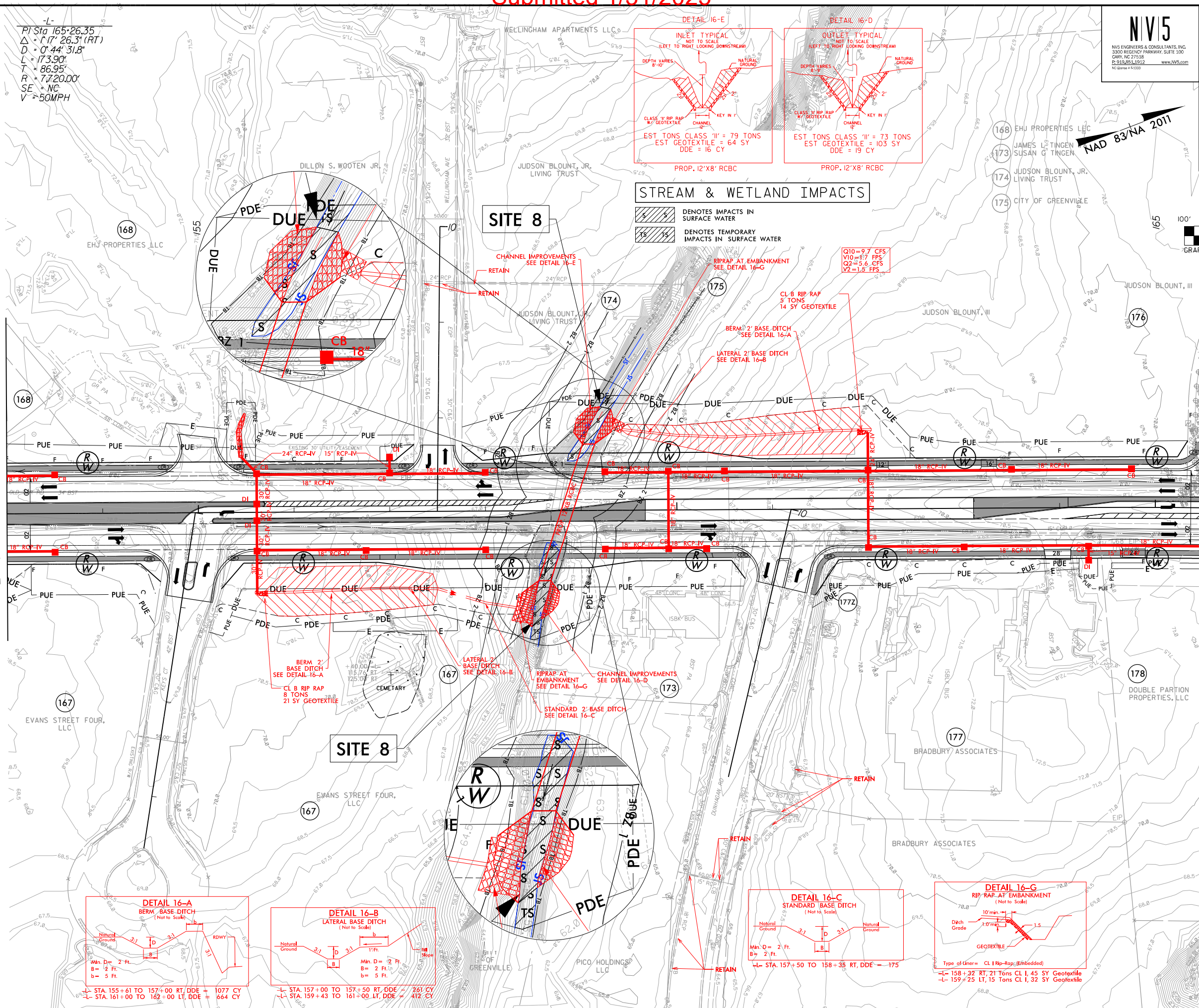
RIGHT OF WAY REVISION - 7/7/2023 - REMOVED PDE ON PARCEL 168, REVISED PUE & DUE ON PARCEL 168, REVISED TCE & PUE ON PARCEL 178, REVISED PUE ON PARCELS 170, 177 & 176, REVISED R/W, PUE & DUE ON PARCEL 167, ADDED PUE ON PARCEL 171, REVISED PROPERTY OWNER NAME ON PARCELS 173 & 178, ADDED DO NOT DISTURB LABEL ON PARCEL 170, CURB CUT SHIFTED ON PARCEL 178, COMBINED PARCELS 168 & 169 TO FORM PARCEL 168, REVISED TCE ON PARCEL 168, REVISED R/W ON PARCEL 176, COMBINED PARCELS 167 & 172 TO FORM PARCEL 167, REVISED DUE ON PARCEL 176.

1/31/2025
R:\Hydro\Projects\Permits\Environmental\Drawings\David\Rocke

-L-
PI Sta 165+26.35
 $\Delta = 1' 17" 26.31" (RT)$
 $D = 0' 44" 31.8"$
 $L = 173.90'$
 $T = 86.95'$
 $R = 7720.00'$
 $SE = NC$
 $V = 50MPH$

MATCHLINE SHEET 15
-L- STA 153+00.00

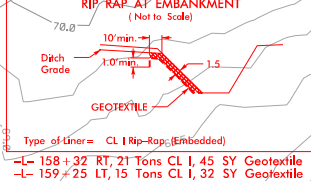
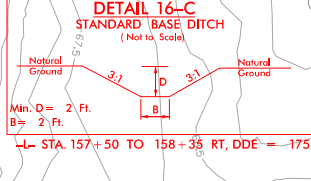
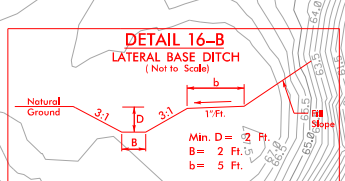
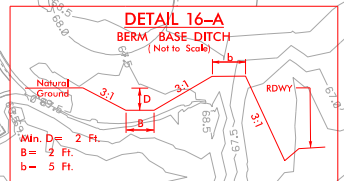
MATCHLINE SHEET 17
-L- STA 165+50.00



STREAM & WETLAND IMPACTS

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

Q10 = 9.7 CFS
V10 = 7.7 FPS
Q2 = 5.6 CFS
V2 = 1.5 FPS



NOTES:
 PROP PAVEMENT REMOVAL
 PROP CONC ISLAND/SIDEWALK
FOR -L- PROFILE, SEE SHEET NO. 37



ENGINEERS + CONSULTANTS

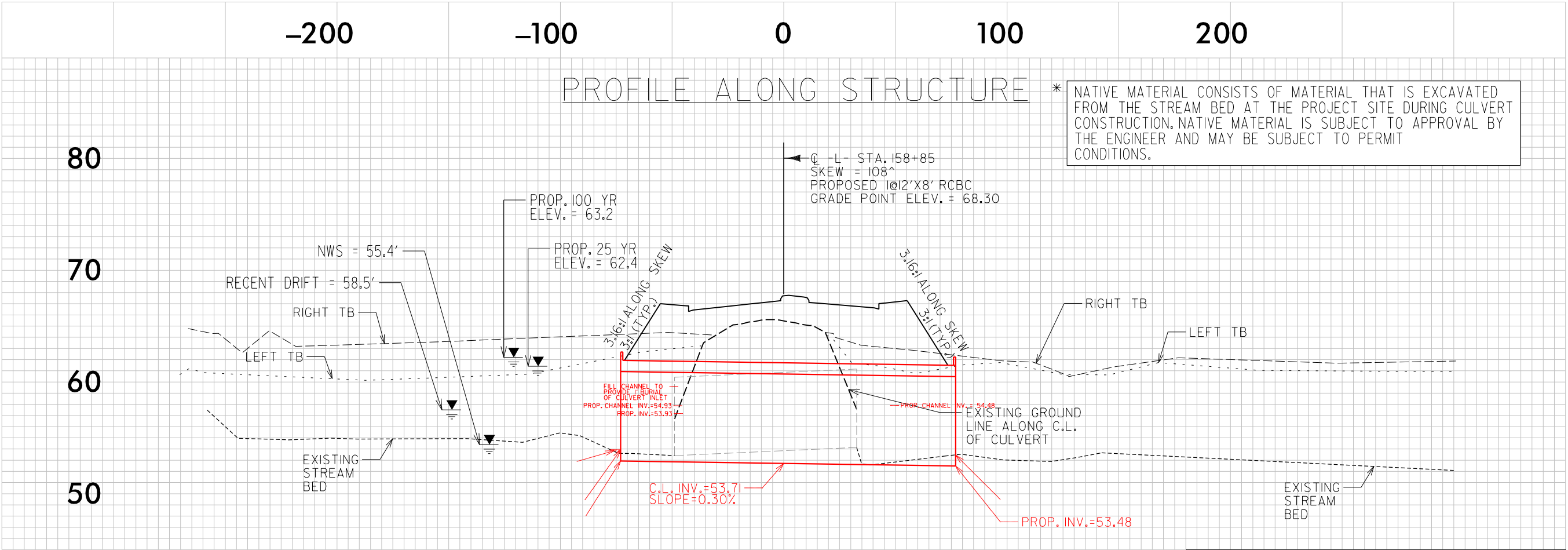
6750 TRYON ROAD
CARY, NC 27518
phone: 919.851.1912
CALYXengineers.com
NC License # F-1333

PROJECT REFERENCE NO. U-2817		SHEET NO.	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR ROW ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

PERMIT DRAWING
SHEET 16 OF 28

SITE 8

-L- 158+85 - 1@ 12' x8' RCBC



STREAM NOTE:
CHANNEL IS APPROX. 10'-12' WIDE W/ 7'-8' HIGH BANKS AND 1:1 SLOPES WHICH ARE STABLE. BANKS ARE LINED W/ HEAVY VEGETATION EXCEPT ON THE SOUTH SIDE (D/S), UNDERBRUSH W/ TALL HARDWOODS. NORMAL DEPTH IS 0.5'-1.5'. FLOODPLAIN IS MADE UP OF OPEN FIELDS EXCEPT FOR THICK WOODS ON SOUTH SIDE (D/S). BED MATERIAL IS SILT AND SAND.

REVISIONS

RIGHT OF WAY REVISION - 07/06/2018	ADJUSTED PERMANENT UTILITY EASEMENT ON PARCELS 4.7 AND 8.
RIGHT OF WAY REVISION - 07/06/2018	ADJUSTED PERMANENT UTILITY EASEMENT ON PARCELS 4.7 AND 8.
RIGHT OF WAY REVISION - 07/06/2018	ADJUSTED PERMANENT UTILITY EASEMENT ON PARCELS 4.7 AND 8.

6/23/16

0510	PROJ. REFERENCE NO.	SHEET NO.
	U-2817	X-64

PERMIT DRAWING
SHEET 19 OF 26

SITE 10

187 + 00.00

SITE 10

186 + 50.00

SITE 10

186 + 00.00

SITE 10

185 + 50.00

BROOKFIELD APARTMENTS
DRIVEWAY

0.020

0.020

570.12

WLB

3:1

CLEARING LIMIT

68.49

3:1

569.72

0.020

0.020

569.72

3:1

WLB

CLEARING LIMIT

68.68

3:1

569.31

0.020

0.020

569.31

3:1

WLB

CLEARING LIMIT

68.82

3:1

568.92

0.020

0.020

568.92

3:1

WLB

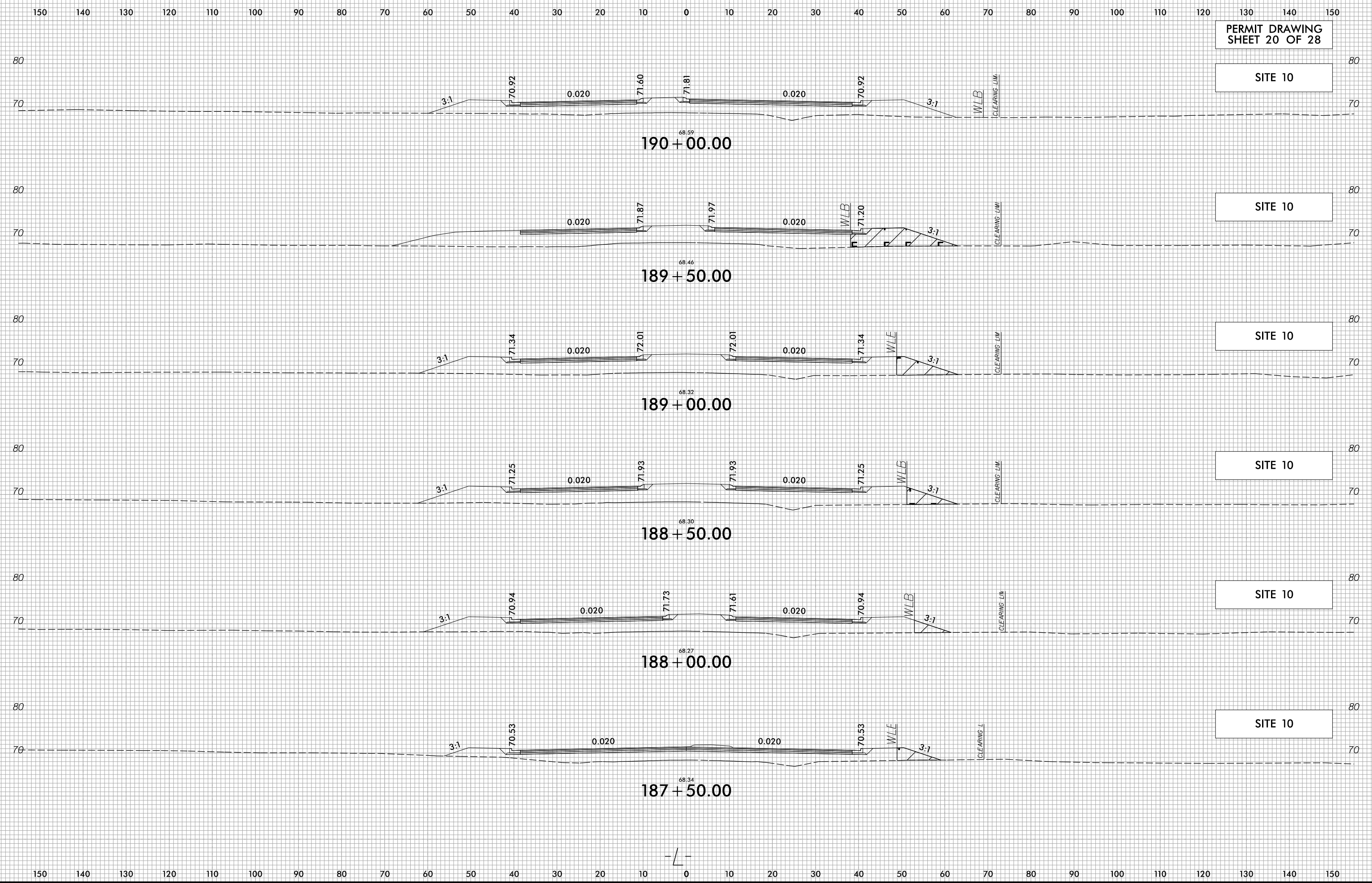
68.83

-/-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2817	X-65

PERMIT DRAWING
SHEET 20 OF 28



1/31/2025
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David Becker

8/17/99

REVISIONS

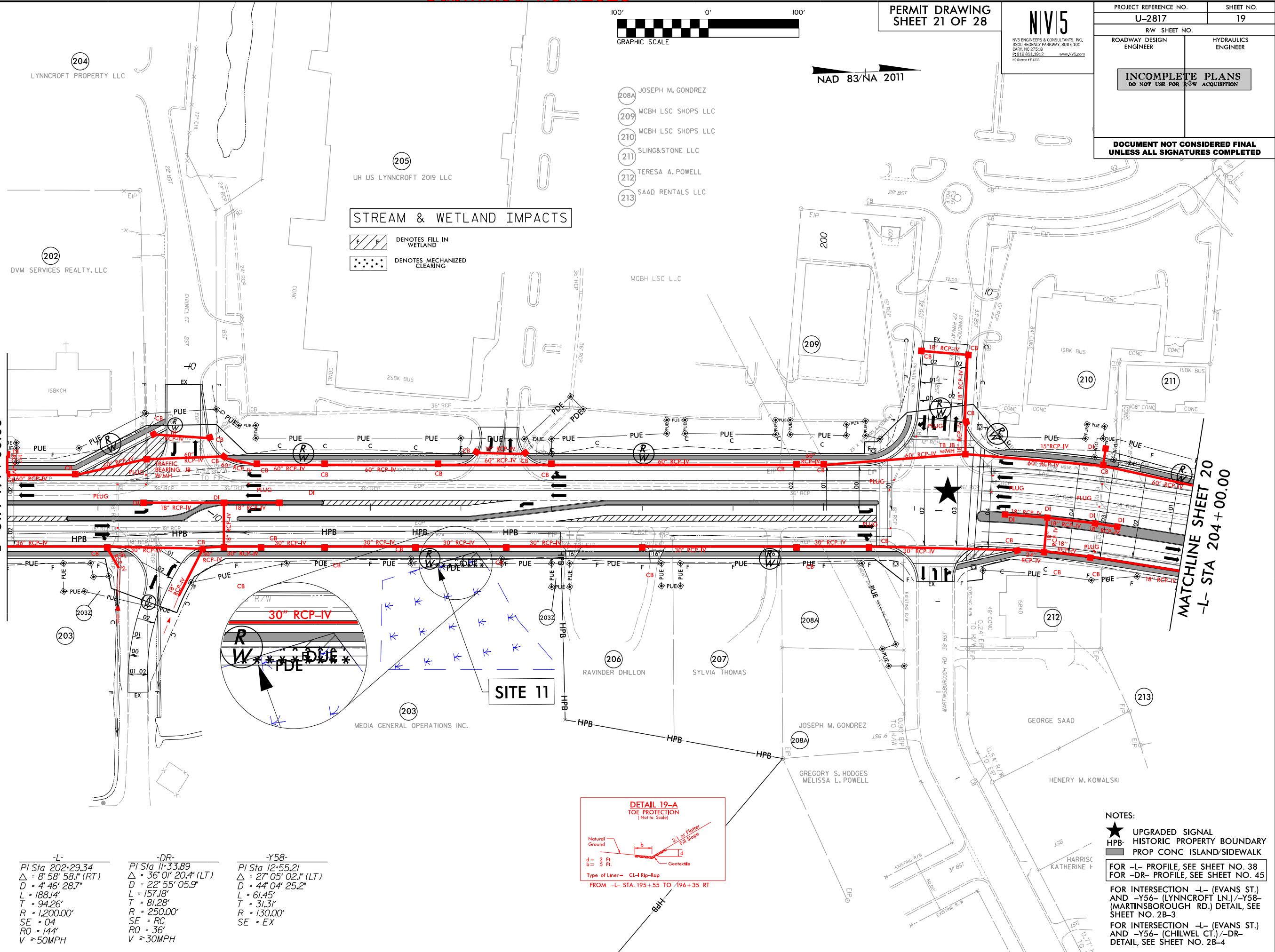
RIGHT OF WAY REVISION - 7/17/2023 - REVISED ROW FOR PARCELS 205, 209 & 212 REMOVED ROW ON PARCEL 213 REVISED TCE ON PARCELS 203, 205, 206, 207, 208A & 213.
REMOVED TCE ON PARCEL 212 REVISED PUE ON PARCELS 203, 205, 206, 207, 208A, 209 & 210 REVISED PROPERTY OWNER NAME FOR PARCELS 202, 204 & 205. COMBINED
PARCELS 205 & 208A TO FORM PARCEL 208A. REVISED DUE ON PARCEL 203. ADDED DO NOT DISTURB LABEL TO PARCEL 210.

1/31/2025
R:\Hodge\Projects\PERMITS\Environmental\Drawings\J28171\2025\1000\1000.dwg
David Hodge

MATCHLINE SHEET 18

-L- STA 191+00.00

MATCHLINE SHEET 20
-L- STA 204+00.00



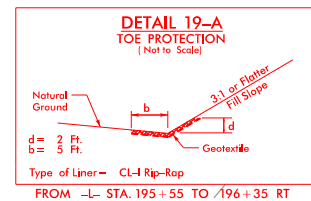
PERMIT DRAWING
SHEET 21 OF 28

NV5

NV5 ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
DALLAS, TX 75246
P: 972.951.1912 www.nv5.com
NO. License # 143533

PROJECT REFERENCE NO.		SHEET NO.	
U-2817		19	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

-L-	-DR-	-Y58-
PI Sta 202+29.34	PI Sta 11+33.89	PI Sta 12+55.21
$\Delta = 8^{\circ} 58' 58.1''$ (RT)	$\Delta = 36^{\circ} 01' 20.4''$ (LT)	$\Delta = 27^{\circ} 05' 02.1''$ (LT)
D = 4' 46' 28.7"	D = 22' 55' 05.9"	D = 44' 04' 25.2"
L = 188.14'	L = 157.18'	L = 61.45'
T = 94.26'	T = 81.28'	T = 31.31'
R = 1,200.00'	R = 250.00'	R = 130.00'
SE = 04	SE = 36	SE = EX
RO = 144'	RO = 36'	
V = 50MPH	V = 30MPH	



NOTES:

- ★ UPGRADED SIGNAL
- HPB- HISTORIC PROPERTY BOUNDARY
- PROP CONC ISLAND/SIDEWALK

FOR -L- PROFILE, SEE SHEET NO. 38
FOR -DR- PROFILE, SEE SHEET NO. 45

FOR INTERSECTION -L- (EVANS ST.) AND -Y58- (LYNNCROFT LN.)/-Y58- (MARTINSBOROUGH RD.) DETAIL, SEE SHEET NO. 2B-3
FOR INTERSECTION -L- (EVANS ST.) AND -Y56- (CHILWEL CT.)/-DR- DETAIL, SEE SHEET NO. 2B-4

8/17/99

RIGHT OF WAY REVISION - 7/7/2023 - REVISED ROW FOR PARCELS 205, 209 & 212 REMOVED ROW ON PARCEL 213 REVISED TCE ON PARCELS 203, 205, 206, 207, 208A & 213.
REMOVED TCE ON PARCEL 212 REVISED PUE ON PARCELS 203, 205, 206, 207, 208A, 209 & 210 REVISED PROPERTY OWNER NAME FOR PARCELS 202, 204 & 205 COMBINED
PARCELS 205 & 208A TO FORM PARCEL 208A REVISED DUE ON PARCEL 203, ADDED DO NOT DISTURB LABEL TO PARCEL 20.
J28171.dwg, p.dwg, bsh1.dwg

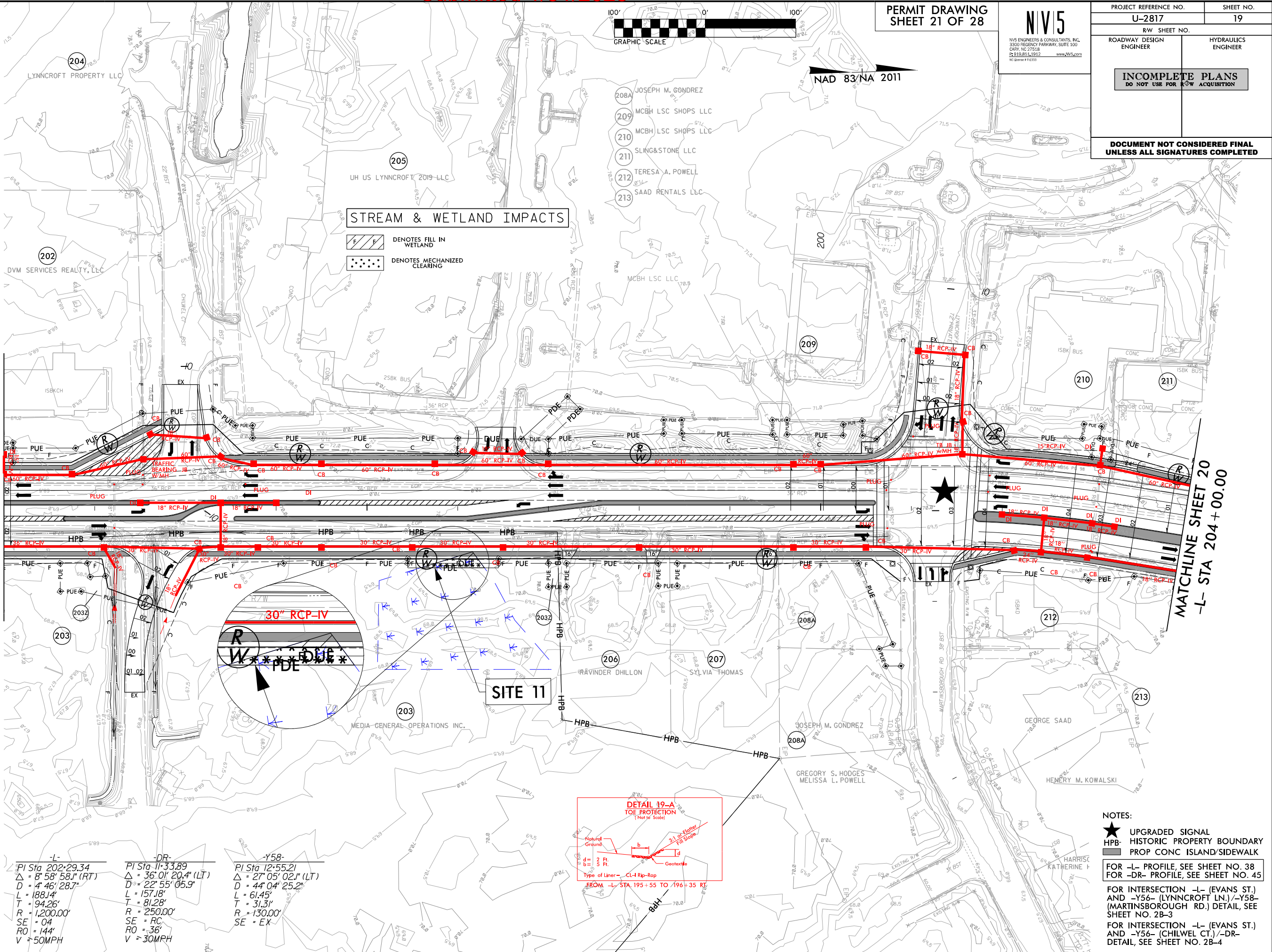
1/31/2025
R:\Hud\culverts\PERMITS\Environmental\Drawings\

REVISIONS

MATCHLINE SHEET 18

-L- STA 191+00.00

MATCHLINE SHEET 20
-L- STA 204+00.00



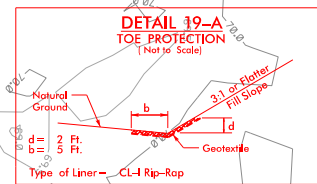
PERMIT DRAWING
SHEET 21 OF 28

NV5

NV5 ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
DALLAS, TX 75244
P: 972.951.1912
www.nv5.com
NO. License # 143533

PROJECT REFERENCE NO.		SHEET NO.	
U-2817		19	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

-L-	-DR-	-Y58-
PI Sta 202+29.34	PI Sta 11+33.89	PI Sta 12+55.21
$\Delta = 8' 58" 58.1"$ (RT)	$\Delta = 36' 01" 20.4"$ (LT)	$\Delta = 27' 05" 02.1"$ (LT)
D = 4' 46" 28.7"	D = 22' 55" 05.9"	D = 44' 04" 25.2"
L = 188.14'	L = 157.18'	L = 61.45'
T = 94.26'	T = 81.28'	T = 31.31'
R = 1,200.00'	R = 250.00'	R = 130.00'
SE = 04	SE = RC	SE = EX
RO = 144'	RO = 36'	
V = 50MPH	V = 30MPH	



NOTES:

- ★ UPGRADED SIGNAL
- HPB- HISTORIC PROPERTY BOUNDARY
- ▬ PROP CONC ISLAND/SIDEWALK

FOR -L- PROFILE, SEE SHEET NO. 38
FOR -DR- PROFILE, SEE SHEET NO. 45

FOR INTERSECTION -L- (EVANS ST.) AND -Y56- (LYNNCROFT LN.)/-Y58- (MARTINSBOROUGH RD.)-DETAIL, SEE SHEET NO. 2B-3

FOR INTERSECTION -L- (EVANS ST.) AND -Y56- (CHILWEL CT.)/-DR-DETAIL, SEE SHEET NO. 2B-4

6/23/16

0510	PROJ. REFERENCE NO.	SHEET NO.
	U-2817	X-67

PERMIT DRAWING
SHEET 23 OF 28

LYNNCROFT SHOPPING CENTER

SITE 11

196 + 50.00

SITE 11

196 + 00.00

SITE 11

195 + 50.00

- / -

J/3/2025
R:Hydraulics\PERMITS-Environmental\Drawings\J2817_hyd_p-rm_psh25.dgn
David Bocker

-Y28-

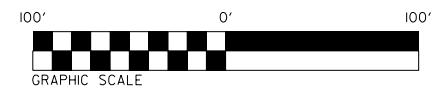
PI Sta 21+78.91
 $\Delta = 27^\circ 40' 54.6''$ (RT)
 $D = 4^\circ 22' 25.4''$
 $L = 632.9'$
 $T = 322.76'$
 $R = 1,310.00'$
 $SE = 04$
 $RO = 144'$
 $V \approx 50$ MPH

256 JOANNE M. BAILEY
257 CORNERSTONE HOMEOWNERS
ASSOCIATION
258 STALLINGS INVESTMENTS LLC
260 STALLINGS INVESTMENTS LLC

STREAM & WETLAND IMPACTS

 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER



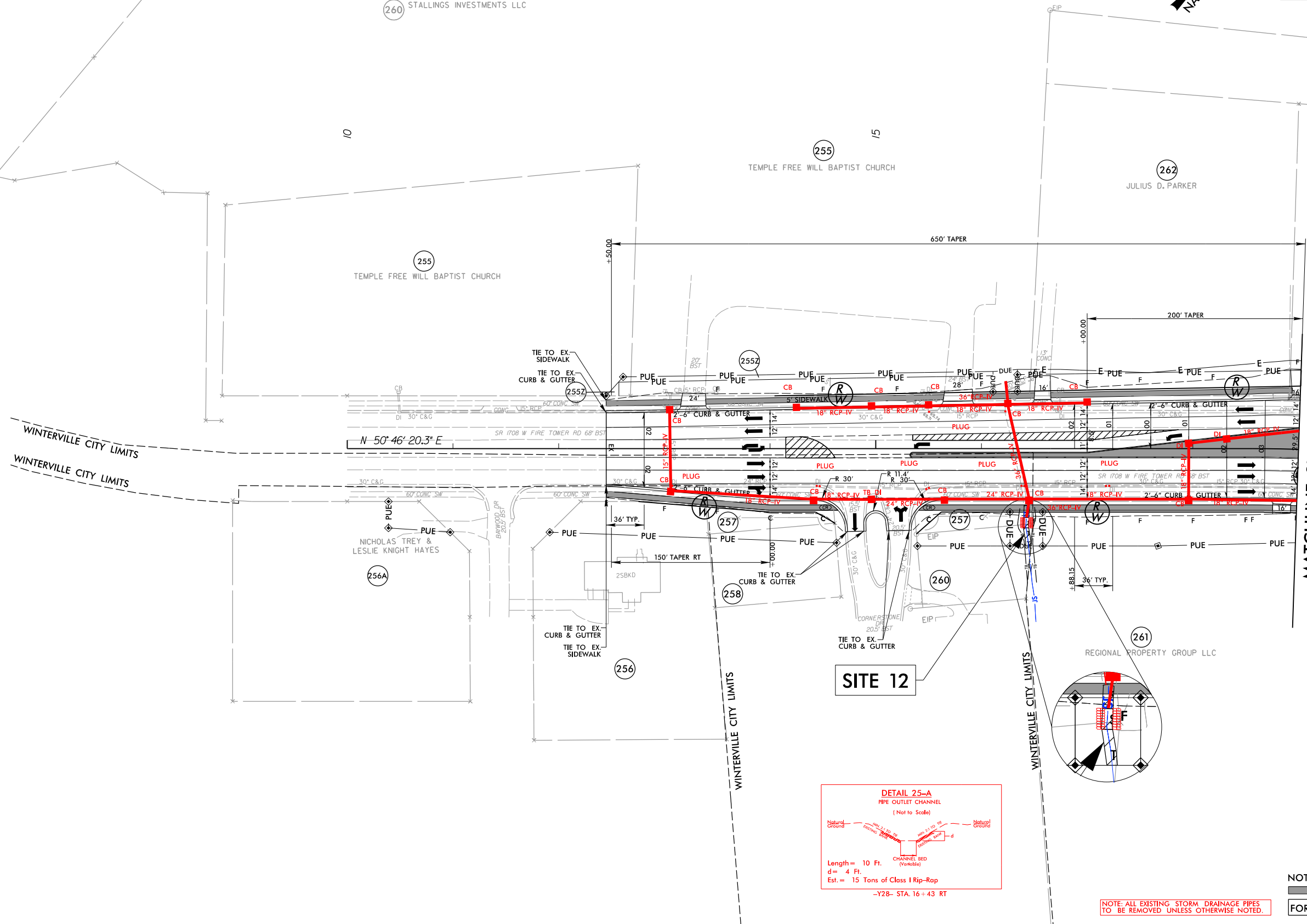
N|V|5
NV5 ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
P: 919.851.1912 www.NV5.com
NC License # F-1333

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3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
P: 919.851.1912 www.NV5.com
NC License # E-1333

PROJECT REFERENCE NO.	SHEET NO.
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 24 OF 28

**MATCHLINE SHEET 26
-Y28- STA. 19+00.00**



SITE 12

DETAIL 25-A
PIPE OUTLET CHANNEL
(Not to Scale)

Natural Ground

EXISTING ELEVATION

HILL 2.1 TO RE

HILL 2.1 TO RE

HILL 2.1 TO RE

ditch

d

CHANNEL BED
(Variable)

Length = 10 Ft.

d = 4 Ft.

Est. = 15 Tons of Class I Rip-Rap

-Y28- STA. 16 + 43 RT

NOTES:

PROP CONC SIDEWALK

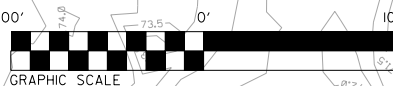
FOR -Y28- PROFILE, SEE SHEET NO. 43

8/17/99

Y28-
PI Sta 21+78.91
 $\Delta = 27^{\circ} 40' 54.6" (RT)$
 $D = 4' 22" 25.4"$
 $L = 632.9'$
 $T = 322.76'$
 $R = 1,310.00'$
 $SE = 04'$
 $RO = 144'$
 $V = 50 \text{ MPH}$

STREAM & WETLAND IMPACTS

 DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER



NAD 83/NA 2011

NV15

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3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
P: 919.861.9192 www.NV5.com
NC License # 94333

PROJECT REFERENCE NO.		SHEET NO.
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	

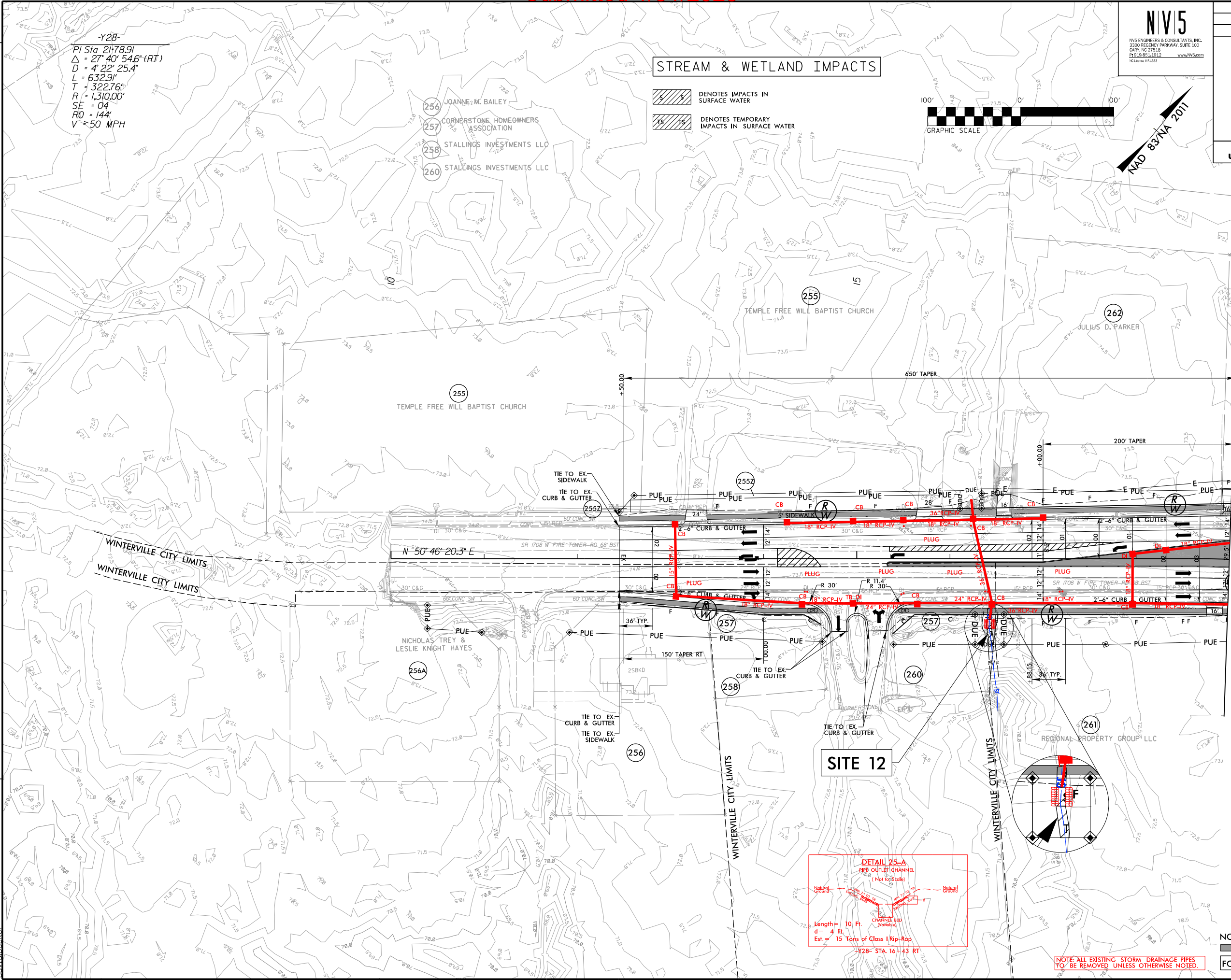
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 24 OF 28

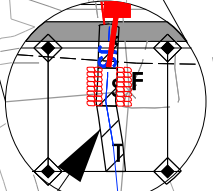
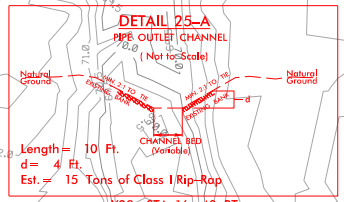
NAD 83/NA 2011

REVISIONS
RIGHT OF WAY REVISION - 7/7/2023 - COMBINED PARCELS 255 & 255A TO FORM PARCEL 255, REMOVED PUE & REVISED PUE & DUE ON PARCEL 255.
COMBINED PARCELS 262 & 263 TO FORM PARCEL 262, REVISED PUE ON PARCEL 262, COMBINED PARCELS 257 & 259 TO FORM PARCEL 257.

1/31/2025
R:\Hyd\culverts\PERMITS\Environmental\Drawings\J2817_hyd.prm.psh25-cont.dgn
David Becker



SITE 12



MATCHLINE SHEET 26
-Y28- STA. 19 + 00.00

NOTES:
 PROP CONC SIDEWALK
FOR -Y28- PROFILE, SEE SHEET NO. 43

NOTE: ALL EXISTING STORM DRAINAGE PIPES TO BE REMOVED UNLESS OTHERWISE NOTED.

100' 0' 10'

GRAPHIC SCALE

230
NAD 83/NA 2011

MATCHLINE SHEET 22
-1- STA 230 + 25.00

★ UPGRADED / PROPOSED SIGNAL
-HPB- HISTORIC PROPERTY BOUNDARY
▬ PROP CONC ISLAND/SIDEWALK
FOR -L- PROFILE, SEE SHEET NO. 39

REVISIONS

TRAFFIC DIAGRAM

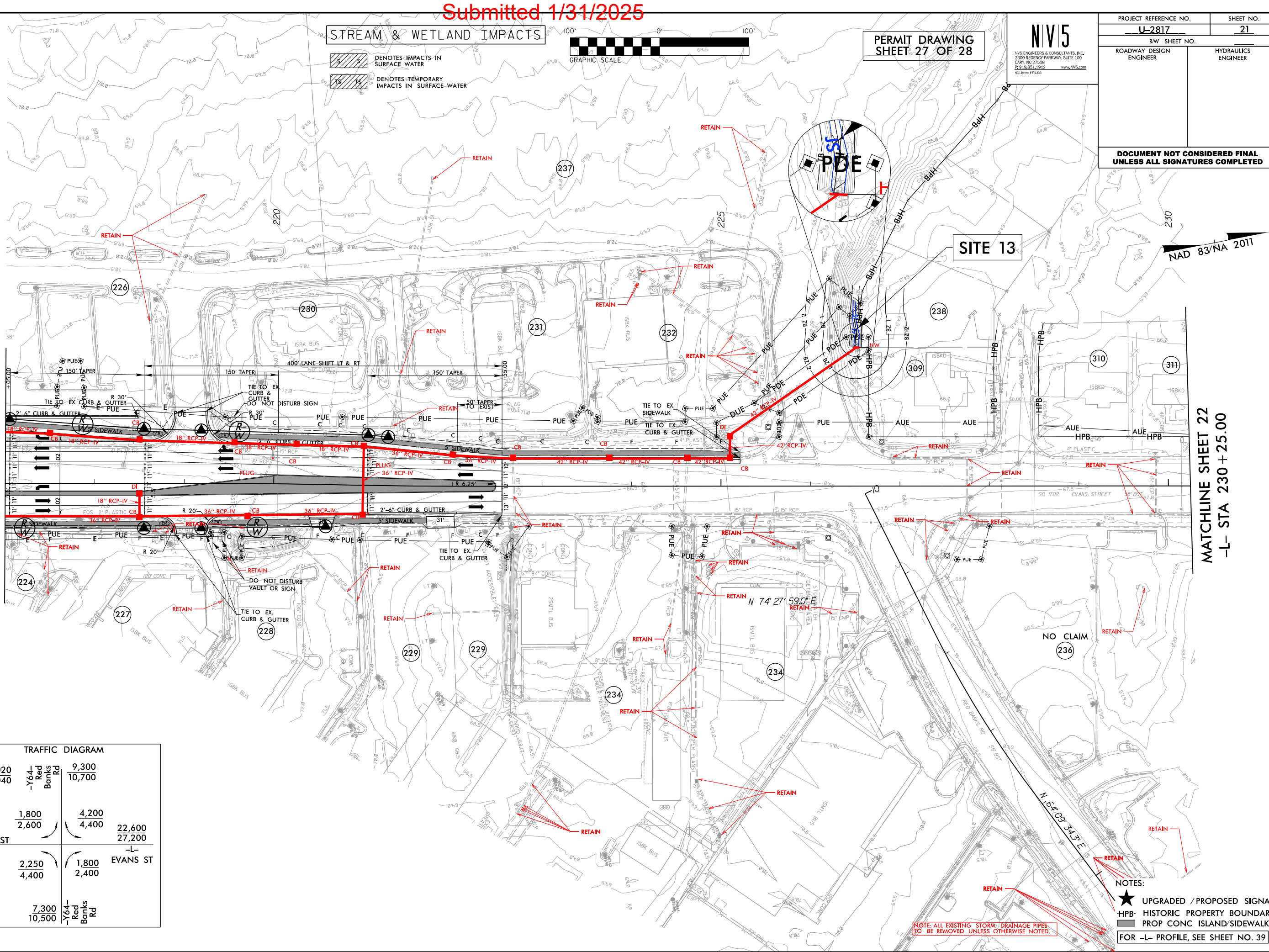
Direction	ADT 2020	ADT 2040	Change
Northbound (Left Lane)	640	1,040	+400
Northbound (Right Lane)	9,300	10,700	+1,400
Southbound (Left Lane)	2,700	4,400	+1,700
Southbound (Right Lane)	2,400	4,000	+1,600

MATCHLINE SHEET 20

-L- STA 217+00.00

MATCHLINE SHEET 22

-L- STA 230+25.00



WETLAND AND SURACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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	-L- 35+20/36+10	66" RCP-IV						0.01	< 0.01	122	28	
	-L- 35+20/36+10	Bank Stabilization						< 0.01	< 0.01	33	12	
2	-L- 74+30/75+50	2 @ 8'x6' RCBC						0.01		86		
	-L- 74+30/75+50	Bank Stabilization						< 0.01	< 0.01	66	35	
3	-L- 79+50/81+22	Roadway Fill	0.06			0.03						
4	-L- 81+40/81+80	2 @ 10'x8' RCBC						0.04		89		
	-L- 81+40/81+80	Bank Stabilization						0.02	< 0.01	100	20	
5	-L- 81+80/84+80	Roadway Fill/Excavation	0.17		< 0.01	0.06						
6	-L- 81+80/82+10	Bank Stabilization						< 0.01	< 0.01	18	22	
7	-L- 150+60/151+30	54" RCP-IV						0.01				
	-L- 150+60/151+30	Bank Stabilization						< 0.01	< 0.01			
8	-L- 158+50/159+40	12'x8' RCBC						0.02		63		
	-L- 158+50/159+40	Bank Stabilization						0.02	< 0.01	94	30	
9	-L- 178+20/178+50	60" RCP-IV						< 0.01		59		
	-L- 178+20/178+50	Bank Stabilization						< 0.01	< 0.01	38	12	
10	-L- 185+30/190+40	Roadway Fill	0.09			0.12						
11	-L- 195+10/197+00	Roadway Fill	< 0.01			0.01						
12	-Y28- 16+40/16+50	36" RCP- IV						< 0.01				
	-Y28- 16+40/16+50	Bank Stabilization						< 0.01	< 0.01			
13	-L- 226+50	42" RCP- IV							< 0.01		20	
TOTALS*:			0.33		< 0.01	0.22		0.17	0.02	768	179	0

*Rounded totals are sum of actual impacts

NOTES:

NOTES:

- Sites 7 and 12 were verified as jurisdictional Tributary Waters of the US.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
1/31/2025
PITT COUNTY
U-2817
34868.1.FD3
SHEET 28 OF 28

PROJECT REFERENCE NO.
U-2817

R/W SHEET NO.
6

ROADWAY DESIGN
ENGINEER

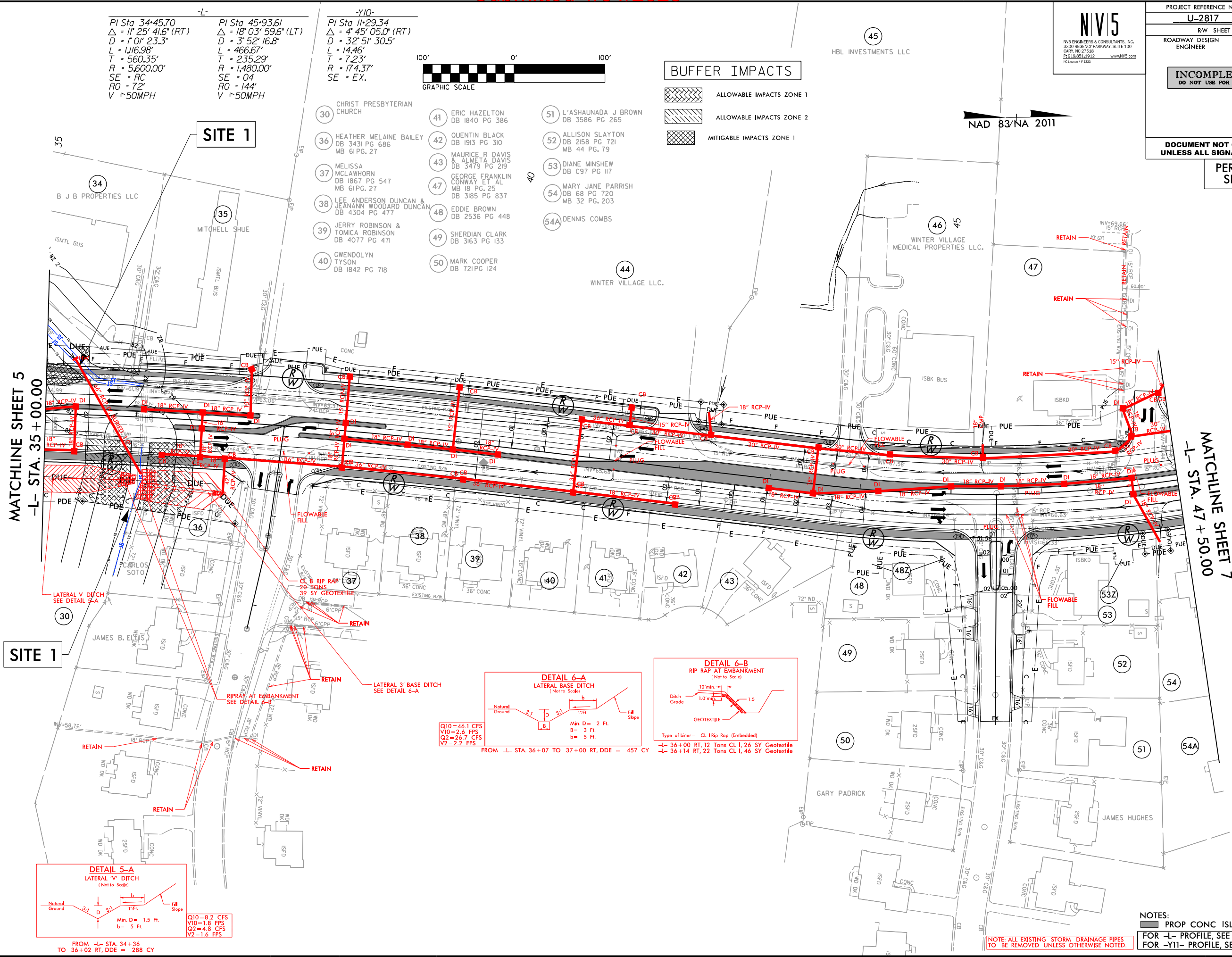
HYDRAULICS
ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR ROW ACQUISITION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 3 OF 11

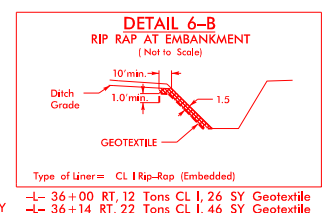
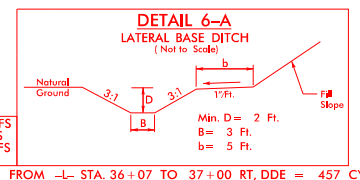
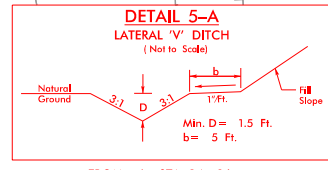
NV5
NV5 ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
P: 919.485.1912
www.nv5.com
NC License # F-2333



MATCHLINE SHEET 5
-L- STA. 35 + 00.00

MATCHLINE SHEET 7
-L- STA. 47 + 50.00

SITE 1



NOTES:
■ PROP CONC ISLAND/SIDEWALK
FOR -L- PROFILE, SEE SHEET NO. 32 & 33
FOR -Y11- PROFILE, SEE SHEET NO. 41

RIGHT OF WAY REVISION - 7/17/2023 - REVISED TCE & PUE ON PARCEL 44, REVISED PUE & DUE ON PARCELS 46 & 47, REVISED TCE & PUE ON PARCEL 48, REVISED TCE, PUE & DUE ON PARCEL 53, REVISED TCE, PUE & DUE ON PARCEL 54, ADDED DO NOT DISTURB LABEL ON PARCELS 37, 38, 39 & 46, REVISED PARCEL 48, REVISED TCE, PUE & DUE ON PARCELS 36, 38, 39, 43, 45, 47, 49 & 51, ADDED AUE TO PARCELS 34 & 35.

REVISIONS

8/17/99

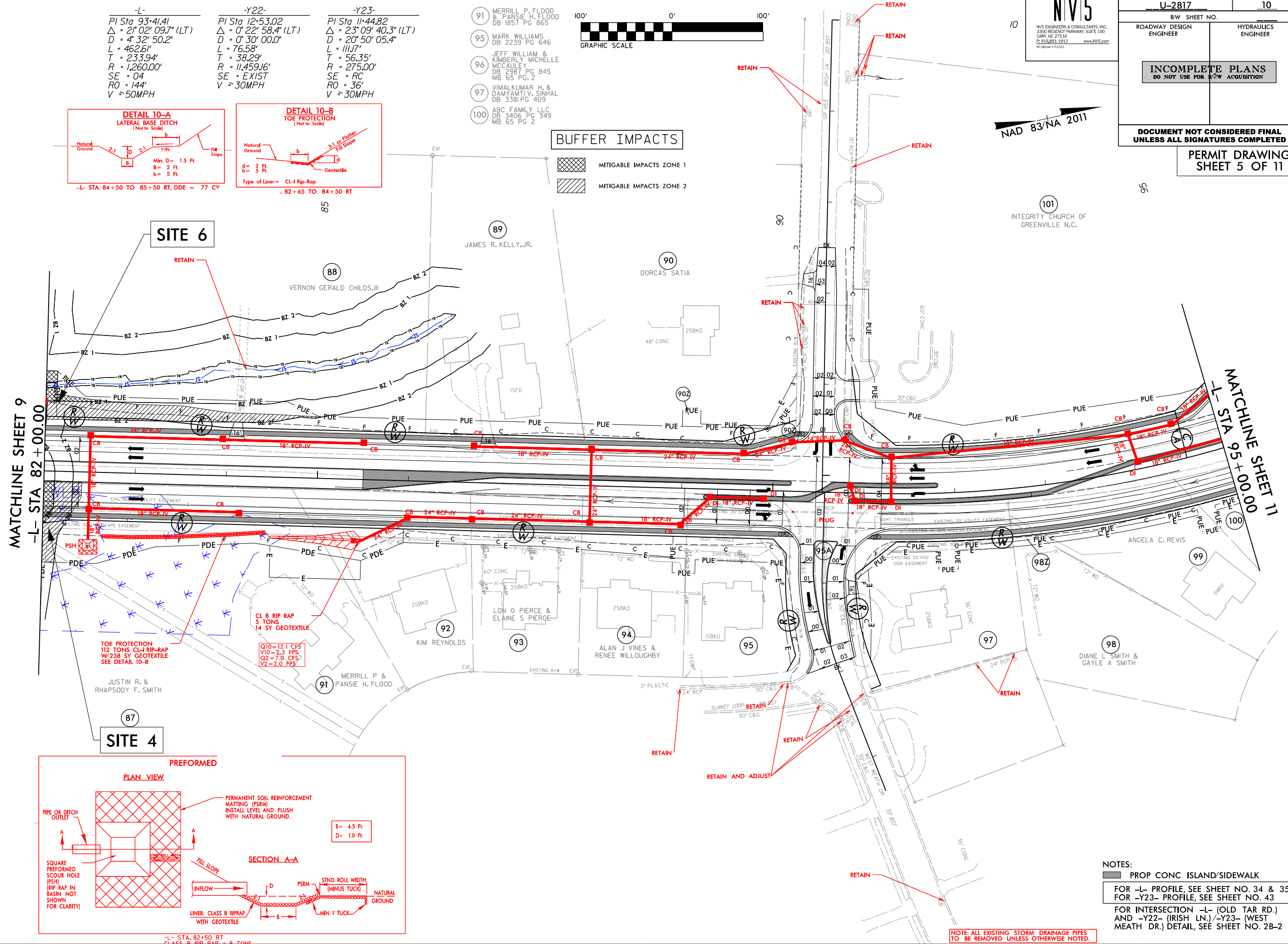
1/31/2025

NOTES:

 PROP CONC ISLAND/SIDEWALK

FOR -L- PROFILE, SEE SHEET NO. 34 & 35
FOR -Y23- PROFILE, SEE SHEET NO. 43

FOR INTERSECTION -L- (OLD TAR RD.)
AND -Y22- (IRISH LN.)/-Y23- (WEST
MEATH DR.) DETAIL, SEE SHEET NO. 2B-2

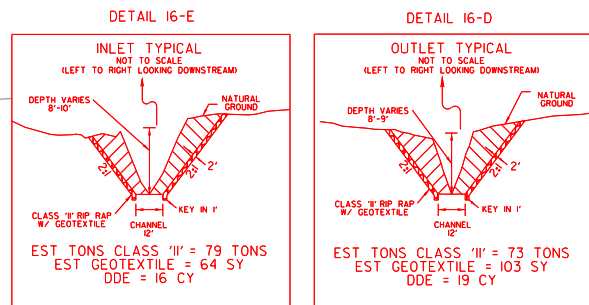


-L-
PI Sta 165+26.35
 $\Delta = 1' 17" 26.3" (RT)$
D = 0' 44' 31.8"
L = 173.90'
T = 86.95'
R = 7,720.00'
SE = NC
V = 50MPH

BUFFER IMPACTS



MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2



NV15
NVS ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
CARY, NC 27513
P: 919.251.1912
www.nv15.com
NC License # E-13333

PROJECT REFERENCE NO.	SHEET NO.
U-2817	16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

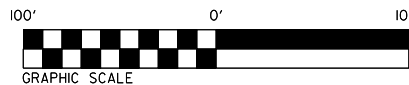
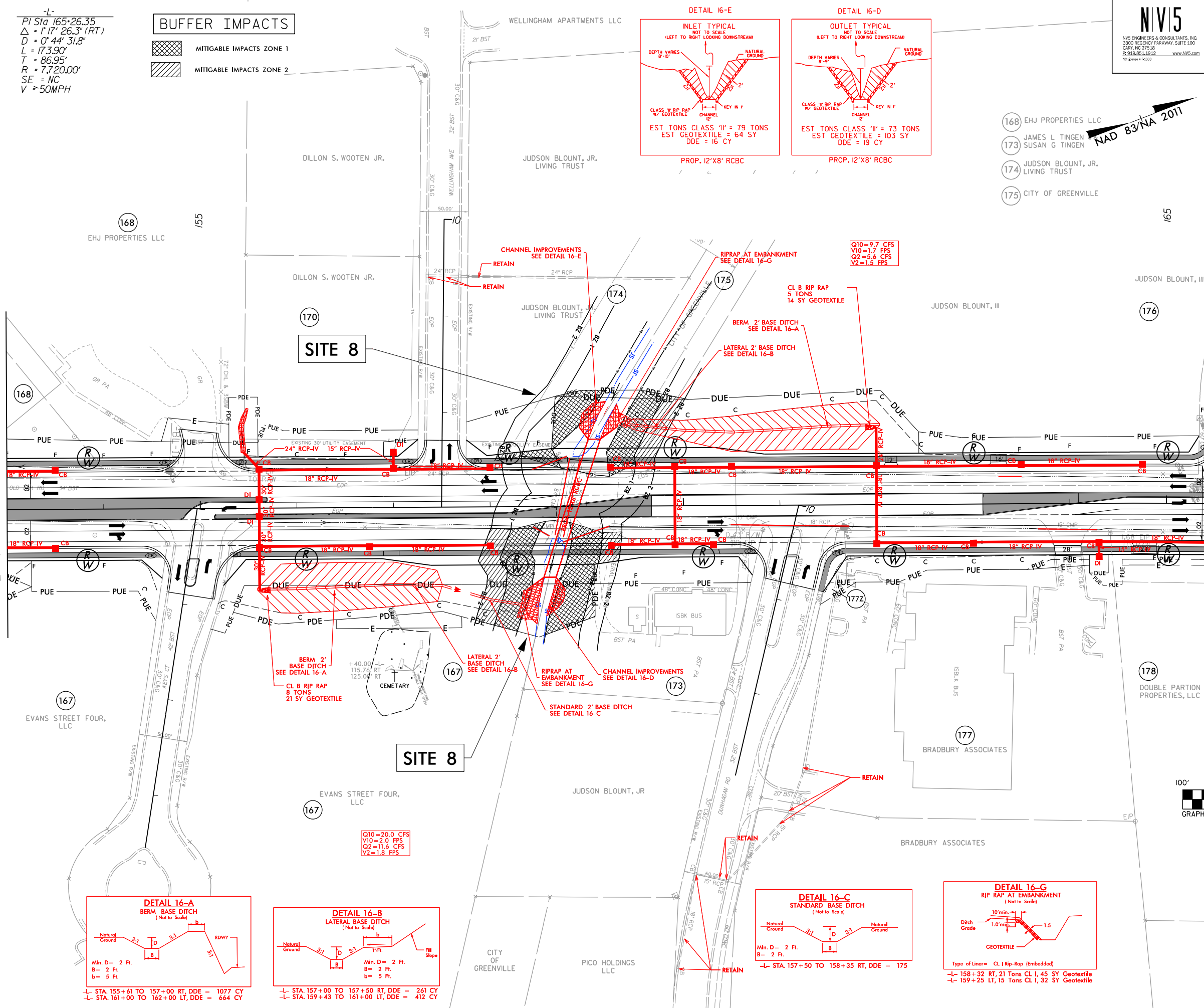
PERMIT DRAWING
SHEET 6 OF 11

- 168 EHJ PROPERTIES LLC
173 JAMES L TINGEN
SUSAN G TINGEN
174 JUDSON BLOUNT, JR.
LIVING TRUST
175 CITY OF GREENVILLE

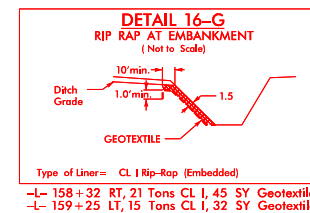
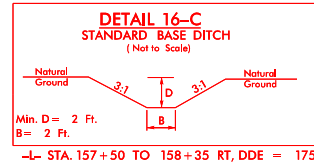
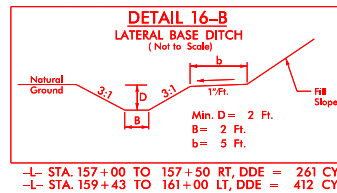
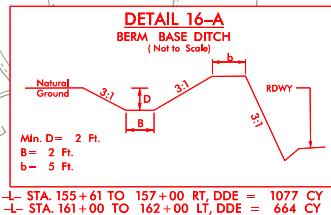


MATCHLINE SHEET 15
-L- STA 153+00.00

MATCHLINE SHEET 17
-L- STA 165+50.00



NOTES:
PROP PAVEMENT REMOVAL
PROP CONC ISLAND/SIDEWALK
FOR -L- PROFILE, SEE SHEET NO. 37





NIV5
NWS ENGINEERS & CONSULTANTS, INC.
3300 REGENCY PARKWAY, SUITE 100
DUBLIN, NC 27016
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www.NIV5.com
NC License # F-1333

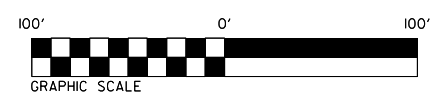
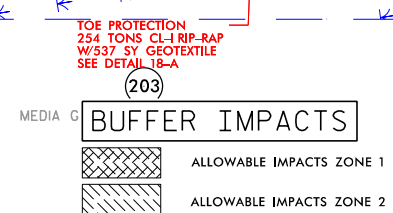
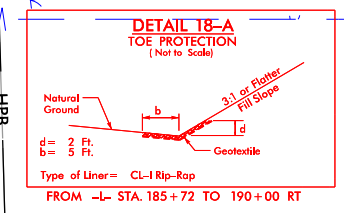
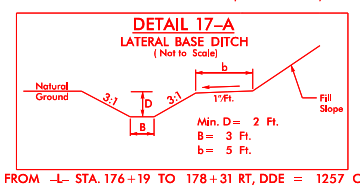
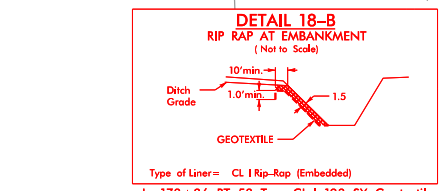
PROJECT REFERENCE NO.		SHEET NO.
U-2817		18
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

PERMIT DRAWING
SHEET 8 OF 11

- NAD 83/NA 2011
- 186 PAUL WAYNE AYERS & CAROLINE AYERS
 - 187 PGP AZALEA 1, LLC, PGP AZALEA 2, LLC AND PGP AZALEA 3, LLC
 - 188 OBIE LEE GODLEY & ARGYLE GODLEY
 - 191 TIPTON RENTALS, LLC
 - 192 TIPTON RENTALS, LLC
 - 193 STA HOLDINGS LLC
 - 194 JEAN M. MICHALEK
 - 197 CAIRD F. VANDERSLOOT, II & WIFE, HEATHER D. VANDERSLOOT
 - 202 DVM SERVICES REALTY, LLC

MATCHLINE SHEET 17
-L- STA 178+00.00

MATCHLINE SHEET 19
-L- STA 191+00.00



-L-
PI Sta 178+70.43
 $\Delta = 20' 01" 03.2" (LT)$
 $D = 4' 05" 33.2"$
 $L = 489.12'$
 $T = 247.08'$
 $R = 1,400.00'$
 $SE = 04$
 $RO = 144'$
 $V = 50MPH$

- NOTES:
- ★ NOTE: ALL EXISTING STORM DRAINAGE PIPES TO BE REMOVED UNLESS OTHERWISE NOTED.
 - ★ PROPOSED SIGNAL
 - HPB HISTORIC PROPERTY BOUNDARY
 - PROP CONC ISLAND/SIDEWALK
 - FOR -L- PROFILE, SEE SHEET NO. 38

RIGHT OF WAY REVISION - 7/7/2023 - REVISED ROW ON PARCELS 187,191,196 & 197, REVISED TCE ON PARCELS 188,189,190,193,196,201 & 203, REMOVED TCE ON PARCEL 195, REVISED PUE ON PARCELS 188 & 201, REVISED PUE ON PARCELS 187,188,189,191,192,193,196,198,201 & 203, REVISED DUE ON PARCELS 186,187,188,191,192 & 203, ADDED PUE ON PARCEL 195, REVISED PROPERTY OWNER NAME ON PARCELS 187,190,193,197 & 202, COMBINED PARCELS 191 & 192 TO FORM PARCEL 191, COMBINED PARCELS 198,199 & 200 TO FORM PARCEL 198, JABOT, BILLY, 600 W. 10TH STREET, DUBLIN, NC 27016

REVISIONS

8/17/99

1/31/2025
R:\Hydraulics\PERMITS\Environmental\Drawings\David Rocker

3/31/2025
C:\Users\David.Rocker\Documents\Hydraulics\PERMITS_Environmental\Drawings\David.Rocker

MATCHLINE SHEET 20
-L- STA 217+00.00

-L- STA 217+00.00



NOTES:

- ★ UPGRADED / PROPOSED SIGN
-HPB- HISTORIC PROPERTY BOUNDARY
PROP CONC ISLAND/SIDEWALK
FOR -L- PROFILE, SEE SHEET NO. 3

RIPARIAN BUFFER IMPACTS SUMMARY

IMPACTS													
Site No.	Station (From/To)	Structure Size / Type	TYPE			ALLOWABLE			MITIGABLE			BUFFER REPLACEMENT	
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft²)	ZONE 2 (ft²)	TOTAL (ft²)	ZONE 1 (ft²)	ZONE 2 (ft²)	TOTAL (ft²)	ZONE 1 (ft²)	ZONE 2 (ft²)
1	-L- 34+50/36+70 LT	66" RCP-IV	X			0	0	0	1270	682	1951		
1	-L- 34+50/36+70 RT	66" RCP-IV	X			4503	3030	7533	0	0	0		
2	-L- 74+00/75+80	2 @ 8'X6' RCBC	X			0	0	0	8267	4261	12528		
4	-L- 81+00/82+40	2 @ 10'X8' RCBC	X			0	0	0	10774	4966	15740		
6	-L- 82+00/83+30	Roadway Fill			X	0	0	0	226	4136	4362		
8	-L- 157+90/159+80	12'X8' RCBC	X			0	0	0	10996	4730	15725		
9	-L- 178+20/178+80	60" RCP-IV	X			3915	2007	5922	0	0	0		
13	-L- 226+50	42" RCP-IV	X			0	0	0	166	0	166		
TOTALS*:						8418	5037	13455	31698	18775	50473	0	0

NOTES:

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

1/31/2025

PITT

U-2817

34868.1.FD3

SHEET10OF11

