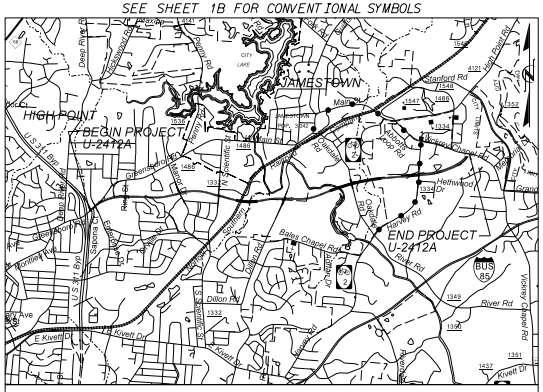
09/08/99

TIP PROJECT: U-2412A

CONTRACT:

SEE SHEET 1A FOR INDEX OF SHEETS
SEE SHEET 1B FOR CONVENTIONAL SYMBOLS



VICINITY MAP

DETOUR FOR OAKDALE ROAD BRIDGE CONSTRUCTION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GUILFORD COUNTY

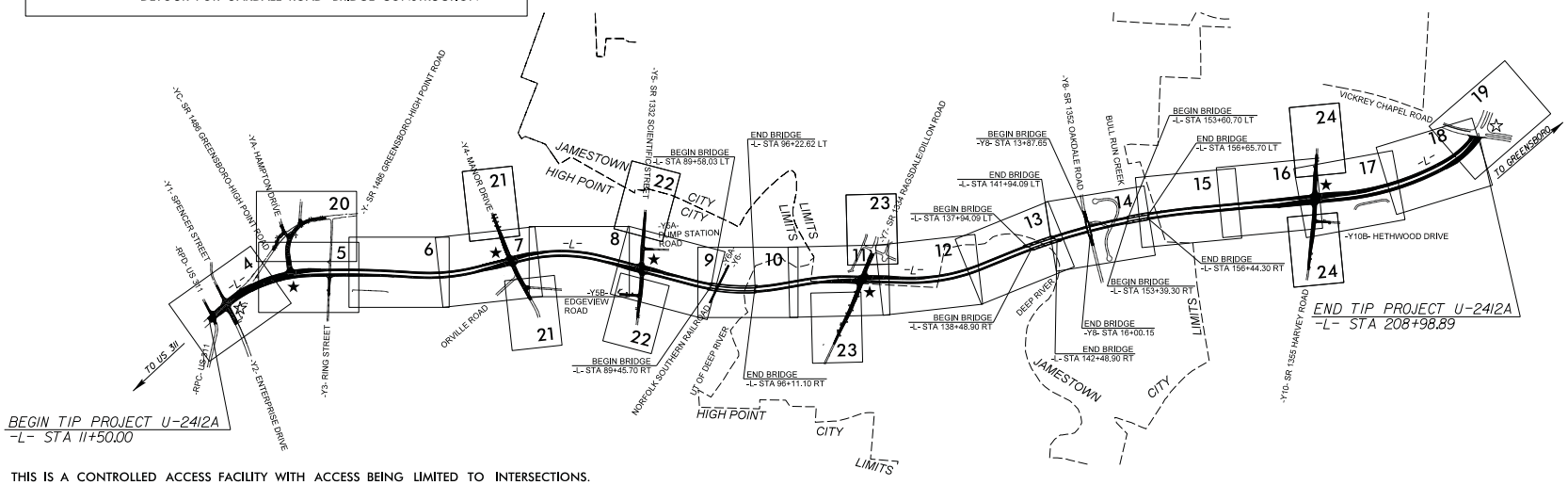
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2412A	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
34802.1.1	STP-4121(3)	PE
34802.2.2	STP-4121(3)	R/W & UTL.

LOCATION: ***SR-1486 /SR-4121 (GREENSBORO/HIGH POINT ROAD) FROM PROPOSED US 311 BYPASS TO WEST OF SR 1480 (VICKREY CHAPEL ROAD)***

TYPE OF WORK: ***GRADING, DRAINAGE, PAVING, STRUCTURES, CULVERT, SIGNALS, AND GUARDRAIL***

NAD 83/95



THIS IS A CONTROLLED ACCESS FACILITY WITH ACCESS BEING LIMITED TO INTERSECTIONS.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF HIGH POINT AND JAMESTOWN.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II
NCDOT CONTACT: GARY LOVERING, PE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100 — PLANS

50 25 0 50 100 — PROFILE (HORIZONTAL)

10 5 0 10 20 — PROFILE (VERTICAL)

DESIGN DATA

ADT 2019 = 36,330
ADT 2039 = 45,160
K = 9 %
D = 55 %
T = 4 % *
V = 60 MPH
* TTST =1% DUAL 3%
FUNC CLASS =
URBAN ARTERIAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT	U-2412A	=	3.481	MILES
LENGTH STRUCTURES TIP PROJECT	U-2412A	=	.259	MILES
TOTAL LENGTH OF TIP PROJECT	U-2412A	=	3.740	MILES

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
(919) 552-2733
(919) 552-2254 (Fax)
www.mottmac.com/americas
LICENSE NO. F-0669

SUNGATE DESIGN GROUP, P.A.
901 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-9258
ENG FIRM LICENSE NO. C-850

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
FEBRUARY 20, 2009

LETTING DATE:
APRIL 16, 2019

MICHAEL PEKAREK, PE
PROJECT ENGINEER

BRIAN PHILLIPS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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PM156859

PROJECT REFERENCE	SHEET NO.
U-2412A	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale **S.U.E. = Subsurface Utility Engineering*

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — EPM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Existing Historic Property Boundary — HPB
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line LOS B (S.U.E.*) — P
- U/G Power Line LOS C (S.U.E.*) — P
- U/G Power Line LOS D (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- U/G Telephone Cable LOS B (S.U.E.*) — T
- U/G Telephone Cable LOS C (S.U.E.*) — T
- U/G Telephone Cable LOS D (S.U.E.*) — T
- U/G Telephone Conduit LOS B (S.U.E.*) — TC
- U/G Telephone Conduit LOS C (S.U.E.*) — TC
- U/G Telephone Conduit LOS D (S.U.E.*) — TC
- U/G Fiber Optics Cable LOS B (S.U.E.*) — T FO
- U/G Fiber Optics Cable LOS C (S.U.E.*) — T FO
- U/G Fiber Optics Cable LOS D (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line LOS B (S.U.E*) — W
- U/G Water Line LOS C (S.U.E*) — W
- U/G Water Line LOS D (S.U.E*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- U/G TV Cable LOS B (S.U.E.*) — TV
- U/G TV Cable LOS C (S.U.E.*) — TV
- U/G TV Cable LOS D (S.U.E.*) — TV
- U/G Fiber Optic Cable LOS B (S.U.E.*) — TV FO
- U/G Fiber Optic Cable LOS C (S.U.E.*) — TV FO
- U/G Fiber Optic Cable LOS D (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line LOS B (S.U.E.*) — G
- U/G Gas Line LOS C (S.U.E.*) — G
- U/G Gas Line LOS D (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- SS Forced Main Line LOS B (S.U.E.*) — FSS
- SS Forced Main Line LOS C (S.U.E.*) — FSS
- SS Forced Main Line LOS D (S.U.E.*) — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line LOS B (S.U.E.*) — ?U/L
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole LOS A (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

04/26/15

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of:
MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
www.mottmac.com/americas
LICENSE NO. F-0669

SUNGATE DESIGN GROUP, P.A.
105 FOREST PARKWAY BLVD
FALLON, NORTH CAROLINA 27007
TEL (919) 552-6200
ENGINEERING LICENSE NO. C-0910

STEVEN W. MICHAEL
RANDALL H. STROUD
DB 4612 PG 58
PB 5 PG 39

REVISIONS

REVISED PARCEL 6 & 7 TO 5; PARCEL 10 TO 9; PARCEL 12 TO 11 - REVISED 6-24-09
R/W REVISION; UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 1,4,5, AND 11; UPDATED EXISTING R/W AND CA TO REFLECT THE ADVANCED PARCEL LINE; ADDED PARCEL 13 TO PARCEL 11 AND ADJUSTED PROPOSED R/W ON PARCEL 11; ADDED PARCEL 14 - TEM - 05-26-11
9; ADJUSTED PROPOSED R/W ON PARCEL 1; ADJUSTED PUE ON PARCELS 1 THROUGH 3,5 AND 9; ADDED PUE ON PARCEL 8 - TEM - 05-26-11

8/17/99

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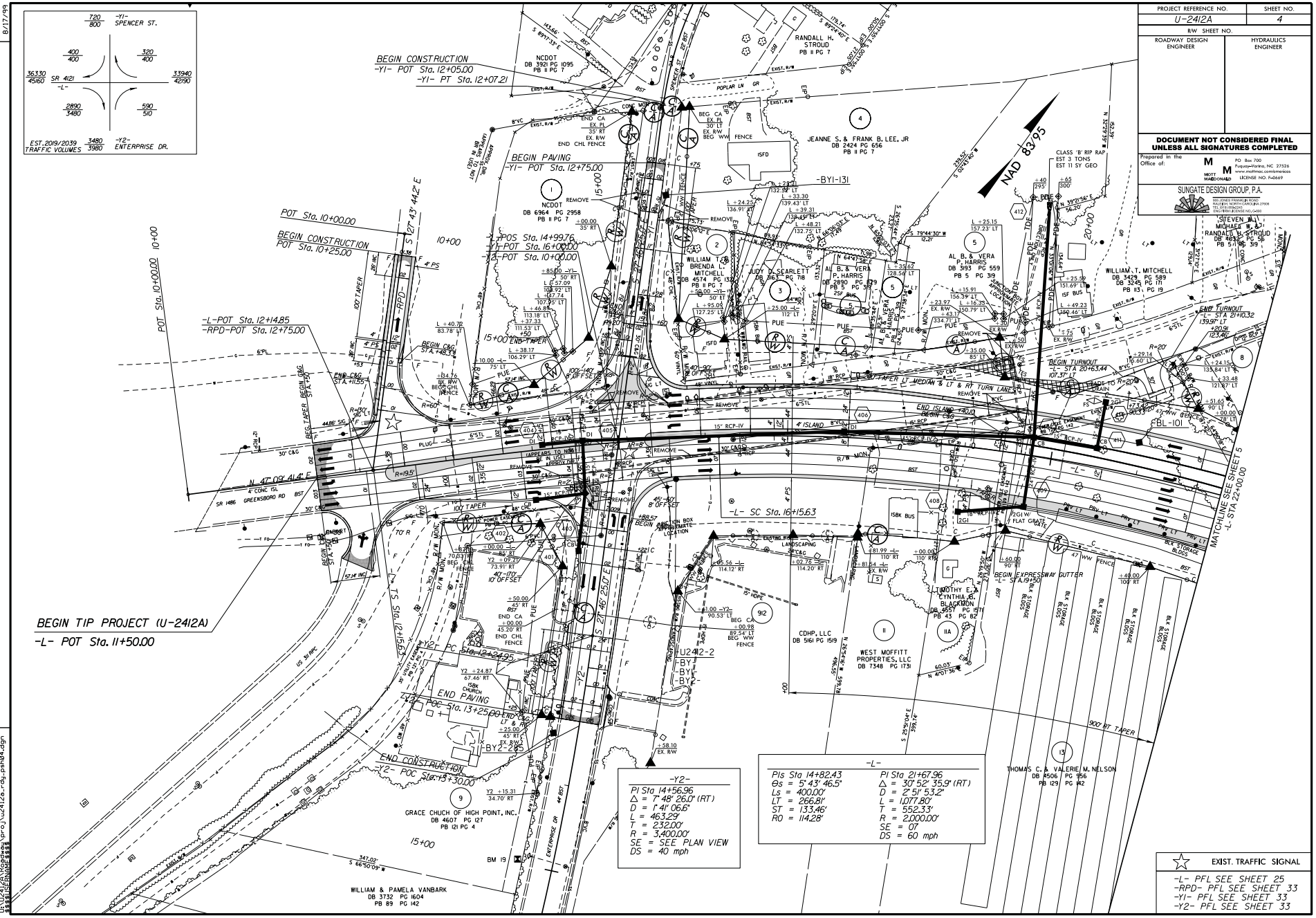

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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PO Box 700
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LICENSE NO. F-0669

SUNGATE DESIGN GROUP, P.A.
905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL: (919) 852-6200
ENG. ENGINEERING LICENSE NO. C-0910

REVISIONS

8/17/99

REVISED OWNER FOR PARCELS 14,15,16,& 17; REVISED PARCEL 22 TO 20 - REVISED 6-24-09
ADDED 80' ACCESS BREAK IN CA FOR PARCEL 16 REVISED 3-9-10
U2412A_R_PL_RW_ALIGNMENT_PARCEL_21_UPDATED PROPERTY OWNER AND DEED REFERENCE - TJW
U2412A_R_PL_RW_ALIGNMENT_PARCEL_68_UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 14 THROUGH 17,20,23, AND 25;UPDATED EXISTING R/W;C/A
R/W REVISION;CREATED PARCEL 68;ADDED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 14 THROUGH 17,20,23, AND 25;ADDED PUE ON PARCEL 16B - TEM - 05/26/17
AND PDE TO REFLECT AN ACQUISITION ON PARCELS 15,16,20 AND 23;ADJUSTED PUE ON PARCELS 16,20 AND 25;ADDED PUE ON PARCEL 16B - TEM - 05/26/17

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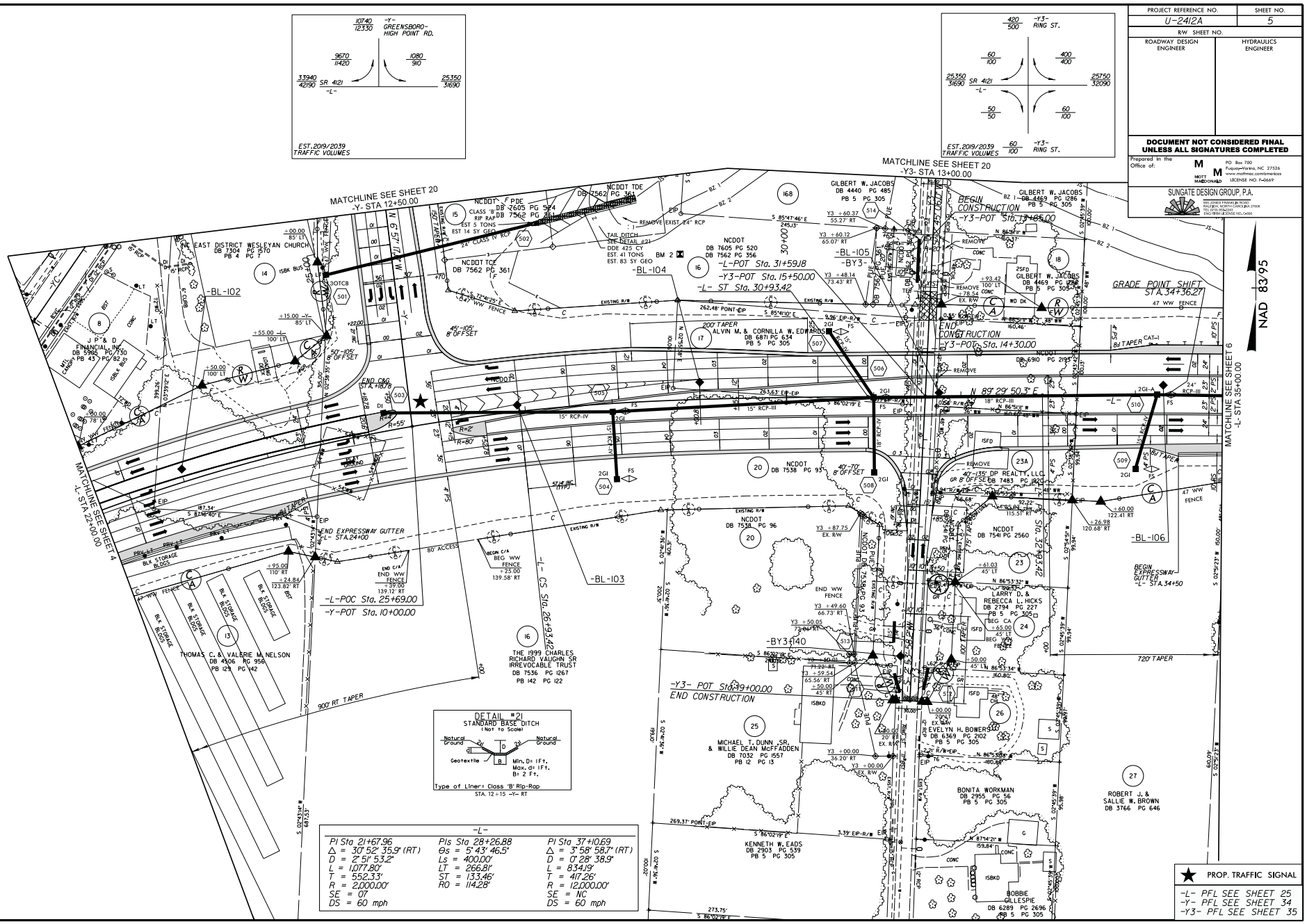

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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SUNGATE DESIGN GROUP, P.A.
905 JONES FRANKLIN ROAD, RALEIGH, NORTH CAROLINA 27606, TEL: (919) 854-6200, ENGINEERING LICENSE NO. C-0910

NAD 83/95

DETAIL #2
TOE PROTECTION
(Not to Scale)
Natural Ground, 2:1 OR FLATTER, Fill Slope, Geotextile, d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 38+00 TO STA. 42+50 -L- LT
FROM STA. 40+50 TO STA. 42+00 -L- RT

DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground, 2:1, 4:1 or Flatter, Fill Slope, Geotextile, Min. D= 1.5 Ft., Max. D= 1.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 35+00 TO STA. 36+00 -L- RT

DETAIL #20
STANDARD BASE DITCH
(Not to Scale)
Natural Ground, 2:1, D, 2:1, B, Natural Ground, Min. D= 2 Ft., B= 3 Ft.
FROM STA. 38+00 -L- LT

DETAIL #14
SPECIAL LATERAL BASE DITCH
(Not to Scale)
Natural Ground, 2:1, 4:1 or Flatter, Fill Slope, Geotextile, Min. D=1.5 Ft., Max. D=1.5 Ft., B=2.0 Ft.
Type of Liner= Class B Rip-Rap
FROM STA. 36+00 TO STA. 40+00 -L- RT

DETAIL #7
ROCK FILL IN POND
(Not to Scale)
Proposed, Existing, Earth Fill, Rock Fill To Berm, 10.0', 1.0', Elev.= 828.0, N.W.S. Elev.= 827.0
FROM STA. 42+00 TO 45+20 -L- RT

MATCHLINE SEE SHEET 5 -L- STA 35+00.00

MATCHLINE SEE SHEET 7 -L- STA 48+50.00

BARRIER CORPORATION DB 3851 PG 1184 PB 72 PG 33

AR STORAGE ARMADILLO GREENSBORO INC DB 7701 PG 2454 PB 138 PG 44, 45

RICHARD R. & MARY M. GLOVER DB 7525 PG 2851 PB 5 PG 342

ORVILLE WILLARD HOUSE HISTORIC PROPERTY LIMITS PER PRELIMINARY DESIGN

ROBERT J. & SALLIE W. BROWN DB 3994 PG 972

SIDNEY W. & CYNTHIA T. YOUNG DB 6505 PG 2739 PB 39 PG 51

MOORE & GEORGIA WHITE DB 6762 PG 2914 PB 39 PG 51

ROBERT J. & SALLIE W. BROWN DB 4223 PG 1033 PB 39 PG 51

JOYCE B. & NATASHA E. BASKINS DB 6093 PG 2474 PB 39 PG 51

AGGIE R. EAVES DB 2943 PG 38 PB 39 PG 51

LARRY & MARCELLETTE B. McKINNEY DB 3780 / PG 378 PB 39 PG 51

JACQUELINE L. HARRINGTON DB 7502 PG 2891 PB 39 PG 51

KHAN & SHERRY KHAN DB 4459 PG 818

GROOME, HOFFMAN & BENCINI, INC. DB 1923 PG 631

HARRELL G. & LEAH C. SMITH DB 2942 PG 25 PB 5 PG 342

EDWARD W. & ALICE H. HORNE DB 249 PG 53 PB 5 PG 342

JUSTIN W. & JESSICA O. STRICKLAND DB 7726 PG 2402 PB 5 PG 342

JUSTIN W. & JESSICA O. STRICKLAND DB 7726 PG 2464 PB 5 PG 342

TERRY & LILLIE W. BUCHANAN DB 3896 PG 788 PB 39 PG 51

-L- PT Sta. 44+27.61

-L- TS Sta. 43+55.38

-L- SC Sta. 45+80.38

-L- PFL SEE SHEET 25 & 26

-L-		
PI Sta 37+10.69	PIs Sta 45+05.39	PI Sta 49+09.57
Δ = 3°58'58.7" (RT)	θs = 2°13'21.7"	Δ = 12°57'07.6" (LT)
D = 0°28'38.9"	Ls = 225.00'	D = 1°58'32.6"
L = 834.19'	LT = 150.01'	L = 655.56'
T = 417.26'	ST = 75.01'	T = 329.19'
R = 12,000.00'		R = 2,900.00'
SE = NC		SE = 055
DS = 60 mph		DS = 60 mph

REVISIONS
8/17/99
REVISED OWNER FOR PARCEL 29; REVISED ROW AND PDE MONUMENT TO SC STA.45+80.38 RT - REVISED 6-24-09
R/W REVISION; CREATED PARCEL 33A; ADDED TCE ON PARCEL 33A; UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 28 AND 30; UPDATED PROPOSED R/W AND C/A ON PARCEL 30. - TEM - 05/26/17

26-MAY-2017 07:50
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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
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LICENSE NO. F-0669

SUNGATE DESIGN GROUP, P.A.
905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL: (919) 829-2420
ENGINEERING LICENSE NO. C-0910

8/17/99

REVISIONS

REVISED PARCEL 35 & 36 TO 34;46;48;50 & 51 TO 43;56 TO 54;45 TO 91?;REVISED OWNER FOR PARCEL 39B;40;52;55;& 59;ADDED PARCEL 59A;REVISED 6-24-09 R/W REVISION;UPDATED PROPOSED R/W AND C/A ON PARCEL 39;REVISED TWO TRACTS OF PARCEL 34 TO PARCELS 34A AND 34B;REVISED TRACTS OF PARCEL 43 TO PARCELS 43A,43B,43C;REVISED TRACTS OF PARCEL 45 TO PARCELS 45A AND 45B;REVISED PARCEL 47 TO PARCELS 47,49;59A AND 91?;UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES UPDATED EXISTING R/W AND C/A TO REFLECT AN ACQUISITION ON PARCELS 34B,43C,47;49;58;59 AND 91?;ADJUSTED PUE ON PARCELS 53;54 AND 56;REMOVED ON PARCELS 37;38;39B;42;43;43A;43B;43C;47;49;58;59 AND 91?;ADDED PUE ON PARCELS 41;42;47 AND 91?;ADDED NO CLAIM ON PARCELS 39A PUE ON PARCELS 34B;37 THROUGH 39;39A THROUGH 39C;CORRECTED STA/OFF AT -L- STA 60+00 RT ON PARCEL 54;ADDED NO CLAIM ON PARCELS 39A THROUGH 39C.- TEM - 05/26/11

26-MAY-2011 12:05
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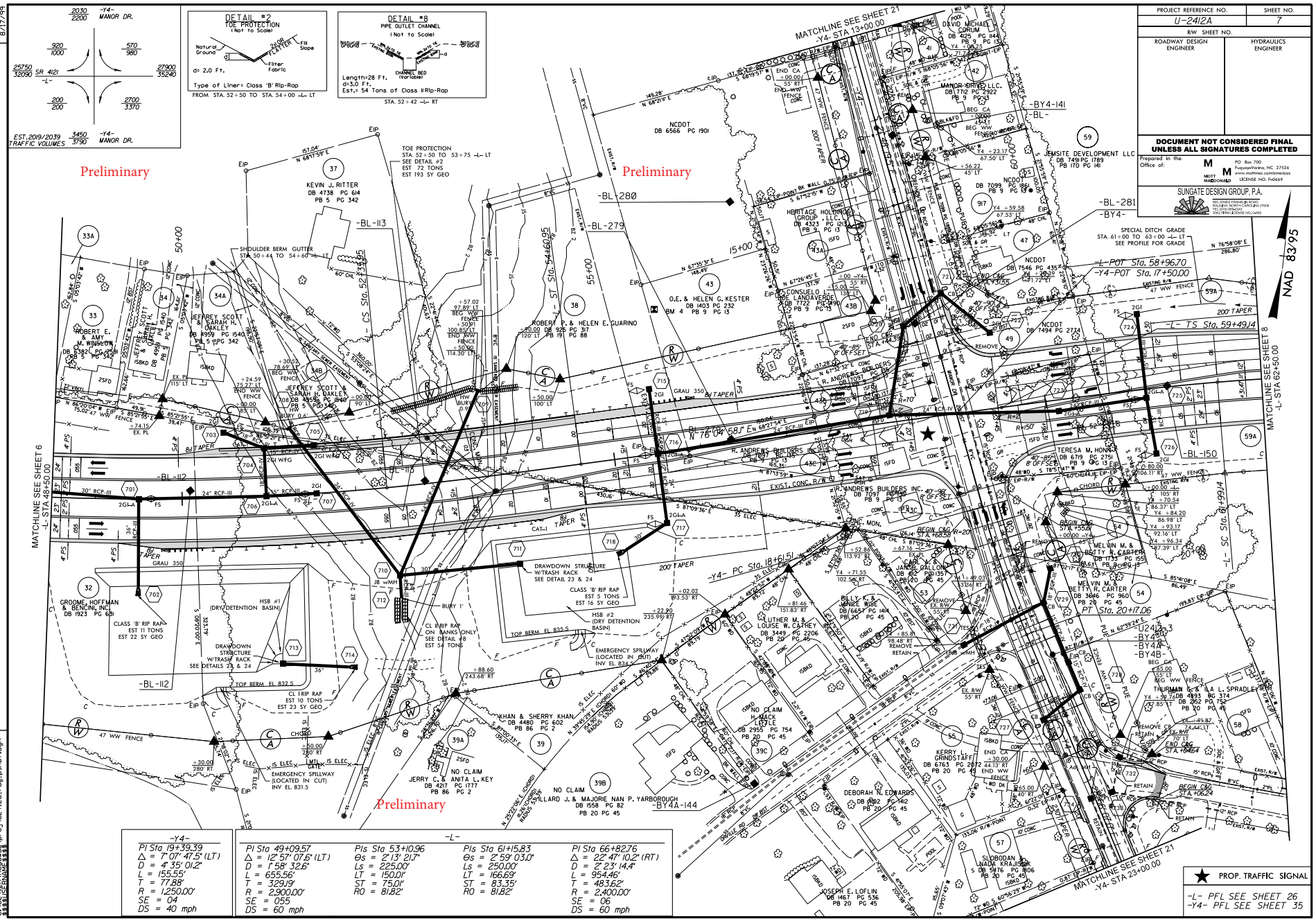

-Y4-
PI Sta 19+39.39
Δ = 7°07' 47.5" (LT)
D = 4° 35' 01.2"
L = 155.55'
T = 77.88'
R = 1,250.00'
SE = 04
DS = 40 mph

-L-			
PI Sta 49+09.57	PIs Sta 53+10.96	PIs Sta 61+15.83	PI Sta 66+82.76
Δ = 12° 57' 07.6" (LT)	Θs = 2° 13' 21.7"	Θs = 2° 59' 03.0"	Δ = 22° 47' 10.2" (RT)
D = 1° 58' 32.6"	Ls = 225.00'	Ls = 250.00'	D = 2° 23' 14.4"
L = 655.56'	LT = 150.01'	LT = 166.69'	L = 954.46'
T = 329.19'	ST = 75.01'	ST = 83.35'	T = 483.62'
R = 2,900.00'	RO = 81.82'	RO = 81.82'	R = 2,400.00'
SE = 055			SE = 06
DS = 60 mph			DS = 60 mph

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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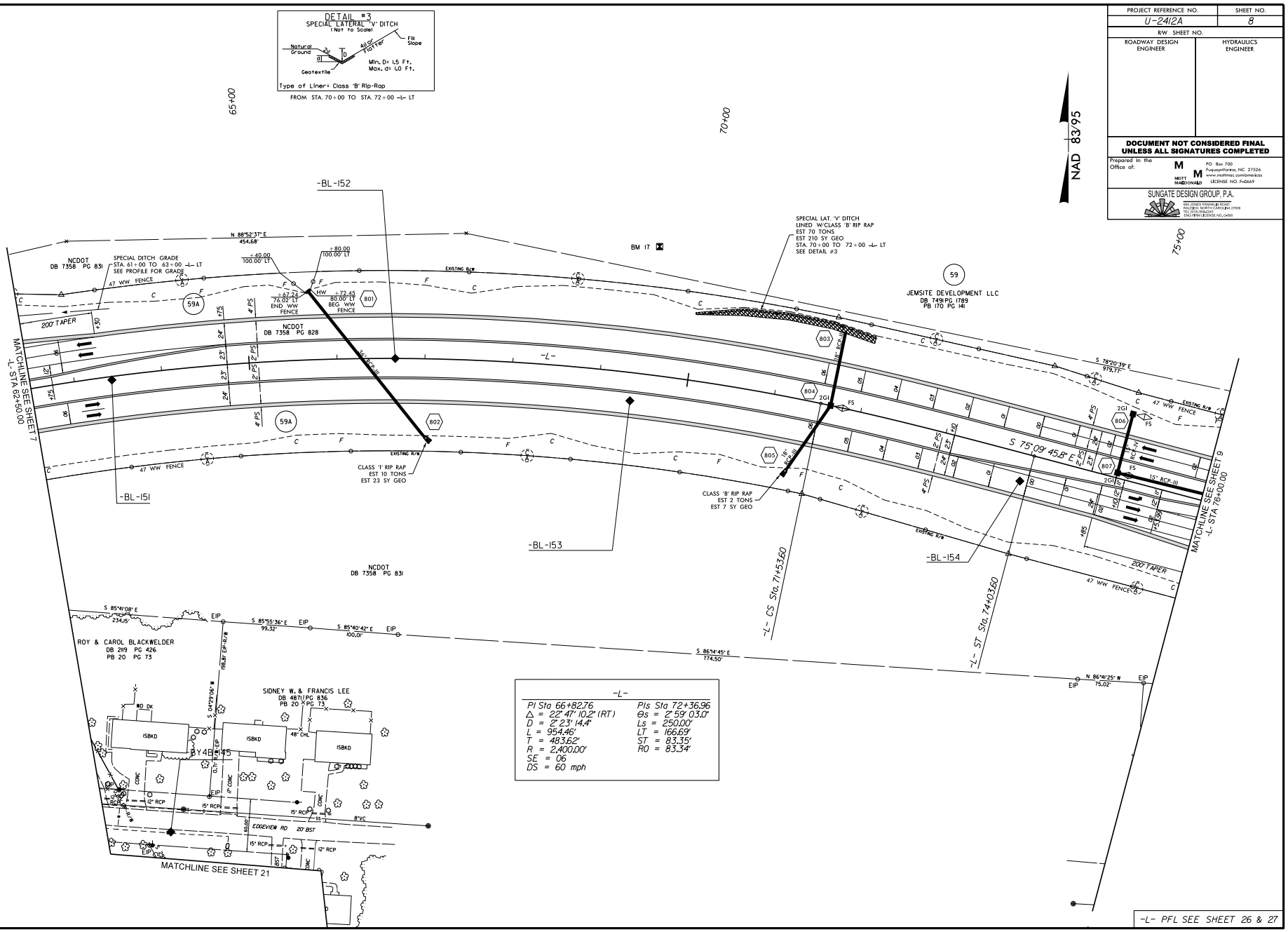
SUNGATE DESIGN GROUP, P.A.
905 JONES FRANKLIN ROAD, RALEIGH, NORTH CAROLINA 27606, TEL: (919) 854-6200, ENGINEERING LICENSE NO. C-0910

REVISIONS

8/17/99

ADDED PARCEL 59A,REVISED OWNER FOR PARCEL 59 - REVISED 6-24-09
R/W REVISION;UPDATED EXISTING R/W AND C/A TO REFLECT AN ACQUISITION ON PARCEL 59A,UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 59 AND 59A - TEM - 05/26/17



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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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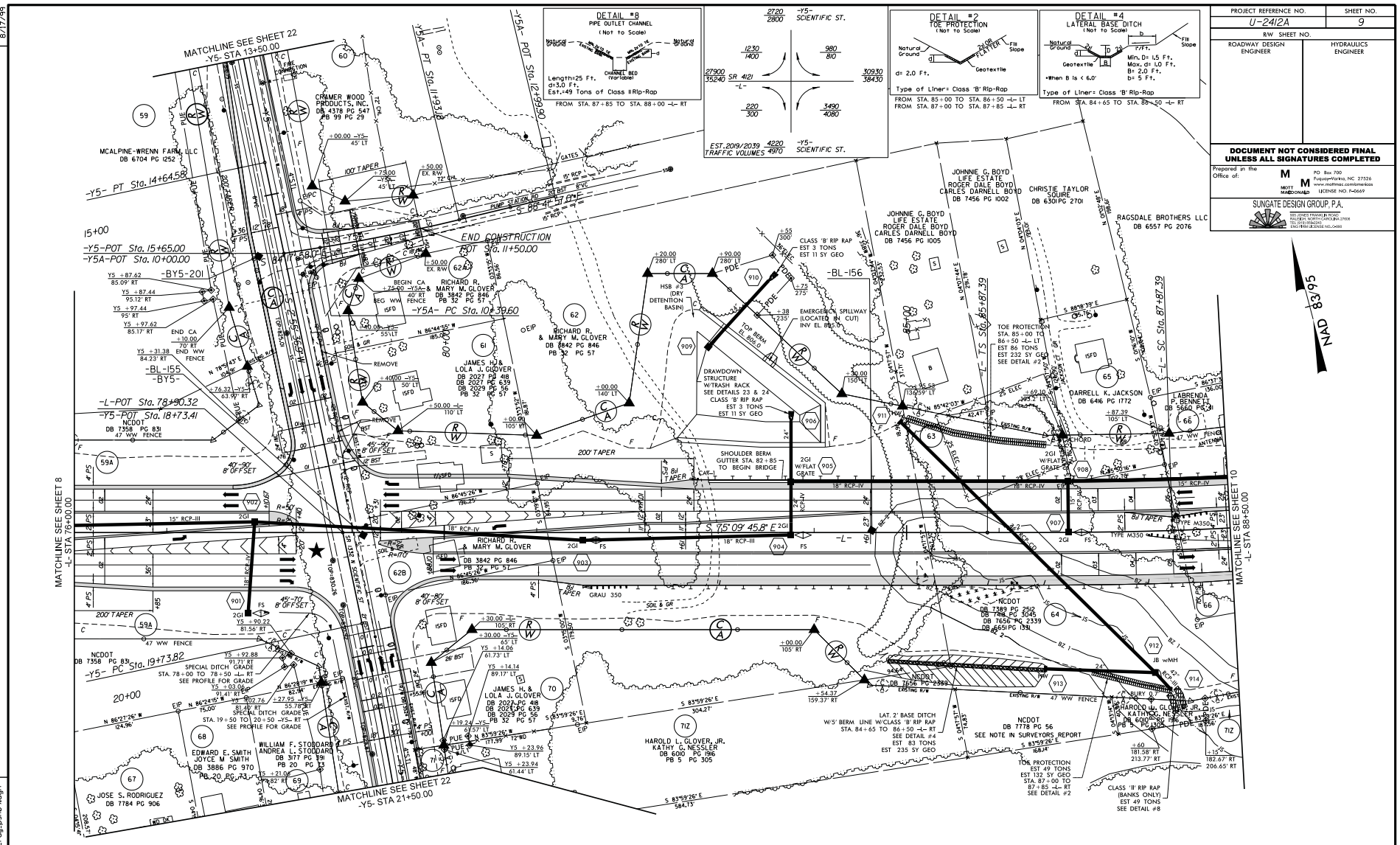
SUNGATE DESIGN GROUP, P.A. — 905 JUDGES FERRY PLACE, RALEIGH, NORTH CAROLINA 27608, TEL: (919) 828-2501, ENGINEERING LICENSE NO. C-0910

NAD 83/95



-Y5-	
PI Sta 13+54.60	PI Sta 21+18.69
Δ = 1° 15' 37.1" (LT)	Δ = 3° 19' 09.3" (RT)
D = 0° 34' 22.6"	D = 1° 08' 45.3"
L = 219.97'	L = 289.66'
T = 109.99'	T = 144.87'
R = 10,000.00'	R = 5,000.00'
SE = NC	SE = SEE PLAN VIEW
DS = 50 mph	DS = 50 mph

-Y5A-
PI Sta 11+16.43
Δ = 4° 23' 59.0" (LT)
D = 2° 51' 53.2"
L = 153.58'
T = 76.83'
R = 2,000.00'
SE = SEE PLAN VIEW
DS = 30 mph

-L-	
PIs Sta 87+20.73	PI Sta 93+42.25
Θs = 1° 54' 35.5"	Δ = 20° 57' 26.2" (LT)
Ls = 200.00'	D = 1° 54' 35.5"
LT = 133.34'	L = 1,097.32'
ST = 66.67'	T = 554.86'
	R = 3,000.00'
	SE = 05
	DS = 60 mph

★ PROP. TRAFFIC SIGNAL

-L- PFL SEE SHEET 27
-Y5- PFL SEE SHEET 36
-Y5A- PFL SEE SHEET 37

REVISIONS

REVISED OWNER FOR PARCEL 59 & 72; ADDED PARCEL 59A - REVISED 6-24-09
10/07/14 - R/W REVISION:COMBINING PARCELS 71 AND 73 INTO PARCEL 71 AND CORRECTING THE PROPERTY LINES BETWEEN PARCELS 64 AND 71.- TLW
R/W REVISION:CHANGED PARCEL 62 TO 62A AND ADDED PARCEL 62B, REMOVED EXISTING R/W AND C/A TO REFLECT AN ADDED PUE ON PARCEL 62B, CORRECTED STA/OFF AT -L- STA 80+30 RT ON PARCEL 70; CORRECTED STA/OFF AT -Y5A- STA 10+75 RT ON PARCEL 62A - TEM - 05/26/17

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	10

R/W SHEET NO.

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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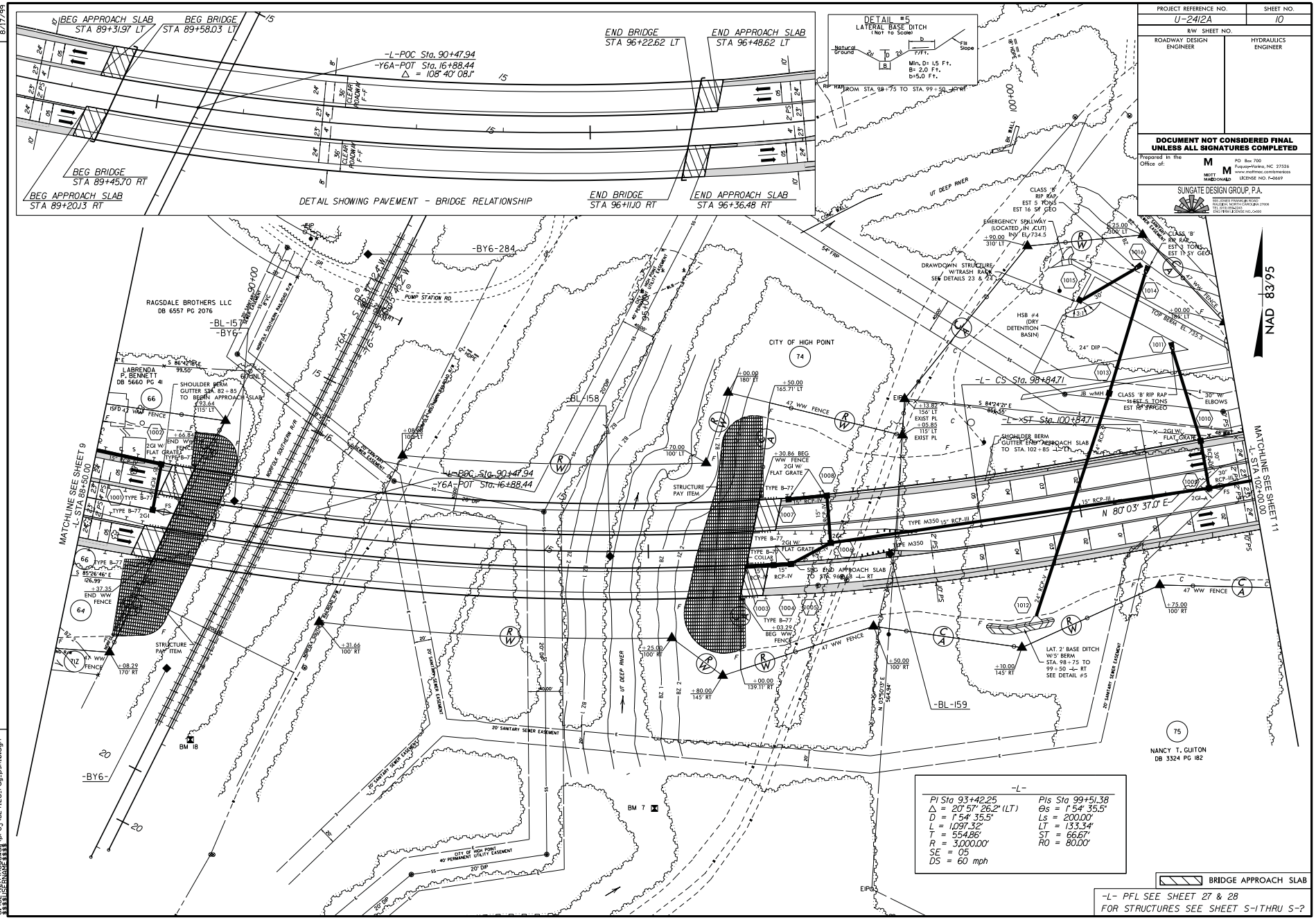
LICENSE NO. F-0669

SUNGATE DESIGN GROUP, P.A.
1005 JUDGES FARM PLACE
RALEIGH, NORTH CAROLINA 27606
TEL: (919) 852-6200
ENGINEERING LICENSE NO. C-0181



REVISIONS

10/07/14 - R/W REVISION: COMBINING PARCELS 71 AND 73 INTO PARCEL 71 - TLW
R/W REVISION: UPDATED EXISTING R/W AND C/A TO REFLECT AN ACQUISITION ON PARCEL 71Z - TEM - 05/26/17

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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SUNGATE DESIGN GROUP, P.A.
109 EAGLES TRANSFER BLVD
MULLICA HILL, NORTH CAROLINA 27508
TEL: (919) 552-6243
ENGINEERING LICENSE NO. C-0180

REVISIONS

8/17/99

REVISED PARCEL 77 & 78 TO 76 - REVISED 6-24-09
REVISED ROW ON PARCEL 76 - REVISED 12-22-09
R/W REVISION:UPDATED EXISTING R/W AND C/A TO REFLECT AN ACQUISITION ON PARCELS 76,78 AND 80:ADDED PUE ON PARCELS 80 THROUGH 82:UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 76,82 AND 84:CORRECTED STA/OFF AT -L- STA 113+00 RT ON PARCEL 81:CORRECTED STA/OFF AT -L- STA 111+87.75 AND 112+81:LT ON PARCEL 77:- TEM - 05/26/11

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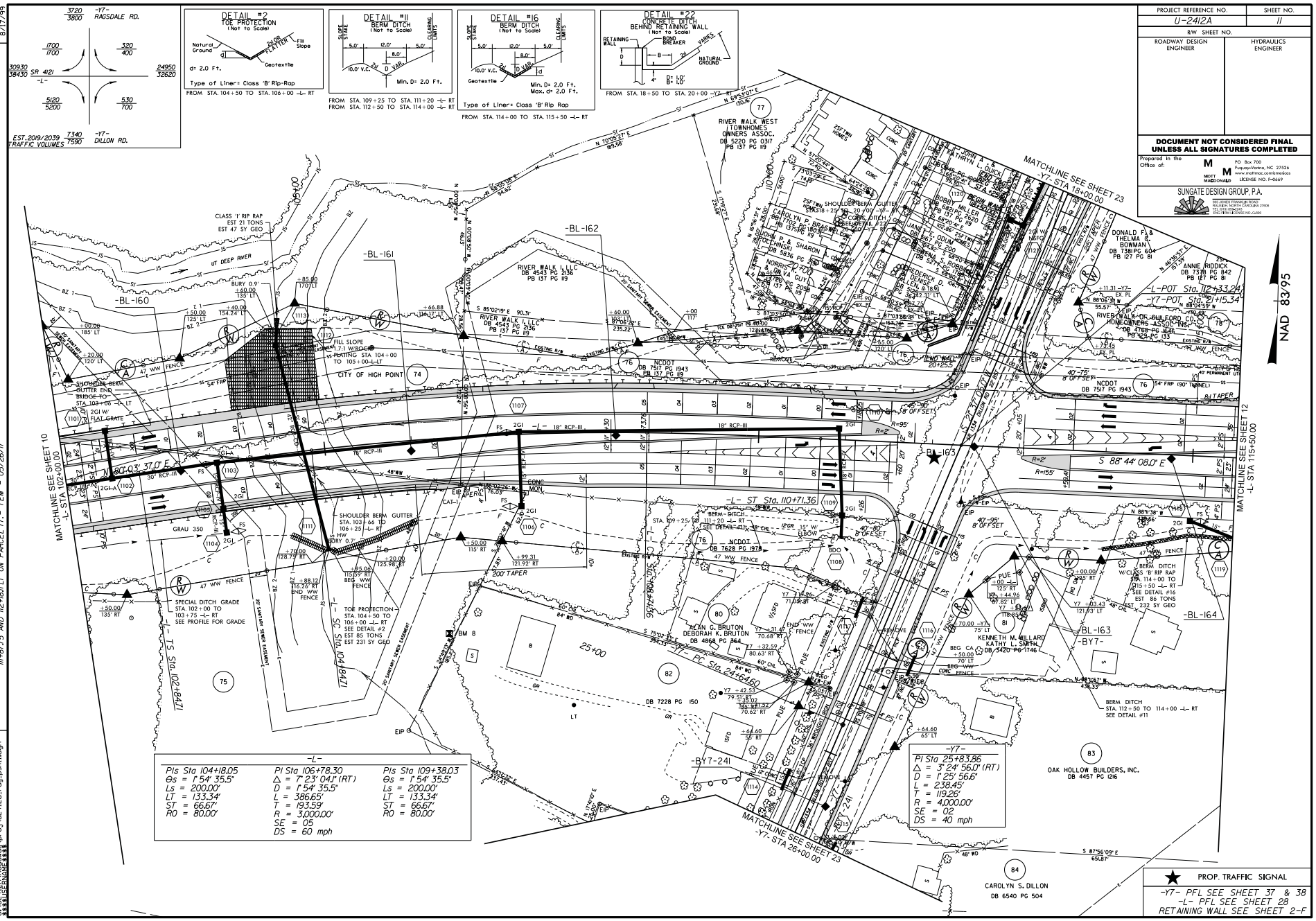

★ PROP. TRAFFIC SIGNAL

-Y7- PFL SEE SHEET 37 & 38
-L- PFL SEE SHEET 28
RETAINING WALL SEE SHEET 2-F

8/17/99

REVISIONS

REVISED PARCEL 79 TO 76; REVISED OWNER OF PARCEL 85 AND 86 - REVISED 6-24-09

R/W REVISION: UPDATED EXISTING R/W AND C/A TO REFLECT AN ACQUISITION ON PARCEL 76; UPDATED EXISTING R/W, C/A AND PUE TO REFLECT AN ACQUISITION ON PARCEL 86; REMOVED PUE ON PARCEL 78; UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 76 AND 84. - TEM - 05/26/17

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	12

R/W SHEET NO.

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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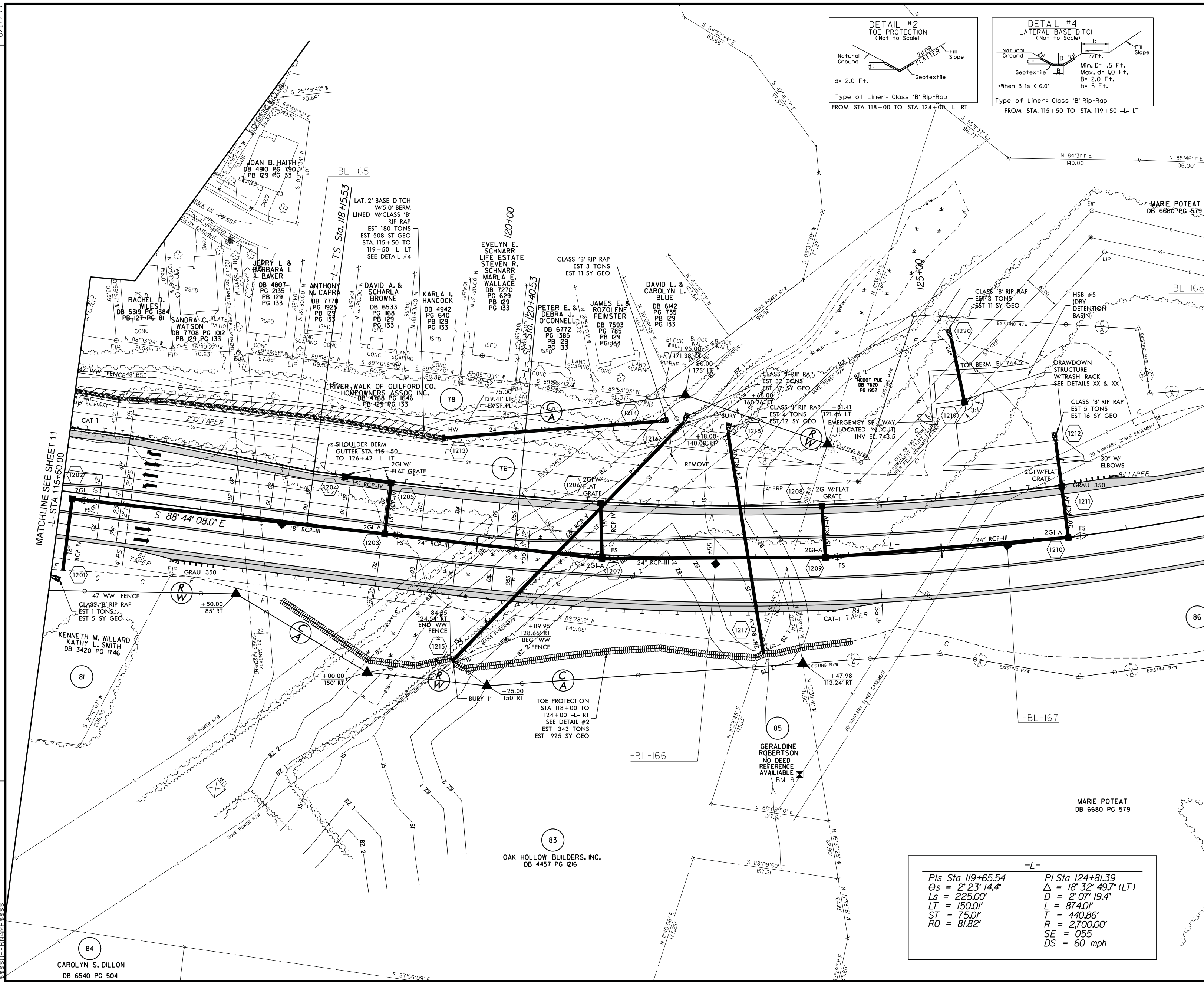

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	13

R/W SHEET NO.

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

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REVISIONS

8/17/99

REVISED OWNERS FOR PARCEL 86 AND 88 - REVISED 6-24-09
R/W REVISION:UPDATED EXISTING R/W,C/A AND PDE TO REFLECT AN ACQUISITION ON PARCEL 86;UPDATED PROPERTY OWNER NAME AND/OR DEED REFERENCE ON PARCEL 87.- TEM - 05/26/11

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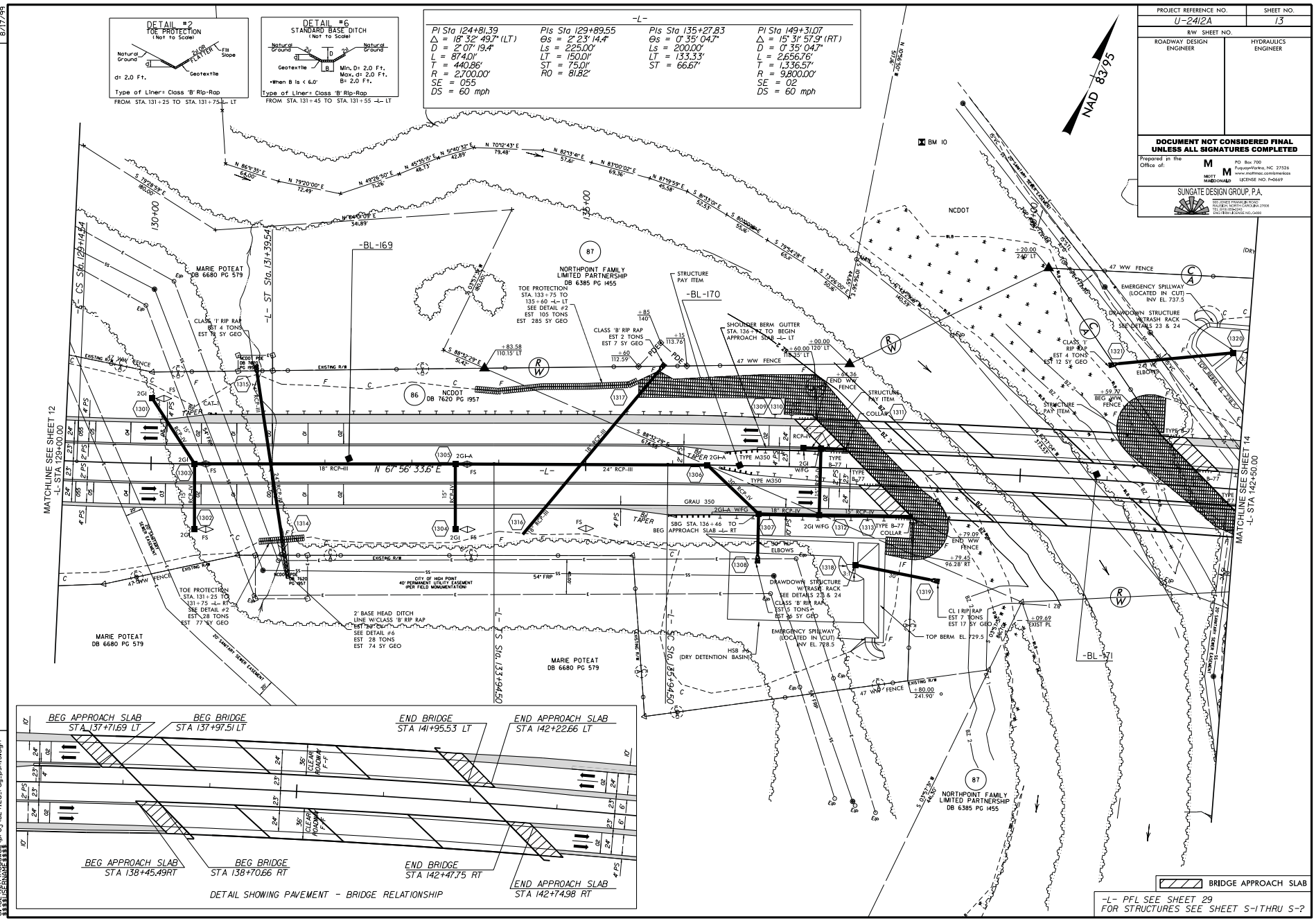

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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905 JUDGES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL: (919) 829-0202
ENGINEERING LICENSE NO. C-0481

REVISIONS

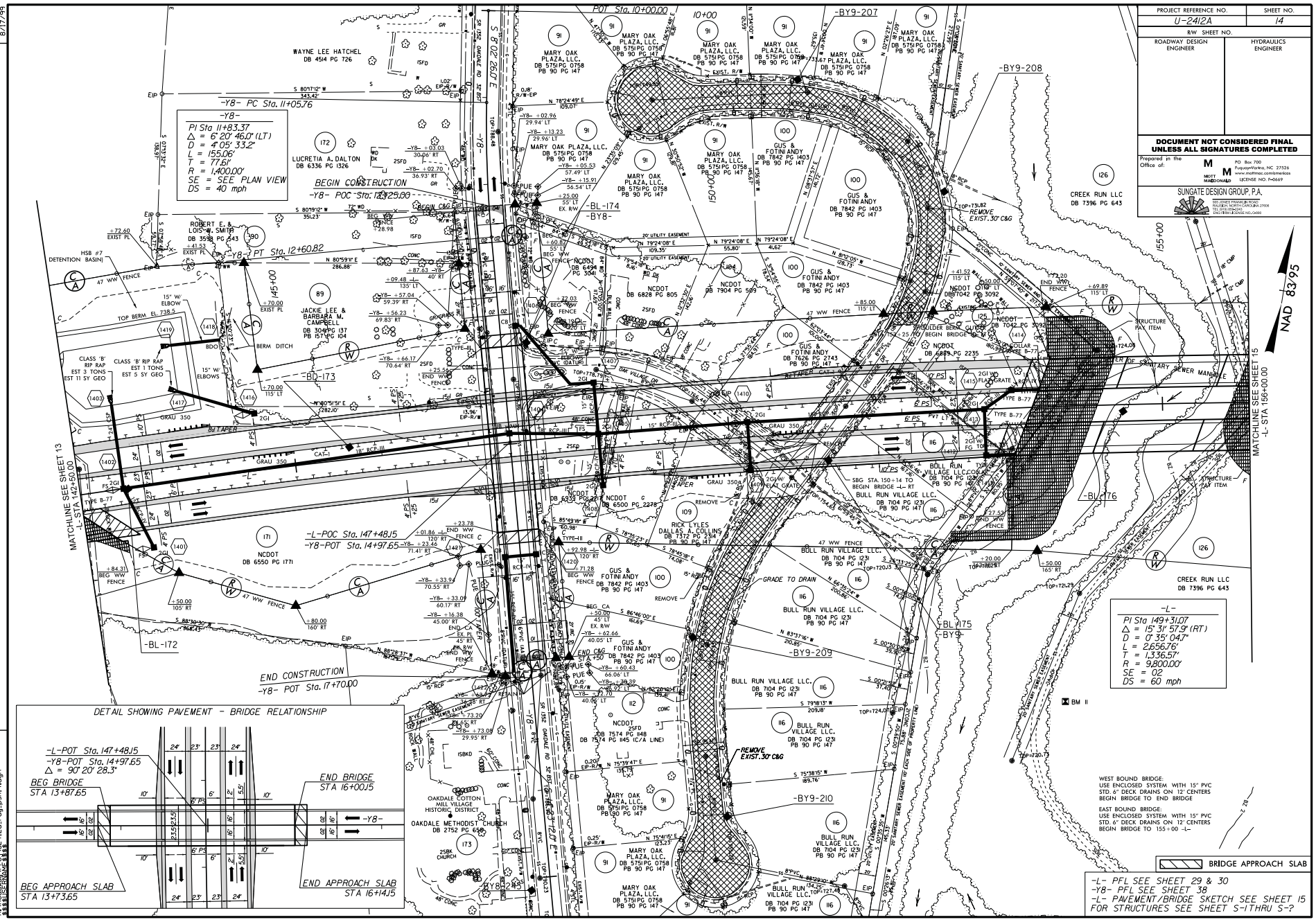
8/17/99

REVISED OWNER OF PARCEL 88,89,91,105,107,108,124,& 126;REVISED PARCELS 92,93,94,95,96,97,98,99,113,114,& 115 TO 91;PARCELS 117,118,119,120,121,122,123 TO 116; PARCELS 110 & 111 TO 100;PARCEL 102 TO 100 - REVISED 6-24-09

REVISED -Y8- BRIDGE APPROACH SLABS 10-05-09

R/W REVISION:REVISED SUBDIVISION PARCEL NUMBERS AS FOLLOWS;91 TO REFLECT 91 AND 91 THROUGH 91K;100 TO 100 AND 100A,101 TO 101,101A AND 101B,116 TO 116,116A THROUGH 116G;CREATED PARCELS 125 AND 126;REVISED OWNER NAME AND ADDRESS FOR PARCEL 91;ADDED PARCELS 91A THROUGH 91J;CORRECTED PARCEL 100A,101A,101B,103,104,109,112,116,116A THROUGH 116G;125 AND 126 ADDED PUE ON PARCELS 89 THROUGH 91,101 AND 171 THROUGH 173;CORRECTED STA/OFF AT -L- STA 147+90.86 RT ON PARCEL 171; CORRECTED STA/OFF AT -L- STA 147+92.98 RT ON PARCEL 101.- TEM - 05/26/17

R/W REVISION:RENUMBERED PARCELS 91A THROUGH 91K TO PARCEL 91; RENUMBERED PARCELS 100A,101,101A,101B AND 103 TO PARCEL 100; RENUMBERED PARCELS 116A THROUGH 116G TO PARCEL 116.- MDP - 08-10-17



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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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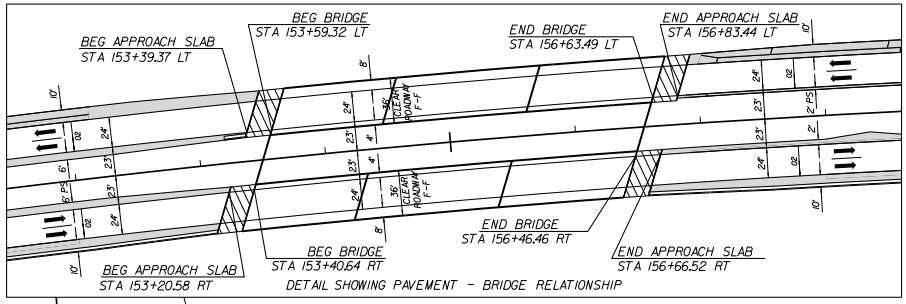

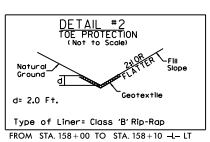

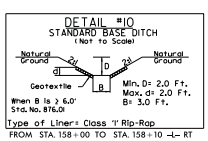

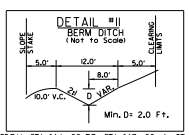

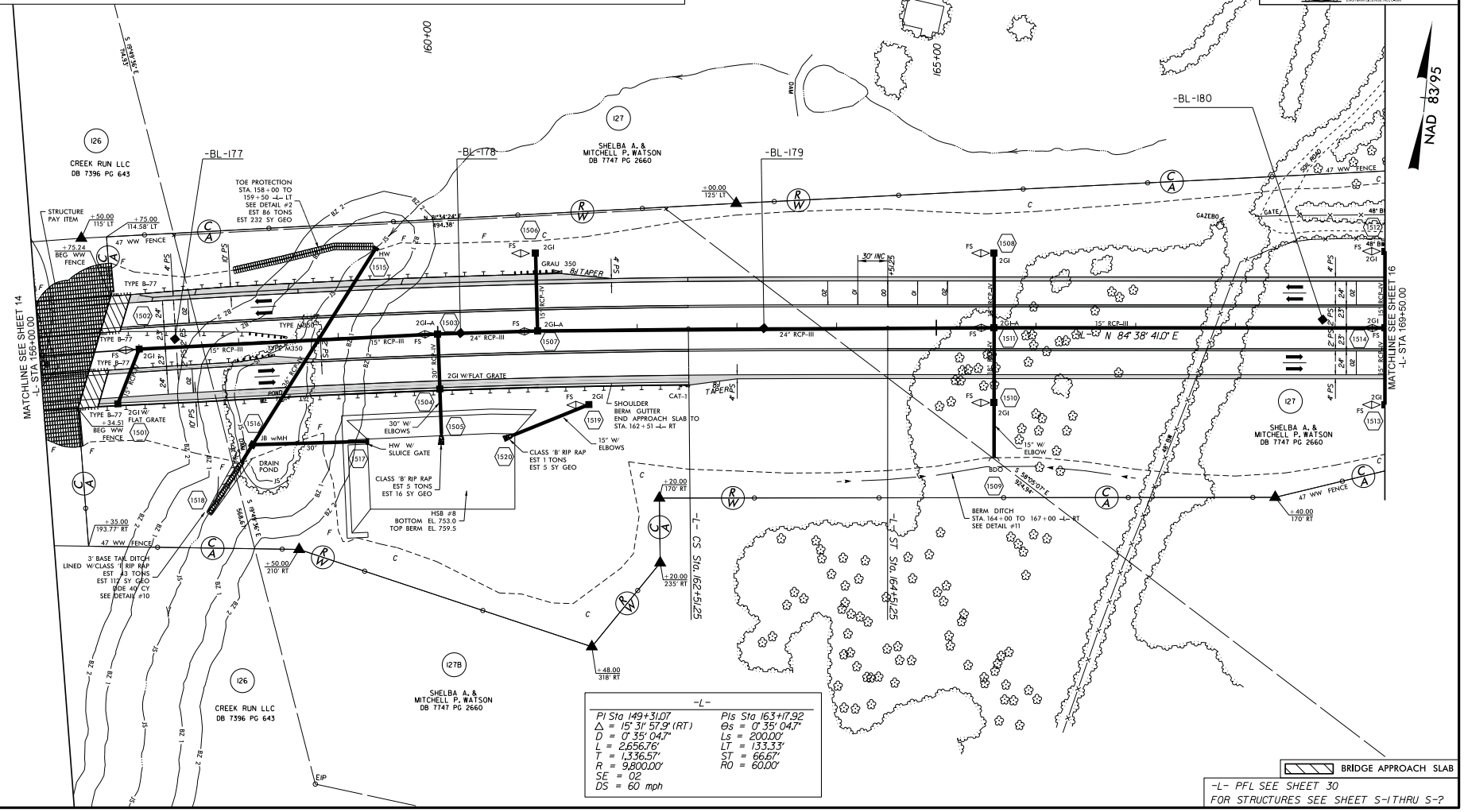

-L-

PI Sta 149+31.07	PIs Sta 163+17.92
Δ = 15° 31' 57.9" (RT)	Θs = 0° 35' 04.7"
D = 0° 35' 04.7"	Ls = 200.00'
L = 2,656.76'	LT = 133.33'
T = 1,336.57'	ST = 66.67'
R = 9,800.00'	RO = 60.00'
SE = 02	
DS = 60 mph	

REVISIONS

8/17/99

REVISED OWNER FOR PARCEL 126 - REVISED 6-24-09
R/W REVISION-CREATED PARCEL 127B; SUBDIVIDED PARCEL 127 INTO PARCELS 127 AND 127B; UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 126 THRU 127B. - TEM - 05/26/17

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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909 JONES FRANKLIN ROAD, RALEIGH, NORTH CAROLINA 27606, TEL: (919) 854-6200, ENG FIRM LICENSE NO.: C-0910

REVISIONS

8/17/99 R/W REVISION:CREATED PARCEL 127A-SUBDIVIDED PARCEL 127 INTO PARCELS 127 AND 127A-REMOVED AN ERRANT STA/OFF AT -L- STA 171+50 LT ON PARCEL 127.- TEM - 05/26/17

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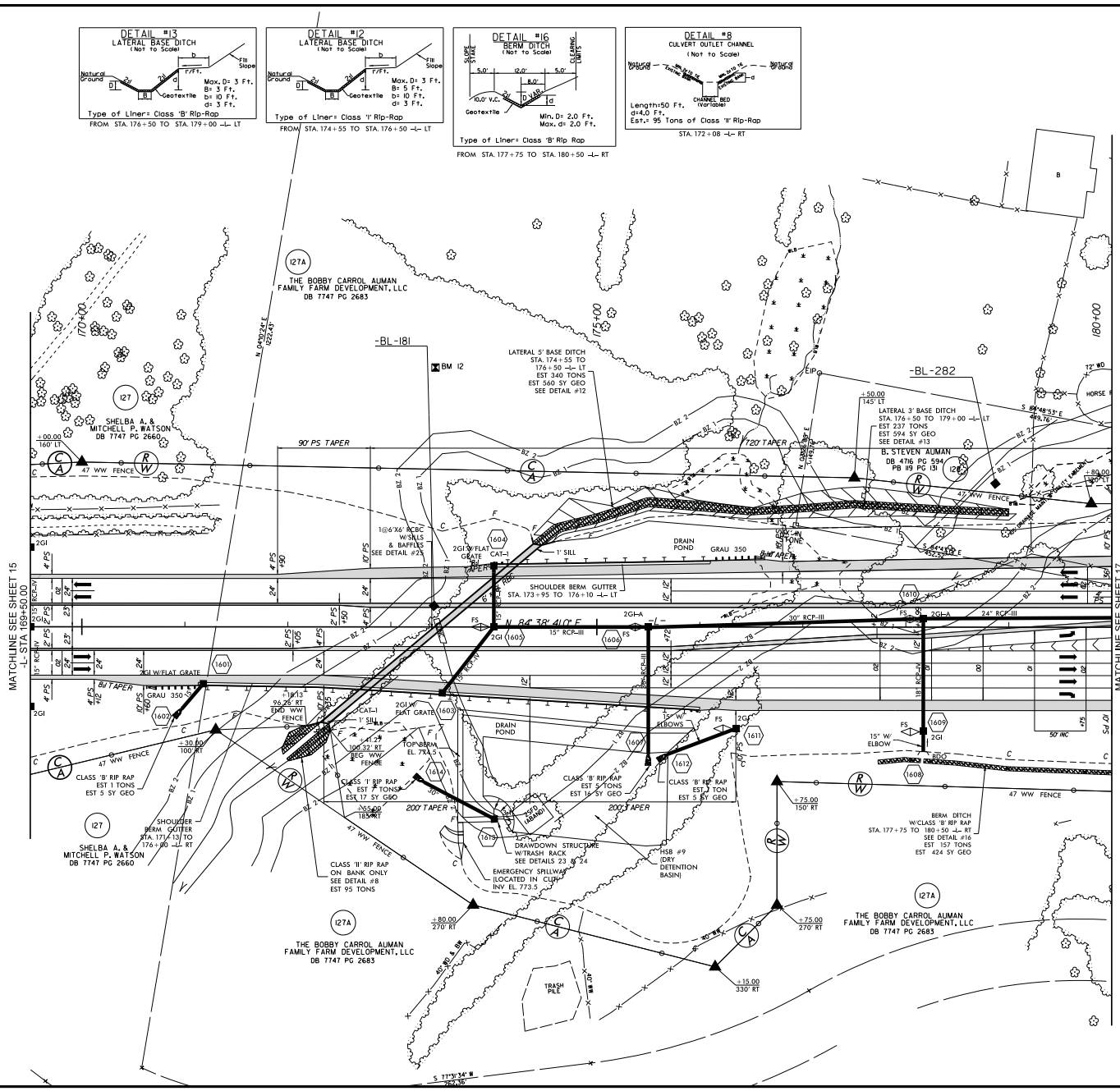

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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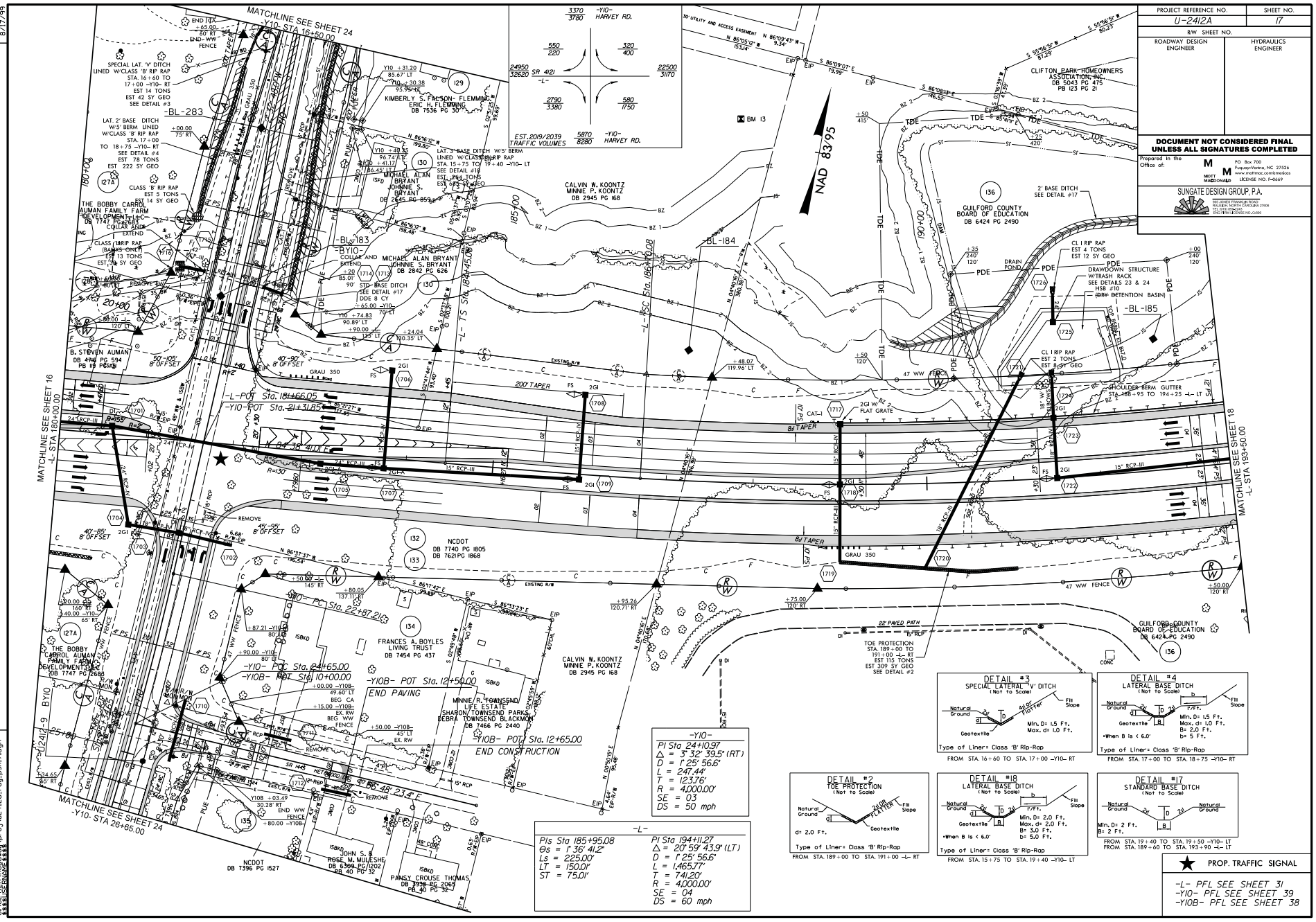
SUNGATE DESIGN GROUP, P.A.
105 FOREST FRANKLIN ROAD
MULBERRY, NORTH CAROLINA 28787
TEL: (910) 882-6243
ENGINEERING LICENSE NO. C-0181

8/17/99

REVISIONS

REVISED OWNER FOR PARCEL 129 & 136 - REVISED 6-24-09
REVISED PUE AND TCE TIE TO PUE ON PARCEL 135 - REVISED 5-21-12
R/W REVISION ADJUSTED PARCEL 134 AND DELETED REFERENCES ON PARCELS 127A, 129, 133 THROUGH 135, ADJUSTED PUE ON PARCELS 129, 130 AND 135, ADJUSTED PROPERTY OWNERS NAME AND DELETED REFERENCES ON PARCELS 127A, 129, 133 THROUGH 135, ADJUSTED PUE ON PARCEL 134, CORRECTED STA/OFF AT -L- STA 180+20 RT AND -Y10- STA 23+40 RT ON PARCEL 127A, CORRECTED STA/OFF AT -L- STA 182+50 RT ON PARCEL 134, - TEM - 05/26/17



-Y10-
PI Sta 24+10.97
Δ = 3° 32' 39.5" (RT)
D = 1° 25' 56.6"
L = 247.44'
T = 123.76'
R = 4,000.00'
SE = 03
DS = 50 mph

-L-
PIs Sta 185+95.08
θs = 1° 36' 41.2"
Ls = 225.00'
LT = 150.01'
ST = 75.01'

PI Sta 194+11.27
Δ = 20° 59' 43.9" (LT)
D = 1° 25' 56.6"
L = 1,465.77'
T = 741.20'
R = 4,000.00'
SE = 04
DS = 60 mph

DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground, Geotextile, Fill Slope, 4:1 Max. Fill Slope
Min. D= 1.5 Ft.
Max. d= 1.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 16+60 TO STA. 17+00 -Y10- RT

DETAIL #4
LATERAL BASE DITCH
(Not to Scale)
Natural Ground, Geotextile, Fill Slope, F/F Ft.
Min. D= 1.5 Ft.
Max. d= 1.0 Ft.
B= 2.0 Ft.
b= 5 Ft.
*When B is < 6.0'
Type of Liner= Class 'B' Rip-Rap
FROM STA. 17+00 TO STA. 18+75 -Y10- RT

DETAIL #2
TOE PROTECTION
(Not to Scale)
Natural Ground, Geotextile, Fill Slope, 2:1 Max. Fill Slope
d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 189+00 TO STA. 191+00 -L- RT

DETAIL #18
LATERAL BASE DITCH
(Not to Scale)
Natural Ground, Geotextile, Fill Slope, F/F Ft.
Min. D= 2.0 Ft.
Max. d= 2.0 Ft.
B= 3.0 Ft.
b= 5.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'B' Rip-Rap
FROM STA. 15+75 TO STA. 19+40 -Y10- LT

DETAIL #17
STANDARD BASE DITCH
(Not to Scale)
Natural Ground, Natural Ground
Min. D= 2 Ft.
B= 2 Ft.
FROM STA. 19+40 TO STA. 19+50 -Y10- LT
FROM STA. 189+60 TO STA. 193+90 -L- LT

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	18
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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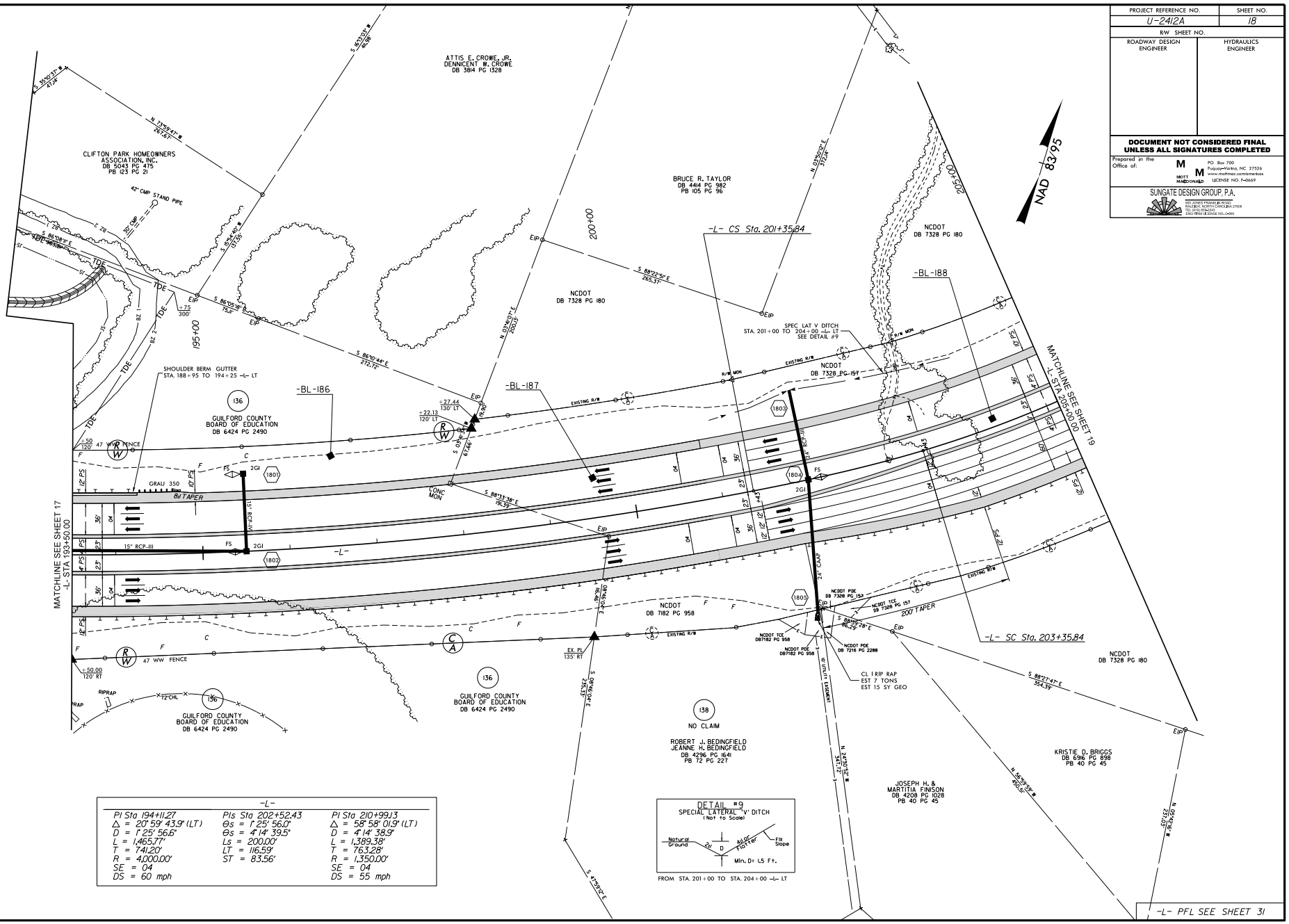
905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL: (919) 859-2243
ENGINEERING LICENSE NO. C-0481



-L-		
PI Sta 194+11.27	PIs Sta 202+52.43	PI Sta 210+99.13
Δ = 20° 59' 43.9" (LT)	Θs = 1° 25' 56.0"	Δ = 58° 58' 01.9" (LT)
D = 1° 25' 56.6"	Θs = 4° 14' 39.5"	D = 4° 14' 38.9"
L = 1,465.77'	Ls = 200.00'	L = 1,389.38'
T = 741.20'	LT = 116.59'	T = 763.28'
R = 4,000.00'	ST = 83.56'	R = 1,350.00'
SE = 04		SE = 04
DS = 60 mph		DS = 55 mph

REVISIONS

8/17/99 REVISED OWNER FOR PARCEL 136 & 137 - REVISED 6-24-09
R/W REVISION: REMOVED A PROPERTY LINE ON PARCEL 136; ADJUSTED PROPOSED R/W AT -L- STA 198+27.44,130' LT AND TDE ON PARCEL 136; UPDATED EXISTING R/W AND C/A TO REFLECT AN ACQUISITION ON PARCEL 138; ADDED "NO CLAIM" ON PARCEL 138.- TEM - 05/26/17

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	19
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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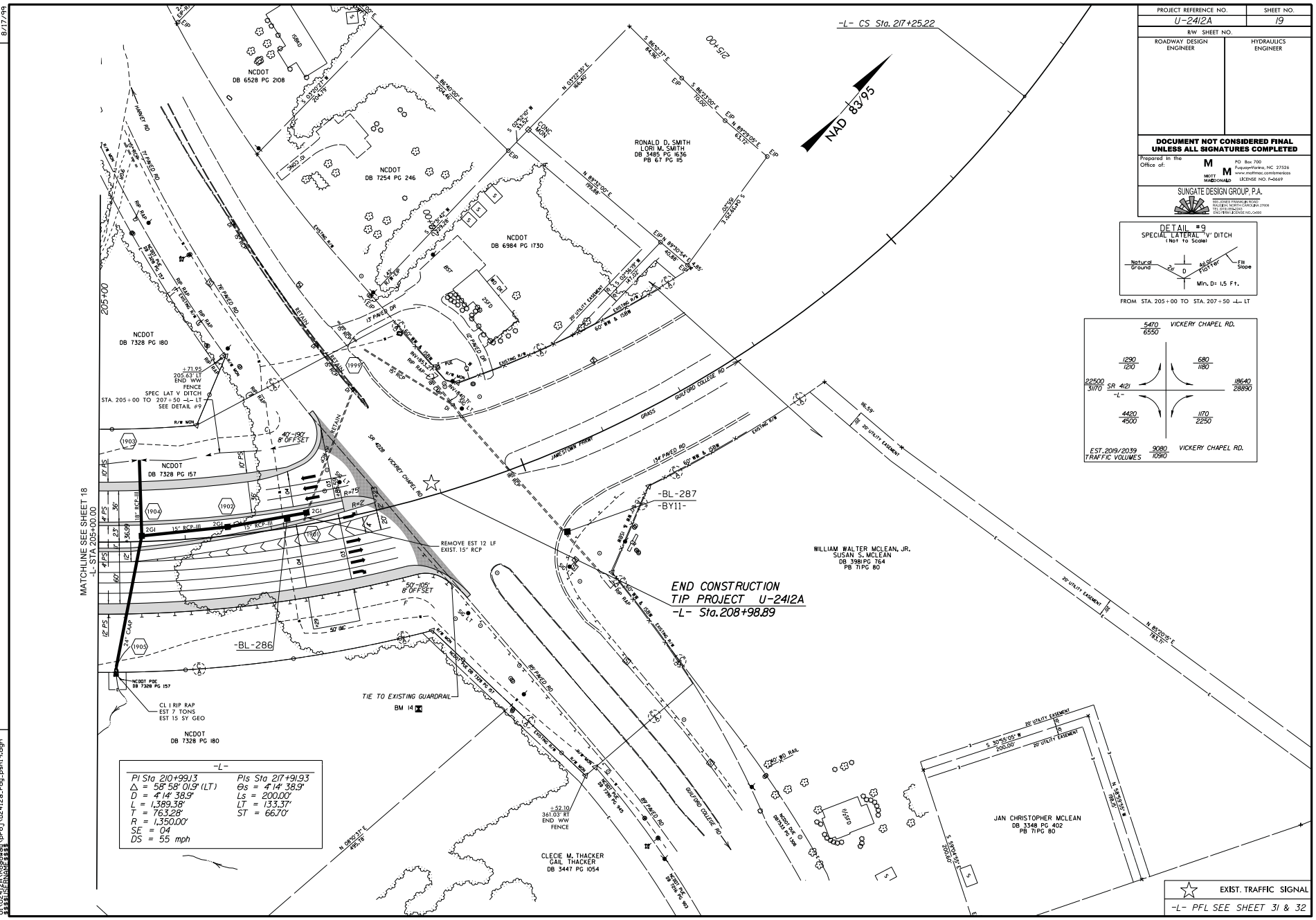
SUNGATE DESIGN GROUP, P.A.
909 LEGGETT FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27603
TEL: (919) 834-2241
ENGINEERING LICENSE NO. C-0910



DETAIL #9
SPECIAL LATERAL "V" DITCH
(Not to Scale)

FROM STA. 205+00 TO STA. 207+50 -L- LT

EXIST. TRAFFIC SIGNAL

-L- PFL SEE SHEET 31 & 32

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	20
R/W SHEET NO.	
19	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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905 JUDGES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243
ENGINEERING LICENSE NO. C-0461

-Y-
PI Sta 17+86.26
△ = 90° 50' 28.0" (RT)
D = 11° 48' 48.8"
L = 768.96'
T = 492.17'
R = 485.00'
SE = 06
DS = 40 mph

-YA-
PI Sta 11+85.92
△ = 32° 50' 02.0" (LT)
D = 22° 55' 05.9"
L = 143.26'
T = 73.66'
R = 250.00'
SE = SEE PLAN VIEW
DS = 30 mph

-YC-
PI Sta 14+00.19
△ = 22° 15' 26.6" (LT)
D = 19° 05' 54.9"
L = 116.54'
T = 59.01'
R = 300.00'
SE = SEE PLAN VIEW
DS = 25 mph

PI Sta 15+19.13
△ = 44° 32' 05.6" (RT)
D = 38° 11' 49.9"
L = 116.59'
T = 61.42'
R = 150.00'
SE = SEE PLAN VIEW
DS = 25 mph

-Y3-
PI Sta 11+49.51
△ = 0° 45' 08.0" (RT)
D = 0° 34' 22.6"
L = 131.29'
T = 65.64'
R = 10,000.00'
SE = NC
DS = 30 mph

NAD 83/95

PAVEMENT REMOVAL
-Y- PFL SEE SHEET 34
-YA- PFL SEE SHEET 34
-YC- PFL SEE SHEET 34
-Y3- PFL SEE SHEET 35

MATCHLINE SEE SHEET 5 -Y- STA 12+50.00

MATCHLINE SEE SHEET 5 -Y3- STA 13+00.00

REVISIONS
8/17/99
REVISED OWNER FOR PARCEL 14,15,& 16; REVISED PARCEL 142 TO 140 - REVISED 6-24-09
REVISED SHEET NUMBER FROM 19 TO 20 - REVISED 10-20-2016
R/W REVISION: REVISED PARCEL 139 TO 140 AND PERMANENT EASEMENT TO REFLECT AN ACQUISITION ON PARCELS 15 AND 16; UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 14 THROUGH 16,139,143 THROUGH 145 AND 147; ADJUSTED PUE ON PARCELS 139 THROUGH 141 AND 143; ADDED PUE ON PARCELS 168 AND 174; REMOVED PUE ON PARCEL 144. - TEM - 05/26/17
REVISED PUE FROM -Y- STA.18+76.93 TO 20+95.40 LT. ON PARCELS 143 AND 144. - MDP - 7-12-2017
R/W REVISION: REVISED THE DRIVEWAY ENTRANCE ON PARCEL 143. - MDP - 08-10-17

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PROJECT REFERENCE NO.	SHEET NO.
U-2412A	21
R/W SHEET NO.	
20	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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Prepared in the Office of:
MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
www.mottmac.com/americas
LICENSE NO. F-0869

SUNGATE DESIGN GROUP, P.A.
905 SUGGETT FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27608
TEL: (919) 854-2200
ENGINEERING LICENSE NO. C-0910

REVISIONS

REVISED OWNER FOR PARCEL 151 & 152; ADDED PARCEL 151A & 152A - REVISED 6-24-09
REVISED SHEET NUMBER FROM 20 TO 21 - REVISED 10-20-2016
R/W REVISION: CREATED PARCEL 176, UPDATED EXISTING R/W AND/OR PROPERTY LINES ON PARCELS 150 THROUGH 152A AND 176; UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 150, 151A AND 156; REVISED PROPOSED R/W ON PARCELS 151 AND 152A; ADDED PDE ON PARCELS 152A AND 176; ADJUSTED PUE ON PARCEL 4; REMOVED PUE ON PARCELS 152, 152A, 153 AND 176. - TEM - 05/26/17

8/17/99

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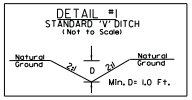
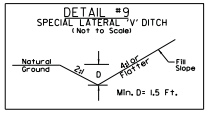
NAD 83/95

DETAIL #1
STANDARD "V" DITCH
(Not to Scale)

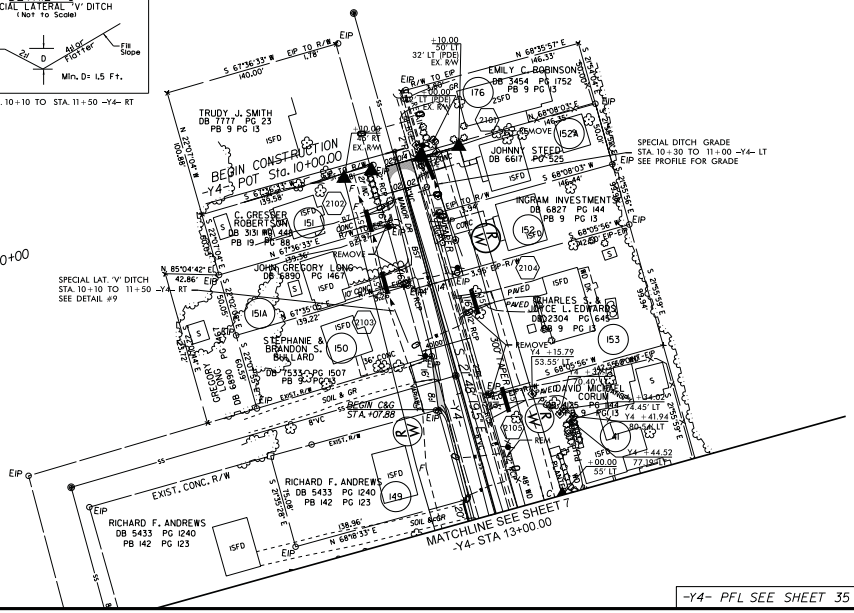


FROM STA. 10+30 TO STA. 11+00 -Y4- LT

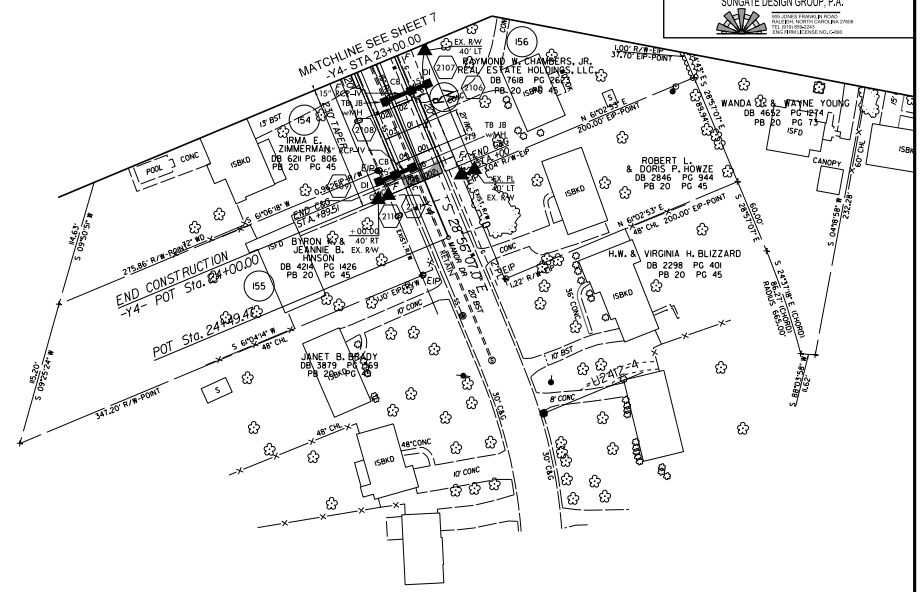
DETAIL #9
SPECIAL LATERAL "V" DITCH
(Not to Scale)



FROM STA. 10+10 TO STA. 11+50 -Y4- RT



NAD 83/95



PROJECT REFERENCE NO.	SHEET NO.
U-2412A	22
R/W SHEET NO.	21
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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SUNGATE DESIGN GROUP, P.A. — 905 JONES FRANKLIN ROAD, RALEIGH, NORTH CAROLINA 27606, TEL: (919) 854-6200, ENGINEERING LICENSE NO. C-0910

REVISIONS

REVISED OWNER FOR PARCEL 59 - REVISED 6-24-09
REVISED SHEET NUMBER FROM 21 TO 22 - REVISED 10-20-2016
R/W REVISION:CREATED PARCELS 177 AND 178;UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 59,67 AND 157;ADJUSTED PUE ON PARCEL 60; ADDED PUE ON PARCELS 59,69,158,159,177 AND 178;CORRECTED STA/OFF AT -Y5- STA 22+00 RT ON PARCEL 69;CORRECTED STA/OFF AT -Y5B- STA 12+20 RT ON PARCEL 158;CORRECTED STA/OFF AT -Y5- STA 23+80 AND 24+30 LT ON PARCEL 160.- TEM - 05/26/11

8/17/99

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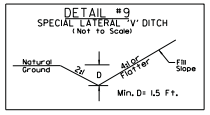
NAD 83/95

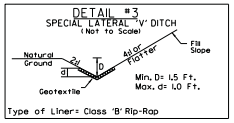
-BY5-200

DETAIL #9
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



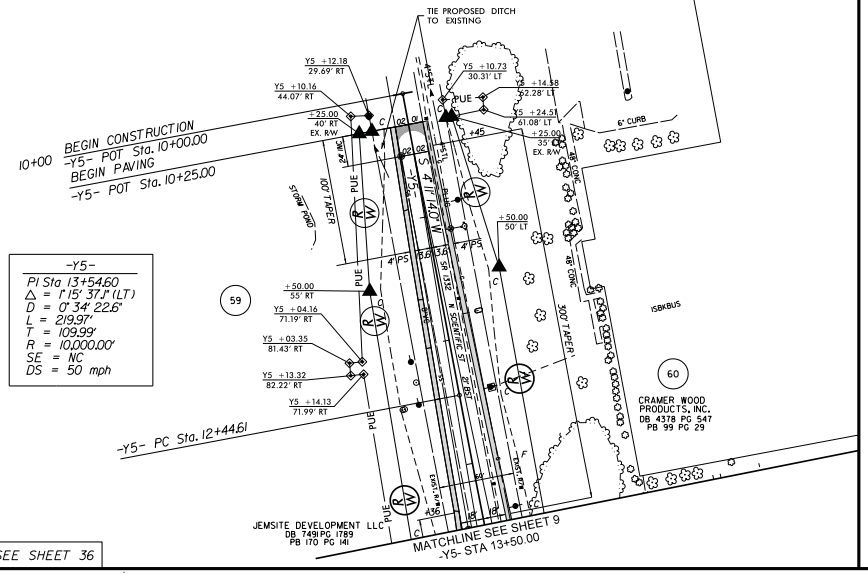
FROM STA. 23+50 TO STA. 24+00 -Y5- RT

DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)

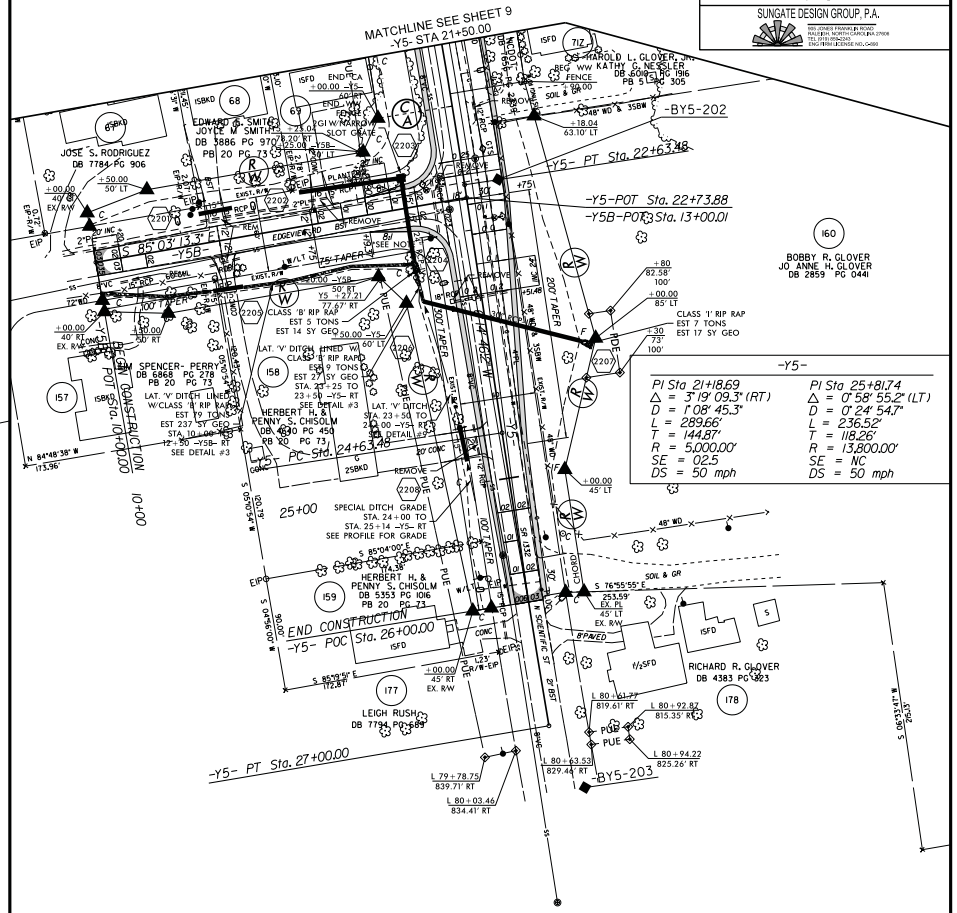


Type of Liner= Class 'B' Rip-Rap

FROM STA. 10+00 TO STA. 12+50 -Y5B- RT



NAD 83/95



PROJECT REFERENCE NO.	SHEET NO.
U-2412A	23
R/W SHEET NO.	
22	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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LICENSE NO. F-0669

SUNGATE DESIGN GROUP, P.A.
905 SUNSET FARM DR. SOUTH
RALEIGH, NORTH CAROLINA 27603
TEL: (919) 834-2200
ENGINEERING LICENSE NO.: C-0181

REVISIONS

8/17/99

REVISED SHEET NUMBER FROM 22 TO 23 - REVISED 10-20-2016
R/W REVISION:CREATED PARCELS 163B AND 179;SUBDIVIDED PARCEL 163 INTO PARCELS 163,163A AND 163B;UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 78,84,AND 161THROUGH 163;ADDED PUE ON PARCELS 75,82,161,162 AND 179;REMOVED PUE ON PARCELS 84,163 AND 163B.- TEM - 05/26/17

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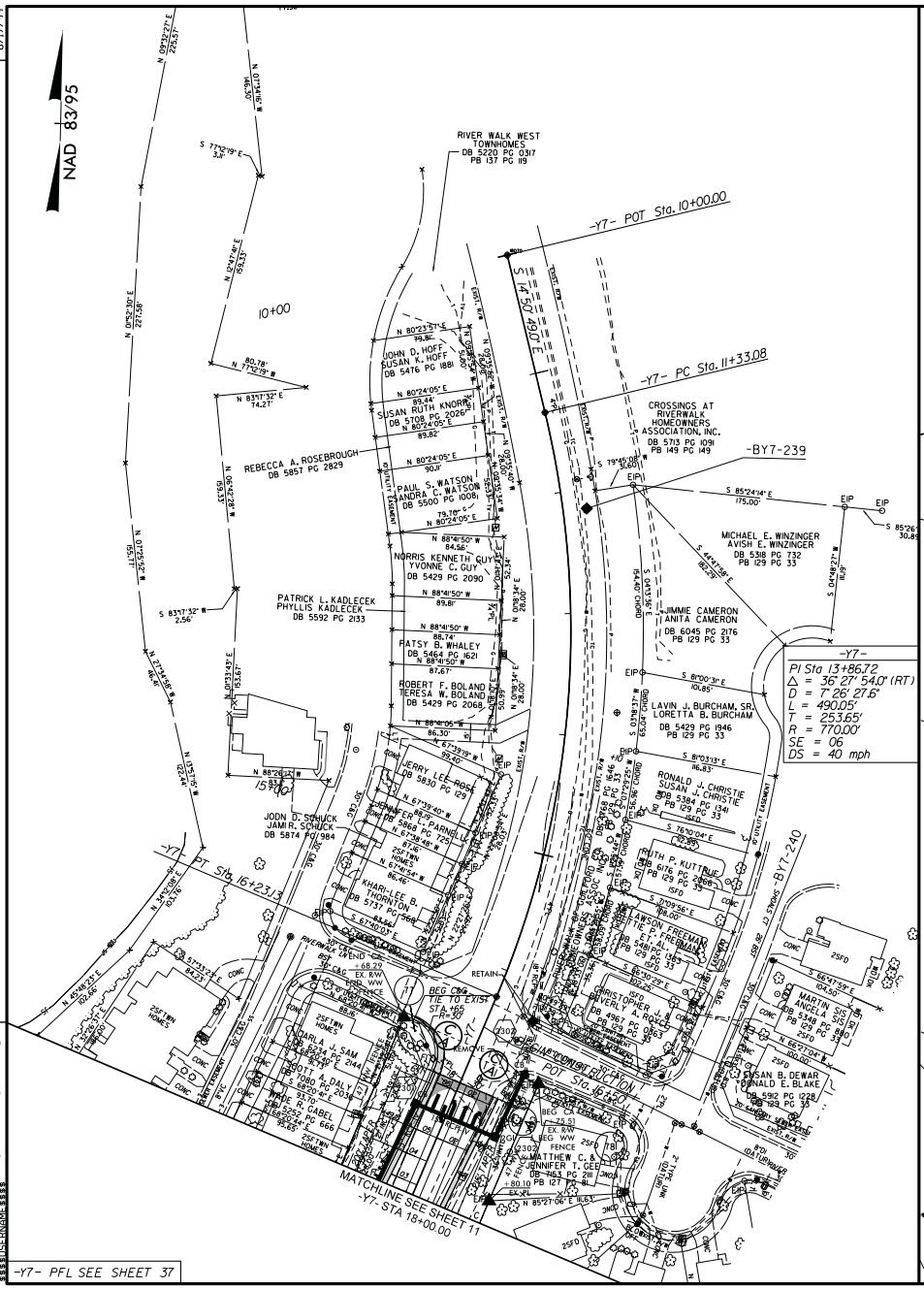

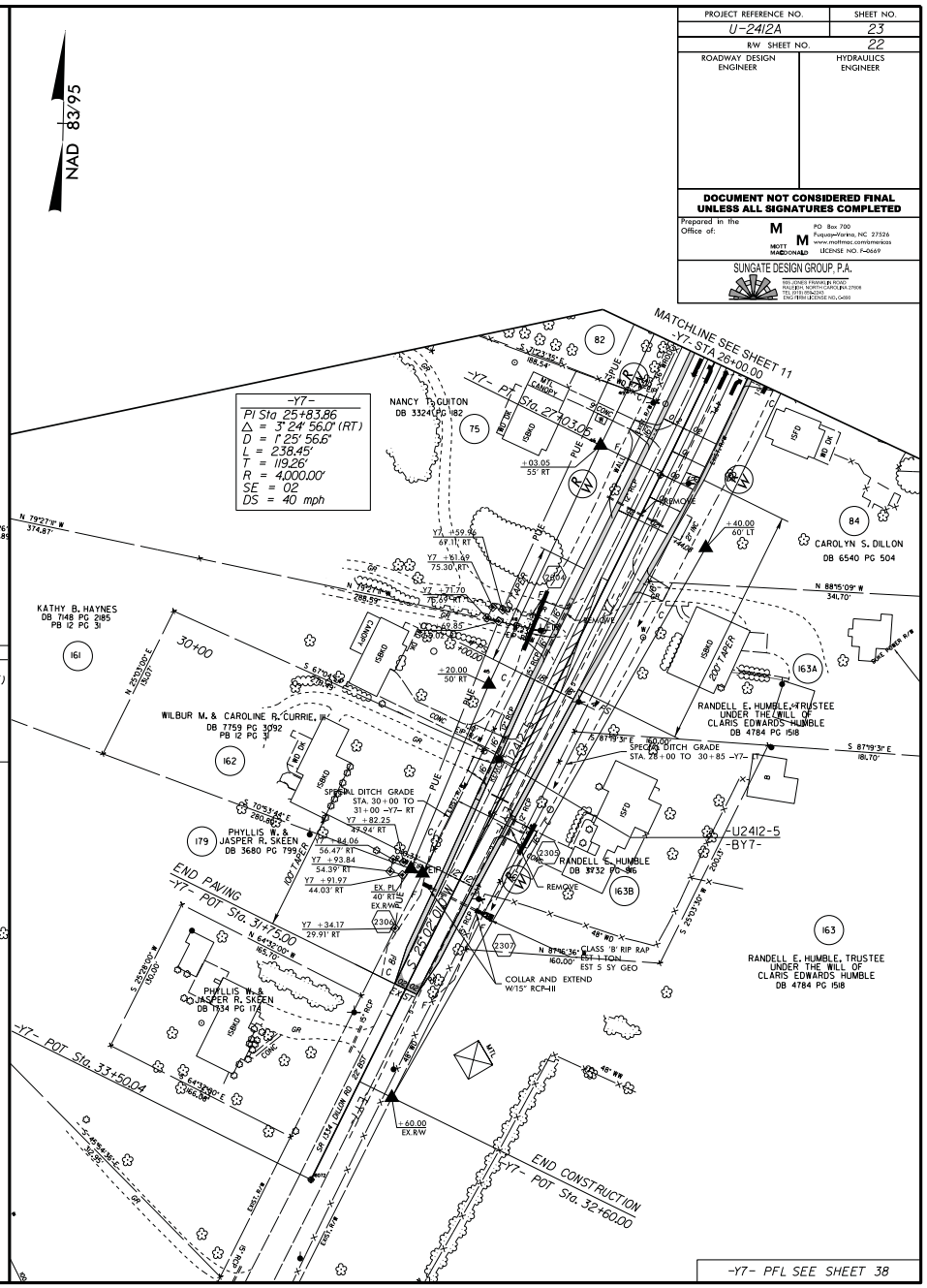

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	24
R/W SHEET NO.	
23	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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LICENSE NO. F-0669

SUNGATE DESIGN GROUP, P.A.
905 JUDGES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL: (919) 859-2243
ENGINEERING LICENSE NO.: C-0461

REVISIONS

REVISED OWNER FOR PARCEL 129 & 164 - REVISED 6-24-09
REVISED SHEET NUMBER FROM 23 TO 24 - REVISED 10-20-2016
R/W REVISION-CREATED PARCEL 181,UPDATED PARCEL 127 TO 127A,UPDATED PROPERTY OWNER NAMES AND/OR DEED REFERENCES ON PARCELS 127,127A,129,135 AND 165;
ADJUSTED PUE ON PARCELS 129 AND 135,ADDED PUE ON PARCELS 127 AND 181,REMOVED PUE ON PARCELS 164 THROUGH 167. - TEM - 05/26/17

8/17/99

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NAD 83/95

-Y10-
PI Sta 14+96.45
Δ = (-) 32° 59.0" (LT)
D = 0° 34' 22.6"
L = 270.48'
T = 135.25'
R = 10,000.00'
SE = NC
DS = 50 mph

-Y10- POT Sta. 10+00.00

-Y10- PC Sta. 13+61.20

BEGIN CONSTRUCTION
-Y10- POT Sta. 14+65.00

-Y10- PT Sta. 16+31.68

END CONSTRUCTION
-Y10- POT Sta. 32+00.00

-BY10-211

-BY10-212

-EY10-

PEGGY K. WEAVER
DB 2196 PG 595
PB 30 PG 7

WALTER K. BURTON
JOYCE A. BURTON
DB 3829 PG 855

HENRY A. SCOTT, JR.
GILDA F. SCOTT
PB30 PG 7

BRENDA KENNEDY
DB 5248 PG 1335
PB30 PG 7

GEORGE J. TAYLOR HEIRS
PB30 PG 7

GEORGE J. TAYLOR
PB30 PG 7

THE BOBBY CARROLL AUMAN FAMILY FARM DEVELOPMENT LLC
DB 7747 PG 2683

DORIS JACKSON
DB 7138 PG 1245
PB 40 PG 43

STEPHEN EDWARD BENOIT
LEIGH ANNE BENOIT
DB 6050 PG 2157
PB 66 PG 21

CLIFTON PARK HOMEOWNERS ASSOCIATION, INC.
DB 5043 PG 475
PB 123 PG 21

KIMBERLY S. FALCON- FLEMMING
ERIC H. FLEMMING
DB 7556 PG 30

DETAIL #18
LATERAL BASE DITCH
(Not to Scale)
Natural Ground, Fill Slope, Geotextile, Min. D= 2.0 Ft., Max. d= 2.0 Ft., B= 3.0 Ft., b= 5.0 Ft., *When B is < 6.0'
Type of Liner= Class 'B' Rip-Rap
FROM STA. 15+75 TO STA. 19+40 -Y10- LT

LAT. 3' BASE DITCH W/5' BERM LINED W/CLASS 'B' RIP RAP
STA. 15+75 TO 19+40 -Y10- LT
SEE DETAIL #18
SEE SHEET 17 FOR QUANTITIES

MATCHLINE SEE SHEET 17
-Y10- STA 16+50.00

-Y10- PFL SEE SHEET 39

MATCHLINE SEE SHEET 17
-Y10- STA 26+65.00

SHERRILL L. & KITSIE O. AUMAN
DB 7747 PG 2672

NCDOT
DB 7396 PG 1527

JOHN S. & ROSE M. MULESHE
DB 6309 PG 1202
PB 40 PG 32

PANSY CROUSE THO
DB 3938 PG 206
PB 40 PG 32

DONALD HETHCOX
PB 6902 PG 1543

THOMAS J. RANDO
DB 7121 PG 1239
DB 7207 PG 2305
PB 171 PG 101

WALTER A. & SYLVIA C. LIPPARD, JR
DB 2889 PG 322
PB 40 PG 52

JEFFREY TYLER RUSH
DB 5115 PG 1466

WILLIAM L. SANDRIDGE
DB 7348 PG 225

CLASS 'B' RIP RAP
EST 2 TONS
EST 7 SY GEO

* USE 3:1 FILL SLOPE
STA. 30+50 TO 31+00 -Y10- LT

DETAIL #9
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground, Fill Slope, 4:1 OR 7:1 OR 10:1 OR 15:1, Min. D= 1.5 Ft.
FROM STA. 29+50 TO STA. 32+00 -Y10- LT

SPECIAL LAT. 'V' DITCH
STA. 29+50 TO 32+00 -Y10- LT
SEE DETAIL #9

-Y10- PFL SEE SHEET 39