T.I.P. PROIECT: R-5861

NTRACT: C204877

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SIGNING PLAN CHEROKEE COUNTY

LOCATION: WIDENING US 19 /129 FROM THE GEORGIA STATE LINE TO US 64 /74.

TIP NO. SHEET NO.

R-5861 SIGN-1

APPROVED: DocuSigned by:

069183F28E5741E...

DATE:

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ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

ı	CONSID	ERED A PART OF THESE PLANS:
l	<u>STD. NO</u> .	<u>TITLE</u>
l	904.10	ORIENTATION OF GROUND MOUNTED SIGNS
l	904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS, SHEET 2 OF 2
ı	910.50	SIGNING FOR SPEED REDUCTION ZONES
l	1264.01	OBJECT MARKERS - TYPES
l	1264.02	OBJECT MARKERS - INSTALLATION
ı		

SUMMARY OF QUANTITIES ITEM DESCRIPTION ITEM NO. QUANTITY UNIT SECT. DESC. NO. NO. 4072000000 SUPPORTS, 3 LB STEEL U-CHANNEL 1,975 4096000000 SIGN ERECTION, TYPE D EA. 4102000000 SIGN ERECTION, TYPE E 111 EA. 4108000000 SIGN ERECTION, TYPE F EA. 4116100000 EA. SIGN ERECTION, RELOCATE SIGN TYPE D 4116100000 SIGN ERECTION, RELOCATE SIGN TYPE E EA. 4155000000 DISPOSAL OF SIGN SYSTEM, U-CHANNEL EA. 4192000000 EA. DISPOSAL OF SUPPORT, U-CHANNEL 4360000000 RECTANGULAR RAPID FLASHING BEACON ASSEMBLY EA. 4360000000 DISPOSAL OF FLASHER SYSTEM EA.

PLAN SUBMITTED TO: NCDOT DIVISION 14 STEVEN BUCHANAN DIVISION TRAFFIC ENGINEER KELVIN L. JORDAN SIGNING AND DELINEATION REGIONAL ENGINEER

GENERAL NOTES

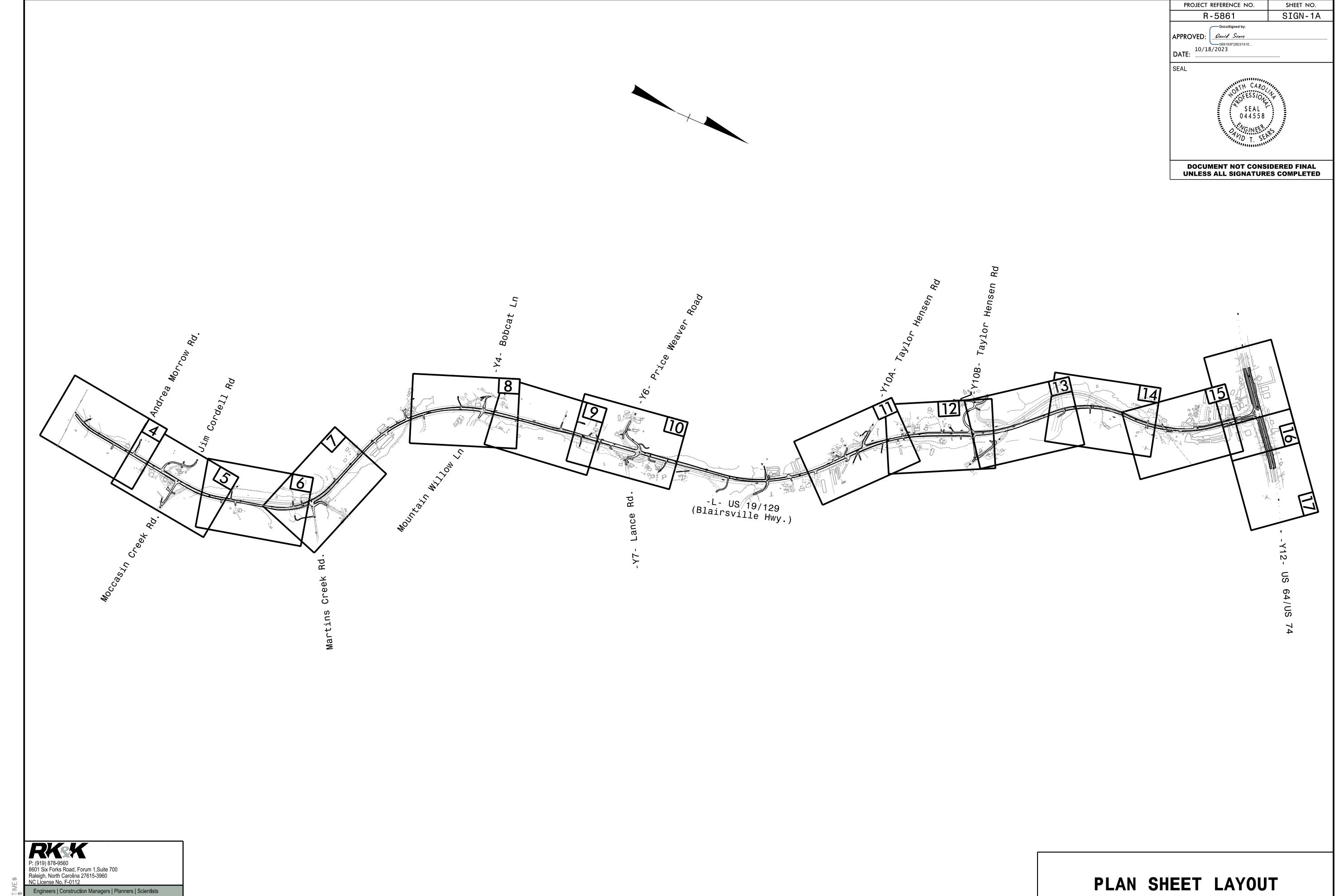
- . SIGNS FURNISHED BY STATE (BUNN PLANT)
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING. SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

INDEX

	SHEET NO.	DESCRIPTION
	SIGN-1	TITLE SHEET
	SIGN-1A	PLAN SHEET LAYOUT
	SIGN-2-2A	REVISED SIGNING ROADWAY STANDARD DRAWING
	SIGN-3-3A	E AND F SIGNS
	SIGN-3B-3C	SIGN DESIGNS
	SIGN-4-17	SIGNING PLAN SHEETS
1)

	P: (919) 878-9560 8601 Six Forks Road, Forum 1,Suite 700 Raleigh, North Carolina 27615-3960 NC License No. F-0112		
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<u>Allen Tutt</u> Sr. Designer	Engineers Construction Managers Planners Scientists www.rkk.com		
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TIP NO.

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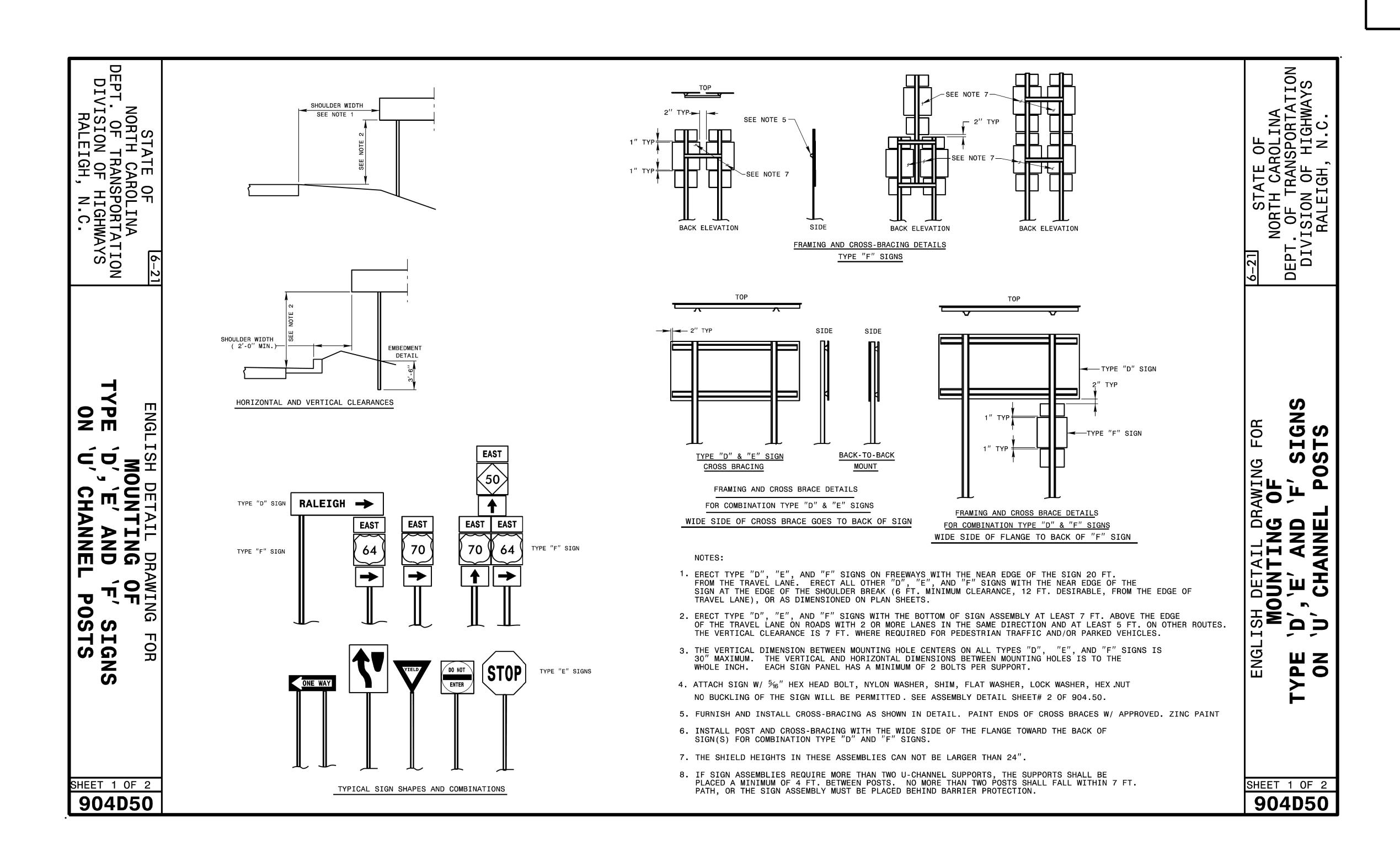
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REVISED SIGNING ROADWAY STANDARD DRAWING

Two to Four Lanes, Undivided RRFB A I OR OR W11-2 W16-7PL A OR R10-25

RRFB Sign Detail

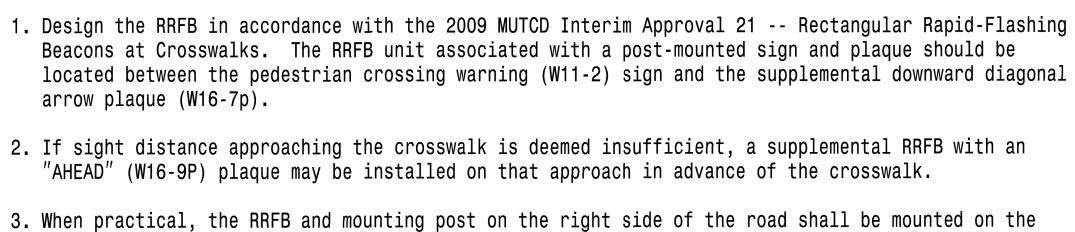
W11-2

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W16-7PR

R10-25

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Notes

- approach side of the crosswalk closest to approaching traffic.
- 4. When practical, the RRFB and mounting post on the left side of the road may be mounted on the back of the post for the opposing approach.
- 5. A RRFB on the left side of the roadway or in the median may be individually mounted on the approach side of the crosswalk closest to approaching traffic, or, when practical, may be mounted back to back on the same post and mounted on either side of the crosswalk in the median.
- 6. Locate push button sign (R10-25) and push button to face crosswalk, even if it is mounted on the back side of the sign.
- 7. All RRFB units associated with a given crosswalk (including those with an advance crossing sign) shall, when actuated, simultaneously commence operation of their rapid-flashing indications and shall cease operation simultaneously.

<u>Timing of RRFBs</u>

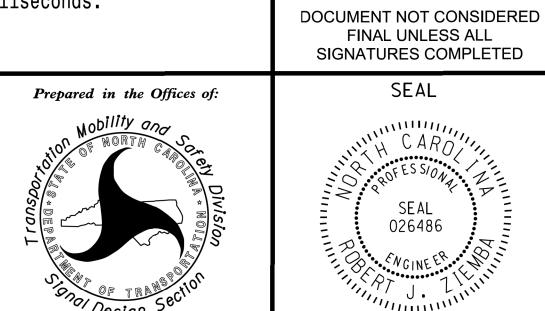
When actuated, the two yellow indications in each RRFB unit shall flash in a rapidly flashing sequence.

The RRFB shall flashing sequence shall provide enough time for pedestrians to cross from curb to curb. It is recommened to be a minimum of 7 seconds plus the crossing distance (D) divided by 3.5 feet/per sec., rounded up to the next whole second:

Flash Time (sec.) = 7 + D/3.5

RRFBs shall provide 75 flashing sequences per minute. During each 800-millisecond flashing sequence, the left and right RRFB indications shall operate using the following sequence:

- The RRFB indication on the left-hand side shall be illuminated for approximately 50 milliseconds. Both RRFB indications shall be dark for approximately 50 milliseconds.
- The RRFB indication on the right-hand side shall be illuminated for approximately 50 milliseconds. Both RRFB indications shall be dark for approximately 50 milliseconds.
- The RRFB indication on the left-hand side shall be illuminated for approximately 50 milliseconds. Both RRFB indications shall be dark for approximately 50 milliseconds.
- The RRFB indication on the right-hand side shall be illuminated for approximately 50 milliseconds. Both RRFB indications shall be dark for approximately 50 milliseconds.
- Both RRFB indications shall be illuminated for approximately 50 milliseconds. Both RRFB indications shall be dark for approximately 50 milliseconds.
- Both RRFB indications shall be illuminated for approximately 50 milliseconds. Both RRFB indications shall be dark for approximately 250 milliseconds.



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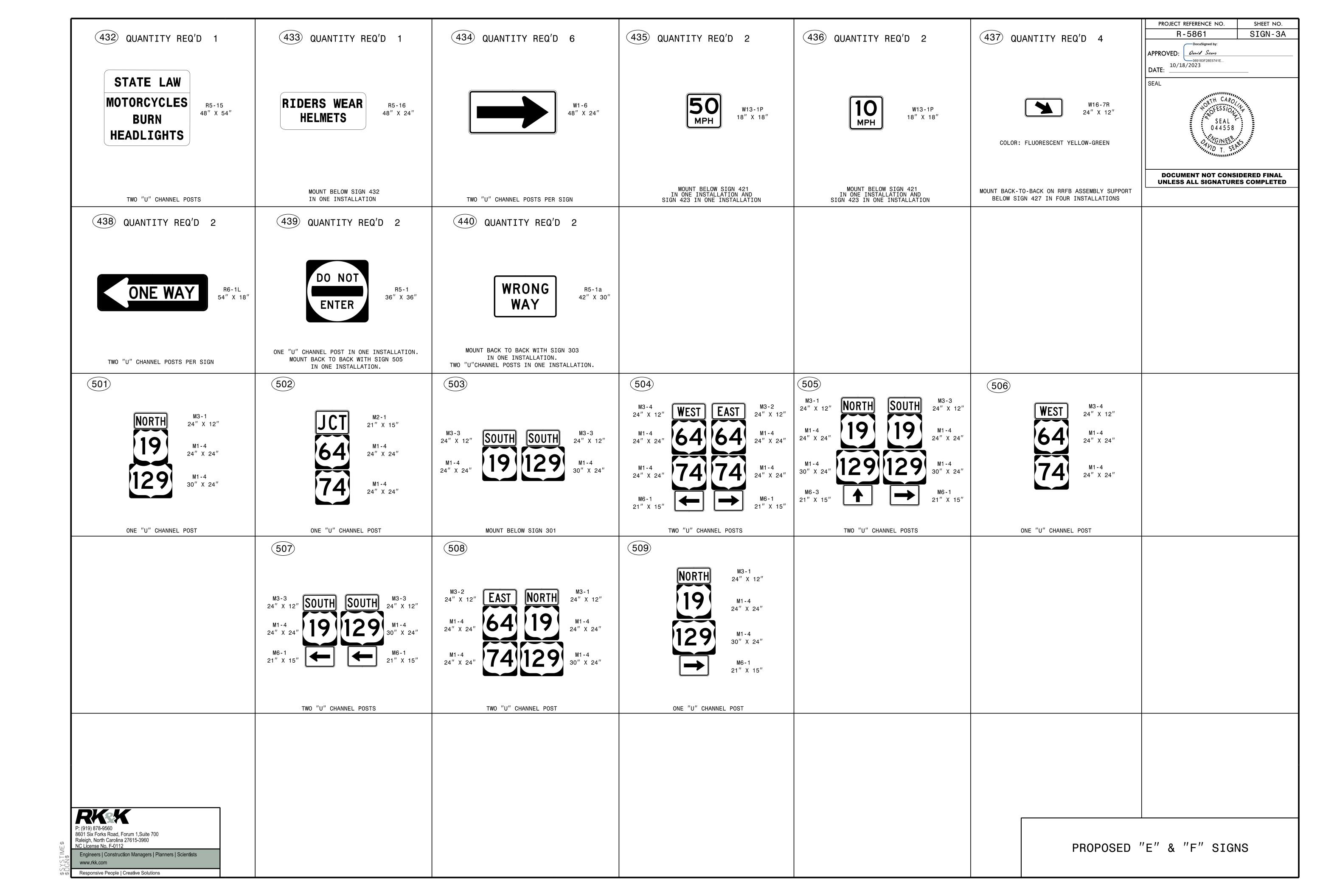
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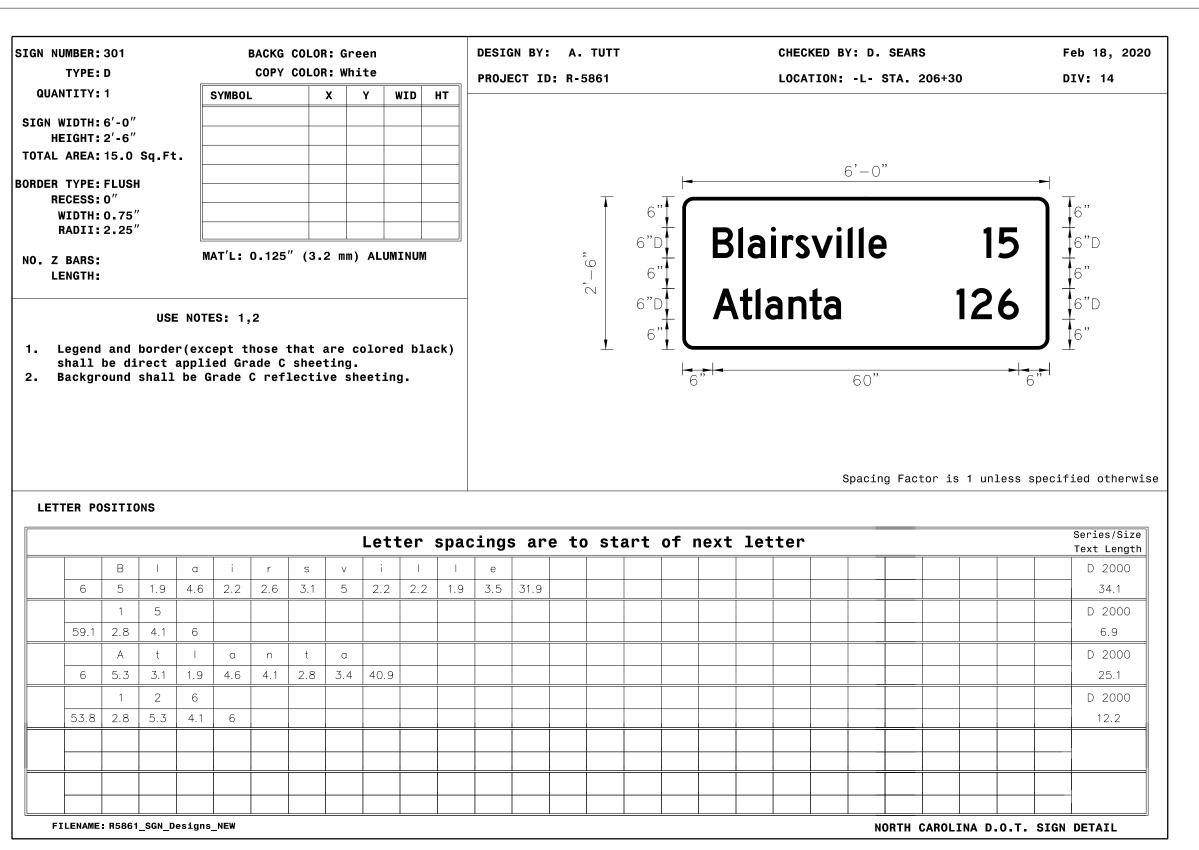
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| See Note 5

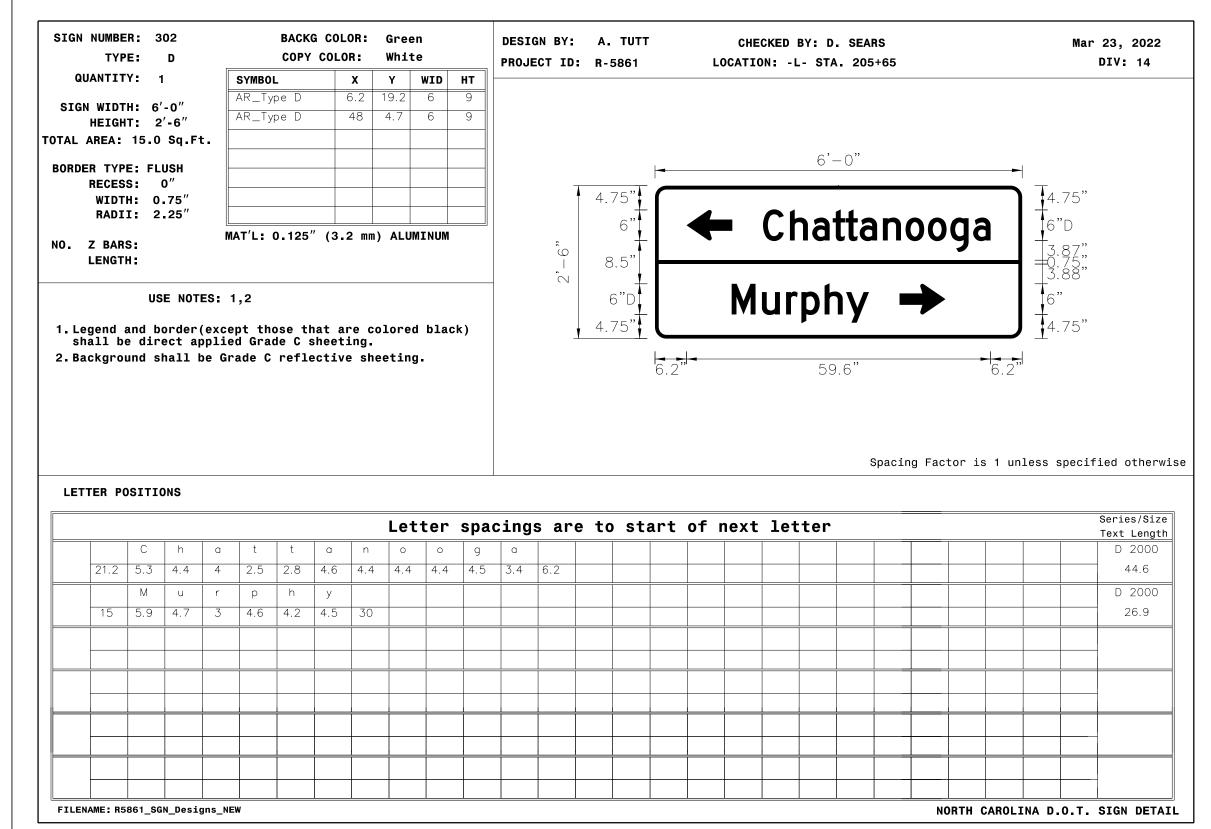
Two or Multi-Lanes, Divided

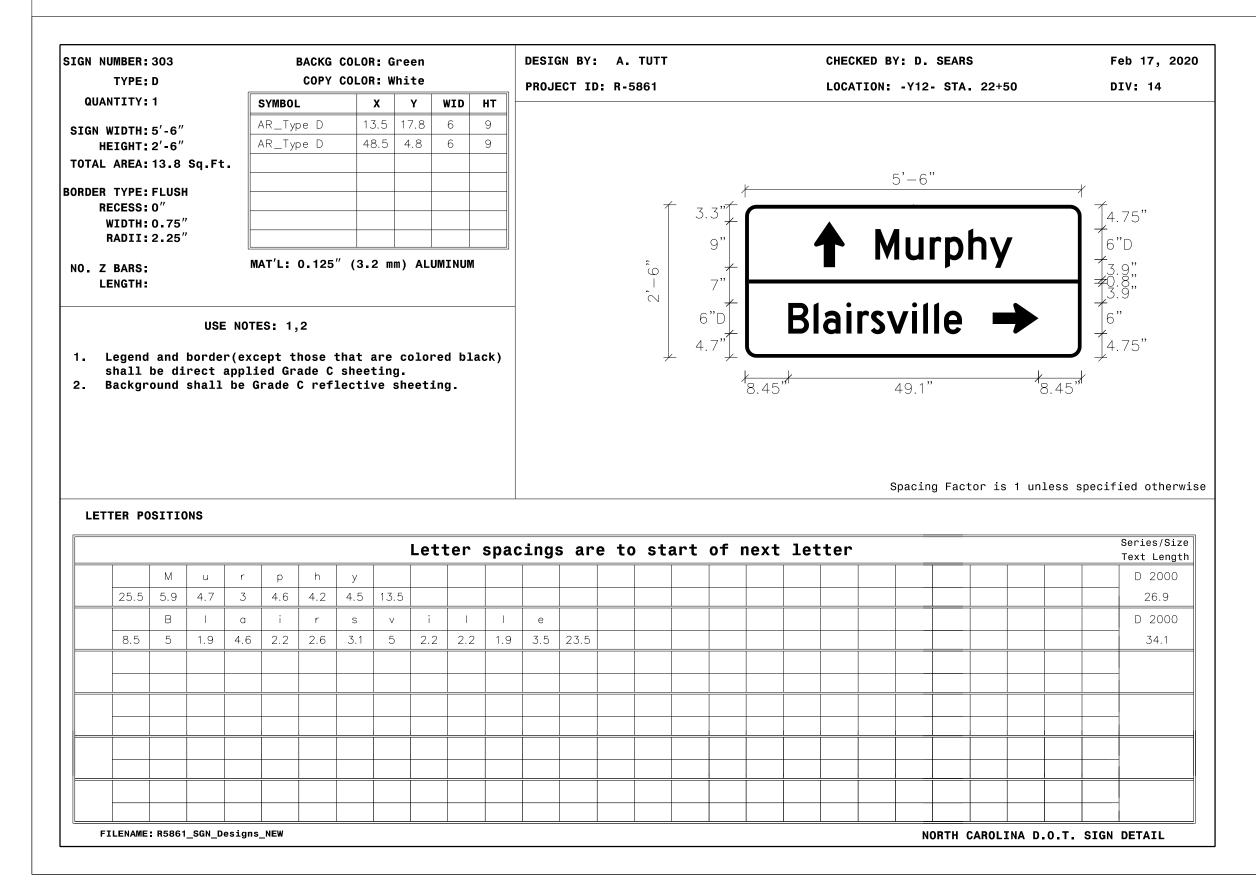
Standard Drawing for Rectangular Rapid Flashing Beacon

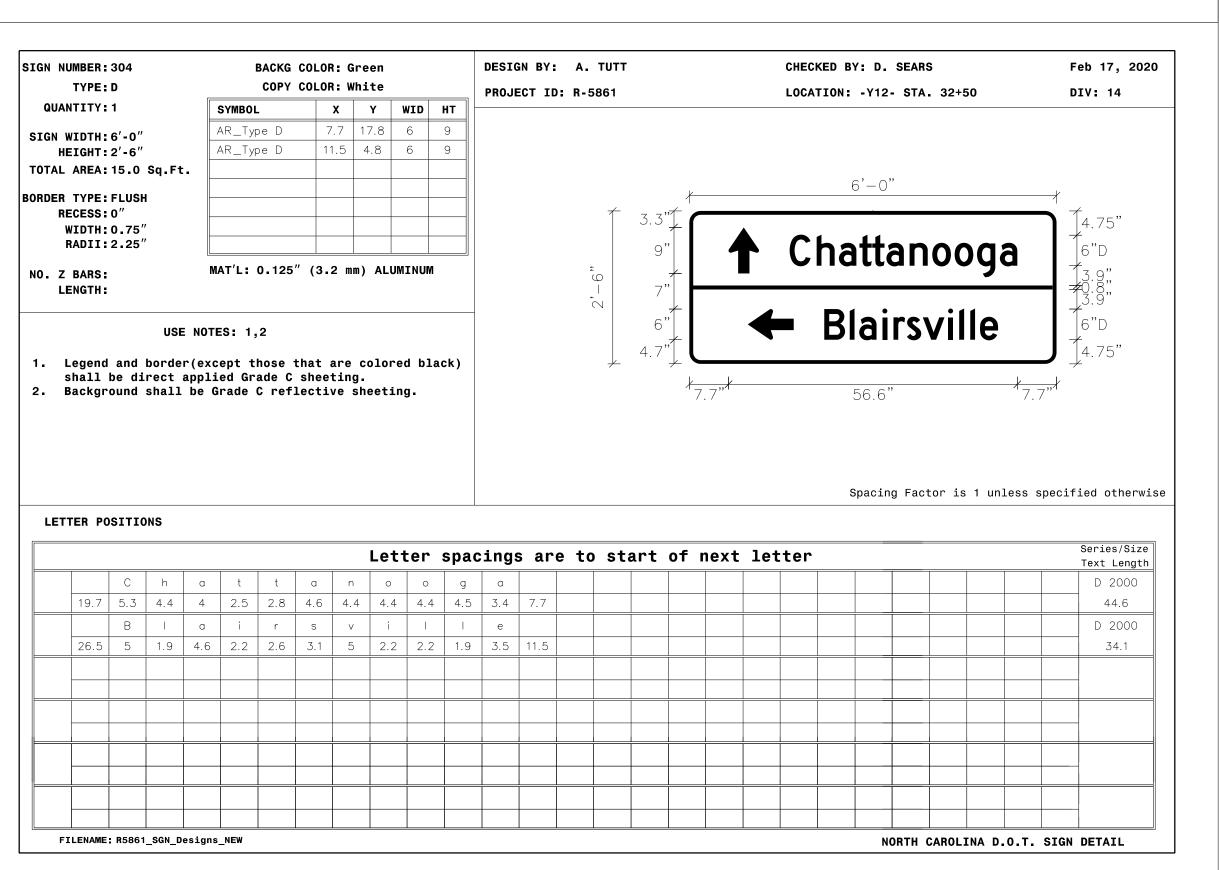
401 QUANTITY REQ'D 1	402 QUANTITY REQ'D 1	403 QUANTITY REQ'D 1	404 QUANTITY REQ'D 1	405 QUANTITY REQ'D 14	406 QUANTITY REQ'D 1	PROJECT REFERENCE NO. SHEET NO. R - 5861 SIGN - 3 APPROVED: David Sears 10/18/2023 DATE:
STATEWIDE R2-22 36" x 10"	SPEED LIMIT 82-1 36" X 48"	UNLESS OTHERWISE POSTED R2-23 42" X 14"	STATE LAW FASTEN SEAT BELTS R5-17 30" X 24"	STOP R1-1 36" X 36"	SPEED LIMIT 24" X 30"	SEAL SEAL OFESSION SEAL OFESSION SEAL OFFICE OF
MOUNT ABOVE SIGN-402 IN ONE INSTALLATION	TWO "U" CHANNEL POSTS	MOUNT BELOW SIGN-402 IN ONE INSTALLATION	ONE "U" CHANNEL POST	ONE "U" CHANNEL POST PER SIGN	ONE "U" CHANNEL POST	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
407 QUANTITY REQ'D 7	408 QUANTITY REQ'D 2	409 QUANTITY REQ'D 7	410 QUANTITY REQ'D 1	411 QUANTITY REQ'D 1	412 QUANTITY REQ'D 1	413 QUANTITY REQ'D 1
W3-1 30" X 30"	YIELD R1-2 36" X 36" X 36"	SPEED LIMIT 24" X 30"	UNLAWFULL TO PASS STOPPED SCHOOL BUS FROM EITHER DIRECTION	DO NOT PASS WHEN SOLID YELLOW LINE IS IN YOUR LANE	MAX \$1000 TO LITTER M10-7 30" X 30"	R4-7 18" X 30"
ONE "U" CHANNEL POST PER SIGN 414 QUANTITY REQ'D 8	ONE "U" CHANNEL POST PER SIGN 415 QUANTITY REQ'D 1	ONE "U" CHANNEL POST PER SIGN 416 QUANTITY REQ'D 1	ONE "U" CHANNEL POST 417 QUANTITY REQ'D 4	TWO "U" CHANNEL POSTS 418 QUANTITY REQ'D 1	ONE "U" CHANNEL POST 419 QUANTITY REQ'D 1	ONE "U" CHANNEL POST 420 QUANTITY REQ'D 1
PUSH BUTION TO TURN ON WARNING LIGHTS R10-25 9" X 12"	SPEED LIMIT 40 R2-1 24" X 30"	DO NOT ENTER R5-1 30" X 30"	W11-7 30" X 30"	SPEED LIMIT 24" X 30"	W4-2R 36" X 36"	RIGHT LANE S6" x 36" ENDS
MOUNT BACK-TO-BACK ON RRFB ASSEMBLY SUPPORT BELOW SIGN 427 IN EIGHT INSTALLATIONS 421 QUANTITY REQ'D 6	ONE "U" CHANNEL POST 422 QUANTITY REQ'D 6	ONE "U" CHANNEL POST 423 QUANTITY REQ'D 6	ONE "U" CHANNEL POST PER SIGN 424 QUANTITY REQ'D 1	ONE "U" CHANNEL POST 425 QUANTITY REQ'D 3	ONE "U" CHANNEL POST 426 QUANTITY REQ'D 1	ONE "U" CHANNEL POST 427 QUANTITY REQ'D 10
W1-2R 30" X 30"	20 M.P.H. W13-1P 18" X 18"	W1-2L 30" X 30"	DEAD W14-1 30" X 30"	OM4-3 18" X 18"	SPEED W3-5 LIMIT 35 36" X 36"	W11-2 30" X 30"
ONE "U" CHANNEL POST PER SIGN	MOUNT BELOW SIGN 421 IN THREE INSTALLATIONS AND SIGN 423 IN THREE INSTALLATIONS	ONE "U" CHANNEL POST PER SIGN	ONE "U" CHANNEL POST	ONE "U" CHANNEL POST PER SIGN	ONE "U" CHANNEL POST	COLOR: FLUORESCENT YELLOW-GREEN MOUNT BACK-TO-BACK ON RRFB ASSEMBLY SUPPORT IN EIGHT INSTALLATIONS ONE "U" CHANNEL POST PER SIGN IN TWO INSTALLATIONS.
	428 QUANTITY REQ'D 4	429 QUANTITY REQ'D 1	430 QUANTITY REQ'D 3	431 QUANTITY REQ'D 2		
P: (919) 878-9560 8601 Six Forks Road, Forum 1,Suite 700 Raleigh, North Carolina 27615-3960 NC License No. F-0112	W16-7L 24" X 12" COLOR: FLUORESCENT YELLOW-GREEN	W12-1 30" X 30"	SPEED LIMIT 82-1 24" X 30"	AHEAD W16-9P 24" X 12" COLOR: FLUORESCENT YELLOW-GREEN		
NC License No. F-0112 Engineers Construction Managers Planners Scientists www.rkk.com Responsive People Creative Solutions	MOUNT BACK-TO-BACK ON RRFB ASSEMBLY SUPPORT BELOW SIGN 427 IN FOUR INSTALLATIONS	ONE "U" CHANNEL POST	ONE "U" CHANNEL POST PER SIGN	MOUNT BELOW SIGN 427 IN TWO INSTALLATIONS	PROPOS	ED "E" SIGNS











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PROJECT REFERENCE NO.

R-5861

APPROVED: David Scars

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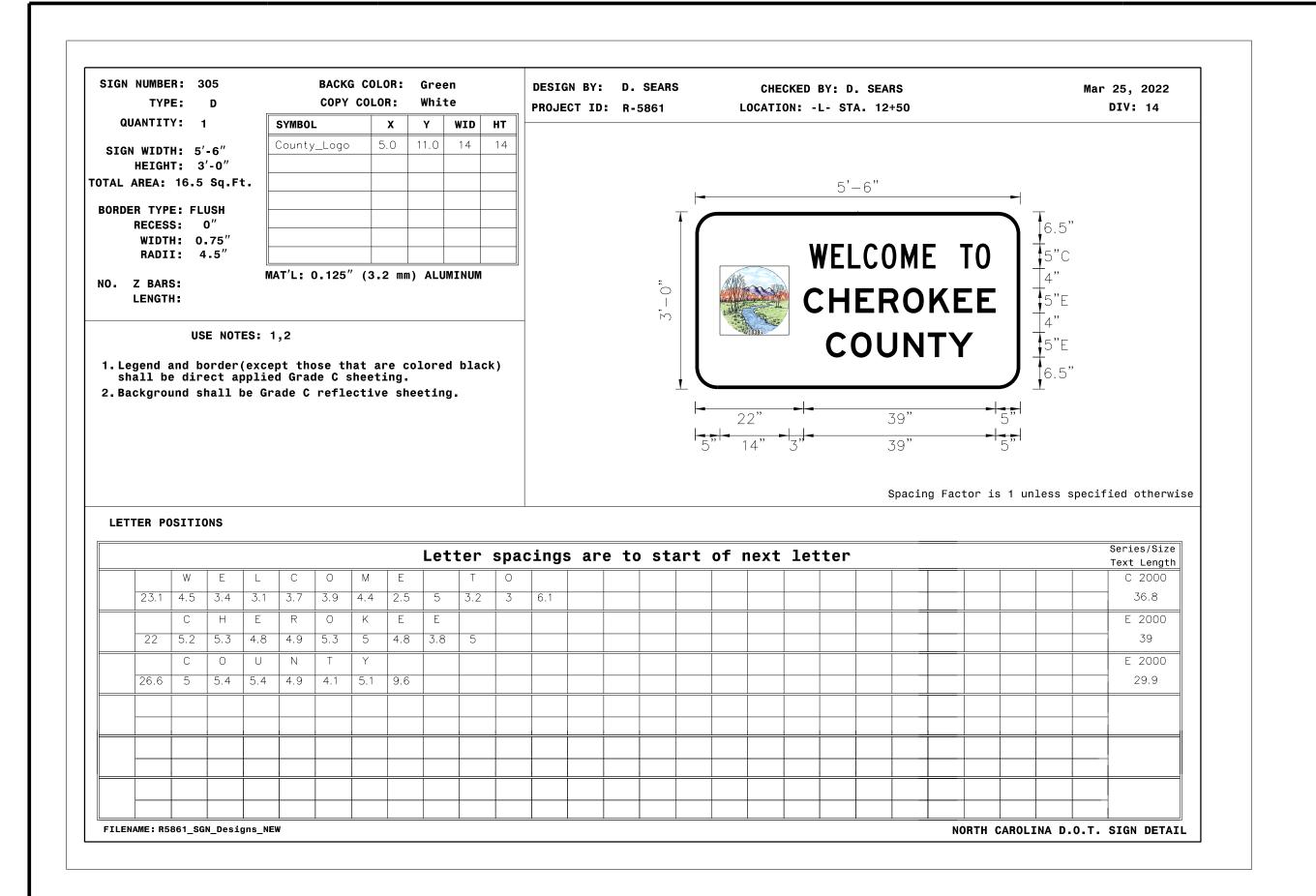
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SIGN-3B



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Docusigned by:

David Sears

10/18/2023

DATE:

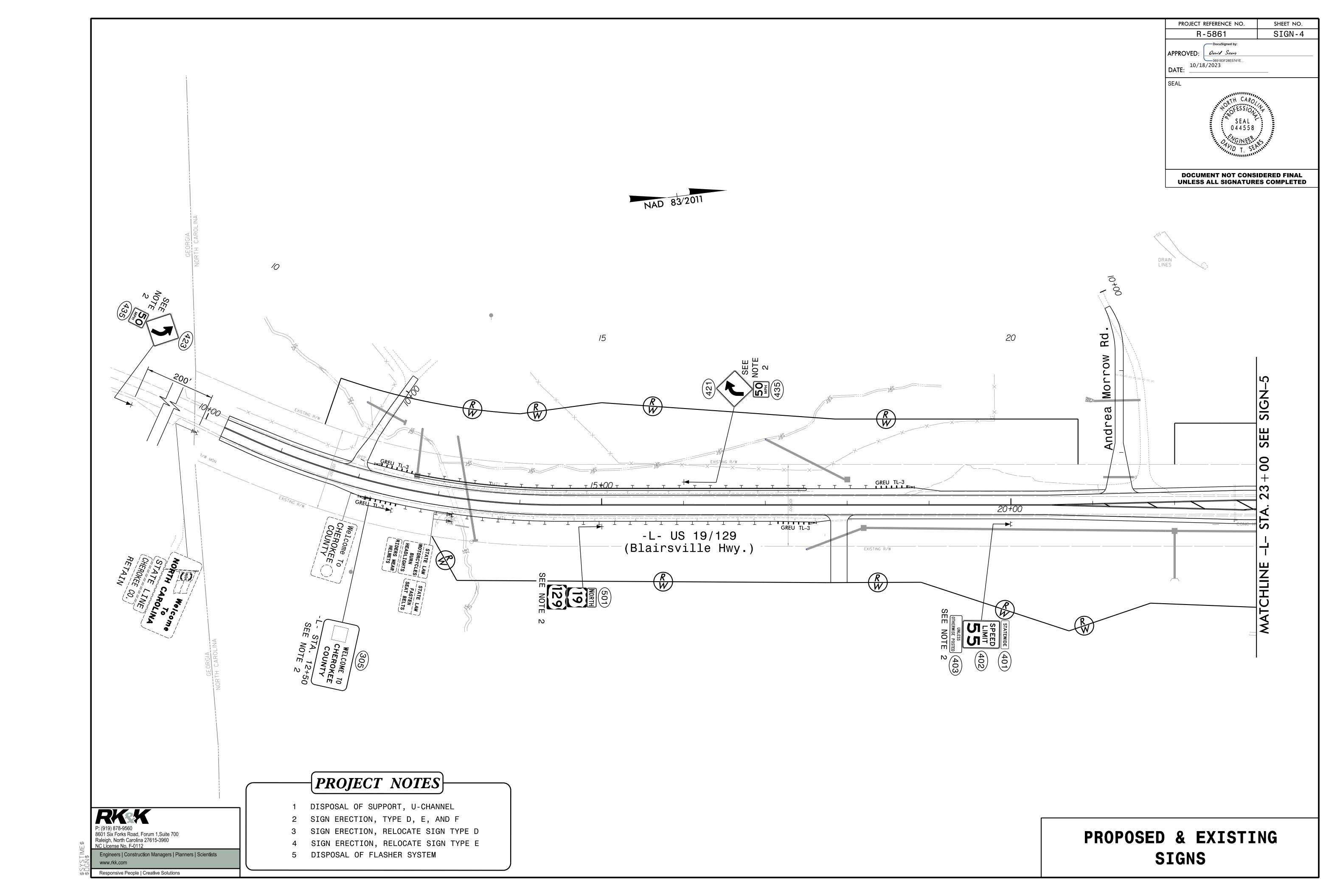
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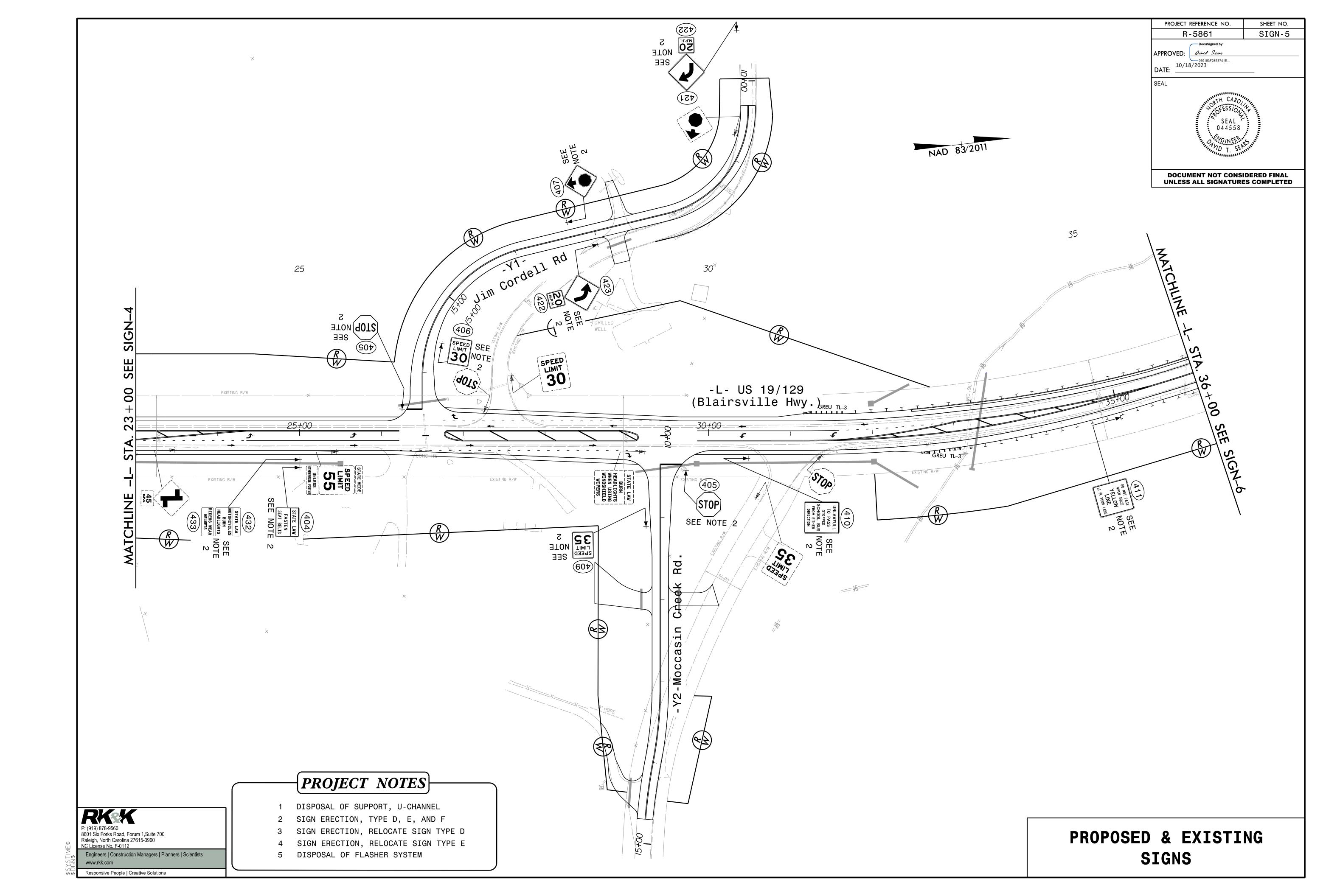
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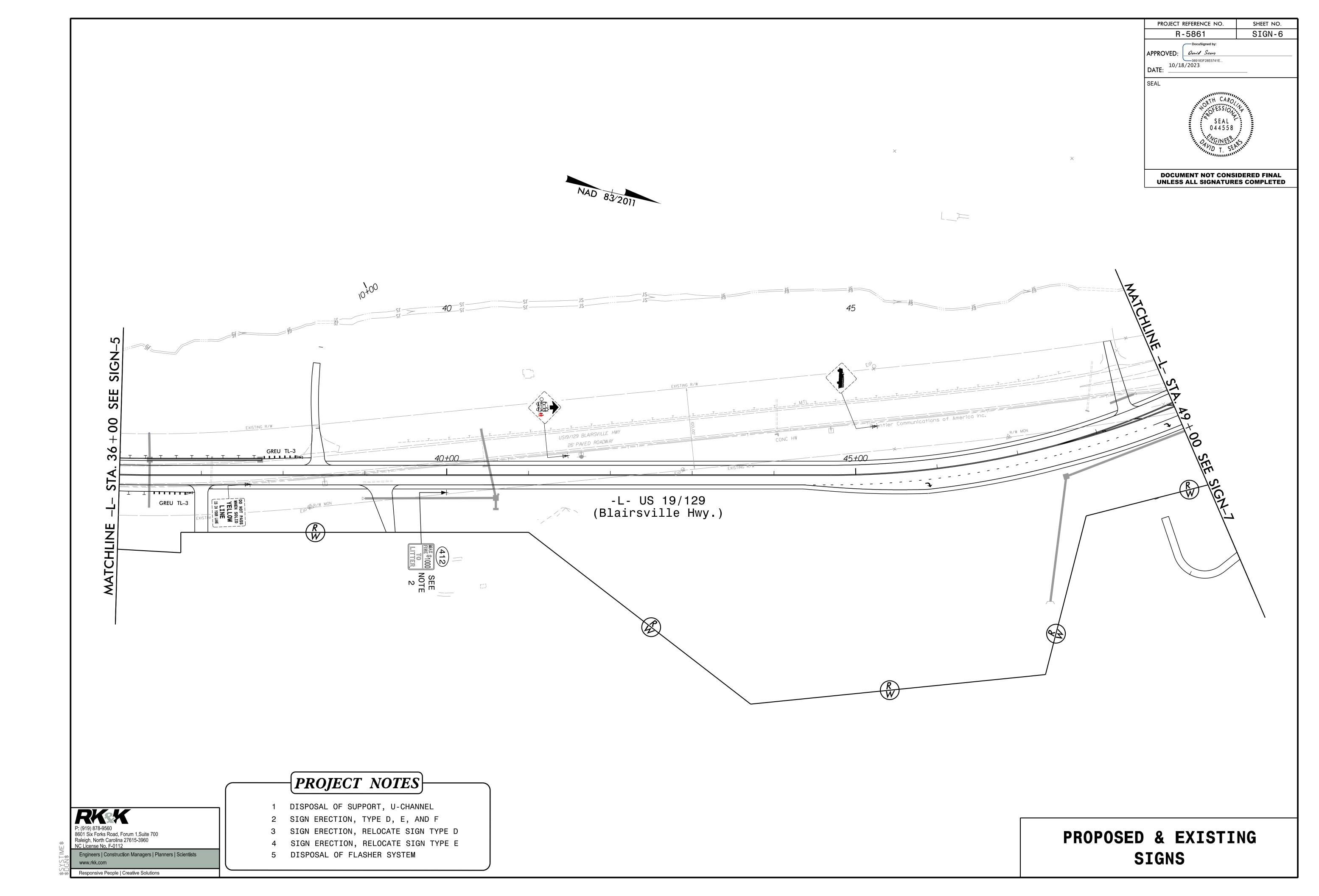
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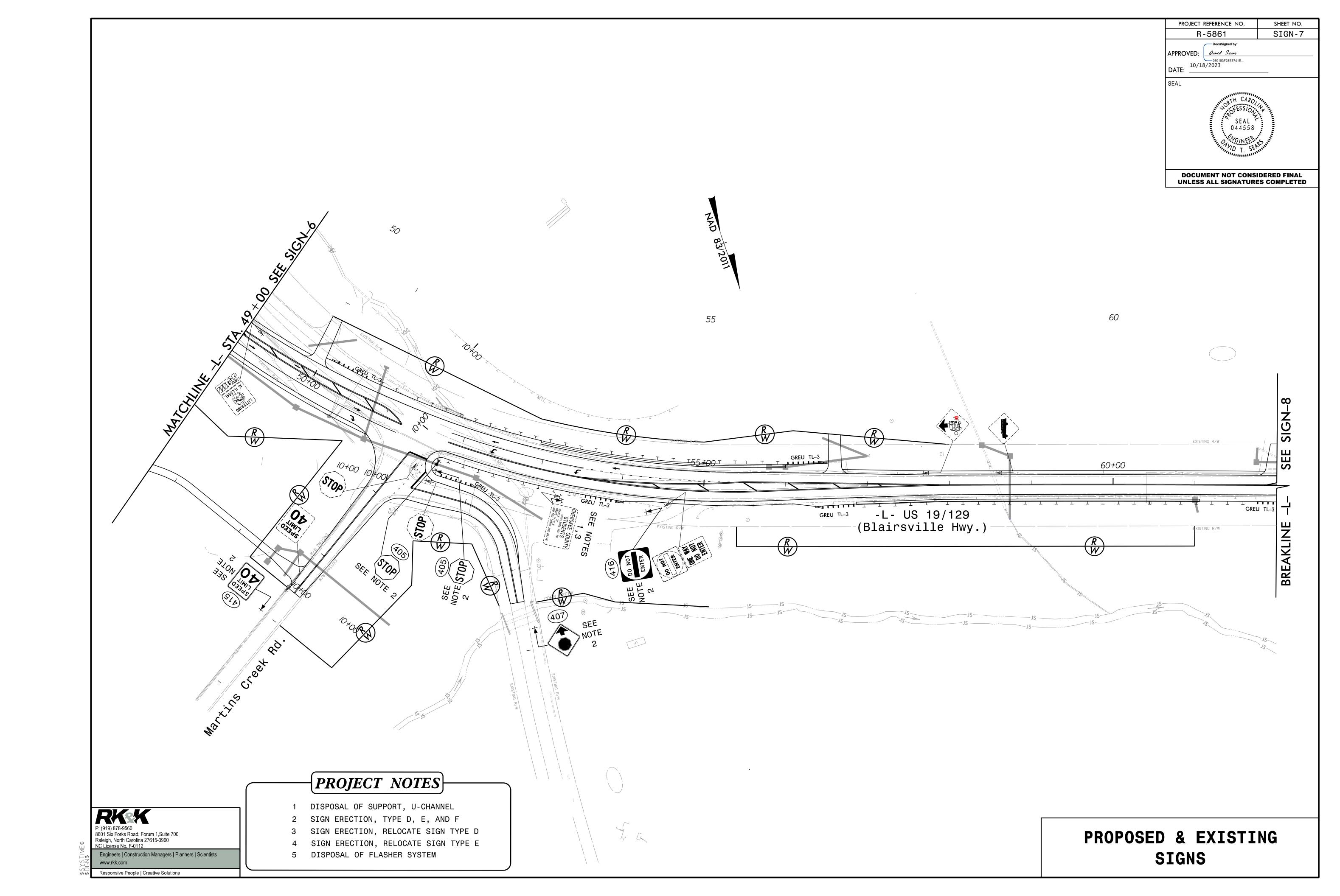
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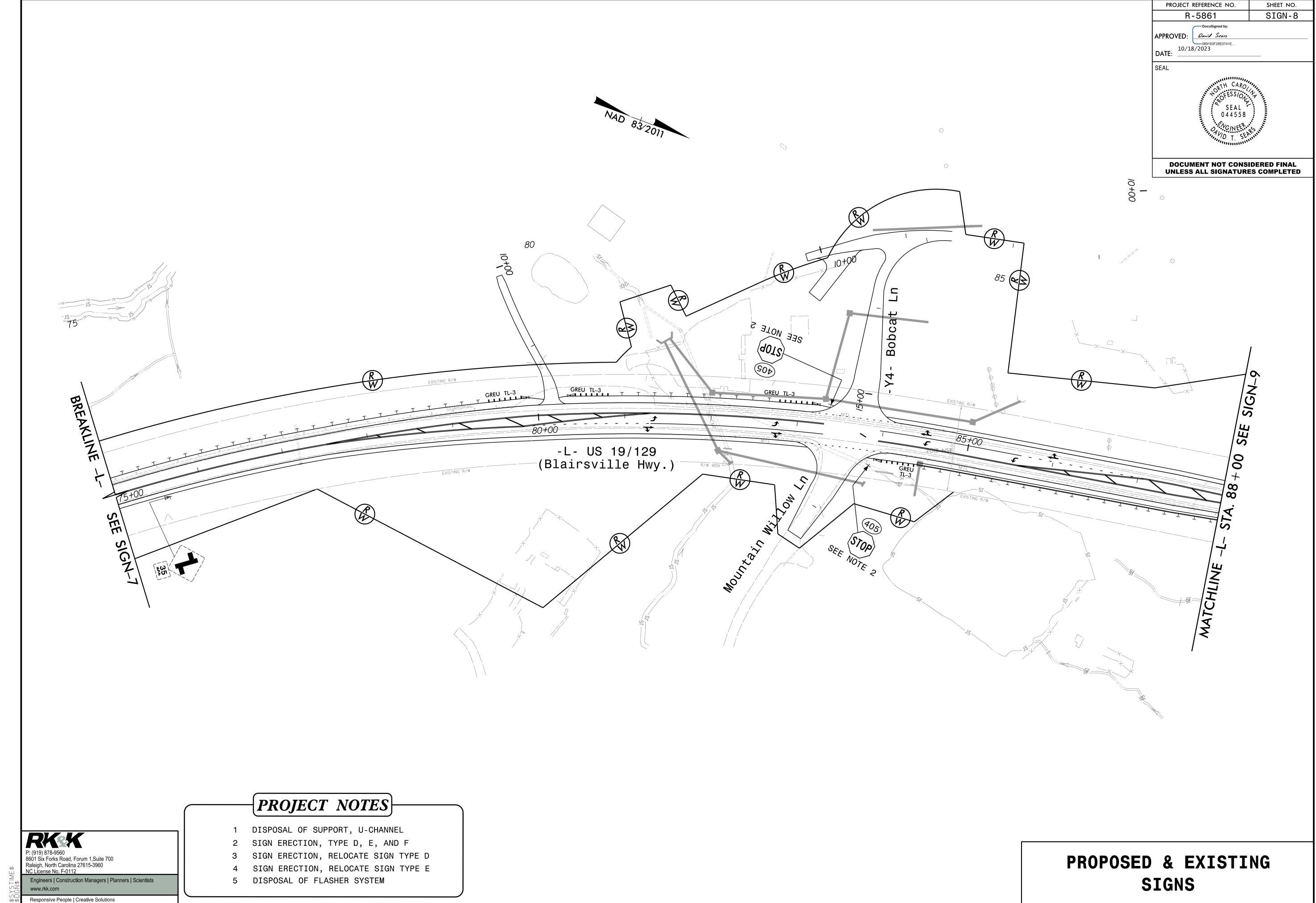
SIGN DESIGNS

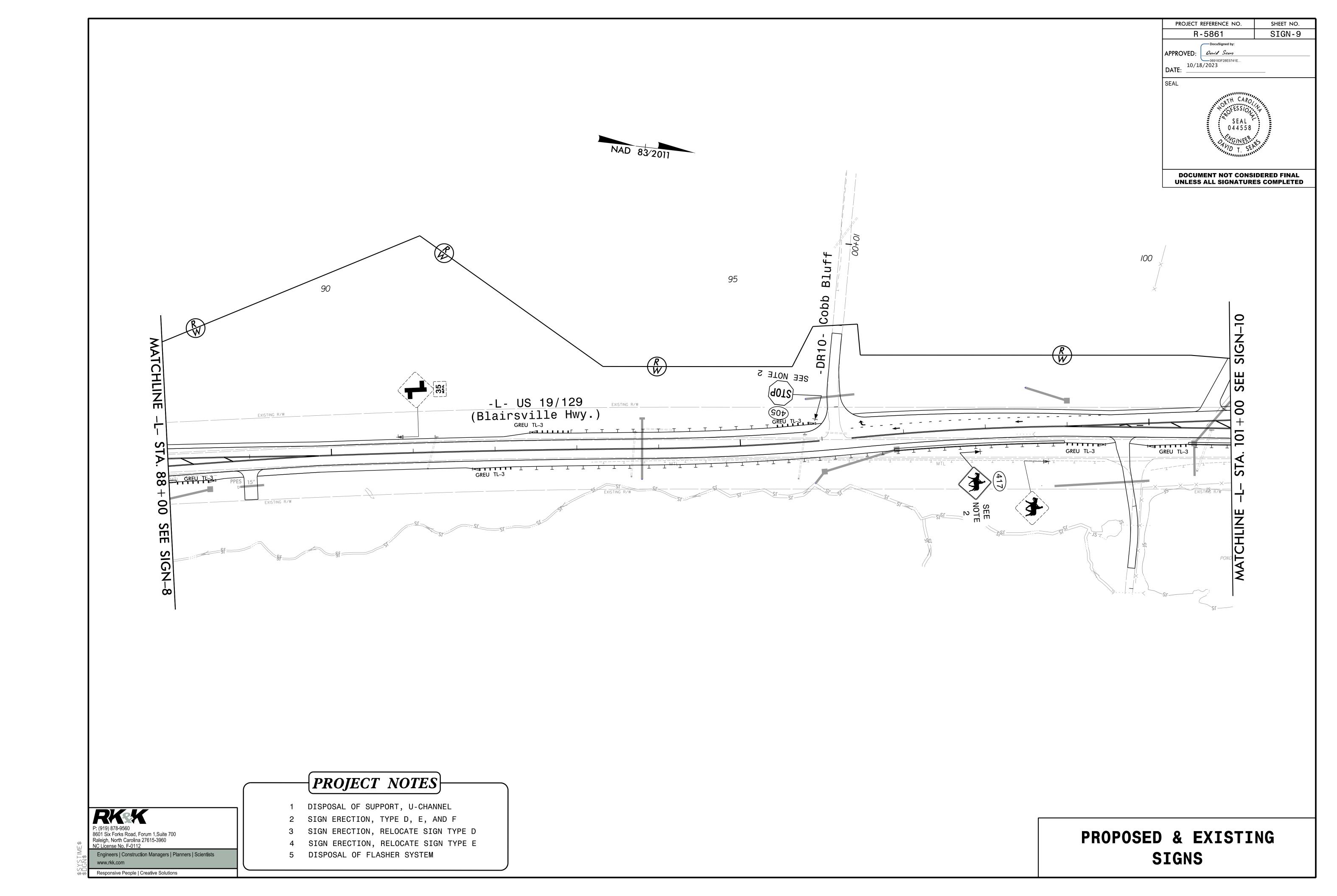


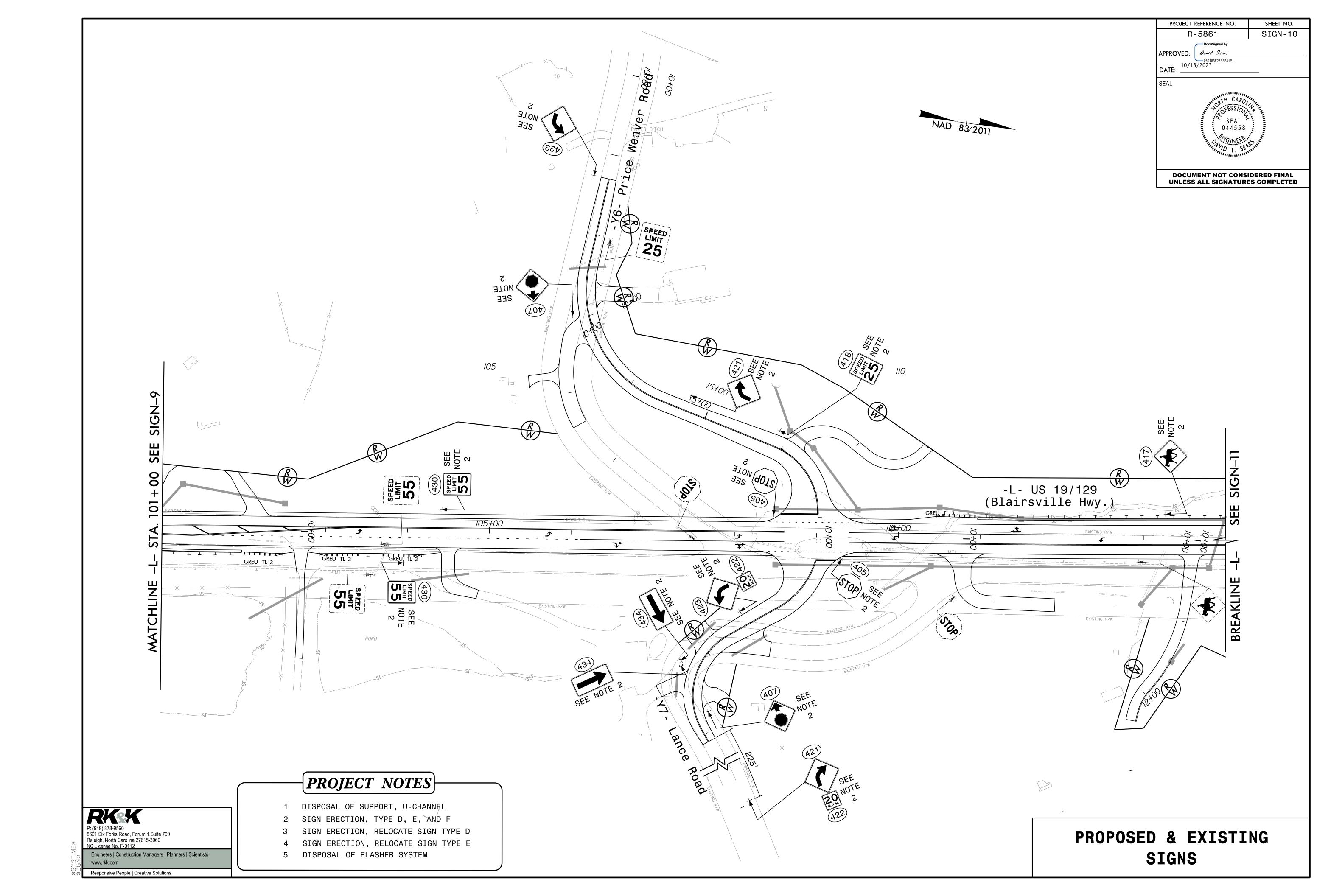


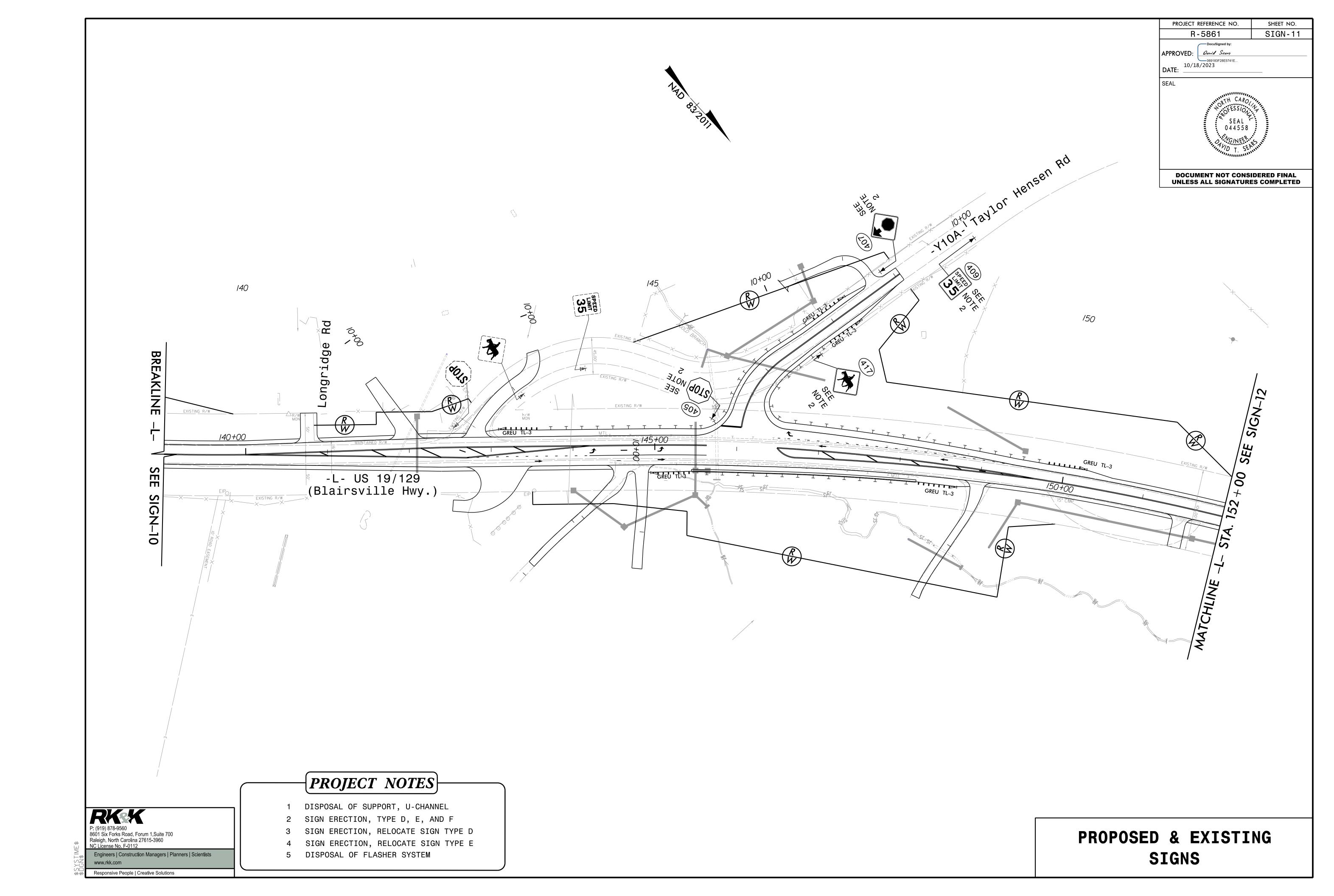


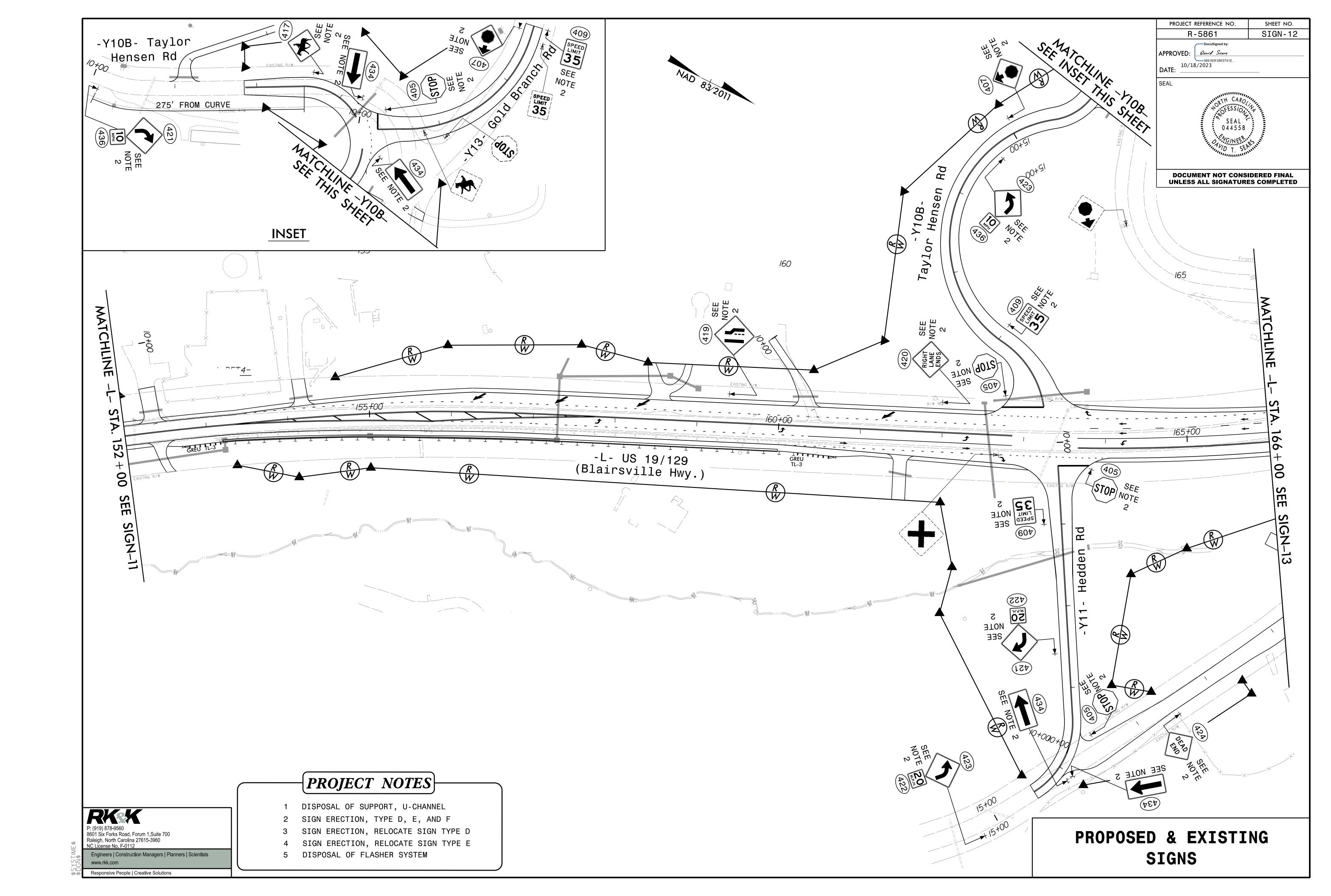


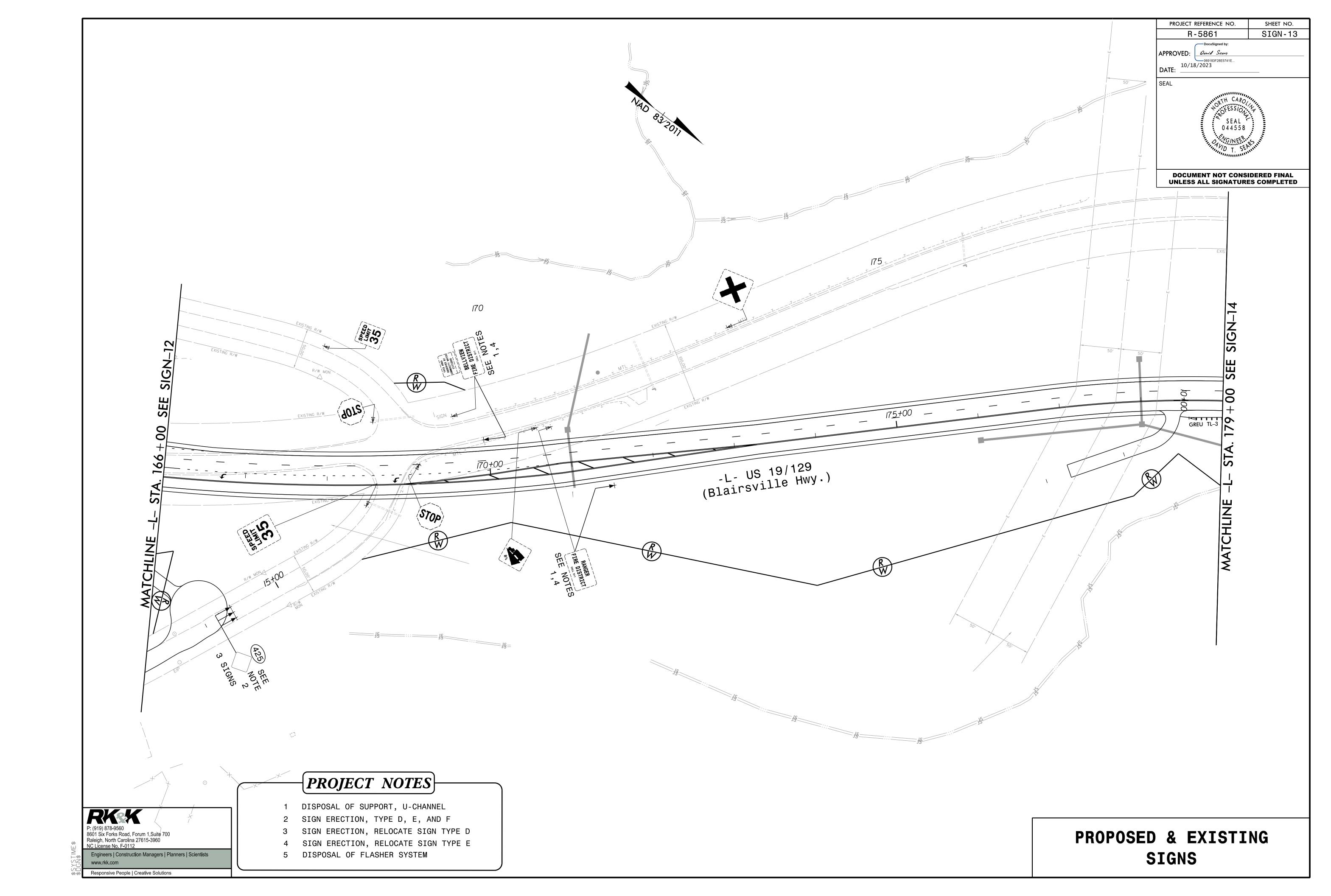


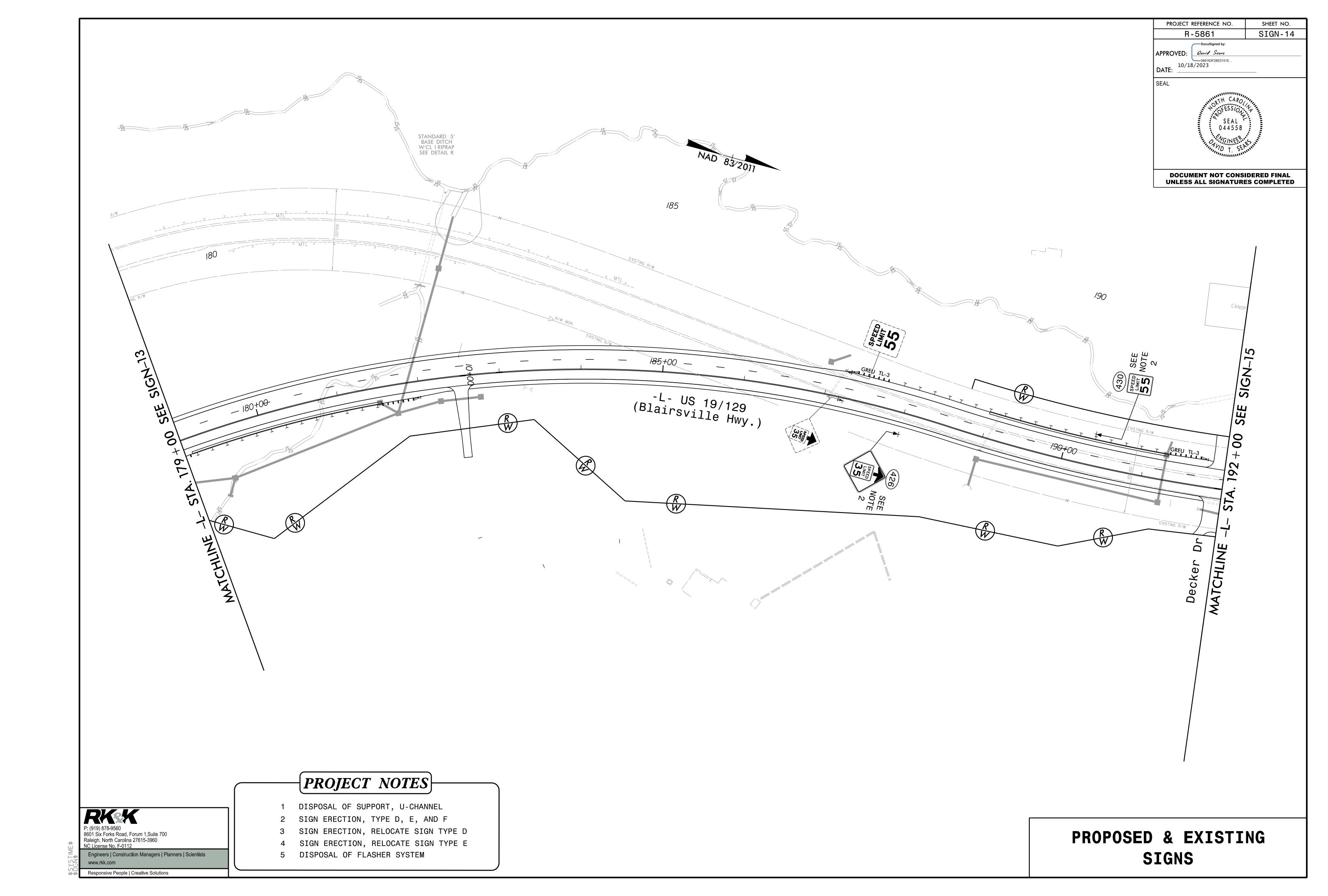


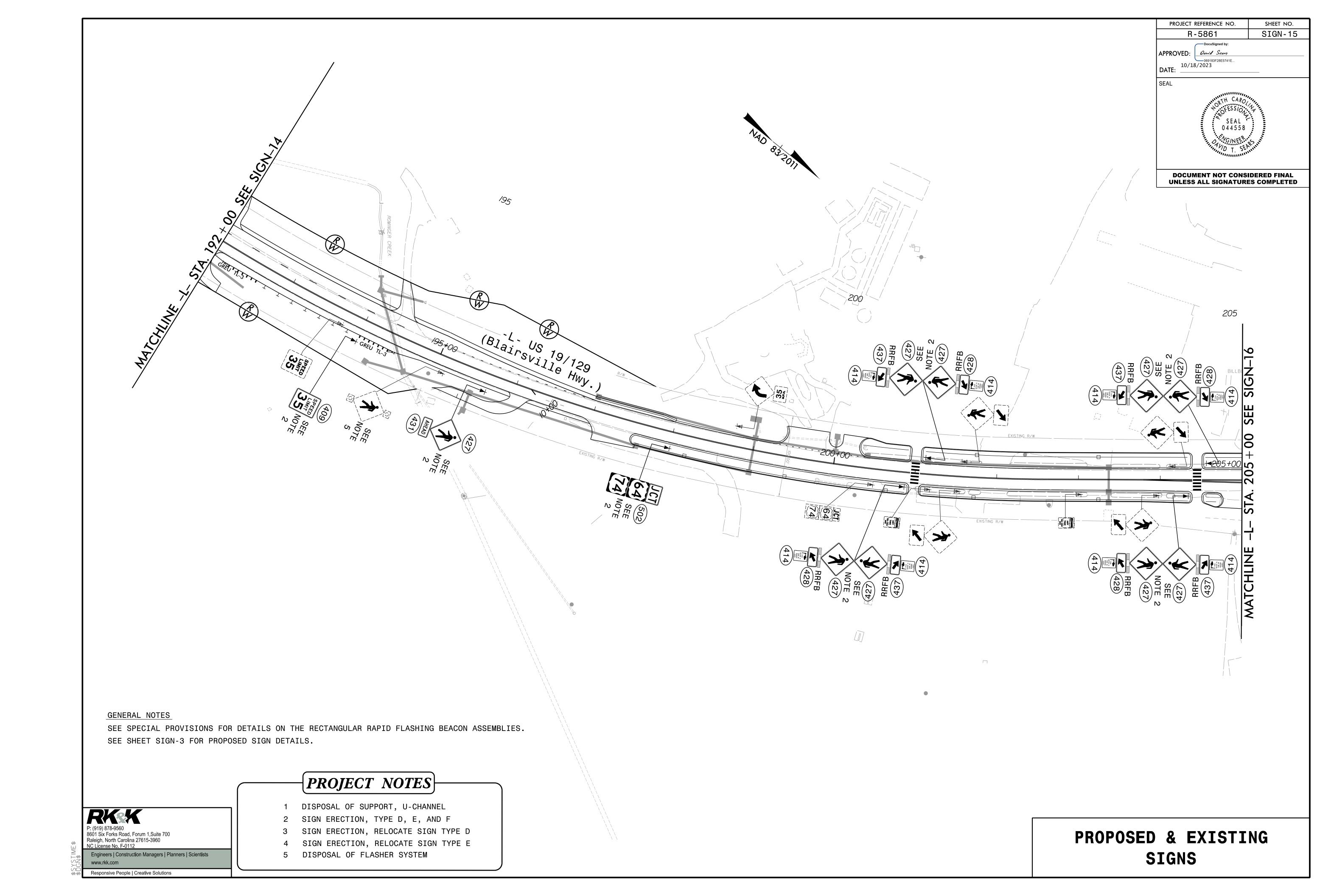


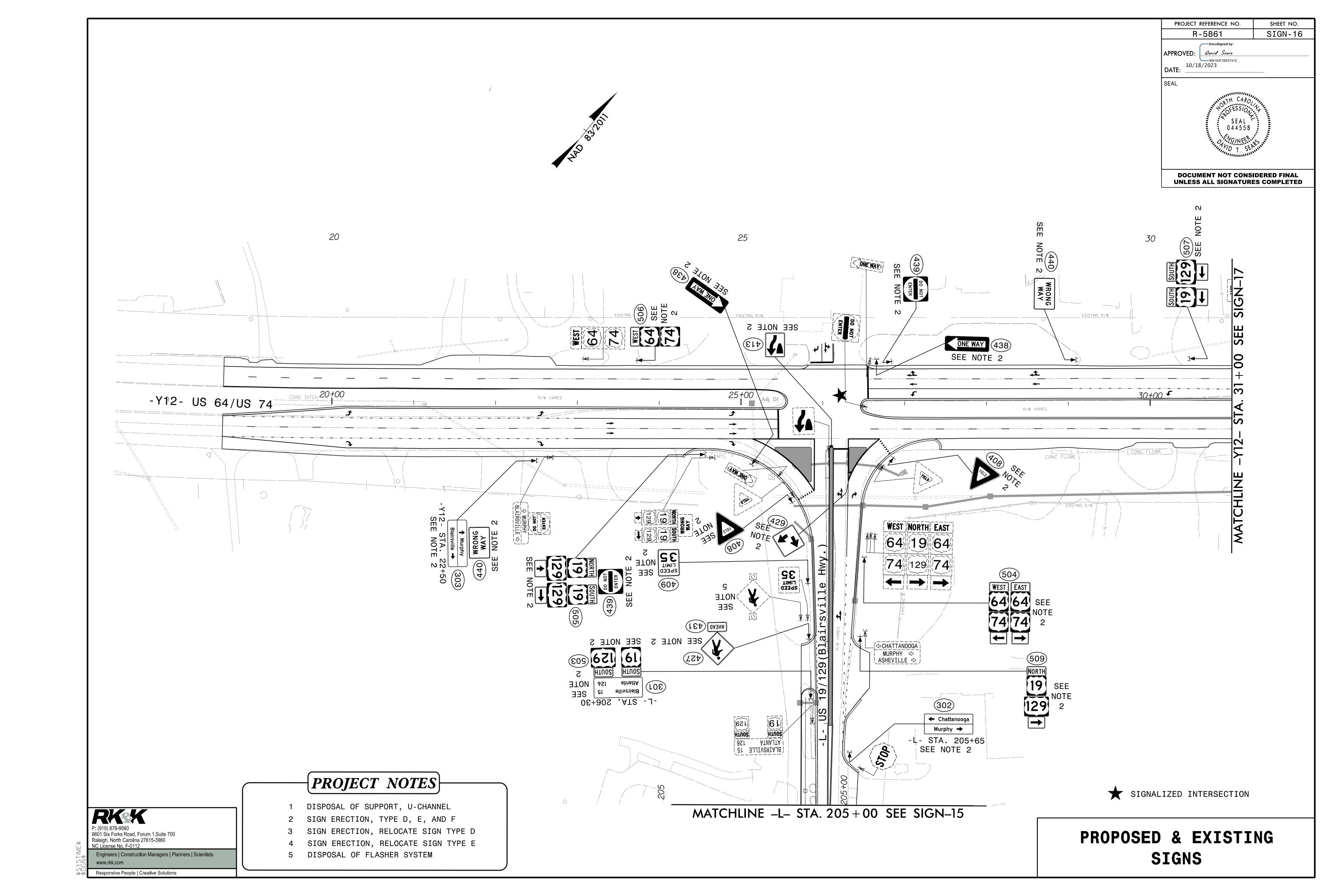












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PROJECT NOTES

- 1 DISPOSAL OF SUPPORT, U-CHANNEL
- 2 SIGN ERECTION, TYPE D, E, AND F
- SIGN ERECTION, RELOCATE SIGN TYPE D
- 4 SIGN ERECTION, RELOCATE SIGN TYPE E 5 DISPOSAL OF FLASHER SYSTEM

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PROPOSED & EXISTING SIGNS

PROJECT REFERENCE NO.

R-5861

SHEET NO.

SIGN-17