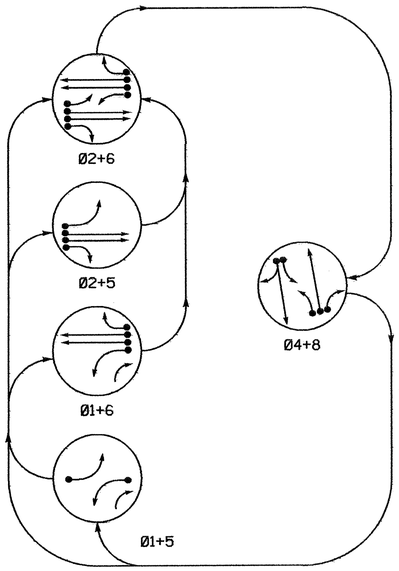
PROJECT REFERENCE NO.	SHEET NO.
R-2911C	Sig.1

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8	FLASH
21	R	R	G	G	R	Y
22, 23	R	R	G	G	R	Y
41, 42, 43	R	R	R	R	G	R
61	R	G	R	G	R	Y
62, 63	R	G	R	G	R	Y
81, 83	R	R	R	R	G	R
82	R	R	R	R	G	R

SIGNAL FACE I.D.

Denotes L.E.D.

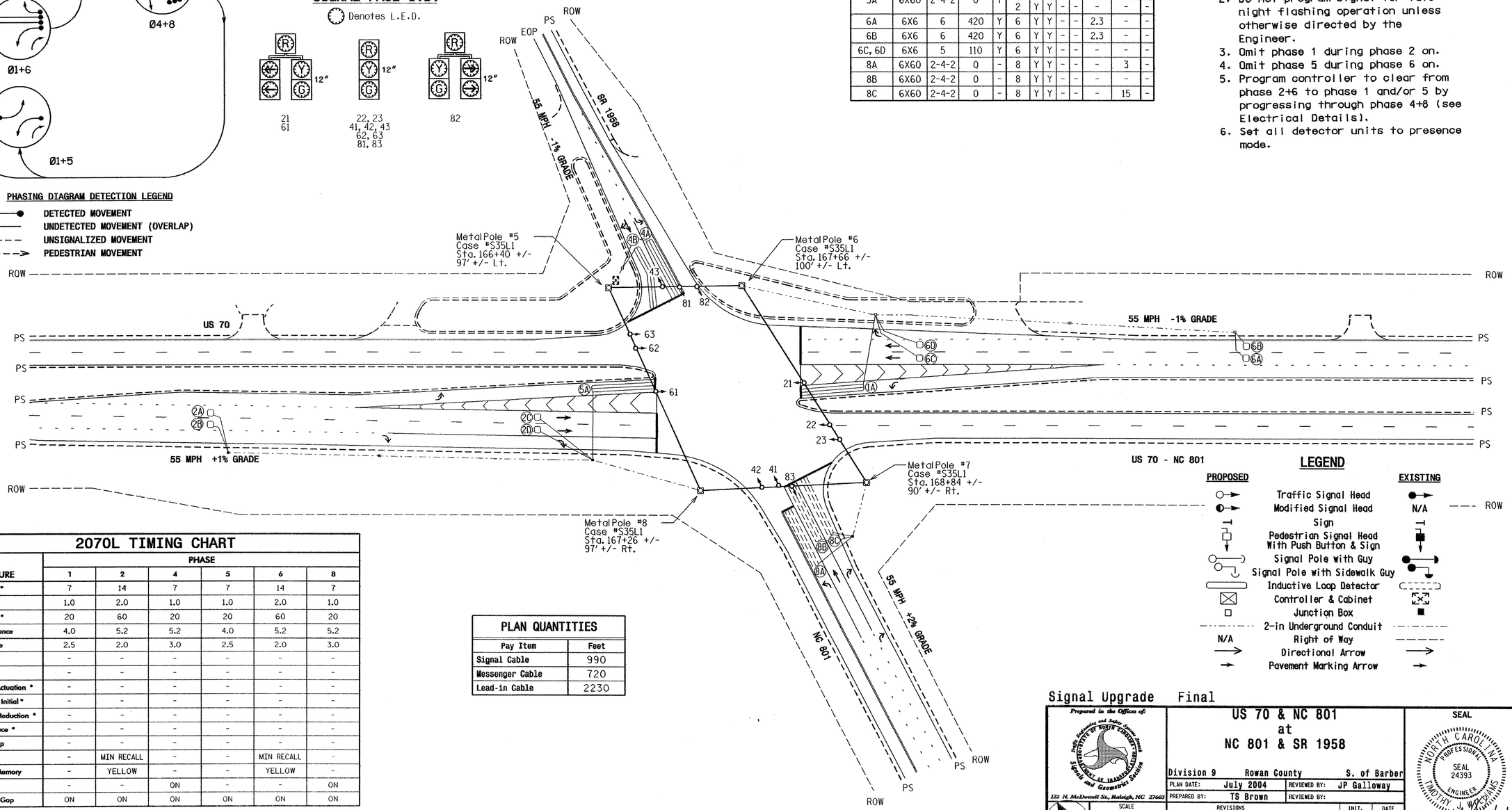
2070L LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS						DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW	LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
1A	6X60	2-4-2	0	Y		1	Y	Y	-	-	-	20	-
						6	Y	Y	-	-	-	-	-
2A	6X6	6	420	Y		2	Y	Y	-	-	2.3	-	-
2B	6X6	6	420	Y		2	Y	Y	-	-	2.3	-	-
2C, 2D	6X6	5	110	Y		2	Y	Y	-	-	-	-	-
4A	6X60	2-4-2	0	Y		4	Y	Y	-	-	-	3	-
4B	6X60	2-4-2	0	Y		4	Y	Y	-	-	-	10	-
5A	6X60	2-4-2	0	Y		5	Y	Y	-	-	-	20	-
						2	Y	Y	-	-	-	-	-
6A	6X6	6	420	Y		6	Y	Y	-	-	2.3	-	-
6B	6X6	6	420	Y		6	Y	Y	-	-	2.3	-	-
6C, 6D	6X6	5	110	Y		6	Y	Y	-	-	-	-	-
8A	6X60	2-4-2	0	-		8	Y	Y	-	-	-	3	-
8B	6X60	2-4-2	0	-		8	Y	Y	-	-	-	-	-
8C	6X60	2-4-2	0	-		8	Y	Y	-	-	-	15	-

5 Phase
Fully Actuated
Isolated

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Omit phase 1 during phase 2 on.
4. Omit phase 5 during phase 6 on.
5. Program controller to clear from phase 2+6 to phase 1 and/or 5 by progressing through phase 4+8 (see Electrical Details).
6. Set all detector units to presence mode.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Pavement Marking Arrow	

2070L TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	7	14	7	7	14	7
Extension 1 *	1.0	2.0	1.0	1.0	2.0	1.0
Max Green 1 *	20	60	20	20	60	20
Yellow Clearance	4.0	5.2	5.2	4.0	5.2	5.2
Red Clearance	2.5	2.0	3.0	2.5	2.0	3.0
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

PLAN QUANTITIES

Pay Item	Feet
Signal Cable	990
Messenger Cable	720
Lead-in Cable	2230

Signal Upgrade Final

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal and Geometrics Section
122 N. McDowell St., Raleigh, NC 27603

US 70 & NC 801 at NC 801 & SR 1958

Division 9 Rowan County S. of Barber

PLAN DATE: July 2004 REVIEWED BY: JP Galloway

PREPARED BY: TS Brown REVIEWED BY:

SCALE 0 50 1"=50'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 24393 ENGINEER TIMOTHY S. WILLIAMS

SIGNATURE 7/20/04 DATE

SIG. INVENTORY NO. 09-0708

20-JUL-2004 16:00
W:\Projects-Unit\Workgroups\TIP Projects\R-2911C\Roadway\SIGNAL FILES\#090708Final Sig_Den_2004mod.dgn
jsbrown