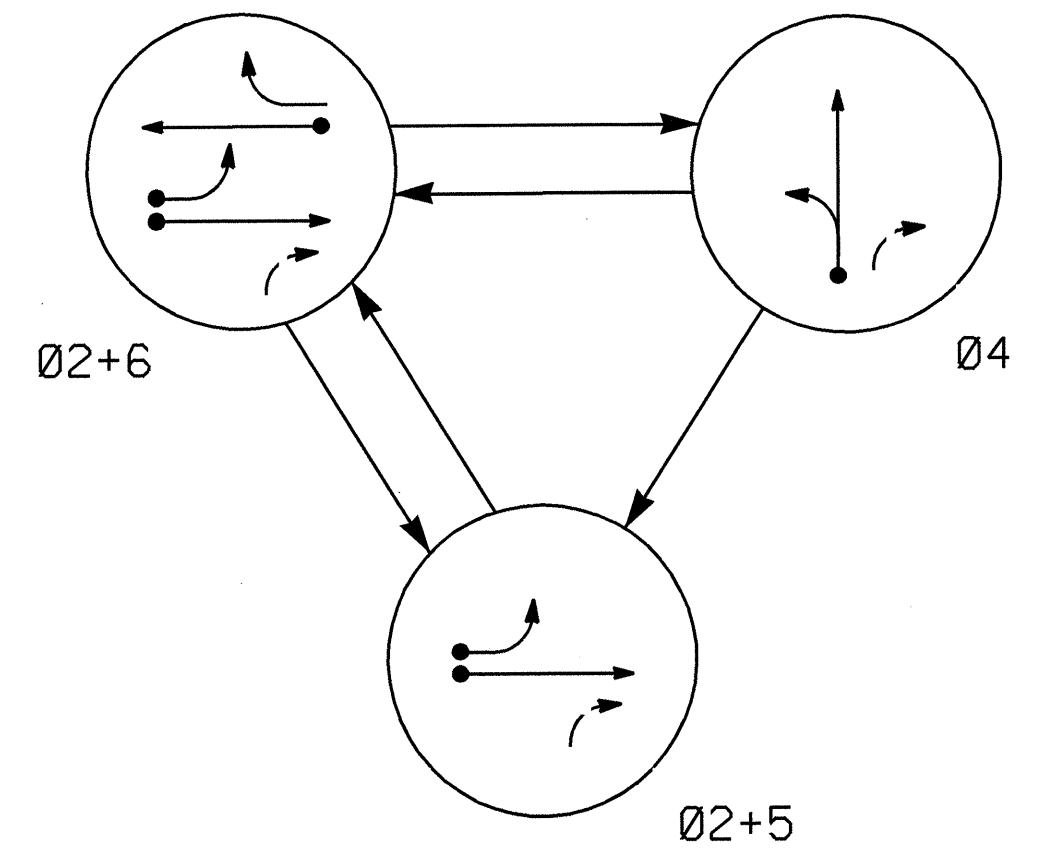
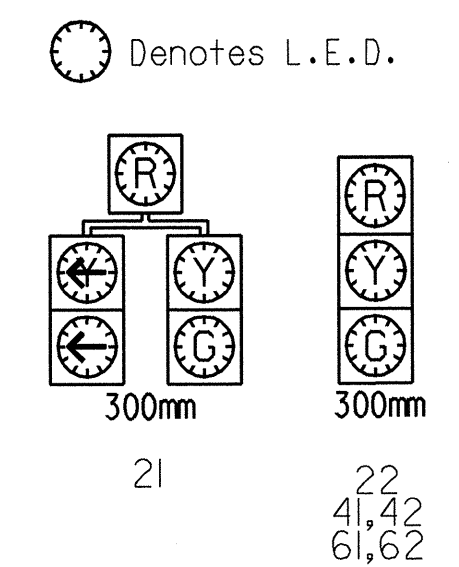


**PHASING DIAGRAM**



SIGNAL FACE	PHASE			
	Ø2+5	Ø2+6	Ø4	FLASH
21	G	R	Y	
22	G	G	R	Y
41,42	R	R	G	R
61,62	R	G	R	Y

**SIGNAL FACE I.D.**



**2070L LOOP & DETECTOR INSTALLATION**

LOOP	SIZE (M)	TURNS	DISTANCE FROM STOPBAR (M)	DETECTOR PROGRAMMING								
				PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD	
2A	1.8X1.8	5	21	Y	2	Y	Y	-	-	-	-	-
4A	1.8X1.8	2-4-2	0	Y	4	Y	Y	-	-	-	-	-
5A	1.8X1.8	2-4-2	0	Y	2	Y	Y	-	-	-	15	-
6A	1.8X1.8	4	21	Y	6	Y	Y	-	-	-	-	-
S2	1.8X1.8	4	+55	Y	-	-	-	Y	-	-	-	Y
S3	1.8X1.8	4	+55	Y	-	-	-	Y	-	-	-	Y
S4	1.8X1.8	4	+55	Y	-	-	-	Y	-	-	-	Y

3 Phase Fully Actuated  
(Closed Loop Signal System)

**NOTES**

- REFER TO "ROADWAY STANDARD DRAWINGS NCDOT", DATED JANUARY 2002 AND "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2002.
- MAXIMUM TIMES SHOWN IN TIMING CHART ARE FOR FREE-RUN OPERATIONS ONLY. COORDINATED SIGNAL SYSTEM TIMING VALUES SHALL SUPERSEDE THESE VALUES.
- REPOSITION EXISTING SIGNAL HEADS NUMBERED 21,22,41,42.
- SET ALL DETECTOR UNITS TO PRESENCE MODE.
- CLOSED LOOP SYSTEM DATA: INTERSECTION CONTROLLER ASSET # 0431.

**PHASING DIAGRAM DETECTION LEGEND**

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

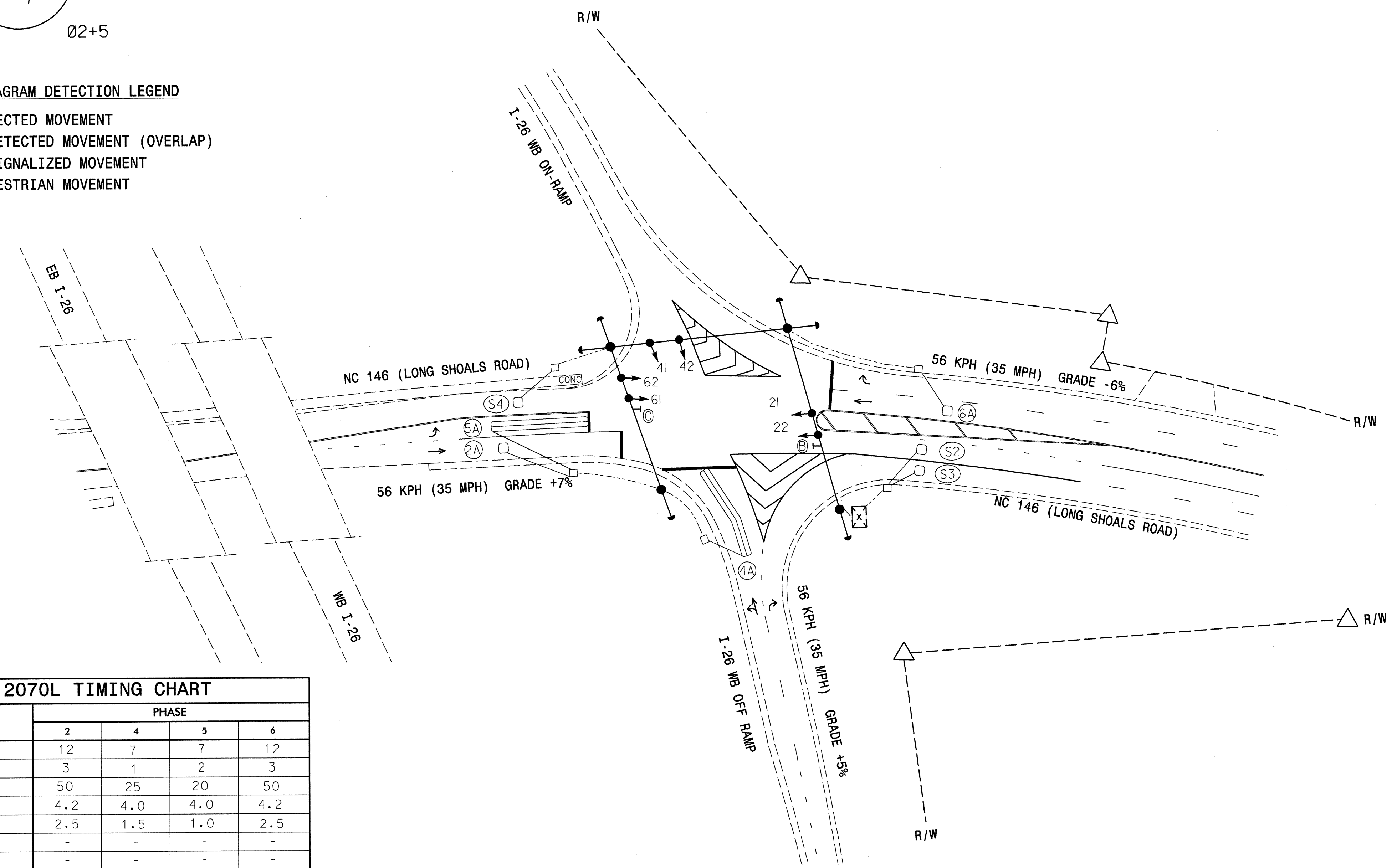
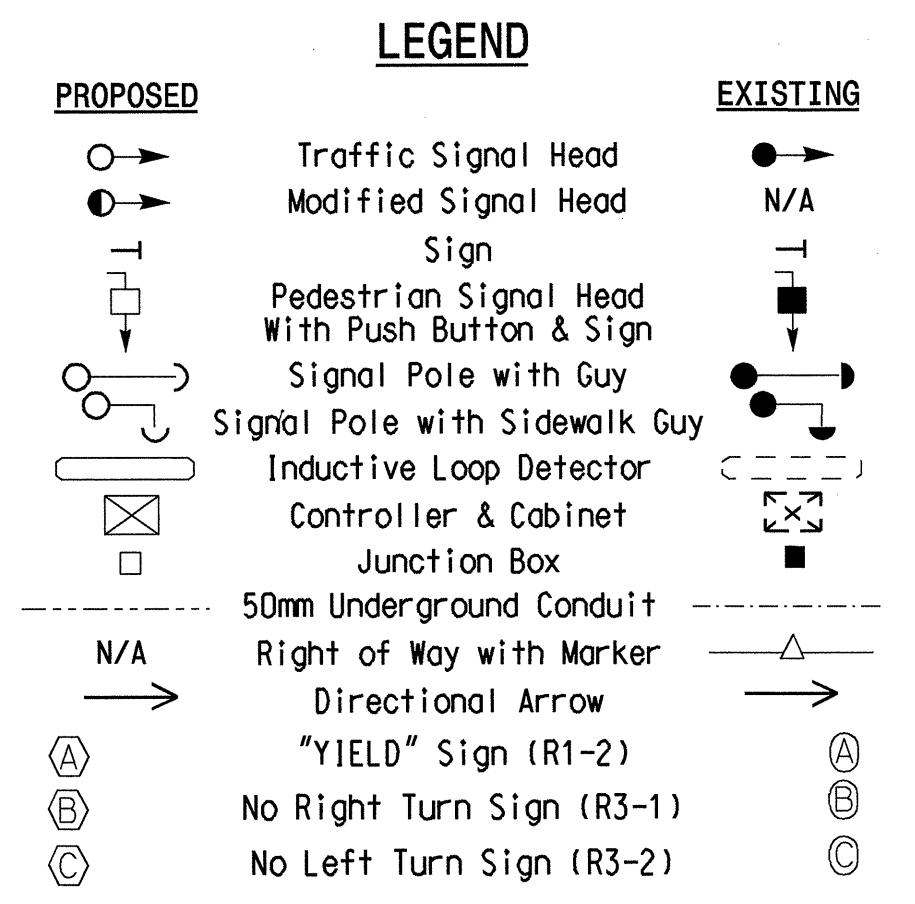
**PLAN QUANTITIES**

Pay Item	Meters
Signal Cable	—
Messenger Cable	—
Lead-in Cable	330

**2070L TIMING CHART**

FEATURE	PHASE			
	2	4	5	6
Min Green 1*	12	7	7	12
Extension 1*	3	1	2	3
Max Green 1*	50	25	20	50
Yellow Clearance	4.2	4.0	4.0	4.2
Red Clearance	2.5	1.5	1.0	2.5
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	-	-	-	-
Simultaneous Gap	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.



SIGNAL UPGRADE - FINAL

<p><b>PLANS PREPARED BY :</b> RUMMEL KLEPPER &amp; KAHL, LLP consulting engineers 5800 FARINGDON PLACE SUITE 105 RALEIGH, NORTH CAROLINA 27609-3960</p> <p>FOR <b>DIVISION OF HIGHWAYS</b></p>		<p>NC 146 (LONG SHOALS ROAD) AT I-26 WB RAMPS</p>		
		<p>DIVISION 13 BUNCOMBE COUNTY ASHEVILLE</p> <p>PLAN DATE: 02-06-04 REVIEWED BY: D. MORTON</p> <p>PREPARED BY: C.B. HOLDEN RKK PROJECT NO. 302-079-SIG4</p>	<p>122 N. McDowell St., Raleigh, NC 27603</p> <p>SCALE: 1:500</p>	