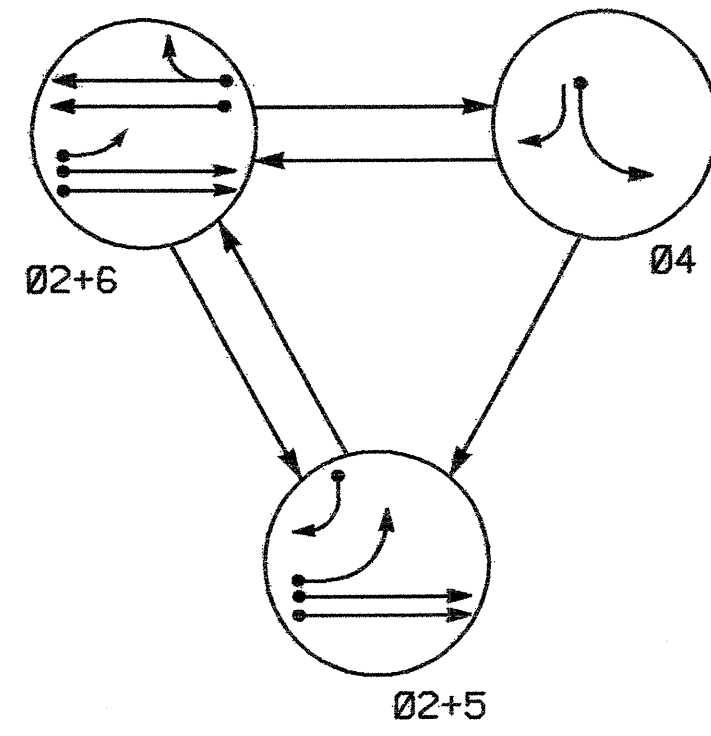


**PHASING DIAGRAM**



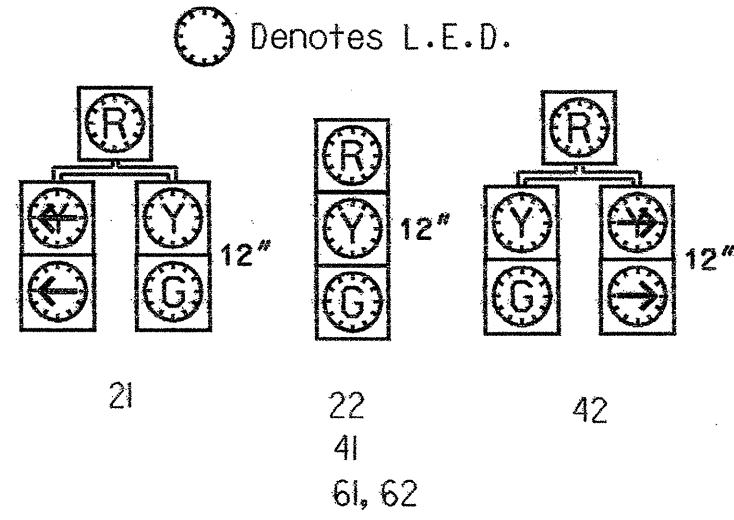
**PHASING DIAGRAM DETECTION LEGEND**

- ● → DETECTED MOVEMENT
- ← ○ ← UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ⚡ PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	Ø 2 + 5	Ø 2 + 6	Ø 4	FLASHER
21	G	R	Y	
22	G	R	Y	
41	R	G	R	
42	R	G	R	
61, 62	R	G	Y	

**SIGNAL FACE I.D.**



**2070L LOOP & DETECTOR INSTALLATION**

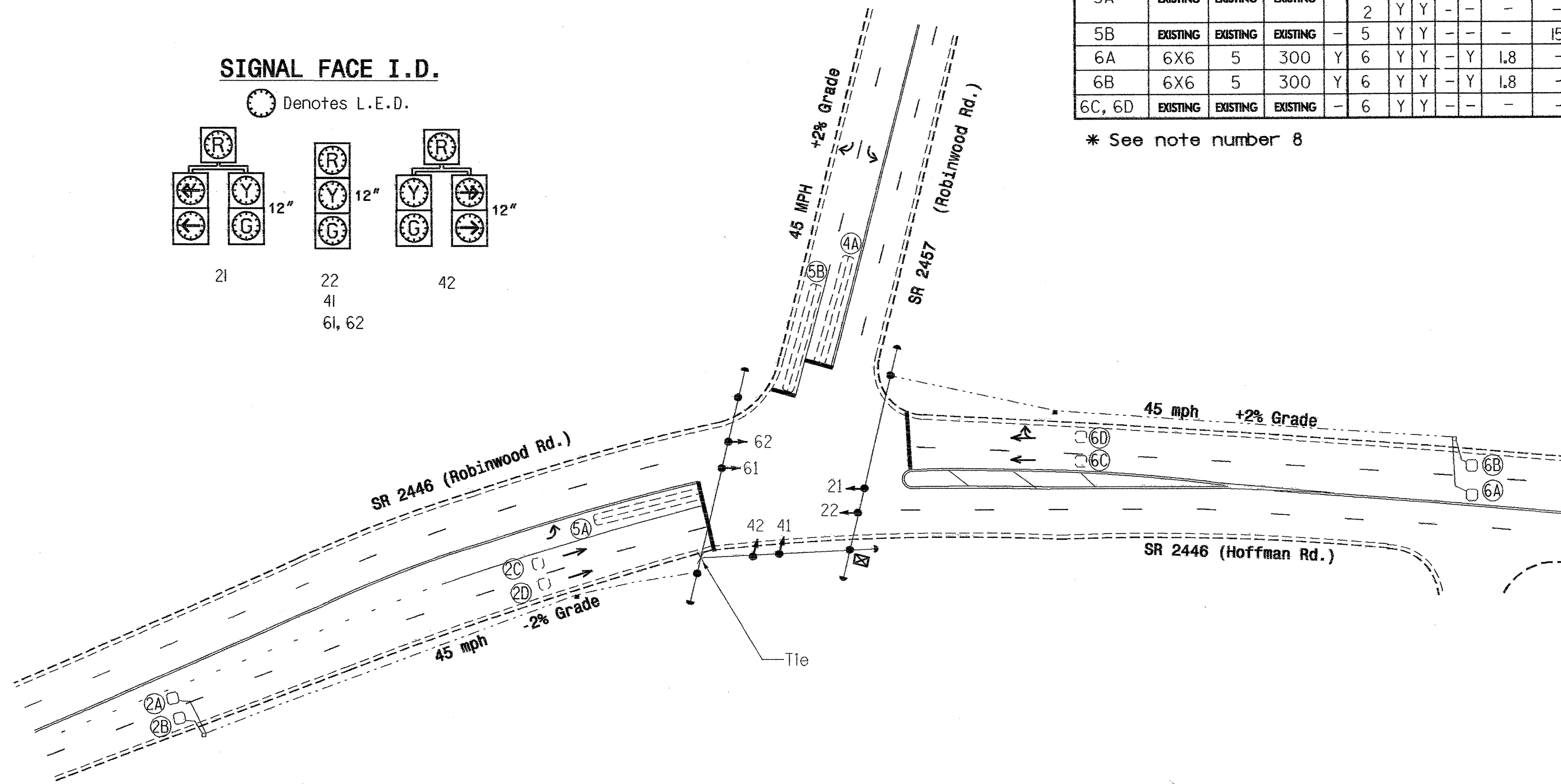
LOOP	INDUCTIVE LOOPS				DETECTOR PROGRAMMING							
	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
2A	6X6	5	300	Y	2	Y	Y	-	Y	1.8	-	Y
2B	6X6	5	300	Y	2	Y	Y	-	Y	1.8	-	Y
2C, 2D	EXISTING	EXISTING	EXISTING	-	2	Y	Y	-	-	-	-	Y
4A	EXISTING	EXISTING	EXISTING	-	4	Y	Y	-	-	-	3	Y
5A	EXISTING	EXISTING	EXISTING	-	5	Y	Y	-	-	-	15	Y
5B	EXISTING	EXISTING	EXISTING	-	5	Y	Y	-	-	-	15	Y
6A	6X6	5	300	Y	6	Y	Y	-	Y	1.8	-	Y
6B	6X6	5	300	Y	6	Y	Y	-	Y	1.8	-	Y
6C, 6D	EXISTING	EXISTING	EXISTING	-	6	Y	Y	-	-	-	-	Y

\* See note number 8

**3 Phase Fully Actuated (Gastonia City System)**

**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 flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Pavement markings are existing.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
7. City system data: Controller Asset 1209.
8. Loops 2A, 2B, 6A, and 6B must be wired separately to serve as both presence loops and system loops.



**2070L TIMING CHART**

FEATURE	PHASE			
	02	04	05	06
Min Green 1 *	12	7	7	12
Extension 1 *	2.0	2.0	1.0	2.0
Max Green 1 *	45	25	15	45
Yellow Clearance	4.7	4.0	4.0	4.7
Red Clearance	1.8	2.0	1.9	1.8
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.

**LEGEND**

- |                            |                                     |
|----------------------------|-------------------------------------|
| <b>PROPOSED</b>            | <b>EXISTING</b>                     |
| ○ → Traffic Signal Head    | ● → N/A                             |
| ● → Modified Signal Head   | — Sign                              |
| ⊥ Pedestrian Signal Head   | ⊥ Sign 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           | --- Right of Way                    |
| → Directional Arrow        | → Pavement Marking Arrow            |

**Signal Upgrade**

Prepared in the Office of:  
  
**SR 2446 (Robinwood Rd./ Hoffman Rd.) at SR 2457 (Robinwood Rd.)**  
 Division 12 Gaston County Gastonia  
 PLAN DATE: January 2005 REVIEWED BY:   
 PREPARED BY: C. Pierce REVIEWED BY: D. Y. Ishak  
 REVISIONS: INIT. DATE  
 SCALE: 1" = 50'  
 SIGNATURE: DATE: 7 February 05  
 SIG. INVENTORY NO. 12-1209