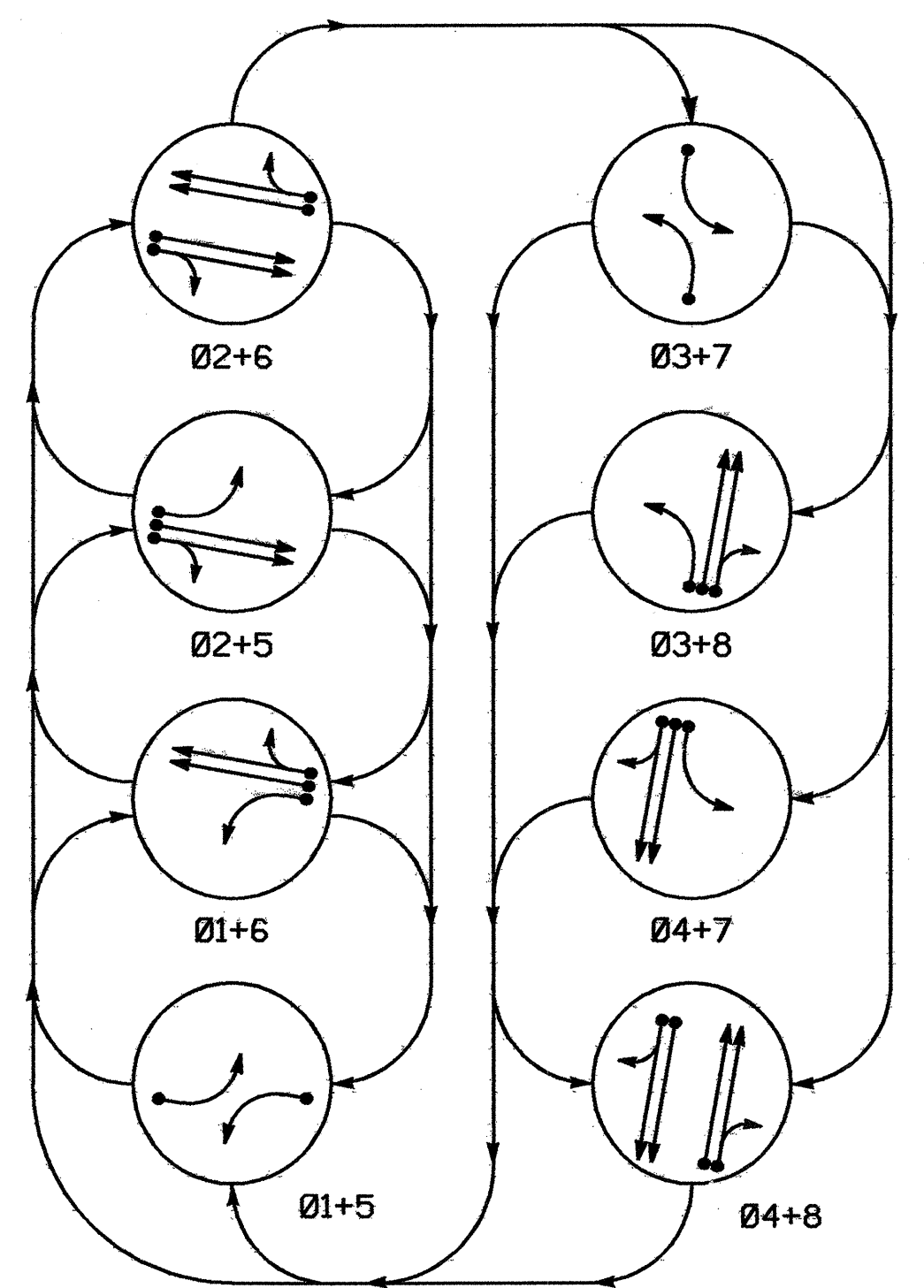


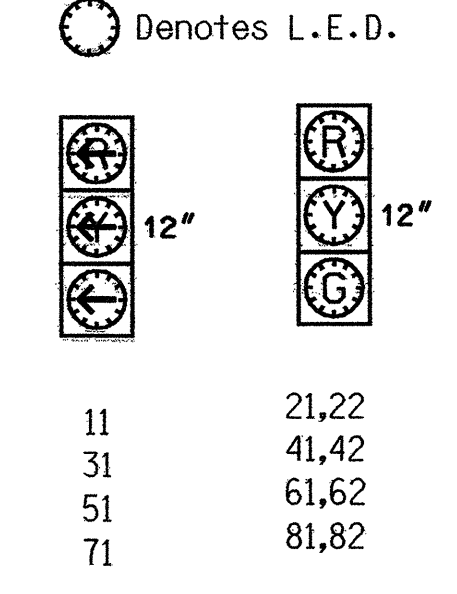
PHASING DIAGRAM



**PHASING DIAGRAM DETECTION LEGEND**  
 ● DETECTED MOVEMENT  
 ○ UNDETECTED MOVEMENT (OVERLAP)  
 - - UNSIGNALIZED MOVEMENT  
 - - - PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE							
	Ø 1+5	Ø 1+6	Ø 2+5	Ø 2+6	Ø 3+7	Ø 3+8	Ø 4+7	Ø 4+8
11	→	→	→	→	→	→	→	→
21, 22	R	R	G	G	R	R	R	Y
31	→	→	→	→	→	→	→	→
41, 42	R	R	R	R	R	R	G	G
51	→	→	→	→	→	→	→	→
61, 62	R	G	R	G	R	R	R	Y
71	→	→	→	→	→	→	→	→
81, 82	R	R	R	R	G	R	G	R

SIGNAL FACE I.D.



2070L LOOP & DETECTOR INSTALLATION

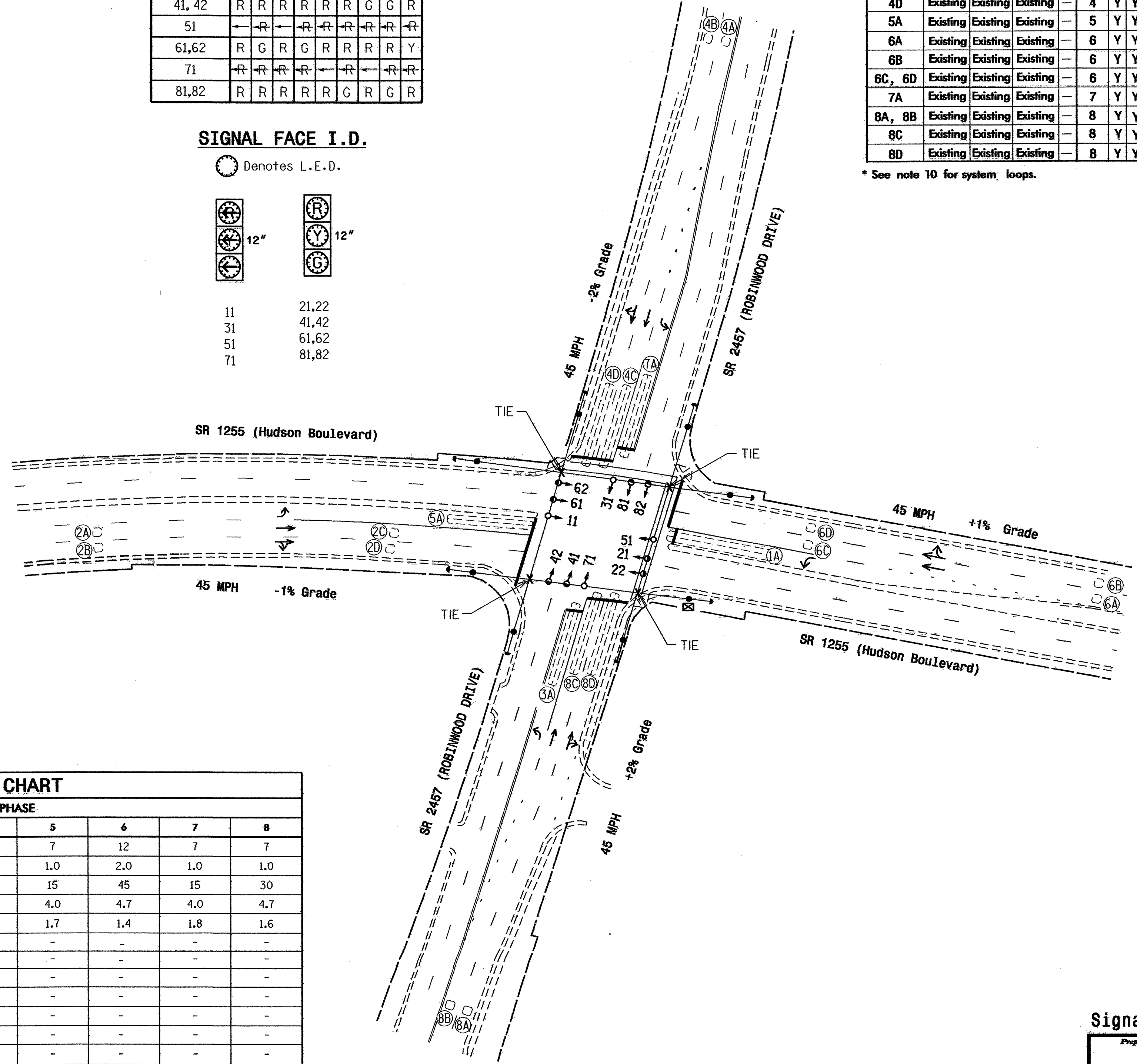
LOOP	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	DETECTOR PROGRAMMING						
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	NEW CARD
1A	Existing	Existing	Existing	-	1	Y	Y	-	-	-	Y
2A	Existing	Existing	Existing	-	2	Y	Y	-	1.8	-	Y
2B	Existing	Existing	Existing	-	2	Y	Y	-	1.8	-	Y
2C, 2D	Existing	Existing	Existing	-	2	Y	Y	-	-	-	Y
3A	Existing	Existing	Existing	-	3	Y	Y	-	-	-	Y
4A, 4B	Existing	Existing	Existing	-	4	Y	Y	-	2.0	-	Y
4C	Existing	Existing	Existing	-	4	Y	Y	-	-	-	Y
4D	Existing	Existing	Existing	-	4	Y	Y	-	-	-	Y
5A	Existing	Existing	Existing	-	5	Y	Y	-	-	-	Y
6A	Existing	Existing	Existing	-	6	Y	Y	-	1.8	-	Y
6B	Existing	Existing	Existing	-	6	Y	Y	-	1.8	-	Y
6C, 6D	Existing	Existing	Existing	-	6	Y	Y	-	-	-	Y
7A	Existing	Existing	Existing	-	7	Y	Y	-	-	-	Y
8A, 8B	Existing	Existing	Existing	-	8	Y	Y	-	2.0	-	Y
8C	Existing	Existing	Existing	-	8	Y	Y	-	-	-	Y
8D	Existing	Existing	Existing	-	8	Y	Y	-	-	-	Y

\* See note 10 for system loops.

8 Phase Fully Actuated (Gastonia City System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 or phase 5 may be lagged.
- Phase 3 or phase 7 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- City system data: Controller Asset 1378.
- Loops 2A, 2B, 6A, and 6B must be wired separately to serve as both present loops and systems loops.



**LEGEND**

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head Sign	○ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
□ → Utility Pole with Guy	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
□ → Inductive Loop Detector	□ → N/A
□ → Controller & Cabinet	□ → N/A
□ → Junction Box	□ → N/A
□ → Guard Rail	□ → N/A
□ → Wheel Chair Ramp	□ → N/A
□ → 2-in Underground Conduit	□ → N/A
□ → Right of Way with Marker	□ → N/A
→ Directional Arrow	→
→ Pavement Marking Arrow	→

**2070L TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	7	12	7	7
Extension 1 *	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0
Max Green 1 *	15	45	15	30	15	45	15	30
Yellow Clearance	4.0	4.7	4.0	4.7	4.0	4.7	4.0	4.7
Red Clearance	1.8	1.4	1.7	1.6	1.7	1.4	1.8	1.6
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	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

Prepared in the Office of:  
 NORTH CAROLINA PROFESSIONAL ENGINEERS AND SURVEYORS  
 STATE OF NORTH CAROLINA  
 C. PIERCE  
 222 N. McDowell St., Raleigh, NC 27603

SR 1255 (Hudson Boulevard) AT SR 2457 (Robinwood Drive)

DIVISION 12 GASTON COUNTY GASTONIA  
 PLAN DATE: January 2005 REVIEWED BY: DUSHAK  
 PREPARED BY: C. Pierce REVIEWED BY:  
 REVISIONS INIT. DATE

SCALE 1"=50'  
 0 50  
 1"=50'

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEERS AND SURVEYORS  
 STATE OF NORTH CAROLINA  
 C. PIERCE  
 222 N. McDowell St., Raleigh, NC 27603

SIGNATURE DATE  
 SIG. INVENTORY NO. 12-1378