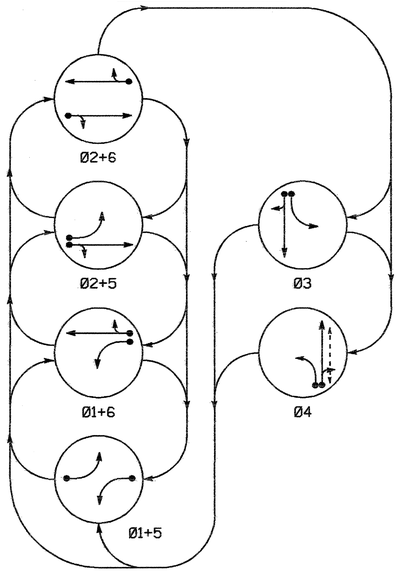
PROJECT REFERENCE NO.	SHEET NO.
U-4736	Sig 62

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

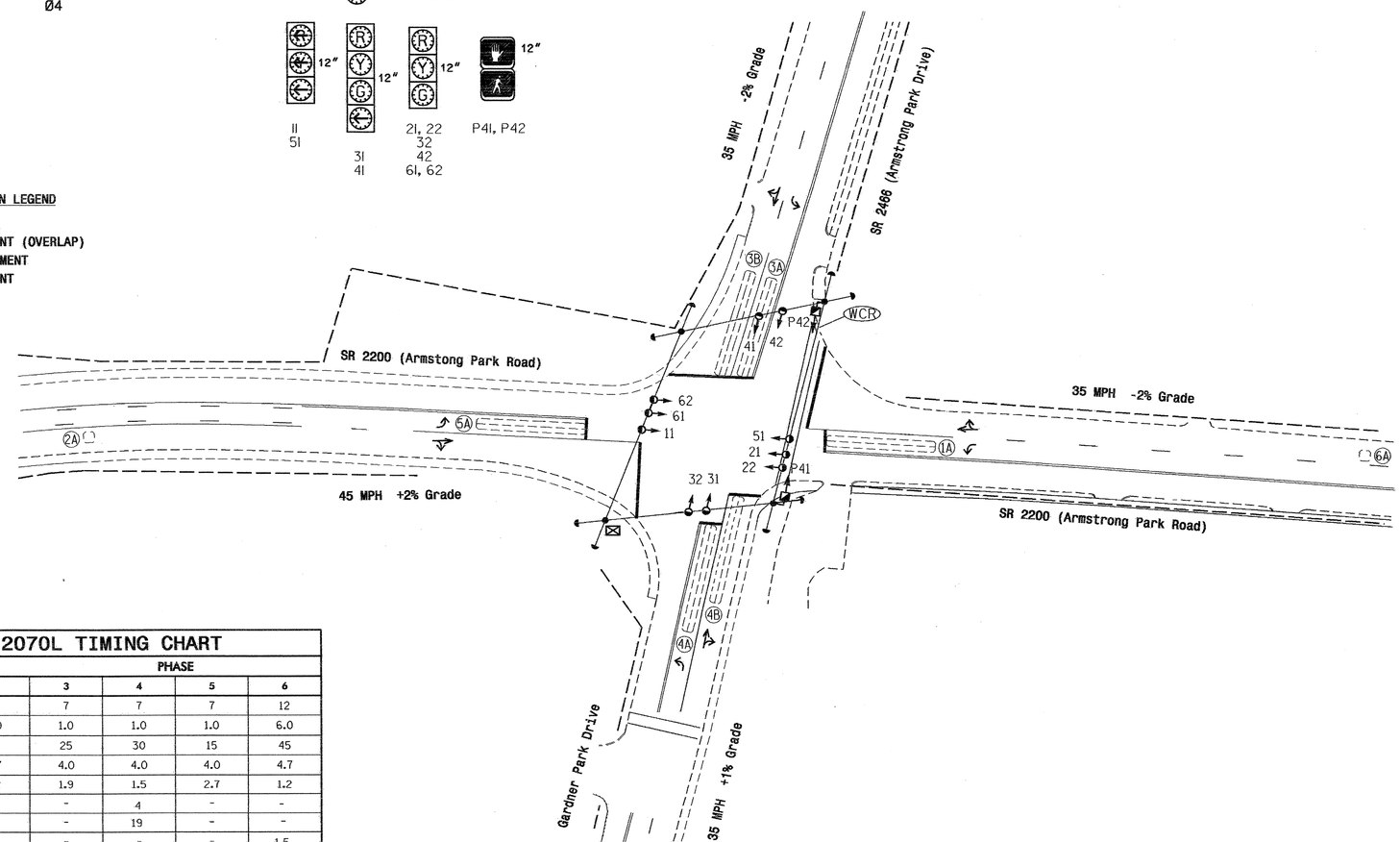
SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3	Ø4	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R	Y
P41, P42	DW	DW	DW	DW	DW	W	DRK

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	EXISTING	EXISTING	EXISTING	–	1	Y	Y	–	–	–	3	Y
2A	EXISTING	EXISTING	EXISTING	–	2	Y	Y	–	–	–	–	Y
3A	EXISTING	EXISTING	EXISTING	–	3	Y	Y	–	–	–	–	Y
3B	EXISTING	EXISTING	EXISTING	–	3	Y	Y	–	–	–	10	Y
4A	EXISTING	EXISTING	EXISTING	–	4	Y	Y	–	–	–	–	Y
4B	EXISTING	EXISTING	EXISTING	–	4	Y	Y	–	–	–	10	Y
5A	EXISTING	EXISTING	EXISTING	–	5	Y	Y	–	–	–	3	Y
6A	EXISTING	EXISTING	EXISTING	–	6	Y	Y	–	–	–	–	Y



2070L TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1 *	1.0	6.0	1.0	1.0	1.0	6.0
Max Green 1 *	15	45	25	30	15	45
Yellow Clearance	4.0	4.7	4.0	4.0	4.0	4.7
Red Clearance	2.0	1.2	1.9	1.5	2.7	1.2
Walk 1 *	-	-	-	4	-	-
Don't Walk 1	-	-	-	19	-	-
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.0	-	-	-	3.0
Recall Mode	-	MIN. RECALL	-	-	-	MIN. RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
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.

6 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 night flashing operation unless otherwise directed by the Engineer.
3. The order of phase 3 and phase 4 may be reversed.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Pavement markings are existing.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. City system data: Controller Asset #0609.
10. Program all signal heads for the same approach to flash concurrently during flashing operation.
11. Phase 1 or Phase 5 may be lagged.

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	

Signal Upgrade

Prepared in the Offices of: Traffic Engineering and Safety Systems Branch, Signals and Geometrics Section, Division of Highways, Department of Transportation, 122 N. McDowell St., Raleigh, NC 27603

SR 2200 (Armstrong Park Road) at Gardner Park Drive / SR 2466 (Armstrong Park Drive)

Division 12 Gaston County Gastonia

PLAN DATE: December 2004 REVIEWED BY: DJSLL

PREPARED BY: C. Pierce REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL ENGINEER RICHARD E. MULLINAX

SIGNATURE DATE

SIG. INVENTORY NO. 12-0609

12-MAY-2005 08:57
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