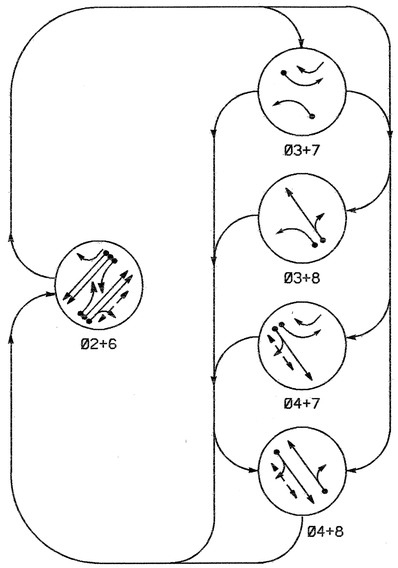
PROJECT REFERENCE NO.	SHEET NO.
U-4736	Sig224

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

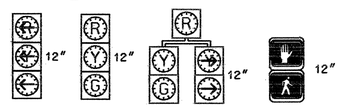
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	FLASH
21, 22	G	R	R	R	R	Y
31	~~R~~	–	–	~~R~~	~~R~~	~~R~~
41, 42	R	R	R	G	G	R
61, 62	G	R	R	R	R	Y
63	G	R/	R	R/	R	Y
71	~~R~~	–	~~R~~	–	~~R~~	~~R~~
81, 82	R	R	G	R	G	R
P21, P22	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	W	W	DRK

SIGNAL FACE I.D.

Denotes L.E.D.



31, 71 — 21,22, 41,42, 61,62, 81,82 — 63 — P21,P22, P41,P42

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
2A	EXISTING	EXISTING	EXISTING	–	2	Y	Y	–	–	1.8	–	Y
2B	EXISTING	EXISTING	EXISTING	–	2	Y	Y	–	–	1.8	–	Y
2C	EXISTING	EXISTING	EXISTING	–	2	Y	Y	–	–	–	–	Y
2D	EXISTING	EXISTING	EXISTING	–	2	Y	Y	–	–	–	–	Y
2E	EXISTING	EXISTING	EXISTING	–	2	Y	Y	–	–	–	–	Y
3A	EXISTING	EXISTING	EXISTING	–	3	Y	Y	–	–	–	3	Y
4A	EXISTING	EXISTING	EXISTING	–	4	Y	Y	–	–	–	10	Y
6A	EXISTING	EXISTING	EXISTING	–	6	Y	Y	–	–	1.8	–	Y
6B	EXISTING	EXISTING	EXISTING	–	6	Y	Y	–	–	1.8	–	Y
6C	EXISTING	EXISTING	EXISTING	–	6	Y	Y	–	–	–	–	Y
6D	EXISTING	EXISTING	EXISTING	–	6	Y	Y	–	–	–	–	Y
6E	EXISTING	EXISTING	EXISTING	–	6	Y	Y	–	–	–	–	Y
7A	EXISTING	EXISTING	EXISTING	–	7	Y	Y	–	–	–	3	Y
8A	EXISTING	EXISTING	EXISTING	–	8	Y	Y	–	–	–	10	Y

5 Phase
Fully Actuated
(Gastonia City System)

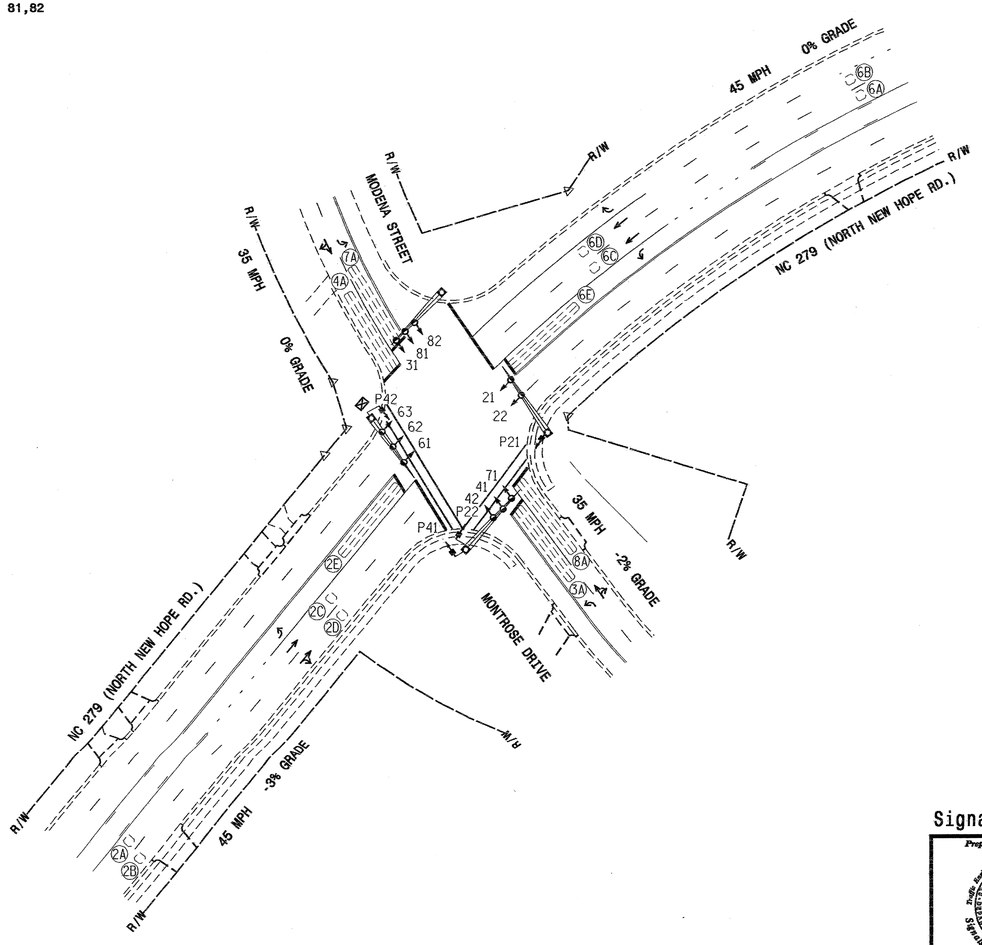
NOTES

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. Phase 3 or phase 7 may be lagged.
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. Loops 2A, 2B, 6A, and 6B must be wired seperately to serve as both presence loops and system loops.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. City system data: Controller Asset #1373.

2070L TIMING CHART

FEATURE	PHASE 2	3	4	6	7	8
Min Green 1 *	12	7	7	12	7	7
Extension 1 *	2.0	1.0	1.0	2.0	1.0	1.0
Max Green 1 *	60	15	30	60	15	30
Yellow Clearance	4.7	4.0	4.0	4.7	4.0	4.0
Red Clearance	1.5	2.1	2.4	1.5	1.8	2.4
Walk 1 *	4	-	4	-	-	-
Don't Walk 1	11	-	17	-	-	-
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

* 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

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	
N/A	Metal Pole with Mastarm	

Signal Upgrade

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

NC 279 (New Hope Road) at Modena Street / Montrose Drive

Division 12 Gaston County Gastonia

PLAN DATE: January 2005	REVIEWED BY:
PREPARED BY: C. Pierce	REVIEWED BY: D. Y. Ishak

SCALE 0 50 1" = 50'

REVISIONS	INIT.	DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL ENGINEER RICHARD E. MULLMAX

SIGNATURE February 05 DATE

SIG. INVENTORY NO. 12-1373

12-MAY-2005 11:32
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