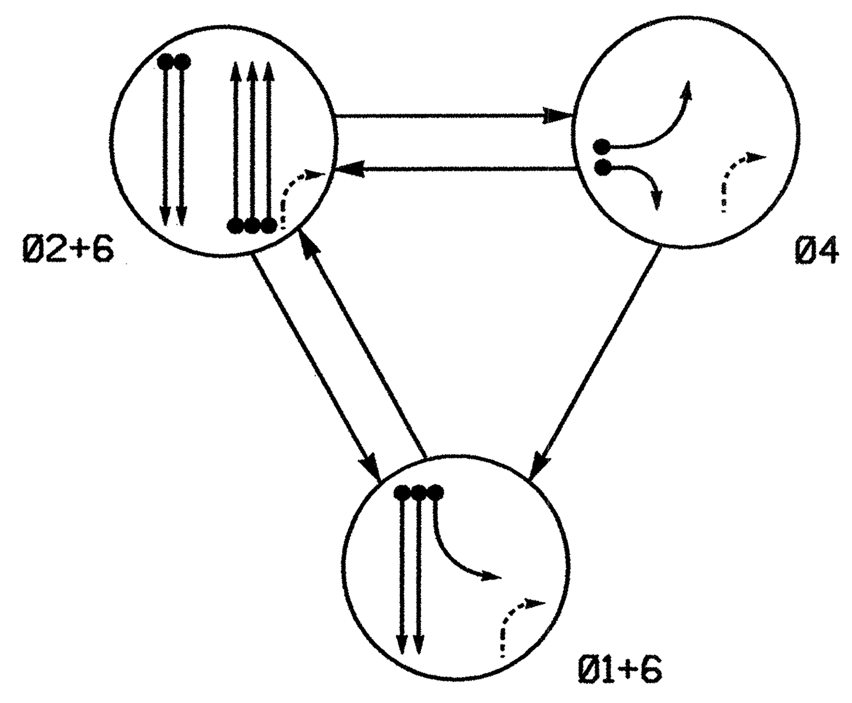
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

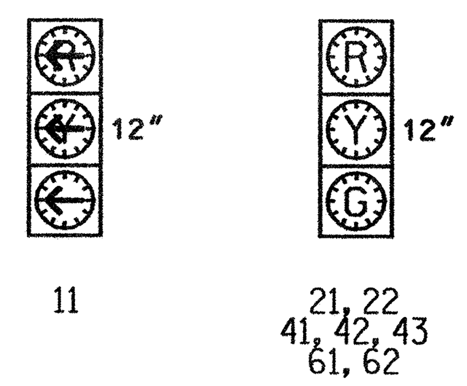
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+6	PHASE Ø2+6	PHASE Ø4	PHASE FLASH
11	←	R	R	R
21,22	R	G	R	Y
41,42,43	R	R	G	R
61, 62	G	G	R	Y

SIGNAL FACE I.D.

Denotes L.E.D.



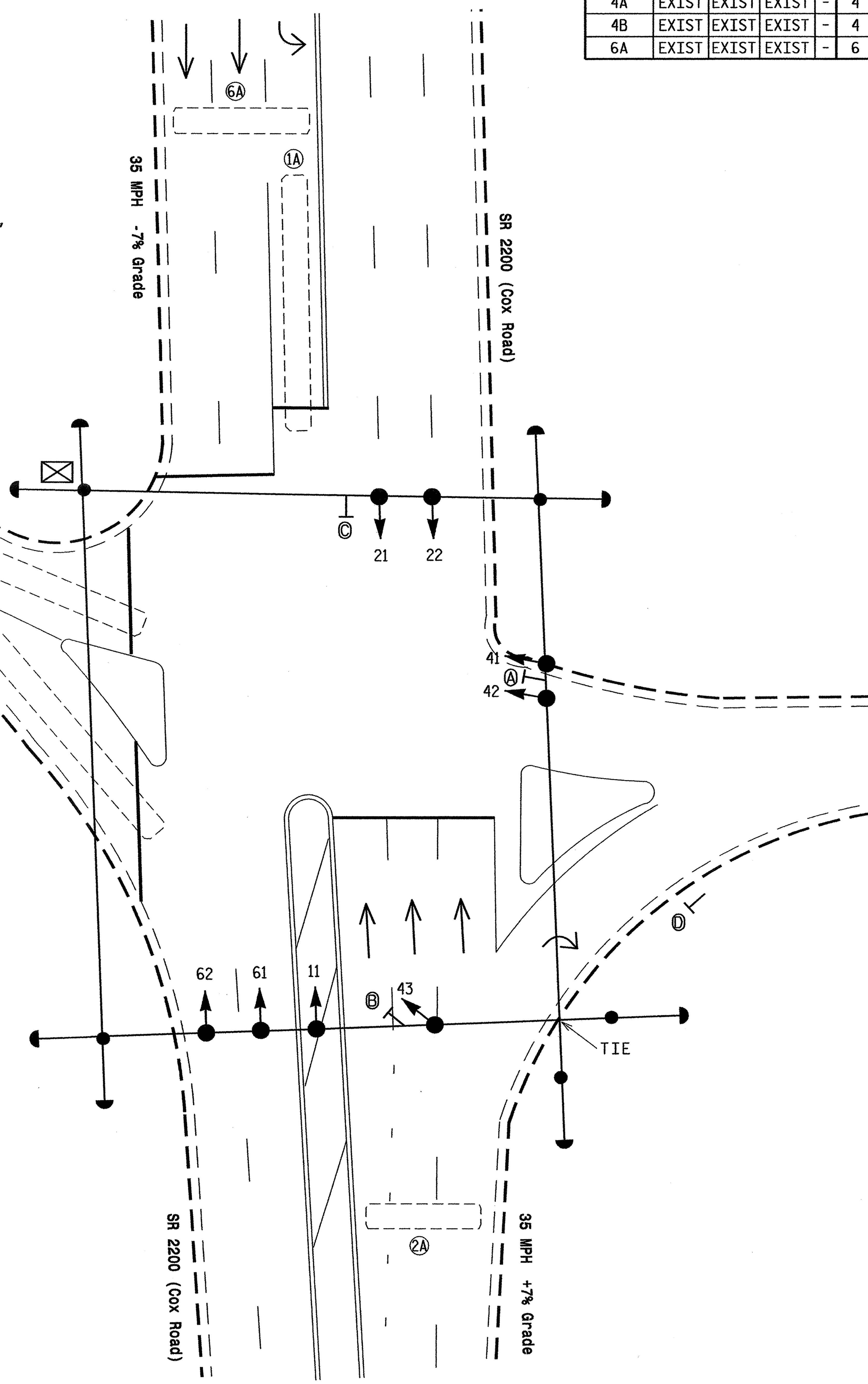
2070L LOOP & DETECTOR INSTALLATION

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
	INDUCTIVE LOOPS				DETECTOR PROGRAMMING							
1A	EXIST	EXIST	EXIST	-	1	Y	Y	-	-	3	-	Y
2A	EXIST	EXIST	EXIST	-	2	Y	Y	-	-	-	-	Y
4A	EXIST	EXIST	EXIST	-	4	Y	Y	-	-	-	-	Y
4B	EXIST	EXIST	EXIST	-	4	Y	Y	-	-	15	-	Y
6A	EXIST	EXIST	EXIST	-	6	Y	Y	-	-	-	-	Y

3 Phase
Fully Actuated
Gastonia City Signal 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 1 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. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Closed loop system data: Controller Asset #1086.



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	
Ⓐ	Left Arrow "ONLY" Sign (R3-5L)	Ⓐ
Ⓑ	Right Arrow "ONLY" Sign (R3-5R)	Ⓑ
Ⓒ	No Left Turn Sign (R3-2)	Ⓒ
Ⓓ	"YIELD" Sign (R1-2)	Ⓓ

This Plan shall supersede the plan signed and sealed by Richard E. Mullinax, PE on 02/18/2005.

2070L TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 6
Min Green 1 *	7	10	7	10
Extension 1 *	1.0	3.0	1.0	3.0
Max Green 1 *	15	45	25	45
Yellow Clearance	4.0	4.0	4.0	4.0
Red Clearance	2.7	2.8	1.5	2.8
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.

Signal Upgrade

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

SR 2200 (Cox Road) at I-85 Northbound Ramp

Division 12 Gaston County Gastonia

PLAN DATE:	November 2005	REVIEWED BY:	Z.M. Little
PREPARED BY:	C. E. Pierce	REVIEWED BY:	D.Y. Ishak

REVISIONS	INIT.	DATE

SCALE 0 20 1"=20'

SEAL: North Carolina Professional Engineer Seal 22627 Richard E. Mullinax

SIGNATURE DATE 3 January 06

SIG. INVENTORY NO. 12-1086

30-DEC-2005 14:15
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zmlittle