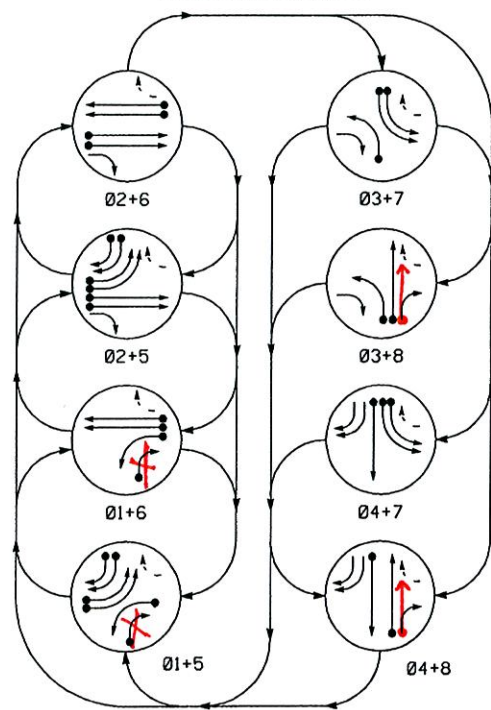


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

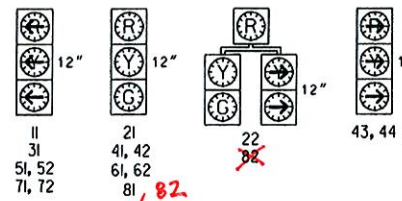
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11								
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31								
41, 42	R	R	R	R	R	R	R	R
43, 44								
51, 52								
61, 62	R	G	R	G	R	R	R	Y
71, 72								
81, 82	R	R	R	R	R	R	R	R
82								

SIGNAL FACE I.D.

Denotes L.F.D.



2070L LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS				DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	PULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP
1A	6X40	350	EXIST	-	1	Y	Y	-	-	-	-
1B	6X40	200	EXIST	-	1	Y	Y	-	-	-	-
2A	6X40	300	EXIST	-	2	Y	Y	-	-	-	-
2B	6X40	900	EXIST	-	2	Y	Y	-	-	-	-
3A	6X40	0	EXIST	-	3	Y	Y	-	-	-	-
4A	6X40	0	EXIST	-	4	Y	Y	-	-	-	-
5A	6X40	350	EXIST	-	5	Y	Y	-	-	-	-
5B	6X40	350	EXIST	-	5	Y	Y	-	-	-	-
5C	6X40	0	EXIST	-	5	Y	Y	-	-	15	-
5D	6X40	0	EXIST	-	5	Y	Y	-	-	15	-
6A	6X206	300	EXIST	-	6	Y	Y	-	-	-	-
6B	6X206	900	EXIST	-	6	Y	Y	-	-	-	-
7A	6X40	0	EXIST	-	7	Y	Y	-	-	-	-
7B	6X40	0	EXIST	-	7	Y	Y	-	-	-	-
8A	6X40	200	EXIST	-	8	Y	Y	-	-	-	-
S1	6X6	495	EXIST	-	-	-	-	-	-	-	Y
S2	6X6	495	EXIST	-	-	-	-	-	-	-	Y

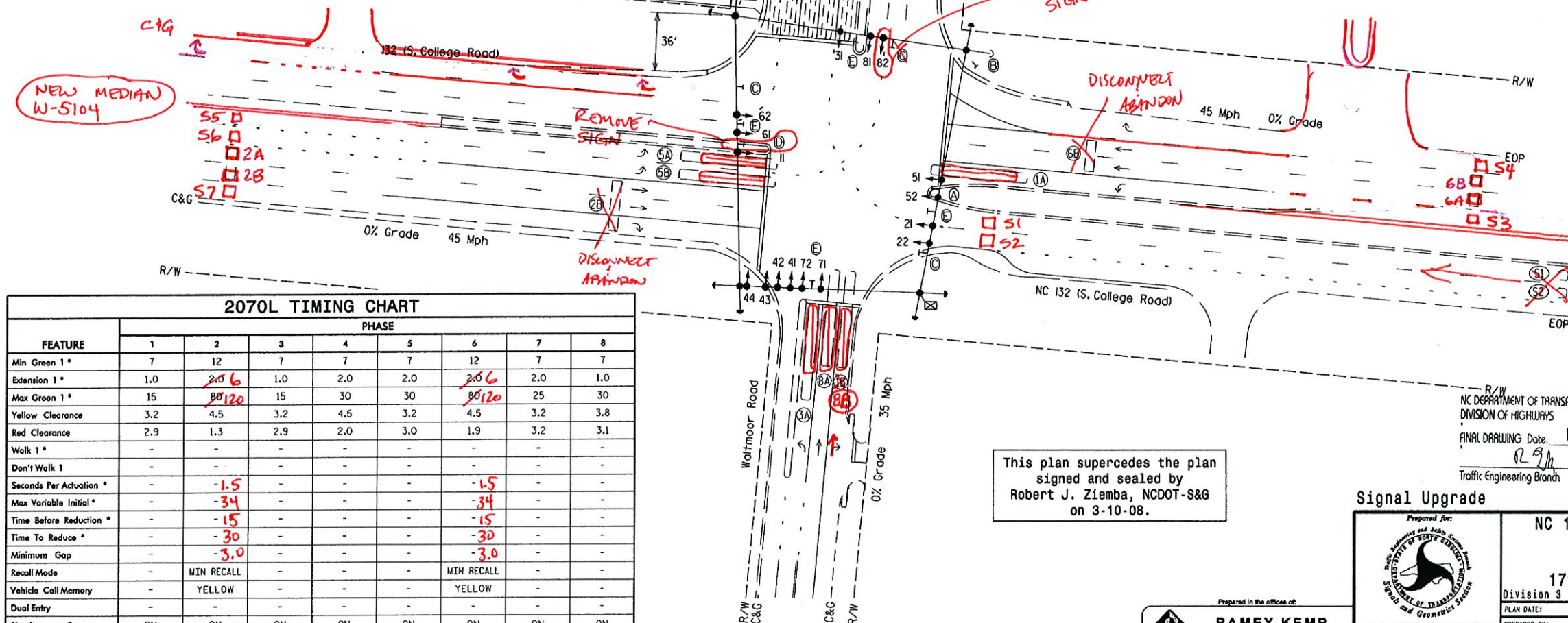
SYSTEM DETECTORS

System Data	Signal System	Control Zone
ID Number	Number	Zone
S1	0395-01	6
S2	0395-02	6

8 Phase Fully Actuated (Wilmington Signal System)

NOTES

- Refer to 'Roadway Standard Drawings NCDOT' dated July 2006, 'Standard Specifications for Roads and Structures' dated July 2006.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- In the event of loop replacement, refer to the current Signals & Geometrics Design Manual and submit a Plan of Record to the Signals & Geometrics Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Signal System Data: Controller Asset No: 0395.



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	2.0	2.0	2.0	2.0	1.0
Max Green 1 *	15	30	15	30	30	30	25	30
Yellow Clearance	3.2	4.5	3.2	4.5	3.2	4.5	3.2	3.8
Red Clearance	2.9	1.3	2.9	2.0	3.0	1.9	3.2	3.1
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.

This plan supercedes the plan signed and sealed by Robert J. Ziembra, NCDOT-S&G on 3-10-08.

Signal Upgrade

Prepared for: RAMEY KEMP ASSOCIATES, INC.

Form containing project details, dates, and signatures. Includes fields for 'Prepared for', 'Division 3', 'Date', 'Reviewed by', 'Scale', and 'Signature'.

AS-BUILTS: CURB & GUTTERS FROM OLD DEVELOPER PROJECTS / POR: SIDESTREET LANE MODIFICATION (PROPOSED) / W-5104, AS BUILT (MEDIANS) / POR FOR FUTURE LOOPS & VOL-DEM