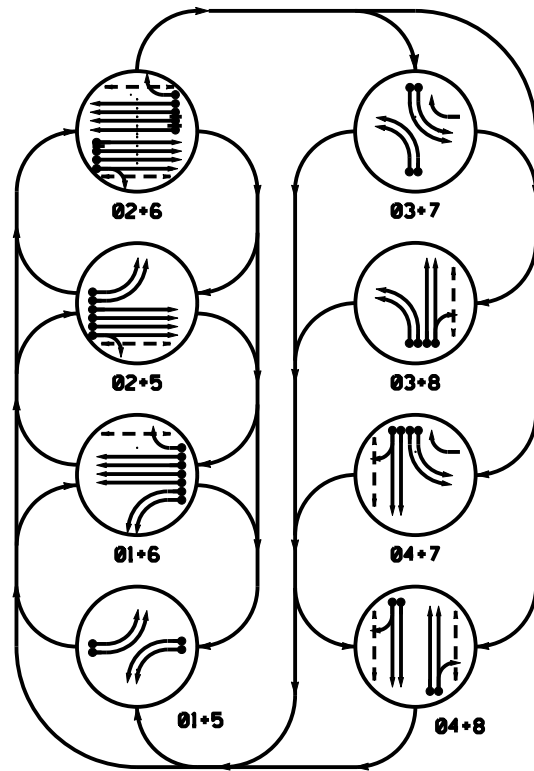


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

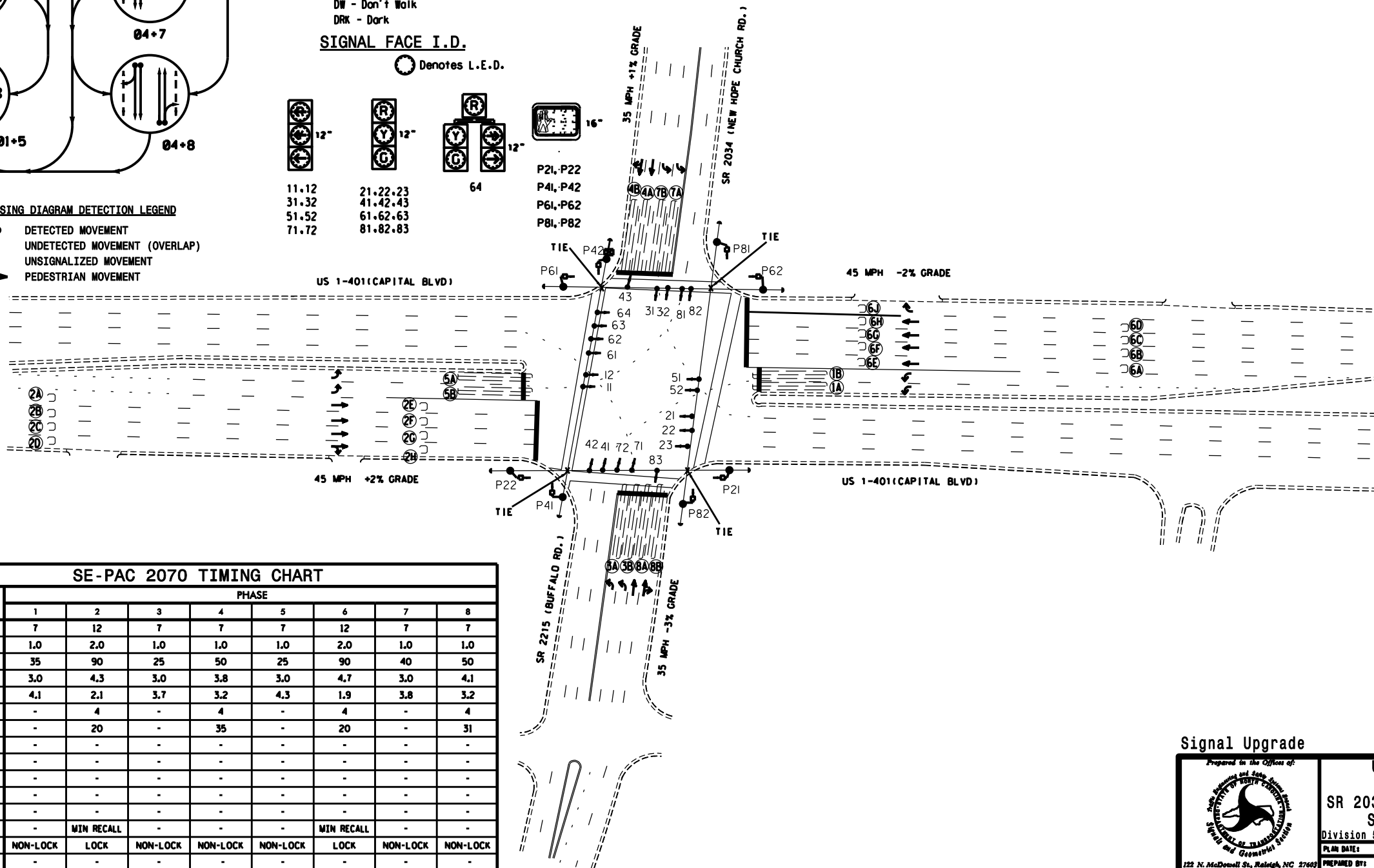
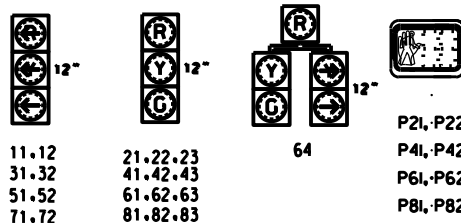
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
1, 12								
2, 22, 23	R	R	G	G	R	R	R	Y
3, 32	R	R	R	R				
4, 42, 43	R	R	R	R			G	G
5, 52								
6, 62, 63	R	G	R	G	R	R	R	Y
64	R	G	R	G	R	R	R	Y
7, 72								
8, 82, 83	R	R	R	R	R	G	R	
P21, P22	DW	DW	W	W	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	DW	DRK

W - Walk
DW - Don't Walk
DRK - Dark

SIGNAL FACE I.D.

Denotes L.E.D.



SE-PAC 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Passage Gap *	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0
Maximum Green *	35	90	25	50	25	90	40	50
Yellow Change	3.0	4.3	3.0	3.8	3.0	4.7	3.0	4.1
Red Clear	4.1	2.1	3.7	3.2	4.3	1.9	3.8	3.2
Walk *	-	4	-	4	-	4	-	4
Pedestrian Clear	-	20	-	35	-	20	-	31
Added Initial *	-	-	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK	NON-LOCK
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.

LOOP & DETECTOR UNIT INSTALLATION CHART
SE-PAC 2070 CONTROLLER WITH 170 CABINET

INDUCTIVE LOOPS					DETECTOR PROGRAMMING												
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	ASSIGNED PHASE	TIMING		OPERATION MODE								STATUS
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROTECT	PERMIT	THROUGH	
1A	6X60	EXIST	EXIST	-	X	1	- SEC	- SEC	X	-	-	-	-	-	-	-	X
1B	6X60	EXIST	EXIST	-	X	1	- SEC	- SEC	X	-	-	-	-	-	-	-	X
2A, 2B, 2C, 2D	6X6	EXIST	EXIST	-	X	2	- SEC	1.8 SEC	X	-	-	-	-	-	-	-	X
2E, 2F, 2G, 2H	6X6	EXIST	EXIST	-	X	2	- SEC	- SEC	X	-	-	-	-	-	-	-	X
3A, 3B	6X60	EXIST	EXIST	-	X	3	- SEC	- SEC	X	-	-	-	-	-	-	-	X
4A, 4B	6X60	EXIST	EXIST	-	X	4	- SEC	- SEC	X	-	-	-	-	-	-	-	X
5A	6X60	EXIST	EXIST	-	X	5	- SEC	- SEC	X	-	-	-	-	-	-	-	X
5B	6X60	EXIST	EXIST	-	X	5	- SEC	- SEC	X	-	-	-	-	-	-	-	X
6A, 6B, 6C, 6D	6X6	EXIST	EXIST	-	X	6	- SEC	1.8 SEC	X	-	-	-	-	-	-	-	X
6E, 6F, 6G, 6H	6X6	EXIST	EXIST	-	X	6	- SEC	- SEC	X	-	-	-	-	-	-	-	X
6J	6X6	EXIST	EXIST	-	X	6	- SEC	- SEC	X	-	-	-	-	-	-	-	X
7A, 7B	6X60	EXIST	EXIST	-	X	7	- SEC	- SEC	X	-	-	-	-	-	-	-	X
8A, 8B	6X60	EXIST	EXIST	-	X	8	- SEC	- SEC	X	-	-	-	-	-	-	-	X

8 Phase
Fully Actuated
(Raleigh City Signal System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "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 logged.
- Phase 3 or phase 7 may be logged.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current Signals and Geometrics Design Manual and submit a Plan of Record to the Signals and Geometrics Section.
- Pavement markings are existing.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

- | PROPOSED | EXISTING |
|--|----------|
| Traffic Signal Head | N/A |
| Modified Signal Head | N/A |
| Sign | N/A |
| Pedestrian Signal Head With Push Button & Sign | 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 |
| 2-in Underground Conduit | N/A |
| Right of Way | N/A |
| Directional Arrow | N/A |
| Pavement Marking Arrow | N/A |

Signal Upgrade

Prepared in the Office of:

122 N. McDowell St., Raleigh, NC 27603

US 1 (Capital Blvd.)
at
SR 2034 (New Hope Church Rd.) /
SR 2215 (Buffalo Rd.)

Division 5 Wake County Raleigh

PLAN DATES: December 2006
PREPARED BY: C. E. Pierce
REVIEWED BY: Z. W. Little
REVIEWED BY: D. Y. Ishak

REVISIONS: INIT. DATE

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NORTH CAROLINA
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22027
RICHARD E. MULLINIX

SIGNATURE: DATE: 05-1198

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