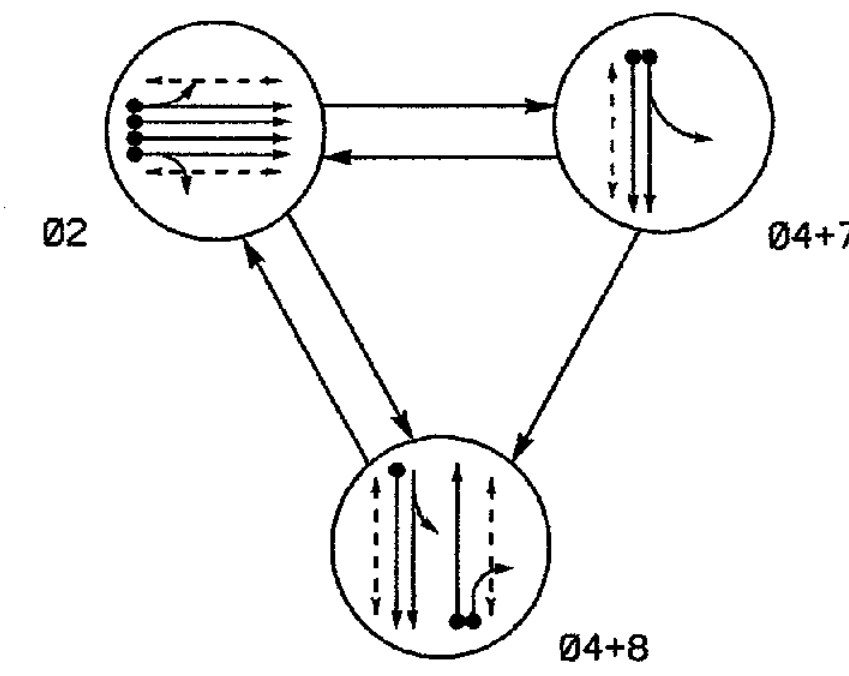


PHASING DIAGRAM

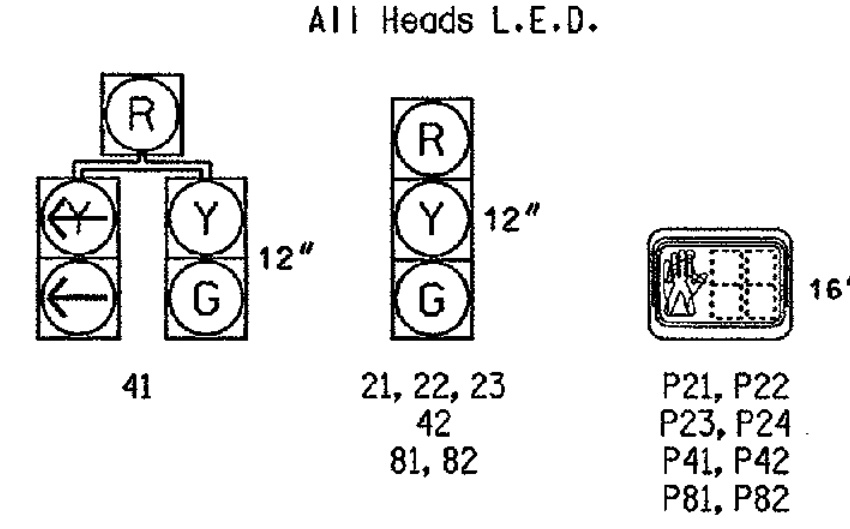


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE			
	Ø 2	Ø 4 + 7	Ø 4 + 8	FLASH
21, 22, 23	G	R	R	Y
41	R	G	G	R
42	R	G	G	R
81, 82	R	R	G	R
P21, P22	W	DW	DW	DRK
P22, P23	W	DW	DW	DRK
P41, P42	DW	W	W	DRK
P81, P82	DW	DW	W	DRK

SIGNAL FACE I.D.



LOOP & DETECTOR UNIT INSTALLATION CHART																			
SE-PAC 2070 CONTROLLER WITH 170 CABINET																			
INDUCTIVE LOOPS						DETECTOR PROGRAMMING													
						ASSIGNED PHASE	TIMING		OPERATION MODE							SWITCH	SYSTEM LOOPS	STATUS	
									0	1	2	3	4	5	6			7	NEW
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROXIMITY LEFT TURN	PROXIMITY THROUGH TURN	AND				
2A	6X6	EXIST	80	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	
2B	6X6	EXIST	80	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	
2C	6X6	EXIST	80	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	
2D	6X6	EXIST	80	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	
4A	6X60	EXIST	+5	-	X	4	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	
7A	6X60	EXIST	+5	-	X	7	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	
						4	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	
8A, 8B	6X60	EXIST	+5	-	X	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-	

3 Phase Fully Actuated (Raleigh Signal System)

NOTES

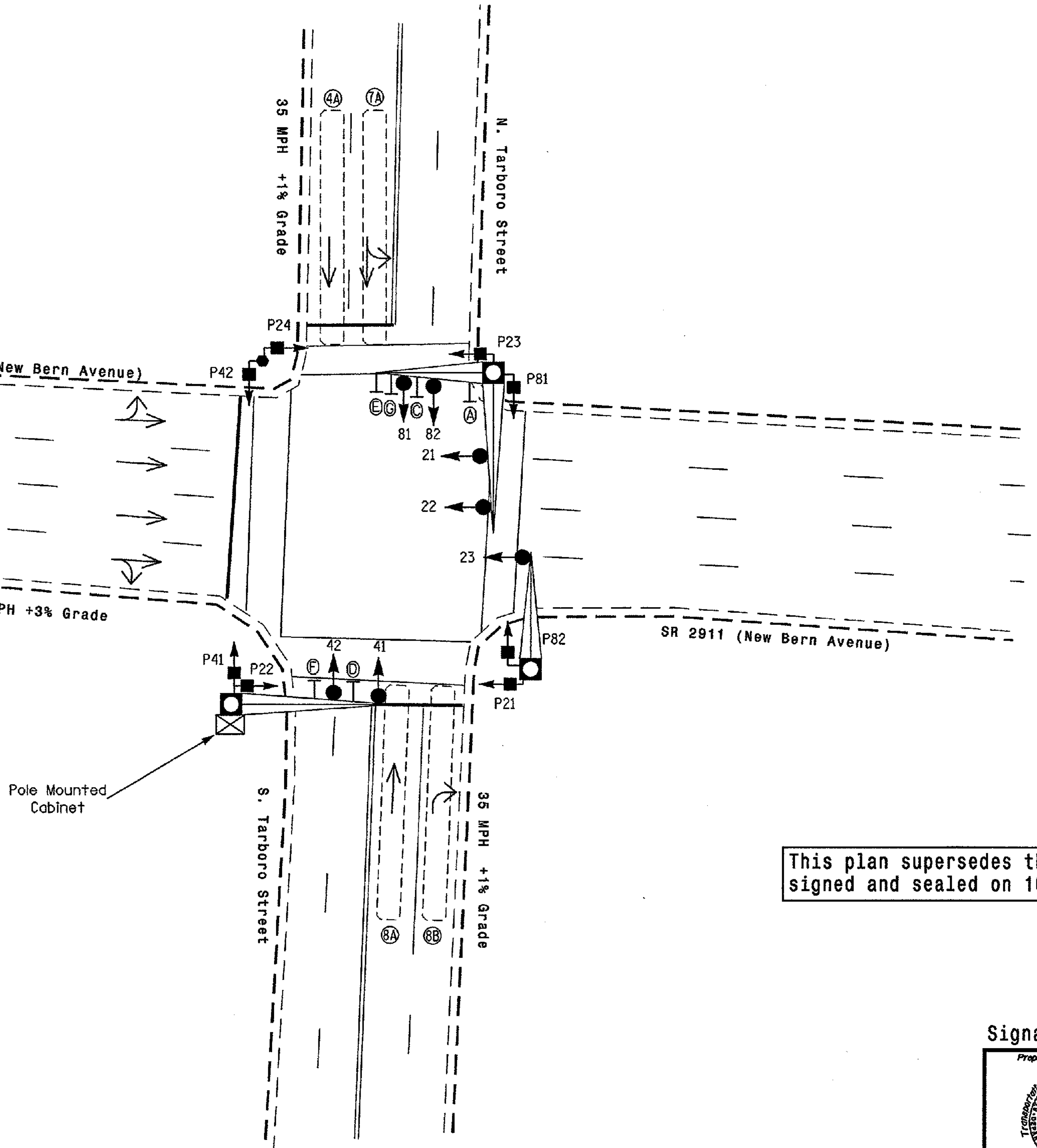
- Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 7 may be lagged.
- Renumber existing signal heads and loops as shown.
- Signal heads numbered 21, 22, 23, 41, 42, and 81 have backplates.
- 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.
- 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.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

- PROPOSED: Traffic Signal Head, Modified Signal Head, 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, Right of Way, Directional Arrow, Signal Pedestal, Metal Pole with Mastarm.
- EXISTING: N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A.

SE-PAC 2070 TIMING CHART				
FEATURE	PHASE			
	2	4	7	8
Min Green *	10	7	7	7
Passage Gap *	3.0	1.0	1.0	1.0
Maximum Green *	40	30	20	30
Yellow Change	3.7	3.8	3.0	3.8
Red Clear	1.4	1.7	1.8	1.7
Walk *	4	4	-	4
Pedestrian Clear	10	12	-	11
Added Initial *	-	-	-	-
Maximum Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	-	-
Vehicle Call Memory	LOCK	NON-LOCK	NON-LOCK	NON-LOCK
Dual Entry	-	ON	-	ON
Simultaneous Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



This plan supersedes the plan signed and sealed on 10/10/08.

Signal Upgrade

Prepared in the Office of: Transportation Mobility and Safety Division, Division 5, Wake County, Raleigh. Plan Date: October 2009. Reviewed by: Sterling. Revisions: [Table with columns for Revisions, Init., Date].