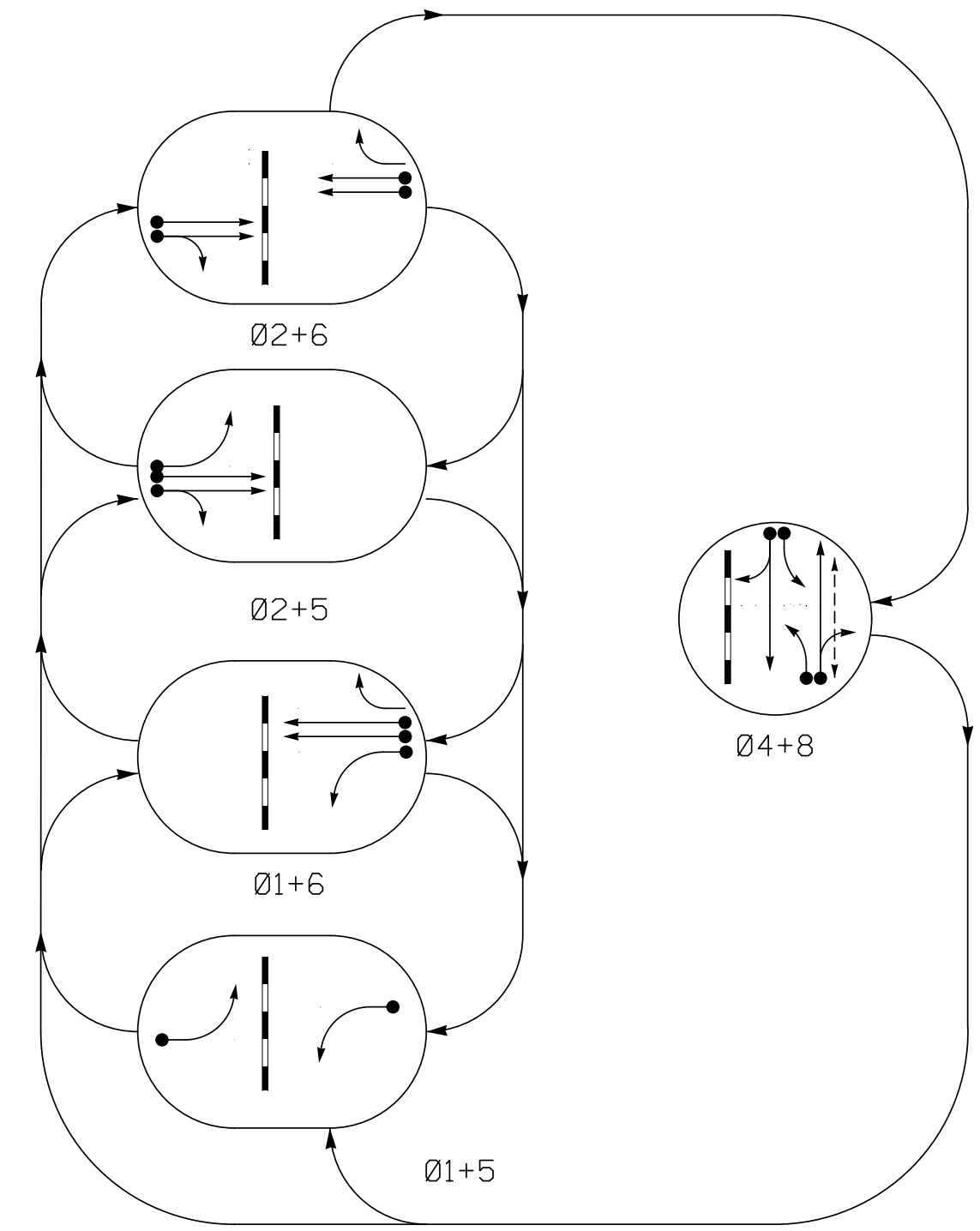


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

RAIL PREEMPT PHASES (High Priority)

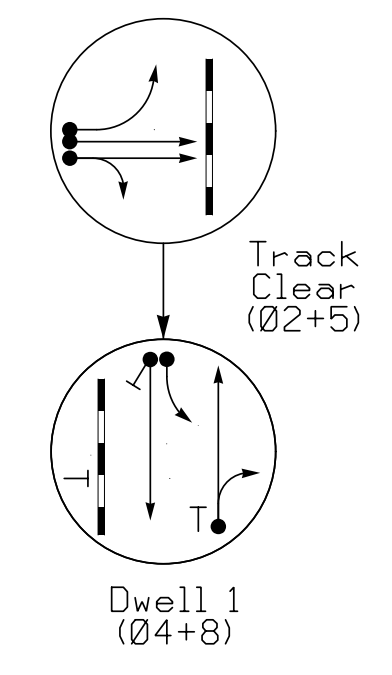
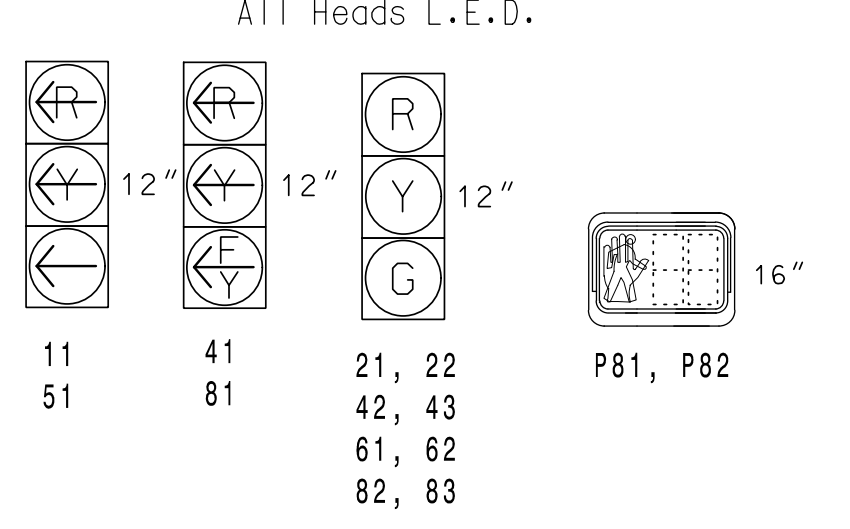


TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	04+8	RR CLEAR	RR DWELL	RR TRACK
11	←	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	G	R	Y
41	←	←	←	←	←	←	←	←
42, 43	R	R	R	R	G	R	G	R
51	←	←	←	←	←	←	←	←
61, 62	R	G	R	G	R	R	R	R
81	←	←	←	←	←	←	←	←
81, 82	R	R	R	R	G	R	G	R
P81, P82	DW	DW	DW	DW	W	DW	DW	DRK
SIGN 'A'	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON *

* See Note #9

SIGNAL FACE I.D.



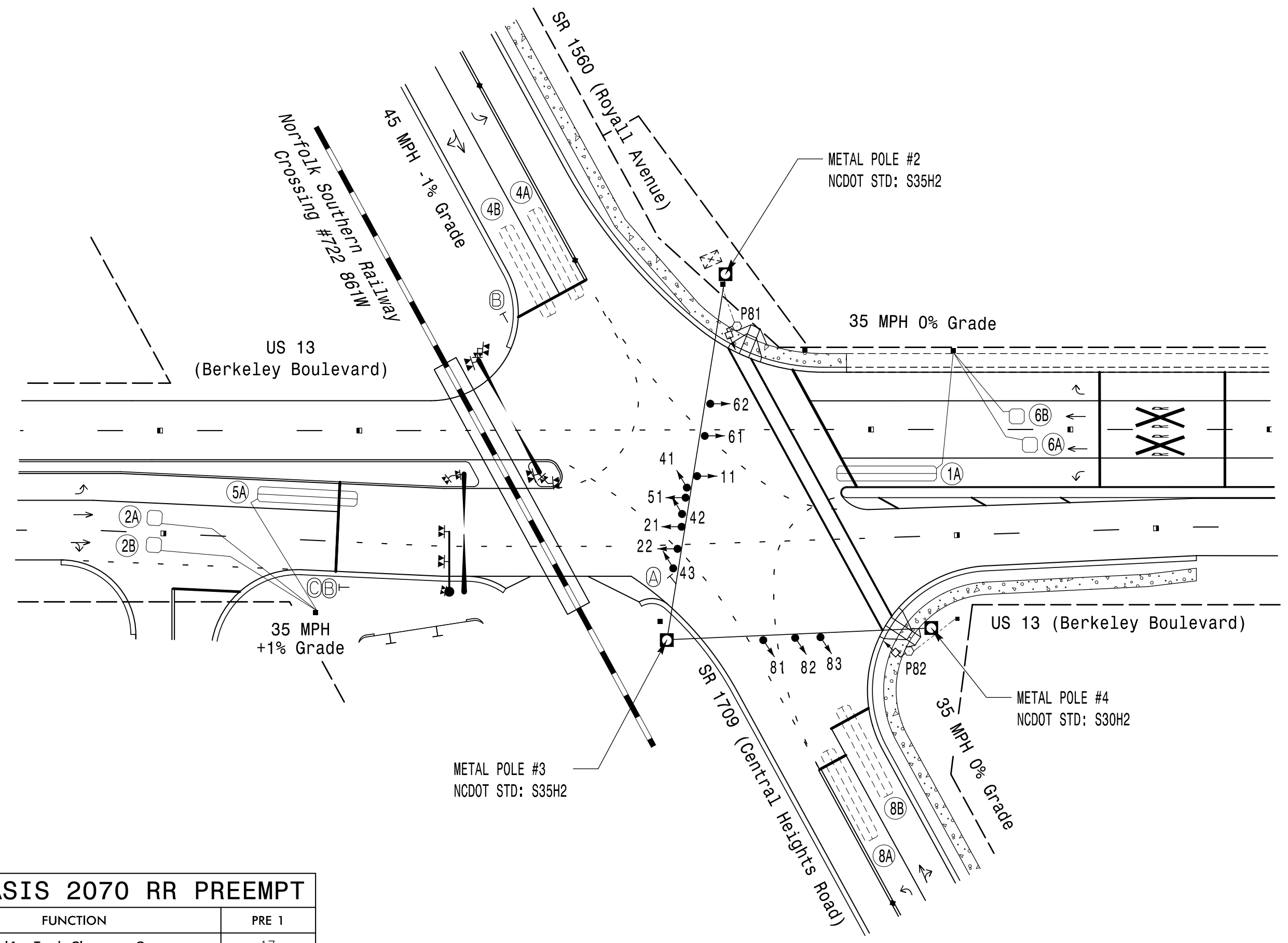
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	INDUCTIVE LOOPS			DETECTOR PROGRAMMING					SYSTEM LOOP NEW CARD	
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME		DELAY TIME
1A	6X40	+5	2-4-2	Y	1	Y	Y	-	-	-
2A	6X6	70	6	Y	2	Y	Y	-	-	-
2B	6X6	70	6	Y	2	Y	Y	-	-	-
4A	6X40	+5	2-4-2	-	4	Y	Y	-	3	-
4B	6X40	+5	2-4-2	-	4	Y	Y	-	-	-
5A	6X40	+5	2-4-2	Y	5	Y	Y	-	-	-
6A	6X6	70	6	Y	6	Y	Y	-	-	-
6B	6X6	70	6	Y	6	Y	Y	-	-	-
8A	6X40	+5	2-4-2	-	8	Y	Y	-	3	-
8B	6X40	+5	2-4-2	-	8	Y	Y	-	-	-

5 PHASE W/ RR PREEMPTION FULLY ACTUATED (GOLDSBORO SIGNAL SYSTEM)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
- Phase 1 and/or phase 5 may be lagged.
- Reposition existing signal heads numbered 11, 21, 22, 51, 61 and 62.
- Set all detector units to presence mode.
- Pavement markings are existing.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Ensure flashing operation does not alter operation of blankout signs.
- Program parent phase for Overlap "P" for all phases used in normal operation.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- Controller Asset #0556.



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
○ Type II Signal Pedestal	○ N/A
○ Metal Strain Pole	○ N/A
□ Inductive Loop Detector	□ N/A
□ Controller & Cabinet	□ N/A
□ Junction Box	□ N/A
— 2-in Underground Conduit	— N/A
— Directional Drill	— N/A
— Right of Way	— N/A
— Directional Arrow	— N/A
— Guardrail	— N/A
— Railroad Tracks	— N/A
— Railroad Gate and Flasher	— N/A
— Railroad Cantilever	— N/A
⊙ "NO RIGHT TURN - TRAIN" LED Blankout Sign	⊙ (A)
⊙ "NO TURN ON RED" Sign (R10-11)	⊙ (B)
⊙ "STOP HERE ON RED" Sign (R10-6)	⊙ (C)

OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1 *	7	10	7	7	10	7
Extension 1 *	2.0	3.0	2.0	2.0	3.0	2.0
Max Green 1 *	25	60	30	25	60	30
Yellow Clearance	3.0	3.8	4.6	3.0	3.8	4.6
Red Clearance	2.4	3.5	4.2	4.3	2.7	4.2
Walk 1 *	-	-	-	-	-	7
Don't Walk 1	-	-	-	-	-	32
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	-	-	ON	-	-	ON
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.

OASIS 2070 RR PREEMPT

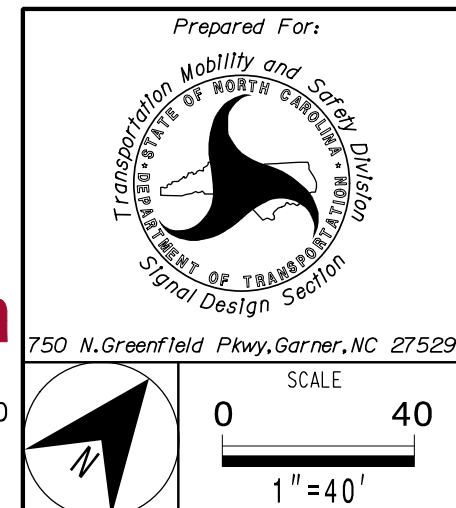
FUNCTION	PRE 1
Interval 1 - Track Clearance Green	17
Interval 1 - Track Clearance Yellow	3.8
Interval 1 - Track Clearance Red	4.4
Interval 2 - Dwell Green	255
Interval 2 - Dwell Yellow	0.0*
Interval 2 - Dwell Red	0.0*
Interval 5 - Exit Green	1
Interval 5 - Yellow	0.0
Interval 5 - Red	0.0
Exit Phase(s)	2+6
Priority	HIGH
Delay Time	0.0
Min Green Before Pre	1
Ped Clear Before Pre	4
Yellow Clear Before Pre	4.6
Red Clear Before Pre	4.3
Dwell Min Time	-
Enable Backup Protection	N
Ped Clear Through Yellow	Y
Omit Overlaps	B,P

* Time defaults to time used for phase during normal operation

THIS SIGNAL IS DESIGNED FOR SIMULTANEOUS PREEMPTION

PLANS PREPARED IN THE OFFICE OF:
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Raleigh, NC 27601
(919) 671-2000

Signal Upgrade - Final



US 13 (BERKELEY BOULEVARD) AT SR 1560 (ROYALL AVENUE) AND SR 1709 (CENTRAL HEIGHTS ROAD)

DIVISION 4 WAYNE COUNTY GOLDSBORO

PLAN DATE: DECEMBER 2018 REVIEWED BY: SL PHILLIPS

PREPARED BY: SP PENNINGTON REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

SL PHILLIPS
PROFESSIONAL ENGINEER
STATE OF NORTH CAROLINA
LICENSE #032607

6/30/2020

SIG. INVENTORY NO. 04-0556

6/29/2020 3:43:01 PM susan.pennington K:\RAL_TPT\DM-SIGNALS\N011036333 U5724\54 - Signal Design\11 04-0556_2018.dgn