

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Reposition existing signal heads numbered 11, 21, 22, 51, 61, 62, and 63. Reposition sign A.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. To provide a leading pedestrian interval on phase 4, program FYA head numbered 44 to delay for 7 seconds after the start of the phase 4 walk interval. See Electrical Details for programming.
9. To provide a leading pedestrian interval on phase 6, program FYA heads numbered 51 and 63 to delay for 7 seconds after the start of the phase 6 walk interval. See Electrical Details for programming.
10. The Division Traffic Engineer will determine the hours of use for each phasing plan.
11. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

SIGNAL FACE	PHASE						
	1 + 5	1 + 6	2 + 5	2 + 6	3	4	F L A S H
11	←	←	$\frac{F}{V}$	$\frac{F}{V}$	$\frac{R}{V}$	$\frac{R}{V}$	$\frac{R}{V}$
21,22	R	R	G	G	R	R	R
31	R	R	R	R	$\frac{G}{V}$		
32,33	R	R	R	G	R	R	R
41	$\frac{R}{V}$	$\frac{R}{V}$	$\frac{R}{V}$	$\frac{R}{V}$	$\frac{R}{V}$	←	$\frac{R}{V}$
42	R	R	R	R	R	$\frac{G}{V}$	R
43	R	R	R	R		G	R
44	R	R	R	R	R	$\frac{F}{V}$	R
51	←	$\frac{F}{V}$	←	$\frac{F}{V}$	$\frac{R}{V}$	$\frac{R}{V}$	$\frac{R}{V}$
61,62	R	G	R	G	R	R	R
63	R	$\frac{F}{V}$	R	$\frac{F}{V}$	R	→	R
P21, P22	DW	DW	W	W	DW	DW	DRK
P31, P32	DW	DW	DW	DW	W	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

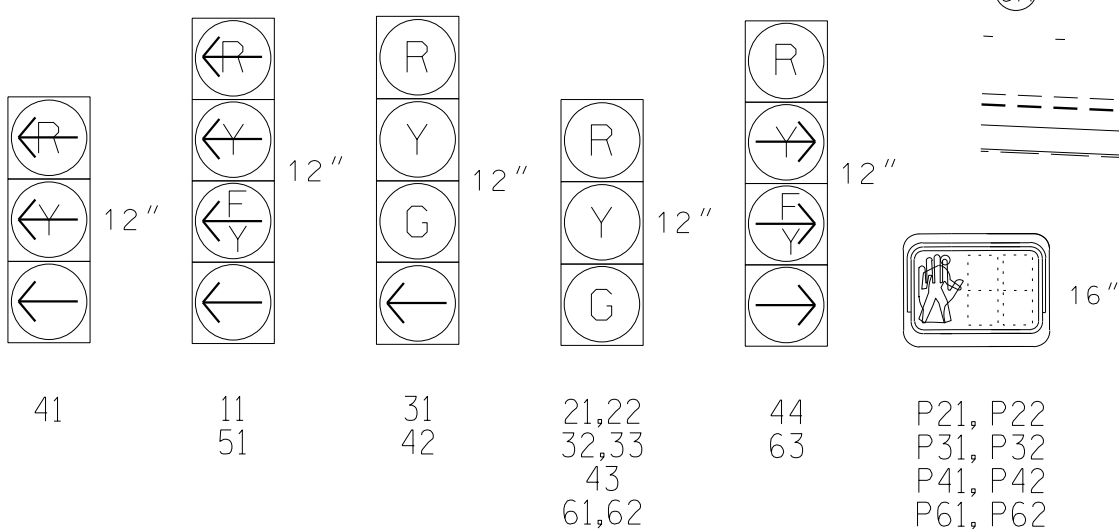
SIGNAL FACE	PHASE						
	1 + 5	1 + 6	2 + 5	2 + 6	3	4	F L A S H
11	←	←	→	→	→	→	→
21, 22	R	R	G	G	R	R	R
31	R	R	R	R	G	←	R
32, 33	R	R	R	G	R	G	R
41	→	→	→	→	→	←	→
42	R	R	R	R	R	G	←
43	R	R	R	R	G	←	R
44	R	R	R	R	R	←	→
51	←	→	←	→	→	→	→
61, 62	R	G	R	G	R	R	R
63	R	←	R	←	R	→	R
P21, P22	DW	DW	W	W	DW	DW	DRK
P31, P32	DW	DW	DW	DW	W	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	*	0	*	X	1 6#	15.0**	-	X	-	X	-	*
3A	*	0	*	-	3	5.0	-	X	-	X	-	*
4A	*	0	*	-	4	3.0	-	X	-	X	-	*
4B	*	0	*	-	4	-	-	X	-	X	-	*
4C	*	0	*	-	4	15.0	-	X	-	X	-	*
5A	*	0	*	X	5 2#	15.0**	-	X	-	X	-	*
								X	-	X	-	*

```
* Multi-Zone Microwave Detection Zone
** Disable delay during Alternate Phase Operation.
# Disable Phase call for loop during Alternate
  Phasing Operation.
```

	DETECTED MOVEMENT
	UNDETECTED MOVEMENT (OVERLAP)
	UNSIGNALIZED MOVEMENT
	PEDESTRIAN MOVEMENT

All Heads L.E.D.



FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	–	14	13	14	–	14
Ped Clear *	–	15	25	26	–	20
Min Green	7	12	7	7	7	12
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	45	90	30	40	45	90
Yellow Change	3.0	4.6	4.2	3.8	3.0	4.6
Red Clear	3.3	2.5	3.3	3.1	3.3	2.5
Added Initial *	–	–	–	–	–	–
Maximum Initial *	–	–	–	–	–	–
Time Before Reduction *	–	–	–	–	–	–
Time To Reduce *	–	–	–	–	–	–
Minimum Gap	–	–	–	–	–	–
Advance Walk	–	7	6	**	–	***
Non Lock Detector	X	–	X	X	X	–
Vehicle Recall	–	MIN RECALL	–	–	–	MIN RECALL
Dual Entry	–	–	–	–	–	–

* 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.
 ** See note 8.
 *** See note 9.

	(2A)		(6A)	
FUNCTION	Sensor 1		Sensor 2	
Channel	1		1	
Phase	2		6	
Direction of Travel	NB		SB	
Type	Priority		Priority	
Level	2	QUEUE	2	QUEUE
Detection Zone (ft)	< 750	–	< 750	–
Range (ft)	600–100	150–100	600–100	150–100
Enable Speed	Y	Y	Y	Y
Speed Range (mph)	35–100	1–35	35–100	1–35
Enable Estimated Time of Arrival	Y	N	Y	N
Estimated Time of Arrival (sec)	2.5–6.5	–	2.5–6.5	–

Plans Prepared By:

 DRMP

DRMP, INC.
8210 UNIVERSITY EXECUTIVE PARK DR.
SUITE 220
CHARLOTTE, NC 28262
NC LICENSE NO. F-1524 (704) 549-4260

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Sign	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	Oversized Junction Box	
N/A	2-in Underground Conduit	N/A
	Right of Way	
	Directional Arrow	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
	Non-Intrusive Detection Zone	
	Construction Zone	N/A
N/A	Temporary Construction Easement	E
N/A	Permanent Utility Easement	PUE
	"RIGHT TURN SIGNAL" Sign (R10-10R)	
	"RIGHT TURN ON RED YIELD TO U-TURN" Sign (R10-30)	
	No U Turn Sign (R3-4) With "TRUCK" Sign (M4-4)	

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SF AI

Signed by: Brittany Groome 8/26/2011
TE09340E1094484... DAT
SIG. INVENTORY NO. 14-0411