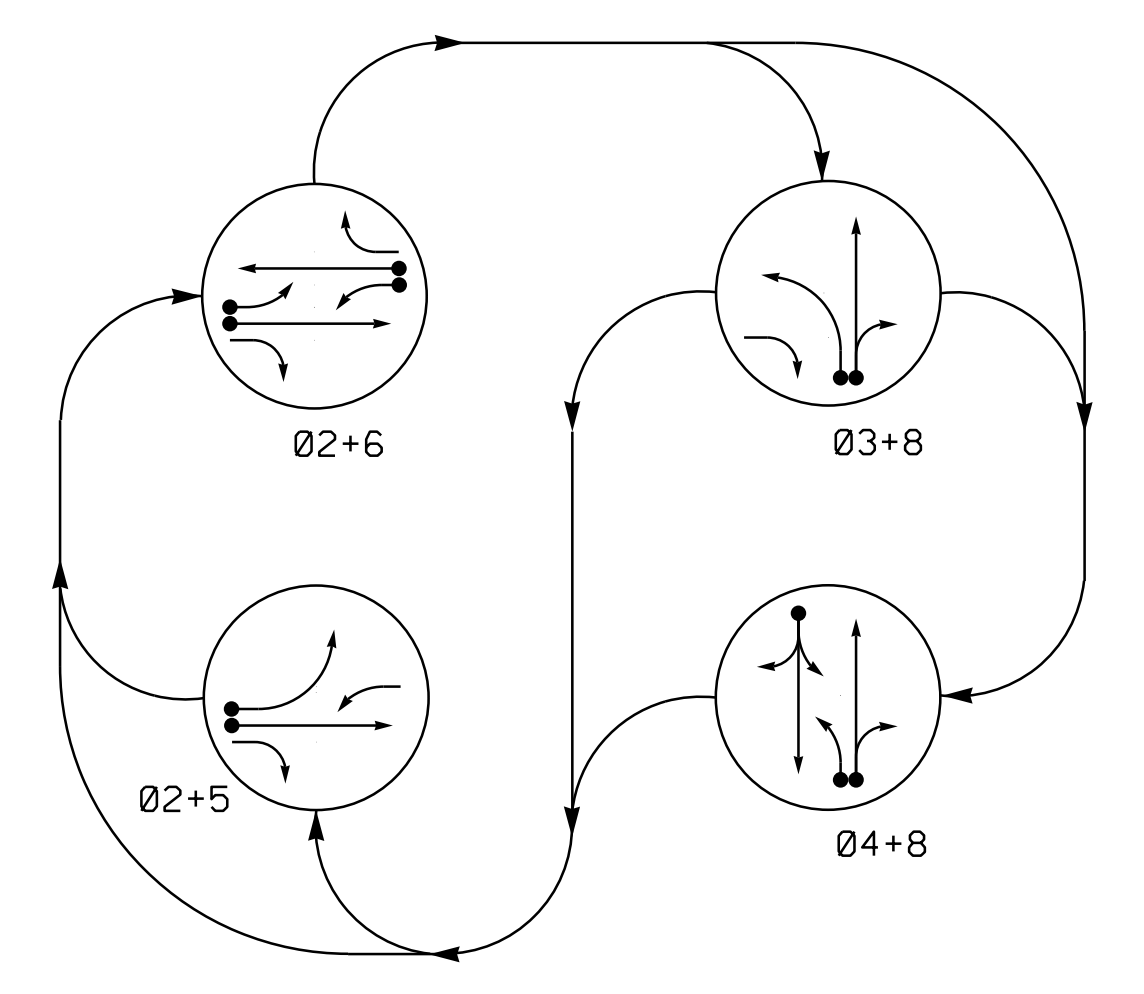


**PHASING DIAGRAM**

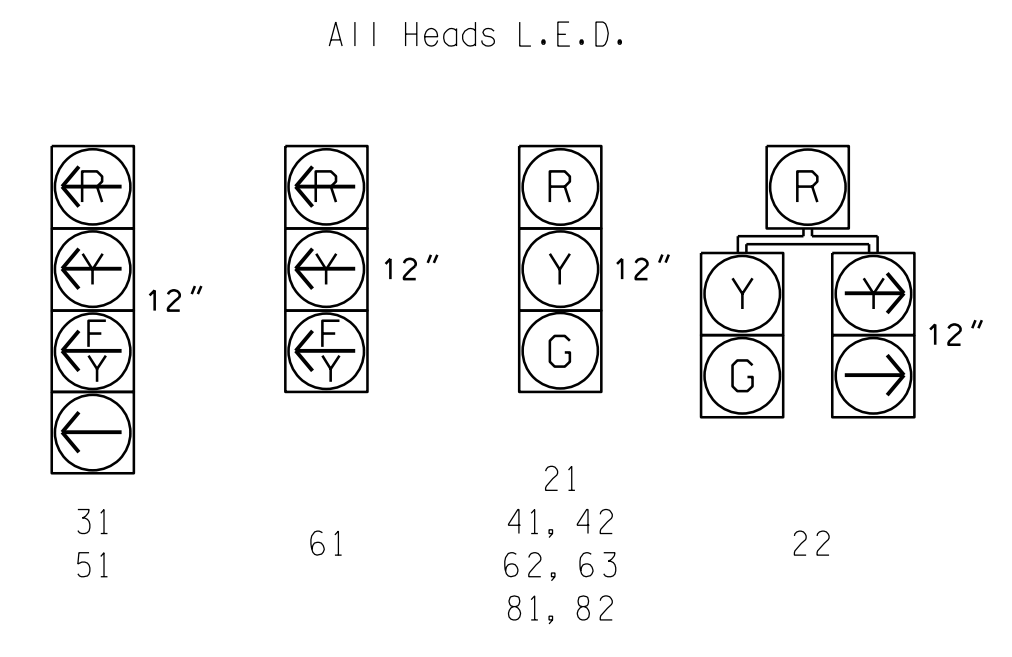


**PHASING DIAGRAM DETECTION LEGEND**

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

SIGNAL FACE	PHASE				
	02+5	02+6	03+8	04+8	FLTS
21	G	G	R	R	Y
22	G	G	R	R	Y
31	R	R	G	G	Y
41, 42	R	R	R	G	R
51	R	R	R	R	Y
61	R	R	R	R	Y
62, 63	R	G	R	R	Y
81, 82	R	R	G	G	R

**SIGNAL FACE I.D.**



**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

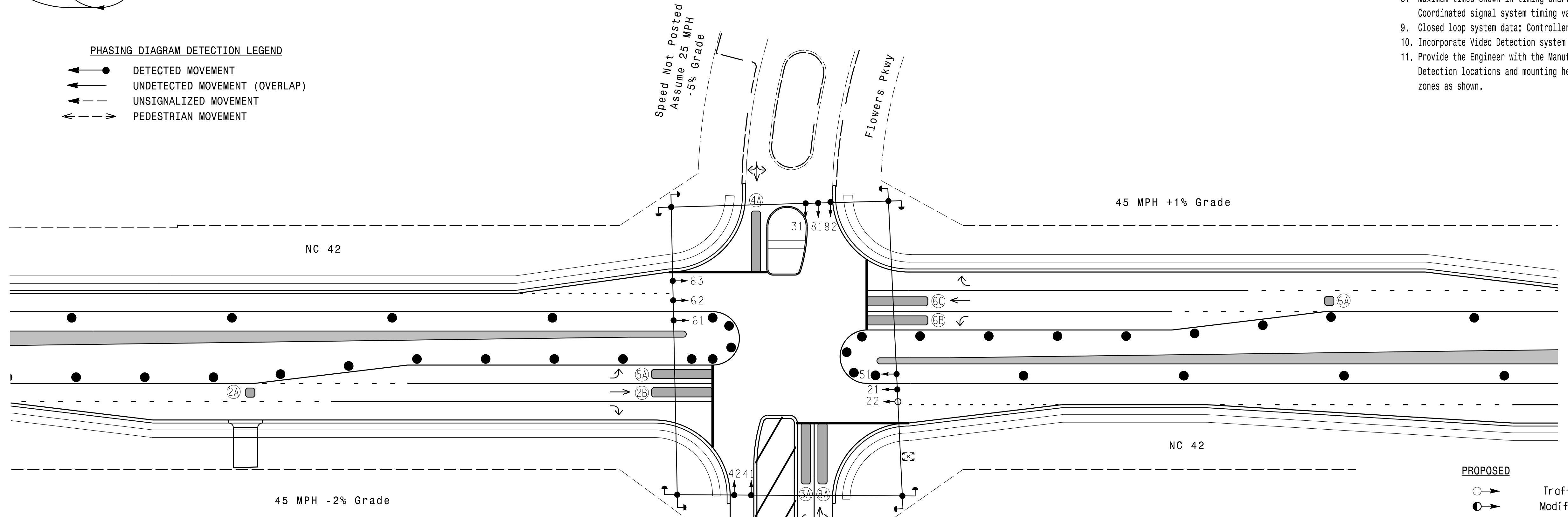
LOOP/ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME		
2A	6X6	300	*	*	2	Y	Y	-	-	-	-
2B	6X40	0	*	*	2	Y	Y	Y	2.0	5	-
3A	6X40	0	*	*	3	Y	Y	-	-	15	-
4A	6X40	0	*	*	4	Y	Y	-	-	10	-
5A	6X40	0	*	*	5	Y	Y	-	-	15	-
6A	6X6	300	*	*	6	Y	Y	-	-	-	-
6B	6X40	0	*	*	6	Y	Y	Y	-	3	-
6C	6X40	0	*	*	6	Y	Y	Y	2.0	5	-
8A	6X40	0	*	*	8	Y	Y	-	-	10	-

\* Video Detection

**4 Phase Fully Actuated NC 42 (East of Clayton) CLS Signal System #: 10411**

**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018, "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Omit phase 3 during phase 4 on.
- Phase 5 may be lagged.
- Reposition existing heads 21, 51, 61, 62 and 63.
- Set all detector units to presence mode.
- See traffic control plans for stop bar locations.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #1432.
- Incorporate Video Detection system for vehicle detection.
- Provide the Engineer with the Manufacturer's approved Video Detection locations and mounting heights to obtain detection zones as shown.



FEATURE	OASIS 2070 TIMING CHART							
	PHASE							
	2	3	4	5	6	8		
Min Green 1 *	12	7	7	7	12	7		
Extension 1 *	6.0	2.0	2.0	2.0	6.0	2.0		
Max Green 1 *	90	25	45	25	90	45		
Yellow Clearance	4.7	3.0	3.5	3.0	4.7	3.5		
Red Clearance	1.9	3.2	3.0	3.3	1.9	3.0		
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0		
Walk 1 *	-	-	-	-	-	-		
Don't Walk 1	-	-	-	-	-	-		
Seconds Per Actuation *	-	-	-	-	-	-		
Max Variable Initial *	-	-	-	-	-	-		
Time Before Reduction *	15	-	-	-	15	-		
Time To Reduce *	30	-	-	-	30	-		
Minimum Gap	3.0	-	-	-	3.0	-		
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.

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
○	Construction Zone	○	N/A
○	Video Detector	○	N/A

**Signal Upgrade Temporary Design 3 - (TMP Phase 3, Step 1)**

**RKA**  
RAMEY KEMP ASSOCIATES  
8008 Fairington Place Raleigh, North Carolina 27609  
Phone: 919-872-9115 | www.rkainc.com | NC License No. C-0910

**NC 42 at Flowers Parkway**

Division 4 Johnston County Clayton

PLAN DATE: April 2020 REVIEWED BY: WJ Hamilton

PREPARED BY: JT Stiff RKA PROJ. NO: 19160 (040)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
WILLIAM J. HAMILTON  
4/30/20

4/29/2020  
 \*04143273...s:q:dsn:2020mcd:qgn  
 User: jstiff