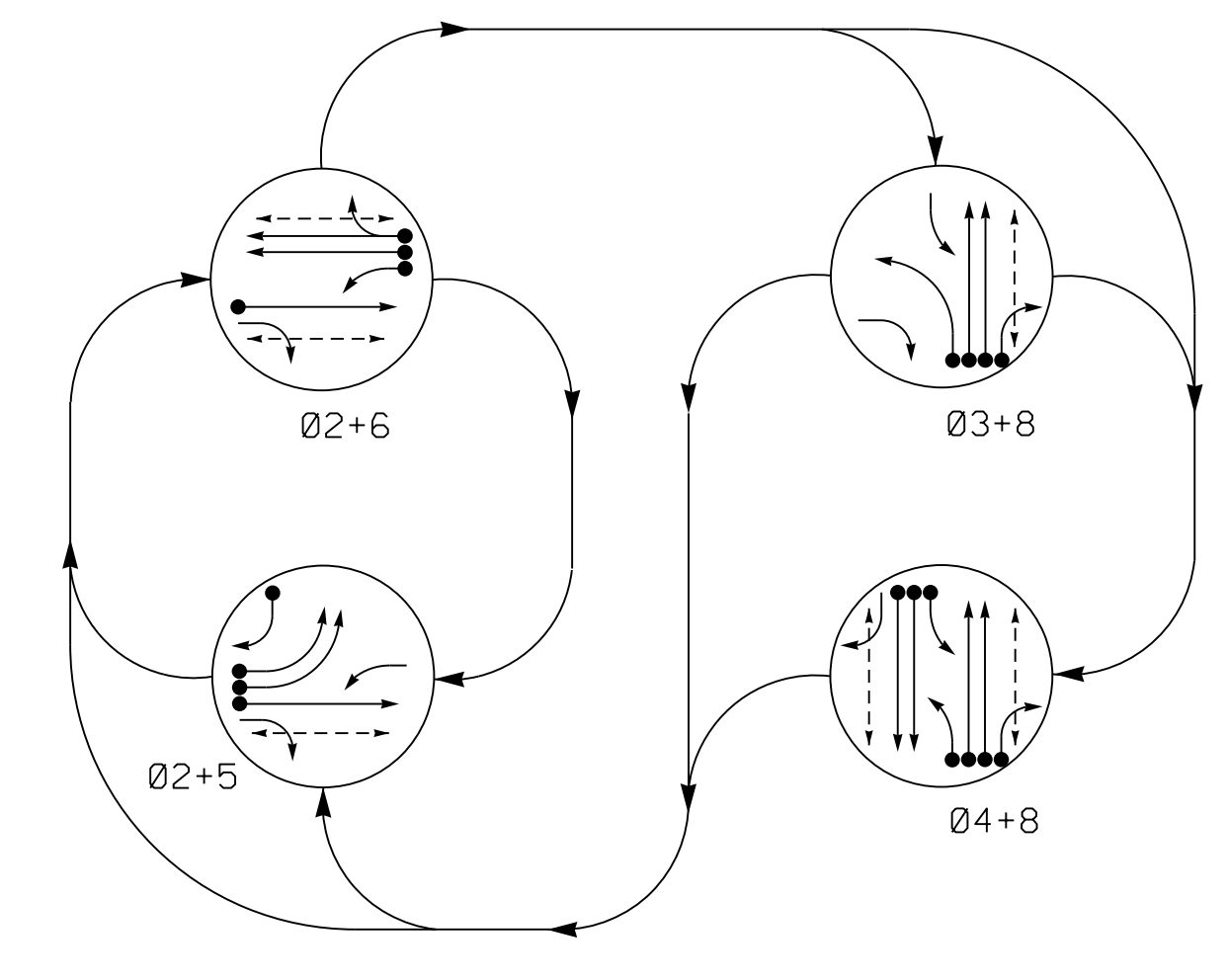


PHASING DIAGRAM



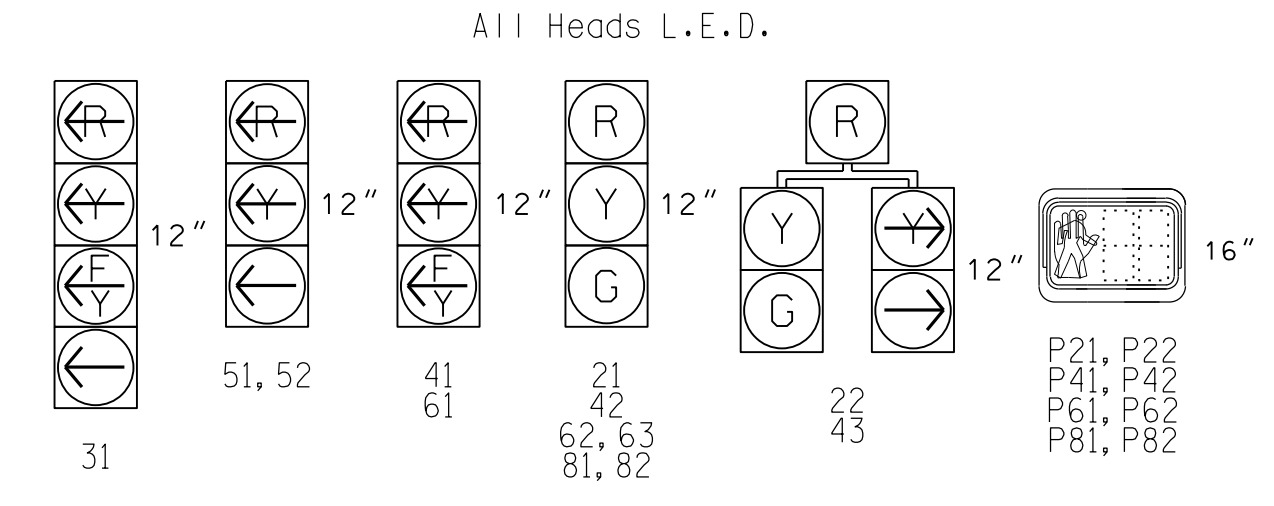
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE				
	Ø 2 + 5	Ø 2 + 6	Ø 3 + 8	Ø 4 + 8	FLASH
21	G	G	R	R	Y
22	G	G	R	R	Y
31	R	R	F	F	R
41	R	R	F	F	R
42	R	R	R	G	R
43	R	R	R	G	R
51, 52	F	F	R	R	R
61	F	F	R	R	Y
62, 63	R	G	R	R	Y
81, 82	R	R	G	G	R
P21, P22	W	W	DW	DW	DRK
P41, P42	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	DW	DRK
P81, P82	DW	DW	W	W	DRK

SIGNAL FACE I.D.



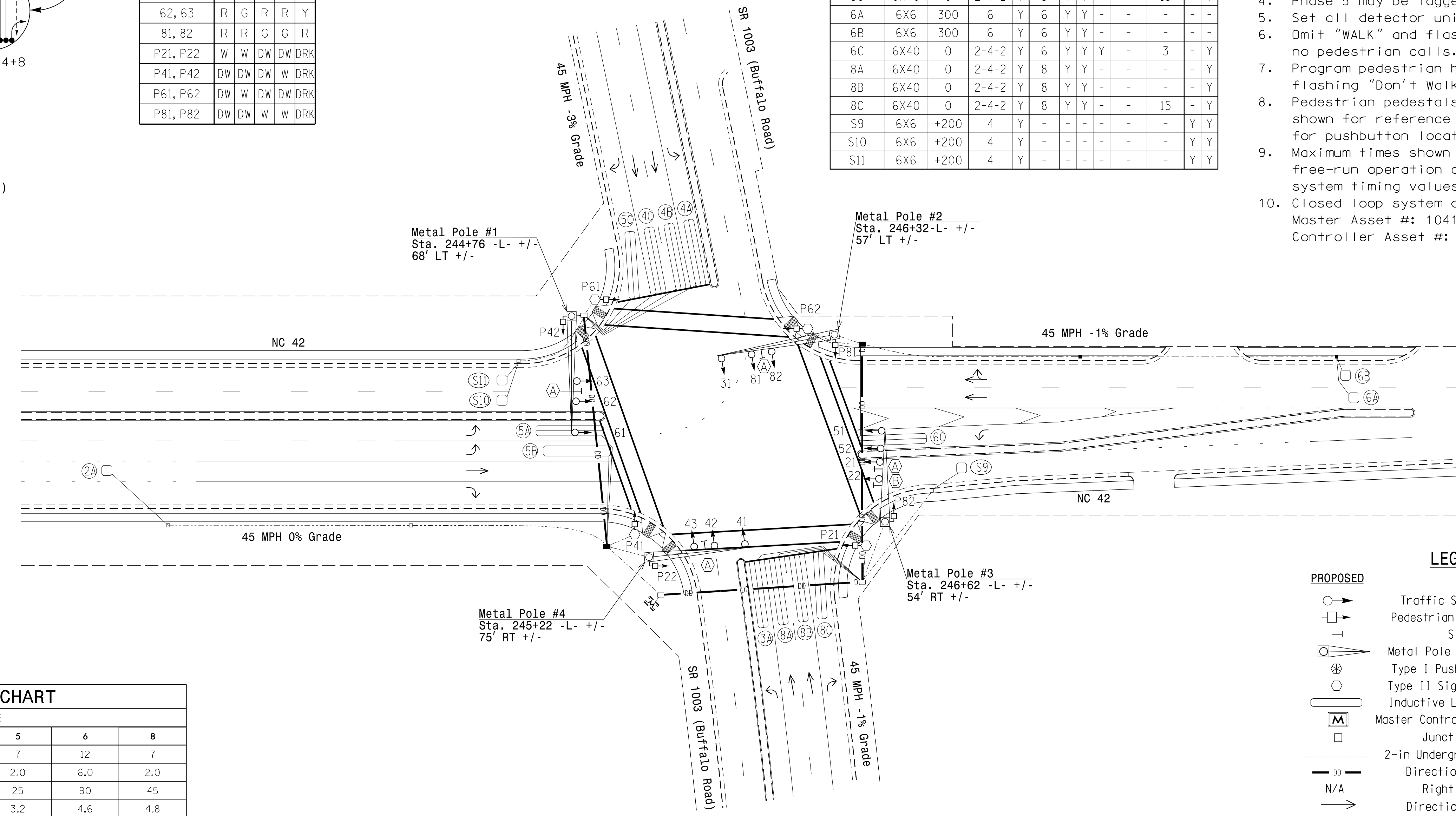
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	6X6	300	4	Y	2	Y	Y	-	-	-	-	-
3A	6X40	0	2-4-2	Y	3	Y	Y	-	-	15	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
4C	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	-	-	Y
5B	6X40	0	2-4-2	Y	5	Y	Y	-	-	-	-	Y
5C	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	-	Y
6A	6X6	300	6	Y	6	Y	Y	-	-	-	-	-
6B	6X6	300	6	Y	6	Y	Y	-	-	-	-	-
6C	6X40	0	2-4-2	Y	6	Y	Y	Y	-	3	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y
8B	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y
8C	6X40	0	2-4-2	Y	8	Y	Y	-	-	15	-	Y
S9	6X6	+200	4	Y	-	-	-	-	-	-	-	Y
S10	6X6	+200	4	Y	-	-	-	-	-	-	-	Y
S11	6X6	+200	4	Y	-	-	-	-	-	-	-	Y

4 Phase Fully Actuated NC 42 (East of Clayton)

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.
- Phase 3 may be lagged.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data:
Master Asset #: 10411,
Controller Asset #: 0874.



OASIS 2070 TIMING CHART

FEATURE	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	4.6	3.2	4.8	3.2	4.6	4.8
Red Clearance	2.1	3.3	2.3	3.0	2.1	2.3
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	5	-	5	-	5	5
Don't Walk 1	29	-	33	-	23	27
Seconds Per Actuation *	2.5	-	-	-	1.8	-
Max Variable Initial *	34	-	-	-	34	-
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

* 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.

LEGEND

	PROPOSED Traffic Signal Head		EXISTING Traffic Signal Head
	PROPOSED Pedestrian Signal Head		EXISTING Pedestrian Signal Head
	PROPOSED Sign		EXISTING Sign
	PROPOSED Metal Pole with Mastarm		EXISTING Metal Pole with Mastarm
	PROPOSED Type I Pushbutton Post		EXISTING Type I Pushbutton Post
	PROPOSED Type II Signal Pedestal		EXISTING Type II Signal Pedestal
	PROPOSED Inductive Loop Detector		EXISTING Inductive Loop Detector
	PROPOSED Master Controller & Cabinet Junction Box		EXISTING Master Controller & Cabinet Junction Box
	PROPOSED 2-in Underground Conduit		EXISTING 2-in Underground Conduit
	PROPOSED Directional Drill		EXISTING Directional Drill
	PROPOSED Right of Way		EXISTING Right of Way
	PROPOSED Directional Arrow		EXISTING Directional Arrow
	PROPOSED Street Name Sign (D3-1)		EXISTING Street Name Sign (D3-1)
	PROPOSED Right Arrow "ONLY" Sign (R3-5R)		EXISTING Right Arrow "ONLY" Sign (R3-5R)

Signal Upgrade - Final Design

Prepared by
URS
URS Corporation - North Carolina
1600 Perimeter Park Drive
Morrisville, North Carolina 27560
TELEPHONE (919) 461-1100 FAX (919) 461-1415
NC LICENSE # C-2243

NC 42 at SR 1003 (Buffalo Road)

Division 4 Johnston County Clayton

PLAN DATE: January 2018 REVIEWED BY: C. L. Kalencik

PREPARED BY: S. W. Cox REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/25/2018

E:\25\2018 L:\Mort\BVI\118\U081\4R3825B\T\affl.cas:gnal s4000874.s:fg.dsn.drf.e-dgn
 5/25/2018 11:08:11 AM
 C:\OSD