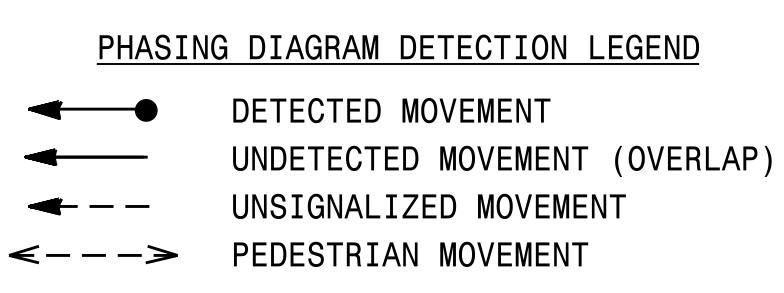
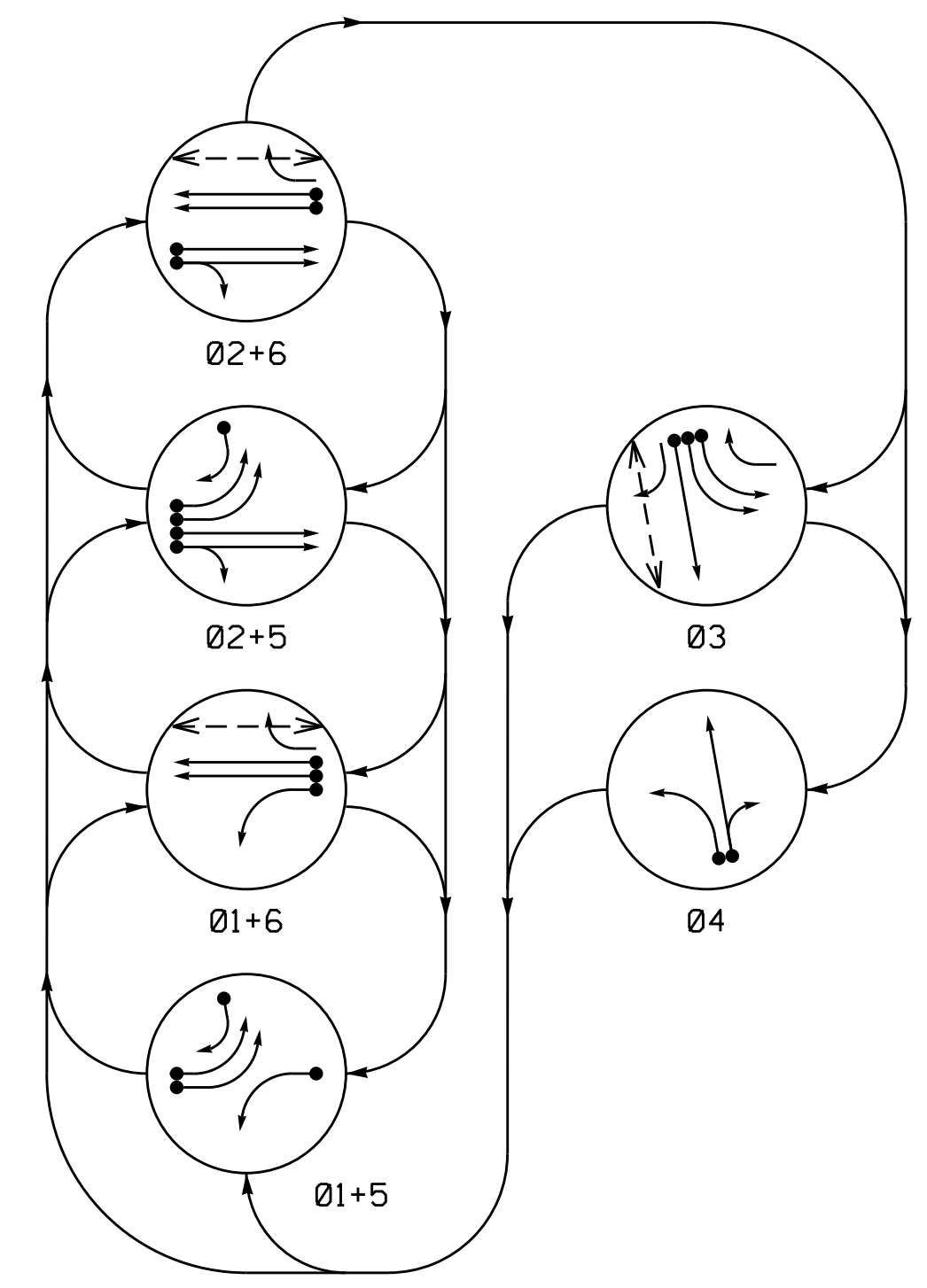


PHASING DIAGRAM



EV PREEMPT PHASES (Medium Priority)

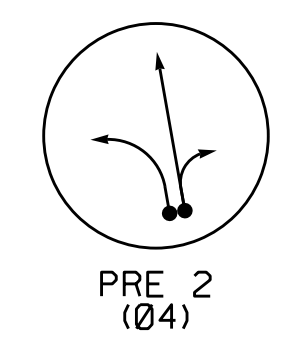
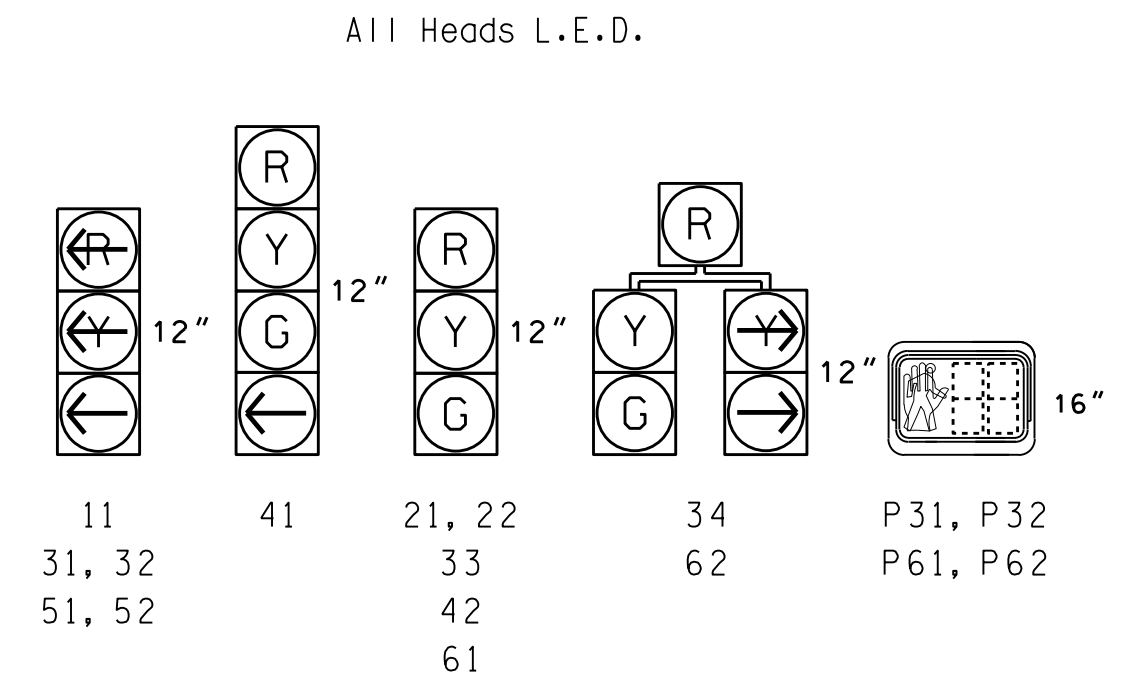


TABLE OF OPERATION

SIGNAL FACE	PHASE							
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3	Ø4	P	W
11	---	---	---	---	---	---	---	---
21, 22	R	R	G	G	R	R	R	Y
31, 32	R	R	R	R	---	---	---	---
33	R	R	R	R	G	R	R	R
34	R	R	R	R	G	R	R	R
41	R	R	R	R	R	G	R	R
42	R	R	R	R	R	G	R	R
51, 52	---	---	---	---	---	---	---	---
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
P31, P32	DW	DW	DW	DW	W	DW	DW	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DRK

SIGNAL FACE I.D.



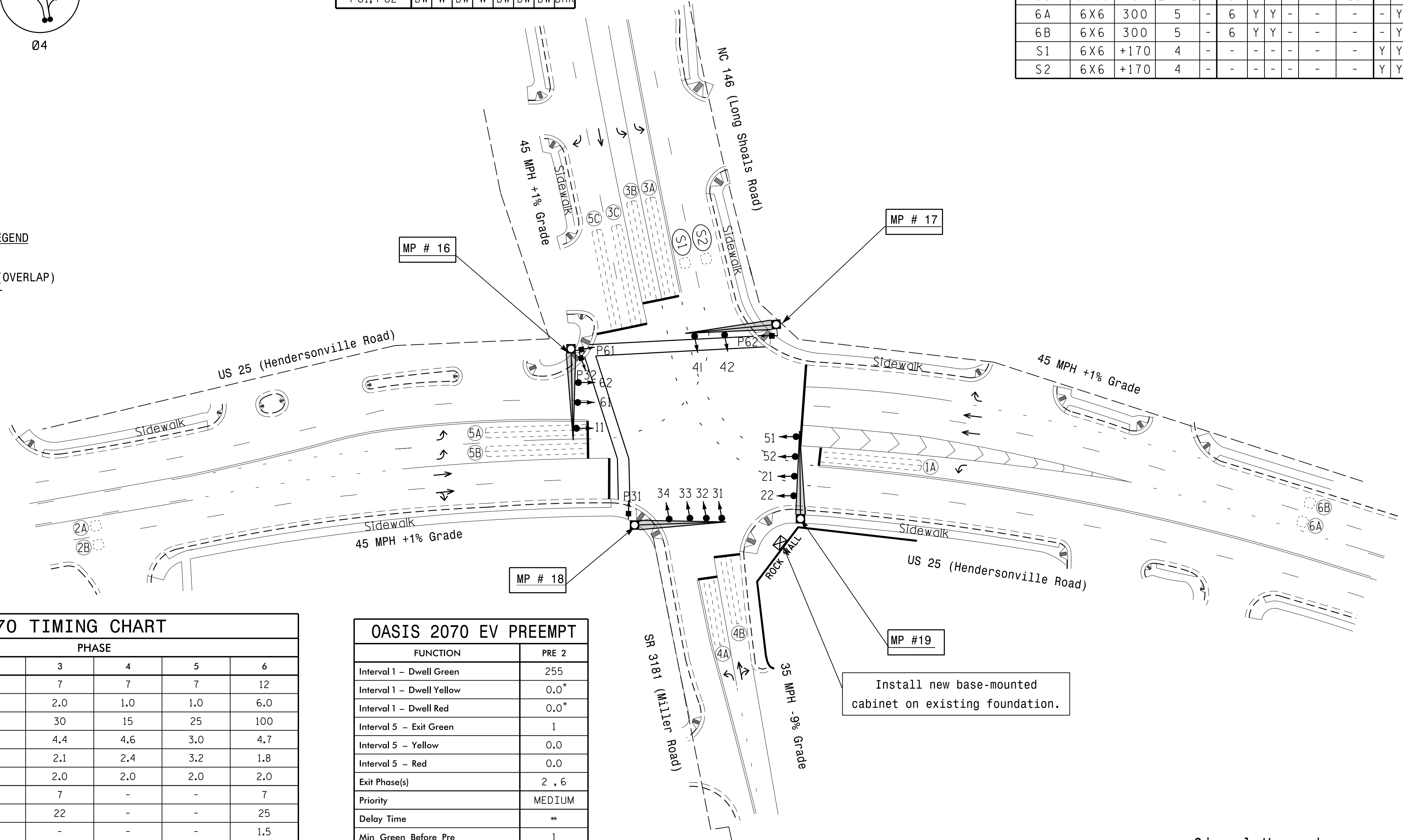
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	0	2-4-2	-	1	Y	Y	-	-	3	-	Y
2A	6X6	300	5	-	2	Y	Y	-	-	-	-	Y
2B	6X6	300	5	-	2	Y	Y	-	-	-	-	Y
3A	6X60	0	2-4-2	-	3	Y	Y	-	-	3	-	Y
3B	6X60	0	2-4-2	-	3	Y	Y	-	-	-	-	Y
3C	6X60	0	2-4-2	-	3	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	3	-	Y
4B	6X40	0	2-4-2	-	4	Y	Y	-	-	10	-	Y
5A	6X60	0	2-4-2	-	5	Y	Y	-	-	3	-	Y
5B	6X60	0	2-4-2	-	5	Y	Y	-	-	-	-	Y
5C	6X60	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
6A	6X6	300	5	-	6	Y	Y	-	-	-	-	Y
6B	6X6	300	5	-	6	Y	Y	-	-	-	-	Y
S1	6X6	+170	4	-	-	-	-	-	-	-	-	Y
S2	6X6	+170	4	-	-	-	-	-	-	-	-	Y

6 Phase Fully Actuated W/ EV Preempt Asheville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012, "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct vehicles turning right on red.
- The cabinet should be designed to include an Auxiliary Output file for future use.
- 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.
- Emergency vehicle preemption switch is located in the Fire Station.
- The Division Traffic Engineer will determine the delay before preempt and Preempt Dwell Min Green time.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



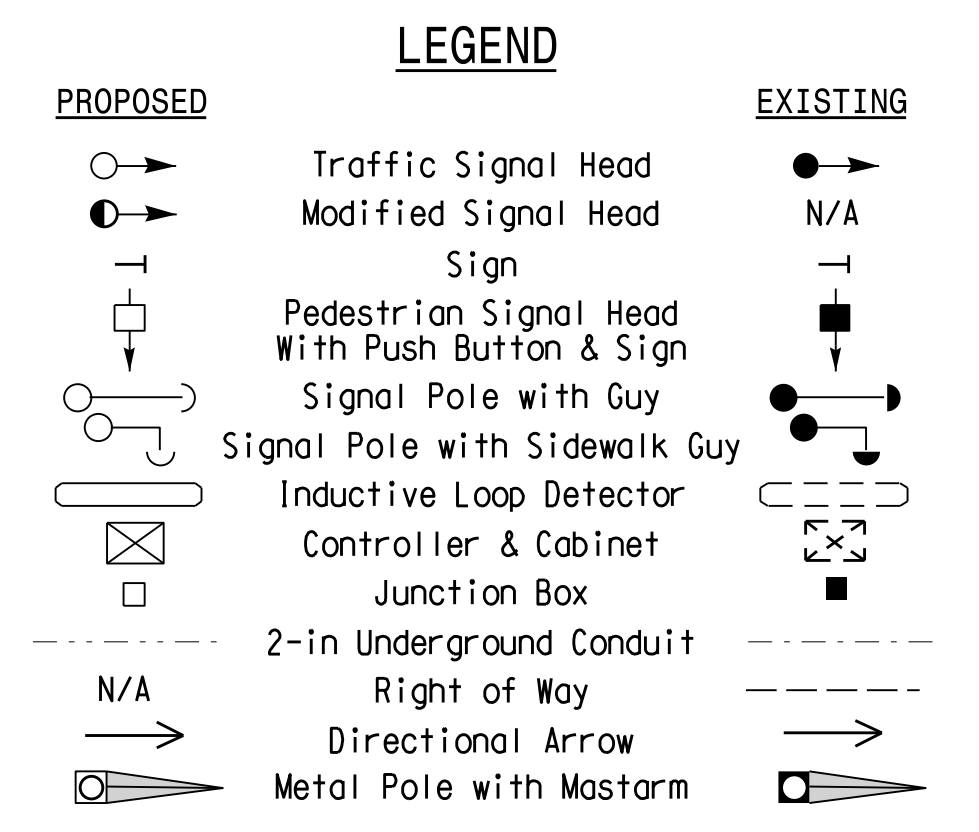
OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1*	7	12	7	7	7	12
Extension 1	1.0	6.0	2.0	1.0	1.0	6.0
Max Green 1*	25	100	30	15	25	100
Yellow Clearance	3.0	4.7	4.4	4.6	3.0	4.7
Red Clearance	2.9	1.8	2.1	2.4	3.2	1.8
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1*	-	-	7	-	-	7
Don't Walk 1	-	-	22	-	-	25
Seconds Per Actuation*	-	1.5	-	-	-	1.5
Max Variable Initial*	-	34	-	-	-	34
Time Before Reduction*	-	15	-	-	-	15
Time To Reduce*	-	40	-	-	-	40
Minimum Gap	-	3.0	-	-	-	3.0
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON	ON

OASIS 2070 EV PREEMPT

FUNCTION	PRE 2
Interval 1 - Dwell Green	255
Interval 1 - Dwell Yellow	0.0*
Interval 1 - 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	MEDIUM
Delay Time	**
Min Green Before Pre	1
Ped Clear Before Pre	12
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	**
Enable Backup Protection	N
Ped Clear Through Yellow	N
Omit Overlaps	-

* Time defaults to time used for phase during normal operation.
** See Note #12.



Signal Upgrade

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

US 25 (Hendersonville Road) at NC 146 (Long Shoals Road) / SR 3181 (Miller Road)

Division 13 Buncombe County Asheville

PLAN DATE: January 2016 REVIEWED BY: P. Alexander

PREPARED BY: M. Mahbooba RK & PROJECT NO.

REVISIONS: _____ INIT. DATE

SCALE: 0 40
1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 024393
 J. O. Williams
 11/7/2016
 DATE
 SIG. INVENTORY NO. 13-0284

07-NOV-2016 14:57
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