

6 Phase Semi-Actuated (Asheville Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. 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.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Enable backup protect for phase 2 and 6 to allow the controller to clear from phase 2+6 to phase 1 and/or 5 by progressing through an all-red display.
9. Omit "Walk" and Flashing "Don't Walk" with no pedestrian calls on phases 3 and 4.
10. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
11. Locate new cabinet on existing foundation.
12. Program controller to allow an Advance Walk movement before serving the vehicle phase.
13. Program phase 2 and 6 for Rest-In-Walk.
14. The order of phase 3 and 4 may be reversed.
15. Existing yellow change interval for phase 2 may be decreased by 0.2 seconds per week until the required value is reached.

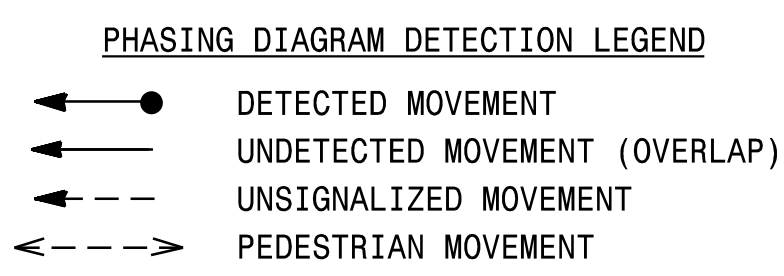
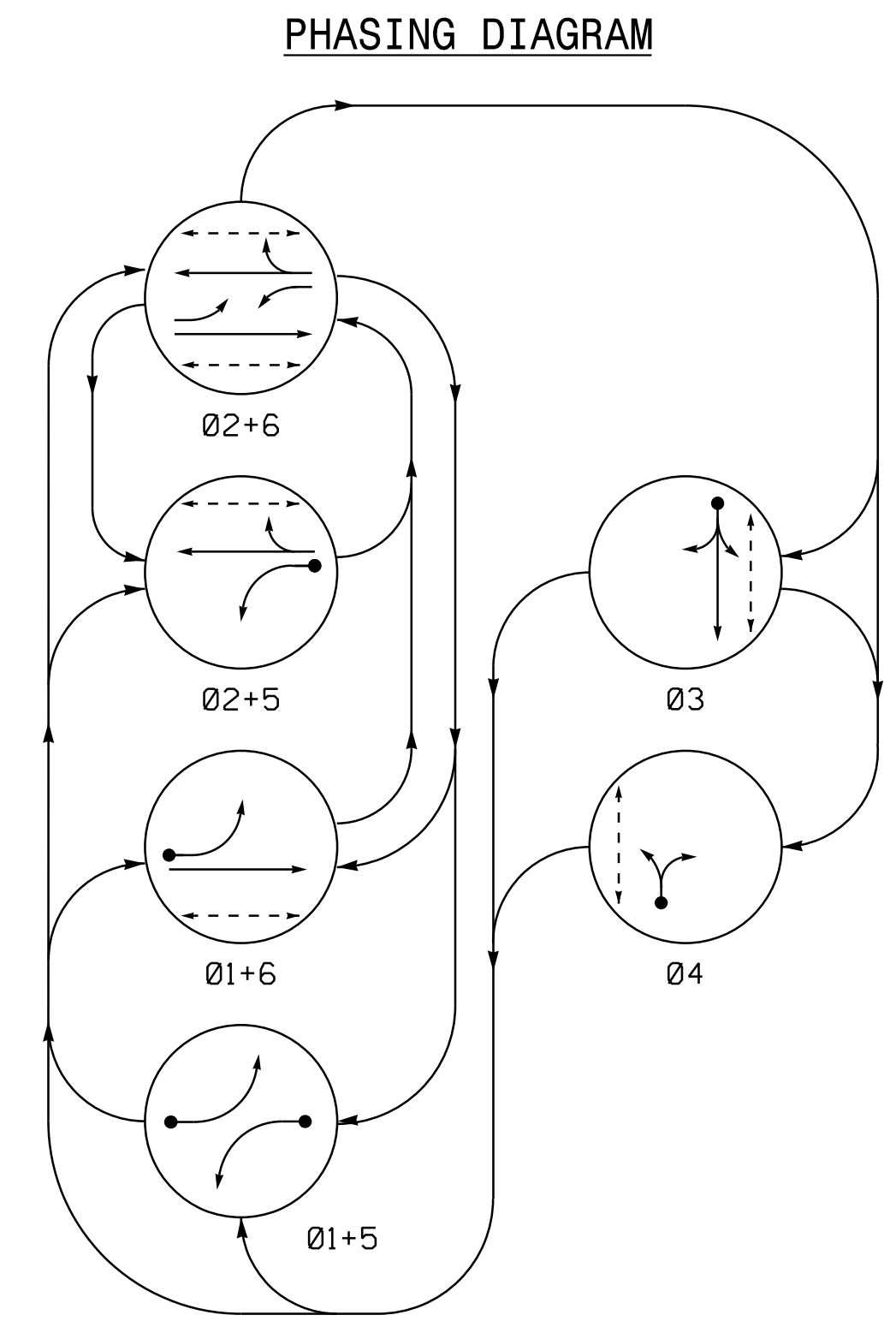
OASIS 2070E LOOP & DETECTOR INSTALLATION CHART

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	6X20	0	EXIST	-	1	Y	Y	-	-	15	-	Y
3A	6X20	+5	EXIST	-	3	Y	Y	-	-	3	-	Y
4A	6X20	0	EXIST	-	4	Y	Y	-	-	-	-	Y
5A	6X20	+10	EXIST	-	5	Y	Y	-	-	15	-	Y

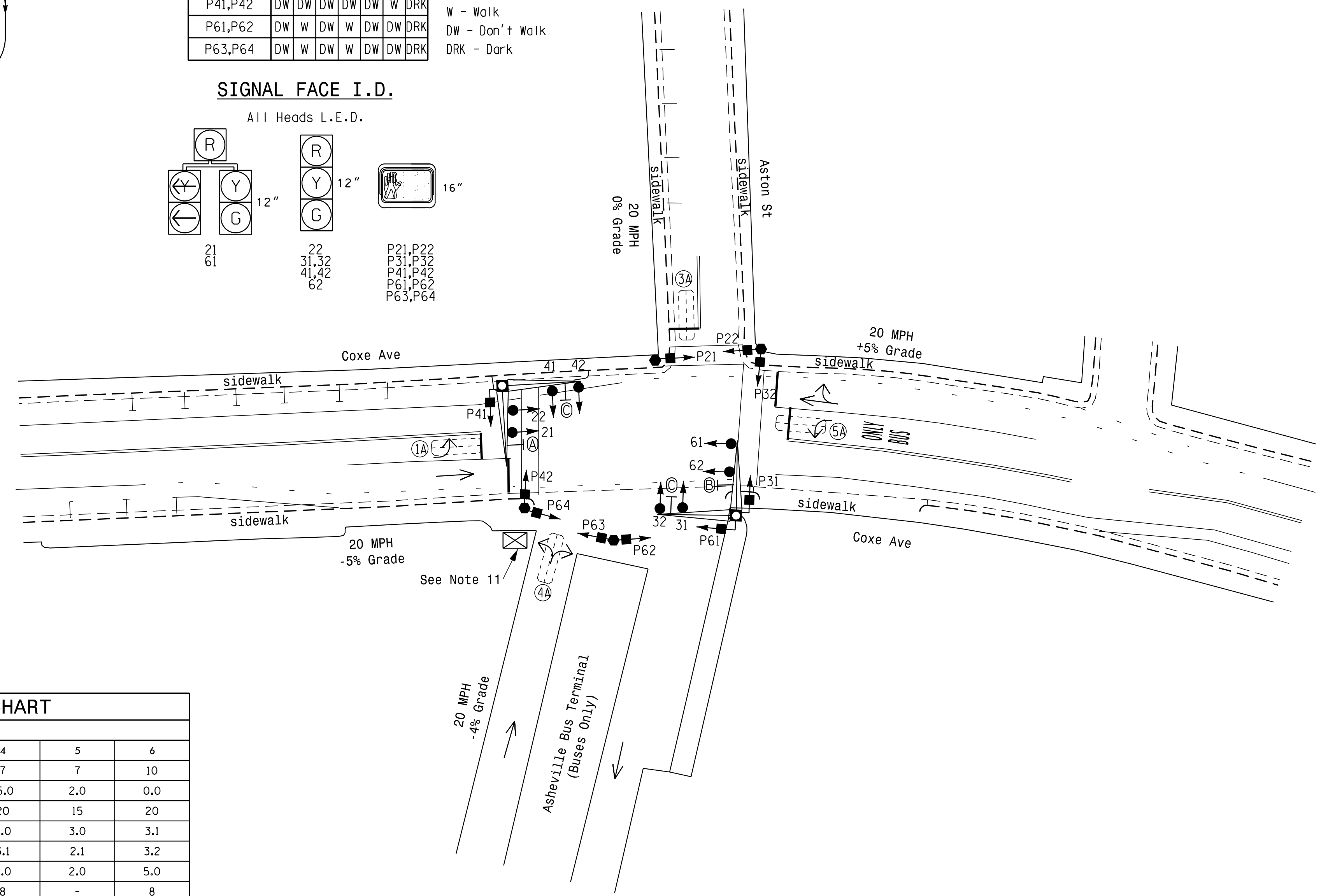
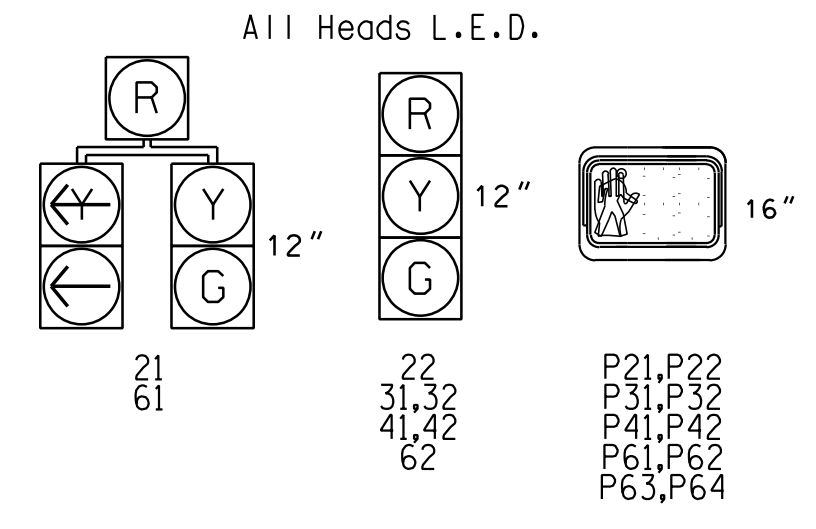
TABLE OF OPERATION

SIGNAL FACE	PHASE						F L T A H O A T
	01+5	01+6	02+5	02+6	03	04	
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
31,32	R	R	R	R	G	R	R
41,42	R	R	R	R	R	G	R
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R	Y
P21,P22	DW	DW	W	W	DW	DW	DRK
P31,P32	DW	DW	DW	DW	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK	
P61,P62	DW	W	DW	W	DW	DW	DRK
P63,P64	DW	W	DW	W	DW	DW	DRK

W - Walk
DW - Don't Walk
DRK - Dark



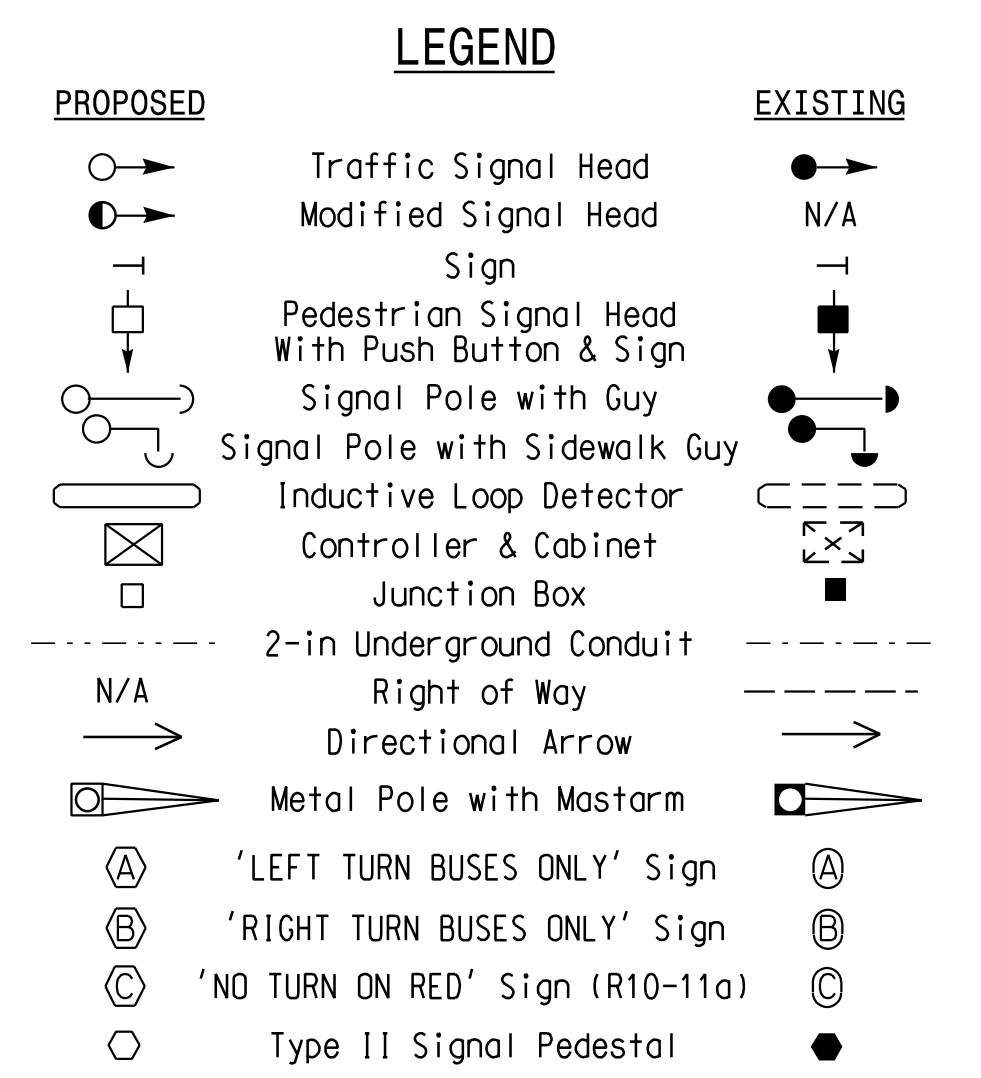
SIGNAL FACE I.D.



OASIS 2070E TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	10	7	7	7	10
Extension 1 *	2.0	0.0	3.0	15.0	2.0	0.0
Max Green 1 *	15	20	20	20	15	20
Yellow Clearance	3.1	3.0	3.0	3.0	3.0	3.1
Red Clearance	3.1	3.2	2.4	3.1	2.1	3.2
Red Revert	2.0	5.0	2.0	2.0	2.0	5.0
Walk 1 *	-	14	10	8	-	8
Don't Walk 1	-	6	10	12	-	12
Walk Advance **	0.0	3.0	3.0	3.0	0.0	3.0
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MAX/PED	-	-	-	MAX/PED
Vehicle Call Memory	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-
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.
** See Note 12.



Signal Upgrade

Mattern & Craig
CONSULTING ENGINEERS • SURVEYORS
FIRM LICENSE No. C-1154
12 BROAD STREET
ASHEVILLE, NORTH CAROLINA 28801
(828) 254-2201
FAX (828) 254-4562

Prepared for the Offices of:
CITY OF ASHEVILLE
NORTH CAROLINA

Coxe Ave at COA Bus Terminal and Aston St

Division 13 Buncombe County Asheville

PLAN DATE: MAY 2016 REVIEWED BY: SMH
PREPARED BY: BGR REVIEWED BY: JBV

REVISIONS: INIT. DATE

SCALE: 1"=30'

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022599
James Voss
140F000379E041F 12/13/2016
SIGNATURE DATE
SIG. INVENTORY NO. COA-0119