PHASING DIAGRAM
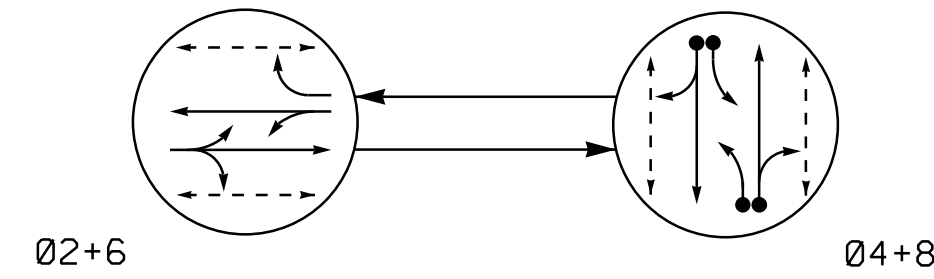

Ø2+6   Ø4+8

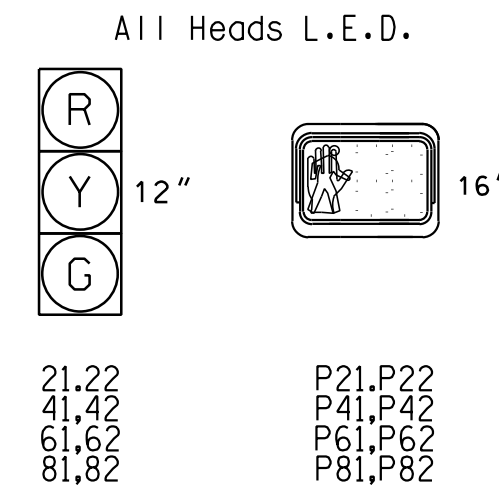### PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	PHASE Ø4+8	FLASH
21,22	G	R	Y
41,42	R	G	R
61,62	R	G	Y
81,82	R	G	R
P41,P42	DW	W	DRK
P61,P62	W	DW	DRK
P63,P64	DW	W	DRK
P81,P82	DW	W	DRK

W – Walk
DW – Don't Walk
DRK – Dark

SIGNAL FACE I.D.

All Heads L.E.D.

R
Y   12"
G

[16"]

| 21,22	P21,P22
41,42	P41,P42
61,62	P61,P62
81,82	P81,P82

OASIS 2070E LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
4A	EXIST	0	EXIST	-	4	Y	Y	-	-	3	Y	Y
4B	EXIST	0	EXIST	-	4	Y	Y	-	-	10	Y	Y
8A	EXIST	0	EXIST	-	8	Y	Y	-	-	-	Y	Y
8B	EXIST	0	EXIST	-	8	Y	Y	-	-	10	Y	Y

INDUCTIVE LOOPS / DETECTOR PROGRAMMING

2 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. Omit "Walk" and Flashing "Don't Walk" with no pedestrian calls on phases 4 and 8.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Locate new cabinet on existing foundation.
11. Program controller to allow an Advance Walk movement before serving the vehicle phase.
12. Program phase 2 and 6 for Rest-In-Walk.

Install 2 - 2" risers
See Note 10

OASIS 2070E TIMING CHART
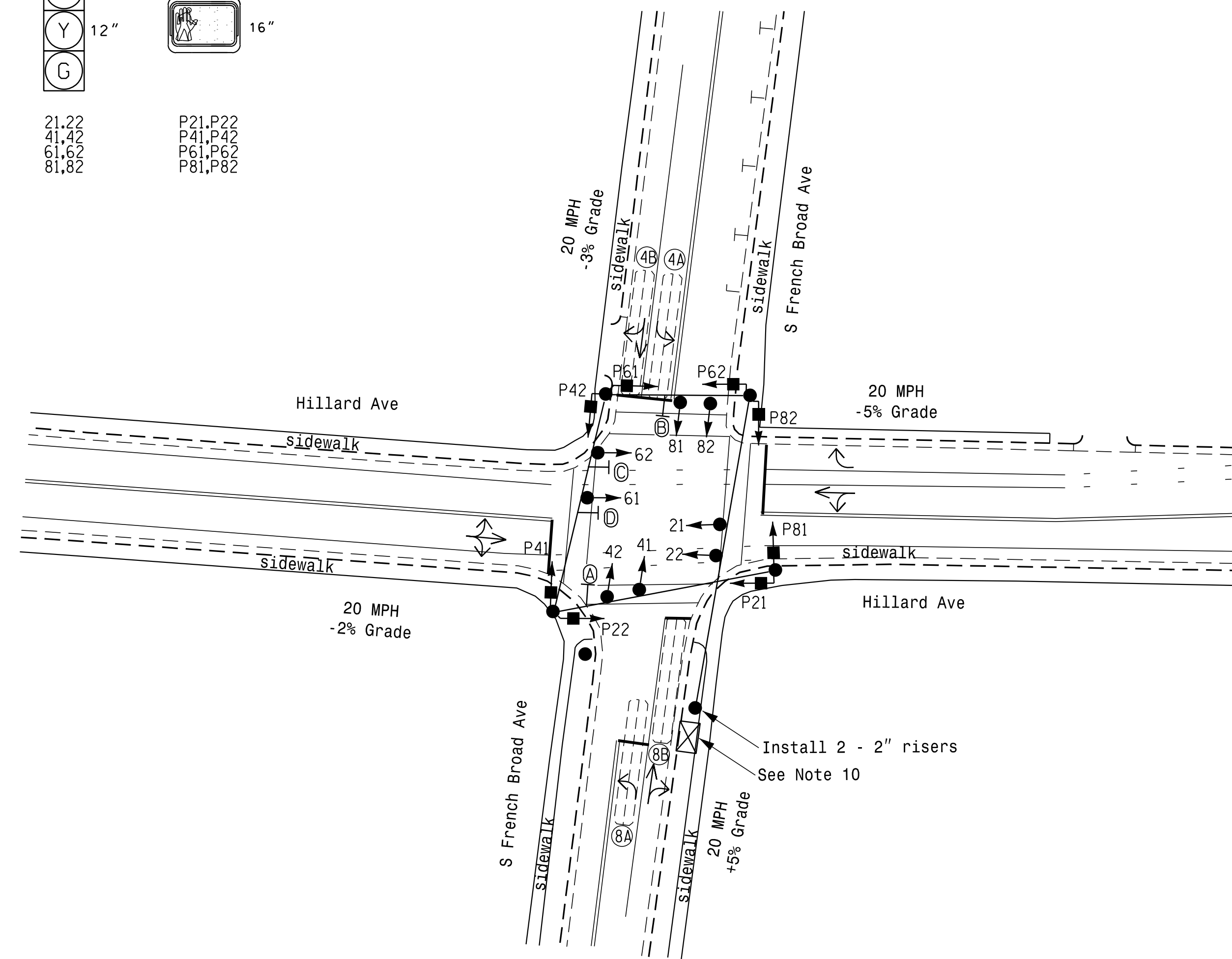
FEATURE	PHASE 2	PHASE 4	PHASE 6	PHASE 8
Min Green 1 *	10	7	10	7
Extension 1 *	0.0	3.0	0.0	3.0
Max Green 1 *	60	30	60	30
Yellow Clearance	3.0	3.0	3.1	3.0
Red Clearance	1.9	2.1	1.9	2.6
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	53	7	51	7
Don't Walk 1	7	9	9	10
Walk Advance **	3.0	3.0	3.0	3.0
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MAX/PED	-	MAX/PED	-
Vehicle Call Memory	-	-	-	-
Dual Entry	-	ON	-	ON
Simultaneous Gap	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 11.

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◑→	Modified Signal Head	N/A
⊡	Sign	▣
	Pedestrian Signal Head With Push Button & Sign	
⌐●	Signal Pole with Guy	●→
⌐●	Signal Pole with Sidewalk Guy	●
	Inductive Loop Detector	
⊠	Controller & Cabinet	
□	Junction Box	■
	2-in Underground Conduit	
N/A	Right of Way	
→	Directional Arrow	
⌐▷	Metal Pole with Mastarm	◁
Ⓐ	'NO TURN ON RED' Sign (R10-11)	Ⓐ
Ⓑ	'LEFT TURN YIELD ON GREEN' Sign (R10-12)	Ⓑ
Ⓒ	'RIGHT TURN ONLY' Sign (R3-5)	Ⓒ
Ⓓ	'LEFT/STRAIGHT ARROW' Sign (R3-6)	Ⓓ

Signal Upgrade

SCALE
0   30
1"=30'

8:13:57 AM
R:\3602 Asheville Signal System\DGN\COA-0305\COA-0305-MCOA-305_sig_dsn.dgn
bgross