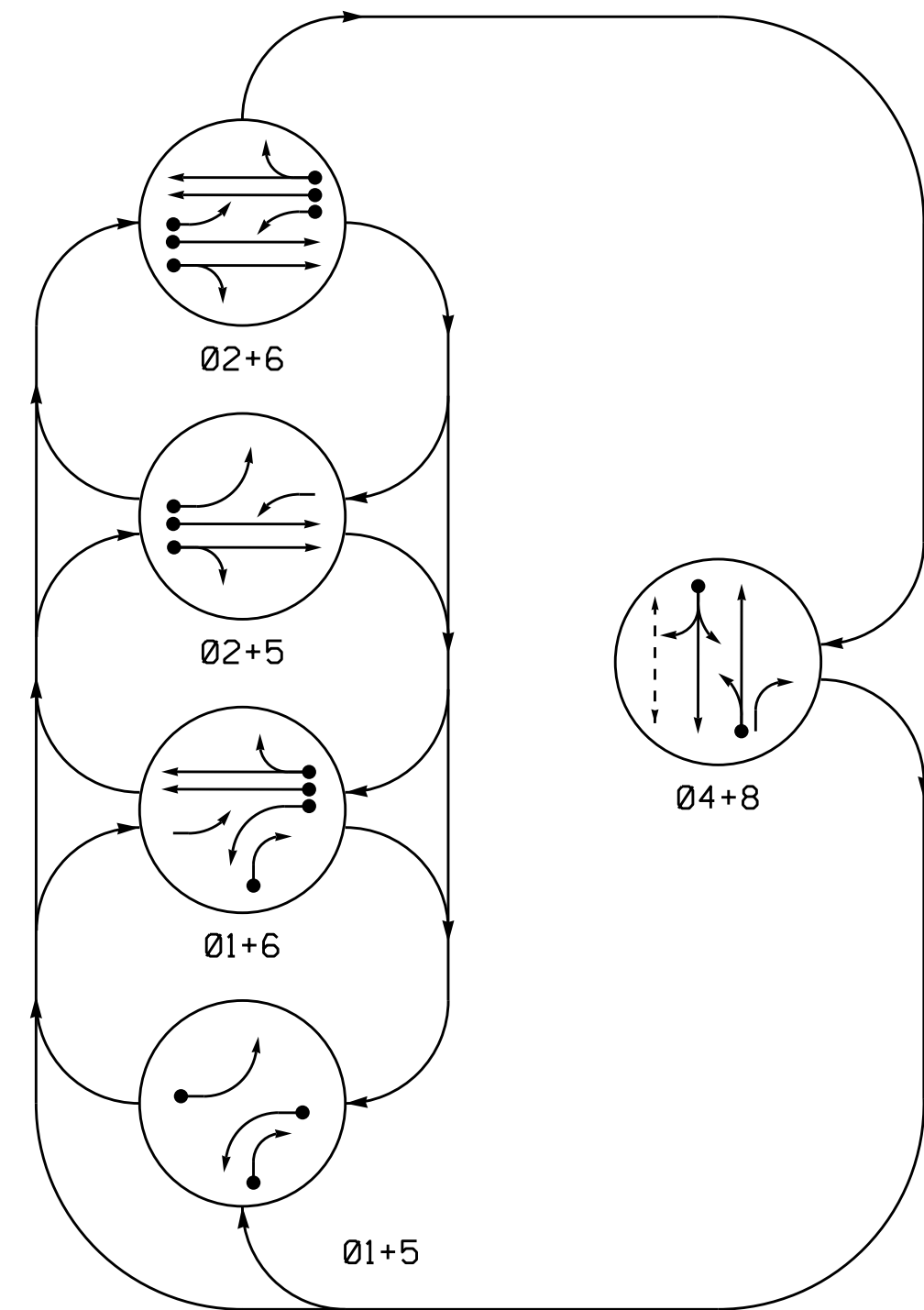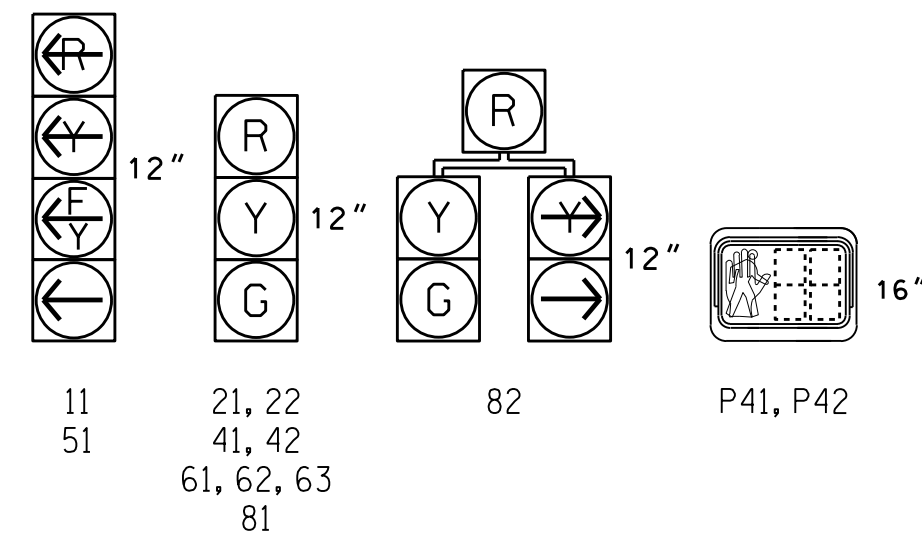## PHASING DIAGRAM

Ø2+6

Ø2+5

Ø1+6

Ø1+5

Ø4+8

PHASING DIAGRAM DETECTION LEGEND

- →● DETECTED MOVEMENT
- ← UNDETECTED MOVEMENT (OVERLAP)
- ←--- UNSIGNALIZED MOVEMENT
- ←---- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8	FLASH
11	←	F Y	F Y	←	R	Y
21, 22	R	R	G	G	R	Y
41, 42	R	R	R	R	G	R
51	←	F Y	←	F Y	R	Y
61, 62, 63	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R/	R/	R	R	G	R
P41, P42	DW	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.

11
51

21, 22
41, 42
61, 62, 63
81

82

P41, P42

OASIS 2070 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
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	Y
					6	Y	Y	Y	-	3	-	Y
1B	6X40	+5	2-4-2	-	1	Y	Y	-	-	15	-	Y
2A	6X6	300	4	-	2	Y	Y	-	-	-	-	Y
2B	6X6	300	4	-	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	3	-	Y
4B	6X15	0	4	-	4	Y	Y	-	-	10	-	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
					2	Y	Y	Y	-	3	-	Y
6A	6X6	300	4	-	6	Y	Y	-	-	-	-	Y
6B	6X6	300	4	-	6	Y	Y	-	-	-	-	Y
8A	6X40	+5	2-4-2	-	8	Y	Y	-	-	3	-	Y
S1	6X6	+148	4	-	-	-	-	-	-	-	Y	Y
S2	6X6	+148	4	-	-	-	-	-	-	-	Y	Y
S3	6X6	+164	4	-	-	-	-	-	-	-	Y	Y
S4	6X6	+164	4	-	-	-	-	-	-	-	Y	Y

5 Phase
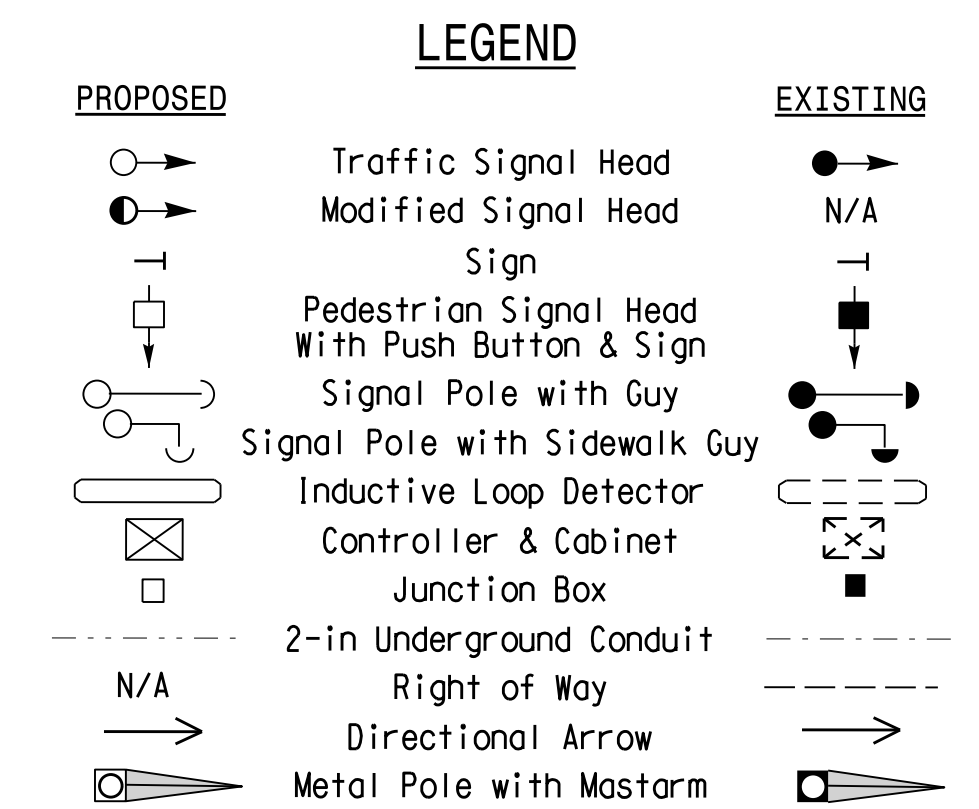## Fully Actuated
Asheville Signal System

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. Phase 1 and/or phase 5 may be lagged.
4. Reposition existing signal heads numbered 22 & 62 as needed.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. Pavement markings are existing.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

Entrance to "The Forest" Apartment Complex

Metalpole #5
Case #LC2-45-24

Metalpole #6
Case #LC-45-24

NC146 (Long Shoals Road)
Sidewalk

25 MPH -1% Grade

45 MPH -7% Grade
Sidewalk
NC146 (Long Shoals Road)

Install new base-mounted cabinet on existing foundation.

Metalpole #8
Case #LC2-45-24

Metalpole #7
Case #LC2-45-24

CP&L Drive

25 MPH +4% Grade

45 MPH -2% Grade

OASIS 2070 TIMING CHART
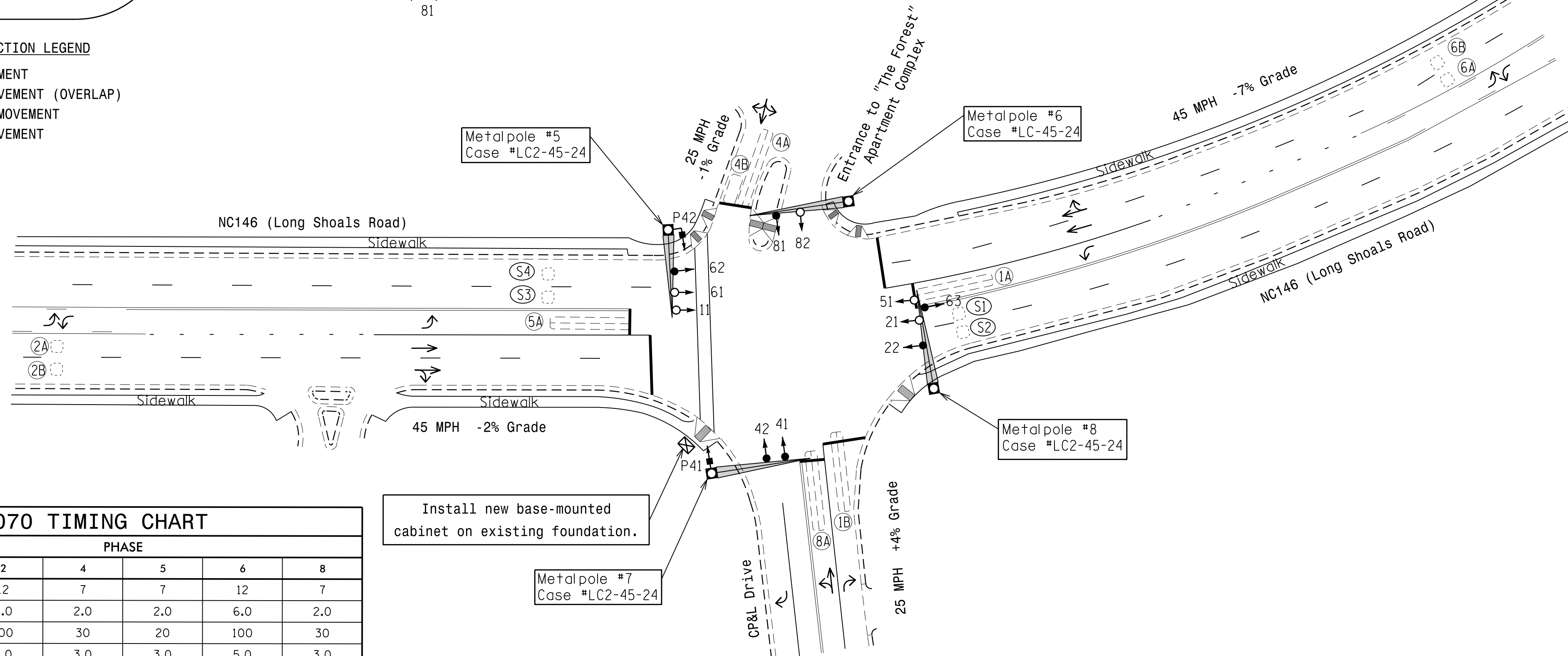
FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	7	12	7	7	12	7
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0
Max Green 1 *	20	100	30	20	100	30
Yellow Clearance	3.1	5.0	3.0	3.0	5.0	3.0
Red Clearance	2.9	1.6	3.3	2.8	1.6	3.3
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	7	-	-	-
Don't Walk 1	-	-	23	-	-	-
Seconds Per Actuation *	-	1.5	-	-	1.5	-
Max Variable Initial *	-	34	-	-	34	-
Time Before Reduction *	-	20	-	-	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.

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
- Right of Way — N/A
- Directional Arrow
- Metal Pole with Mastarm

Signal Upgrade

01-SEP-2016 11:55
S.#ITS&SU#ITS Signals#Signal Design Design Section#Western Region#Div#13#U-4715#

SCALE
0   40
1"=40'