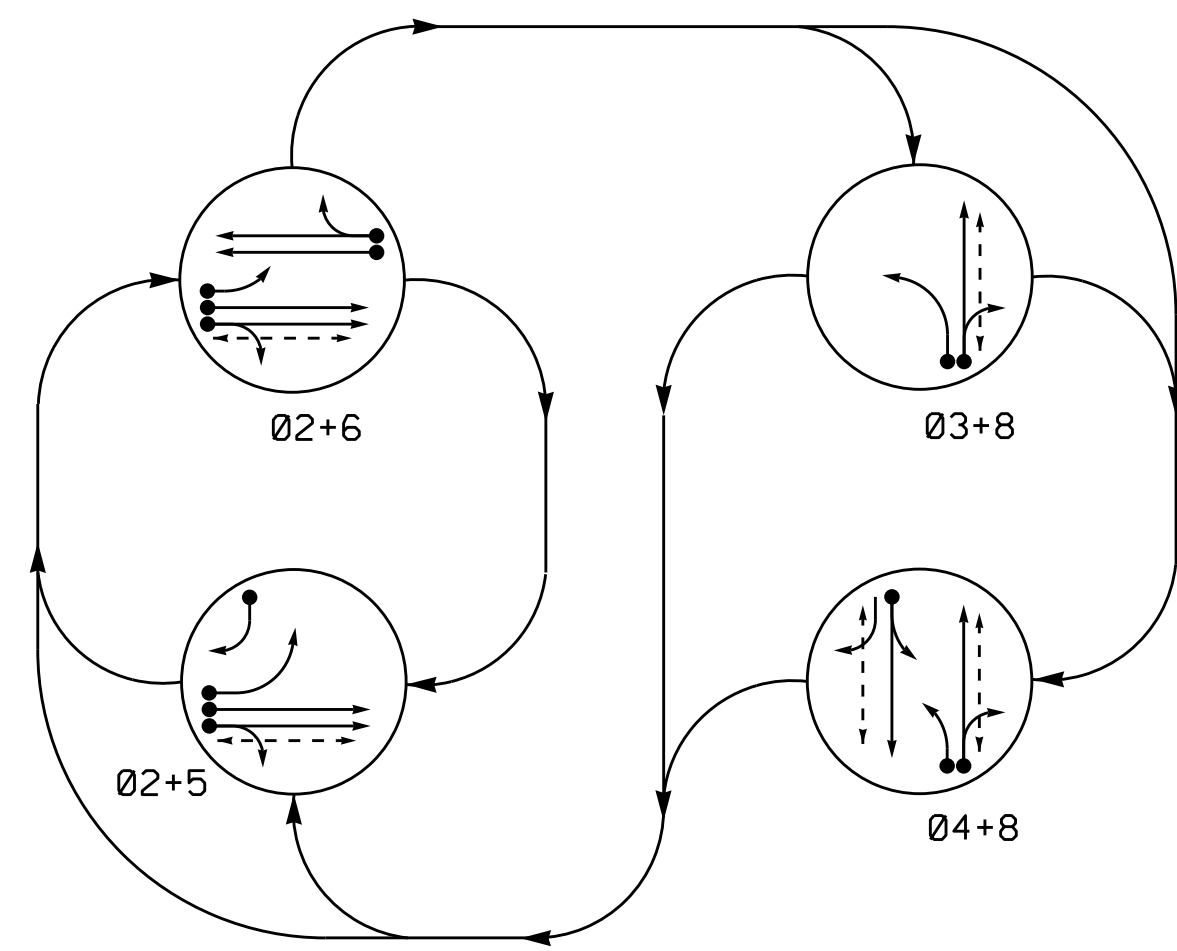


PHASING DIAGRAM

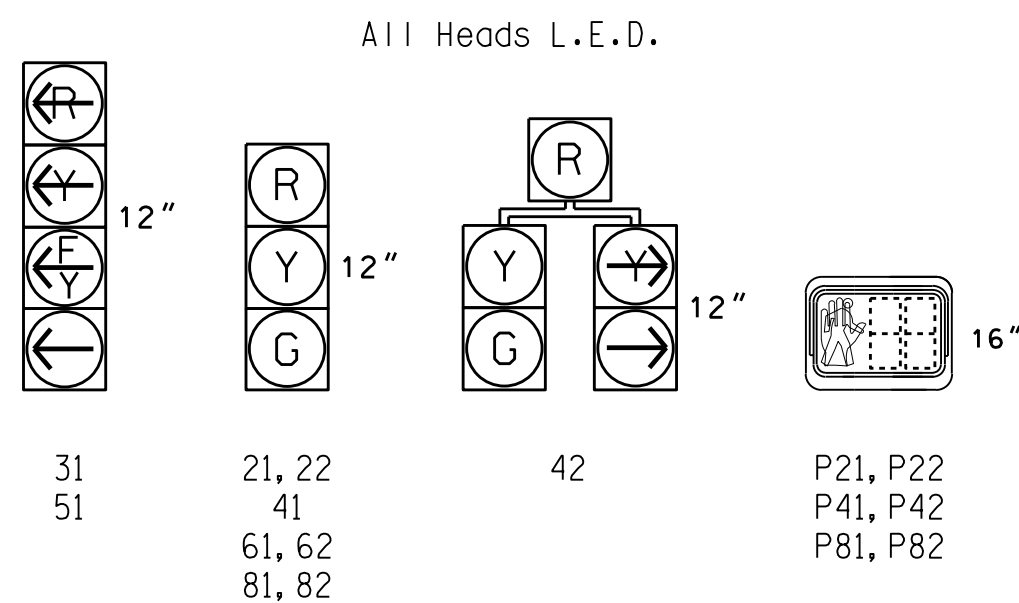


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	02+5	02+6	03+8	04+8	F
21, 22	G	G	R	R	Y
31	R	R	---	---	---
41	R	R	R	G	R
42	R	R	R	G	R
51	---	---	---	---	---
61, 62	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
P81, P82	DW	DW	W	W	DRK

SIGNAL FACE I.D.

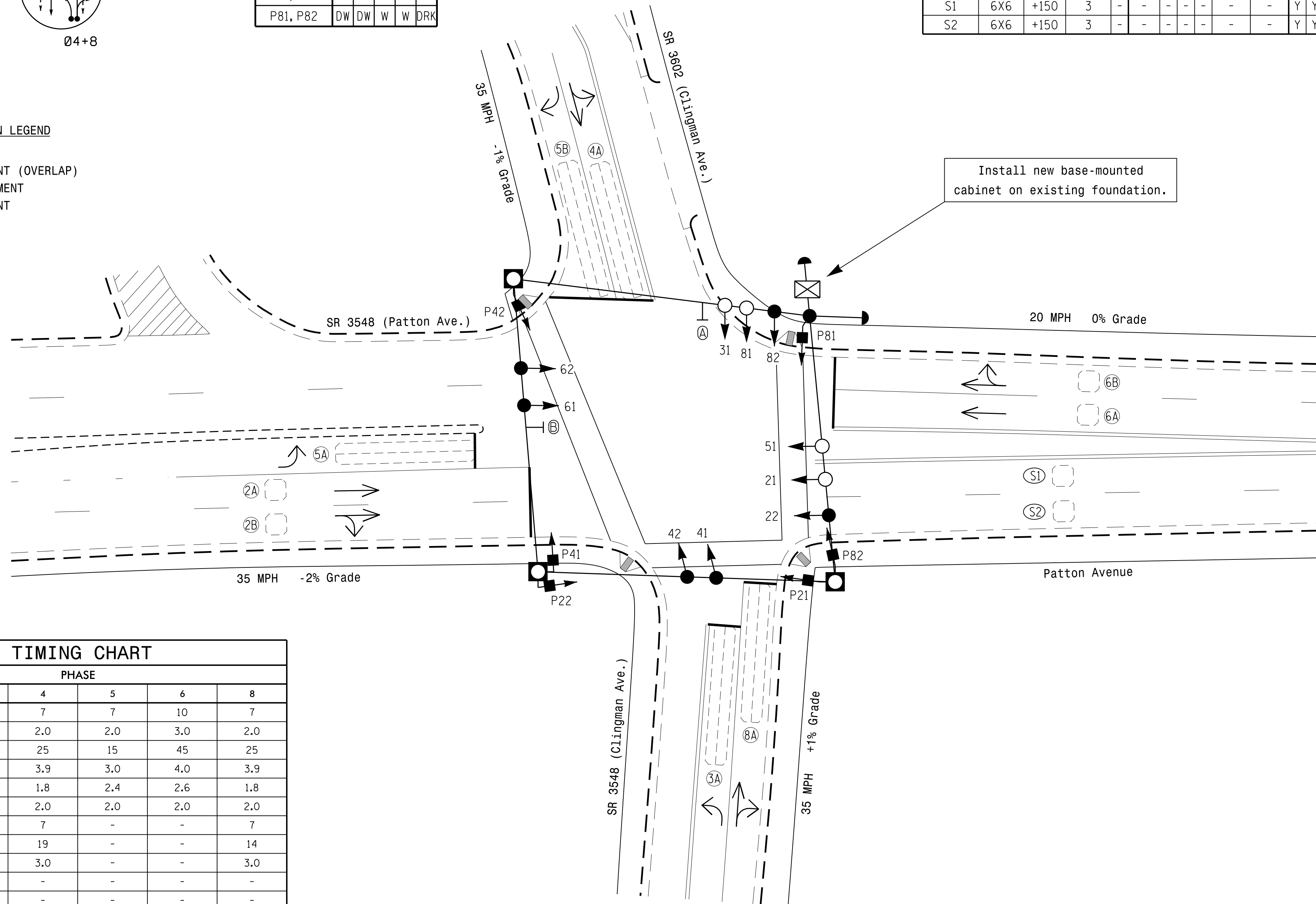


OASIS 2070 LOOP & DETECTOR INSTALLATION CHART												
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					SYSTEM LOOP	NEW CARD	
					PHASE	CALLING EXTENSION	STRETCH TIME	DELAY TIME	NEW LOOP			
2A, 2B	6X6	70	5	-	2	Y	Y	-	-	-	-	Y
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	15	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	3	-	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
5B	6X40	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
6A, 6B	6X6	70	4	-	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	10	-	Y
S1	6X6	+150	3	-	-	-	-	-	-	-	-	Y
S2	6X6	+150	3	-	-	-	-	-	-	-	-	Y

4 Phase Fully Actuated Asheville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Omit phase 3 during phase 4 on.
- Phase 5 may be lagged.
- Reposition existing signal heads numbered 22 and 82.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE					
	2	3	4	5	6	8
Min Green 1 *	10	7	7	7	10	7
Extension 1 *	3.0	2.0	2.0	2.0	3.0	2.0
Max Green 1 *	45	15	25	15	45	25
Yellow Clearance	4.0	3.0	3.9	3.0	4.0	3.9
Red Clearance	2.6	2.6	1.8	2.4	2.6	1.8
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	7	-	7	-	-	7
Don't Walk 1	10	-	19	-	-	14
Walk Advance Time *	3.0	-	3.0	-	-	3.0
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
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                           | ●→ N/A                           |
| ●→ Modified Signal Head                          | ○→ N/A                           |
| ⊥ Sign   | ⊥ N/A                            |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ N/A                            |
| ○ Signal Pole with Guy                           | ● Signal Pole with Guy           |
| ○ Signal Pole with Sidewalk Guy                  | ○ Signal Pole with Sidewalk Guy  |
| ⊠ Inductive Loop Detector                        | ⊠ Inductive Loop Detector        |
| ⊠ Controller & Cabinet                           | ⊠ Junction Box                   |
| --- 2-in Underground Conduit                     | --- 2-in Underground Conduit     |
| N/A Right of Way                                 | --- Right of Way                 |
| → Directional Arrow                              | → Directional Arrow              |
| ○ Metal Strain Pole                              | ○ Metal Strain Pole              |
| N/A Curb Ramp                                    | ○ Curb Ramp                      |
| ⊠ Left Arrow "ONLY" Sign (R3-5L)                 | ⊠ Left Arrow "ONLY" Sign (R3-5L) |
| ⊠ No Left Turn Sign (R3-2)                       | ⊠ No Left Turn Sign (R3-2)       |

Signal Upgrade

SR 3548 (Patton Ave.)  
at  
SR 3602/3548 (Clingman Ave.)

Division 13 Buncombe County Asheville

PLAN DATE: April 2016 REVIEWED BY: P.L. Alexander

PREPARED BY: R.N. Zinser REVIEWED BY:

REVISIONS: \_\_\_\_\_ INIT. DATE

SCALE: 1"=20'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

Richard N. Zinser 8/4/2016

SIG. INVENTORY NO. 13-0263

04-10-2016 07:54  
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