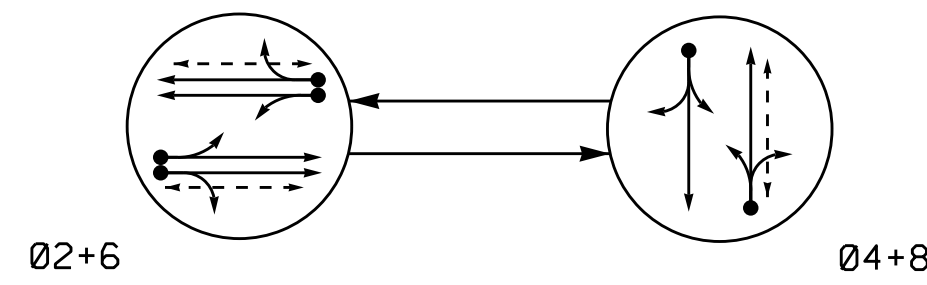


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	Ø 2+6	Ø 4+8	FLIGHT
21, 22	G	R	Y
41, 42	R	G	R
61, 62	G	R	Y
81, 82	R	G	R
P21, P22	W	DW	DRK
P61, P62	W	DW	DRK
P81, P82	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



- 21, 22 P21\*, P22\*
- 41, 42 P61\*, P62\*
- 61, 62 P81\*, P82\*
- 81, 82

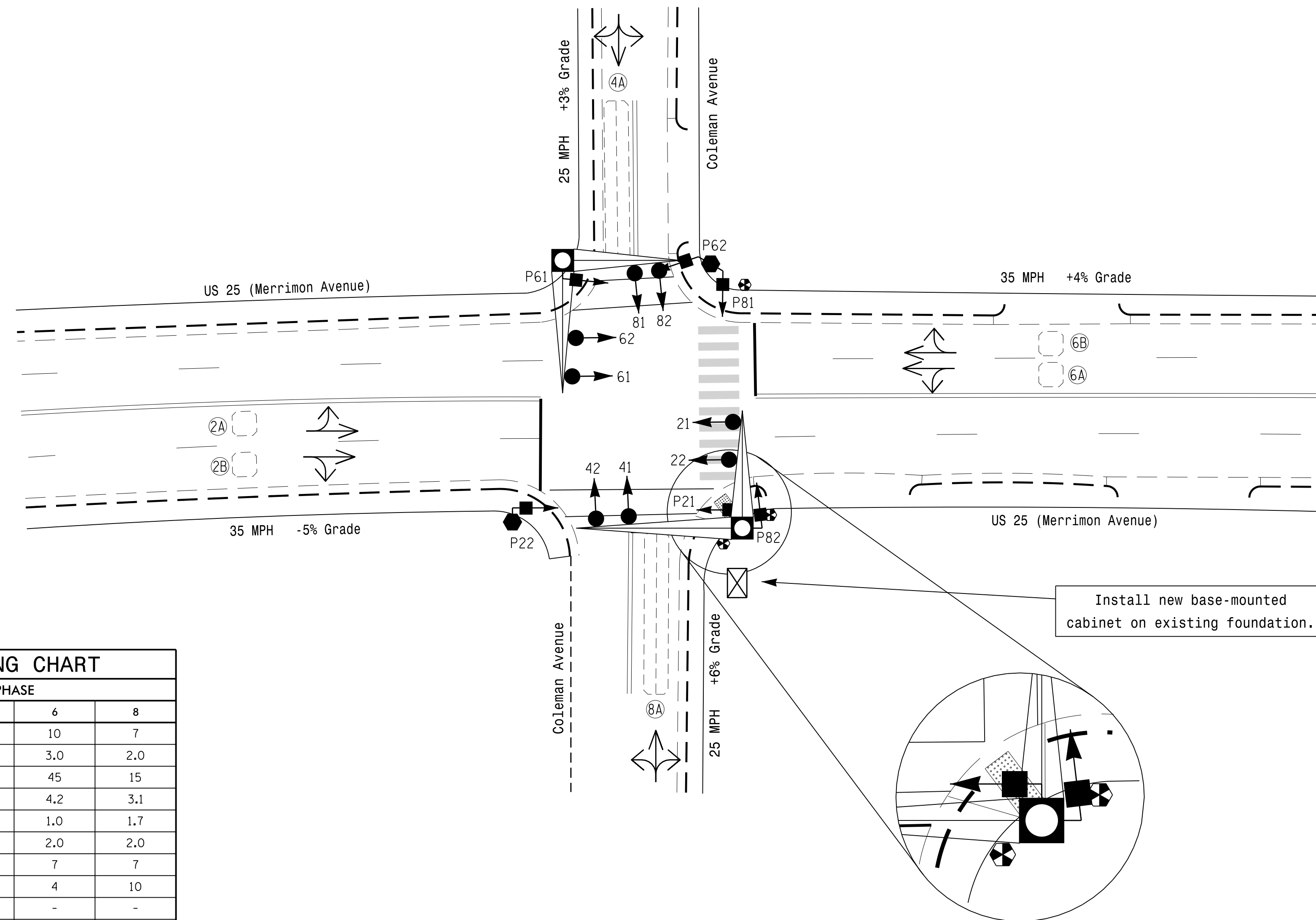
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME	LOOP SYSTEM	NEW CARD	
2A	6X6	70	EXIST	-	2	Y	Y	-	-	-	-	Y
2B	6X6	70	EXIST	-	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	5	-	Y
6A	6X6	70	EXIST	-	6	Y	Y	-	-	-	-	Y
6B	6X6	70	EXIST	-	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	5	-	Y

2 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.
- 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.



Install new base-mounted cabinet on existing foundation.

OASIS 2070 TIMING CHART

FEATURE	PHASE			
	2	4	6	8
Min Green 1 *	10	7	10	7
Extension 1 *	3.0	2.0	3.0	2.0
Max Green 1 *	45	15	45	15
Yellow Clearance	4.2	3.1	4.2	3.1
Red Clearance	1.0	1.7	1.0	1.7
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	7	-	7	7
Don't Walk 1	8	-	4	10
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

\* 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                | — Sign                            |
| ○ → Pedestrian Signal Head              | ○ → Signal Pole with Guy          |
| ○ → Signal Pole with Push Button & Sign | ○ → Signal Pole with Sidewalk Guy |
| ○ → Inductive Loop Detector             | ○ → Controller & Cabinet          |
| ○ → Junction Box                        | ○ → 2-in Underground Conduit      |
| ○ → Right of Way                        | ○ → Directional Arrow             |
| ○ → Metal Pole with Mastarm             | ○ → Type I Pushbutton Post        |
| ○ → Type II Signal Pedestal             | ○ → Curb Ramp                     |

Signal Upgrade

**US 25 (Merrimon Avenue) at Coleman Avenue**

Division 13 Buncombe County Asheville

PLAN DATE: December 2015 REVIEWED BY: Z.M. Little

PREPARED BY: R.N. Zinser REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

11/28/2016

SIG. INVENTORY NO. 13-0224

08-NOV-2016 09:55  
 S:\IT\SSU\13-0224\13-0224\_Sig.dgn  
 Design: R.N. Zinser  
 System: Signal Design Section  
 Region: Western Region  
 Project: U-4715 B (Asheville)  
 Sheet: Sig. 32.0  
 Date: 11/28/2016