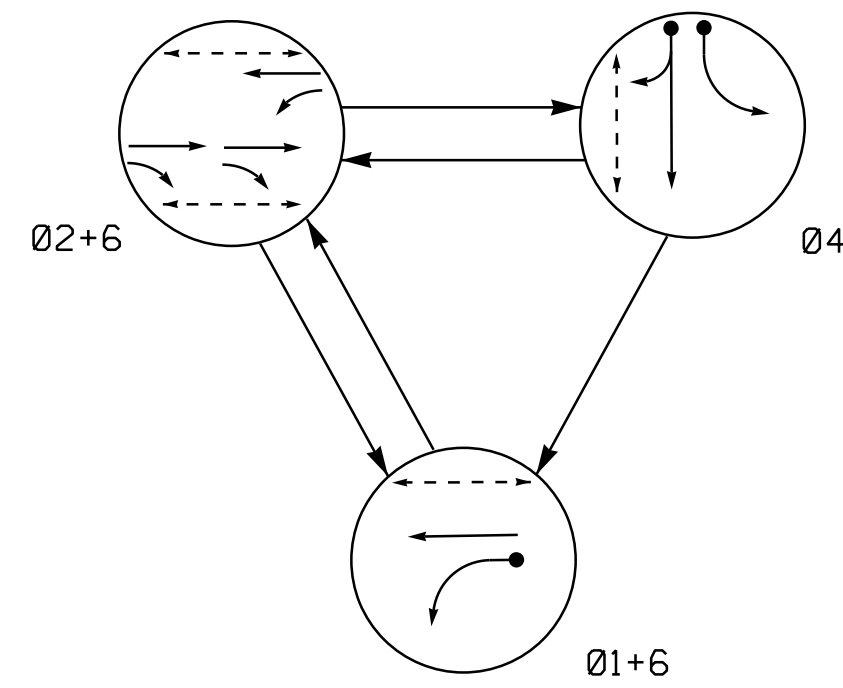
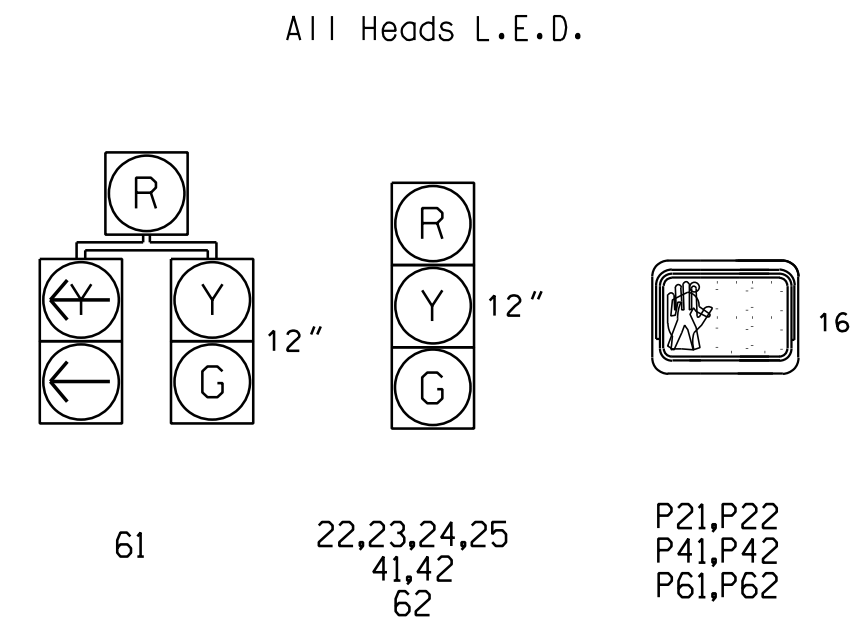


PHASING DIAGRAM



SIGNAL FACE	PHASE			
	01+6	02+6	04	FLASH
21,22	R	G	R	Y
23,24	R	G	R	Y
41,42	R	R	G	R
61	G	G	R	Y
62	G	G	R	Y
P21,P22	DW	W	DW	DRK
P41,P42	DW	DW	W	DRK
P61,P62	W	W	DW	DRK

SIGNAL FACE I.D.



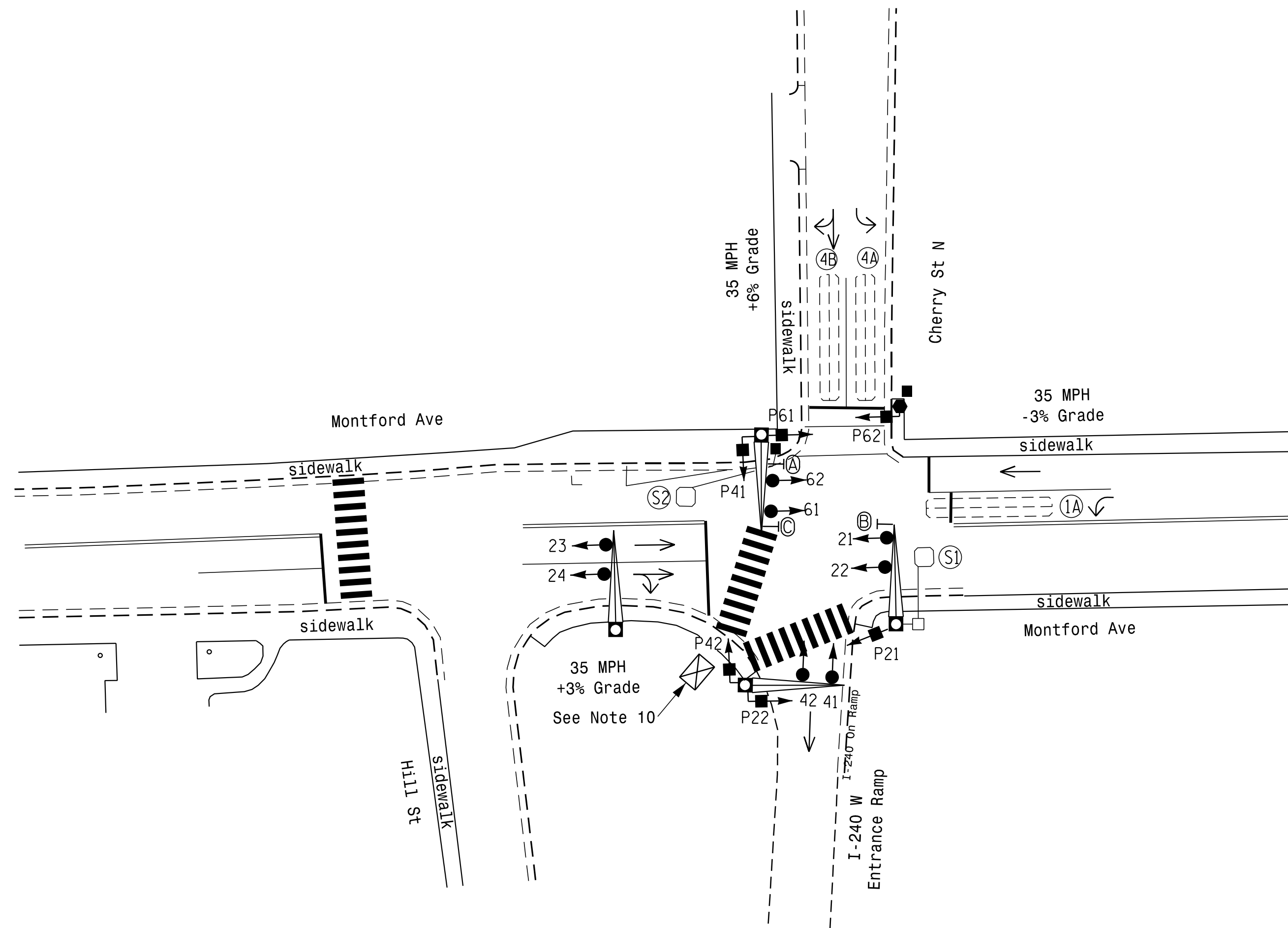
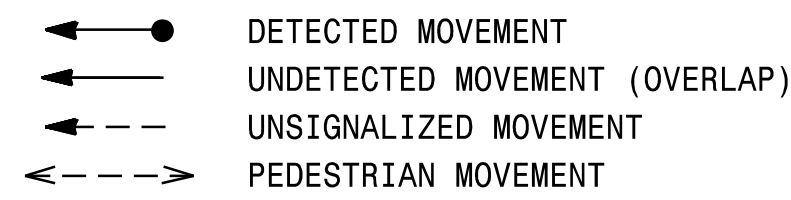
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	EXIST	+5	2-4-2	-	1	Y	Y	-	-	5	-	Y
4A	EXIST	0	2-4-2	-	4	Y	Y	-	-	-	-	Y
4B	EXIST	0	2-4-2	-	4	Y	Y	-	-	10	-	Y
S1	6X6	+70	2-4-2	Y	2	Y	Y	-	-	-	-	Y
S2	6X6	+75	2-4-2	Y	6	Y	Y	-	-	-	-	Y

3 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. Phase 1 may be lagged.
9. Program pedestrian heads to countdown the flashing "Don't Walk" times only.
10. Locate new cabinet on existing foundation.

PHASING DIAGRAM DETECTION LEGEND



FEATURE	PHASE			
	1	2	4	6
Min Green 1 *	7	30	7	30
Extension 1 *	1.5	0.0	1.5	0.0
Max Green 1 *	10	30	20	30
Yellow Clearance	3.0	4.1	3.5	4.1
Red Clearance	2.1	1.1	1.3	1.1
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	24	5	24
Don't Walk 1	-	6	11	6
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	-	MAX/PED	PED SOFT	MAX/PED
Vehicle Call Memory	-	YELLOW	-	YELLOW
Dual Entry	-	-	-	-
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.

PROPOSED	LEGEND	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	
	Type II Signal Pedestal	
	'NO RIGHT TURN' Sign (R3-1)	
	'NO LEFT TURN' Sign (R3-2)	
	'LEFT TURN ONLY' Sign (R3-2)	

Signal Upgrade

City of Asheville
North Carolina

Montford Ave
at
Cherry St N and I-240 West Ent

Division 13 Buncombe County Asheville

PLAN DATE: JUNE 2016 REVIEWED BY: SMH

PREPARED BY: BGR REVIEWED BY: JBV

SEAL

James B. Voss
Professional Engineer
No. 22559

12/13/2016

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

