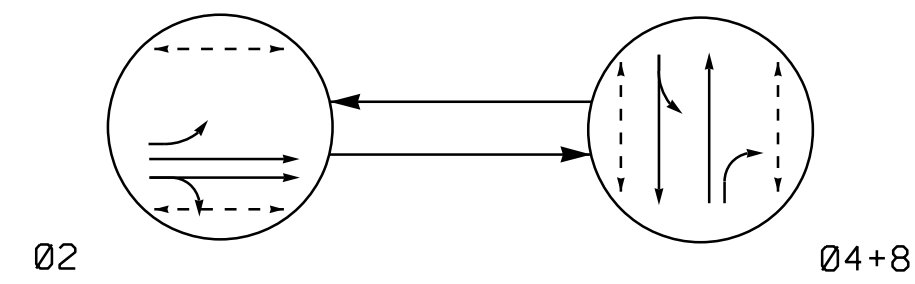


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

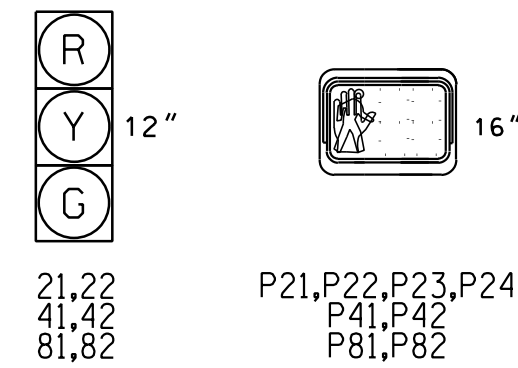
TABLE OF OPERATION

SIGNAL FACE	PHASE		
	02	04+8	FLASH
21,22	G	R	Y
41,42	R	G	R
81,82	R	G	R
P21,P22,P23,P24	W	DW	DRK
P41,P42	DW	W	DRK
P81,P82	DW	W	DRK

W - Walk
 DW - Don't Walk
 DRK - Dark

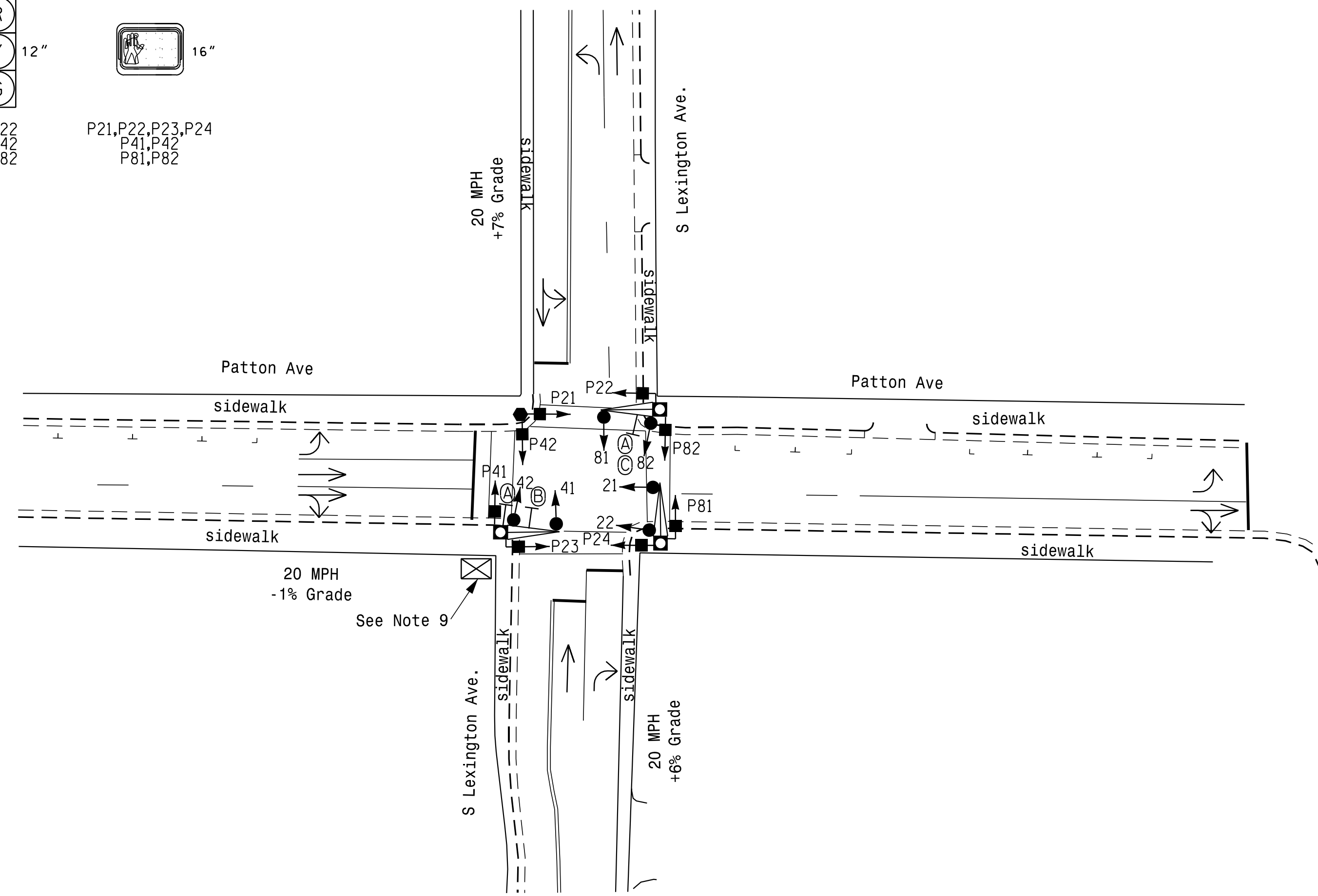
SIGNAL FACE I.D.

All Heads L.E.D.



21,22
41,42
81,82

P21,P22,P23,P24
P41,P42
P81,P82



2 Phase Pre-Timed (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.
- 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Locate new cabinet on existing foundation.
- Program controller to allow an Advance Walk movement before serving the vehicle phase.
- Program Phase 2 for Rest-in-Walk.

OASIS 2070E TIMING CHART

FEATURE	PHASE		
	2	4	8
Min Green 1 *	10	7	7
Extension 1 *	0.0	0.0	0.0
Max Green 1 *	30	20	20
Yellow Clearance	3.0	3.0	3.0
Red Clearance	1.9	1.9	1.9
Red Revert	2.0	2.0	2.0
Walk 1 *	21	11	13
Don't Walk 1	9	9	7
Walk Advance **	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	MAX/PED
Vehicle Call Memory	-	-	-
Dual Entry	-	-	-
Simultaneous Gap	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 10.

LEGEND

- | PROPOSED | EXISTING |
|--------------------------------------------------|--------------------------------------------------|
| ○ → Traffic Signal Head | ● → N/A |
| ○ → Modified Signal Head | ○ → N/A |
| ⊥ Sign | ⊥ Sign |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ Pedestrian Signal Head With Push Button & Sign |
| ○ → 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 | □ Controller & Cabinet |
| □ Junction Box | □ Junction Box |
| --- 2-in Underground Conduit | --- 2-in Underground Conduit |
| N/A Right of Way | --- Right of Way |
| → Directional Arrow | → Directional Arrow |
| ⊠ Metal Pole with Mastarm | ⊠ Metal Pole with Mastarm |
| Ⓐ 'ONE WAY' Sign (R6-2) | Ⓐ 'ONE WAY' Sign (R6-2) |
| Ⓑ 'NO RIGHT TURN' Sign (R3-1) | Ⓑ 'NO RIGHT TURN' Sign (R3-1) |
| Ⓒ 'NO LEFT TURN' Sign (R3-2) | Ⓒ 'NO LEFT TURN' Sign (R3-2) |
| ○ Type II Signal Pedestal | ● Type II Signal Pedestal |

Signal Upgrade

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

City of Asheville logo and seal.

Patton Ave at S Lexington Ave

Division 13 Buncombe County Asheville

PLAN DATE: MAY 2016 REVIEWED BY: SMH

PREPARED BY: BGR REVIEWED BY: JBV

REVISIONS: _____ INIT. DATE

SCALE: 1"=30'

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER JAMES B. VOSS 022599

SIGNATURE: James B. Voss DATE: 12/13/2016

SIG. INVENTORY NO. COA-0114

2:45:46 PM
 R:\3602 Asheville\110 Signal System\CON\COA-0114\sig_dsm.dgn
 D:\cross