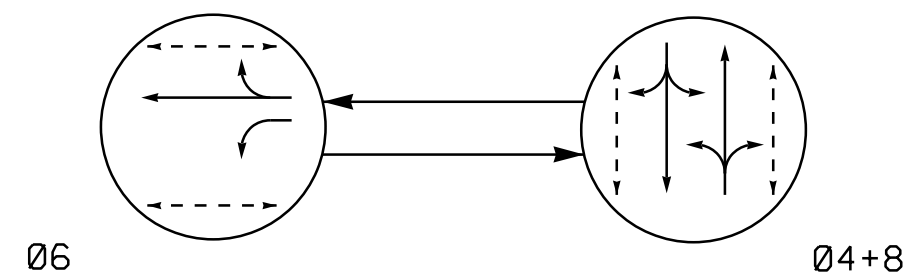


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- ◄ ● ► DETECTED MOVEMENT
- ◄ ◊ ► UNDETECTED MOVEMENT (OVERLAP)
- ◄ --- ► UNSIGNALIZED MOVEMENT
- ◄ - - - ► PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	06	04+8	FLASH
41,42	R	G	R
61,62	G	R	Y
81,82	R	G	R
P41,P42	DW	W	DRK
P61,P62, P63,P64	W	DW	DRK
P81,P82	DW	W	DRK

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

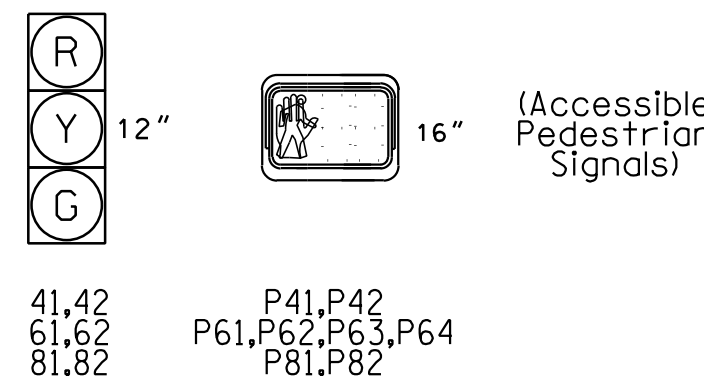
2 Phase Pre-Timed (Asheville Signal System)

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.
- Locate new cabinet on existing foundation.
- Program controller to allow an Advance Walk movement before serving the vehicle phase.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Program Phase 6 for Rest-in-Walk.

SIGNAL FACE I.D.

All Heads L.E.D.



41,42 61,62 81,82 P41,P42 P61,P62,P63,P64 P81,P82 (Accessible Pedestrian Signals)

ACCESSIBLE PEDESTRIAN SIGNAL OPERATION

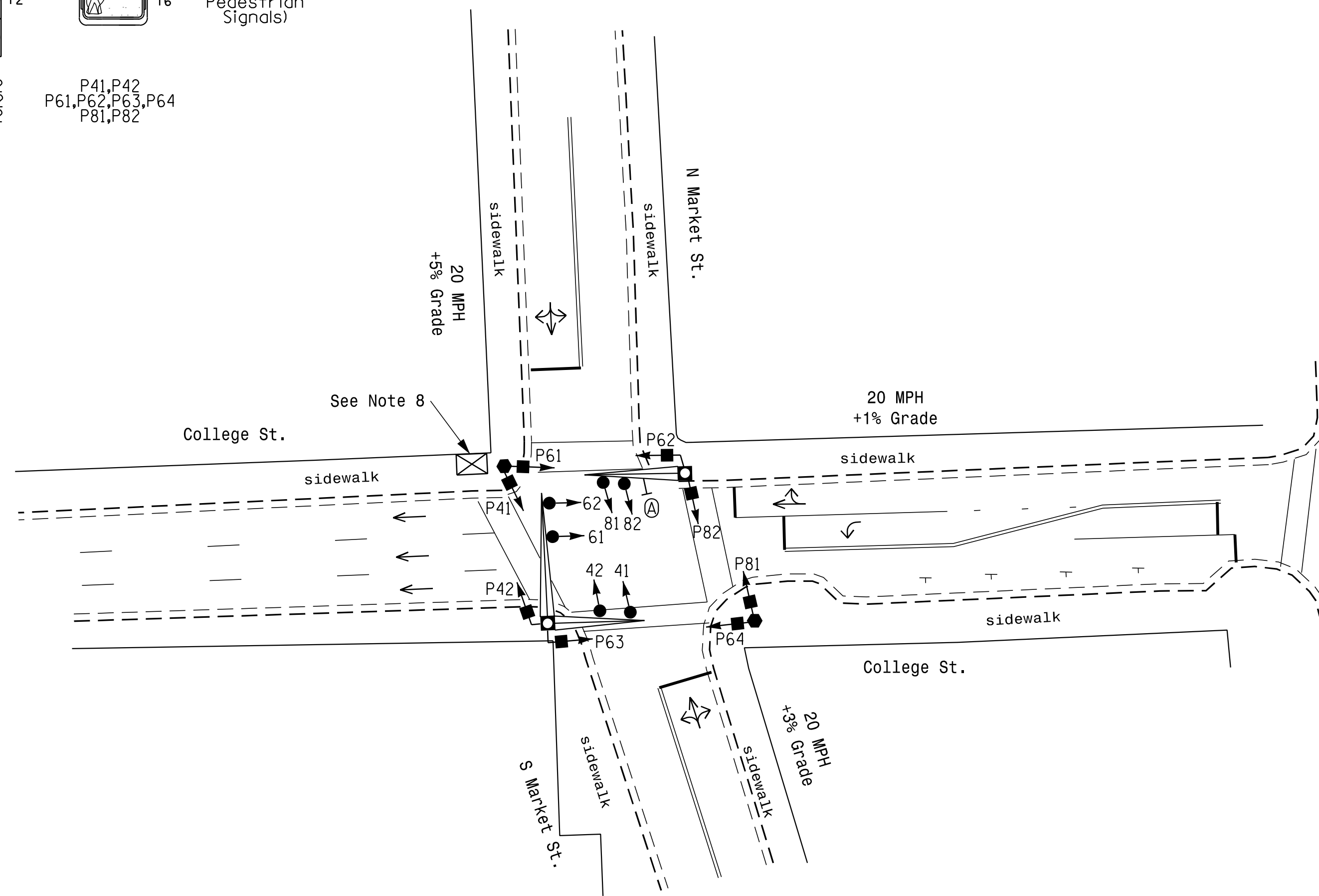
SIGNAL FACE	INTERVAL	MESSAGE/TONE*
P41, P42	Walk	"College Street: Walk sign is on to cross College Street."
	Flashing Don't Walk/Don't Walk	Silent Pushbutton Locator Tone Only**
P61, P62 P63, P64	Walk	"Market Street: Walk sign is on to cross Market Street."
	Flashing Don't Walk/Don't Walk	Silent Pushbutton Locator Tone Only**
P81, P82	Walk	"College Street: Walk sign is on to cross College Street."
	Flashing Don't Walk/Don't Walk	Silent Pushbutton Locator Tone Only**

* Volume should be set to no more than 5 db over the ambient noise level.
** Pushbutton locator tones shall have a duration of 0.15 seconds or less, and shall repeat at 1-second intervals.

OASIS 2070E TIMING CHART

FEATURE	PHASE		
	4	6	8
Min Green 1*	7	10	7
Extension 1*	0.0	0.0	0.0
Max Green 1*	20	30	20
Yellow Clearance	3.0	3.0	3.0
Red Clearance	2.8	2.4	2.4
Red Revert	2.0	2.0	2.0
Walk 1*	12	20	11
Don't Walk 1	8	10	9
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 9.



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 | ⊥ |
| N/A | Right of Way | --- |
| → | Directional Arrow | → |
| ⊥ | Metal Pole with Mastarm | ⊥ |
| ○ | Type II Signal Pedestal | ● |
| ⊙ | TURNING VEHICLES YIELD TO PEDESTRIANS' Sign (R10-15) | ⊙ |

Signal Upgrade

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Prepared for the Offices of:		College St. at N Market St. and S Market St.	
CITY OF ASHEVILLE		Division 13 Buncombe County Asheville	
PLAN DATE: JUNE 2016	REVIEWED BY: SMH	SEAL	SEAL
PREPARED BY: BGR	REVIEWED BY: JBV	140P00379E041F	12/13/2016
SIGNATURE		DATE	
James Voso		DATE	
SIG. INVENTORY NO. COA-0104			