

## 3 Phase Full Actuated D13-22\_Asheville

## **NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- 2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 may be lagged.
- Set all detector units to presence mode.
- refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- turning right on red. 7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls for
- Phase 4.
- time only.
- 10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

<u>PROPOSED</u>		<b>EXISTING</b>
$\bigcirc$	Traffic Signal Head	<b></b>
<b>O</b>	Modified Signal Head	N/A
$\dashv$	Sign	$\dashv$
	Pedestrian Signal Head	-
$\bigcirc$	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	K×7
	Junction Box	
	2-in Underground Conduit	uc
N/A	Right of Way	
$\longrightarrow$	Directional Arrow	$\longrightarrow$
	Metal Strain Pole	
N/A	Curb Ramp	
$\bigcirc$	Type II Signal Pedestal	
A	Right "TURNING VEHICLES" Yield "TO" Pedestrians Sign (R10-15R)	A
$\langle B \rangle$	Left "TURNING VEHICLES" Yield "TO" Pedestrians Sign (R10-15L)	B
(C)	"NO TURN ON RED" Sign (R10-11)	<b>©</b>
(D)	No Right Turn Sign (R3-1)	© E
Œ	No Left Turn Sign (R3-2)	
	Detection Zone	<==>

at I-240 WB Off-Ramp				
Division 13	Buncombe (	County	Asheville	
PLAN DATE:	January 2024	REVIEWED BY:	R.N. Zinser	

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t	-DocuSigned by:
	R. Nicholas Zinser 02/09/2024

DOCUMENT NOT CONSIDERED

FINAL UNLESS ALL

SIGNATURES COMPLETED

SEAL

SIG. INVENTORY NO. 13-1344

02+6
01+6

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

← - - > PEDESTRIAN MOVEMENT

UNSIGNALIZED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

PHASING DIAGRAM

- F - Y | R | † 21 22 RGRY RRGR GGRY 62 P21,P22 DW W DW DRK P41,P42 DW DW W DRK P61,P62 W W DW DRK

SIGNAL FACE

TABLE OF

OPERATION

PHASE

R Y (Y)G 21 22 41,42

SIGNAL FACE I.D.

All Heads L.E.D.

P21,P22 P41,P42

P61,P62

61

US 19-23 Bus. (Haywood Rd)

Χ

20 MPH +1% Grade

MAXTIME TIMING CHART PHASE FEATURE 6 4 14 13 7 Ped Clear 13 10 10 10 Min Green \* 2.0 2.0 3.0 3.0 Passage \* Max 1 \* 20 60 25 3.0 3.0 3.5 3.0 Yellow Change 1.7 2.1 3.1 3.1 Red Clear Added Initial \* -Maximum Initial \* Time Before Reduction \* Time To Reduce \* Minimum Gap -Advance Walk -Χ Χ Non Lock Detector PED RECALL Vehicle Recall PED RECALL Dual Entry

\* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases

21

22

Prepared in the Offices of:

Signal Design Section		Division 13	Buncombe County		Ashe		
		PLAN DATE:	January 2024	REVIEWED BY:	R.N. Zinser		
	⊃kwy, Garner, N0	C 27529	PREPARED BY:	T.A. Kenion	REVIEWED BY:		
	SCALE			REVISIONS		INIT.	DA
	O	20					

Ped Recycle should not be lower than 4 seconds.

Actuated Rest in Walk

2A 6X6 70 2B 6X6

6X60

RY

RY

DETECTOR

DISTANCE FROM STOP LINE LOOP EXIST X 2 -EXIST X 2 | X | - | X | - | X 6X60

2-4-2

- | x | - | x | - | x | 70 EXIST - | x | - | x | - | x | 6A \* EXIST 6 \* Microwave Detection Zone

MAXTIME DETECTOR INSTALLATION CHART

PROGRAMMING

5. In the event of loop replacement,

6. Locate new cabinet so as not to obstruct sight distance of vehicles

8. Program pedestrian heads to countdown the flashing "Don't Walk"

Pavement markings are existing.

New Installation US 19-23 Bus (Haywood Rd)