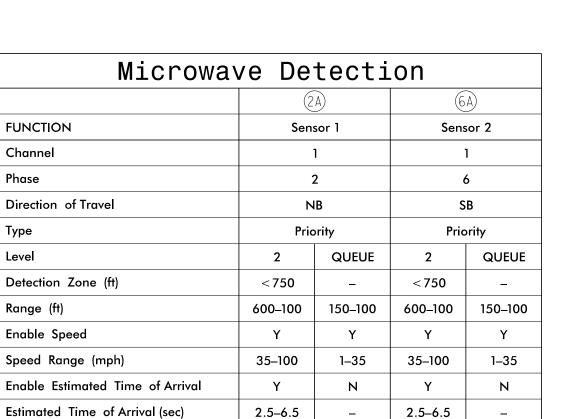
## 6 Phase Fully Actuated (Time Based Coordination)

# NOTES

- 1. 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
- 3. Phase 1 and/or Phase 5 may be lagged.
- 4. The order of phase 3 and phase 4 may be reversed.
- 5. Cover and disconnect existing pedestrian head and pushbutton P31.
- 6. Set all detector units to presence mode.
- 7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 8. Program pedestrian heads to countdown the flashing "Don't Walk" time only
- 9. To provide a leading pedestrian interval on phase 4 program FYA head numbered 44 to delay for 7 seconds after the start of phase 4 walk interval. See Electrical Details for programming.
- 10. To provide a leading pedestrian interval on phase 6 program FYA head numbered 63 to delay for 7 seconds after the start of the phase 6 walk interval. See Electrical Details for programming.
- 11. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- 12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



MAXTIME DETECTOR INSTALLATION CHART

**DETECTOR** 

SIZE

(FT)

4A

Retaining wall

P41,P42 P61,P62

DISTANCE

FROM

STOPBAR

\* Multi-zone Microwave Detection Zone

35 MPH +2% Grade (Design Speed 45 MPH)

NC 107 (E. Main Street)

**PROGRAMMING** 

- X - X

- X - X

- X - X

- X - X

- | X | - | X

- X - X

- | X | - | X | - | \*

\_ PHASE TIME TIME X

1 3.0

1 | 15.0 |

3 3.0

4 | - |

5 3.0

0 | \* |-| 5 | 15.0 |

Retaining wall

# **PROPOSED**

### Traffic Signal Head $\bigcirc$ Modified Signal Head N/A Pedestrian Signal Head Signal Pole with Guy Signal Pole with Sidewalk Guy Inductive Loop Detector ×\_ Controller & Cabinet Junction Box Oversized Junction Box ?-in Underground Conduit N/A Right of Way Directional Arrow on-Intrusive Detection Zone Directional Drill N/A Type I Pushbutton Post Type II Signal Pedestal Permanent Utility Easement — PUE – N/A Construction Zone N/A Barricade XXX Portable Concrete Barrier (A) "RIGHT TURN SIGNAL" Sign (R10-10)

LEGEND

**EXISTING** 

# Signal Upgrade

- PUE

Temporary Design 4 - TMP Ph2, S1, Part 2



NC 107 (E. Main Street) Walmart Driveway /

Commerical Driveway Division 14 Jackson County

Sylva REVIEWED BY: ZM Esposito REVIEWED BY: BN Groome INIT. DATE

PLAN DATE: August 2025 PREPARED BY: KA Jones

	- FUE		1 OL		TOL	
	MAX	TIME T	IMING	CHART		
FEATURE -	PHASE					
	1	2	3	4	5	6
Walk *	<del>-</del>	_	-	14	_	14
Ped Clear	_	_	-	25	_	23
Min Green *	7	12	7	7	7	12
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	20	45	20	40	20	45
Yellow Change	3.0	4.3	4.0	3.2	3.0	4.3
Red Clear	2.6	2.5	3.0	3.0	3.3	2.5
Added Initial *	_	_	_	_	_	_
Maximum Initial *	_	_	-	_	_	_
Time Before Reduction *	_	_	_	_	_	_
Time To Reduce *	_	_	-	_	_	_
Minimum Gap	_	_	_	_	_	_
Advance Walk	_	_	_	**	_	***
Non Lock Detector	Х	_	Х	Х	Х	_
Vehicle Recall	_	MIN RECALL	_	_	_	MIN RE
Dual Entry	_	_	_	_	_	_

PHASING DIAGRAM

1+6

TABLE OF OPERATION

SIGNAL

FACE

21,22

31

32

33

42

43

44

51

61,62

63

P41,P42

P61,P62

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

UNSIGNALIZED MOVEMENT

PEDESTRIAN MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

PHASE

→| →| R | R | →| R | F

│<del></del>╃│╃╎╃│╃╎╃│╃

 $\rightarrow$  R  $\rightarrow$  R R R  $\downarrow \stackrel{F}{\Rightarrow}$  F

R | ➡ R | ➡ R | ➡ R

DW|DW|DW|DW|W|DR

|DW| W |DW| W |DW|DW|DR

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is \*\* See note 9

\*\*\* See note 10

35 MPH +3% Grade (Design Speed 45 MPH) PEDESTRIAN DETAIL Detail for installation of P22 & P41 heads and pushbuttons Install ped heads on new Type II pedestal at –L– Sta. 99+78  $\pm$  LT 76  $\pm$ Future P22 Transformer Base Install new pushbuttons and signs. Maintain 10' min between pushbuttons PB41 and PB22. 7′ min.– 10' max.

NC 107 (E. Main Street)

Existing pushbutton mounted in retaining wall. Intercept Conduit on back side of wall to maintain pushbutton Standard R10–3 – (E) Sign Pedestrian Pushbutton Future Proposed Wall Sidewalk

Elevation View

-Locate pushbuttons adjacent to truncated domes -See additional information in -WALL 15-details

SIGNAL FACE I.D.

All Heads L.E.D.

61,62

**Plans Prepared By:** 

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052936 Brittany Groome

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

CARA