PROJECT REFERENCE NO.	SHEET NO.
HA-0004	Sig. 1.0

PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

EV PREEMPT PHASES

(Medium Priority)

PRE 3
(Ø4)

TABLE OF OPERATION

SIGNAL FACE	PHASE: Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4	EVP 3	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R	Y
41	R	R	R	R	G	G	R
42	R/	R	R/	R	G	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R	Y

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A*	6X40	0	*	Y	1	Y	Y	-	-	-	-	-
2A*	6X6	420	*	Y	2	Y	Y	-	2.2	-	-	-
2B*	6X6	420	*	Y	2	Y	Y	-	2.2	-	-	-
2C*	6X6	110	*	Y	2	Y	Y	-	-	-	-	-
2D*	6X6	110	*	Y	2	Y	Y	-	-	-	-	-
4A*	6X40	0	*	Y	4	Y	Y	-	-	-	-	-
5A*	6X40	0	*	Y	5	Y	Y	-	-	-	-	-
5B*	6X40	0	*	Y	5	Y	Y	-	-	20	-	-
6A*	6X6	420	*	Y	6	Y	Y	-	2.2	-	-	-
6B*	6X6	420	*	Y	6	Y	Y	-	2.2	-	-	-
6C*	6X6	110	*	Y	6	Y	Y	-	-	-	-	-
6D*	6X6	110	*	Y	6	Y	Y	-	-	-	-	-

* Multi-Zone Microwave Detection Zone

5 Phase
Fully Actuated
w/ Emergency Vehicle Preemption
Isolated

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
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. Set all detector units to presence mode.
5. Pavement markings are existing.
6. Emergency vehicle preemption switch located in EMS Station.
7. The Division Traffic Engineer will determine the Delay before Preempt and Preempt Dwell Min Green time for the emergency vehicle preemption timing.
8. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.

SIGNAL FACE I.D.

All Heads L.E.D.

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	
	Construction Zone	N/A
	Microwave Detection Zone	
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ
Ⓑ	U-Turn "MUST YIELD" Sign (R3-27)	Ⓑ

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6
Min Green 1 *	7	14	7	7	14
Extension 1 *	2.0	2.0	2.0	2.0	2.0
Max Green 1 *	25	90	30	35	90
Yellow Clearance	3.0	5.3	3.0	3.0	5.3
Red Clearance	3.5	1.2	3.3	3.1	1.2
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-	-
Simultaneous Gap	ON	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.

OASIS 2070 EV PREEMPT

FUNCTION	PRE 3
Interval 1 – Dwell Green	255
Interval 1 – Dwell Yellow	0.0*
Interval 1 – Dwell Red	0.0*
Interval 5 – Exit Green	1
Interval 5 – Yellow	0.0
Interval 5 – Red	0.0
Exit Phase(s)	2, 6
Priority	MEDIUM
Delay Time	#
Min Green Before Pre	1
Ped Clear Before Pre	0
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	#
Enable Backup Protection	N
Ped Clear Through Yellow	N
Omit Overlaps	-
Preempt Extend**	2

* Time defaults to time used for phase during normal operation
** Program Timing on Optical Detection Unit
\# See Note 7

Signal Upgrade - Temporary Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 23-441 (Sylva Rd.) at Hyatt Road

Division 14 Macon County Franklin

PLAN DATE: November 2021 REVIEWED BY: T.J. Williams
PREPARED BY: R.N. Zinser REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 043914 ENGINEER RICHARD N. ZINSER

DocuSigned by: R. N. Zinser Dec 15, 2021
SIGNATURE DATE

SIG. INVENTORY NO. 14-0955T

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