PHASING DIAGRAM

02+6   04

04 (PRE 2)

PHASING DIAGRAM DETECTION LEGEND

- ●——— DETECTED MOVEMENT
- ←——— UNDETECTED MOVEMENT (OVERLAP)
- ←– – – UNSIGNALIZED MOVEMENT
- ←– – –▸ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	Ø4	PRE 2	FLASH
21,22	G	R	R	Y
41,42,43	R	G	G	R
61,62	G	R	R	Y

SIGNAL FACE I.D.

◯ Denotes L.E.D.

R
Y   12"
G

21,22
41,42,43
61,62

2070L LOOP & DETECTOR INSTALLATION

LOOP	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	QUEUE MAX OCCUPANCY TIME	QUEUE GAP RESET TIME	PREEMPT INDEX FOR QUEUE	NEW CARD
2A	✳	✳	275	✳	2	Y	Y	-	-	1.9	-	-	-	-	Y
2B	6X6	4	45	Y	2	Y	Y	-	-	-	-	-	-	-	Y
4A	6x40	2-4-2	0	Y	4	Y	Y	-	-	-	3	-	-	-	Y
4B	6X40	2-4-2	0	Y	4	Y	Y	-	-	-	15	-	-	-	Y
6A	6x6	5	300	Y	6	Y	Y	-	-	1.8	-	-	-	-	Y
6B	6x6	4	90	Y	6	Y	Y	-	-	-	-	-	-	-	Y
✳✳ Q1	6X6	5	460	-	PRE 2	-	-	-	-	-	-	5	0.1	2	-

✳ Microwave Detection Zone
✳✳ See note 5

2 Phase
Fully Actually with Backup Preemption
Isolated

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Reposition existing signal heads numbered 21,22,43,61, and 62 and signs A and B.
4. Set all detector units to presence mode.
5. Program controller to initiate backup preemption upon activation of queue backup loops.
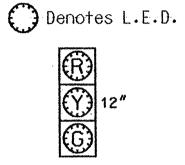6. Relocate existing microwave detector from previous temporary signal.

PLAN QUANTITIES

Pay Item	Feet
Signal Cable	–
Messenger Cable	–
Lead-in Cable	1250

EOP
EOP

R/W

I-40 WB Entrance Ramp B

22+23 +/- -L-
51' Lt. +/-

Direct Bury

Relocate Microwave Detector

SR 1101 (Harper Road)

R/W

R/W

45 MPH +1% Grade

(2A) (2B) 62 61 41 42 43 21 22 (A) 6B 6A
(4A) (4B)

45 MPH -3% Grade

I-40 WB Exit Ramp A

35 MPH +5% Grade

Q1
PS PS

R/W

2070L TIMING CHART

FEATURE	PHASE 2	4	6
Min Green 1 *	12	7	12
Extension 1 *	2.0	2.0	2.0
Max Green 1 *	45	30	45
Yellow Clearance	4.7	4.0	4.7
Red Clearance	2.5	2.0	2.5
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

* 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.

PREEMPT 2

2070 BACKUP PREEMPTION

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
Delay Time	0.0
Min Green Before Pre	7
Ped Clear Before Pre	0
Yellow Clear Before Pre	4.7
Red Clear Before Pre	2.5
Dwell Min Time	45
Enable Backup Protection	N
Ped Clear Through Yellow	N

*Clearance time defaults to time used for phase during normal operation.

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	
➤	Pavement Marking Arrow	➤
▬	Microwave Detection Zone	⬭
▒	Construction Zone	
⋈	Microwave Detector	⊷
Ⓐ	No Right Turn Sign (R3-1)	Ⓐ
Ⓑ	No Left Turn Sign (R3-2)	Ⓑ

Temporary Signal 3 - TCP Phase II

Prepared in the Offices of:

DEPARTMENT OF TRANSPORTATION
Division of Highways
Signals and Geometric Section
122 N. McDowell St., Raleigh, NC 27603

SR 1101 (Harper Road)
At
I-40 WB Exit Ramp A

Division 9	Forsyth County	Clemmons
PLAN DATE:	April 2004	REVIEWED BY: J. P. Galloway
PREPARED BY:	C.J. Collins	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL 24393
TIMOTHY J. WILLIAMS

SIGNATURE 7/1/04
DATE

SIG. INVENTORY NO. 09-0763 T3

SCALE
0   40
1"=40'