METRIC	PROJECT REFERENCE NO.	SHEET NO.
	U-2734	Sig. 64

3 Phase
(Fully-Actuated)
(Military Cutoff Road Closed Loop System)

PHASING DIAGRAM

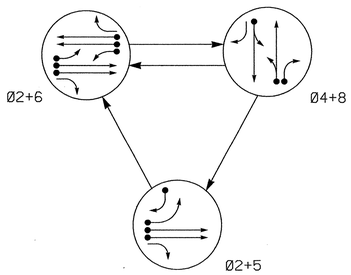
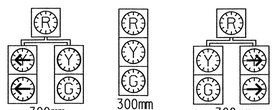


TABLE OF OPERATION				
SIGNAL FACE	PHASE Ø2+5	PHASE Ø2+6	PHASE Ø4+8	FLASH
21	G	G	R	Y
22, 23	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
61, 62, 63	R	G	R	Y
81, 82	R	R	G	R

PLAN QUANTITIES	
Pay Item	Meters
Signal Cable	50
Messenger Cable	0
Lead-in Cable	810

SIGNAL FACE I.D.

Denotes L.E.D.



PHASING DIAGRAM DETECTION LEGEND

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

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Pavement markings are existing.
3. Reposition existing signal head number 41.
4. Omit phase 5 during phase 6 on.
5. Program controller to clear from phase 2+6 to Phase 2+5 by progressing through phase 4+8 (see Electrical Details).
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
7. Set all detector units to presence mode.
8. Add Trimble Acutime 2000 (RS-232) GPS Unit for time synchronization until fiber optic cable is installed.
9. Remove Trimble Acutime 2000 (RS-232) GPS Unit upon installation of fiber optic cable and actuation of closed loop system.
10. Closed Loop System Data: Controller Asset #0369.

2070L TIMING CHART					
FEATURE	PHASE 2	4	5	6	8
Min Green 1 *	12	7	7	12	7
Extension 1 *	6.0	1.0	1.0	6.0	1.0
Max Green 1 *	100	25	15	100	25
Yellow Clearance	4.7	4.0	4.0	4.7	4.0
Red Clearance	1.5	2.5	1.5	1.5	2.5
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	1.5	-	-	1.5	-
Max Variable Initial *	34	-	-	34	-
Time Before Reduction *	15	-	-	15	-
Time To Reduce *	30	-	-	30	-
Minimum Gap	3.0	-	-	3.0	-
Recall Mode	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	YELLOW	-	-	YELLOW	-
Dual Entry	-	ON	-	-	ON
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.

2070L LOOP & DETECTOR INSTALLATION												
INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (M)	TURNS	DISTANCE FROM STOPBAR (M)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
2A	1.8X1.8	EXISTING	90	–	2	Y	Y	–	–	—	—	Y
2B	1.8X1.8	EXISTING	90	–	2	Y	Y	–	–	—	—	Y
4A	1.8X18	EXISTING	0	–	4	Y	Y	–	–	—	10	Y
5A	1.8X18	EXISTING	0	–	5	Y	Y	–	–	—	15	Y
					2	Y	Y	Y	–	—	3	Y
5B	1.8X12	EXISTING	0	–	5	Y	Y	–	–	—	15	Y
6A-S39	1.8X1.8	EXISTING	90	–	6	Y	Y	–	Y	—	—	Y
6B-S40	1.8X1.8	EXISTING	90	–	6	Y	Y	–	Y	—	—	Y
6C	1.8X18	EXISTING	0	–	6	Y	Y	–	–	—	3	Y
8A	1.8X18	EXISTING	0	–	8	Y	Y	–	–	—	—	Y
8B	1.8X18	EXISTING	+1.5	–	8	Y	Y	–	–	—	15	Y

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	■
	50mm Underground Conduit	
N/A	Right of Way with Marker	
→	Directional Arrow	→
→	Pavement Marking Arrow	→

Signal Upgrade

SEPI ENGINEERING GROUP
2300 Rexwoods Drive
Suite 370
Raleigh, NC 27607
Tel:919-789-9977 Fax:789-9591

Prepared for:
Traffic Engineering and Safety Systems Branch
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signals and Geometrics Section
122 N. McDowell St., Raleigh, NC 27603

SCALE 5 0 10
1:500

US 17 (Market Street)
at
SR 1363 (Bayshore Drive) and
SR 2717 (Torchwood Blvd.)

Division 3 | New Hanover County | Wilmington

PLAN DATE:	Oct. 2003	REVIEWED BY:	L. M. Eddins
PREPARED BY:	H. M. Surti	REVIEWED BY:	S. S. Asefnia

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA
SEAL
20104
ENGINEER
STEPHEN S. ASEFNIA

12/11/03
SIGNATURE DATE

SIG. INVENTORY NO. 03-0369

$$$$SYSTIME$$$$
$$$$SYSTIME$$$$
$$$$USERNAME$$$$