PROJECT REFERENCE NO.	SHEET NO.
R-2813C	SIG.12

PHASING DIAGRAM

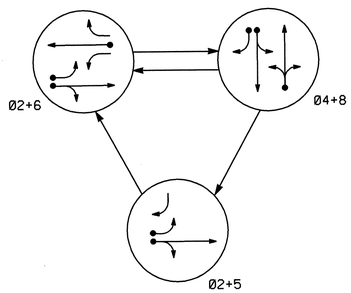
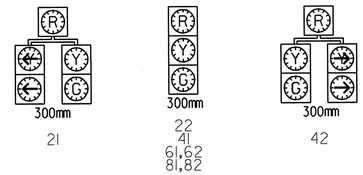


TABLE OF OPERATION

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

SIGNAL FACE I.D.

Denotes L.E.D.



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	5	90	Y	2	Y	Y	-	-	1.8	—	-
2B	1.8X1.8	4	27	Y	2	Y	Y	-	-	—	—	-
4A	1.8X18	2-4-2	0	Y	4	Y	Y	-	-	—	—	-
4B	1.8X18	2-4-2	0	Y	4	Y	Y	-	-	—	10	-
5A	1.8X18	2-4-2	0	Y	5	Y	Y	-	-	—	15	-
6A	1.8X1.8	5	90	Y	6	Y	Y	-	-	1.8	—	-
6B	1.8X1.8	4	27	Y	6	Y	Y	-	-	—	—	-
8A	1.8X18	2-4-2	0	Y	8	Y	Y	-	-	—	3	-

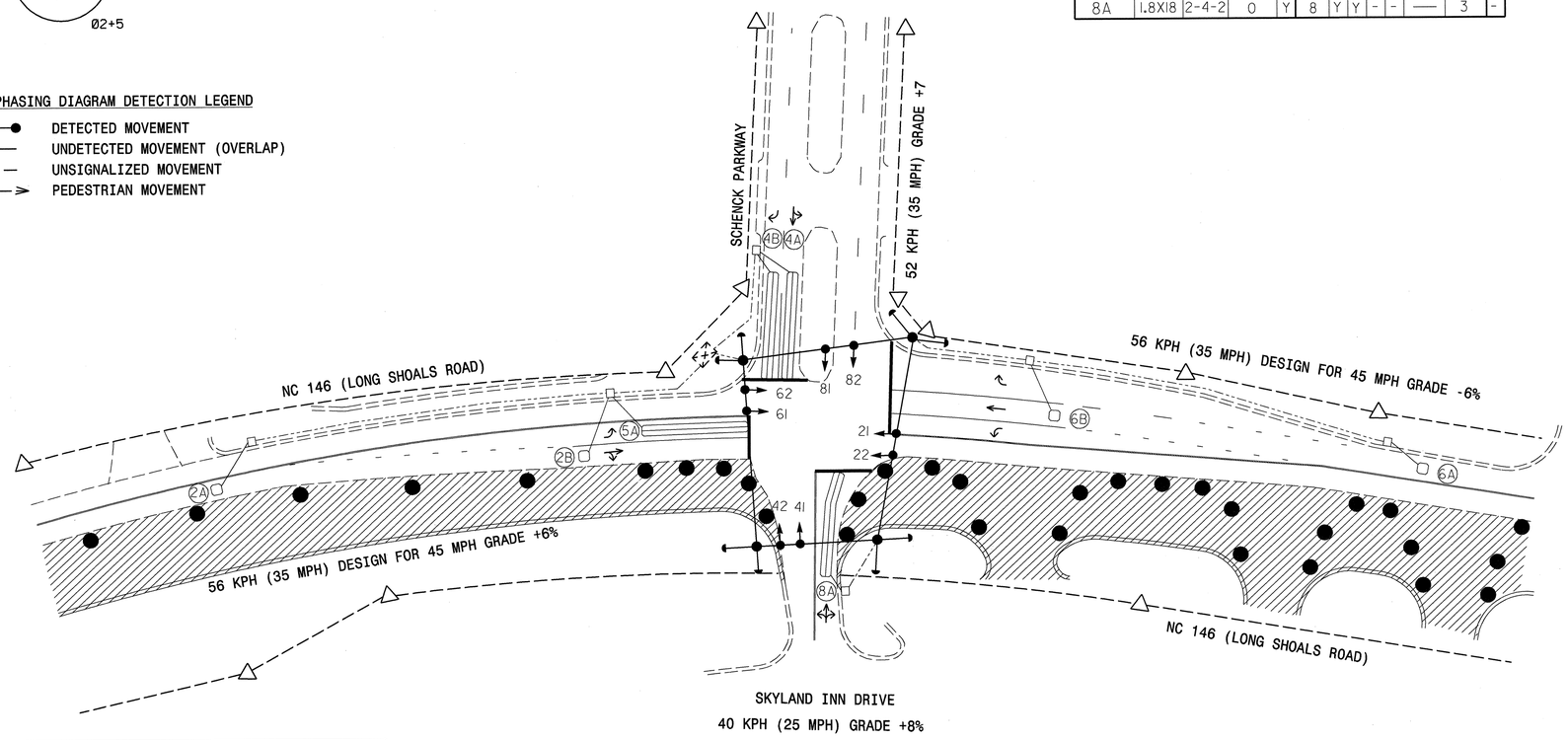
3 Phase Actuated
(Isolated)

NOTES

1. REFER TO "ROADWAY STANDARD DRAWINGS NCDOT", DATED JANUARY 2002 AND "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2002.
2. REPOSITION EXISTING SIGNAL HEADS NUMBERED 21,22,41,42,61,62,81,82.
3. OMIT PHASE 5 DURING PHASE 6 ON.
4. PROGRAM CONTROLLER TO CLEAR PHASE 2+6 TO PHASE 2+5 BY PROGRESSING THROUGH PHASE 4+8 (SEE ELECTRICAL DETAILS).
5. SET ALL DETECTOR UNITS TO PRESENCE MODE.

PHASING DIAGRAM DETECTION LEGEND

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



PLAN QUANTITIES

Pay Item	Meters
Signal Cable	—
Messenger Cable	—
Lead-in Cable	575

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	
	Construction Zone	
	Construction Barrels	

2070L TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 5	PHASE 6	PHASE 8
Min Green 1 *	12	7	7	12	7
Extension 1 *	2	2	2	2	2
Max Green 1 *	50	25	15	50	25
Yellow Clearance	5.1	4.0	4.0	5.1	4.0
Red Clearance	2.0	1.5	1.5	2.0	1.5
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	-	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.

TEMPORARY SIGNAL 2 - PHASE II - TCP 17

PLANS PREPARED BY :
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consulting engineers
5800 FARINGDON PLACE SUITE 105
FOR
DIVISION OF HIGHWAYS

Prepared for the Offices of:
State of North Carolina Department of Transportation Signals and Geometric Section
122 N. McDowell St., Raleigh, NC 27603

SCALE 1 : 500

NC 146 (LONG SHOALS ROAD)
AT
SCHENCK PARKWAY / SKYLAND INN DRIVE

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: 2-10-04 REVIEWED BY: D. MORTON
PREPARED BY: C.B. HOLDEN RK&K PROJECT NO. 302-079-SIG4

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 19798 ENGINEER DONALD W. MORTON

SIGNATURE 2-26-04 DATE

SIG. INVENTORY NO. 13-1126T2