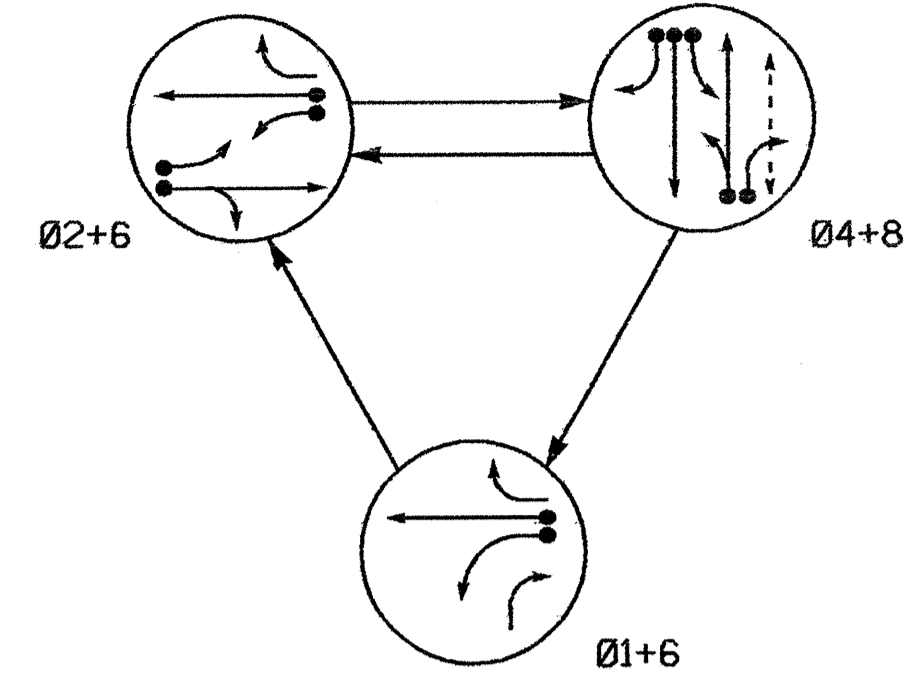


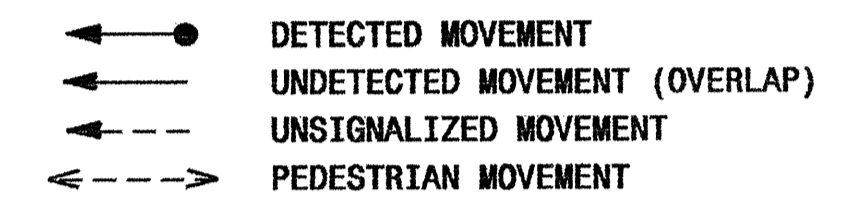
3 Phase Fully Actuated (Durham Signal System)

PHASING DIAGRAM

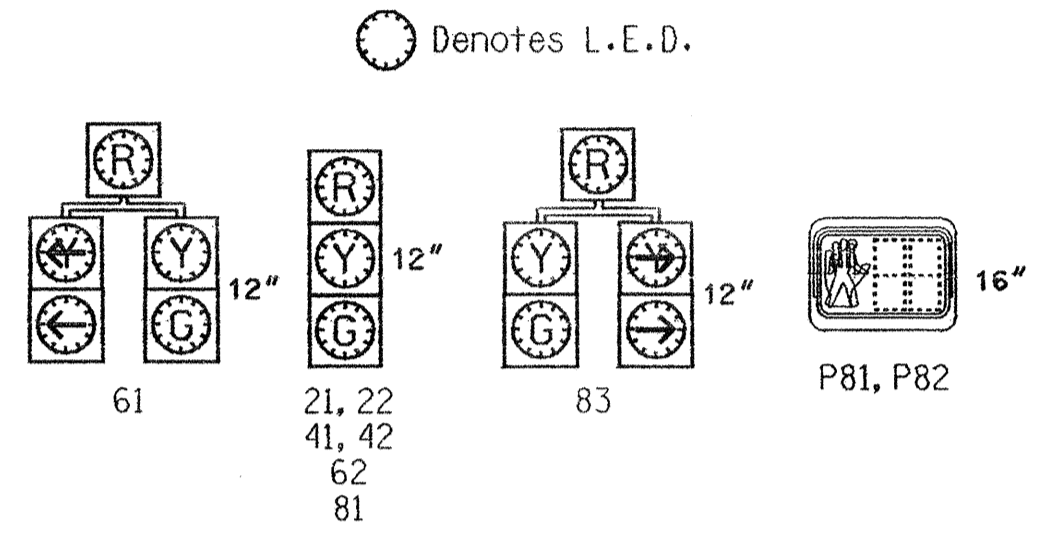


SIGNAL FACE	PHASE				
	Ø1+6	Ø2+6	Ø4+8	FL	SH
21, 22	R	G	R	Y	
41, 42	R	R	G	R	
61	G	G	R	Y	
62	G	G	R	Y	
81	R	R	G	R	
83	R	R	G	R	
P81, P82	DW	DW	W	DRK	

PHASING DIAGRAM DETECTION LEGEND

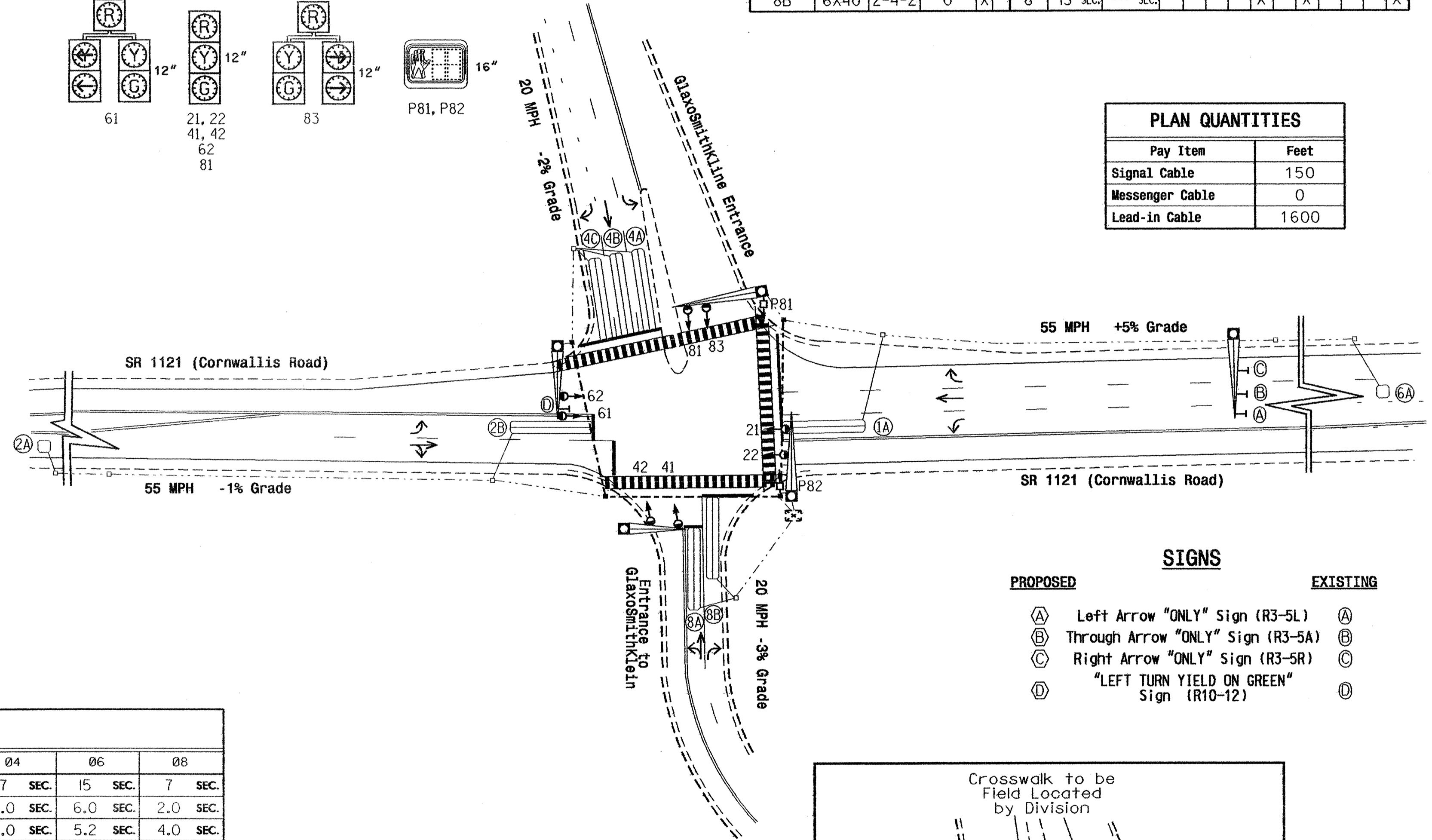


SIGNAL FACE I.D.



LOOP & DETECTOR UNIT INSTALLATION CHART															
170 CONTROLLER AND CABINET															
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW EXISTING	DETECTOR PROGRAMMING							STATUS			
					NEMA PHASE	TIMING		ATTRIBUTES							
						DELAY	CARRY (STRETCH)	PULL TIME DELAY	RECALL	REVERSE	COUNT		EXTENSION	TYPE 3	CALLING
1A	6X40	2-4-2	0	X	1	15 SEC.	— SEC.							X	
					4	15 SEC.	— SEC.				X	X	X		X
					6	3 SEC.	— SEC.	X			X	X	X		X
2A	6X6	6	420	X	2	— SEC.	— SEC.			X	X	X	X		X
2B	6X40	2-4-2	0	X	2	3 SEC.	— SEC.	X			X	X	X		X
4A	6X40	2-4-2	0	X	4	— SEC.	— SEC.				X	X			X
4B	6X40	2-4-2	0	X	4	— SEC.	— SEC.				X	X			X
4C	6X40	2-4-2	0	X	4	15 SEC.	— SEC.				X	X			X
6A	6X6	6	420	X	6	— SEC.	— SEC.			X	X	X	X		X
8A	6X40	2-4-2	0	X	8	3 SEC.	— SEC.				X	X	X		X
8B	6X40	2-4-2	0	X	8	15 SEC.	— SEC.				X	X	X		X

Pay Item	Feet
Signal Cable	150
Messenger Cable	0
Lead-in Cable	1600



SIGNS

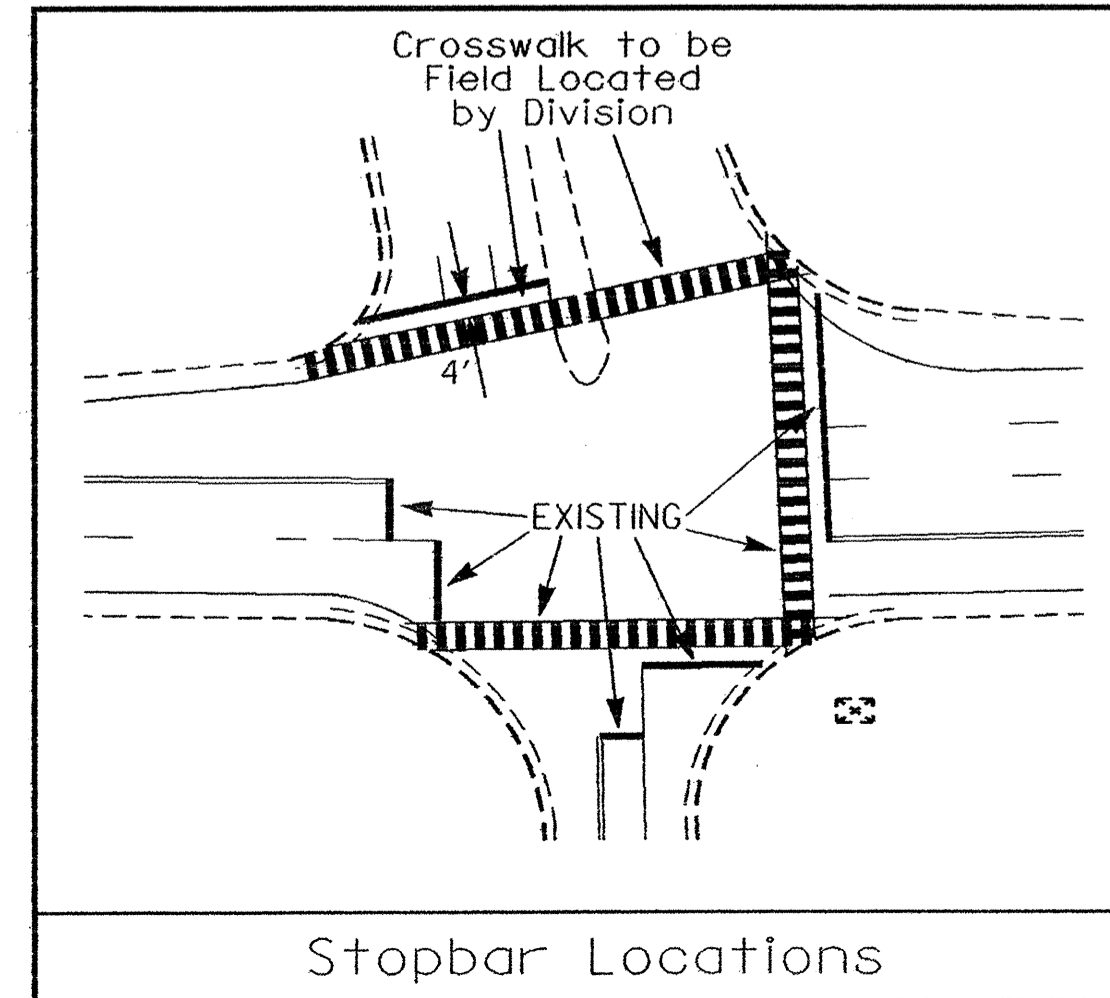
- | | |
|--|-----------------|
| PROPOSED | EXISTING |
| (A) Left Arrow "ONLY" Sign (R3-5L) | (A) |
| (B) Through Arrow "ONLY" Sign (R3-5A) | (B) |
| (C) Right Arrow "ONLY" Sign (R3-5R) | (C) |
| (D) "LEFT TURN YIELD ON GREEN" Sign (R10-12) | (D) |

LEGEND

- | | |
|--|---------------------------------|
| PROPOSED | EXISTING |
| ⊙ Traffic Signal Head | ⊙ Traffic Signal Head |
| ⊙ Modified Signal Head | N/A |
| T Sign | T Sign |
| ⊙ Pedestrian Signal Head With Push Button & Sign | ⊙ Pedestrian Signal Head |
| ⊙ Signal Pole with Guy | ⊙ Signal Pole with Guy |
| ⊙ Signal Pole with Sidewalk Guy | ⊙ Signal Pole with Sidewalk Guy |
| ⊙ Inductive Loop Detector | ⊙ Inductive Loop Detector |
| ⊙ Controller & Cabinet | ⊙ Controller & Cabinet |
| ⊙ Junction Box | ⊙ Junction Box |
| — 2-in Underground Conduit | — 2-in Underground Conduit |
| N/A Right of Way with Marker | △ Right of Way with Marker |
| → Directional Arrow | → Directional Arrow |
| ⊙ Metal Pole with Mastarm | ⊙ Metal Pole with Mastarm |
| N/A Directional Drill Conduit | — Directional Drill Conduit |

PHASE	Ø1	Ø2	Ø4	Ø6	Ø8
MINIMUM INITIAL *	7 SEC.	15 SEC.	7 SEC.	15 SEC.	7 SEC.
VEHICLE EXTENSION *	2.0 SEC.	6.0 SEC.	2.0 SEC.	6.0 SEC.	2.0 SEC.
YELLOW CHANGE INT.	4.0 SEC.	5.3 SEC.	4.0 SEC.	5.2 SEC.	4.0 SEC.
RED CLEARANCE	2.0 SEC.	1.0 SEC.	2.0 SEC.	1.4 SEC.	2.5 SEC.
MAXIMUM LIMIT *	20 SEC.	90 SEC.	25 SEC.	90 SEC.	25 SEC.
RECALL POSITION	NONE	VEH. RECALL	NONE	VEH. RECALL	NONE
VEHICLE CALL MEMORY	NONE	YELLOW LOCK	NONE	YELLOW LOCK	NONE
DOUBLE ENTRY	OFF	OFF	ON	OFF	ON
WALK *	— SEC.	— SEC.	— SEC.	— SEC.	4 SEC.
FLASHING DON'T WALK	— SEC.	— SEC.	— SEC.	— SEC.	18 SEC.
TYPE 3 LIMIT	— SEC.	— SEC.	— SEC.	— SEC.	— SEC.
ALTERNATE EXTENSION	— SEC.	— SEC.	— SEC.	— SEC.	— SEC.
ADD PER VEHICLE *	— SEC.	2.5 SEC.	— SEC.	2.5 SEC.	— SEC.
MAXIMUM INITIAL *	— SEC.	46 SEC.	— SEC.	46 SEC.	— SEC.
MAXIMUM GAP *	2.0 SEC.	7.0 SEC.	2.0 SEC.	7.0 SEC.	2.0 SEC.
REDUCE 0.1 SEC EVERY *	— SEC.	1.5 SEC.	— SEC.	1.5 SEC.	— SEC.
MINIMUM GAP	2.0 SEC.	3.4 SEC.	2.0 SEC.	3.4 SEC.	2.0 SEC.

* 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.



Signal Upgrade

SR 1121 (Cornwallis Road) at GlaxoSmithKline Entrances

Division 5 Durham County RTP

PLAN DATE: January 2005 REVIEWED BY:

PREPARED BY: A.B. Hambricht REVIEWED BY:

122 N. McDowell St., Raleigh, NC 27603

SCALE: 0 40
1" = 40'

SIGNATURE: *Robert J. Tibbitts* DATE: 3/2/05

SIG. INVENTORY NO. 05-1073