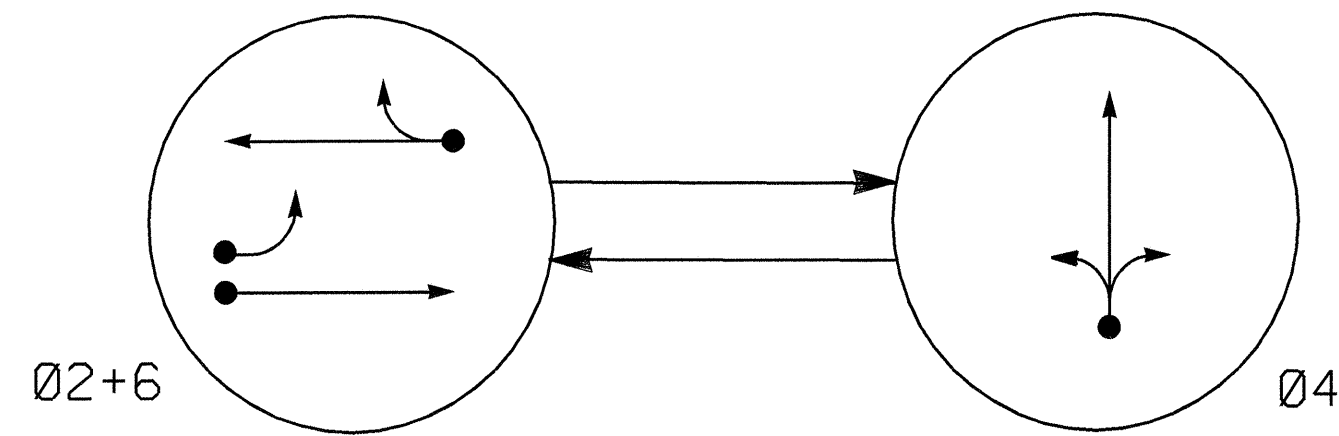


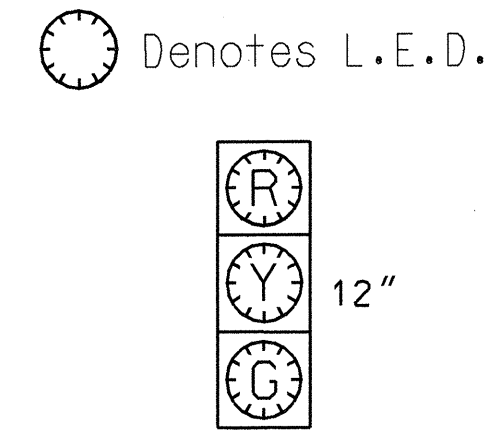
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.



21,22  
41,42  
61,62

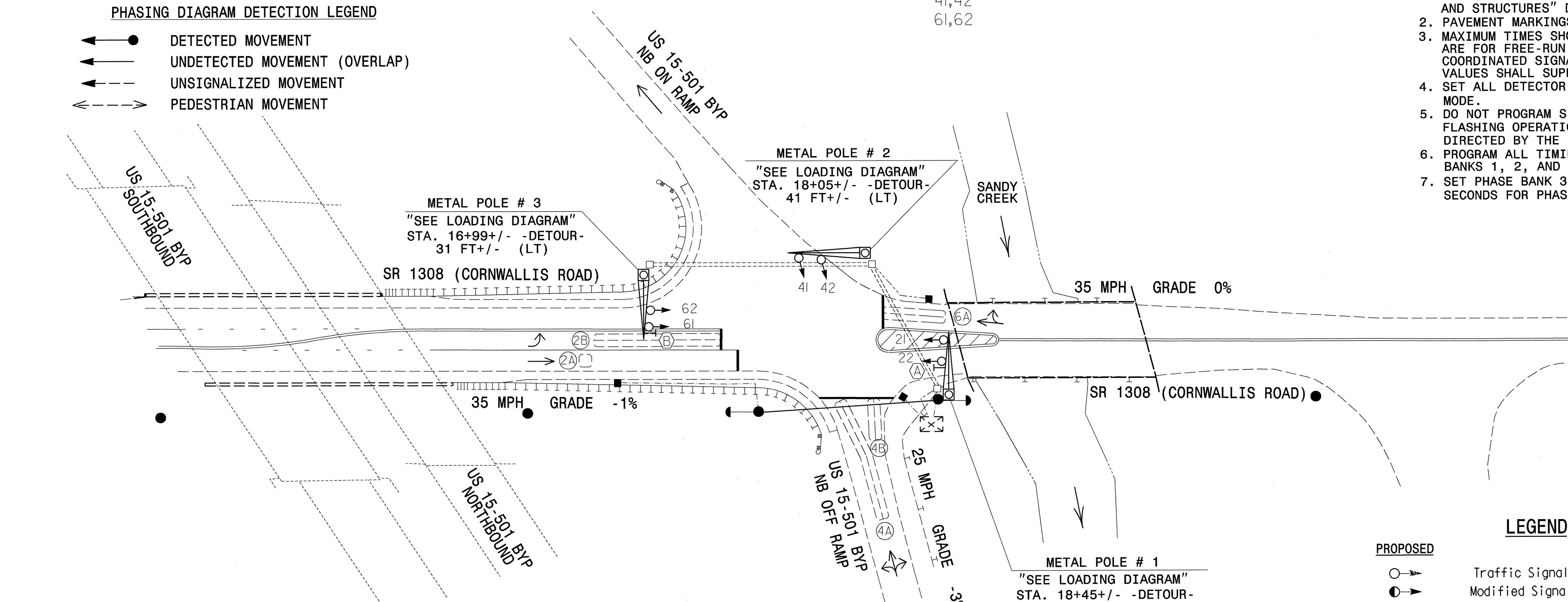
PLAN QUANTITIES

Pay Item	Feet
Signal Cable	530
Messenger Cable	—
Lead-in Cable	130

2 Phase Fully Actuated  
(Durham Signal System)

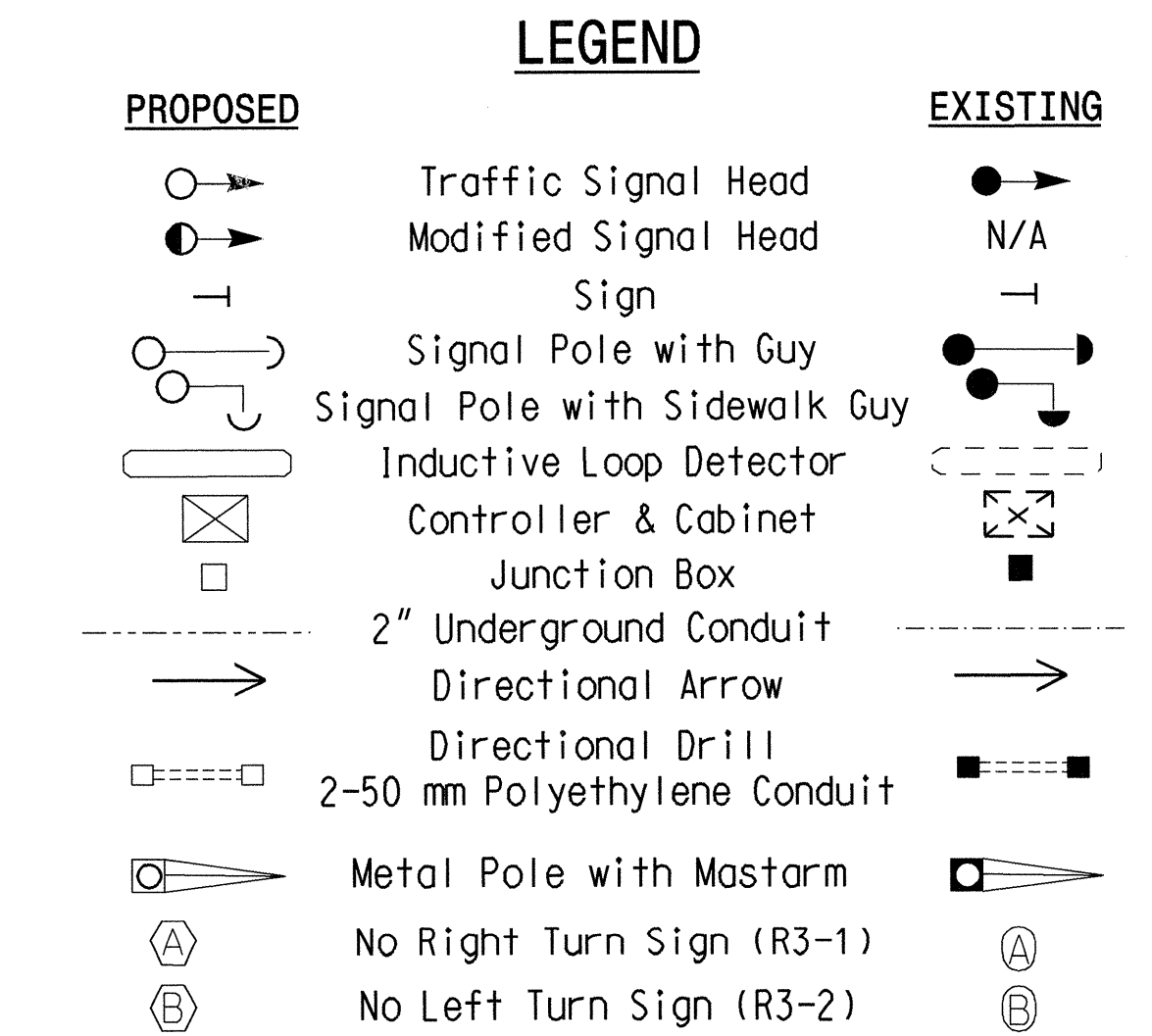
NOTES

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. MAXIMUM TIMES SHOWN IN TIMING CHART ARE FOR FREE-RUN OPERATIONS ONLY. COORDINATED SIGNAL SYSTEM TIMING VALUES SHALL SUPERSEDE THESE VALUES.
4. SET ALL DETECTOR UNITS TO PRESENCE MODE.
5. DO NOT PROGRAM SIGNAL FOR LATE NIGHT FLASHING OPERATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. PROGRAM ALL TIMING INFORMATION INTO PHASE BANKS 1, 2, AND 3 UNLESS OTHERWISE NOTED.
7. SET PHASE BANK 3 MAXIMUM LIMIT TO 250 SECONDS FOR PHASES USED.



PHASE	Ø2	Ø4	Ø6
MINIMUM INITIAL	10 SEC.	7 SEC.	10 SEC.
VEHICLE EXTENSION	4.0 SEC.	1.0 SEC.	4.0 SEC.
YELLOW CHANGE INT.	4.0 SEC.	4.0 SEC.	4.0 SEC.
RED CLEARANCE	1.5 SEC.	2.0 SEC.	1.5 SEC.
MAXIMUM LIMIT	35 SEC.	20 SEC.	35 SEC.
RECALL POSITION	VEH RECALL	NONE	VEH RECALL
VEHICLE CALL MEMORY	YELLOW LOCK	NONE	YELLOW LOCK
DOUBLE ENTRY	OFF	OFF	OFF
WALK	— SEC.	— SEC.	— SEC.
FLASHING DON'T WALK	— SEC.	— SEC.	— SEC.
TYPE 3 LIMIT	— SEC.	— SEC.	— SEC.
ALTERNATE EXTENSION	— SEC.	— SEC.	— SEC.
ADD PER VEHICLE	— SEC.	— SEC.	— SEC.
MAXIMUM INITIAL	— SEC.	— SEC.	— SEC.
MAXIMUM GAP	4.0 SEC.	1.0 SEC.	4.0 SEC.
REDUCE 0.1 SEC EVERY	— SEC.	— SEC.	— SEC.
MINIMUM GAP	4.0 SEC.	1.0 SEC.	4.0 SEC.

ZONE NO.	SIZE (FT)	DIST. FROM STOPBAR (FT)	NEW EXISTING	NEMA PHASE	CONTROLLER PROGRAMMING												STATUS	
					TIMING		ATTRIBUTES								SYSTEM	DETECTION ZONES	NEW	EXISTING
					DELAY	CARRY (STRETCH)	1	2	3	4	5	6	7	8				
2A	6X6	70	X	Ø2	— SEC.	— SEC.								X	X			X
2B	6X60	0	X	Ø2	— SEC.	— SEC.						X	X					X
4A	6X60	0	X	Ø4	5 SEC.	— SEC.						X	X					X
4B	6X20	0	X	Ø4	10 SEC.	— SEC.						X	X					X
6A	6X30	0	X	Ø6	— SEC.	— SEC.						X	X					X



FINAL

**PLANS PREPARED BY :**  
**RUMMEL KLEPPER & KAHL, LLP**  
*consulting engineers*  
 5800 FARINGDON PLACE SUITE 105  
 RALEIGH, NORTH CAROLINA 27609-3960

**FOR**  
**DIVISION OF HIGHWAYS**

Prepared for the Offices of:  
  
 122 N. McDowell St., Raleigh, NC 27603

**US 15-501 BYP NB RAMP**  
**AT**  
**SR 1308 (CORNWALLIS ROAD)**

DIVISION 05 DURHAM COUNTY DURHAM NC  
 PLAN DATE: 08-15-04 REVIEWED BY: D.W. MORTON  
 PREPARED BY: C.B. HOLDEN RK&K PROJECT NO. 302-079-SIG6

REVISIONS: \_\_\_\_\_ INIT. DATE

SCALE: \_\_\_\_\_  
 Horiz. 0' 15' 30'

SEAL

  
 SIGNATURE: \_\_\_\_\_ DATE: 9-3-04  
 SIG. INVENTORY NO. 05-0274