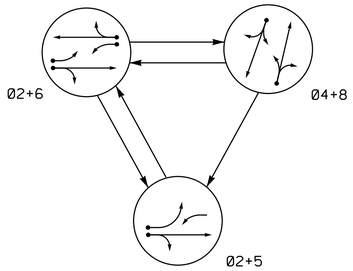
PROJECT REFERENCE NO.	SHEET NO.
SS-4905BI	Sig. 1.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

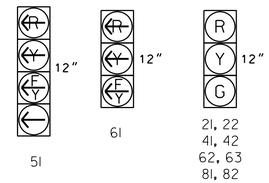
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	PHASE 02+6	PHASE 04+8	FLASH
21, 22	G	G	R	Y
41, 42	R	R	G	R
51	←	F Y	~~R~~	~~Y~~
61	~~F Y~~	F Y	~~R~~	~~Y~~
62, 63	R	G	R	Y
81, 82	R	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



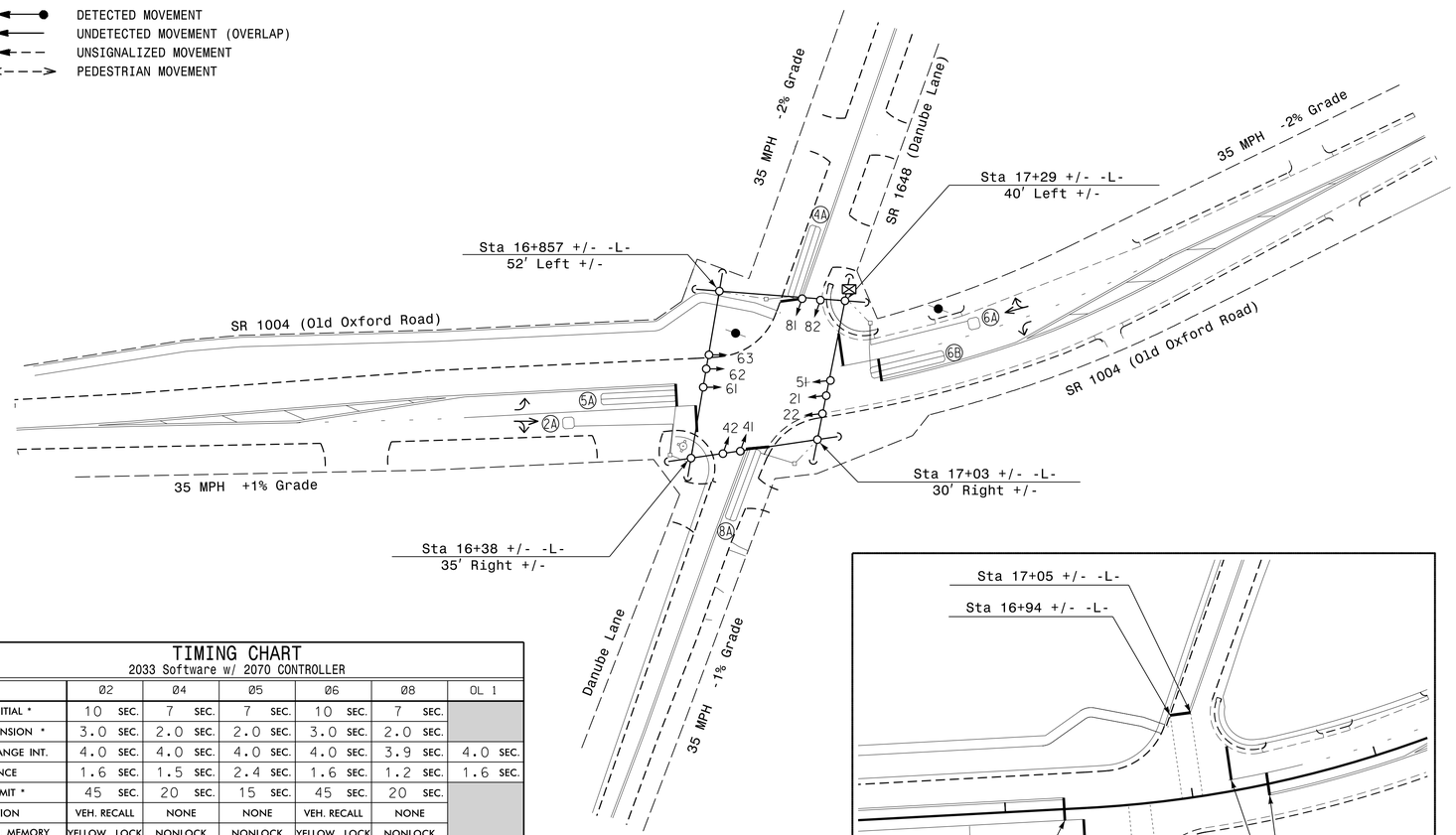
2033 SOFTWARE w/ 2070 CONTROLLER LOOP & DETECTOR UNIT INSTALLATION CHART

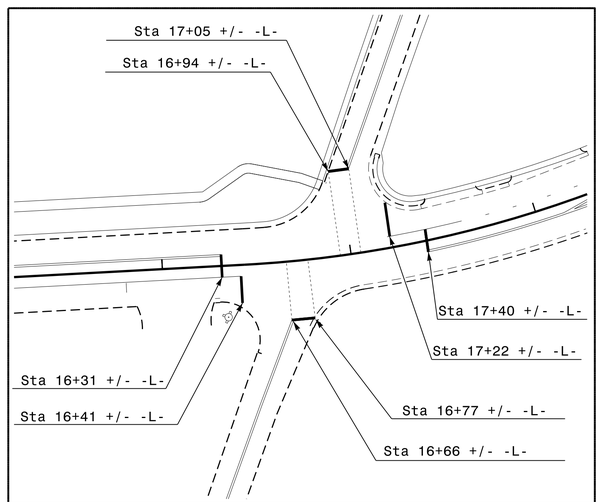
INDUCTIVE LOOPS						DETECTOR PROGRAMMING													
							TIMING		ATTRIBUTES								STATUS	
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	NEMA PHASE	DELAY	CARRY (STRETCH)	1 FULL TIME DELAY	2 PEDESTRIAN CALL	3 RESERVED	4 COUNT	5 EXTENSION	6 TYPE 3	7 CALLING	8 ALTERNATE	SYSTEM LOOPS	NEW	EXISTING
2A	6X6	4	70	X	-	2	- SEC.	- SEC.	-	-	-	-	X	-	X	-	-	X	-
4A	6X40	2-4-2	0	X	-	4	15 SEC.	- SEC.	-	-	-	-	X	-	X	-	-	X	-
5A	6X40	2-4-2	0	X	-	5	15 SEC.	- SEC.	-	-	-	-	X	-	X	-	-	X	-
						2	- SEC.	- SEC.	-	-	-	-	X	-	X	-	-	X	-
6A	6X6	4	70	X	-	6	- SEC.	- SEC.	-	-	-	-	X	-	X	-	-	X	-
6B	6X40	2-4-2	+5	X	-	6	- SEC.	- SEC.	-	-	-	-	X	-	X	-	-	X	-
8A	6X40	2-4-2	0	X	-	8	15 SEC.	- SEC.	-	-	-	-	X	-	X	-	-	X	-

3 Phase
Fully Actuated
(Durham Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.





Proposed Stopbar Locations

TIMING CHART

2033 Software w/ 2070 CONTROLLER

PHASE	02	04	05	06	08	OL 1
MINIMUM INITIAL *	10 SEC.	7 SEC.	7 SEC.	10 SEC.	7 SEC.	
VEHICLE EXTENSION *	3.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 SEC.	2.0 SEC.	
YELLOW CHANGE INT.	4.0 SEC.	4.0 SEC.	4.0 SEC.	4.0 SEC.	3.9 SEC.	4.0 SEC.
RED CLEARANCE	1.6 SEC.	1.5 SEC.	2.4 SEC.	1.6 SEC.	1.2 SEC.	1.6 SEC.
MAXIMUM LIMIT *	45 SEC.	20 SEC.	15 SEC.	45 SEC.	20 SEC.	
RECALL POSITION	VEH. RECALL	NONE	NONE	VEH. RECALL	NONE	
VEHICLE CALL MEMORY	YELLOW LOCK	NONLOCK	NONLOCK	YELLOW LOCK	NONLOCK	
DOUBLE ENTRY	OFF	ON	OFF	OFF	ON	
WALK *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	
FLASHING DON'T WALK	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	
TYPE 3 LIMIT	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	
ALTERNATE EXTENSION	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	
ADD PER VEHICLE *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	
MAXIMUM INITIAL *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	
MAXIMUM GAP*	3.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 SEC.	2.0 SEC.	
REDUCE 0.1 SEC EVERY *	– SEC.	– SEC.	– SEC.	– SEC.	– SEC.	
MINIMUM GAP	3.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 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.

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	

This plan supersedes the plan sealed on 10/22/14.

New Installation

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1004 (Old Oxford Road)
at
SR 1648 (Danube Lane)

Division 5 Durham County Durham

PLAN DATE: May 2013 REVIEWED BY:
PREPARED BY: C.E. Carter REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 036833 ENGINEER RYAN W. HOUGH
DocuSigned by: Ryan W. Hough
43D32DF4A2654C3
1/14/2015
DATE

SIG. INVENTORY NO. 05-2461

21-JAN-2015 08:35
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