3 Phase Fully Actuated w/ Emergency Vehicle Preemption (High Point Signal System)

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

DETECTOR PROGRAMMING

45 MPH -1% Grade

SR 1009 (N. Main St.)

<u>_60</u>

INDUCTIVE LOOPS

FROM

STOPBAR

6X6 90 EXIST

6X40 0 2-4-2

6X40 0 2-4-2

6X6 100 EXIST

6X40 0 2-4-2

0 2-4-2

SIZE (FT)

6X40

2A,2B 6X6 300 EXIST

6A,6B 6X6 300 EXIST

6X40

LOOP

2C, 2D

2E

88

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 1 may be lagged.
- 4. Set all detector units to presence mode.
- 5. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- 6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 7. Remove existing "Left Turn Yield on Green" ball Sign (R10-12).
- 8. Emergency Vehicle Preemption switch is located in the City of High Point Fire Station #4 on Old Winston Rd.
- 9. The Divsion Traffic Engineer will determine the Delay Before Preempt, and Preempt Dwell Min Green Time for the Emergency Vehicle Preemption timing.
- 10. Program signal heads numbered 81 and 82 to clear to all red before going into preempt.
- 11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

<u>PROPOSED</u>		EXISTING
\bigcirc	Traffic Signal Head	
O	Modified Signal Head	N/A
\dashv	Sign	\dashv
\downarrow	Pedestrian Signal Head With Push Button & Sign	•
\bigcirc	Signal Pole with Guy	•
S	ignal Pole with Sidewalk Guy	y • • • • • • • • • • • • • • • • • • •
	Inductive Loop Detector	$\subset = = \supset$
	Controller & Cabinet	K_X K_ \Z
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
\longrightarrow	Directional Arrow	\longrightarrow

Signal Upgrade



SR 1009 (N. Main St.) Rollo Avo /Old Winston Dd

vision 7 Guilford County High Point N DATE: May 2014 REVIEWED BY: PARED BY: R.N. Zinser REVIEWED BY:	Belle Ave./Ol	a winston	RU.
,	vision 7 Guilford (County	High Point
PARED BY: R.N. Zinser REVIEWED BY:	N DATE: May 2014	REVIEWED BY:	
	PARED BY: R.N. Zinser	REVIEWED BY:	

Guilford C	County	High	Point	11111
May 2014	REVIEWED BY:			= 7
R.N. Zinser	REVIEWED BY:			11)
REVISIONS		INIT.	DATE	DocuSigne
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SEAL

PHASING DIAGRAM	EV PREEMPT PHASES (Medium Priority)	TABLE OF	OPE	:RA	ΓIΟN	<u> </u>	
	(РНА	SE		
		SIGNAL FACE	Ø 1 + 6	Ø 2 + 6	Ø 4 + 8	E V P	FLASH
04+8		11	-	- F			-Y
	\	21	- F	- F	-R	-R	- Y
	EVP 2	22, 23	R	G	R	R	Υ
	(03+8)	41, 42	R	R	G	R	R
		62, 63	G	G	R	R	Υ
Y		81	R	R	G	G	R
		82	R	R	G	G	R

SIGNAL FACE I.D.

All Heads L.E.D.

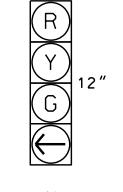
PHASING DIAGRAM DETECTION LEGEND

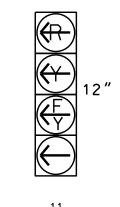
DETECTED MOVEMENT

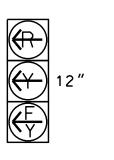
02+6

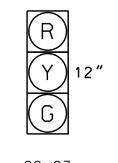
UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT

← − − > PEDESTRIAN MOVEMENT

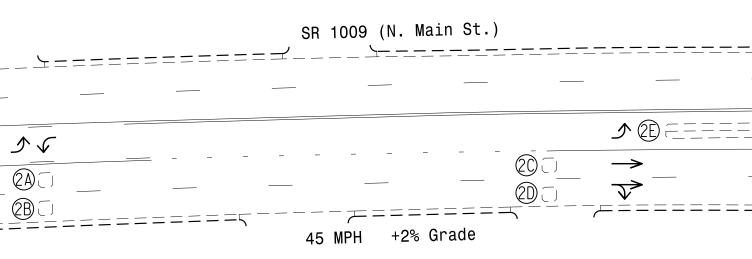








22, 23 41, 42 62, 63 82



 			_
 	 - - 45 MPH	 = = = = = = = +2% Grade	20 J 20 J -

OA	ASIS 20)70 TIN	MING CH	HART	
		PHASE			
FEATURE	1	2	4	6	8
n Green 1 *	7	12	7	12	7
ension 1 *	2.0	2.0	2.0	2.0	2.0
x Green 1 *	15	45	20	45	20
low Clearance	3.0	4.6	4.3	4.6	4.0
d Clearance	2.8	1.3	1.7	1.3	1.7
d Revert	2.0	2.0	2.0	2.0	2.0
ılk 1 *	-	-	-	-	-
n't Walk 1	-	-	-	-	-
conds Per Actuation *	-	-	-	-	-
x Variable Initial *	-	-	-	-	-
ne Before Reduction *	-	-	-	-	-
ne To Reduce *	-	-	-	-	-
nimum Gap	-	-	-	-	-
call Mode **	-	SOFT RECALL	-	SOFT RECALL	-
nicle Call Memory	-	YELLOW	-	YELLOW	-
al Entry	-	-	ON	-	ON

- lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.
- ** May be changed to Min Recall by Time of Day at discretion of City Traffic Engineer

OASIS 2070 EV	PREEMPT
FUNCTION	EVP 2
Interval 1 – Dwell Green	255
Interval 1 — Dwell Yellow	4.0
Interval 1 — Dwell Red	1.7
Interval 5 – Exit Green	1
Interval 5 — Yellow	0.0*
Interval 5 — Red	0.0*
Exit Phase(s)	2+6
Priority	MED
Delay Time	* *
Min Green Before Pre	1
Ped Clear Before Pre	0
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	**
Enable Backup Protection	Y
Ped Clear Through Yellow	N
Omit Overlaps	-

* Time defaults to time used for phase during normal

operation. ** See Note 9