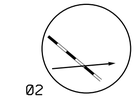
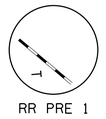
PROJECT REFERENCE NO.	SHEET NO.
C-5558	Sig. 171.0

PHASING DIAGRAM



RAIL PREEMPT PHASE
(High Priority)



QUEUE PREEMPT PHASE
(Medium Priority)

PHASING DIAGRAM DETECTION LEGEND

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

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART													
INDUCTIVE LOOPS						DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP		PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
Q1 #	6X15	**	EXIST	-		PRE 2	-	-	-	-	5	-	Y
Q2 #	6X15	**	EXIST	-		PRE 2	-	-	-	-	5	-	Y

** Locate loop so back of loop is at least 20 feet from RR Exit Gate

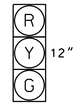
See Note 7

TABLE OF OPERATION				
SIGNAL FACE	PHASE			
	02	PRE 1	QUEUE 2	FLASH
21, 22	G	R	R	R
Sign A	OFF	ON	ON	*

* See Note 5

SIGNAL FACE I.D.

All Heads L.E.D.



21,22

OASIS 2070 TIMING CHART	
FEATURE	PHASE 2
Min Green 1 *	5
Extension 1 *	0.0
Max Green 1 *	10
Yellow Clearance	4.0
Red Clearance	2.0
Red Revert	0.0
Walk 1 *	-
Don't Walk 1	-
Seconds Per Actuation *	-
Max Variable Initial *	-
Time Before Reduction *	-
Time To Reduce *	-
Minimum Gap	-
Recall Mode	-
Vehicle Call Memory	-
Dual Entry	-
Simultaneous Gap	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown.

OASIS 2070 RR PREEMPT	
FUNCTION	PRE 1
Interval 1 – Track Clearance Green	0
Interval 1 – Track Clearance Yellow	0.0
Interval 1 – Track Clearance Red	0.0
Interval 2 – Dwell Green	255
Interval 2 – Dwell Yellow	0.0*
Interval 2 – Dwell Red	0.0*
Interval 5 – Exit Green	1
Interval 5 – Yellow	0.0
Interval 5 – Red	0.0
Exit Phase(s)	2
Priority	HIGH
Delay Time	0
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	5
Enable Backup Protection	N
Ped Clear Through Yellow	N
Omit Overlaps	-

* Time defaults to time used for phase during normal operation

This signal is designed for Advanced Preemption

OASIS 2070 QUEUE PREEMPT	
FUNCTION	PRE 2
Interval 1 – Dwell Green	255
Interval 1 – Dwell Yellow	0.0*
Interval 1 – Dwell Red	0.0*
Interval 5 – Exit Green	1
Interval 5 – Yellow	0.0
Interval 5 – Red	0.0
Exit Phase(s)	2
Priority	MED
Delay Time	0
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	1
Enable Backup Protection	N
Ped Clear Through Yellow	N
Omit Overlaps	-

* Time defaults to time used for phase during normal operation

2 Phase
Fully Actuated
With Railroad Preemption
and Queue Preemption
(High Point Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Ensure flashing operation does not alter operation of blankout sign.
6. Blankout sign Ⓐ to illuminate and remain "ON" during all yellow and red displays for signal heads 21 and 22.
7. These loops serve as queue backup detectors. After 5 seconds of constant actuation, the detector unit places a call to the controller to preempt normal operation to all red to prevent vehicle queuing on the railroad tracks.
8. Pavement markings are existing.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Railroad Preemption shall have priority over Queue Preemption.
11. Queue Preempt to be disabled during phase 8 green at signal 07-1268.

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 with Marker	
	Directional Arrow	
	Type II Signal Pedestal	
N/A	Curb Ramp	
N/A	Railroad Tracks	
N/A	Railroad Cantilever	
N/A	Railroad Gate and Flasher	
Ⓐ	"NO RIGHT TURN" L.E.D. Blankout Sign	Ⓐ
Ⓑ	"DO NOT STOP ON TRACKS" Sign (R8-8)	Ⓑ
Ⓒ	"STOP HERE ON RED" Sign (R10-6)	Ⓒ

Signal Upgrade - Queue Cutter Signal

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

SR 1334 (Dillon Rd.)
at
Norfolk Southern Railway
Crossing 722 354N

Division 7 Guilford County Jamestown

PLAN DATE: April 2014 REVIEWED BY:
PREPARED BY: R.N. Zinser REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: 4/20/2015
SIGNATURE DATE

SIG. INVENTORY NO. 07-2127

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