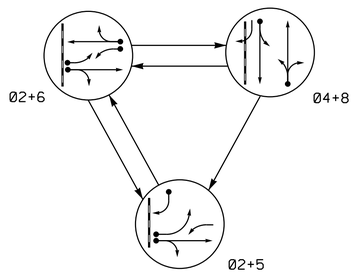
PROJECT REFERENCE NO.	SHEET NO.
38404	Sig. 9

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

RAIL PREEMPT PHASES

(High Priority)

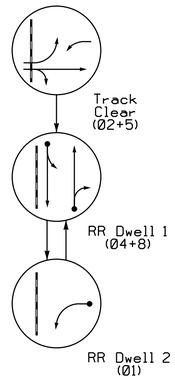


TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	02+6	04+8	CLEARR	DWRR1	DWRR2	FLASH
11	~~F Y~~	~~F Y~~	~~R~~	~~F Y~~	~~R~~	~~←~~	~~Y~~
21, 22	G	G	R	G	R	R	Y
41	R	R	G	R	G	R	R
42	R/←	R	G	R	G	R	R
51	~~←~~	~~F Y~~	~~R~~	~~←~~	~~R~~	~~R~~	~~Y~~
61, 62	R	G	R	R	R	R	Y
81, 82	R	R	G	R	G	R	R
SIGN B	OFF	OFF	OFF	ON	ON	ON	*
SIGN C	OFF	OFF	OFF	ON	ON	ON	*

* SEE NOTE 9

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
2A	6X30	+5	2-4-2	Y	2	Y	Y	-	-	-	-	-
4A	6X60	+5	EXIST	-	4	Y	Y	-	-	3	-	-
5A	6X30	+5	2-4-2	Y	5	Y	Y	-	-	15	-	-
					2	Y	Y	-	-	-	-	-
5B	6X25	0*	2-4-2	Y	5	Y	Y	-	-	10	-	-
					2	Y	Y	-	-	-	-	-
5C	6X60	+5	EXIST	-	5	Y	Y	-	-	15	-	-
6A	6X60	+5	EXIST	-	1/6	Y	Y	-	-	3	-	-
6B	6X60	+5	EXIST	-	6	Y	Y	-	-	-	-	-
8A	6X60	+5	EXIST	-	8	Y	Y	-	-	5	-	-

* Located at Stopbar at RR Gate

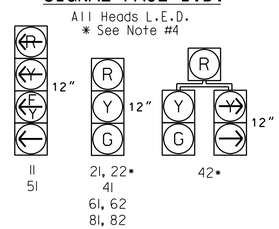
3 Phase Fully Actuated W/Railroad Preemption (Isolated)

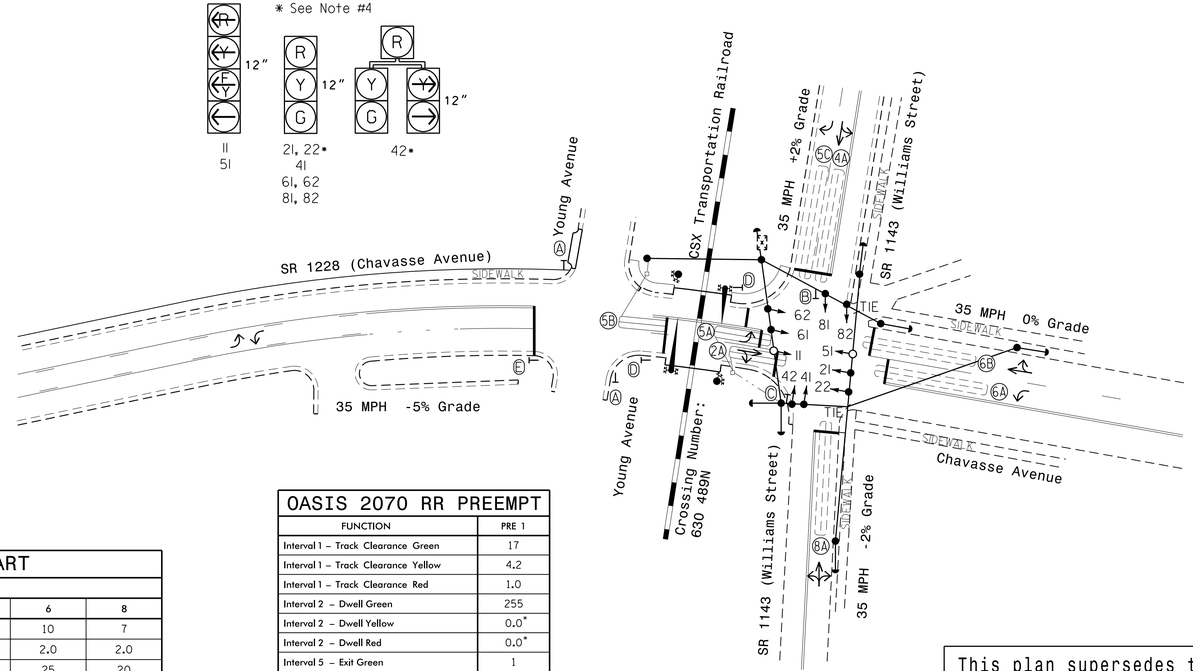
NOTES

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. Reposition existing signal heads number 61 and 62.
4. Remove bags and re-connect heads 21, 22, and 42.
5. Remove bags and re-connect blankout signs B and C.
6. Re-connect loop 5C.
7. Phase 5 may be lagged.
8. Set all detector units to presence mode.
9. Ensure flashing operation does not alter operation of blankout signs.

SIGNAL FACE I.D.

All Heads L.E.D.
* See Note #4





OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	7	10	7	7	10	7
Extension 1 *	2.0	2.0	2.0	2.0	2.0	2.0
Max Green 1 *	10	25	20	10	25	20
Yellow Clearance	3.0	4.2	3.7	3.1	4.2	4.0
Red Clearance	1.6	1.0	1.4	1.4	1.0	1.2
Red Revert	2.0	1.4	2.0	1.4	2.0	2.0
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	-	-	-	-	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

* 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.

OASIS 2070 RR PREEMPT

FUNCTION	PRE 1
Interval 1 – Track Clearance Green	17
Interval 1 – Track Clearance Yellow	4.2
Interval 1 – Track Clearance Red	1.0
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+6
Priority	HIGH
Delay Time	0
Min Green Before Pre	1
Ped Clear Before Pre	0
Yellow Clear Before Pre	4.2
Red Clear Before Pre	1.4
Dwell Min Time	7
Enable Backup Protection	N
Ped Clear Through Yellow	N
Omit Overlaps	B

* Time defaults to time used for phase during normal operation

This signal was designed for simultaneous preemption.

This plan supersedes the plan sealed on 4/9/14.

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	
N/A	Railroad Gate and Flasher	
N/A	Railroad Tracks	
Ⓐ	"STOP" Sign (R1-1)	Ⓐ
Ⓑ	"NO LEFT TURN - TRAIN" LED Blankout Sign	Ⓑ
Ⓒ	"NO RIGHT TURN - TRAIN" LED Blankout Sign	Ⓒ
Ⓓ	"DO NOT STOP ON TRACKS" Sign (R8-8)	Ⓓ
Ⓔ	"DO NOT BLOCK INTERSECTION" Sign (R10-7)	Ⓔ

Signal Upgrade - Final Design

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

SR 1228 (Chavasse Avenue) at SR 1143 (Williams Street)

Division 5 Vance County Henderson

PLAN DATE: March 2015 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 630320FAA2654C3... 3/30/2015 DATE

SIG. INVENTORY NO. 05-0453

31-MAR-2015 10:02
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