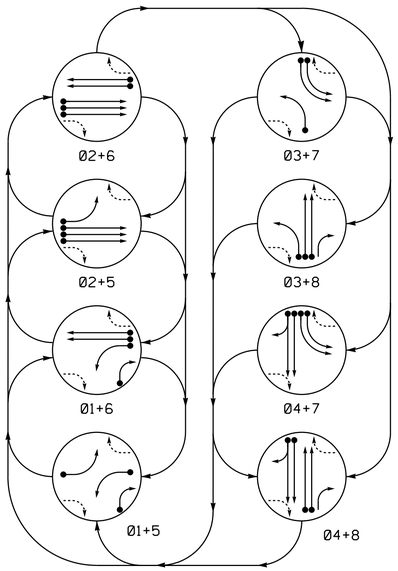
PROJECT REFERENCE NO.	SHEET NO.
B-4565	Sig. 5.0

PHASING DIAGRAM



EV PREEMPT PHASES

(Medium Priority)

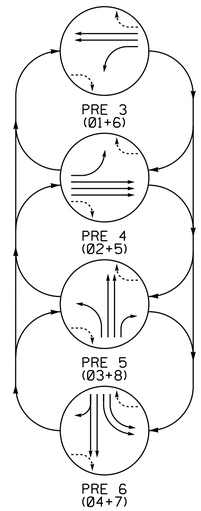
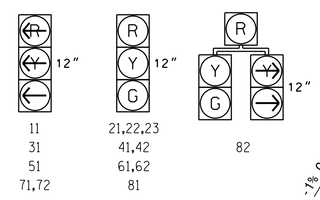


TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	EVP3	EVP4	EVP5	EVP6	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~
21,22,23	R	R	G	G	R	R	R	R	R	G	R	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	←	←	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	~~R~~
41,42	R	R	R	R	R	R	G	G	R	R	R	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	~~R~~	~~R~~
61,62	R	G	R	G	R	R	R	R	G	R	R	R	Y
71,72	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~
81	R	R	R	R	R	G	R	G	R	R	G	R	R
82	R/~~R~~	R/~~R~~	R	R	R	G	R	G	R	R	G	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



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
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	-	-	-
1B	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	-
2A/S01	6X6	420	6	-	2	Y	Y	-	-	-	Y	-
2B/S02	6X6	420	6	-	2	Y	Y	-	-	-	Y	-
2C/S03	6X6	420	6	-	2	Y	Y	-	-	-	Y	-
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	-
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	10	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	-	-	-
6A/S07	6X6	300	4	-	6	Y	Y	-	-	-	Y	-
6B/S08	6X6	300	4	-	6	Y	Y	-	-	-	Y	-
7A	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
7B	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
8A/S11	6X6	300	4	Y	8	-	Y	-	2.1	-	Y	-
8B/S12	6X6	300	4	Y	8	-	Y	-	2.1	-	Y	-
8C	6X40	0	2-4-2	-	8	Y	Y	-	-	-	-	-
8D	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	-
S04	6X6	+225	4	Y	-	-	-	-	-	-	Y	-
S05	6X6	+225	4	Y	-	-	-	-	-	-	Y	-
S06	6X6	+225	4	Y	-	-	-	-	-	-	Y	-
S09	6X6	+165	5	Y	-	-	-	-	-	-	Y	-
S10	6X6	+165	5	Y	-	-	-	-	-	-	Y	-

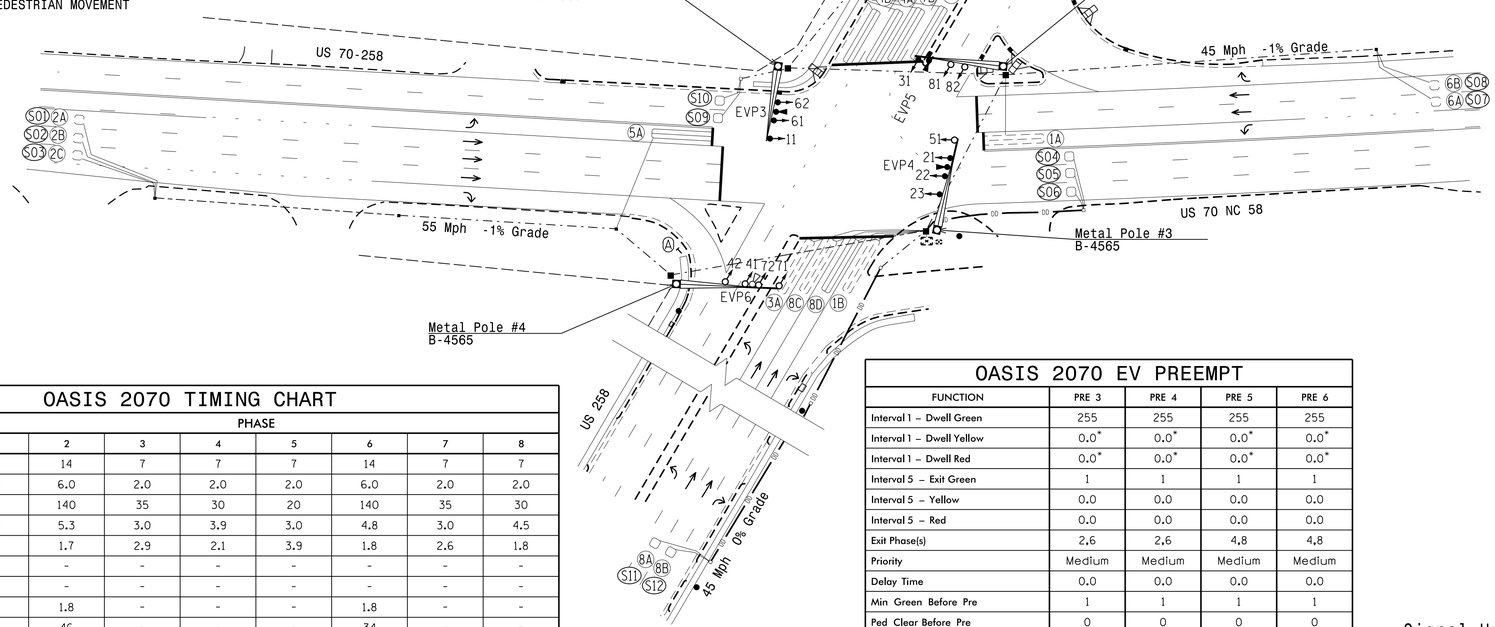
8 Phase w/ EV Preempt
Fully Actuated
Kinston Signal System

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 1 and/or 5 may be lagged.
4. Phase 3 and/or 8 may be lagged.
5. Set all detector units to presence mode.
6. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green 1 *	7	14	7	7	7	14	7	7
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max Green 1 *	20	140	35	30	20	140	35	30
Yellow Clearance	3.0	5.3	3.0	3.9	3.0	4.8	3.0	4.5
Red Clearance	3.7	1.7	2.9	2.1	3.9	1.8	2.6	1.8
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	1.8	-	-	-	1.8	-	-
Max Variable Initial *	-	46	-	-	-	34	-	-
Time Before Reduction *	-	30	-	-	-	30	-	-
Time To Reduce *	-	60	-	-	-	60	-	-
Minimum Gap	-	3.5	-	-	-	3.5	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	ON	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 EV PREEMPT

FUNCTION	PRE 3	PRE 4	PRE 5	PRE 6
Interval 1 – Dwell Green	255	255	255	255
Interval 1 – Dwell Yellow	0.0*	0.0*	0.0*	0.0*
Interval 1 – Dwell Red	0.0*	0.0*	0.0*	0.0*
Interval 5 – Exit Green	1	1	1	1
Interval 5 – Yellow	0.0	0.0	0.0	0.0
Interval 5 – Red	0.0	0.0	0.0	0.0
Exit Phase(s)	2,6	2,6	4,8	4,8
Priority	Medium	Medium	Medium	Medium
Delay Time	0.0	0.0	0.0	0.0
Min Green Before Pre	1	1	1	1
Ped Clear Before Pre	0	0	0	0
Yellow Clear Before Pre	0.0*	0.0*	0.0*	0.0*
Red Clear Before Pre	0.0*	0.0*	0.0*	0.0*
Dwell Min Time	14	14	7	7
Enable Backup Protection	N	N	N	N
Ped Clear Through Yellow	N	N	N	N
Omit Overlaps	A	-	-	-
Preempt Extend**	2	2	2	2

* Time defaults to time used for phase during normal operation
** Program Timing on Optical Detection Unit

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	
	Metal Pole with Mastarm	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Optical Detector	
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ

Signal Upgrade Final

Prepared in the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 50 1"=50'

US 70-258/US 70 NC 58
At
US 70B-258B NC 58/US 258

Division 2 Lenoir County Kinston

PLAN DATE: August 2014	REVIEWED BY: PLA
PREPARED BY: JPG	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 29904 ENGINEER JASON P. GALLOWAY

DocuSigned by: Jason Galloway F70DEA7D4B1841D...
8/26/2014
DATE

SIG. INVENTORY NO. 02-0100

SE-AUC-2014 11:28
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jgalloway