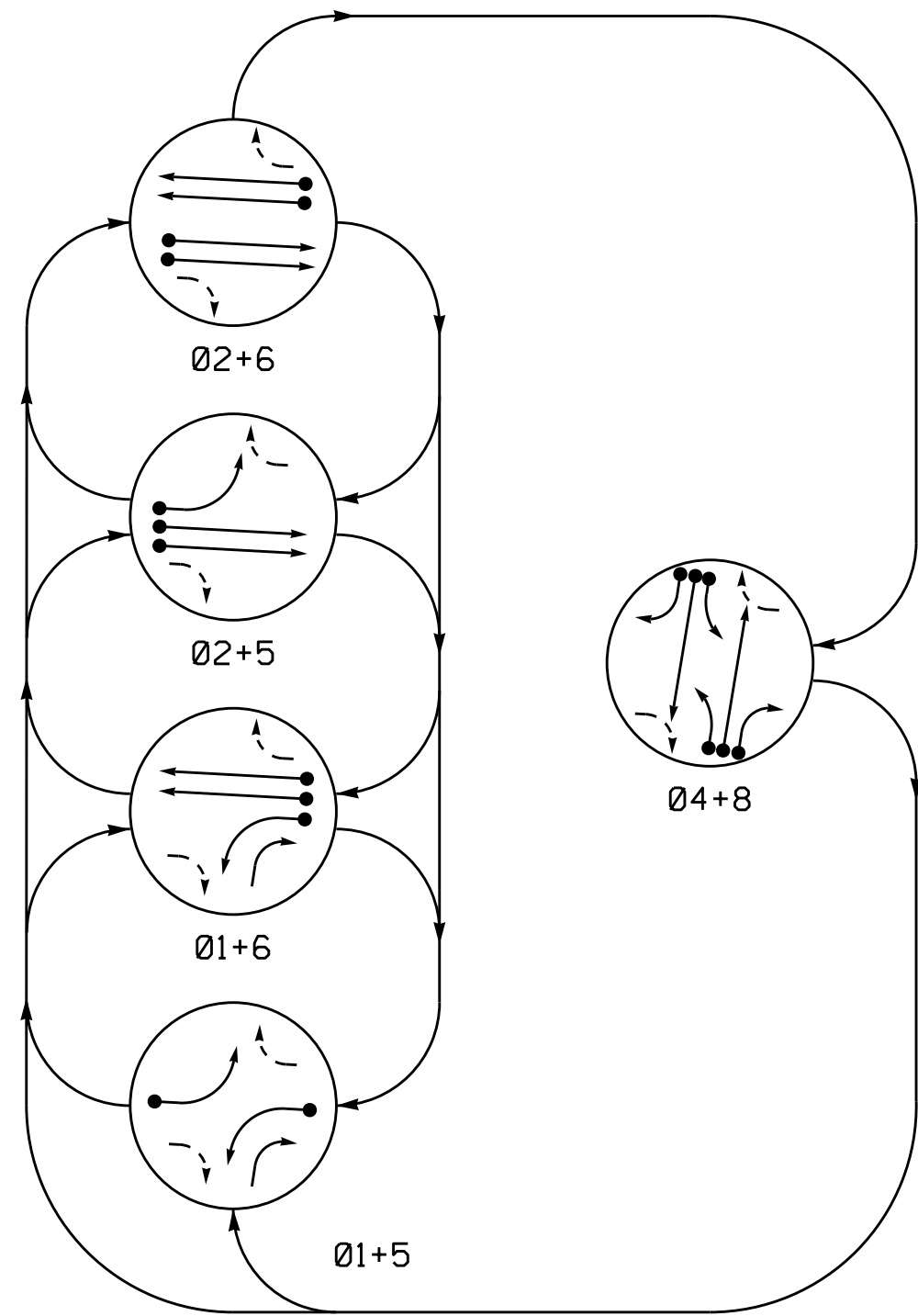


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

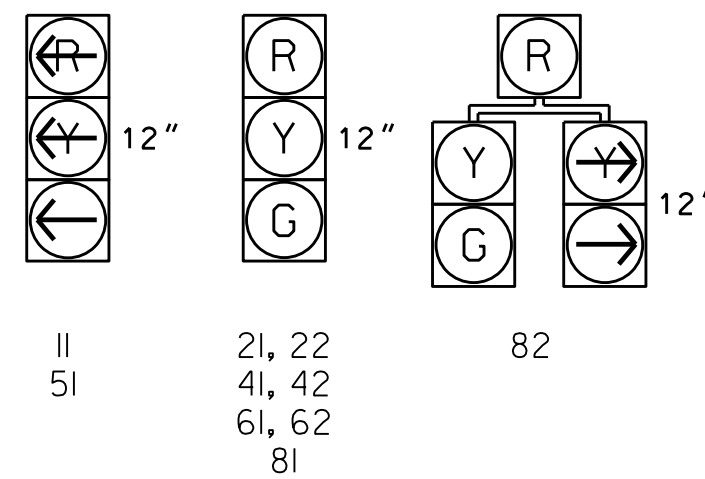
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE					
	01+5	02+5	02+6	04+8	01+6	01+5
II	---	---	---	---	---	---
21, 22	R	R	G	G	R	Y
23,24, 25,26	ON	OFF	OFF	OFF	ON	OFF
41, 42	R	R	R	R	G	R
51	---	---	---	---	---	---
61, 62	R	G	R	G	R	Y
63,64,65,66	ON	OFF	ON	OFF	ON	OFF
81	R	R	R	R	G	R
82	R	R	R	R	G	R

SIGNAL FACE	INTERVAL	
	1	2
23, 25	ON	OFF
24, 26	OFF	ON
63,65	ON	OFF
64,66	OFF	ON

SIGNAL FACE I.D.

All Heads L.E.D.



LONG VEHICLE OVERSPEED DETECTION SYSTEM LOOP & DETECTOR INSTALLATION CHART											
INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW EXISTING	LANE NO. CHANNELED	NEMA PHASE	TIMING		PLACE CALL DURING PHASE	INHIBIT DELAY DURING GREEN?	
FEATURE	TIME										
LV1	6'X6'	4	1015'	X	1	1	2*	NONE	- SEC.	ALL	NO
LV2	6'X6'	4	999'	X	1	1	2*	NONE	- SEC.	ALL	NO
LV3	6'X6'	4	1015'	X	2	2	2*	NONE	- SEC.	ALL	NO
LV4	6'X6'	4	999'	X	2	2	2*	NONE	- SEC.	ALL	NO
LV5	6'X6'	4	1015'	X	1	1	6*	NONE	- SEC.	ALL	NO
LV6	6'X6'	4	999'	X	1	1	6*	NONE	- SEC.	ALL	NO
LV7	6'X6'	4	1015'	X	2	2	6*	NONE	- SEC.	ALL	NO
LV8	6'X6'	4	999'	X	2	2	6*	NONE	- SEC.	ALL	NO
LVODS THRESHOLD SPEED (MPH)							55	2/6			
LVODS EXTEND TIME							12 sec.	2/6			

*Phase hold output to controller

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	Y	1	Y	-	-	-	-	-
2A	6X6	420	6	Y	2	Y	-	-	-	-	-
2B	6X6	420	6	Y	2	Y	-	-	-	-	-
4A	6X40	0	2-4-2	Y	4	Y	-	-	3	-	-
4B	6X40	0	2-4-2	Y	4	Y	-	-	-	-	-
5A	6X40	0	2-4-2	Y	4	Y	-	-	15	-	-
5C	6X40	0	2-4-2	Y	5	Y	-	-	-	-	-
6A	6X6	420	6	Y	6	Y	-	-	-	-	-
6B	6X6	420	6	Y	6	Y	-	-	-	-	-
8A	6X40	0	2-4-2	Y	8	Y	-	-	3	-	-
8B	6X40	0	2-4-2	Y	8	Y	-	-	-	-	-
8C	6X40	0	2-4-2	Y	8	Y	-	-	15	-	-

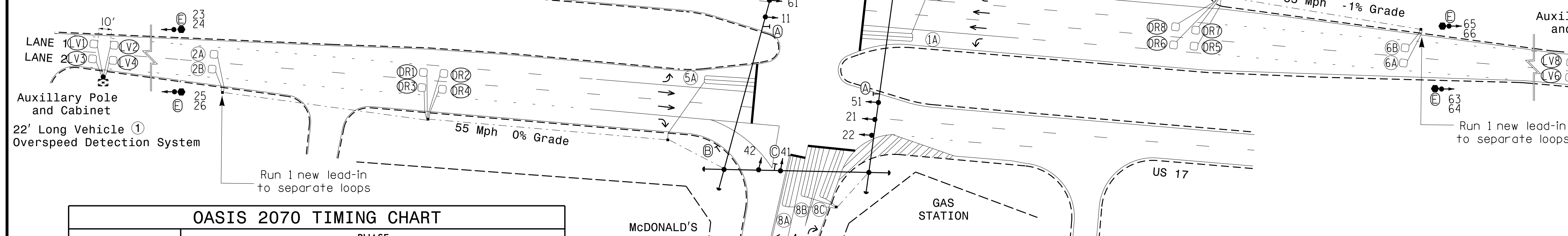
5 Phase Fully Actuated Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units to presence mode.
- Activate flashers at the end of green for phase 2 and/or phase 6.

LEGEND

- | PROPOSED | EXISTING |
|----------|----------|
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| | N/A |
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FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1*	7	14	7	7	14	7
Extension 1*	2.0	6.0	2.0	2.0	6.0	2.0
Max Green 1*	20	90	35	20	55	35
Yellow Clearance	3.0	5.2	5.3	3.0	5.3	5.3
Red Clearance	3.4	1.2	1.7	3.5	1.0	1.6
Walk 1*	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation*	-	1.5	-	-	1.5	-
Max Variable Initial*	-	46	-	-	46	-
Time Before Reduction*	-	15	-	-	15	-
Time To Reduce*	-	45	-	-	45	-
Minimum Gap	-	3.4	-	-	3.4	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
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.

DYNAMIC RED LOOP EXTENSION SYSTEM NORTHSTAR NQ4 LOOP & DETECTOR INSTALLATION CHART											
INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW EXISTING	LANE NO. CHANNELED	NEMA PHASE	TIMING		PLACE CALL DURING PHASE	INHIBIT DELAY DURING GREEN?	
FEATURE	TIME										
DR1	6X6	5	256	X	1	1	2	NONE	- SEC.	ALL	NO
DR2	6X6	5	240	X	1	1	2	NONE	- SEC.	ALL	NO
DR3	6X6	5	256	X	2	2	2	NONE	- SEC.	ALL	NO
DR4	6X6	5	240	X	2	2	2	NONE	- SEC.	ALL	NO
DR5	6X6	4	256	X	1	1	6	NONE	- SEC.	ALL	NO
DR6	6X6	4	240	X	1	1	6	NONE	- SEC.	ALL	NO
DR7	6X6	4	256	X	2	2	6	NONE	- SEC.	ALL	NO
DR8	6X6	4	240	X	2	2	6	NONE	- SEC.	ALL	NO
SET SPEED (MPH)							50	2/6			
SET LENGTH (FT)							1	2/6			
ALARM TIME (SEC)							5*	2/6			

*If output is present during associated phase's red clear, place stop time on red clearance interval.

Signal Upgrade

US 17 at NC 904 (Longwood Road/ Seaside Road)

Division 3 Brunswick County Grissetown

PLAN DATE: December 2012 REVIEWED BY: JPG

PREPARED BY: I. O. Umozurike REVIEWED BY:

REVISIONS: Volume-density detection scheme and replace loops (kgp)

INIT. DATE: 7/16/2015

SIGNATURE: P. Alexander DATE: 7/16/2015

SEAL

Not a certified document as to the Original Document but Only as to the Revisions - This document originally Issued and sealed by Jason P. Galloway, PE-029904 on 12-06-2012

This document is only certified as to the revisions.

SIGNATURE: P. Alexander DATE: 7/16/2015

SIG. INVENTORY NO. 03-0342

16-JUL-2015 09:53
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 P. Alexander