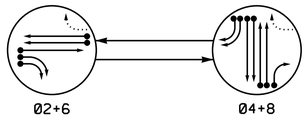
DocuSign Envelope ID: 199DFD23-A899-420C-9818-0BA056D062A6

PROJECT REFERENCE NO.	SHEET NO.
I-5714 / U-5114	Sig. 23.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.

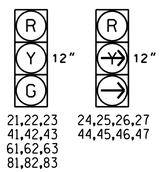
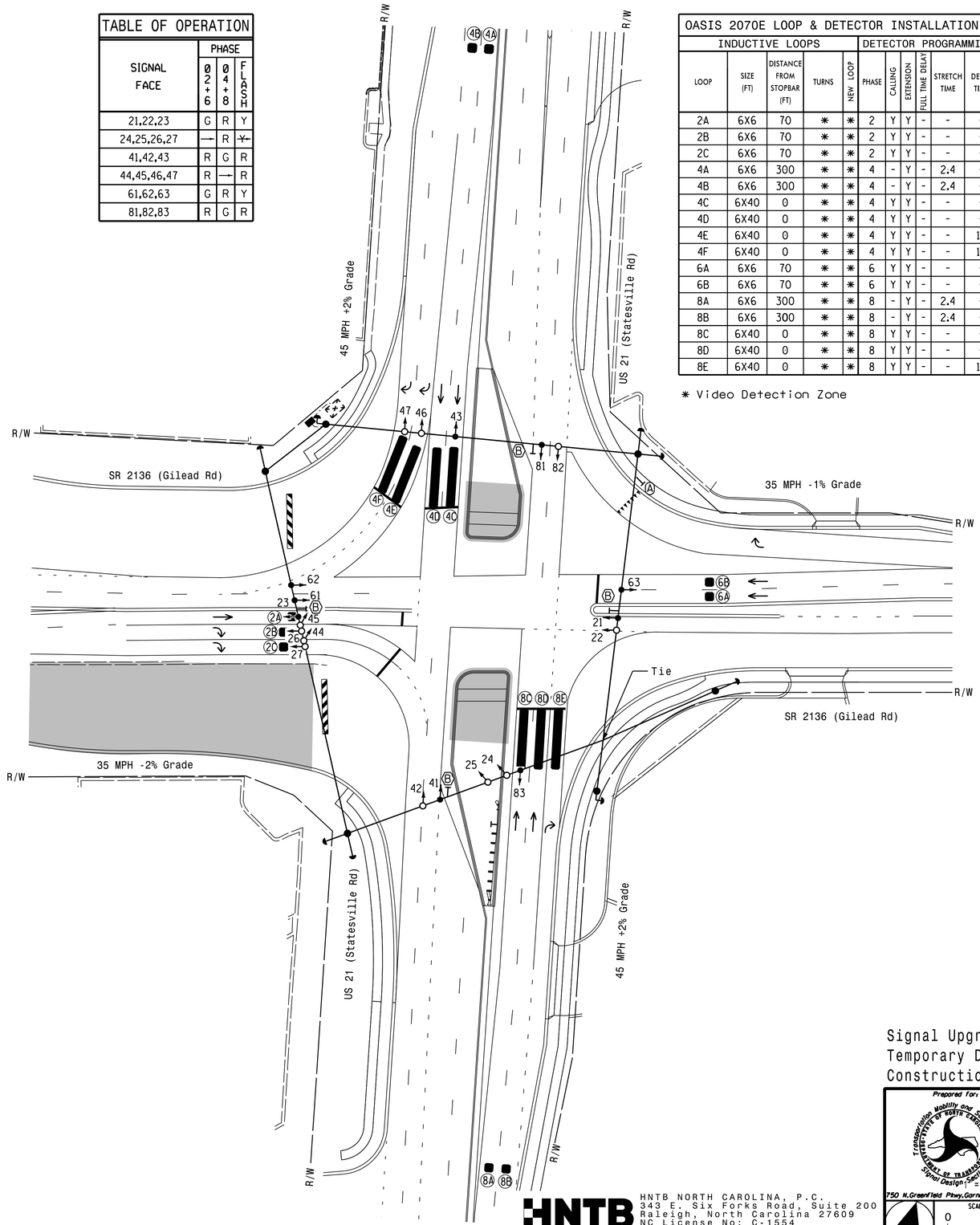


TABLE OF OPERATION

SIGNAL FACE	PHASE 02+6	PHASE 04+8	FLASH
21,22,23	G	R	Y
24,25,26,27	—	R	Y
41,42,43	R	G	R
44,45,46,47	R	—	R
61,62,63	G	R	Y
81,82,83	R	G	R



OASIS 2070E 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	6X6	70	*	*	2	Y	Y	-	-	-	-	*
2B	6X6	70	*	*	2	Y	Y	-	-	-	-	*
2C	6X6	70	*	*	2	Y	Y	-	-	-	-	*
4A	6X6	300	*	*	4	-	Y	-	2.4	-	-	*
4B	6X6	300	*	*	4	-	Y	-	2.4	-	-	*
4C	6X40	0	*	*	4	Y	Y	-	-	-	-	*
4D	6X40	0	*	*	4	Y	Y	-	-	-	-	*
4E	6X40	0	*	*	4	Y	Y	-	-	15	-	*
4F	6X40	0	*	*	4	Y	Y	-	-	15	-	*
6A	6X6	70	*	*	6	Y	Y	-	-	-	-	*
6B	6X6	70	*	*	6	Y	Y	-	-	-	-	*
8A	6X6	300	*	*	8	-	Y	-	2.4	-	-	*
8B	6X6	300	*	*	8	-	Y	-	2.4	-	-	*
8C	6X40	0	*	*	8	Y	Y	-	-	-	-	*
8D	6X40	0	*	*	8	Y	Y	-	-	-	-	*
8E	6X40	0	*	*	8	Y	Y	-	-	15	-	*

* Video Detection Zone

2 Phase
Fully Actuated
Gilead Road Closed Loop System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Reposition existing signal heads numbered 21,23,41,43,61,62,63,81, and 83.
5. Incorporate Video Detection system for vehicle detection.
6. Provide the Engineer with the Manufacturer's approved Video Detection locations and mounting heights to obtain detection zones as shown.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Closed loop system data:
   Master Asset #11042
   Controller Asset #0617

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	
	Over-sized Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
DD	Directional Drill	N/A
	Video Detection Zone	
	Construction Zone	N/A
	Construction Barrier	N/A
A	"YIELD" Sign (R1-2)	A
B	No U-Turn/No Left Turn Sign (R3-18)	B

OASIS 2070E TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 6	PHASE 8
Min Green 1 *	10	7	10	7
Extension 1 *	3.0	2.0	3.0	2.0
Max Green 1 *	60	30	60	30
Yellow Clearance	4.0	4.3	3.9	4.3
Red Clearance	2.2	1.9	3.3	1.4
Red Revert	2.0	2.0	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	YELLOW	-	YELLOW	-
Dual Entry	-	ON	-	ON
Simultaneous Gap	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.

Signal Upgrade
Temporary Design 4
Construction Phase IIIA

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HNTB
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

Prepared for: Transportation Mobility and Safety Division, Signal Design Section, NC DEPARTMENT OF TRANSPORTATION
750 N.Greenfield Pkwy.Garner,NC 27529

SCALE 1" = 40'
0 40

SR 2136 (Gilead Road)
at
US 21 (Statesville Road)

Division 10 Mecklenburg Co. Huntersville

PLAN DATE:	December 2017	REVIEWED BY:	A.D. Klinksiek
PREPARED BY:	J.T. Thibault	REVIEWED BY:	N.R. Simmons

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031464 ENGINEER NATASHA R. SIMMONS

DocuSigned by: Natasha R. Simmons 4/23/2018
SIGNATURE DATE

SIG. INVENTORY NO. 10-0617 T4