PROJECT REFERENCE NO.	SHEET NO.
R-5861	Sig. 2.0

PHASING DIAGRAM

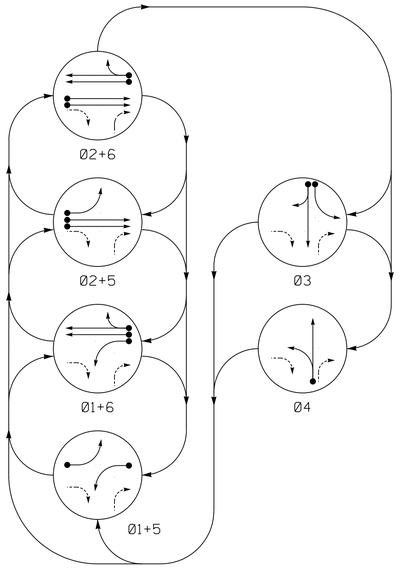
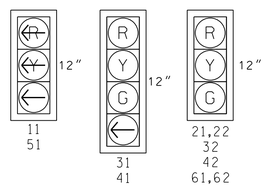


TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03	04	FLASH
11	←●	←●	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21,22	R	R	G	G	R	R	Y
31	R	R	R	R	G ←	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G ←	R
42	R	R	R	R	R	G	R
51	←●	~~R~~	←●	~~R~~	~~R~~	~~R~~	~~R~~
61,62	R	G	R	G	R	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A*	6X40	0	*	X	1	-	-	X	-	X	-	*
2A*	6X6	420	*	X	2	-	-	X	X	X	-	*
2B*	6X6	420	*	X	2	-	-	X	X	X	-	*
2C*	6X40	0	*	X	2	5.0	2.0	X	-	X	X	*
2D*	6X40	0	*	X	2	5.0	2.0	X	-	X	X	*
3A	6X20	0	2-4-2	-	3	3.0	-	X	-	X	-	X
3B	6X20	0	2-4-2	-	3	10.0	-	X	-	X	-	X
4A*	6X40	0	*	X	4	-	-	X	-	X	-	*
5A*	6X40	0	*	X	5	-	-	X	-	X	-	*
6A*	6X6	420	*	X	6	-	-	X	X	X	-	*
6B*	6X6	420	*	X	6	-	-	X	X	X	-	*
6C*	6X40	0	*	X	6	5.0	2.0	X	-	X	X	*
6D*	6X40	0	*	X	6	5.0	2.0	X	-	X	X	*

* VIDEO DETECTION ZONE

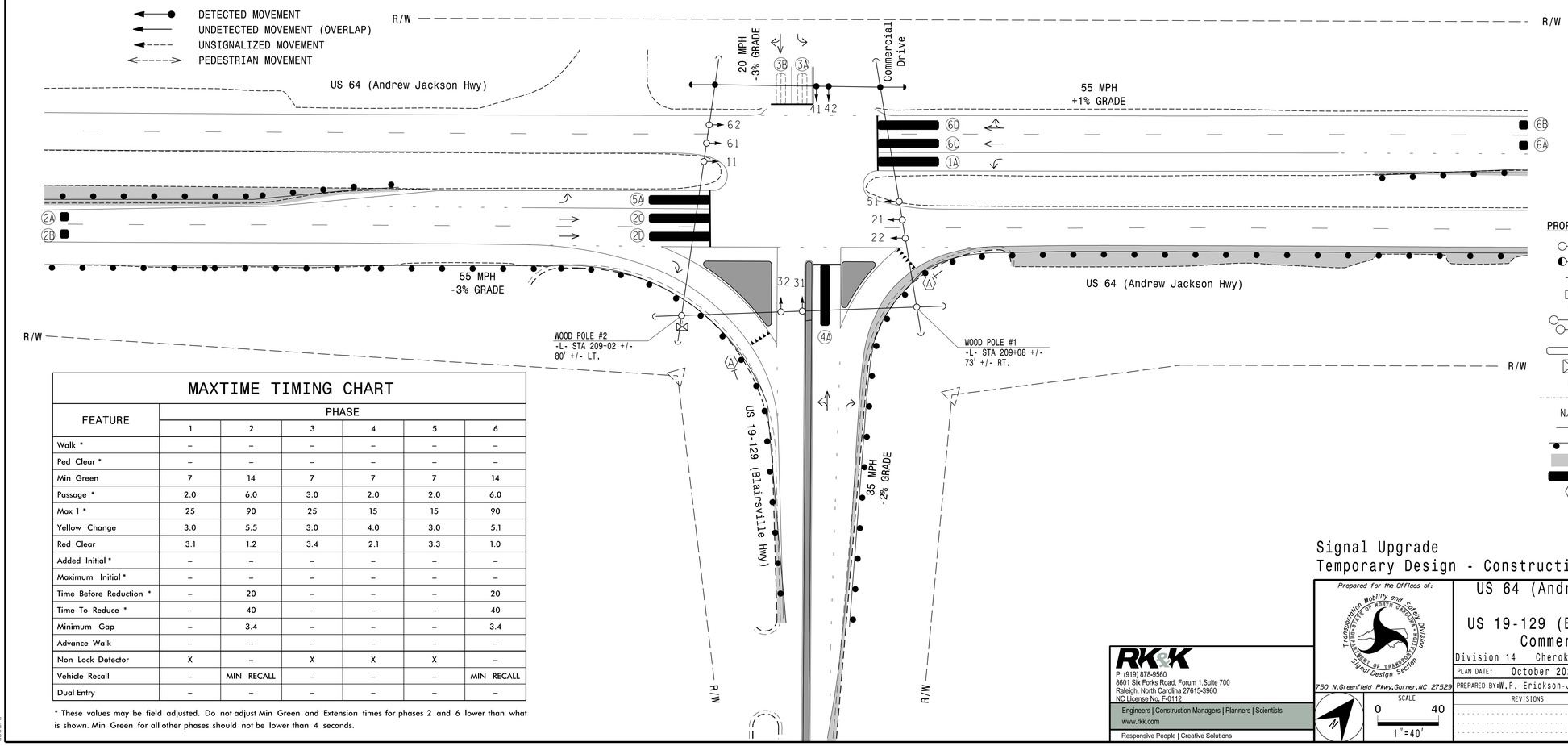
6 Phase
Fully Actuated
Isolated

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. Phase 1 and/or phase 5 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Install backplates for signal heads numbered 11, 21, 22, 31, 32, 51, 61, and 62.
6. Set all detector units to presence mode.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. The cabinet should be designed to include an Auxiliary Output File for future use.
9. Existing Yellow Change Interval for phases 3 and 4 may be decreased by 0.4 seconds per week until the required value is reached.
10. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.

PHASING DIAGRAM DETECTION LEGEND

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



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	
	Construction Zone Drums	
	Construction Zone	
	Video Detection Area	
A	"YEILD" sign (R1-2)	A

MAXTIME TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Walk *	–	–	–	–	–	–
Ped Clear *	–	–	–	–	–	–
Min Green	7	14	7	7	7	14
Passage *	2.0	6.0	3.0	2.0	2.0	6.0
Max 1 *	25	90	25	15	15	90
Yellow Change	3.0	5.5	3.0	4.0	3.0	5.1
Red Clear	3.1	1.2	3.4	2.1	3.3	1.0
Added Initial *	–	–	–	–	–	–
Maximum Initial *	–	–	–	–	–	–
Time Before Reduction *	–	20	–	–	–	20
Time To Reduce *	–	40	–	–	–	40
Minimum Gap	–	3.4	–	–	–	3.4
Advance Walk	–	–	–	–	–	–
Non Lock Detector	X	–	X	X	X	–
Vehicle Recall	–	MIN RECALL	–	–	–	MIN RECALL
Dual Entry	–	–	–	–	–	–

* 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 - Construction Phases I-III

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

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

SCALE 0 40
1"=40'

US 64 (Andrew Jackson Hwy)
at
US 19-129 (Blairsville Hwy)/
Commercial Drive

Division 14 Cherokee County Murphy

PLAN DATE: October 2023 REVIEWED BY: C.B. Holden
PREPARED BY: W.P. Erickson-Jones REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 044558 ENGINEER DAVID T. SEAKS

DocuSigned by: David T Seaks 060183F28E67441E
SIGNATURE 10/30/2023 DATE

SIG. INVENTORY NO. I4-0865T

10/30/2023
R:\Traffic\Designs\Signals\140865-20200130g1.dgn
dseaks