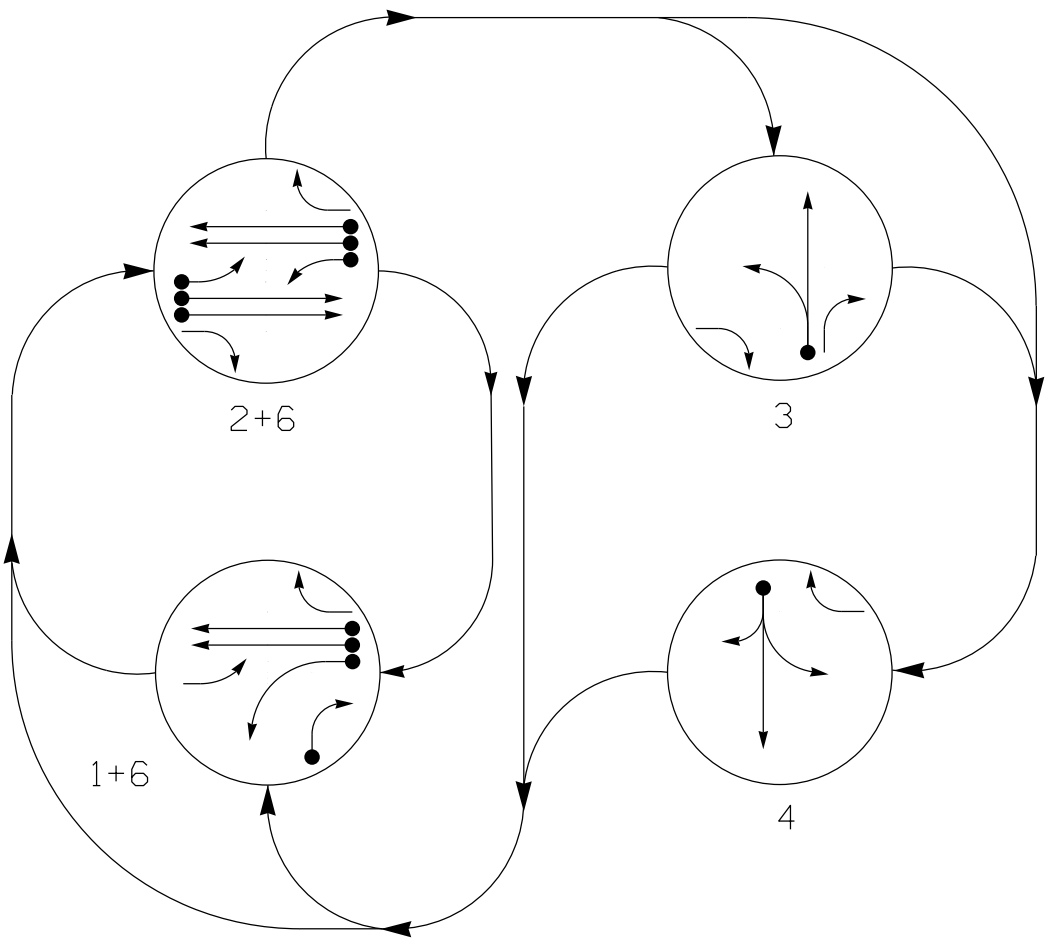


27-APR-2025, 10:15
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K Jones AT CHA-K JONES

PHASING DIAGRAM



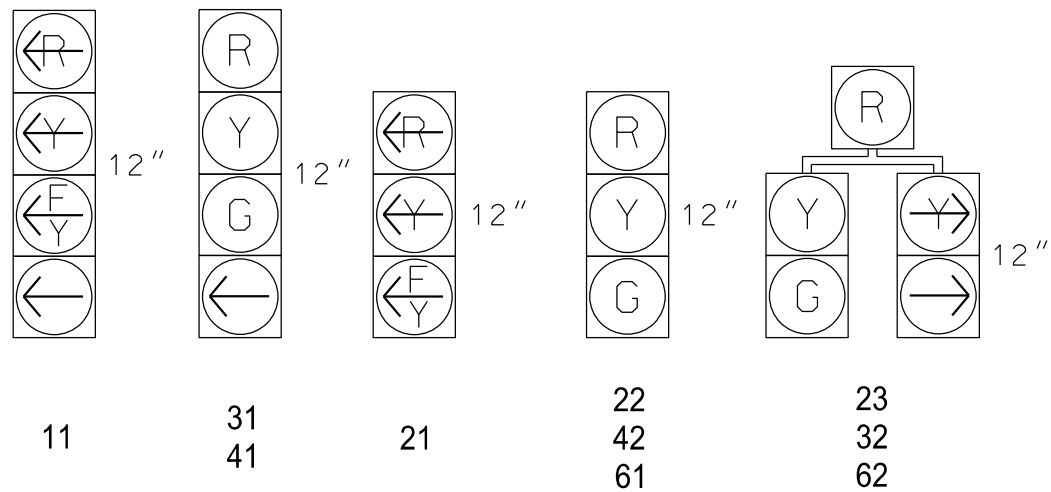
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	1 + 6	2 + 6	3	4	FLASH
11	←	←	←	←	←
21	←	←	←	←	←
22	R	G	R	R	R
23	R	G	R	R	R
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
61	G	G	R	R	R
62	G	G	R	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING						
ZONE(S)	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND INITIAL	ADDED CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	@	@	1 6#	15.0*	-	X	X	-	@
1B	6X40	0	@	@	1	15.0	-	X	X	-	@
2B	6X40	0	@	@	2	-	-	X	X	-	@
3A	6X40	0	@	@	3	3.0	-	X	X	-	@
4A	6X40	0	@	@	4	5.0	-	X	X	-	@

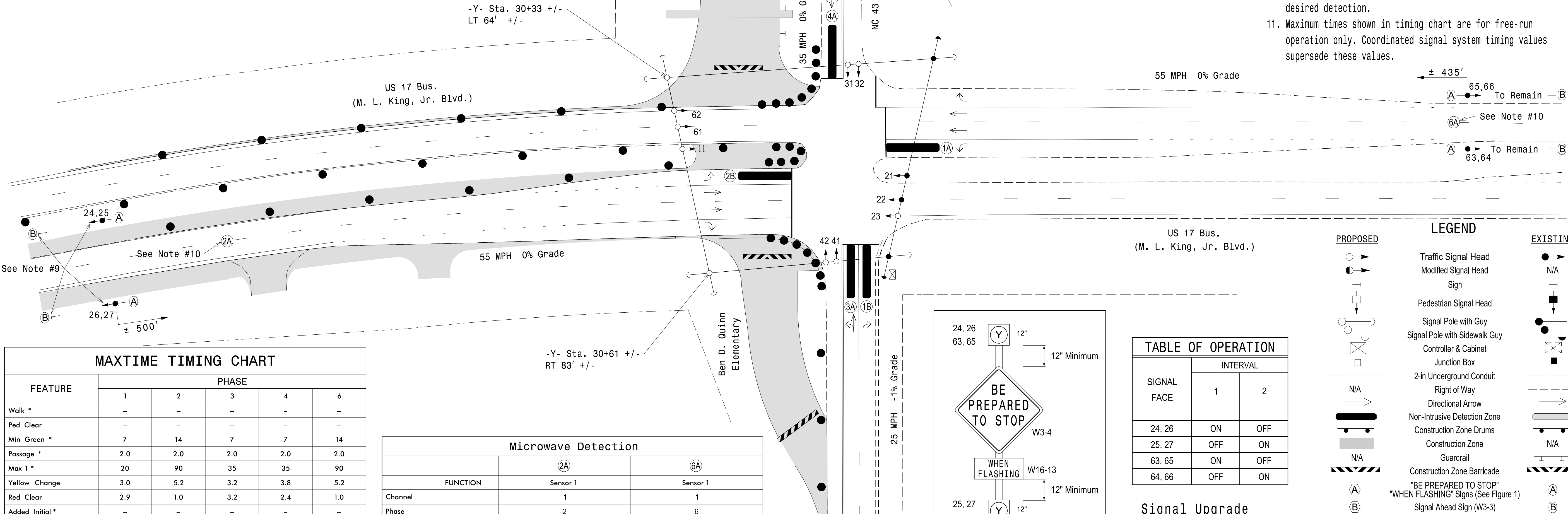
- @ Multizone Microwave Detection
- # Disable Phase call for loop during Alternate Phasing operation.
- * Disable Delay during Alternate Phasing operation.

4 Phase
Fully Actuated
US 17 Bus. (MLK Blvd) CLS
D02-15_New Bern

PROJECT REFERENCE NO.	SHEET NO.
R-4463A	Sig-2.0

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Activate beacons 24, 25, 26, and 27 to flash 3 seconds prior to the end of phase 2 green. These beacons shall remain flashing until the beginning of phase 2 green.
- Activate beacons 63, 64, 65, and 66 to flash 3 seconds prior to the end of phase 6 green. These beacons shall remain flashing until the beginning of phase 6 green.
- Relocate existing northbound "BE PREPARED TO STOP" (W3-4) assemblies (see Figure 1) and Signal Ahead signs (W3-3) to final design location (see sheet 6.0).
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



MAXTIME TIMING CHART

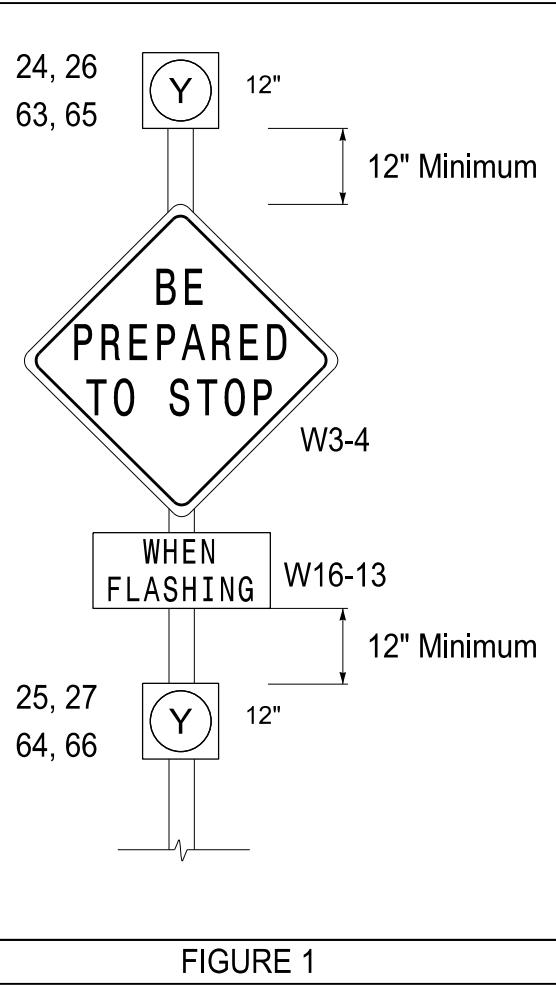
FEATURE	PHASE					
	1	2	3	4	6	
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Min Green *	7	14	7	7	14	
Passage *	2.0	2.0	2.0	2.0	2.0	
Max 1 *	20	90	35	35	90	
Yellow Change	3.0	5.2	3.2	3.8	5.2	
Red Clear	2.9	1.0	3.2	2.4	1.0	
Added Initial *	-	-	-	-	-	
Maximum Initial *	-	-	-	-	-	
Time Before Reduction *	-	-	-	-	-	
Time To Reduce *	-	-	-	-	-	
Minimum Gap	-	-	-	-	-	
Advance Walk	-	-	-	-	-	
Pre Clearance	-	3.0	-	-	3.0	
Non Lock Detector	X	-	X	X	-	
Vehicle Recall	-	MIN RECALL	-	-	MIN RECALL	
Dual Entry	-	-	-	-	-	

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

-Y- Sta. 30+61 +/-
RT 83' +/-

-Y- Sta. 30+33 +/-
LT 64' +/-

Microwave Detection						
FUNCTION	2A			6A		
	Sensor 1	Sensor 1		Sensor 1	Sensor 1	
Channel	1	1		1	1	
Phase	2	6		6	2	
Direction of Travel	NB	SB		SB	NB	
Type	Priority	Priority		Priority	Priority	
Level	1	2	QUEUE	1	2	QUEUE
Discovery Zone (ft)	>= 750	< 750	-	>= 750	< 750	-
Range (ft)	900-100	600-100	150-100	900-100	600-100	150-100
Enable Speed	Y	Y	Y	Y	Y	Y
Speed Range (mph)	35-100	35-100	1-35	35-100	35-100	1-35
Enable Estimated Time of Arrival	Y	Y	N	Y	Y	N
Estimated Time of Arrival (sec)	2.5-10.0	2.5-6.5	-	2.5-10.0	2.5-6.5	-



SIGNAL FACE	INTERVAL	
	1	2
24, 26	ON	OFF
25, 27	OFF	ON
63, 65	ON	OFF
64, 66	OFF	ON

Signal Upgrade
Temporary Design 1 (TMP Phase 1, Step 1)

Plans Prepared By:
DRMP
DRMP, Inc.
8210 University Executive Park Dr, Suite 220
Charlotte, NC 28262
NC License No. F-1524 (T04) 549-4260

Prepared for:

Transportation Mobility and Safety Solutions

SEAL OF TRANSPORTATION SIGNAL DESIGN SECTION

US 17 Business
(M. L. King, Jr. Blvd.)
at
NC 43/Ben D. Quinn Elementary

Division 2 Craven County New Bern

PLAN DATE: April 2025 REVIEWED BY: BN Groome

PREPARED BY: DS Griffith DRMP PROJ. NO.: 17359 (40)

REVISIONS

INIT. DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 052936

BRITTANY N GROOME

Signed by: *Brittany N Groome* 4/24/2025

DATE

SIG. INVENTORY NO. 02-062911