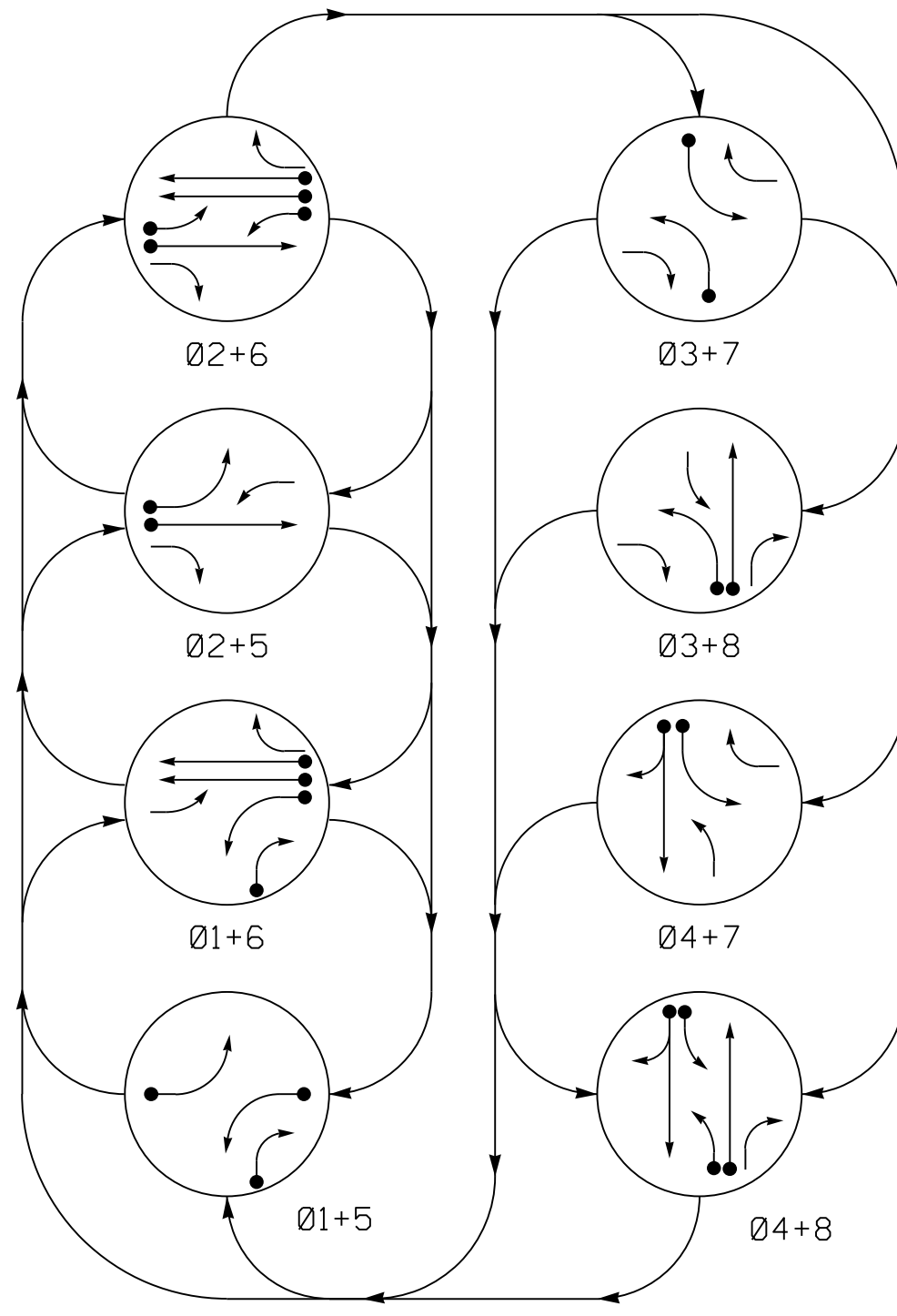


### PHASING DIAGRAM



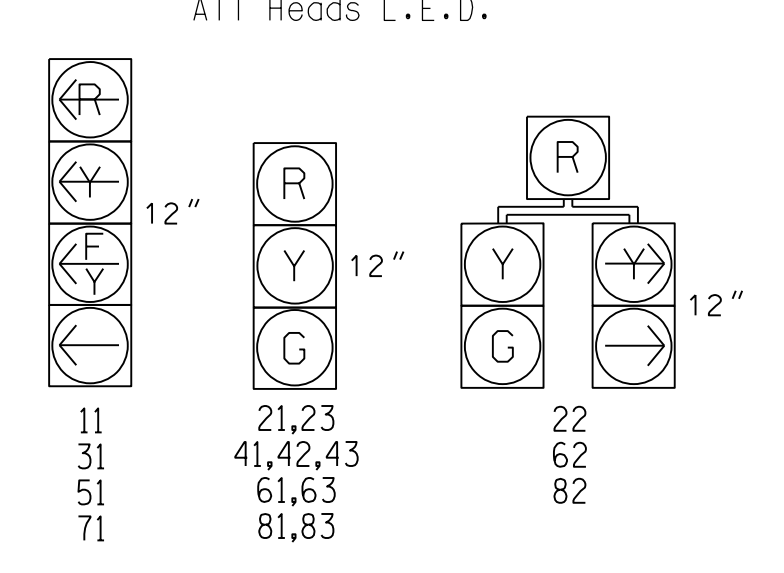
#### PHASING DIAGRAM DETECTION LEGEND

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

### TABLE OF OPERATION

SIGNAL FACE	PHASE							
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8
11	←	←	→	→	←	←	→	→
21,23	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31	R	R	R	R	←	←	→	→
41,42,43	R	R	R	R	R	G	G	R
51	←	←	→	→	←	←	→	→
61,63	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71	R	R	R	R	←	←	→	→
81,83	R	R	R	R	R	G	R	G
82	R	R	R	R	R	G	R	G

### SIGNAL FACE I.D.



### ASC/3 DETECTOR INSTALLATION CHART

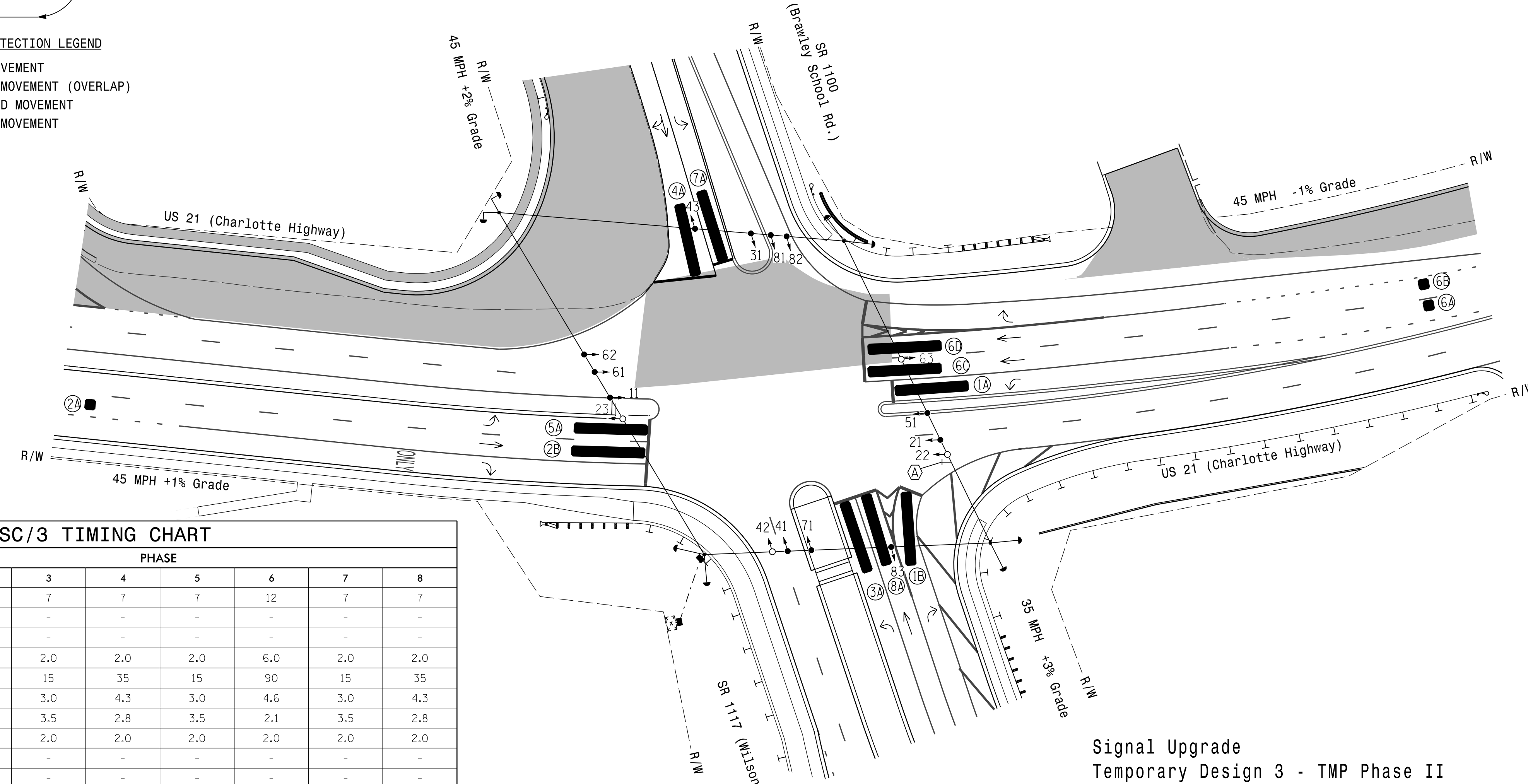
LOOP	DETECTOR				PROGRAMMING							
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	*	*	1	Yes	-	15	-	N	-	*
1B	6X40	0	*	*	6	Yes	-	-	-	G	-	*
2A	6X6	300	*	*	2	Yes	-	-	-	N	-	*
2B	6X40	0	*	*	2	Yes	2.0	5	-	G	-	*
3A	6X40	0	*	*	3	Yes	-	15	-	N	-	*
4A	6X40	0	*	*	8	Yes	-	3	-	N	-	*
5A	6X40	0	*	*	4	Yes	-	10	-	N	-	*
6A	6X6	300	*	*	5	Yes	-	15	-	N	-	*
6B	6X6	300	*	*	2	Yes	-	-	-	G	-	*
6C	6X40	0	*	*	6	Yes	-	-	-	N	-	*
6D	6X40	0	*	*	6	Yes	2.0	5	-	G	-	*
7A	6X40	0	*	*	6	Yes	2.0	5	-	G	-	*
7A	6X40	0	*	*	7	Yes	-	15	-	N	-	*
8A	6X40	0	*	*	4	Yes	-	3	-	N	-	*
8A	6X40	0	*	*	8	Yes	-	-	-	N	-	*

8 Phase Fully Actuated Isolated

#### NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Set all detector units to presence mode.
- This intersection features a video detection system. Detectors should be placed to ensure the desired operation parameters are achieved.
- Reconnect and uncover signal heads 11, 31, 71, 81, 82, and 83.
- Reposition existing signal heads 11, 21, 22, 31, 41, 51, 61, 62, 81, 82, and 83. Install new signal heads 23, 42, and 63.

\* Video Detection Area



### ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	-	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	15	90	15	35	15	90	15	35
Yellow	3.0	4.6	3.0	4.3	3.0	4.6	3.0	4.3
Red Clear	3.2	2.1	3.5	2.8	3.5	2.1	3.5	2.8
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds / Actuation *	-	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	X	-	-	-	X
Simultaneous Gap	X	X	X	X	X	X	X	X

\* 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.

### LEGEND

- | PROPOSED | EXISTING |
|----------|----------|
|          |          |
|          | N/A      |
|          |          |
|          |          |
|          |          |
|          |          |
|          |          |
|          | N/A      |
|          |          |

### Signal Upgrade Temporary Design 3 - TMP Phase II

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David A. Waller  
Professional Engineer  
No. 042678  
State of North Carolina

US 21 (Charlotte Highway) at  
SR 1100 (Brawley School Road)  
/ SR 1117 (Wilson Avenue)

Division 12 Iredell County Mooresville

PLAN DATE: May 2022 REVIEWED BY: E D Harris

PREPARED BY: J. Hambright REVIEWED BY: R M Nuncey

REVISIONS	INIT.	DATE

David A. Waller  
Professional Engineer  
No. 042678  
State of North Carolina

DocuSigned by:  
David A. Waller  
3/24/2023  
DATE

SIG. INVENTORY NO. 12-136913

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