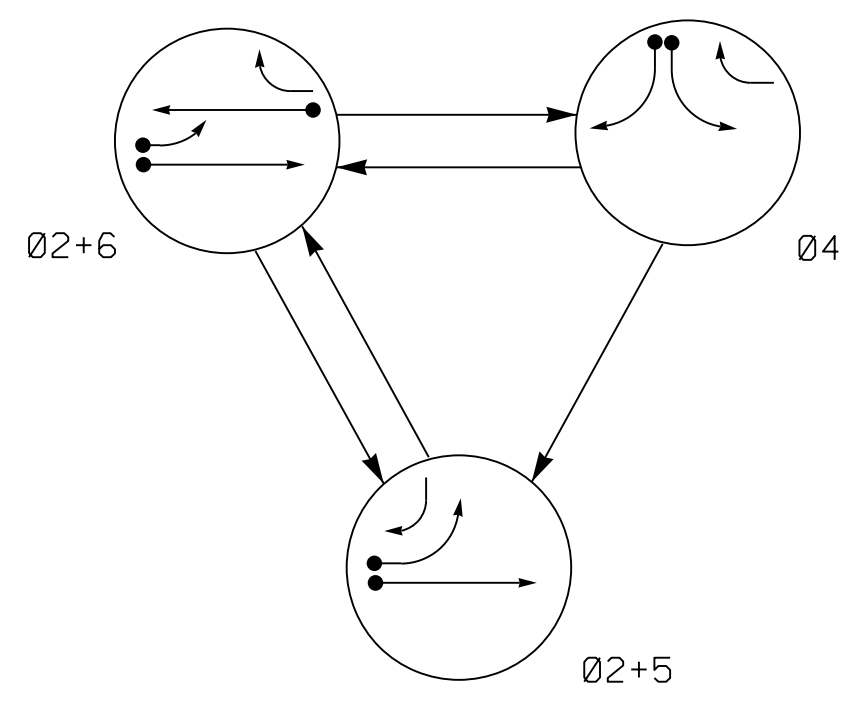


**PHASING DIAGRAM**



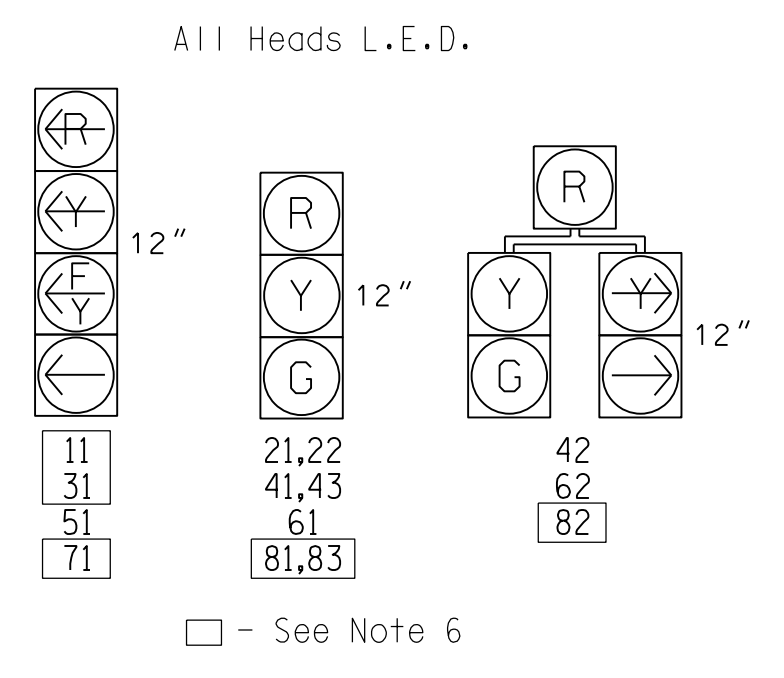
**PHASING DIAGRAM DETECTION LEGEND**

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

**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	Ø2+5	Ø2+6	Ø4	FLIGHT
21,22	G	G	R	Y
41,43	R	R	G	R
42	R	R	G	R
51	---	---	---	---
61	R	G	R	Y
62	R	G	---	---

**SIGNAL FACE I.D.**



**ASC/3 DETECTOR INSTALLATION CHART**

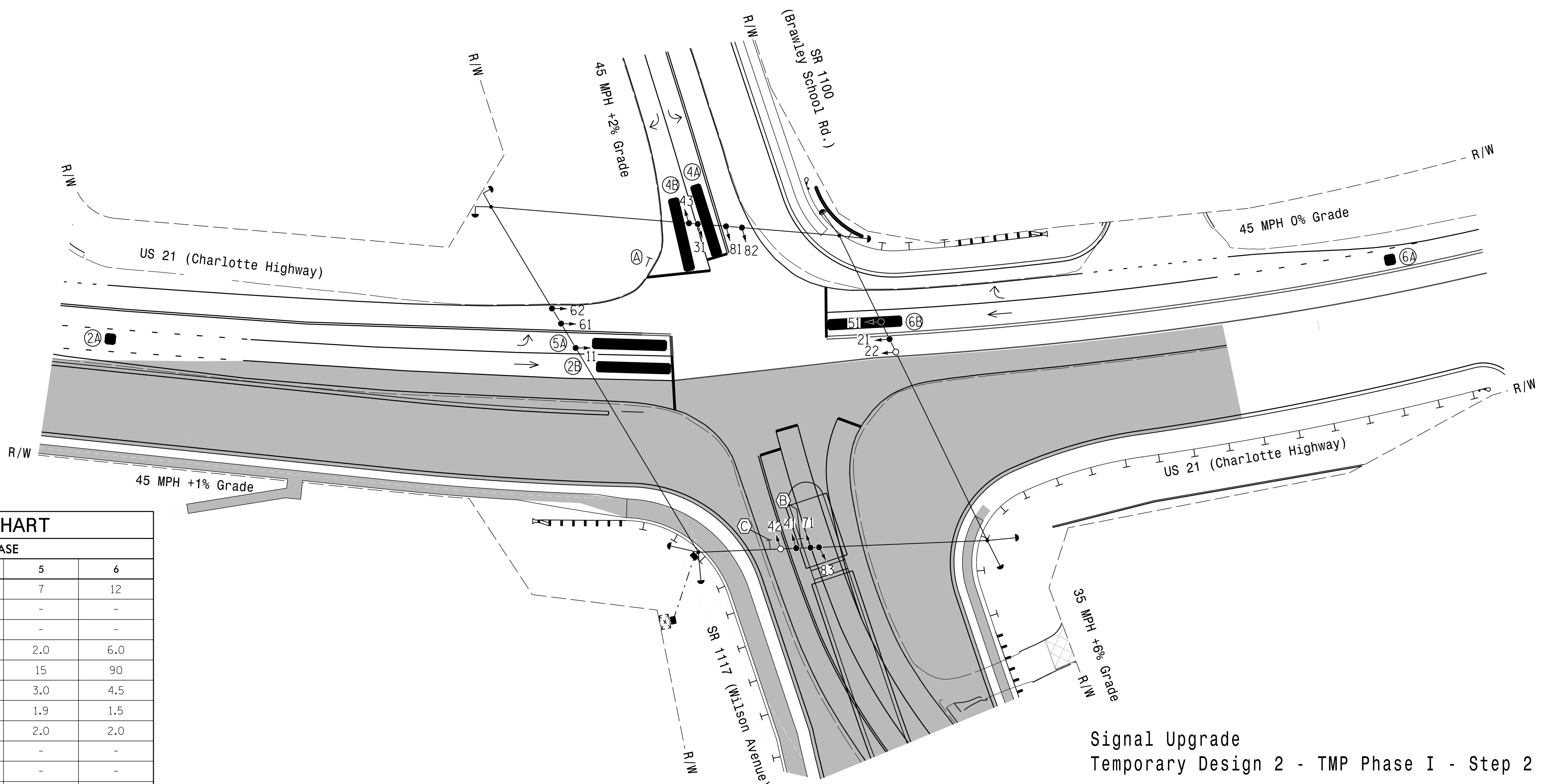
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	300	*	*	2	Yes	-	-	-	N	-	*
2B	6X40	0	*	*	2	Yes	2.0	5	-	G	-	*
4A	6X40	0	*	*	4	Yes	-	3	-	N	-	*
4B	6X40	0	*	*	4	Yes	-	15	-	N	-	*
5A	6X40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

\* Video Detection Area

**3 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 5 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.
- Disconnect and cover existing signal heads 11, 31, 71, 81, 82, and 83.
- Reposition existing signal heads 21, 41, and 51.



**LEGEND**

PROPOSED	EXISTING
○ → Traffic Signal Head	● → Traffic Signal Head
○ → Modified Signal Head	N/A
○ → Pedestrian Signal Head With Push Button & Sign	N/A
○ → Signal Pole with Guy	○ → Signal Pole with Guy
○ → Signal Pole with Sidewalk Guy	○ → Signal Pole with Sidewalk Guy
□ → Inductive Loop Detector	□ → Inductive Loop Detector
□ → Controller & Cabinet	□ → Junction Box
□ → Junction Box	□ → Junction Box
--- 2-in Underground Conduit	--- 2-in Underground Conduit
N/A Right of Way	N/A Right of Way
→ Directional Arrow	→ Directional Arrow
█ Video Detection Area	N/A
█ Construction Zone	N/A
OS Oversized Junction Box	OS Oversized Junction Box
A "YIELD" Sign (R1-2)	A "YIELD" Sign (R1-2)
B Left Arrow "ONLY" Sign (R3-5L)	B Left Arrow "ONLY" Sign (R3-5L)
C Right Arrow "ONLY" Sign (R3-5R)	C Right Arrow "ONLY" Sign (R3-5R)

**ASC/3 TIMING CHART**

FEATURE	PHASE			
	2	4	5	6
Min Green *	12	7	7	12
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Veh. Extension *	6.0	2.0	2.0	6.0
Max 1 *	90	35	15	90
Yellow	4.5	3.0	3.0	4.5
Red Clear	1.5	2.8	1.9	1.5
Red Revert	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	-	-	-	-
Simultaneous Gap	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.

**Signal Upgrade  
Temporary Design 2 - TMP Phase I - Step 2**

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

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Prepared for the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27526

**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. Hambrick REVIEWED BY: R M Muncey

REVISIONS	INIT.	DATE

SEAL  
Brock A. Walker  
3/24/2023  
DATE  
SIG. INVENTORY NO. 12-136972

3/24/2023 10:11 AM  
User: daniel.liber  
C:\Users\daniel.liber\Documents\Projects\3833C\3833C.dwg