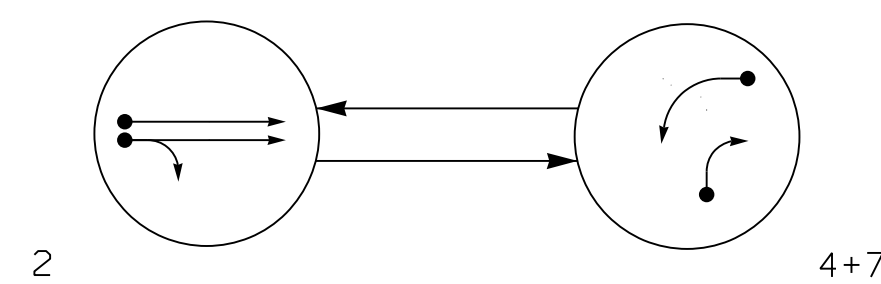


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

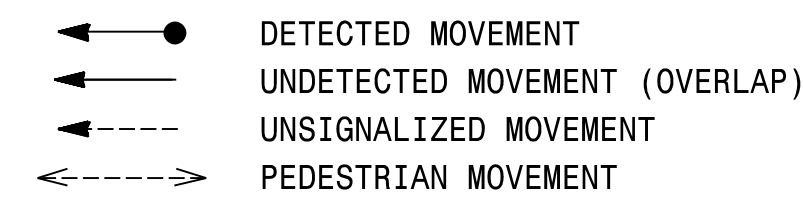
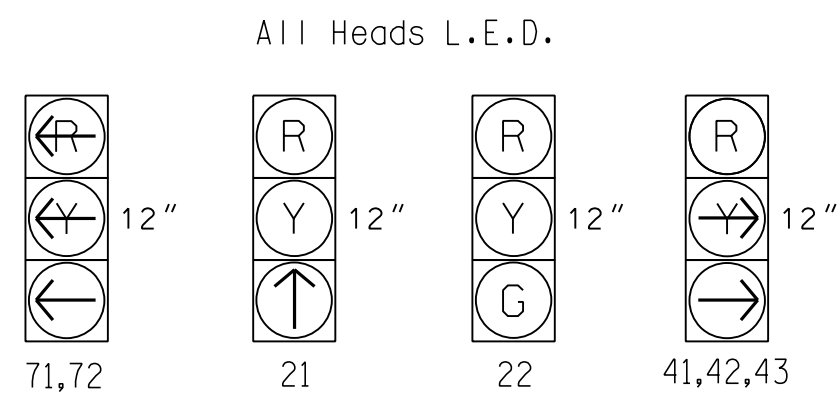


TABLE OF OPERATION

SIGNAL FACE	PHASE		
	2	4+7	FLASH
21	↑	R	R
22	G	R	R
41,42,43	R	→	R
71,72	←	←	←

SIGNAL FACE I.D.



MAXTIME DETECTOR INSTALLATION CHART

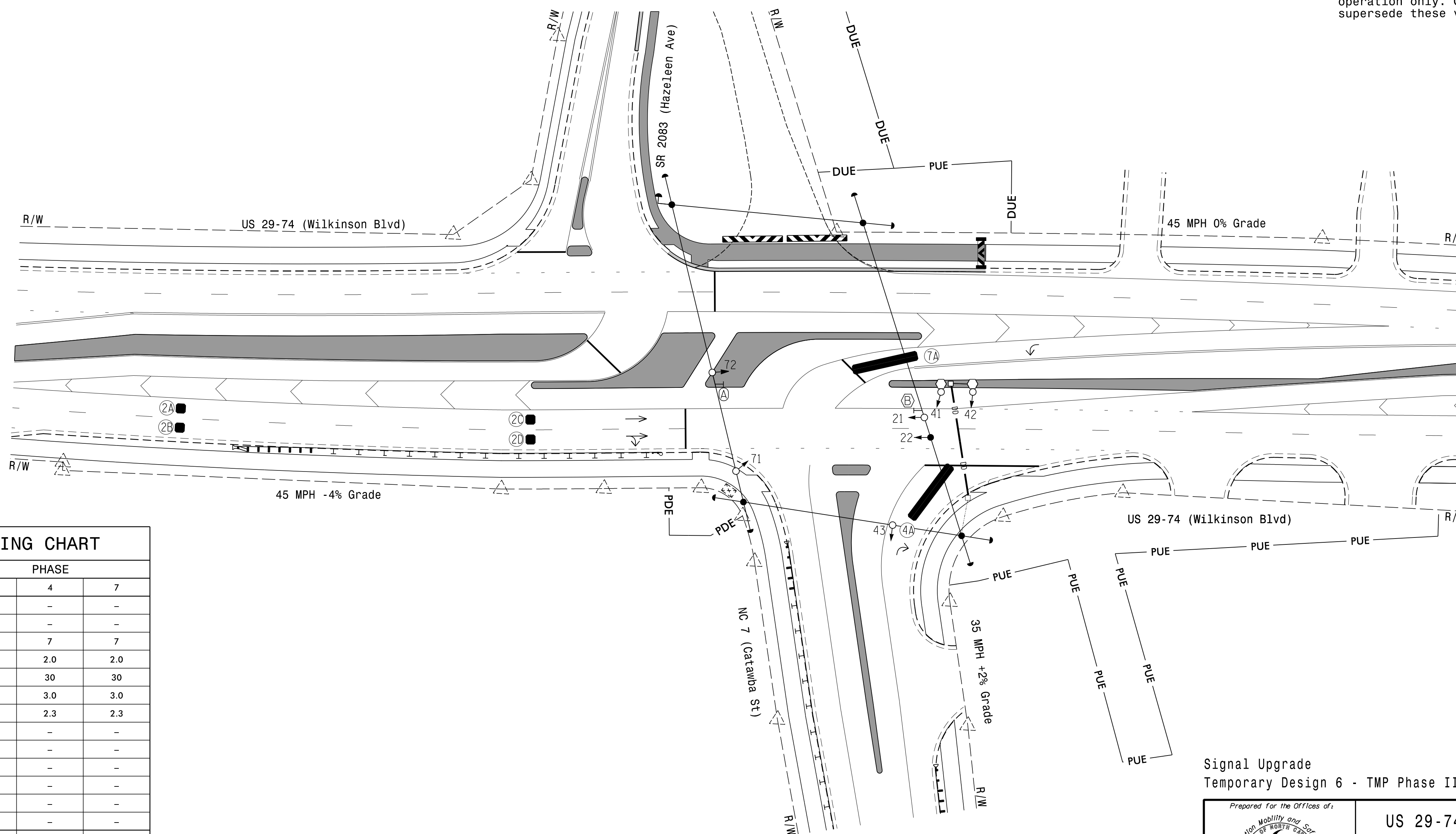
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	
2A	6X6	300	*	*	2	-	1.6	X	-	X	-	*
2B	6X6	300	*	*	2	-	1.6	X	-	X	-	*
2C	6X6	90	*	*	2	-	-	X	-	X	-	*
2D	6X6	90	*	*	2	-	-	X	-	X	-	*
4A	6X40	0	*	*	4	15.0	-	X	-	X	-	*
7A	6X40	0	*	*	7	-	-	X	-	X	-	*

* VIDEO DETECTION ZONE

2 Phase Fully Actuated (Belmont Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specification for Roads and Structures" dated January 2024.
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. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
5. 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		
	2	4	7
Walk *	-	-	-
Ped Clear	-	-	-
Min Green *	12	7	7
Passage *	2.0	2.0	2.0
Max I *	90	30	30
Yellow Change	4.9	3.0	3.0
Red Clear	3.2	2.3	2.3
Added Initial *	-	-	-
Maximum Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Advance Walk	-	-	-
Non Lock Detector	-	X	X
Vehicle Recall	MIN RECALL	-	-
Dual Entry	-	X	X

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

LEGEND

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head	○ → N/A
○ → Sign	○ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
○ → Inductive Loop Detector	○ → N/A
○ → Controller & Cabinet	○ → N/A
○ → Junction Box	○ → N/A
○ → 2-in Underground Conduit	○ → N/A
○ → Right of Way	○ → N/A
○ → Directional Arrow	○ → N/A
○ → PUE → Utility Easement	○ → PUE →
○ → PDE → Drainage Easement	○ → PDE →
○ → N/A → Guardrail	○ → N/A →
○ → Construction Zone	○ → Construction Zone
○ → Non-Intrusive Detection Zone	○ → Non-Intrusive Detection Zone
○ → Pedestrian Barricade	○ → Pedestrian Barricade
○ → Barricade	○ → Barricade
○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)
○ → No Left Turn Sign (R3-2)	○ → No Left Turn Sign (R3-2)

Signal Upgrade
Temporary Design 6 - TMP Phase III Step 3 - Phase IV
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Division 12 Gaston County Belmont
 PLAN DATE: August 2025 REVIEWED BY: DT Sears
 PREPARED BY: WP Erickson-Jones REVIEWED BY:

REVISIONS

NO.	INIT.	DATE

SEAL

 David T. Sears
 8/1/2025
 SIGNATURE DATE
 SIG. INVENTORY NO. 12-099716

8/1/2025
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