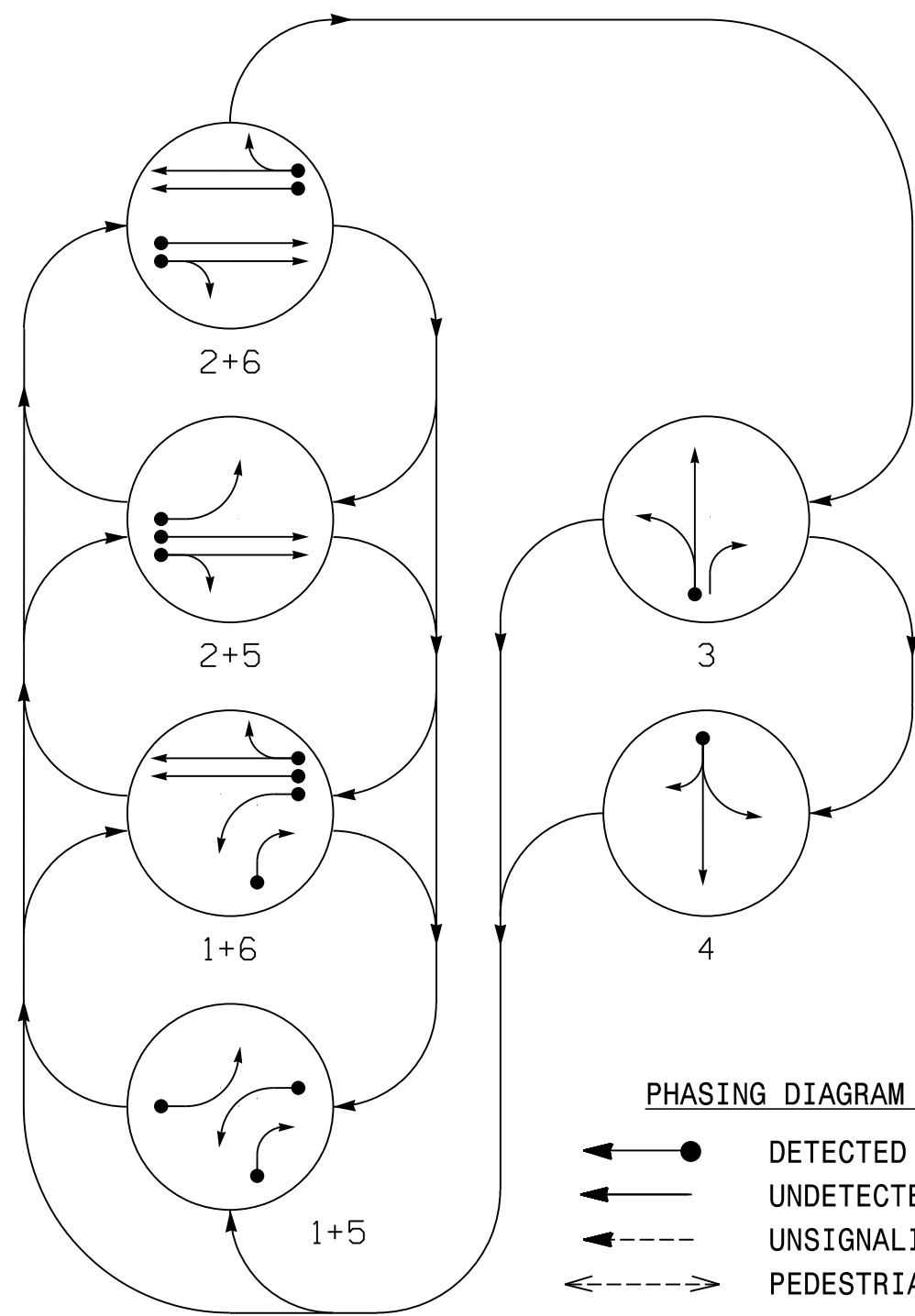
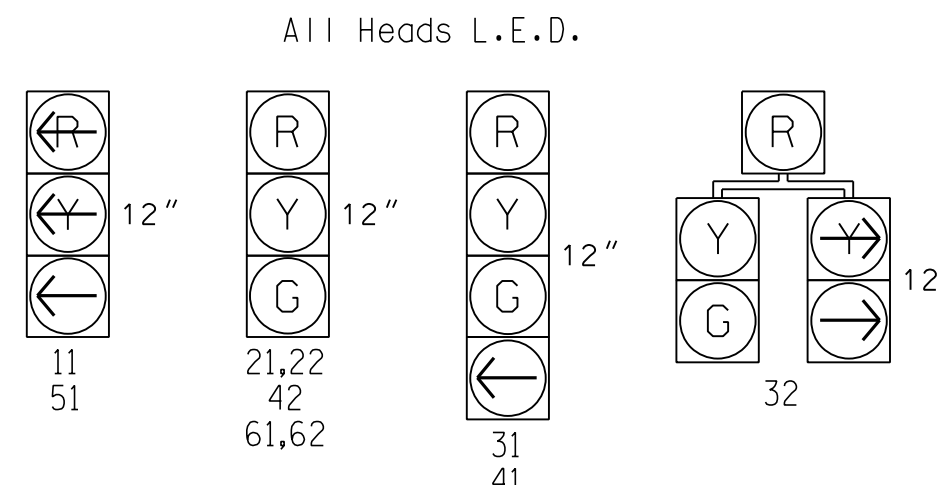


PHASING DIAGRAM



SIGNAL FACE	PHASE					
	1+5	1+6	2+5	2+6	3	4
11	←	←	←	←	←	←
21,22	R	R	G	G	R	R
31	R	R	R	R	G	R
32	R	R	R	R	R	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	←	←	←	←	←
61,62	R	G	R	G	R	R

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	NEW CARD
1A	6X40	0	*	*	1	-	-	X	-	X	-	*
1B	6X40	0	*	*	1	15.0	-	X	-	X	-	*
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	-	*
3A	6X40	0	*	*	3	3.0	-	X	-	X	-	*
4A	6X40	0	*	*	4	10.0	-	X	-	X	-	*
4B	6X15	0	*	*	4	10.0	-	X	-	X	-	*
5A	6X40	0	*	*	5	-	-	X	-	X	-	*
6A	6X6	300	*	*	6	-	1.6	X	-	X	-	*
6B	6X6	300	*	*	6	-	1.6	X	-	X	-	*
6C	6X6	90	*	*	6	-	-	X	-	X	-	*
6D	6X6	90	*	*	6	-	-	X	-	X	-	*

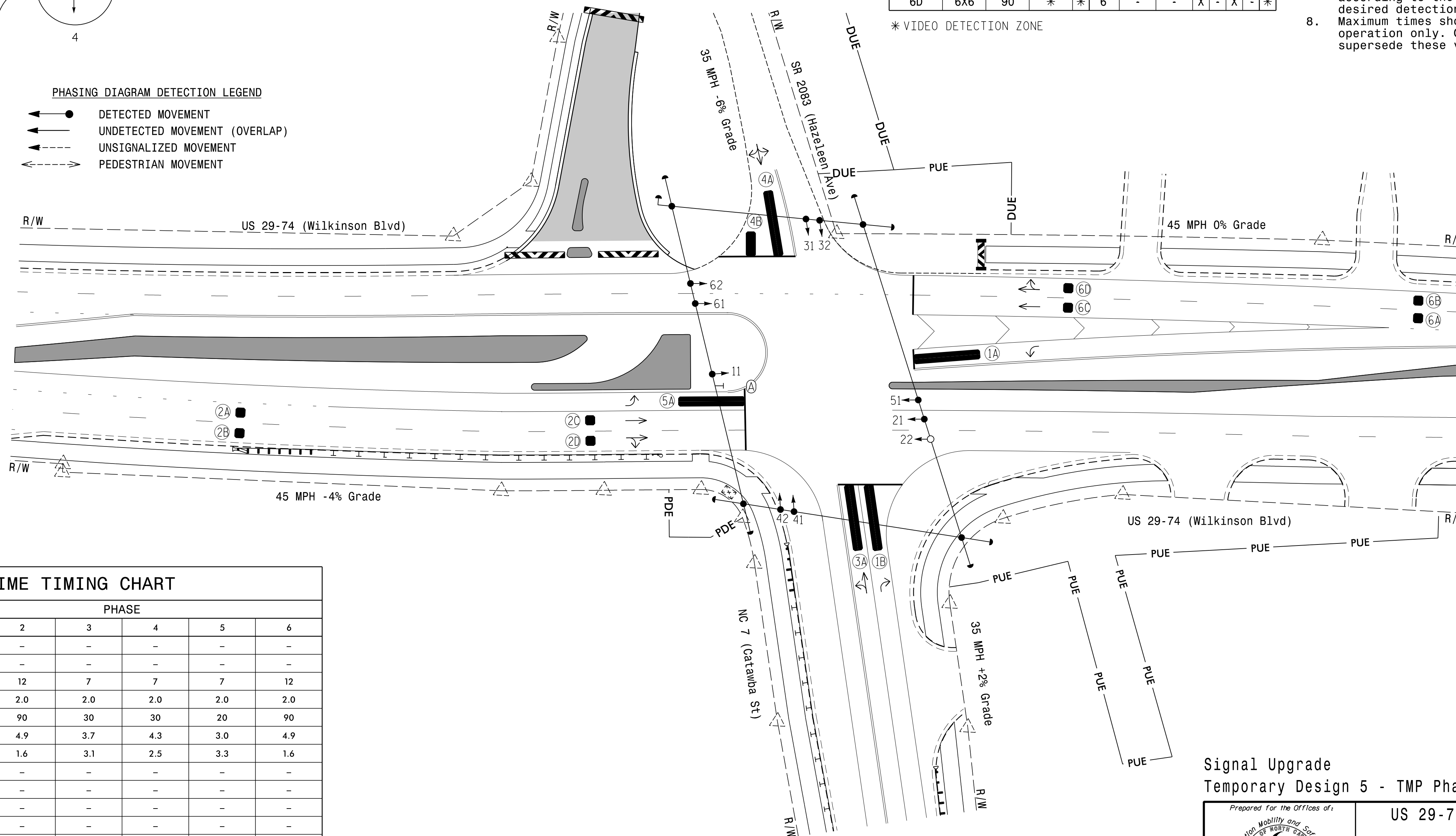
6 Phase Fully Actuated (Belmont Signal System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specification for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Reposition existing signal heads numbered 21 and 51.
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

- ← ● → DETECTED MOVEMENT
- ← ○ → UNDETECTED MOVEMENT (OVERLAP)
- ← ○ → UNSIGNALIZED MOVEMENT
- ← ○ → PEDESTRIAN MOVEMENT



MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Min Green *	7	12	7	7	7	12
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	20	90	30	30	20	90
Yellow Change	3.0	4.9	3.7	4.3	3.0	4.9
Red Clear	2.8	1.6	3.1	2.5	3.3	1.6
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
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.

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 |
| ○ → Utility Easment | ○ → N/A |
| ○ → Drainage Easment | ○ → N/A |
| ○ → Guardrail | ○ → N/A |
| ○ → Construction Zone | ○ → N/A |
| ○ → Non-Intrusive Detection Zone | ○ → N/A |
| ○ → Pedestrian Barricade | ○ → N/A |
| ○ → Barricade | ○ → N/A |
| ○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | ○ → N/A |

Signal Upgrade
Temporary Design 5 - TMP Phase III Steps 1-2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

<p>Prepared For the Offices of: Transportation Mobility and Safety Division STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION Signal Design Section</p>	<p>US 29-74 (Wilkinson Blvd) at NC 7 (Catawba St) / SR 2083 (Hazeleen Avenue)</p>		
	<p>Division 12 Gaston County Belmont</p> <p>PLAN DATE: August 2025 REVIEWED BY: DT Sears</p> <p>PREPARED BY: WP Erickson-Jones REVIEWED BY:</p>		
<p>REVISIONS</p>			<p>INIT. DATE</p>
<p>SCALE: 1" = 40'</p>			<p>SIGNATURE DATE</p>
<p>8/1/2025</p>			<p>8/1/2025</p>

8/1/2025
 R:\Projects\6051\U-6143\Signal\Signal\Signal.dgn
 DT Sears