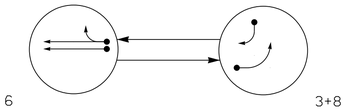
PROJECT REFERENCE NO.	SHEET NO.
B-6051/U-6143	Sig. 9.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

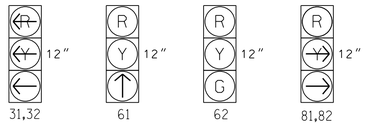
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 6	PHASE 3+8	PHASE FLASH
31,32	R	←	R
61	↑	R	R
62	G	R	R
81,82	R	→	R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

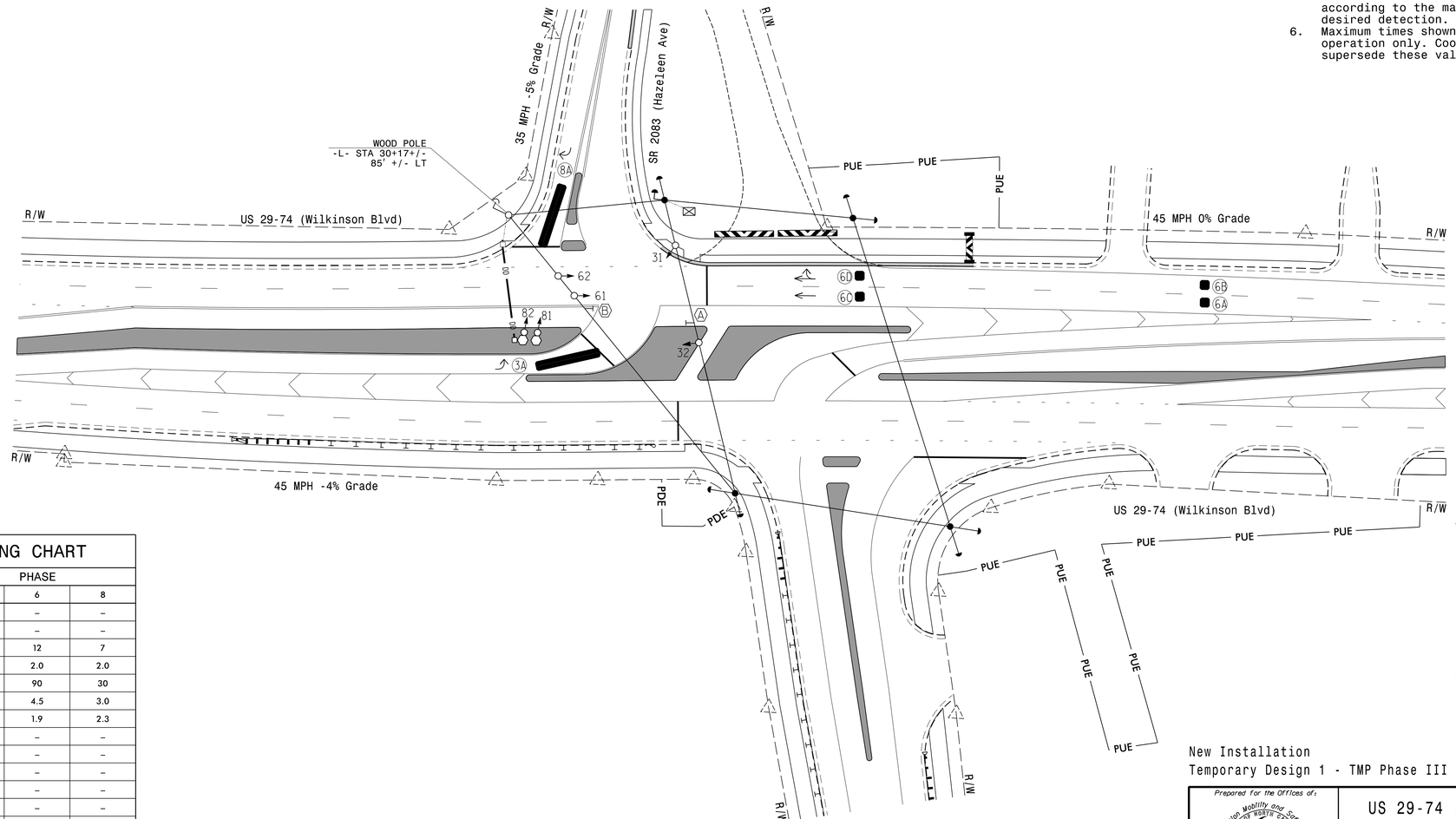
ZONE	DETECTOR SIZE (FT)	DETECTOR DISTANCE FROM STOPBAR (FT)	DETECTOR TURNS	DETECTOR NEW LOOP	PROGRAMMING CALL PHASE	PROGRAMMING DELAY TIME	PROGRAMMING EXTEND TIME	PROGRAMMING EXTEND	PROGRAMMING ADDED INITIAL	PROGRAMMING CALL	PROGRAMMING DELAY DURING GREEN	PROGRAMMING NEW CARD
3A	6X40	0	✳	✳	3	-	-	X	-	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	-	✳
8A	6X40	0	✳	✳	8	15.0	-	X	-	X	-	✳

✳ VIDEO DETECTION ZONE

2 Phase
Fully Actuated
(Isolated)

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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. The cabinet should be designed to include an Auxiliary Output File for future use.
4. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
□↓	Pedestrian Signal Head With Push Button & Sign	■↓
○	Signal Pole with Guy	●
○	Signal Pole with Sidewalk Guy	●
▭	Inductive Loop Detector	▭
⊠	Controller & Cabinet	⊠
□	Junction Box	■
·····	2-in Underground Conduit	·····
N/A	Right of Way	———
→	Directional Arrow	→
— PUE —	Utility Easment	— PUE —
— PDE —	Drainage Easment	— PDE —
▨	Construction Zone	▨
▬	Non-Intrusive Detection Zone	▬
N/A	Guardrail	⊥⊥
⋈	Pedestrian Barricade	⋈
▨	Barricade	▨
Ⓐ	No U-Turn Sign (R3-4)	Ⓐ
Ⓑ	No Left Turn Sign (R3-2)	Ⓑ

MAXTIME TIMING CHART

FEATURE	PHASE 3	PHASE 6	PHASE 8
Walk *	–	–	–
Ped Clear	–	–	–
Min Green *	7	12	7
Passage *	2.0	2.0	2.0
Max 1 *	30	90	30
Yellow Change	3.0	4.5	3.0
Red Clear	2.3	1.9	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 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

New Installation
Temporary Design 1 - TMP Phase III Step 3 - Phase IV

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Prepared for the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

SCALE 0 40 1"=40'

US 29-74 (Wilkinson Blvd) at SR 2083 (Hazeleen Ave)

Division 12 Gaston County Belmont

PLAN DATE: August 2025 REVIEWED BY: DT Sears

PREPARED BY: WP Erickson-Jones REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 044558 ENGINEER DAVID T SEARS

DocuSigned by: David T Sears
069183F2EE5741E...
SIGNATURE 8/1/2025 DATE

SIG. INVENTORY NO. 12-1919TI

8/1/2025
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