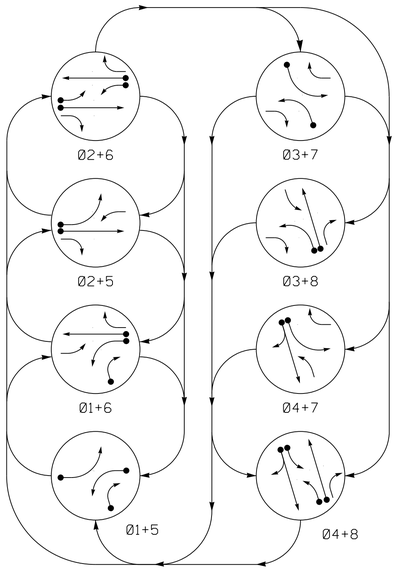
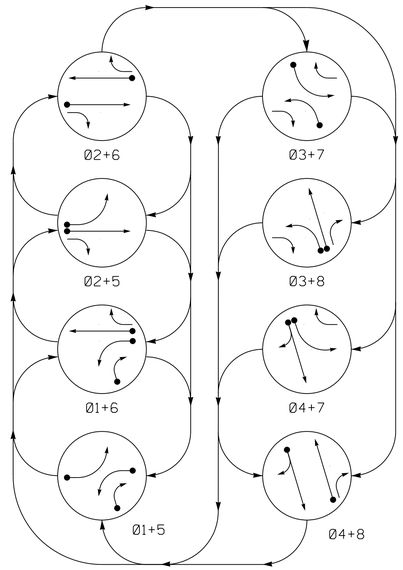
PROJECT REFERENCE NO.	SHEET NO.
R-2577A	Sig. 31.0

DEFAULT PHASING DIAGRAM

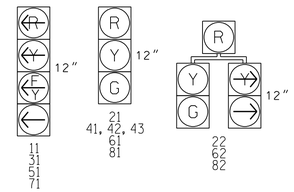


ALTERNATE PHASING DIAGRAM



SIGNAL FACE I.D.

All Heads L.E.D.



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
11	←●	←—	~~F Y~~	~~F Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R/→	R/→	R	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	←—	←—	~~F Y~~	~~F Y~~	~~R~~
41,42,43	R	R	R	R	R	R	G	G	R
51	←—	~~F Y~~	←—	~~F Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R/→	R	R/→	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	←—	~~F Y~~	←—	~~F Y~~	~~R~~
81	R	R	R	R	R	G	R	G	R
82	R/→	R/→	R	R	R	G	R	G	R

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
11	←●	←—	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R/→	R/→	R	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	←—	←—	~~R~~	~~R~~	~~R~~
41,42,43	R	R	R	R	R	R	G	G	R
51	←—	~~R~~	←—	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R/→	R	R/→	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	←—	~~R~~	←—	~~R~~	~~R~~
81	R	R	R	R	R	G	R	G	R
82	R/→	R/→	R	R	R	G	R	G	R

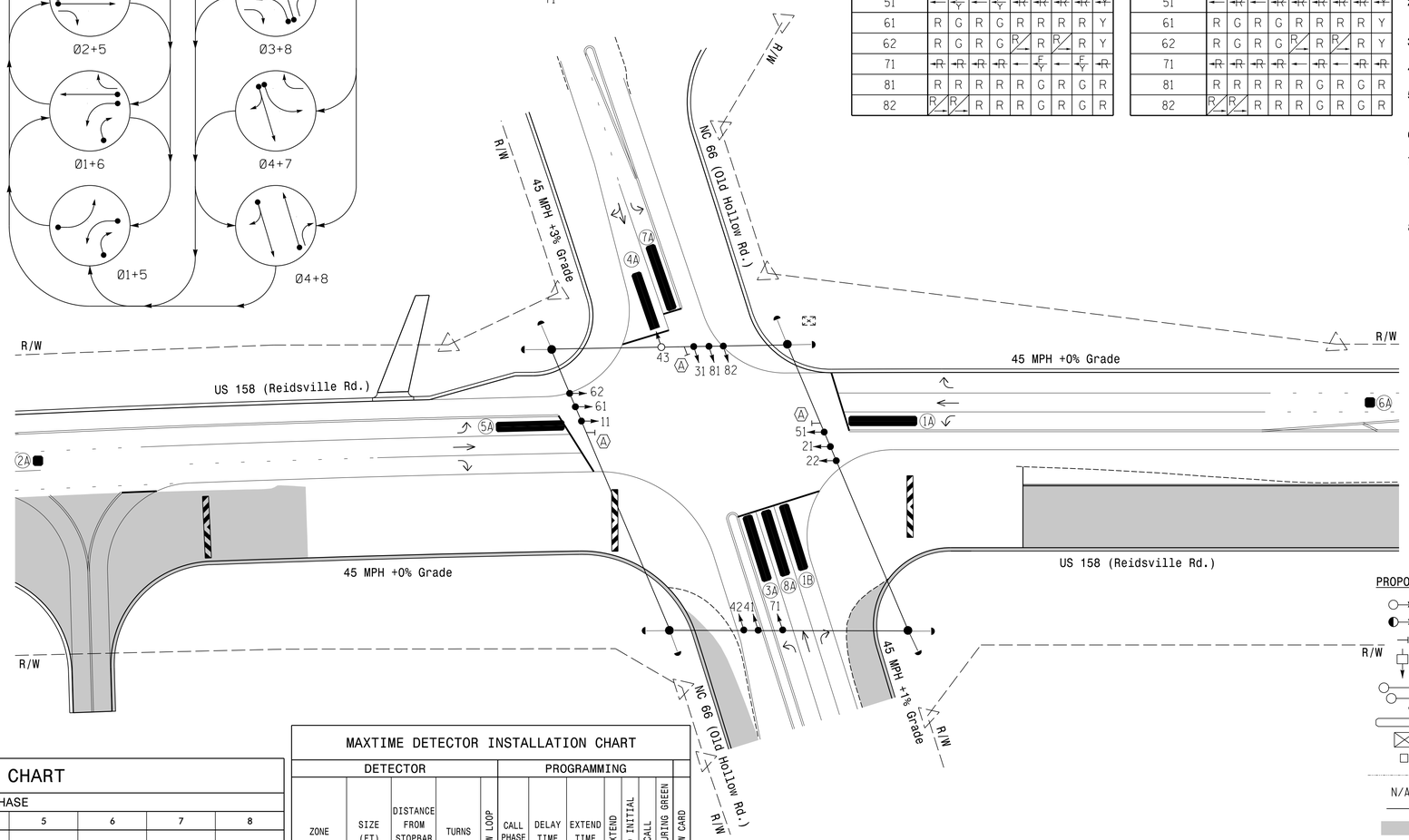
8 Phase
Fully Actuated
(Isolated)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise noted by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Reposition existing signal heads numbered 11, 21, 22, 31, 51, 61, 62, 81, and 82.
6. Set all detector units to presence mode.
7. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
8. The Division Traffic Engineer will determine the hours of use for each phasing plan.

PHASING DIAGRAM DETECTION LEGEND

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



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	
	Construction Zone	
	Video Detection Zone	
	Barricade	
	No U-turn Sign (R3-4)	

MAXTIME TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Walk *	–	–	–	–	–	–	–	–
Ped Clear *	–	–	–	–	–	–	–	–
Min Green	7	12	7	7	7	12	7	7
Passage *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	20	90	20	40	20	90	20	40
Yellow Change	3.0	4.5	3.0	4.4	3.0	4.5	3.0	4.4
Red Clear	2.9	2.2	2.8	1.9	3.1	2.2	3.2	1.9
Added Initial *	–	2.5	–	–	–	2.5	–	–
Maximum Initial *	–	34	–	–	–	34	–	–
Time Before Reduction *	–	15	–	–	–	15	–	–
Time To Reduce *	–	30	–	–	–	30	–	–
Minimum Gap	–	3.0	–	–	–	3.0	–	–
Advance Walk	–	–	–	–	–	–	–	–
Non Lock Detector	X	–	X	X	X	–	X	X
Vehicle Recall	–	MIN RECALL	–	–	–	MIN RECALL	–	–
Dual Entry	–	–	–	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.

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A ✳	6X40	0	✳	✳	1	15#	-	X	-	X	-	✳
					6@	3	-	X	-	X	X	✳
1B ✳	6X40	0	✳	✳	1	15	-	X	-	X	-	✳
2A ✳	6X6	300	✳	✳	2	-	-	X	X	X	-	✳
3A ✳	6X40	0	✳	✳	3	15#	-	X	-	X	-	✳
					8@	3	-	X	-	X	-	✳
4A ✳	6X40	0	✳	✳	4	10	-	X	-	X	-	✳
5A ✳	6X40	0	✳	✳	5	15#	-	X	-	X	-	✳
					2@	3	-	X	-	X	X	✳
6A ✳	6X6	300	✳	✳	6	-	-	X	X	X	-	✳
7A ✳	6X40	0	✳	✳	7	15#	-	X	-	X	-	✳
					4@	3	-	X	-	X	-	✳
8A ✳	6X40	0	✳	✳	8	-	-	X	-	X	-	✳

\# Reduce Delay to 3 Seconds During Alternate Phasing Operation.
@ Disable Phase Call For Zone(s) During Alternate Phasing Operation.
✳ Video Detection Zone

Signal Upgrade - Temporary Design 2 (TMP Phase II)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SCALE 0 40
1" = 40'

US 158 (Reidsville Rd.) at NC 66 (Old Hollow Rd.)

Division 9 Forsyth County Walkertown

PLAN DATE:	February 2024	REVIEWED BY:	WP Erickson-Jones
PREPARED BY:	H Townsend	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 056142 ENGINEER PORTER JONES

DocuSigned by:
Porter Jones
D0EE5E3AEDE488...
SIGNATURE 2/12/2024 DATE

SIG. INVENTORY NO. 09-0264T2

2/12/2024
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wpjones