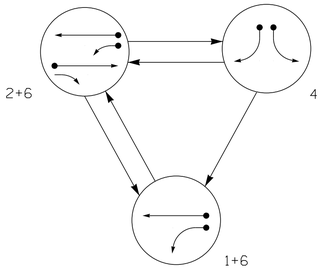
Docusign Envelope ID: 3713D2F4-C78E-4F43-8571-917995BAF5C7

PROJECT REFERENCE NO.	SHEET NO.
I-5898	10.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE 1+6	PHASE 2+6	PHASE 4	FLASH
11	←	F Y	↰R	↰R
21	R	↑	R	R
22	R	G	R	R
23	R	F Y→	R	R
41	↰R	↰R	←	↰R
42	R	R	G	R
43	R	R	↗	R
61	G	G	R	R
62	↑	↑	R	R

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR 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	15.0	-	X	-	X	-	-
					6	-	-	X	-	X	-	-
2A✳	6X6	70	✳	-	2	-	-	X	-	X	-	-
4A✳	6X40	0	✳	-	4	-	-	X	-	X	-	-
4B✳	6X40	0	✳	-	4	15.0	-	X	-	X	-	-
6A✳	6X6	70	✳	-	6	-	-	X	-	X	-	-

✳ Video Detection Zone

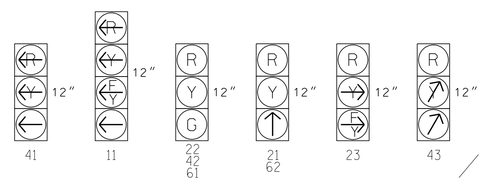
3 Phase
Fully Actuated
(NC 135 CLS)
Signal System # D07-09_Mayodan

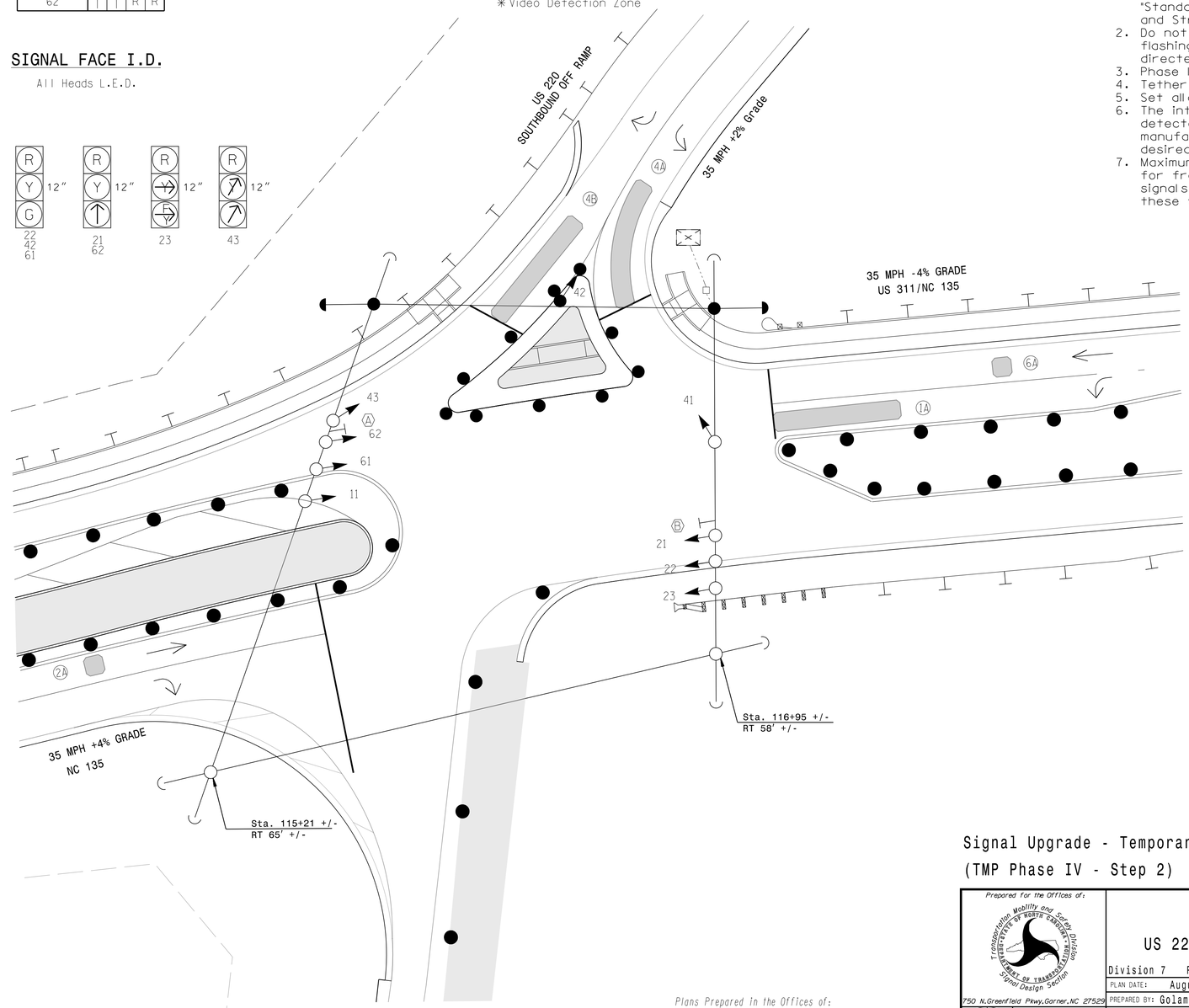
NOTES

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 directed by the Engineer.
3. Phase 1may be lagged.
4. Tether signal heads numbered 43 and 62.
5. Set all detector units to presence mode.
6. The intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve desired detection.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

SIGNAL FACE I.D.

All Heads L.E.D.





LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Sign	
	Signal Pole with Guy	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Guardrail	
	Construction Zone Drums	
	Construction Zone	N/A
	Non-Intrusive Detection Zone	
N/A	Curb Ramp	
Ⓐ	No Right Turn Sign (R3-1)	Ⓐ
Ⓑ	No U-Turn/No Left Turn Sign (R3-18)	Ⓑ

MAXTIME TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 6
Walk *	–	–	–	–
Ped Clear	–	–	–	–
Min Green *	7	10	7	10
Passage *	2.0	3.0	2.0	3.0
Max 1 *	20	60	40	60
Yellow Change	3.0	4.1	3.0	4.1
Red Clear	3.4	2.7	2.6	2.7
Added Initial *	–	–	–	–
Maximum Initial *	–	–	–	–
Time Before Reduction *	–	–	–	–
Time To Reduce *	–	–	–	–
Minimum Gap	–	–	–	–
Advance Walk	–	–	–	–
Non Lock Detector	X	–	X	–
Vehicle Recall	–	MIN RECALL	–	MIN RECALL
Dual Entry	–	–	–	–

* These values may be field adjusted. Do not adjust Min Green and Passage 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 4
(TMP Phase IV - Step 2)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

Plans Prepared in the Offices of:
Johnson, Mirmiran, & Thompson Inc.
4700 Falls of Neuse Rd, Suite 100,
Raleigh, NC, 27606
License No: C-3097

SCALE 0 20 1'=20'

US 311/NC 135
at
US 220 Southbound Ramps

Division 7 Rockingham County Mayodan

PLAN DATE: August 2025 REVIEWED BY:
PREPARED BY: Golam Moinuddin REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 034454 ENGINEER GOLAM M. MOINUDDIN
Signed by: Golam Moinuddin
DOCUSIGNED
SIGNATURE 8/1/2025 DATE
SIG. INVENTORY NO. 07-1475 T4

8/1/2025 10:20:33 AM
*07-1475 T4 US 311 US 220.dgn
User:BMuryawski