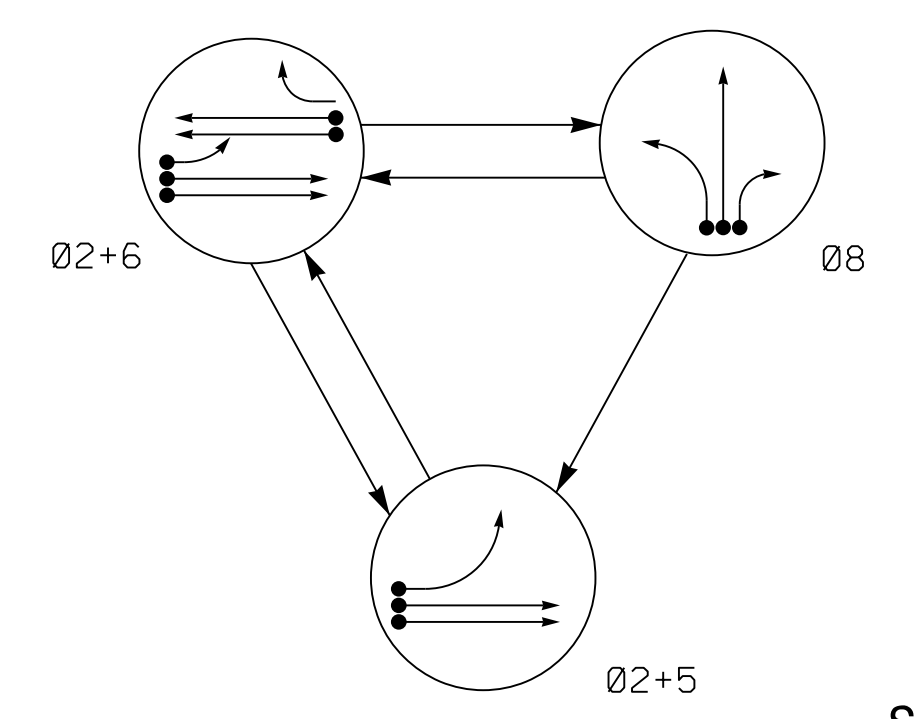


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

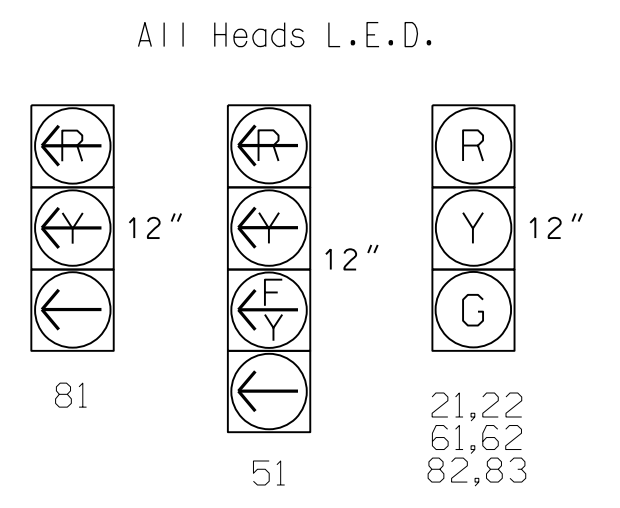


TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 2+5	Ø 2+6	Ø 8	FLASH
21,22	G	G	R	Y
51	—	F	R	Y
61,62	R	G	R	Y
81	R	R	—	R
82,83	R	R	G	R

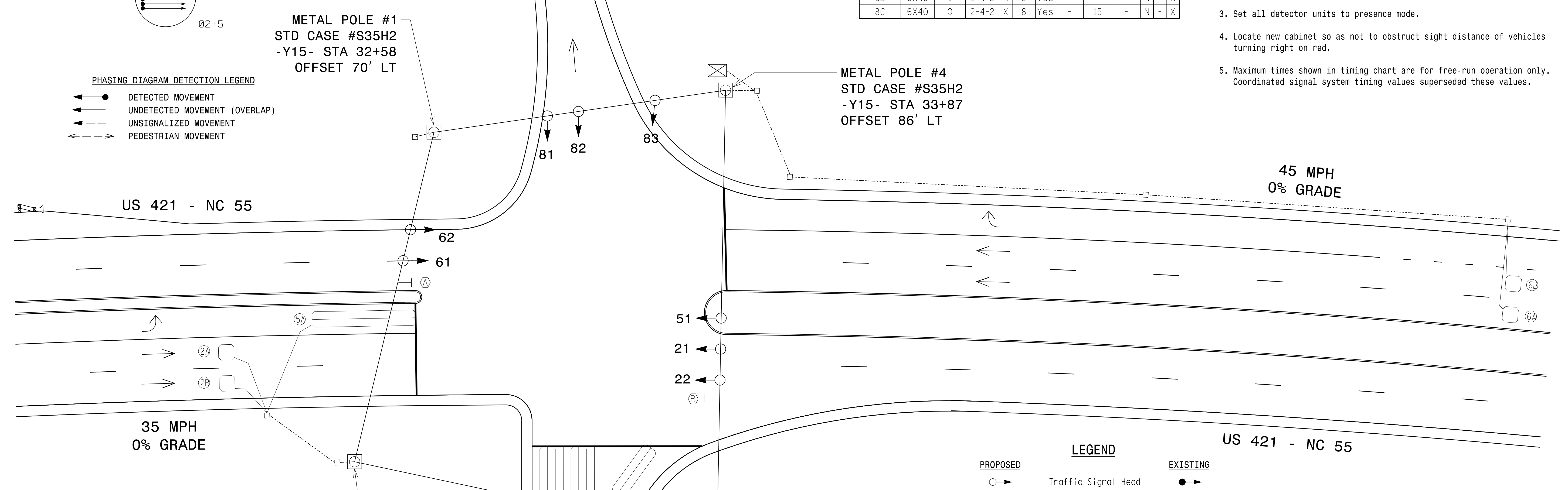
ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	70	4	X	2	Yes	-	-	-	N	-	X
2B	6X6	70	4	X	2	Yes	-	-	-	N	-	X
5A	6X40	0	2-4-2	X	5	Yes	-	15	-	N	-	X
6A	6X6	300	5	X	6	Yes	-	-	-	N	-	X
6B	6X6	300	5	X	6	Yes	-	-	-	N	-	X
8A	6X40	0	2-4-2	X	8	Yes	-	-	-	N	-	X
8B	6X40	0	2-4-2	X	8	Yes	-	-	-	N	-	X
8C	6X40	0	2-4-2	X	8	Yes	-	15	-	N	-	X

3 Phase Fully Actuated Signal System #D06-02 Dunn US 421 - NC 55 (Dunn)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values superseded these values.



ASC/3 TIMING CHART

FEATURE	PHASE			
	2	5	6	8
Min Green *	10	7	12	7
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Veh. Extension *	3.0	2.0	6.0	2.0
Max 1 *	6.0	2.0	6.0	2.0
Yellow	4.5	3.0	4.5	4.6
Red Clear	2.2	2.9	2.2	1.6
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds / Actuation *	-	-	1.5	-
Max Initial *	-	-	25	-
Time Before Reduction *	-	-	15	-
Time To Reduce *	-	-	30	-
Minimum Gap	-	-	3.0	-
Lacking Detector	X	-	X	-
Recall Position	VEH. RECALL	-	VEH. RECALL	-
Dual Entry	-	-	-	-
Simultaneous Gap	X	X	X	X

METAL POLE #2
STD CASE #S35H2
-Y15- STA 32+26
OFFSET 57' RT

METAL POLE #3
STD CASE #S35H2
-NBCD- STA 42+11
OFFSET 59' RT

LEGEND

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head	○ → Sign
○ → Pedestrian Signal Head With Push Button & Sign	○ → Signal Pole with Guy
○ → Signal Pole with Sidewalk Guy	○ → Metal Strain Pole
○ → Inductive Loop Detector	○ → Controller & Cabinet
○ → Junction Box	○ → 2-in Underground Conduit
○ → Right of Way	○ → Directional Arrow
○ → No Left Turn (R3-2) Sign	○ → No Right Turn (R3-1) Sign

Signal Upgrade

Michael Baker INTERNATIONAL
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NC License No.: F-1084

Prepared for:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
SIGNAL DESIGN SECTION

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 0 20
1" = 20'

US 421 - NC 55 at I-95 NB Ramp/CD Road

Division 6 Harnett County Dunn

PLAN DATE: May 2021 REVIEWED BY: A Donald

PREPARED BY: K M Cory REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
KOLLY M. CORY
PROFESSIONAL ENGINEER
SEAL 038970
KOLLY M. CORY

SIGNATURE: Kelly M Cory DATE: 5/9/2021

SIG. INVENTORY NO. 06-0766

09-MAY-2021 2:04:47 2: *P:\PROJECTS\K0001\1-5886B\Traffic\045\SIGNAL\045\SIG-04.dgn KMCORY AT CAROLKORY

* 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.