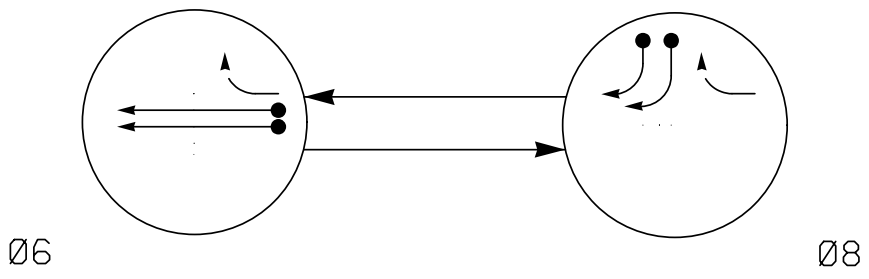


PHASING DIAGRAM



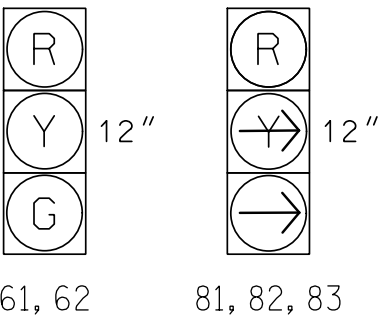
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE		
	Ø 6	Ø 8	FLASHES
61, 62	G	R	Y
81, 82, 83	R	→	R

SIGNAL FACE I.D.

All Heads L.E.D.



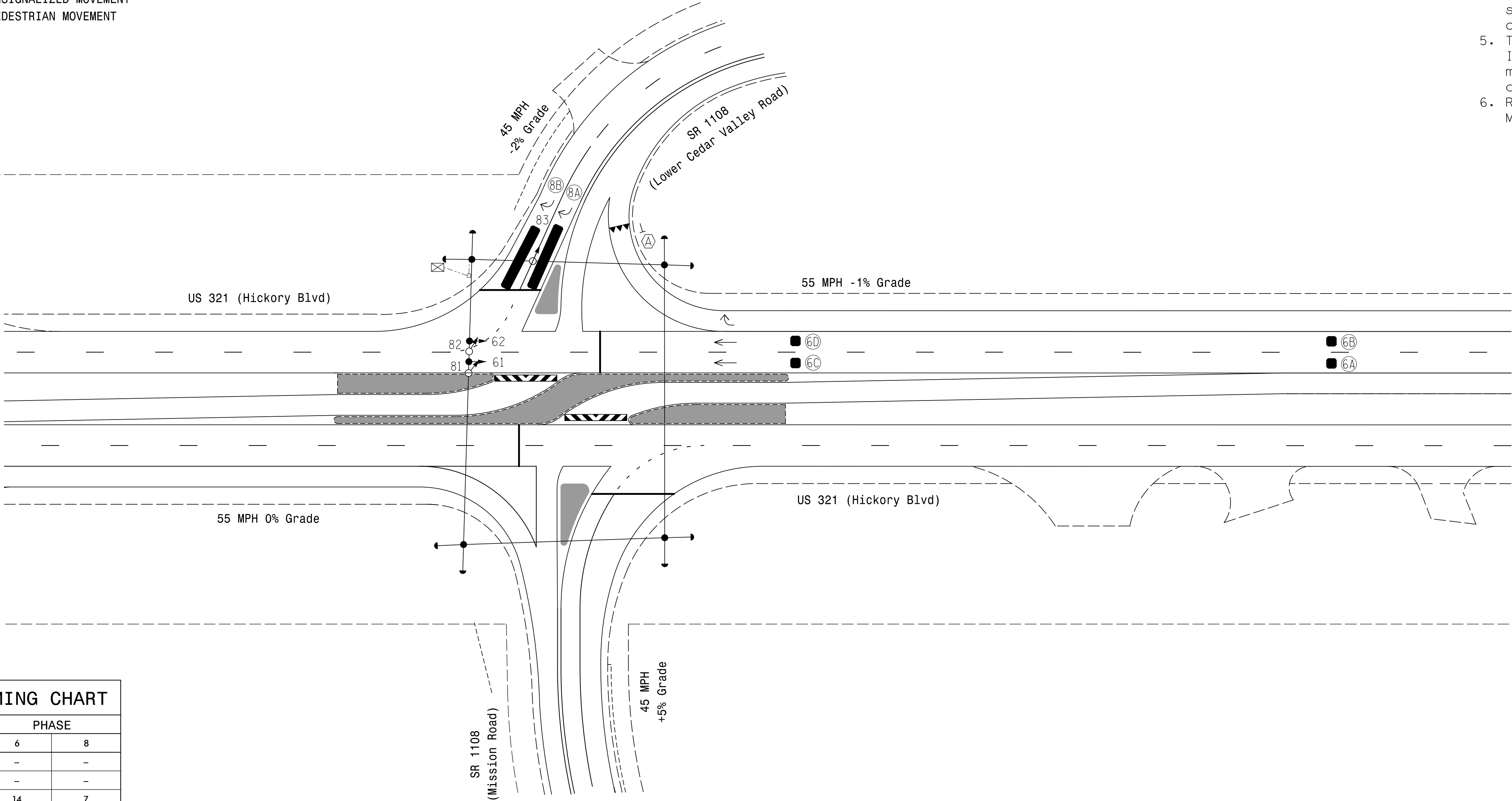
MAXTIME DETECTOR INSTALLATION CHART												
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
6A, 6B	6X6	420	*	*	6	-	2.2	X	-	X	-	*
6C, 6D	6X6	110	*	*	6	-	-	X	-	X	-	*
8A	6X40	0	*	*	8	15.0	-	X	-	X	-	*
8B	6X40	0	*	*	8	15.0	-	X	-	X	-	*

\* Video Detection Zone

2 Phase  
Fully Actuated  
Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- 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.
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Refer to Roadway and/or Pavement Marking plans for stop bar locations.



MAXTIME TIMING CHART		
FEATURE	PHASE	
	6	8
Walk *	-	-
Ped Clear *	-	-
Min Green	14	7
Passage *	2.0	2.0
Max 1 *	90	20
Yellow Change	5.3	3.0
Red Clear	1.3	2.8
Added Initial *	-	-
Maximum Initial *	-	-
Time Before Reduction *	-	-
Time To Reduce *	-	-
Minimum Gap	-	-
Advance Walk	-	-
Non Lock Detector	-	X
Vehicle Recall	MIN RECALL	-
Dual Entry	-	-

\* 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.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
	Right of Way	
	Directional Arrow	
	Video Detection Zone	
	Construction Zone	N/A
	Type III Barricade	N/A
	Yield Bars	
	"YIELD" Sign R1-2	

Signal Upgrade  
Temporary Design 2 - TMP Phase III

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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

US 321 (Hickory Boulevard) NB  
at  
SR 1108 (Mission Road)/  
SR 1108 (Lower Cedar Valley Rd)  
Division 11 Caldwell County Hudson  
PLAN DATE: Sept 2023 REVIEWED BY: D.J. Darity  
PREPARED BY: R. Leon REVIEWED BY: T.M. Woody

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED

SEAL  
NORTH CAROLINA  
PROFESSIONAL  
ENGINEER  
DONALD J. DARTY  
10/18/2023  
DATE  
10-0066T2