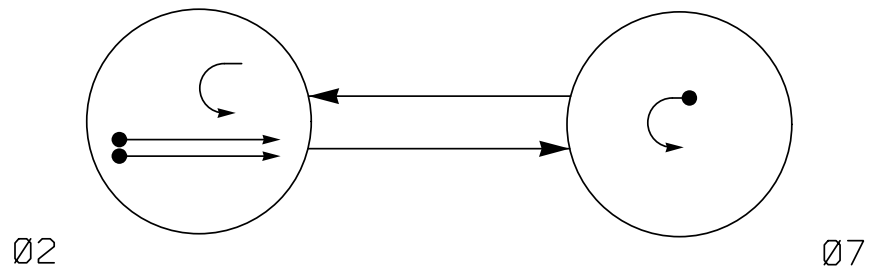


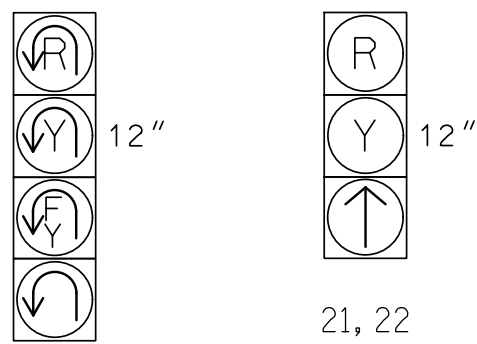
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION			
SIGNAL FACE	PHASE		
	02	07	FLASH
	21, 22	↑ R R	R
71, 72	↓ R	↑ R	↓ R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART											
DETECTOR						PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	URNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
7A	6X40	0	2-4-2	X	7	* 15.0	-	X	-	X	X

* Disable Delay during Alternate Phasing operation.

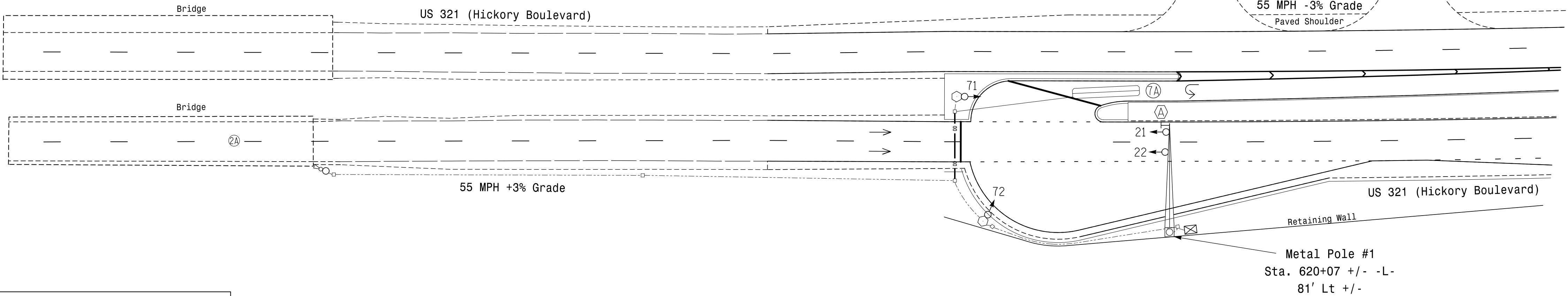
2 Phase
Fully Actuated w/
Alternate Phasing Operation
US 321 Closed Loop System

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.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- This intersection uses single-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Pedestal mounted signal heads shall be mounted a minimum of 8' above the high point of the roadway surface elevation.
- Refer to Roadway and/or Pavement Marking plans for stop bar locations.

PHASING DIAGRAM DETECTION LEGEND

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



MAXTIME TIMING CHART		
FEATURE	PHASE	
	2	7
Walk *	-	-
Ped Clear *	-	-
Min Green	14	7
Passage *	6.0	2.0
Max l *	90	20
Yellow Change	4.9	3.0
Red Clear	1.0	4.5
Added Initial *	1.5	-
Maximum Initial *	46	-
Time Before Reduction *	15	-
Time To Reduce *	30	-
Minimum Gap	3.4	-
Advance Walk	-	-
Non Lock Detector	-	X
Vehicle Recall	MIN RECALL	-
Dual Entry	-	-

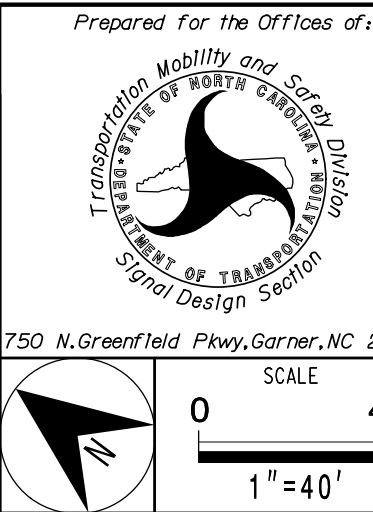
* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Advance Microwave Detection		
FUNCTION	SENSOR 1 - 2A	
Channel	1	
Phase	2	
Direction of Travel	EB	
Type	Priority	
Level	2	QUEUE
Discovery Zone (ft)	< 750	NA
Detection Zone (ft)	100 - 600	100 - 150
Enable Speed	Y	Y
Speed Range (mph)	35 - 100	1 - 35
Enable Estimated Time of Arrival	Y	N
Estimated Time of Arrival (sec)	2.5 - 6.5	-

PROPOSED		LEGEND		EXISTING	
○→	Traffic Signal Head	●→	Traffic Signal Head	●→	Traffic Signal Head
●→	Modified Signal Head	N/A	Modified Signal Head	N/A	Modified Signal Head
→	Sign	→	Sign	→	Sign
○→	Signal Pole with Guy	●→	Signal Pole with Guy	●→	Signal Pole with Guy
○→	Signal Pole with Sidewalk Guy	●→	Signal Pole with Sidewalk Guy	●→	Signal Pole with Sidewalk Guy
○→	Inductive Loop Detector	○→	Inductive Loop Detector	○→	Inductive Loop Detector
⊗	Controller & Cabinet	⊗	Controller & Cabinet	⊗	Controller & Cabinet
□	Junction Box	□	Junction Box	□	Junction Box
-----	2-in Underground Conduit	-----	2-in Underground Conduit	-----	2-in Underground Conduit
N/A	Right of Way	-----	Right of Way	-----	Right of Way
→	Directional Arrow	→	Directional Arrow	→	Directional Arrow
○→	Metal Pole with Mastarm	○→	Metal Pole with Mastarm	○→	Metal Pole with Mastarm
○	Type II Signal Pedestal	○	Type II Signal Pedestal	○	Type II Signal Pedestal
---○---	Directional Drill	N/A	Directional Drill	N/A	Directional Drill
○→	Microwave Detector	○→	Microwave Detector	○→	Microwave Detector
---○---	Non-Intrusive Detection Zone	---○---	Non-Intrusive Detection Zone	---○---	Non-Intrusive Detection Zone
⊗	No Left Turn Sign (R3-2)	⊗	No Left Turn Sign (R3-2)	⊗	No Left Turn Sign (R3-2)

New Installation

stv
STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
(704) 372-1885
NC License Number F-0991



US 321 (Hickory Boulevard) SB at U-Turn North of SR 1809/1952 (Pine Mountain Rd)			
Division 11	Caldwell County	Hudson	
PLAN DATE: May 2026	REVIEWED BY: B. Roth-Roffy		
PREPARED BY: R.L. Aristondo	REVIEWED BY: T.M. Woody		
REVISIONS	INIT.	DATE	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
SEAL	
SEAL 040329	
ENGINEER T.M. WOODY	
DocuSigned by T.M. Woody	5/29/2026
SIG. INVENTORY NO.	II-1451