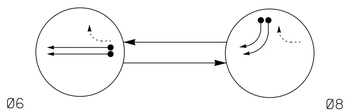
DocuSign Envelope ID: 0FC12AE5-7D8A-489B-8BD2-38166E5C03B4

PROJECT REFERENCE NO.	SHEET NO.
U-4700 CA	Sig. 4.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

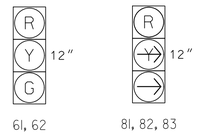
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø6	PHASE Ø8	FLASH
61, 62	G	R	R
81, 82, 83	R	→	R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

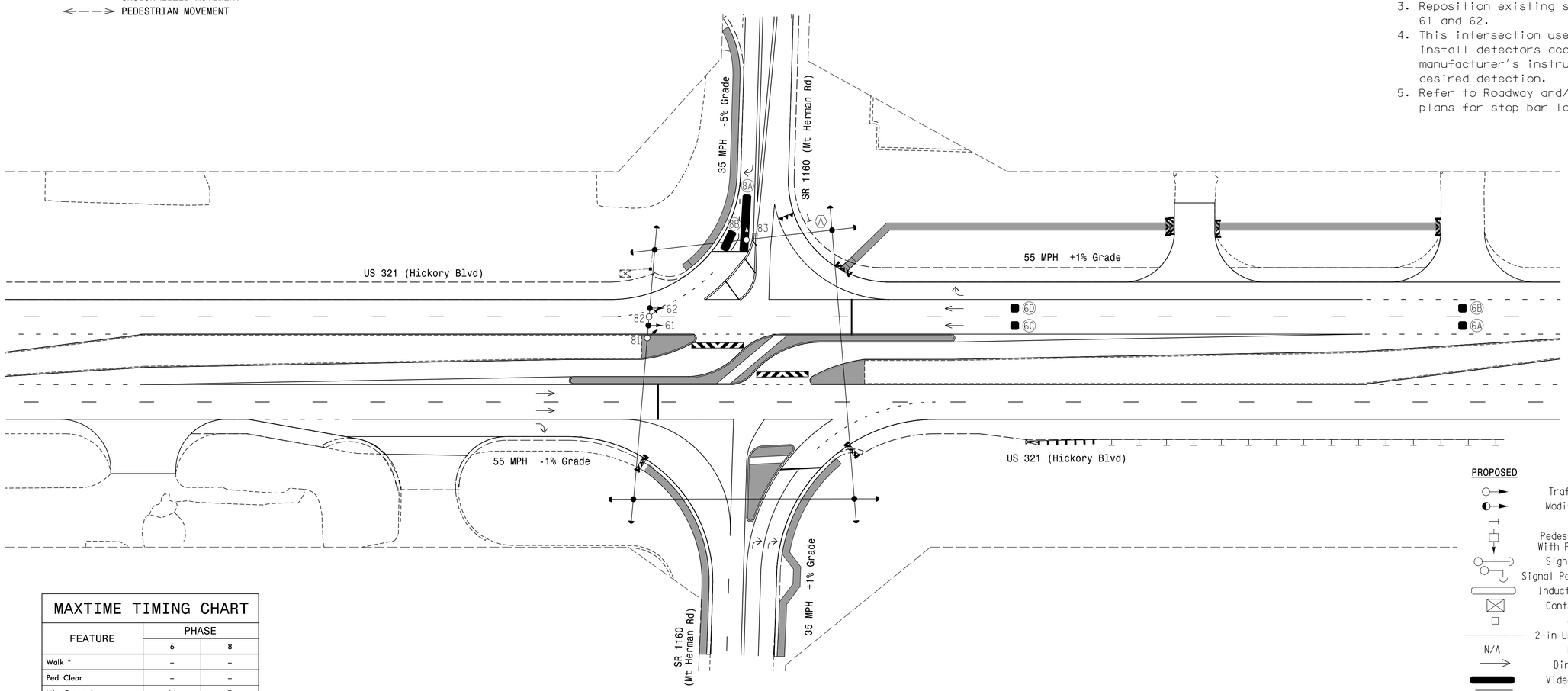
DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
6A,6B	6X6	420	✳	X	6	-	2.0	X	-	X	-	-
6C,6D	6X6	110	✳	X	6	-	-	X	-	X	-	-
8A	6X40	0	✳	X	8	-	-	X	-	X	-	X
8B	6X15	0	✳	X	8	-	-	X	-	X	-	X

✳ Video Detection Zone

2 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 directed by the Engineer.
3. Reposition existing signal heads numbered 61 and 62.
4. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
5. Refer to Roadway and/or Pavement Marking plans for stop bar locations.



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	
	Video Detection Area	
	Construction Zone	N/A
	Guardrail	
	Type III Barricade	N/A
	Pedestrian Barricade	N/A
A	"YIELD" Sign (R1-2)	A

MAXTIME TIMING CHART

FEATURE	PHASE 6	PHASE 8
Walk *	–	–
Ped Clear	–	–
Min Green *	14	7
Passage *	2.0	2.0
Max 1 *	90	20
Yellow Change	5.1	3.1
Red Clear	1.4	3.3
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.

stv
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
(704) 372-1885
NC License Number F-0991

Signal Upgrade
Temporary Design 2 - TMP Phase II

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

US 321 (Hickory Boulevard) NB at SR 1160 (Mt Herman Road)

Division 11 Caldwell County Hudson

PLAN DATE:	June 2024	REVIEWED BY:	D.J. Darity
PREPARED BY:	J.C. Grimm	REVIEWED BY:	T.M. Moody

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 040329 ENGINEER TRENT M. MOODY

DocuSigned by:
Trent Moody 6/10/2024
A5EA1BA8B1D4B4...
SIGNATURE DATE

SIG. INVENTORY NO. II-0810T2

5/31/2024
\\kwa\proj0.stvinc.com\J3\DGPA\Proj13\Projects\4019919\4019919_0001460_Discipline Info\Traffic\Signal Design\U-4700CA(MtHerman)\Submittals\2 - Submittal\1081012_sig_dsn_20240209.dgn
LeonLR