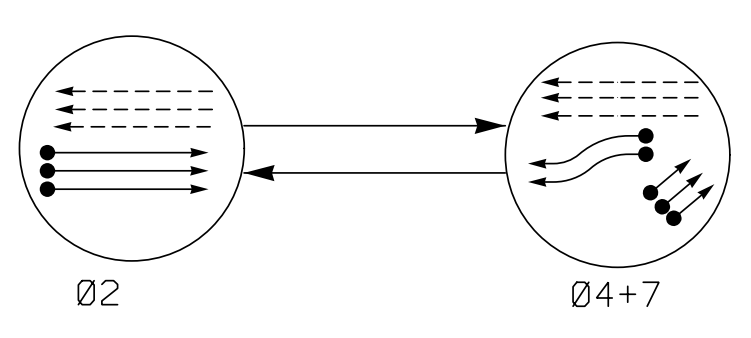


**PHASING DIAGRAM**



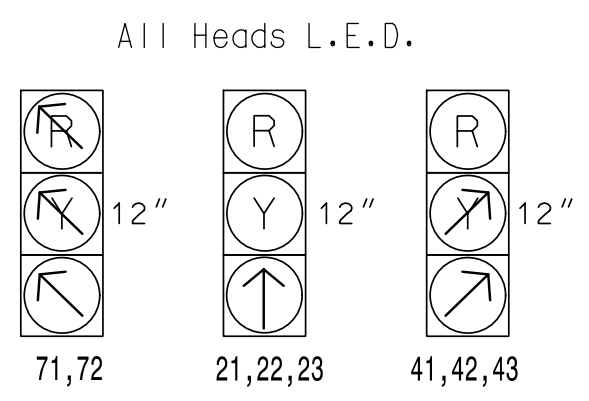
**PHASING DIAGRAM DETECTION LEGEND**

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

**TABLE OF OPERATION**

SIGNAL FACE	PHASE		
	02	04+7	FLASH
21,22,23	↑	R	Y
41,42,43	R	↘	R
71,72	↘	↘	↘

**SIGNAL FACE I.D.**



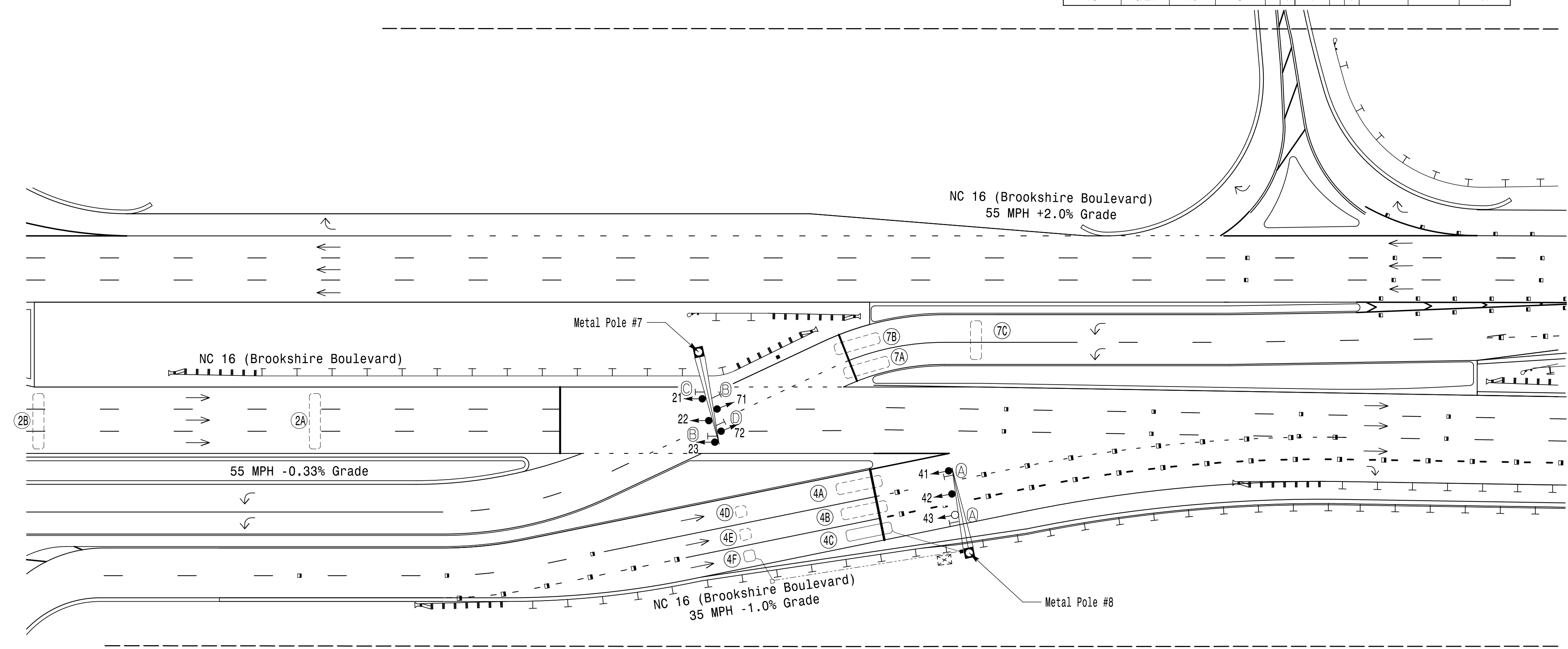
**LOOP & DETECTOR INSTALLATION CHART**  
EOS-2070LX CONTROLLER w/ TS-2 CABINET

LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW EXISTING	DETECTOR UNITS			DET. TYPE	
					NEMA PHASE	NEW EXISTING	TIMING FEATURE TIME		
2A	6X30	130	3	- Y	2	- Y	-	-	N
2B	6X30	280	3	- Y	2	- Y	-	-	N
4A	6X25	+5	3	- Y	4	- Y	-	-	N
4B	6X25	+5	3	- Y	4	- Y	-	-	N
4C	6X25	+5	3	Y	- 4	Y	-	-	N
4D	6X6	70	3	- Y	4	- Y	-	-	N
4E	6X6	70	3	- Y	4	- Y	-	-	N
4F	6X6	70	3	Y	- 4	Y	-	-	N
7A	6X25	+5	3	- Y	7	- Y	-	-	N
7B	6X25	+5	3	- Y	7	- Y	-	-	N
7C	6X21	70	3	- Y	7	- Y	-	-	N

**3 Phase Fully Actuated (Charlotte Signal System)**

**NOTES**

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
5. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
6. Charlotte Signal System Data: Controller Asset #2272



**TIMING CHART**  
EOS-2070LX CONTROLLER

PHASE	02	04	07
MINIMUM GREEN *	14 SEC.	7 SEC.	7 SEC.
VEHICLE EXT. *	2.0 SEC.	3.0 SEC.	3.0 SEC.
YELLOW CHANGE INT.	5.2 SEC.	3.9 SEC.	3.4 SEC.
RED CLEARANCE	2.9 SEC.	1.0 SEC.	3.0 SEC.
MAX. I *	45 SEC.	45 SEC.	45 SEC.
RECALL POSITION	MIN. RECALL	NONE	NONE
LOCK DET.	ON	OFF	OFF
WALK *	- SEC.	- SEC.	- SEC.
PED. CLEAR	- SEC.	- SEC.	- SEC.
VOLUME DENSITY	OFF	OFF	OFF
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	- SEC.	- SEC.	- SEC.
MAX. INITIAL *	- SEC.	- SEC.	- SEC.
TIME B4 REDUCTION *	- SEC.	- SEC.	- SEC.
TIME TO REDUCE *	- SEC.	- SEC.	- SEC.
MINIMUM GAP	- SEC.	- SEC.	- SEC.
DUAL ENTRY	OFF	OFF	OFF
SIMULTANEOUS GAP	ON	ON	ON

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than that is shown. Min Green for all other phases should not be lower than 4 seconds.

**LEGEND**

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head	○ → N/A
○ → Sign	○ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
○ → Metal Pole with Mastarm	○ → N/A
○ → Inductive Loop Detector	○ → N/A
○ → Controller & Cabinet	○ → N/A
○ → Junction Box	○ → N/A
○ → 2-in Underground Conduit	○ → N/A
○ → Right of Way	○ → N/A
○ → Directional Arrow	○ → N/A
○ → Directional Drill	○ → N/A
○ → Guardrail	○ → N/A
(A) "NO TURN ON RED" Sign (R10-11)	(A)
(B) NO RIGHT SYMBOL SIGN (R3-2)	(B)
(C) No Left Turn Sign (R3-2)	(C)
(D) No U-Turn Sign (R3-4)	(D)

**Signal Upgrade - Final Design**

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

<p>PLANS PREPARED IN THE OFFICE OF: <b>Kimley-Horn</b> NC License #F-0102 421 Fayetteville Street, Suite 600 Raleigh, NC 27601 (919) 677-2000</p>	<p>750 N. Greenfield Pkwy, Garner, NC 27526</p>	<p><b>NC 16 (Brookshire Boulevard) at East Cross-over</b></p> <p>Division 10 Mecklenburg County Charlotte</p> <p>PLAN DATE: September 2021 REVIEWED BY: SL Phillips</p> <p>PREPARED BY: SP Pennington REVIEWED BY:</p>	<p>DocuSigned by: Stage L Phillips 2/16/2022</p> <p>SIG. INVENTORY NO. 10-2272</p>						
	<p>SCALE 40 1" = 40'</p>	<table border="1"> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	INIT.	DATE				
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