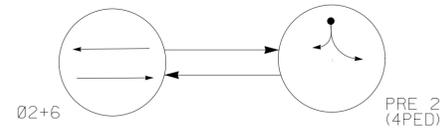


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

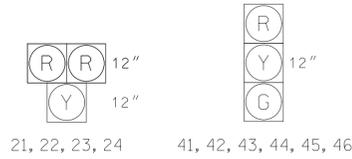
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ⇄ PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE					
	2	4	6	4	2	1
21, 22	DRK	FY	Y	R	FR*	Y
23, 24	DRK	FY	Y	R	FR*	Y
41, 42, 43, 44, 45, 46	DRK	DRK	DRK	DRK	G	R

\* ALTERNATING FLASH  
 Y - STEADY YELLOW  
 FY - FLASHING YELLOW  
 R - STEADY RED  
 FR - FLASHING RED  
 DRK - DARK

**SIGNAL FACE I.D.**

All Heads L.E.D.

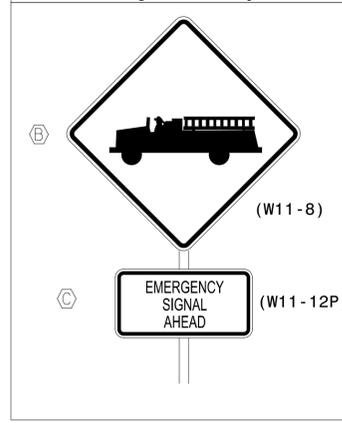


**MAXTIME PREEMPTION CHART**

FUNCTION	PRE 2
Type	EMERG VEH
Exit Phases	2
Delay	#
Call Extend Time	0
Max Presence	0
Enter Min Green	1
Enter Walk	255*
Enter Ped Clear	255*
Enter Yellow Change	25.5*
Enter Red Clear	25.5*
Track Green	0
Track Yellow Change	25.5*
Track Red Clear	25.5*
Dwell Green	#
Exit Min Green	255*
Exit Yellow Change	25.5*
Exit Red Clear	25.5*
Exit Type	EXIT PHASES
Ped Clear Through Yellow	N
Require All Red Entry	N

\* Directs controller to use default phase timing.  
 # See Note 5.

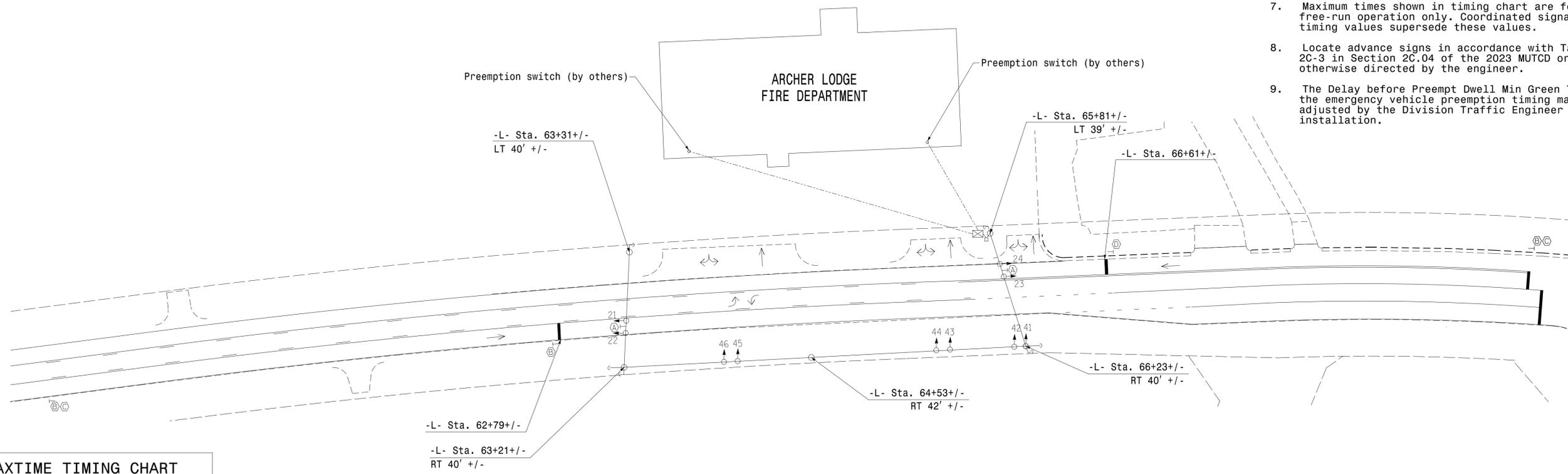
Figure 1: Advanced Warning Sign Assembly



**2 PHASE SEMI-ACTUATED EMERGENCY HYBRID BEACON**

**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 operation unless otherwise directed by the Engineer.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Connect two emergency vehicle preemption switches located in the fire station building. Installation of switch, circuitry to the signal cabinet, and all other work outside of the public Right of Way shall be completed by others.
- The Division Traffic Engineer will determine the Delay before Preempt and Preempt Dwell Min Green time for the emergency preemption timing.
- Clear signal heads 41, 42, 43, 44, 45 and 46 from dark to steady red during interval 1 and 2 before going to green.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Locate advance signs in accordance with Table 2C-3 in Section 2C.04 of the 2023 MUTCD or as otherwise directed by the engineer.
- The Delay before Preempt Dwell Min Green Time for the emergency vehicle preemption timing may be adjusted by the Division Traffic Engineer after installation.



FEATURE	PHASE		
	2	4	6
Walk *	-	-	-
Ped Clear *	-	**	-
Min Green *	12	7	12
Passage *	0.0	0.0	0.0
Max 1 *	30	30	30
Yellow Change	4.6	3.0	4.6
Red Clear	4.2	3.0	4.2
Added Initial *	-	-	-
Maximum Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Advance Walk	-	-	-
Pre Clearance	5.0	-	5.0
Non Lock Detector	-	-	-
Vehicle Recall	MIN RECALL	-	MIN RECALL
Dual Entry	-	-	-

Serves as Preempt Dwell Time  
 Serves as Steady Yellow Clearance Time  
 Serves as All Red Clearance Time  
 Serves as Flashing Yellow Interval

\* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.  
 \*\* See Note 5.

**LEGEND**

- |  |  |
|--|--|
| <b>PROPOSED</b>  | <b>EXISTING</b>  |
| ○ → Traffic Signal Head                                  | ● → Traffic Signal Head                                  |
| — Sign   | — Sign   |
| ○ → Signal Pole with Guy                                 | ● → Signal Pole with Guy                                 |
| ○ → Signal Pole with Sidewalk Guy                        | ● → Signal Pole with Sidewalk Guy                        |
| ☒ Controller & Cabinet                                   | ☒ Controller & Cabinet                                   |
| □ Junction Box   | ■ Junction Box   |
| --- 2-in Underground Conduit                             | --- 2-in Underground Conduit                             |
| N/A Directional Arrow                                    | → Directional Arrow                                      |
| Ⓐ "EMERGENCY SIGNAL STOP ON FLASHING RED" Sign (R10-14a) | Ⓐ "EMERGENCY SIGNAL STOP ON FLASHING RED" Sign (R10-14a) |
| Ⓑ Emergency Vehicle Sign (W11-8)                         | Ⓑ Emergency Vehicle Sign (W11-8)                         |
| Ⓒ "EMERGENCY SIGNAL AHEAD" Sign (W11-12P)                | Ⓒ "EMERGENCY SIGNAL AHEAD" Sign (W11-12P)                |
| Ⓓ "STOP HERE ON RED" Sign (R10-14b)                      | Ⓓ "STOP HERE ON RED" Sign (R10-14b)                      |

**New Installation**

SR 1700 (Covered Bridge Road) at Archer Lodge Fire Department	
Division 4	Johnston County Archer Lodge
PLAN DATE: April 2025	REVIEWED BY: M.L. Stygles
PREPARED BY: L. Gottlieb	REVIEWED BY: J. Ma
REVISIONS	INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED