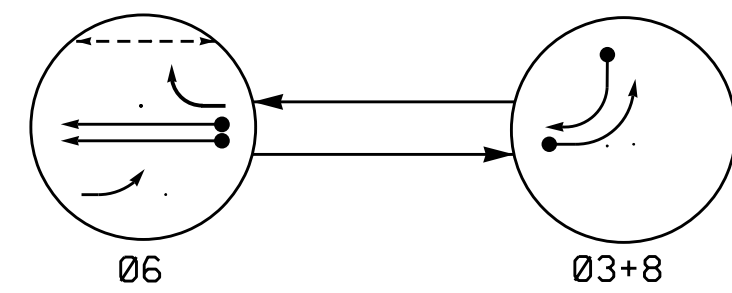
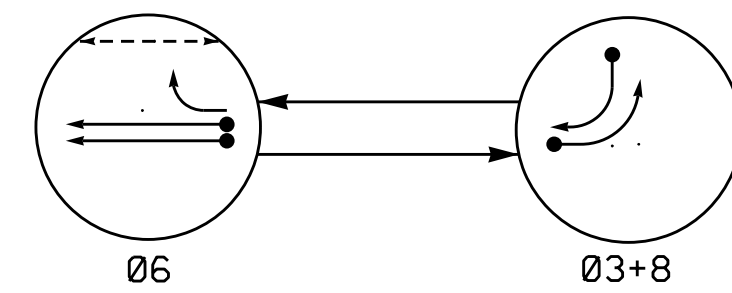


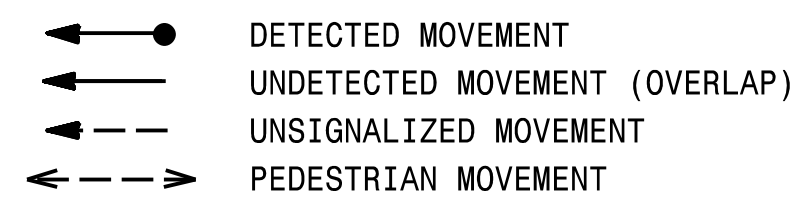
DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM

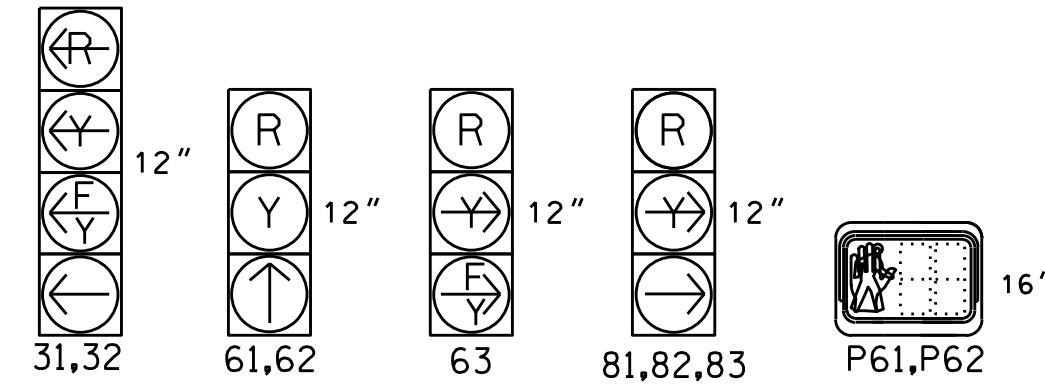


PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE I.D.

All Heads L.E.D.



SIGNAL FACE	PHASE		FLASH
	06	03+8	
31,32	F	Y	Y
61,62	↑	R	Y
63	F	R	Y
81,82,83	R	→	R
P61,P62	W	DWDRK	

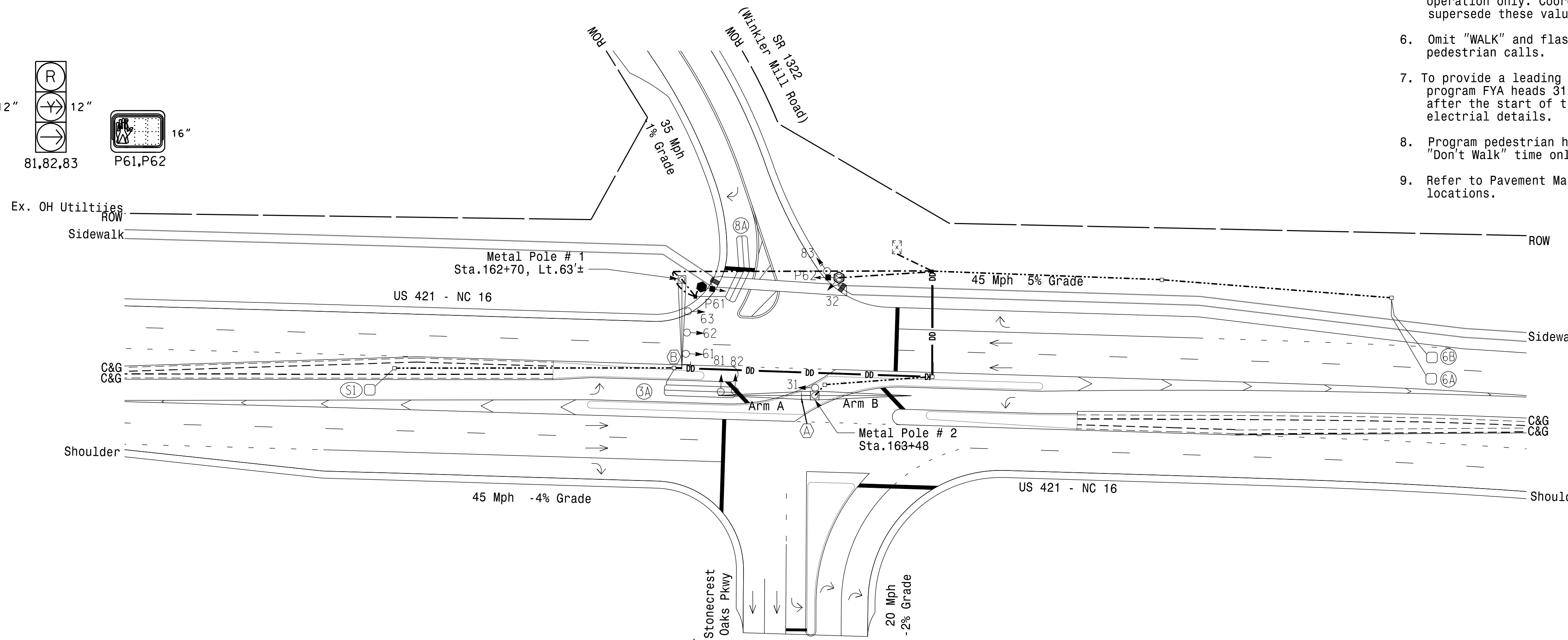
SIGNAL FACE	PHASE		FLASH
	06	03+8	
31,32	→	→	Y
61,62	↑	R	Y
63	F	→	Y
81,82,83	R	→	R
P61,P62	W	DWDRK	

MAXTIME DETECTOR INSTALLATION CHART												
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
3A	6X40	0	2-4-2	X	3	15.0	-	X	-	X	-	X
6A	6X6	300	4	X	6	-	-	X	X	X	-	X
6B	6X6	300	4	X	6	-	-	X	X	X	-	X
8A	6X40	0	2-4-2	X	8	15.0	-	X	-	X	-	X
S1	6X6	200	5	X	-	-	-	-	-	-	-	X

\* Disable delay during alternate phasing operation

2 Phase Fully Actuated W/ Alternate Phasing Operation Wilkesboro Closed Loop System NOTES

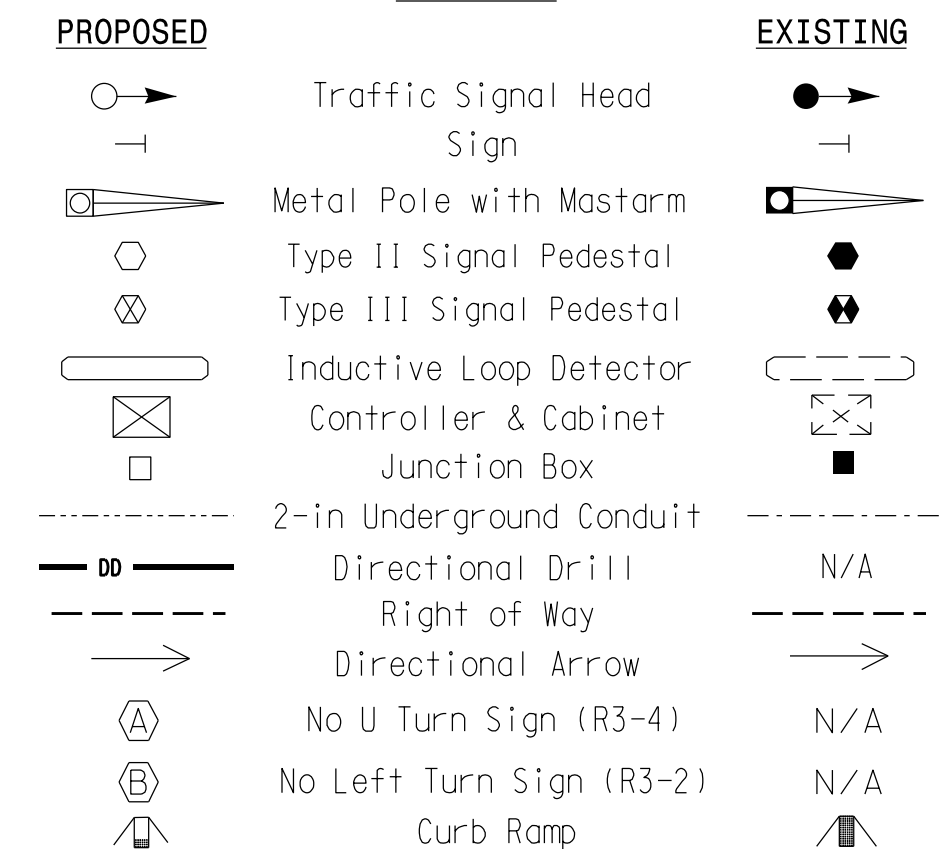
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- The Division (Town) Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- To provide a leading pedestrian interval on phase 6, program FYA heads 31, 32 and 63 to delay for 3 seconds after the start of the phase 6 walk interval. See electrical details.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Refer to Pavement Marking Plans for proposed stop bar locations.



MAXTIME TIMING CHART

FEATURE	PHASE		
	3	6	8
Walk *	-	7	-
Ped Clear *	-	16	-
Min Green	7	12	7
Passage *	2.0	6.0	2.0
Max I *	30	60	30
Yellow Change	3.0	4.1	3.0
Red Clear	2.3	1.6	2.1
Added Initial *	-	1.5	-
Maximum Initial *	-	34	-
Time Before Reduction *	-	15	-
Time To Reduce *	-	30	-
Minimum Gap	-	3.4	-
Advance Walk	-	**	-
Non Lock Detector	X	-	X
Vehicle Recall	-	MIN RECALL	-
Dual Entry	X	-	X

LEGEND



\* These values may be field adjusted. Do not adjust Min Green and Extension 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 7



Signal Upgrade - Final Design

Prepared for the Offices of:  
  
 TRANSPORTATION MOBILITY AND SAFETY DIVISION  
 DEPARTMENT OF TRANSPORTATION  
 STATE OF NORTH CAROLINA  
 Signal Design Section

US 421 - NC 16 at SR 1322 (Winkler Mill Road)

Division 11 Wilkes County Wilkesboro

PLAN DATE: May 2023 REVIEWED BY: M. Stygles

PREPARED BY: S.R. Chiluka REVIEWED BY: J. Ma

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE 0 40

REVISIONS: INIT. DATE

SIGNATURE: S.R. Chiluka DATE: 5/24/2023

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047250 SRIATHA R. CHILUKA

SIG. INVENTORY NO. 11-1044

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