

PHASING DIAGRAM

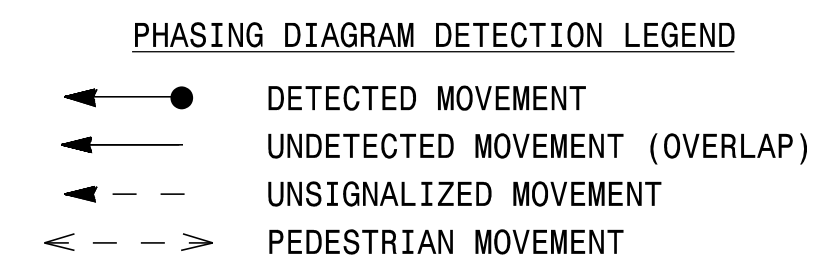
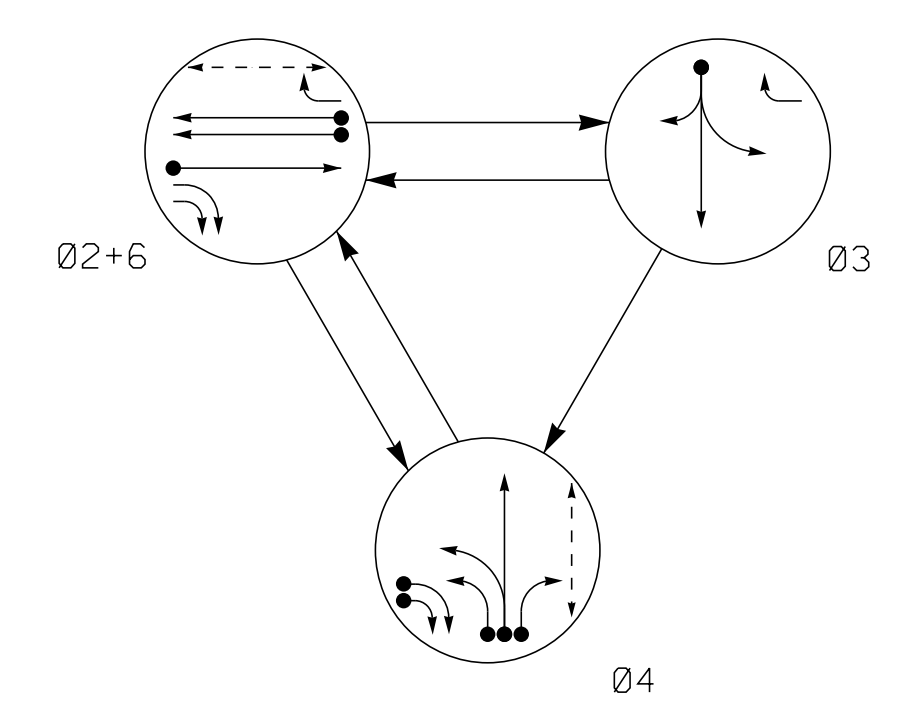
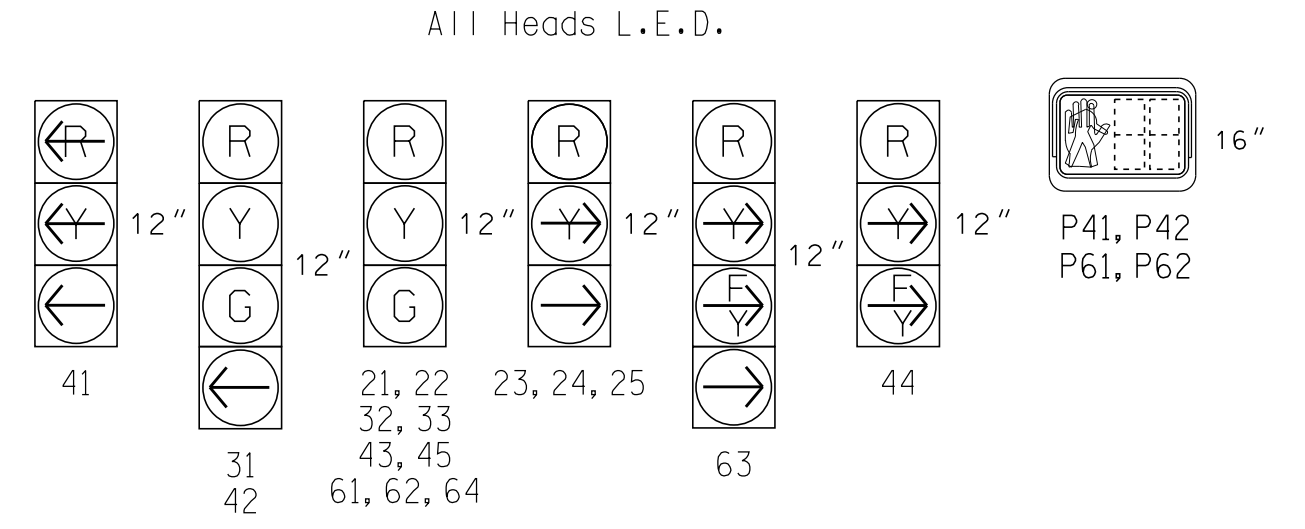


TABLE OF OPERATION

SIGNAL FACE	PHASE				FLASH
	02+6	03	04	04	
21, 22	G	R	R	Y	
23, 24, 25	→	R	→	Y	
31	R	G	R	R	
32, 33	R	G	R	R	
41	←	←	←	←	
42	R	R	G	R	
43, 45	R	R	G	R	
44	R	R	E	R	
61, 62, 64	G	R	R	Y	
63	←	→	→	Y	
P41, P42	DW	DW	W	DRK	
P61, P62	W	DW	DW	DRK	

SIGNAL FACE I.D.



ASC/3 DETECTOR INSTALLATION CHART

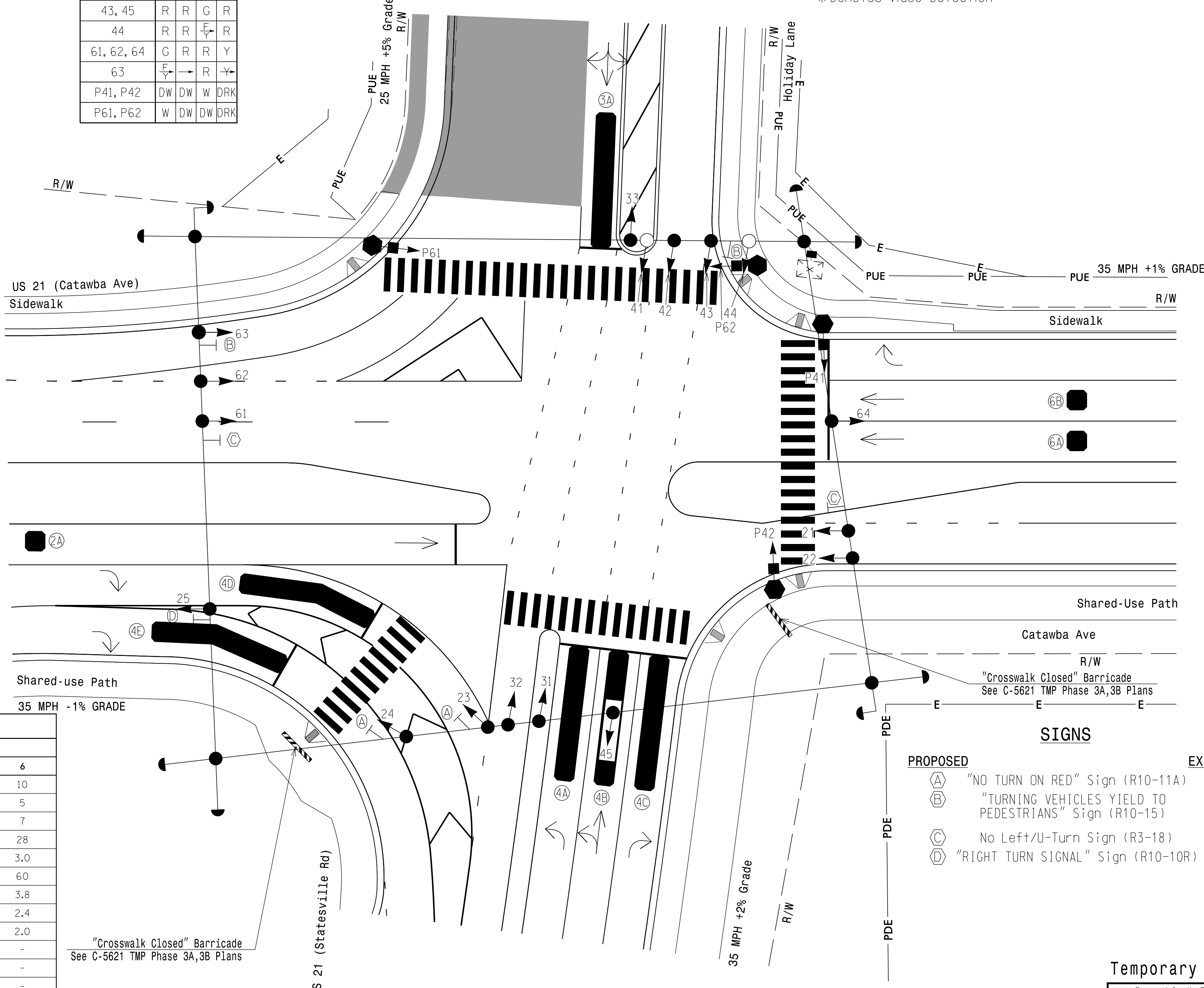
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE		
2A	6X6	70	*	*	2	YES	-	-	-	N	-	*
3A	6X40	0	*	*	3	YES	-	3	-	N	-	*
4A, 4B	6X40	0	*	*	4	YES	-	-	-	N	-	*
4C	6X40	0	*	*	4	YES	-	15	-	N	-	*
4D, 4E	6X40	0	*	*	4	YES	-	-	-	N	-	*
6A, 6B	6X6	70	*	*	6	YES	-	-	-	N	-	*

* Denotes Video Detection

3 Phase Fully Actuated Cornelius CLS D10-18

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018, and all applicable sections of the latest version of the generic Project Special Provisions.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Reposition existing signal heads 21, 22, 23, 24, 25, 31, 32, 33, and 43.
- Rename existing signal heads 41 as 42, and 43 as 45. Reposition as shown.
- Set all detector units to presence mode.
- All pedestrian signal equipment shall be placed on portable bases to allow for relocation as required by Division 10 traffic engineer.
- Pedestrian head and pushbutton signal cables shall be directly attached to overhead spanwire.
- Pedestrian pedestal locations to be determined by Division 10 traffic engineer.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Program controller to allow an Advanced Walk movement before serving the vehicle phase.
- Relocate existing "TURNING VEHICLES YIELD TO PEDESTRIANS" sign (R10-15).
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- See C-5621 TMP Phases 3A, 3B for pavement markings and pedestrian detour plan.
- Portions of crosswalk and video detection zones masked for clarity.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

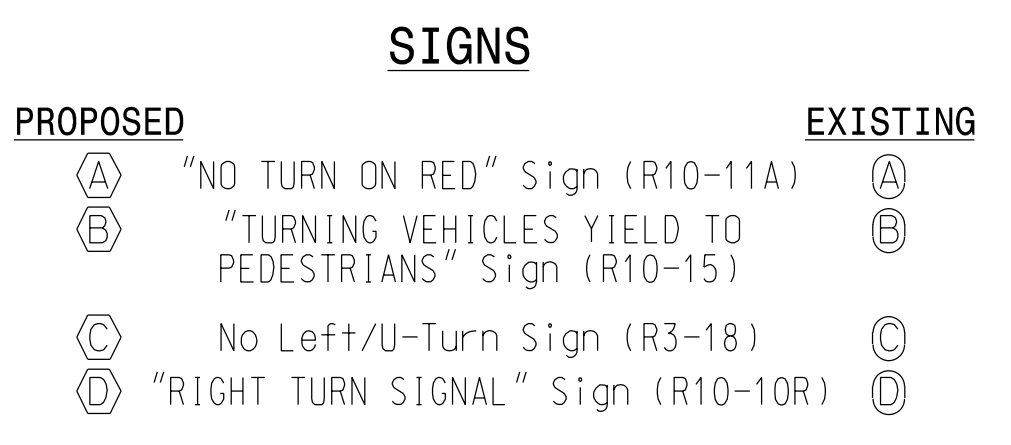
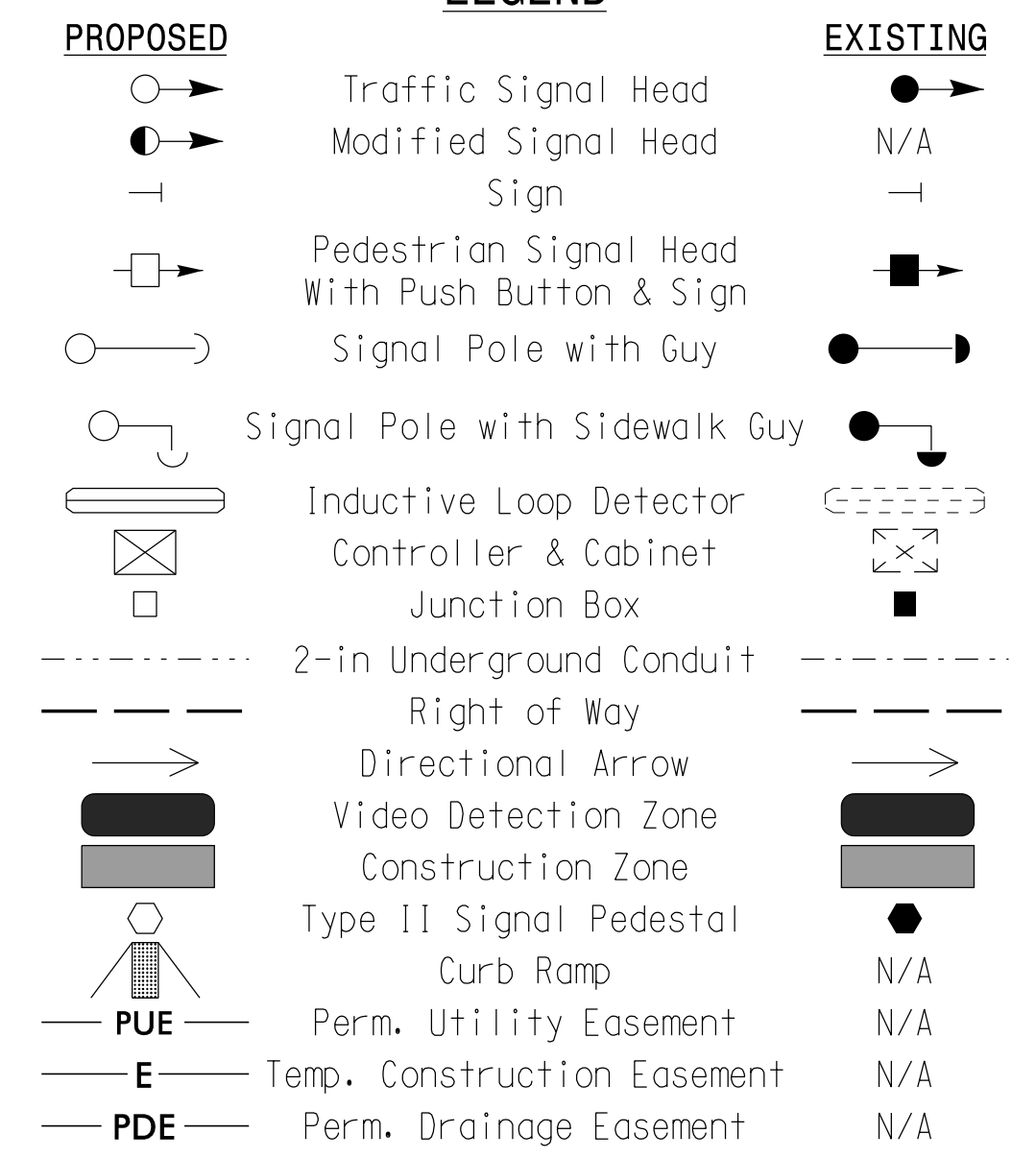


ASC/3 TIMING CHART

FEATURE	PHASE			
	2	3	4	6
Min Green *	10	7	7	10
Delayed Green	-	-	5	5
Walk *	-	-	7	7
Ped Clear	-	-	17	28
Veh. Extension *	3.0	2.0	2.0	3.0
Max I *	60	30	30	60
Yellow	3.9	3.0	3.7	3.8
Red Clear	2.0	3.6	2.2	2.4
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds /Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Locking Detector	X	-	-	X
Recall Position	VEH. RECALL	-	-	VEH. RECALL
Dual Entry	-	-	-	-
Simultaneous Gap	X	X	X	X

* 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.

LEGEND



Temporary Signal 3 - TCP Phase 3A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

 NC FIRM LICENSE No: F-0493 8521 SIX FORKS ROAD, SUITE 400 RALEIGH, NC 27615 (919) 926-4100	Prepared for the Offices of: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SIGNAL DESIGN SECTION	US 21 (Catawba Avenue) / Catawba Avenue at US 21 (Statesville Road) / Holiday Lane Division 10 Mecklenburg County Cornelius PLAN DATE: February 2023 REVIEWED BY: S.G. Haynie PREPARED BY: S.N. Matthews REVIEWED BY:	SEAL S. NICK MATTHEWS ENGINEER No. 046989 DATE: 2/21/2023
	SCALE 0 20 1"=20'	REVISIONS INIT. DATE	SIGNATURE DATE S. NICK MATTHEWS 2/21/2023

This plan supersedes the signal plan signed and sealed by S. Nick Matthews, PE on 05/31/2022.

2/21/2023 15:48:08
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