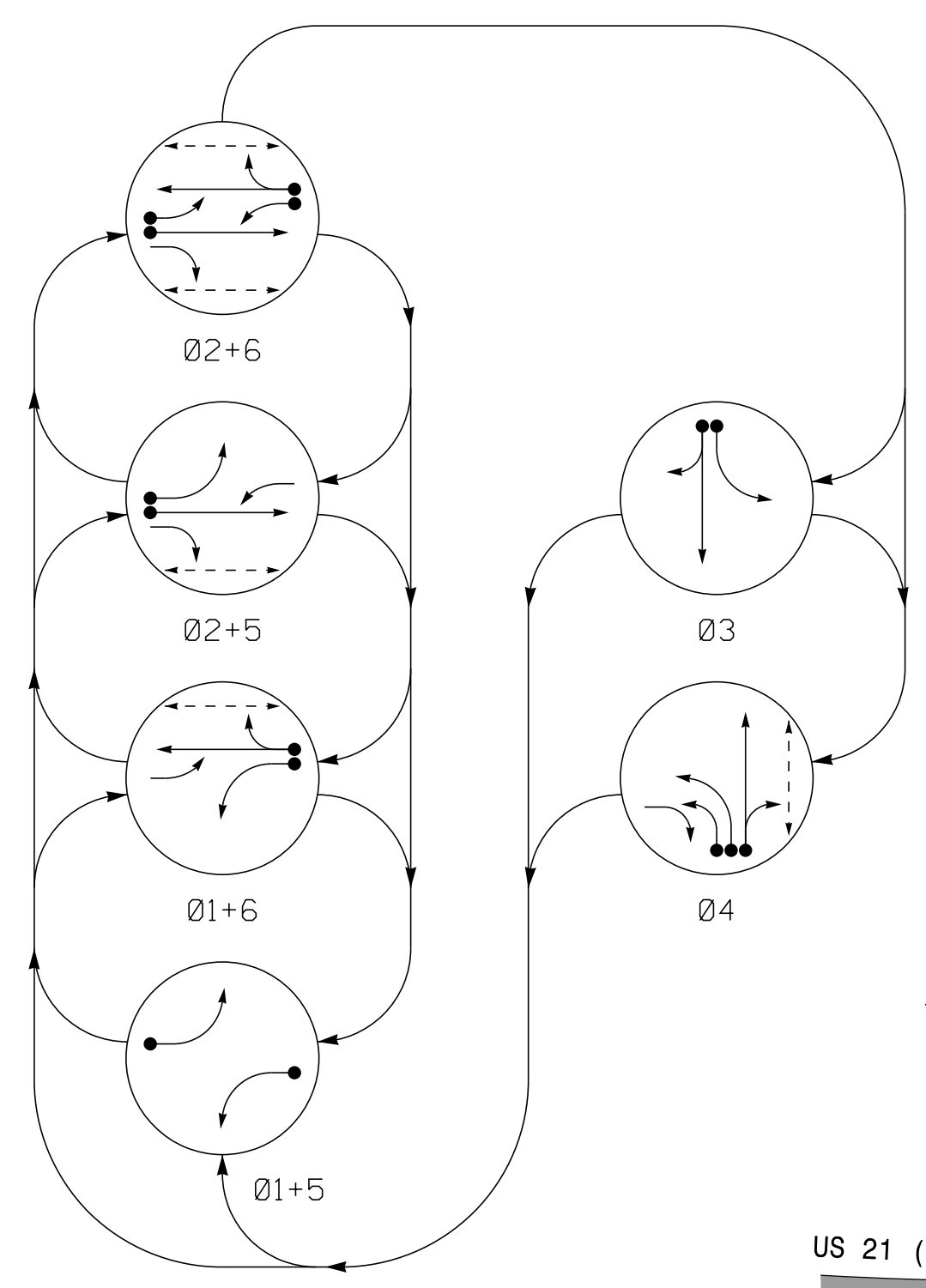
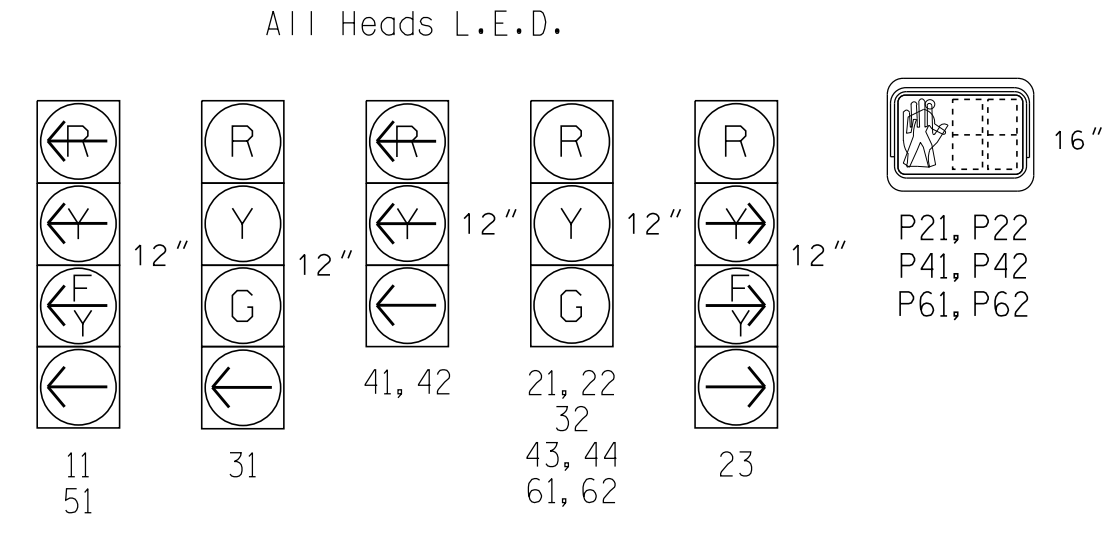


**PHASING DIAGRAM**



SIGNAL FACE	PHASE					
	01+5	02+5	02+6	03	04	FLASH
11	←	←	←	←	←	←
21, 22	R	R	G	R	R	Y
23	R	R	←	←	←	←
31	R	R	R	G	R	R
32	R	R	R	G	R	R
41, 42	←	←	←	←	←	←
43, 44	R	R	R	R	G	R
51	←	←	←	←	←	←
61, 62	R	G	R	G	R	Y
P21, P22	DW	DW	W	DW	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	DW	DW	DRK

**SIGNAL FACE I.D.**



ASC/3 DETECTOR INSTALLATION CHART												
DETECTOR				PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	*	*	1	YES	-	15	-	N	-	*
2A	6X6	70	*	*	2	YES	-	-	-	N	-	*
3A	6X40	0	*	*	3	YES	-	3	-	N	-	*
3B	6X40	0	*	*	3	YES	-	10	-	N	-	*
4A	6X40	0	*	*	4	YES	-	3	-	N	-	*
4B, 4C	6X40	0	*	*	4	YES	-	-	-	N	-	*
5A	6X40	0	*	*	5	YES	-	15	-	N	-	*
6A	6X6	70	*	*	2	YES	-	-	-	N	-	*

\* Denotes Video Detection

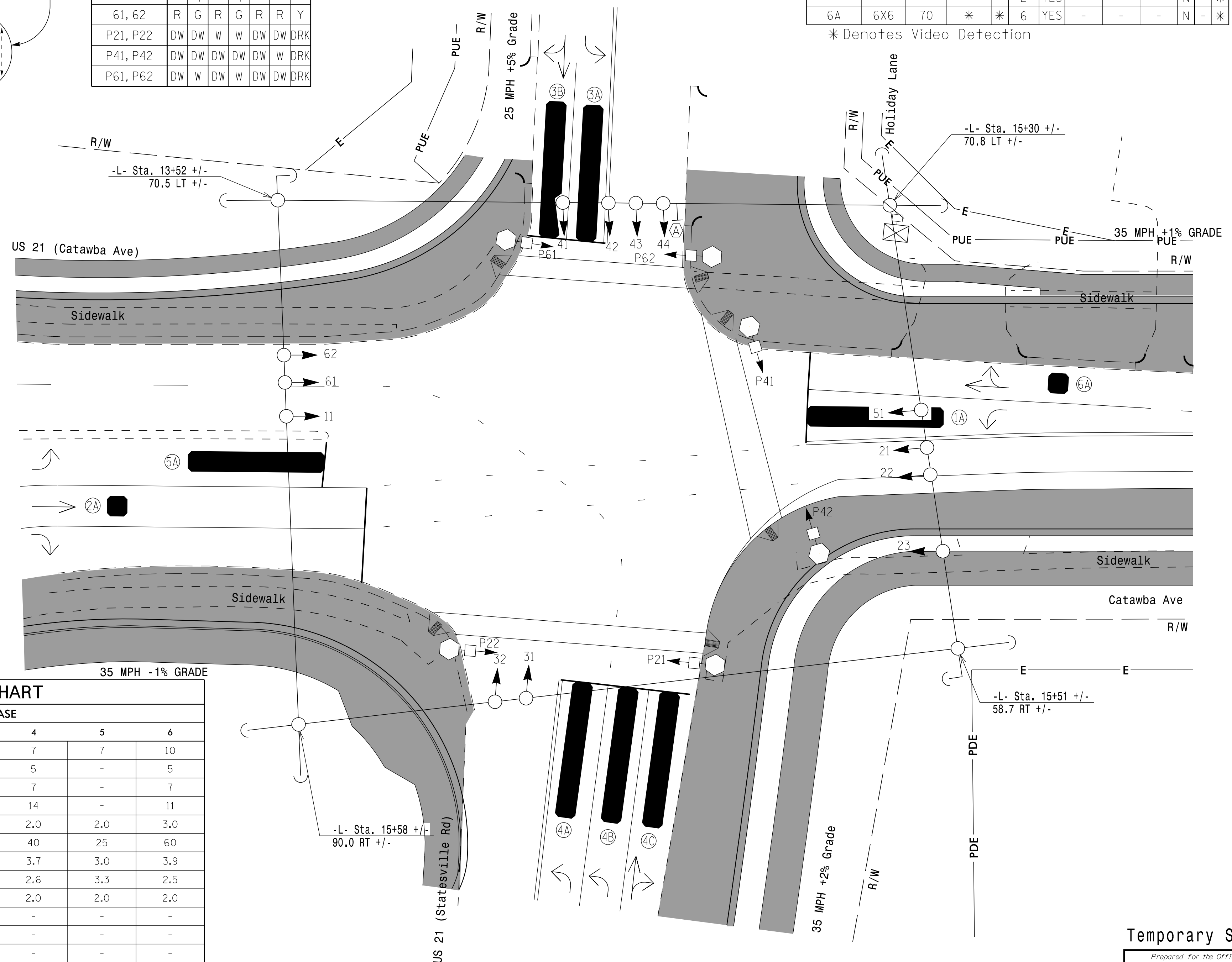
**6 Phase Fully Actuated Cornelius CLS D10-18**

**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.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 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.
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- See C-5621 TMP Phase 1 for pavement markings.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

**PHASING DIAGRAM DETECTION LEGEND**

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



**LEGEND**

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head	○ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
⊠ Inductive Loop Detector	⊠ Construction Zone
⊠ Controller & Cabinet	⊠ Junction Box
⊠ 2-in Underground Conduit	⊠ Right of Way
→ Directional Arrow	→ Video Detection Zone
→ Construction Zone	→ Construction Zone
○ Type II Signal Pedestal	○ Curb Ramp
PUE Perm. Utility Easement	N/A
E Temp. Construction Easement	N/A
PDE Perm. Drainage Easement	N/A
⊠ Oversized Junction Box	⊠
⊠ "NO TURN ON RED" Sign (R10-11A)	⊠

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green *	7	10	7	7	7	10
Delayed Green	-	5	-	5	-	5
Walk *	-	7	-	7	-	7
Ped Clear	-	18	-	14	-	11
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	3.0
Max I *	25	60	40	40	25	60
Yellow	3.0	3.9	3.0	3.7	3.0	3.9
Red Clear	3.3	2.5	3.1	2.6	3.3	2.5
Red Revert	2.0	2.0	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	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.

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



**Temporary Signal 1 - TCP Phase 1**

Prepared for the Offices of:

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:

REVISIONS: INIT. DATE

SCALE: 1"=20'

2/21/2023

Seal of S. Nick Matthews, Professional Engineer, No. 046989

Document NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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