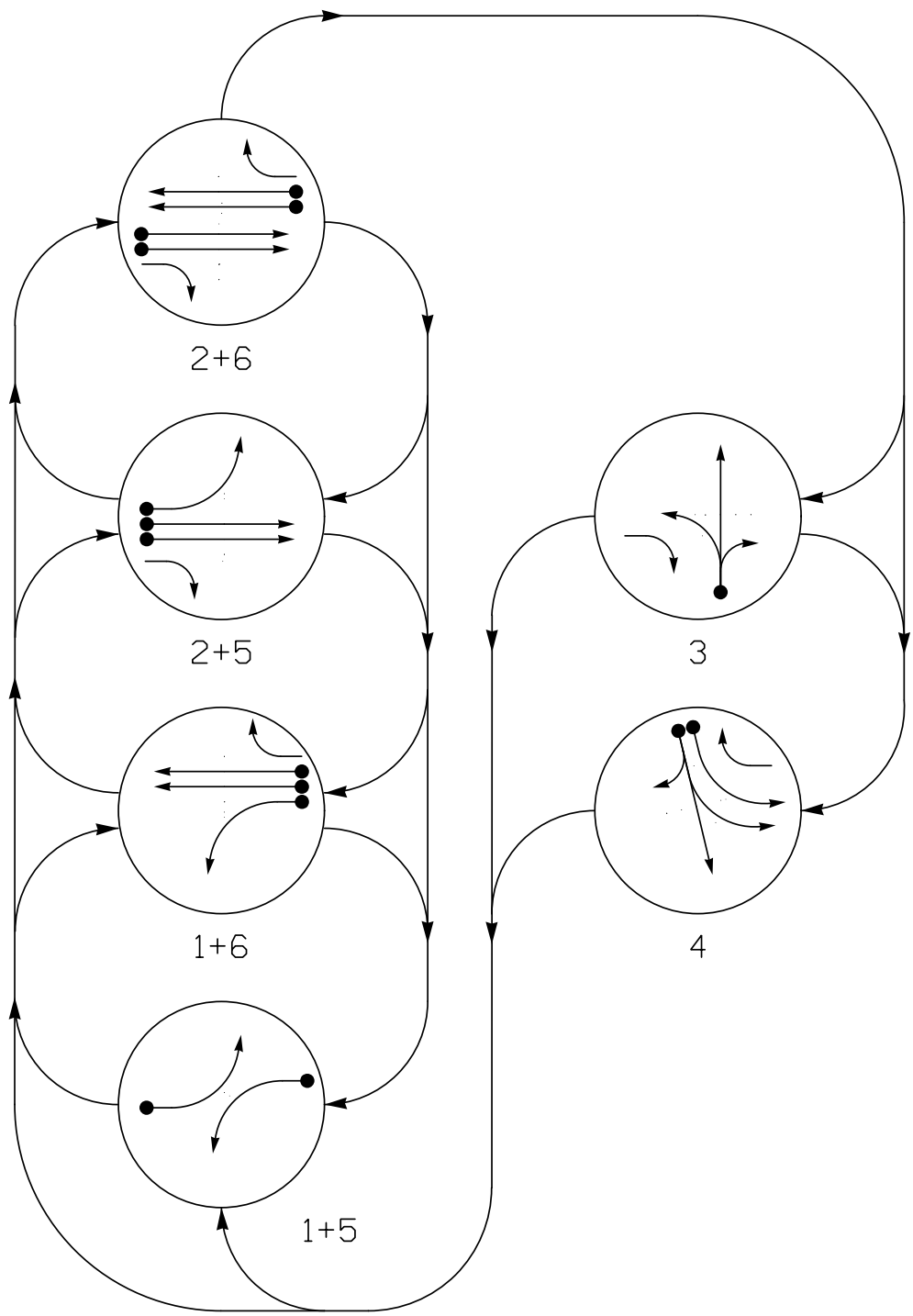


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

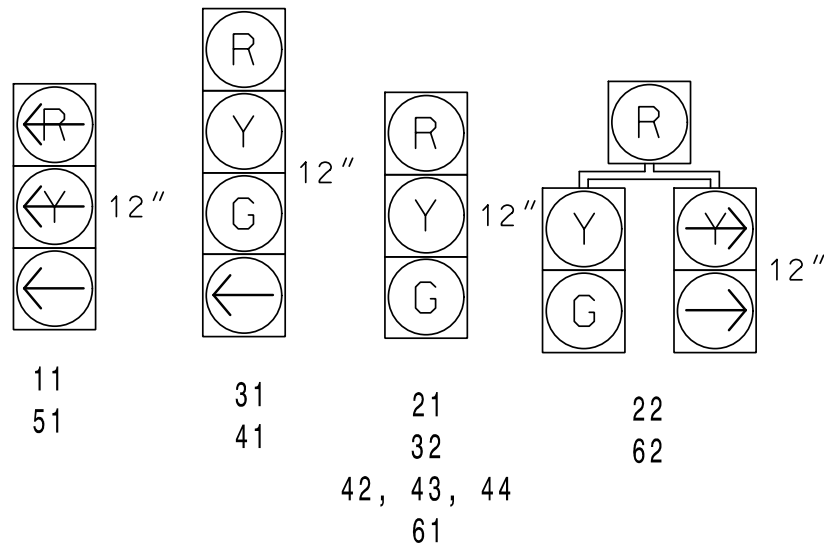
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE						
	1 + 5	1 + 6	2 + 5	2 + 6	3	4	FLASH
11	←	←	←	←	←	←	←
21	R	R	G	G	R	R	R
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42, 43, 44	R	R	R	R	R	G	R
51	←	←	←	←	←	←	←
61	R	G	R	G	R	R	R
62	R	G	R	G	R	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

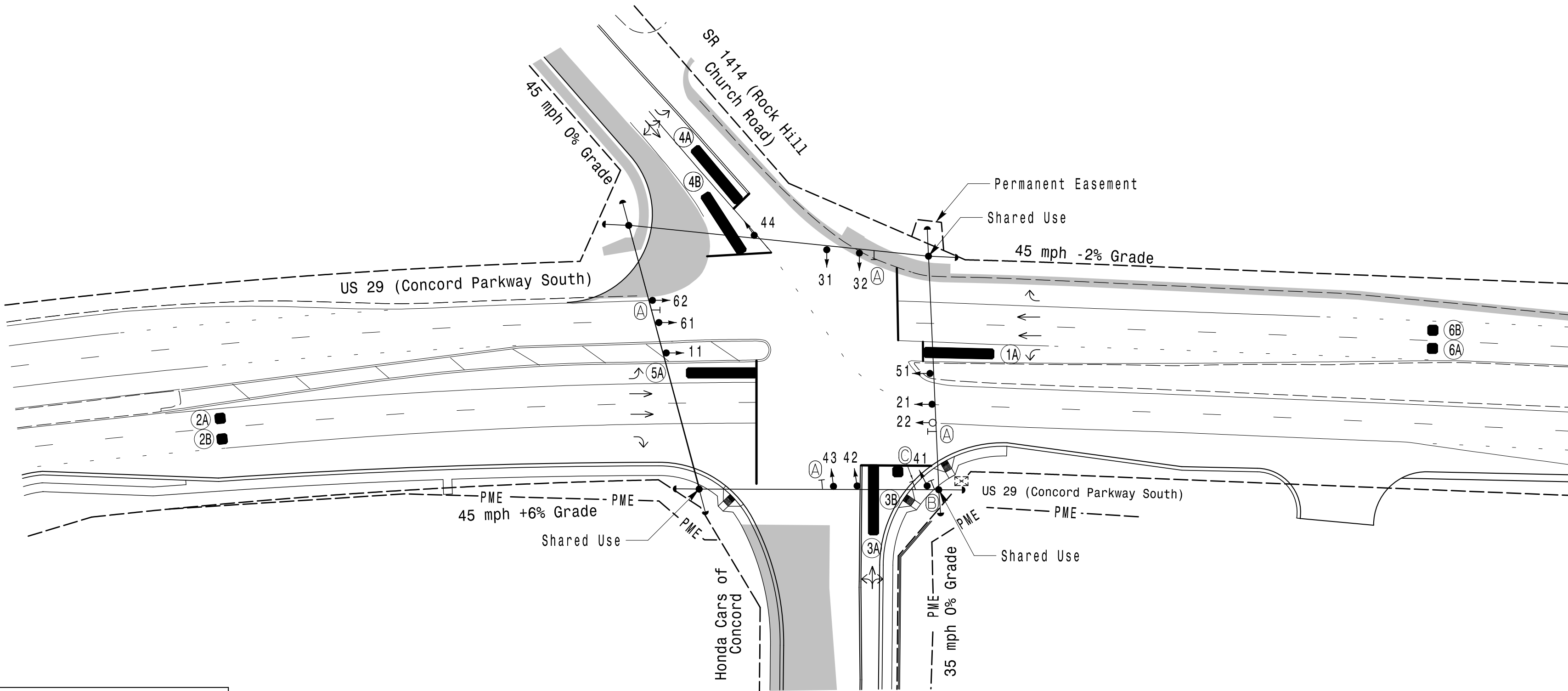
ZONES					PROGRAMMING						
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURN	NEW ZONE	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	INITIAL	ADDED	NEW CARD
1A	6X40	0	*	-	1	-	-	X	-	X	-
2A	6X6	300	*	-	2	-	-	X	X	X	-
2B	6X6	300	*	-	2	-	-	X	X	X	-
3A	6X40	0	*	-	3	5.0	-	X	-	X	-
3B	6X6	0	*	X	3	15.0	-	X	-	X	-
4A	6X40	0	*	-	4	3.0	-	X	-	X	-
4B	6X40	0	*	-	4	10.0	-	X	-	X	-
5A	6X40	0	*	-	5	-	-	X	-	X	-
6A	6X6	300	*	-	6	-	-	X	X	X	-
6B	6X6	300	*	-	6	-	-	X	X	X	-

* Video Detection Zone

6 Phase Fully Actuated (Concord Central System)

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 flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Reposition existing signal heads 21, 31, 32, 42, and 43.
- Set all detector units to presence mode.
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- See Roadway Traffic Control Plans for proposed stop line locations.



LEGEND

- | PROPOSED | EXISTING |
|--|----------|
| Traffic Signal Head | N/A |
| Modified Signal Head | N/A |
| Sign | N/A |
| Pedestrian Signal Head | N/A |
| With Push Button & Sign | N/A |
| Signal Pole with Guy | N/A |
| Signal Pole with Sidewalk Guy | N/A |
| Non-Intrusive Detection Area | N/A |
| Controller & Cabinet | N/A |
| Junction Box | N/A |
| 2-in Underground Conduit | N/A |
| N/A | N/A |
| Right of Way | N/A |
| PME | N/A |
| Permanent Maintenance Easement | N/A |
| Directional Arrow | N/A |
| Construction Zone | N/A |
| Street Name Sign (D3-1) | N/A |
| Left Arrow "ONLY" Sign (R3-5L) | N/A |
| Dual Turn and Through Arrow Sign (R3-19) | N/A |
| N/A | N/A |
| Curb Ramp | N/A |

MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Min Green *	7	12	7	7	7	12
Passage *	2.0	6.0	2.0	2.0	2.0	6.0
Max 1 *	15	120	15	40	20	120
Yellow Change	3.0	4.7	3.8	4.5	3.0	4.7
Red Clear	2.4	1.5	2.6	2.4	2.6	1.5
Added Initial *	-	1.5	-	-	-	1.5
Maximum Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.0	-	-	-	3.0
Advance Walk	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-	-

* 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.

Signal Upgrade - Temporary Design 2
TMP Phase 2

Prepared for the Office of:

750 N. Greenfield Pkwy, Garner, NC 27529

US 29 (Concord Parkway South)
at
SR 1414 (Rock Hill Church Road)
and Honda Cars of Concord

Division 10 Cabarrus County Concord

PLAN DATE: February 2025
PREPARED BY: SP Pennington
REVIEWED BY: KP Baumann

REVISIONS

INIT.	DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SEAL

8/21/2025

SIG. INVENTORY NO. 10-087512

PLANS PREPARED IN THE OFFICE OF:
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