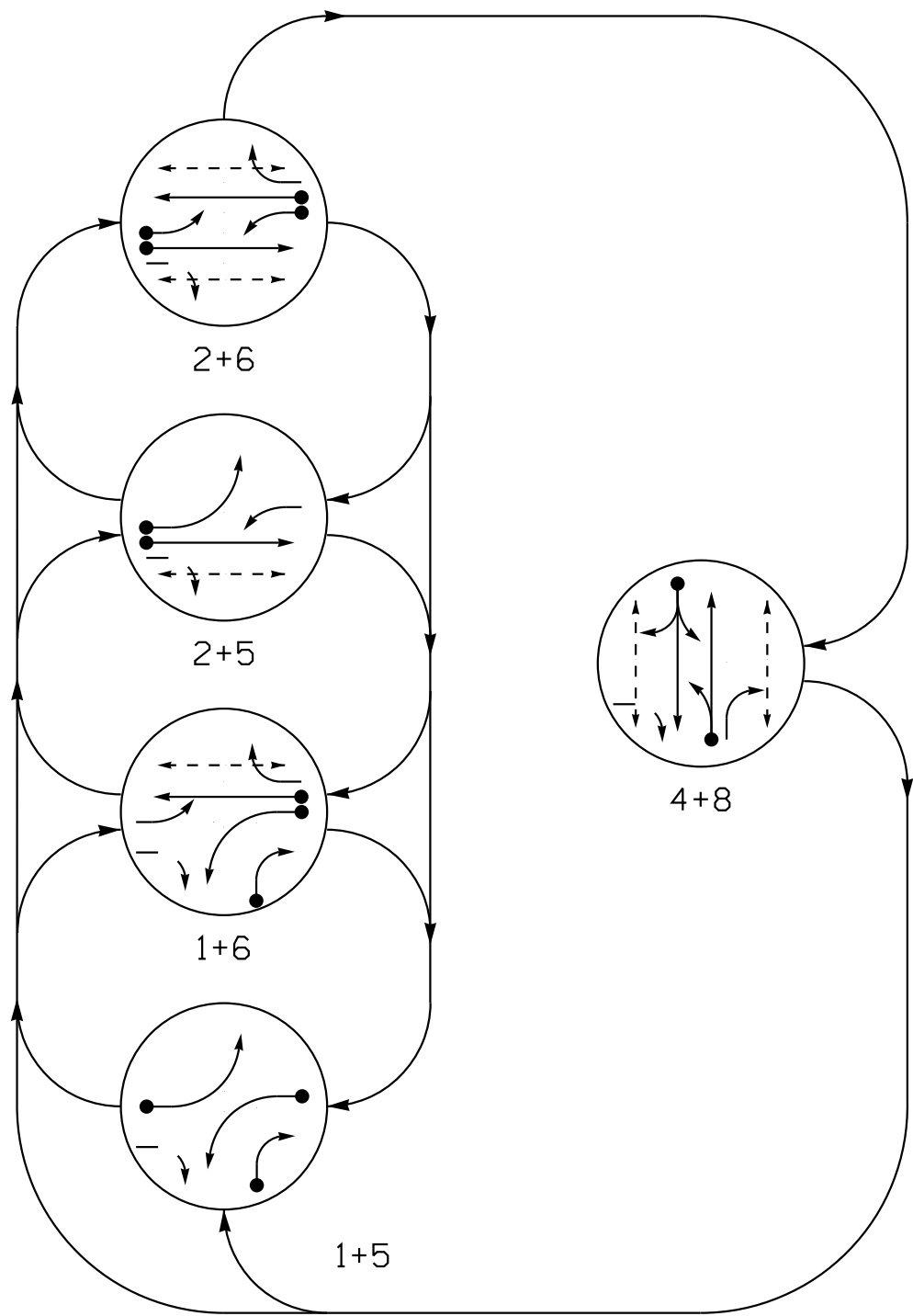
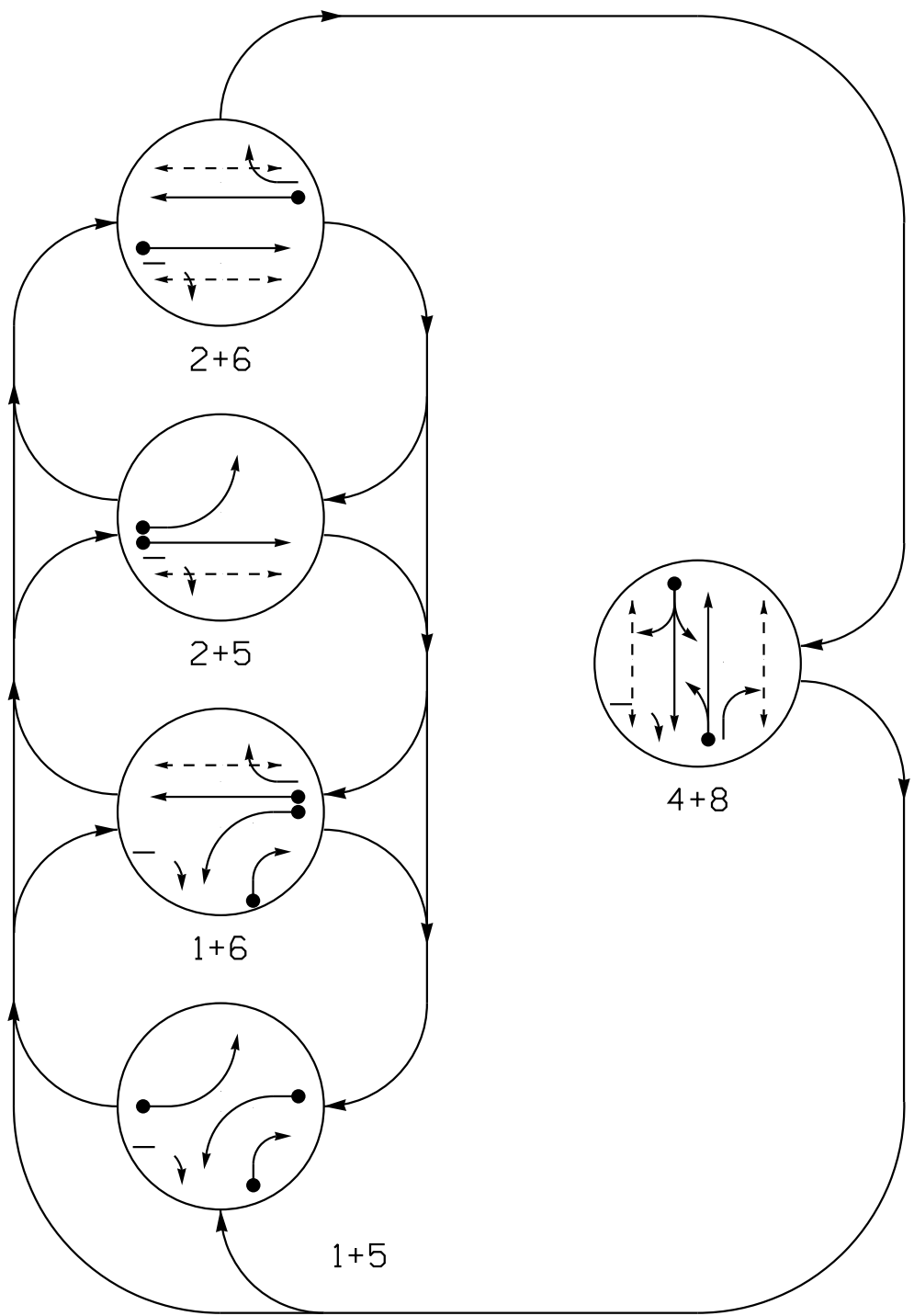


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DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	1 + 5	1 + 6	2 + 5	2 + 6	4 + 8	FLASH
11	←	←	←	←	←	←
21,22	R	R	G	G	R	R
41,42	R	R	R	R	G	R
51	←	←	←	←	←	←
61,62	R	G	R	G	R	R
63	R	←	R	←	R	R
81,82	R	R	R	R	G	R
83	→	→	R	R	←	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	1 + 5	1 + 6	2 + 5	2 + 6	4 + 8	FLASH
11	←	←	←	←	←	←
21,22	R	R	G	G	R	R
41,42	R	R	R	R	G	R
51	←	←	←	←	←	←
61,62	R	G	R	G	R	R
63	R	←	R	←	R	R
81,82	R	R	R	R	G	R
83	→	→	R	R	←	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

MAXTIME DETECTOR INSTALLATION CHART

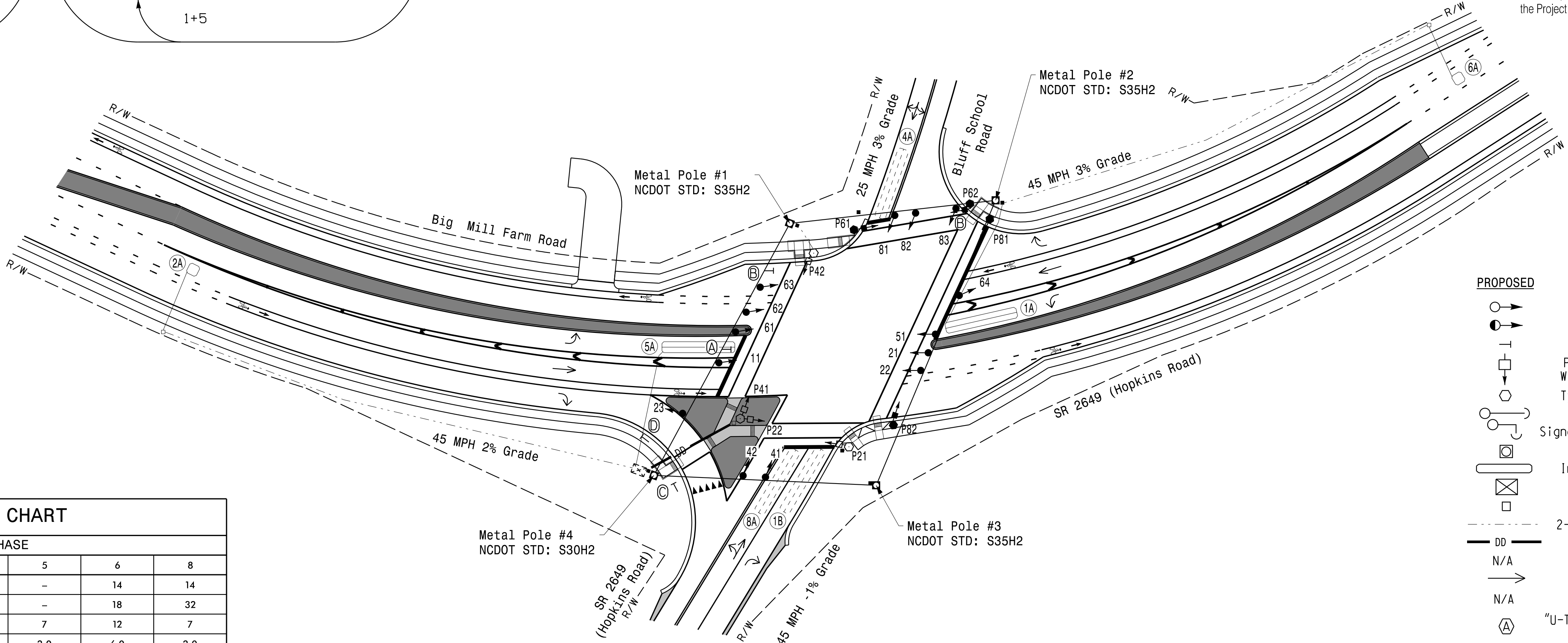
DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURN	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	2-4-2	X	1	15.0*	-	X	-	X	-
1B	6X40	0	2-4-2	-	6#	3.0	-	X	-	X	X
2A	6X6	300	6	X	2	-	-	X	X	X	-
4A	6X40	0	2-4-2	-	4	5.0	-	X	-	X	-
5A	6X40	0	2-4-2	X	5	15.0*	-	X	-	X	-
6A	6X6	300	6	X	6	-	-	X	X	X	-
8A	6X40	0	2-4-2	-	8	3.0	-	X	-	X	-

- * Disable delay during Alternate Phasing operation.
- # Disable Phase call for loop during Alternate Phasing operation.

5 Phase Fully Actuated (Isolated)

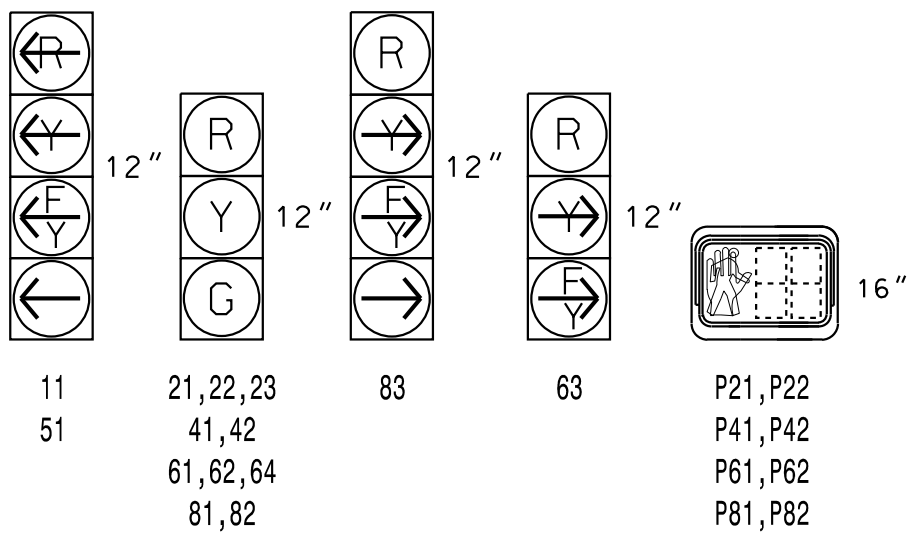
NOTES

- 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.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Reposition existing signal heads 21, 22, & 51.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Program pedestrian detector for Ped 4 to call both Ped 4 and Ped 8.
- Program pedestrian detector for Ped 8 to call both Ped 8 and Ped 4.
- To provide a leading pedestrian interval on Phase 6, program FYA heads 63 and 51 to delay for 7 seconds after the start of the phase 6 Walk interval. See electrical details.
- All metal poles and pedestals shall be painted black as specified in the Project Special Provisions.



SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Walk *	-	7	14	-	14	14
Ped Clear	-	12	23	-	18	32
Min Green *	7	12	7	7	12	7
Passage *	2.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	25	90	30	25	90	30
Yellow Change	3.0	4.3	4.6	3.0	4.3	4.6
Red Clear	3.3	2.0	3.3	3.3	2.0	3.3
Added Initial *	-	2.5	-	-	2.5	-
Maximum Initial *	-	34	-	-	34	-
Time Before Reduction *	-	15	-	-	15	-
Time To Reduce *	-	45	-	-	45	-
Minimum Gap	-	3.0	-	-	3.0	-
Advance Walk	-	-	7	-	**	7
Non Lock Detector	X	-	X	X	-	X
Vehicle Recall	-	MIN RECALL	-	-	MIN RECALL	-
Dual Entry	-	-	X	-	-	X

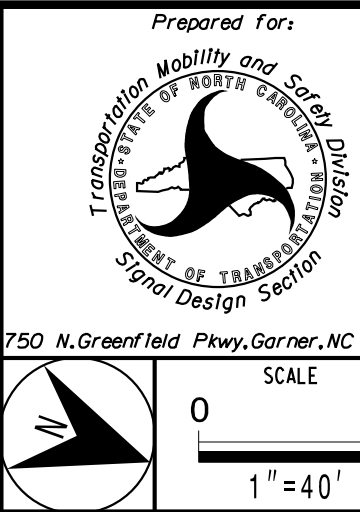
* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

** See Note 13.

LEGEND

- PROPOSED
- EXISTING
- Traffic Signal Head
- Modified Signal Head
- Sign
- Pedestrian Signal Head With Push Button & Sign
- Type II Signal Pedestal
- Signal Pole with Guy
- Signal Pole with Sidewalk Guy
- Metal Strain Pole
- Inductive Loop Detector
- Controller & Cabinet
- Junction Box
- 2-in Underground Conduit
- Directional Drill
- Right of Way
- Directional Arrow
- Curb Ramp
- "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)
- "RIGHT TURN SIGNAL" Sign (R10-10R)
- "YIELD" Sign (R1-2)
- Pedestrian Crossing Sign (W11-2)

Signal Upgrade - Final Design

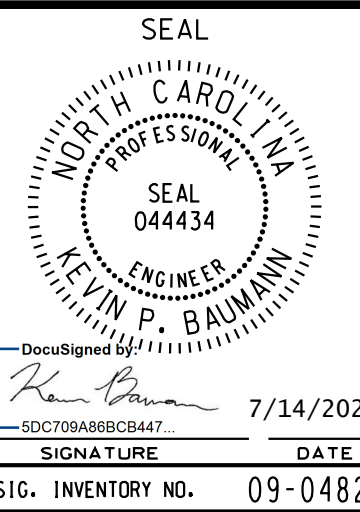


Big Mill Farm Road / SR 2649 (Hopkins Road) at Bluff School Road

Division 9 Forsyth County Kernersville
PLAN DATE: August 2024 REVIEWED BY: SP Pennington
PREPARED BY: CF Davis REVIEWED BY: KP Baumann

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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