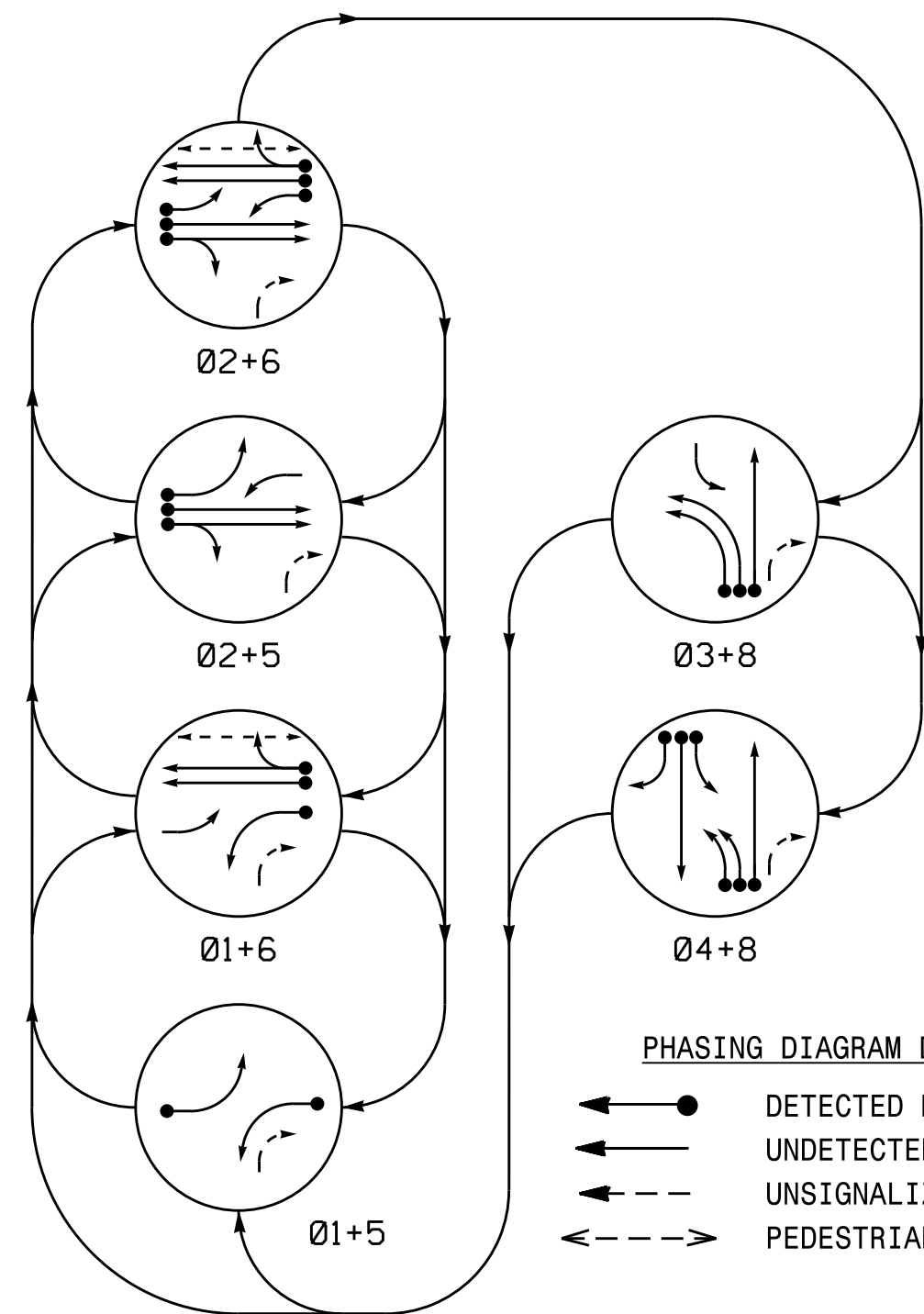
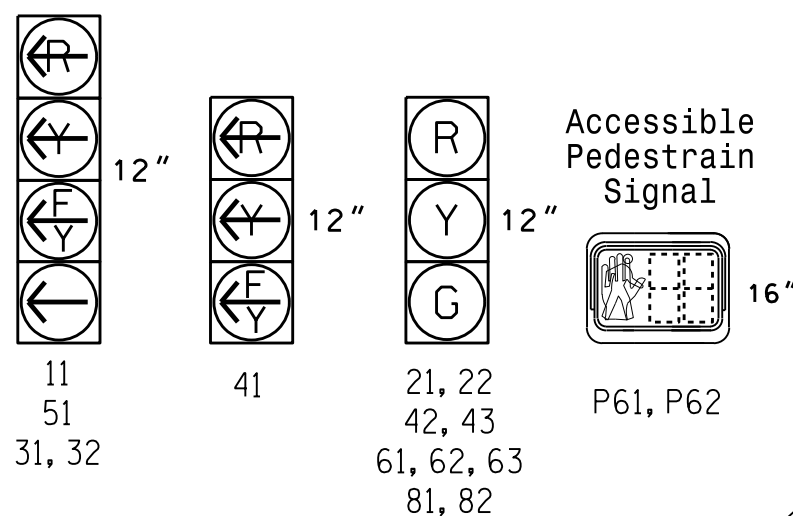


PHASING DIAGRAM



SIGNAL FACE	PHASE							
	01+5	02+5	03+8	04+8	FLASH			
11	←	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	R	Y	
31, 32	←	←	←	←	←	←	←	
41	←	←	←	←	←	←	←	
42, 43	R	R	R	R	G	R		
51	←	←	←	←	←	←	←	
61, 62, 63	R	G	R	G	R	R	Y	
81, 82	R	R	R	G	G	R		
P61, P62	DW	W	DW	W	DW	DW	DRK	

SIGNAL FACE I.D.
All Heads L.E.D.



SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

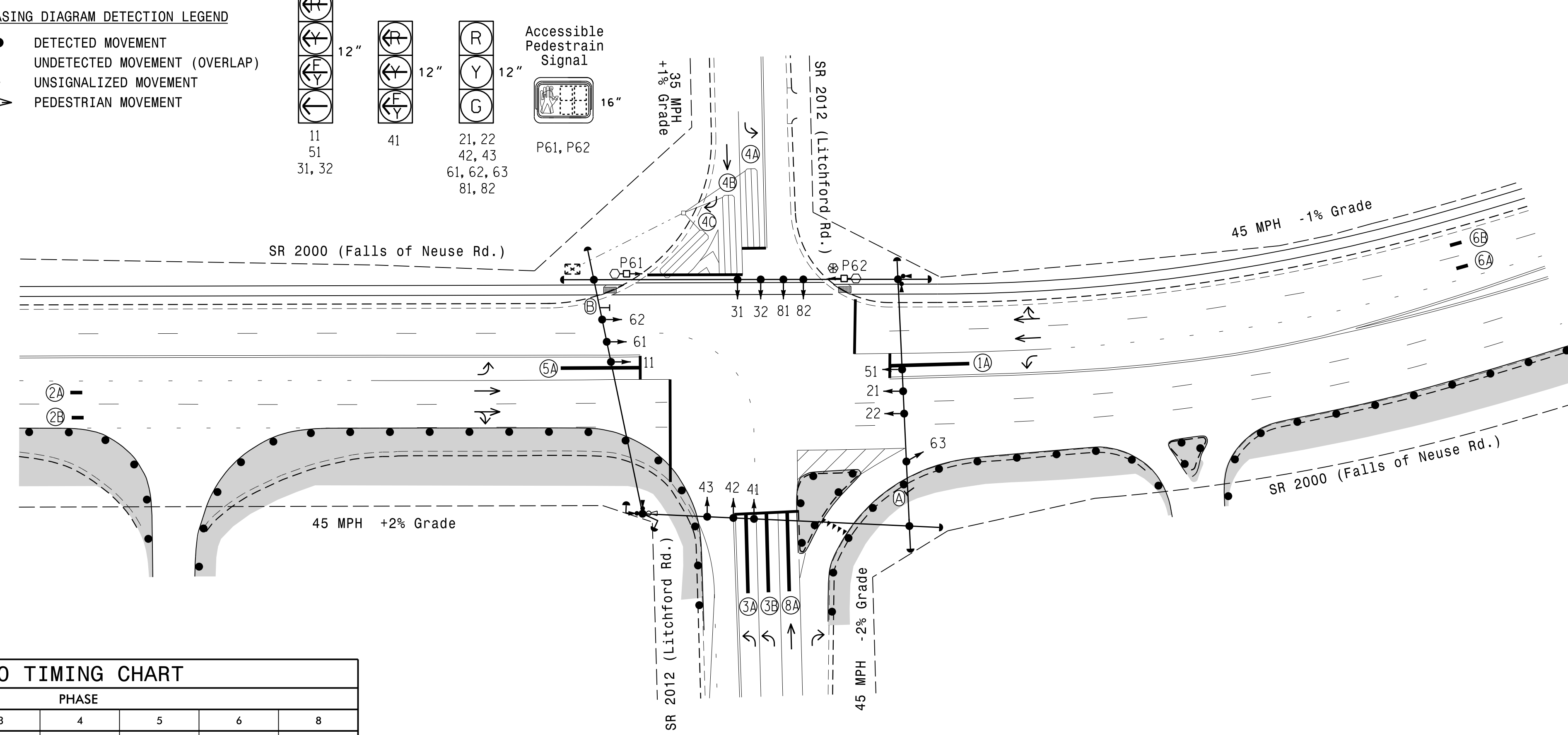
LOOP / ZONE NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	DETECTOR PROGRAMMING																
						ASSIGNED PHASE	TIMING		OPERATION MODE							SYSTEM LOOPS		STATUS				
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROTECTOR	PROTECTOR THROUGH	AND	SWITCH	NEW	EXISTING			
1A*	6X40	*	0	-	X	1	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	*	
2A*	6X6	*	300	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*
2B*	6X6	*	300	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*
3A*	6X40	*	0	X	-	3	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*
3B*	6X40	*	0	X	-	3	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*
4A	6X40	2-4-2	0	X	-	4	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	X
4B	6X40	2-4-2	0	X	-	4	10 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	X
4C	6X30	2-4-2	0	X	-	4	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	X
5A*	6X40	*	0	-	X	5	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*
6A*	6X6	*	300	-	X	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*
6B*	6X6	*	300	-	X	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*
8A*	6X40	*	0	X	-	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	-	*

* Video detection zone.

6 Phase Fully Actuated (Raleigh Signal 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.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 may be lagged.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.
- This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.



SE-PAC 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	8	
Min Green *	7	12	7	7	7	12	7	
Passage Gap *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	
Maximum Green *	15	90	40	20	20	90	30	
Yellow Change	3.0	4.6	3.0	4.7	3.0	4.6	4.7	
Red Clear	3.1	1.6	3.5	1.8	2.8	1.6	1.8	
Walk *	-	-	-	-	-	4	-	
Pedestrian Clear	-	-	-	-	-	25	-	
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	-	
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	
Vehicle Call Memory	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK	
Dual Entry	-	-	-	ON	-	-	ON	
Simultaneous Gap	ON	ON	ON	ON	ON	ON	ON	

* 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.

ACCESSIBLE PEDESTRIAN SIGNAL OPERATION

SIGNAL FACE	VOICE TONES	INTERVAL	SPEECH MESSAGE
P61, P62	- X	Walk	(Percussive Tone)
P61, P62	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Litchford.

LEGEND

PROPOSED	EXISTING

Signal Upgrade - Temporary Design 2 (TMP Phase II)

Prepared in the Offices of:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
SIGNAL DESIGN SECTION

SR 2000 (Falls of Neuse Rd.) at SR 1212 (Litchford Rd.)

Division 5 Wake County Raleigh

PLAN DATE: July 2019 REVIEWED BY:
PREPARED BY: J.A. Lohr REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 1" = 40'

REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 026486 ROBERT J. ZIEBBA ENGINEER

8/29/2019 DATE

SIG. INVENTORY NO. 05-115612

05-10CT-2023 13:49 ***DTP-SR000101-PR015 for eAD-VPR01401-V1:sl:cm05:kl65826:Traffic:cas:signal:04:08:sgn:05-115612...:sig:dsn:20190829.dgn rz:l:emca